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Taxonomy and Applied Biogeography of Mongolian Stonelies (Insecta: Plecoptera)

Sarah Walker Judson

A thesis submitted to the faculty of  
Brigham Young University  
in partial fulfillment of the requirements for the degree of

Master of Science

C. Riley Nelson, Chair  
Steven L. Peck  
Russell B. Rader

Department of Biology  
Brigham Young University  
April 2010

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## ABSTRACT

### Taxonomy and Applied Biogeography of Mongolian Stoneflies (Insecta: Plecoptera)

Sarah Walker Judson

Department of Biology

Master of Science

Since the early 1900s, efforts have been made to catalogue the stoneflies of Mongolia. Taxonomic work from 1960 to 1980 greatly expanded basic lists of stoneflies in Mongolia, but no comprehensive survey or synthesis of this dispersed literature has been completed. In conjunction with a modern survey of the aquatic insects of Mongolia, we collected Plecoptera on a series of expeditions to the Selenge (north) and Altai (west) regions of Mongolia. A total of 48 species distributed in 24 genera and 8 families were documented, including 3 of the 5 Mongolian endemics, 2 new species records for Mongolia, and 1 species new to science. The majority of the fauna are representative of the East Palearctic region. The 800+ species records were used to validate historical species lists, document species ranges with geo-referenced localities, and create various identification tools to be used by researchers and Mongolian natives with a broad range of taxonomic experience. These identification tools include a records database, general-level key to nymphs, species diagnosis pages, species range and predicted Ecological Niche Modeling (ENM) maps, and a custom “Level of Expectedness” (LOE) report\* useful for determining an unbiased projected species list for local areas. These tools are primarily intended for use by Mongolian scientists, sampling teams, and community water quality monitoring groups, as well as general use by researchers interested in biogeography, ecology, and water quality applications of Mongolian Plecoptera. With this work, we hope to equip Mongolians with the scientific resources to protect their valuable and vulnerable water resources.

\*If you are printing a hard copy of this thesis, the author requests that you do not print all of Appendix D to conserve paper. If it is necessary to print, please print Appendix D with two pages to a page and double sided. The entire 600 + page appendix is provided for the ETD version of this thesis, primarily for ease of access purposes for our project collaborators, interested parties, and associated non-profit organizations. Thank you.

Keywords: Stoneflies, Plecoptera, Insecta, Mongolia, taxonomy, biogeography, GIS, water quality, biomonitoring

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Brigham Young University

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## INTRODUCTION

The country of Mongolia is located in central Asia, bordered by Russia to the north and China along the remainder. Mongolia is the third largest country in Asia, covering 1,564,100 square kilometers, an area approximately five times smaller than the United States. The country is divided into provinces (“aimags”) made up of districts or counties (“soums”). Despite Mongolia’s reputation as a desert steppe roamed only by camels, it is penetrated by a number of major rivers and glacial streams that contribute to well-known water sources like Lake Baikal and the Yenisei River. In fact, the Selenge river of the Hovsgol region, contributes half of the inflow into Lake Baikal and has been noted as one of the main pollution sources contaminating the relatively pristine lake (Garmaeva 2001, Stubblefield et al. 2003). Due to the rugged terrain and relatively low density of streams making many areas highly vulnerable to drought, Mongolia has the lowest population density in Asia. As a result of relatively low human impacts, Mongolian streams retain much of the biota that has been reduced in surrounding countries. However, the encroaching effects of grazing and mining threaten this biodiversity and general water quality. Thus, we are seeking to fully survey the aquatic fauna of Mongolia and provide Mongolian scientists and non-governmental organizations (NGOs) with the necessary taxonomic, distributional, and tolerance information about these species to inform their conservation, policy, and other decisions.

The stonefly fauna of Mongolia has been studied intermittently over the past century. Early specimens were documented by zoological and botanical expeditions and the stoneflies collected incidentally were primarily examined by Klapalek (1901; 1907; 1912; 1921; 1923) . In the 1960s, Dr. Z. Kaszab of Hungary carried out another series of zoological expeditions in conjunction with Mongolian Academy of Sciences which amassed a large collection, at least 654 specimens (Raušer 1968), of stoneflies. The Kaszab collections were the primary basis for the

remainder of current taxonomic work from Mongolia carried out by Joost (1970), Rauser (1968), Zhiltzova (1972; 1975; 1979; 1980; 1982; 1995; 2003; Zhiltzova & Zwick 1971; Zwick et al. 1971; Zhiltzova & Varykhanova 1984), and Zwick (Zwick & Surenkhorloo 2005; Zwick et al. 1971; Zhiltzova & Zwick 1971). Though Rauser initiated this work, Zhiltzova and various coauthors can be credited with the bulk of the species determinations, new species descriptions, and taxonomic revisions related to Mongolia, recorded primarily in a series of contributions to the *Insects of Mongolia* (1972, 1975, 1979, 1980, 1982). Her work in Russia and adjacent countries (Zhiltzova 2003), has also made significant contributions to the knowledge of the biogeography of Mongolian stoneflies (1997, 2009a).

In 1995, more a comprehensive survey of aquatic insects was initiated by the Academy of Natural Sciences at Philadelphia in collaboration with the National University of Mongolia and Mongolian Academy of Sciences. The intent of this survey is to not only catalogue the entirety of aquatic fauna including stoneflies, but also to more actively involve native scientists in the process. This work has expanded to nearly yearly expeditions over the past 15 years to the northern and western areas of Mongolia, involving a number of taxonomic experts of aquatic groups from around the globe. For the first ten years, this survey was most concentrated in the Khovsgol region and since involvement of our institution in the expeditions, has been expanded west and south through the Altai mountains. In addition to this survey, other contemporary work on Mongolian stoneflies includes some small ecological studies done by native scientists in the Arctic Ocean drainage basin, specifically in the Hovsgol (Enkhtaivan 2005) and Khentii (Purevdorj 2001) regions. Most recently, an updated Plecoptera species list for Mongolia was released summarizing the noted historical work, these recent ecological studies, and some of our expedition's preliminary data (Surenkhorloo 2009).

Though most of the Plecoptera fauna has been recorded in the aforementioned publications, no single compendium complete with illustrations, identification keys, and distributions has been compiled for Mongolia. The lack of accessible taxonomic information has been noted as a hampering bottleneck for volunteer biomonitoring programs in developing nations (Resh 1994, Morse et al. 2007). Native scientists especially lack easy access to historical publications, and the current state of Mongolian stonefly documentation in particular requires the comparison of many papers in various languages to assess the morphological similarities and differences between species recorded from Mongolia. Additionally, although general distributions of stoneflies have been noted (Surenkhorloo 2009), these are based on a few localities of historical expeditions, especially the Kaszab collection. Due to vague descriptions in field notes or labels and discrepancies between various translations of river names, exact localities are difficult to discern and lack latitude and longitude coordinates useful for mapping purposes.

Herein, I update the current knowledge of Mongolian stoneflies by validating historical species lists with current records, documenting species ranges with accurate geo-referenced localities, and summarizing this information into identification tools including predicted Ecological Niche Modeling (ENM) maps. Additionally, we have taken measures to make these identification and distributional resources accessible to novice scientists, experienced taxonomists, and ecologists alike to move the work in bioassessment, water quality, and biogeography forward in Mongolia at this critical time in conservation decisions.

## **MATERIALS AND METHODS**

### **Field Methods**

Over the course of multiple years, the Mongolian Aquatic Insect Survey (MAIS) expedition team sampled the aquatic nymphs and terrestrial adults of Plecoptera in Mongolia as part of a larger project surveying the aquatic fauna of Mongolia (Gelhaus 2010). From 2003 to 2006, we collected throughout the Selenge River basin (Namkhai 2004) (Figure 1), followed by the Altai mountains in 2008 to 2009 (Gelhaus et al. 2007), and forthcoming sampling in theUvs lake drainage or other southern and western drainages in 2010 and 2011 (Figure 2). Previous expeditions related to the current Mongolian Aquatic Insect Survey (MAIS) were done in the Selenge Basin from 1995 to 2002, and were previously known as the Selenge River Project (SRP) and other grant-specific expedition team names. On each expedition, as many sites as possible were sampled over the course of 3-4 weeks, usually in the month of July when the majority of rivers have been ice-free for a few months and temperatures are adequate for adult emergence. An average of 2-3 sites were visited each day and were restricted to rivers that were accessible by road due to the size of our expedition crew and desire to perform a broad survey within a limited time window. We collected specimens for approximately 2 hours at each site using beating sheets, hand collecting, and sweep nets to collect adults and aquatic kick sampling to sample nymphs. A team of Mongolian students performed quantitative aquatic sampling following the Environmental Protection Agency's Rapid Bioassessment Protocols (RBP) (Barbour et al. 1999). At overnight camping sites, Townes style Malaise traps were erected from dusk (approx. 7 pm) to mid morning (10 am or noon). All specimens are preserved in 70% or 95% ethanol. Water chemistry measures were taken at each site, including dissolved oxygen,

phosphorus, total dissolved solids, and pH. Other environmental information was recorded such as land use estimates, erosion estimates, and substrate composition.

### **Species Determinations and Taxonomic Keys**

Species-level identifications were made for all adult Plecoptera collected on expeditions from 2005 to 2009. In addition to the samples collected from 2005-2009, I also confirmed species identifications of specimens from previous expeditions between 1995 and 2004 housed in the MAIS lab at the Institute of Meteorology and Hydrology (IMH) in Mongolia. I identified other specimens from collections housed at the BYU Monte L. Bean Museum (MLBM), the Slovenian Museum of Natural History in Slovenia, the Academy of Natural Sciences in Philadelphia (ANSP), Clemson University (CU), the National University of Mongolia (NUM), and the Asia Foundation in Mongolia. Specimens from these collections were returned to their respective original depositories, along with a synoptic series for reference where deemed applicable. Specimens preserved in 95% ethanol, and available for DNA extraction, are deposited at the MLBM.

Initially, I determined a potential species list for Mongolia from knowledge of neighboring countries and historical records (Raušer 1968, Joost 1970, Zhiltzova 1972, 1975, 1979, 1982). For my identifications, I primarily relied on illustrations from these annotated lists and individual species descriptions (Zhiltzova and Zwick 1971, Zhiltzova 1980, Zhiltzova and Varykhanova 1984), as well as keys for the palearctic Plecoptera (Lillehammer 1988, Zwick 2004, Sivec et al. 2005, Teslenko and Zhiltzova 2009) and the single Mongolia-specific key for the genus *Isoperla* (Zwick and Surenkhorloo 2005). Once I built a reference collection of species, I took Extended Focal Imaging (EFI) photographs of male and female structures, diagnostic features, and whole specimen habitus for use in the remainder of my identifications and pictorial

keys (Appendix A). The images were acquired using an Olympus MVX10 microscope with an attached Olympus DP70 camera and Microsuite Five software. Some photographs were taken with an Olympus SZX12 microscope with an attached Olympus DP11 camera. Specimen photographs taken in the field by Dr. C. R. Nelson were also identified to species based on photo voucher specimens and labeled properly with the species determination for use in the pictorial keys (Appendix A). As needed quality of photos was edited to highlight relevant features using Adobe Photoshop CS4. If specimens were not available, features were illustrated using Adobe Illustrator CS4. All photographs, along with distribution maps, were compiled onto species diagnoses and comparison pages using Adobe InDesign CS4.

Following identification of the adults, mature nymphs were initially identified based on joint occurrence with a known adult found at the same locality. To confirm identifications, I compared the nymphs to those of the same species from various localities and to illustrations in European keys to the nymphs (Lillehammer 1988) and various publications on Russian and Asian nymphs (Teslenko and Zhiltzova 2003, 2006, 2009, Zwick 2004, Sivec et al. 2005, Teslenko 2009a). I compiled various existing keys for Plecoptera nymphs of the Palearctic and Nearctic regions (Baumann et al. 1977, Lillehammer 1988, Zwick 2004, Stark and Stewart 2008) for use as a preliminary guide to identify commonly used diagnostic features. As I compared the nymphs, I determined appropriate diagnostic features at the family and generic level. With knowledge of these diagnostic features, I aided Will Bouchard in editing a key to the families of Plecoptera (Bouchard 2009) and compiled a key to the genera of Plecoptera nymphs (Appendix A). When specimens were not available from Mongolia or not present in sufficient numbers for comparison, specimens within the same genus were acquired from the MLBM, most of which were Nearctic species. Key couplets that were not validated with specimens from Mongolia are



indicated with an asterisk. Final couplets and accompanying figures were arranged in Adobe InDesign.

For each family, genus, and species, a taxonomic treatment was written to accompany the photographs and keys. The taxonomic treatments contain information about the past literature on the species, diagnostic features, and known distribution. The specific categories included were Synonymy, Diagnosis, Distribution (global, regional, and a list of occurrences by aimag), and Discussion. A complete synonymy including type locality is given for each species, compiled from the Plecoptera species file database (DeWalt et al. 2010) and Zwick 1973. Global distribution was condensed from two recent papers on the zoogeography of stoneflies in areas in and adjacent to Russia (Zhiltzova 1997, 2009a, Teslenko 2009b). Regional and aimag distributions were assessed from our georeferenced data and supplemented by historical records with published localities (Surenkhorloo 2009). The taxonomic treatment for each species was compiled on the same page as the diagnostic photographs and distribution maps for that species. The resulting species pages were arranged in a taxonomic hierarchy for ease of navigation and integration with the nymph key (Appendix A).

## **Database**

In order to organize species records for the Plecoptera and the entire Mongolian Aquatic Insect Survey, I created a database using Filemaker Pro 9 software. The database contains locality and taxonomic information categorized into 6 relational tables (Figure 3): Taxon, Species Information, Specimen, Identifiers, Locality Information, and Environmental Data. Through record numbers, site numbers, and other unique identifiers, the information under each category is compiled for each specimen record (Figure 4) with minimal input by the databaser. The relational tables also protect the database from data corruption, erroneous inputs, and

redundancy of records. Various interconnected design layouts allow for guided data entry (Figure 5) and viewing records in multiple ways depending on viewer preference (Figure 6) (Figure 4).

The purpose of the database is to facilitate communication between researchers at multiple universities in various countries, to allow individuals and independent organizations to access data from our project, and to summarize data preparatory to taxonomic key construction and geographic or ecological analysis. To facilitate communication and allow public access to our data, the database was constructed to be web compatible and is in the process of being hosted on the Academy of Natural Sciences' server. This allows all researchers and interested parties to update records on the web at their convenience and to see changes to the database in real time. To summarize data, multiple reports and export options are available within the database. With the use of queried searches and compiling scripts, I created standard reports that we commonly need such as complete species lists organized by taxonomy (Figure 7) and region specific species lists (Figure 8). The records summarized in these reports can also be exported in formats conducive for use in geographical and analytical software. I also constructed the database to automate everyday lab and curation functions such as tabulating specimen counts for institutional loans, generating labels for preserved specimens (Figure 9), and tracking the progress of specimen identification (Figure 10).

To train users on data entry and navigation of the database, I composed a brief reference tutorial (Appendix F). The tutorial, in addition to the text contained in the database itself, informs the user about how the data entry process will proceed. The tutorial also reviews the many possible layouts, searches, and reports available within the database and encourages the user to explore the versatility of these features. Additionally, while in Mongolia, I held a workshop with

the researchers and students there to familiarize them with the various layouts, data entry and importing procedures, the use of unique record numbers, and to answer their questions about data entry, record browsing, and report generation.

## **Species Distributions and Predicted Occurrence**

Once species determinations were confirmed and recorded for all localities (Figure 11), I created maps of the documented range (Figure 12) of each species along with predicted areas of occurrence (Figure 13) based on Ecological Niche Modeling (ENM). All maps, along with the aforementioned EFI and field habitus photos, were compiled onto species diagnosis pages (Appendix A) using Adobe InDesign CS4. I employed ArcGIS version 9.3 to construct the two main map types (Figure 12, Figure 13, Appendix A), as well as other maps for analysis purposes. The documented range maps illustrate the known extent of species ranges primarily with data from the Mongolian Aquatic Insect Survey (including the Selenge River Project). Around each species occurrence, a 50 mile buffer was generated and then all the buffered occurrences for that species were connected to outline the extent of that species within Mongolia. The range maps were combined to compare the overlap of species' ranges within a genus (Figure 14, Appendix A), over a backdrop of political boundaries, major rivers, and elevation. If there was only one species in a genus, a comparative range map was made with other species in the same family that were also monotypic. The predicted maps (Figure 15, Appendix A) illustrate all point occurrences for a single species (Figure 11), its documented range (Figure 12), and its predicted ENM map (Figure 13).

To generate the predicted maps, I used a combination of ArcGIS software, to perform custom analyses that I developed and automated, and Maxent (Phillips et al. 2006) to produce the ecological niche models (ENM). Maxent software was chosen over available softwares like

GARP, Hyperniche, and Bioclim for its use of presence-only data not requiring confirmed absences or creation of pseudo-absences (Elith et al. 2006, Phillips et al. 2006), its high performance even with low numbers of species occurrences (Papeş and Gaubert 2007, Pearson et al. 2007), its free-ware availability and accompanying web accessible tools, as well as its comparable performance to more widely used software packages (Elith et al. 2006, Peterson et al. 2007).

All species occurrences were imported into ArcGIS along with the water chemistry data collected by our expeditions and geographical information such as political boundaries and stream locations. XY (Longitude and Latitude respectively) coordinates were recorded in decimal degrees and projected using a World Geodetic System (WGS) 1984 coordinate system. The basic import procedure, followed by organization and naming of layers, allowed occurrence point maps (Figure 11) of each species to be readily viewed. I then created an ArcGIS model (Figure 16) to process each set of point localities into a single range extent map (Figure 12). The model was built to allow batch processing of all species at once, thus producing one consolidated layer for selective display of each species' documented range.

To investigate areas of potential (predicted) occurrence, species occurrence and environmental information was prepared for use in Maxent. All species occurrences were exported along with associated latitude and longitude coordinates and compiled in Excel to match the appropriate .csv formatting for Maxent. For the needed environmental information, I accumulated physical and climatic rasters (coverages) from various sources including data from the Hydro1k database (EROS 2009), the International steering Committee for Global Mapping layers (ISCGM 2009), and the Worldclim bioclimatic datasets (Hijmans et al. 2005, 2009). These environmental rasters provide continuous coverage data at an original resolution of 30 arc

seconds (1 km). The Intergovernmental Panel on Climate Change (IPCC) datasets were also considered because of potentially useful and unique variables like cloud cover and number of frost days, but were eliminated from the initial data compilation because of their low resolution (30 arc minutes; 55-60 km) and hence limited power for differentiation between sites.

Using model builder in ArcGIS (Figure 14), I automated the processing of these 42 environmental coverages for use in Maxent. Each environmental layer was resampled to a cell size of 0.01 degrees (1.15 km resolution) with a cubic convolution algorithm for continuous variables and a nearest neighbor algorithm for categorical variables. The cell size was reduced from the original slightly higher resolution (1 km) for two reasons: 1. this is the average cell size among a growing number of aquatic and insect studies employing ENM (Iguchi et al. 2004, McNyset 2005, Oakes et al. 2005, Dominguez-Dominguez et al. 2006, Roura-Pascual et al. 2006, Foley et al. 2008) and 2. this selected cell size balances the conflicting aims of preserving accurate relative influence of variables (percent contributions to predictions) while also broadening the coverage to a country-wide scale. After resampling to this determined cell size, the automated process then extracted (cropped) each coverage to the shape of Mongolia using a mask, and converted it to ASCII format.

To reduce redundancy in the information provided by the environmental layers, I narrowed down the initial 40+ available layers based on pairwise correlations between variables. To test for correlated variables, I extracted the values of each environmental layer from 1000 randomly selected points throughout Mongolia. Using Program R v. 2.10.1, I computed Pearson product-moment correlation coefficients ( $r$ ) for all variable pairwise combinations (Table 1). A representative variable was chosen from groups of variables with high correlation ( $r > 0.80$ ) and the remaining variables were omitted from further analyses. After this evaluation of correlation,

13 variables remained. These were: annual mean temperature, annual precipitation, aspect, compound topographical index, drainage direction, elevation, flow accumulation, isothermality, mean diurnal range, precipitation seasonality, slope, temperature seasonality, and vegetation.

To account for our sampling restrictions limited to road-accessible rivers, I created a sampling probability file for use with Maxent's sampling bias feature. Much like the species occurrence probability outputs, the sampling bias file ranks how heavily an area was sampled (or how accessible it was to sampling) on a scale of 0-1 (Phillips 2008). It informs the model building process as to which areas were sampled heavily and which were not sampled at all, thus facilitating better extrapolation into unsampled (or undersampled) areas. Generally, this expands the coverage of higher species encounter probabilities (Figure 13, Figure 17). To form the bias layer, I incrementally compiled remotely sensed roads and rivers with an emphasis on rivers and roads within 25 miles of our expedition sampling sites, our actual expedition sampling sites, and the cumulative area of all expeditions. In ArcGIS, each layer was given a temporary value of 1 for the presence of its feature of interest, then summed with all other layers. This summation layer was proportionally scaled to a 0-1 range with 1 equating to sites that were on the convergence of a road, river, and an actual sampling site (Figure 18).

With the appropriately formatted occurrence, environmental, and bias data, Maxent was run under the default settings. "Make pictures of predictions", "Create response curves", and "Do jackknife to measure variable importance" were selected to produce preliminary pictures and complete raster coverages of the probability maps, response curves for each variable, and jackknifed contributions of each variable (from models built both with all variables except the variable of interest and models with only the variable of interest to assess the predictive power of the variable of interest). The frequency of high percent contribution and jackknife contribution

were tallied in a table for each variable across species. Because the ability of the program to generate certain calculations depends on the number of species occurrences, average percent contributions of variables were computed only for species with more than five occurrences, and analysis of jackknifed importance of variables was done only for species with more than ten occurrences

The above described bias file was associated with the analysis under the Settings options (Settings→Advanced→Bias file). Because of low species occurrences, no occurrences were withheld from model building and used to validate the models (Settings→Basic→ Random test percentage) as the software could not computational perform both model building and validation with this number of occurrences.

To externally validate the model building ability of Maxent with low occurrences, a map of known extent was constructed for comparison, henceforth referred to as the “true” map. To construct the true map, two random numbers were generated to extract inclusive values from the environmental raster Annual Mean Temperature (Figure 19). Within the boundaries of the true map, 17 random points were placed in 1000 iterations. 17 points were selected as this is the average number of total occurrences for an individual species throughout Mongolia. An additional 1000 iterations was done for 17 random points selected from the entire area of Mongolia, not constrained by the boundaries of the true map, to determine how a random selection would match the true map. The two sets 1000 iterations of 17 random points each were exported to .csv and each set was coded (Sp1, Sp2, etc) as if it were a set of occurrence records for a species. These 2000 “species” were run through Maxent according to the same settings as the actual species. The resulting maps were analyzed in ArcGIS using the “Raster Compare” tool (ArcToolbox→Data Management→Data Comparison→Raster Compare) in Model Builder

(Figure 20) to compare the true and predicted maps. The output was analyzed in Excel to assess the percent of matching cells between the true and predicted maps.

The resulting probability maps (Figure 13) were imported into ArcGIS for creating maps and for further analysis. One such analysis was summing all species' probability maps into a single layer of potential richness by equating any probability over 0.65 (better than random) to a value of 1, therefore a predicted occurrence, and summing the predicted occurrences of all species to identify areas of high predicted richness for future sampling. An observed richness map was constructed using color and size symbology to visually represent actual richness for comparison to predicted richness. Other analyses are discussed below in the "Levels of Expectedness" section.

For species with low numbers of occurrences or undocumented by our survey, simpler maps without the underlying ENM layer are given on the species diagnosis page instead. If the resulting ENM map was a uniform 0.5 probability, typical of species with less than 5 total occurrences, and then only a range extent map is given on the species page. If the species was undocumented by our survey, the aimags of historical occurrence are shaded on the map and the range extent is estimated from aimag centers of the perimeter aimags.

### **Levels of Expectedness**

To determine the likeliness of encountering each species at a particular site, I developed a series of proximity, overlap, and "Zonal Statistics" analyses using custom ArcGIS models (Figure E1). To begin the analyses, a river, sampling site, or other location of interest is selected and the subsequent analyses use this XY point as the central reference for distance and inclusion measures. In order for the results to be broadly applicable and easily used by multiple groups, I selected soum (county) centers. For each species individually, the analyses determine:



1. the distance of the nearest species occurrence from the selected site,
2. the occurrence and frequency of the species within the same soum, aimag, and drainage basin as the selected site, and
3. summary statistics of mean probability of occurrence from Maxent outputs within the same soum, aimag, and basin of the selected site.

I compiled the results from the analyses by exporting them from ArcGIS and organizing into related tables using Microsoft Excel and Access (Figure 21).

Then, for each species at each site, a summary statistic for proximity and likelihood of encounter were calculated. I have termed these “Levels of Expectedness” because they indicate at what level, based on proximity and frequency, that someone sampling in that same area should expect to collect a certain species. Originally the construction of a summary statistic was explored according to arbitrary thresholds of proximity in order to yield an overall rating. The “Proximity” rating (Table 2) was intended to indicate nearest occurrence of that species from the selected site. The “Overall” rating (Table 2) then incorporated the proximity rating along with frequency of occurrence, nearest occurrence distances, and average probability of predicted occurrence from Maxent outputs.

The same conceptual framework supported the development of a standardized calculation that is adaptive to any new data because it is based on standard scores that calibrate the data to fit a normal distribution with a mean of 0. According to this method, each component of the Overall score was first given a standard score. The standard score for each component (near distance, frequency, and Maxent mean for each area) was calculated with array formulas in Excel (Figure E2). using the average and standard deviation for a particular area (soum, aimag, basin), according to the formula:

$$z = (x - \mu) / \sigma$$

The sign of the standard score was switched (multiplied by -1) for Near Distances where a smaller distance indicated a greater likelihood of occurrence, as opposed to all other measures where a low score (i.e. low raw frequency or Maxent mean) indicated low likelihood of occurrence. Using the standard score for each proximity and frequency component, an Overall average was computed which weighted components for closer areas and near distance, and is given by the formula:

$$\text{OverallAvgSS} = (((-[\text{SSNearDistKM}]) * 3) + ([\text{SSFreqS}] * 3) + ([\text{SSFreqA}] * 2) + [\text{SSFreqB}] + ([\text{SSMeanS}] * 3) + ([\text{SSMeanA}] * 2) + [\text{SSMeanB}]) / 15 \text{ (Figure E3)}$$

This overall average was then again calibrated to the normal distribution using the standard score formula (Figure E4). In order to classify the standard scores into the Levels of Expectedness categories (Table 2), thresholds were set according to the median, quartiles, and intermediate between the quartiles (Figure E5). Because Access does not have a built-in median and quartile function, these were computed externally in Excel using array formulas and with some VBA coding could be incorporated directly into the database to make it more dynamic. Finally, the results (Figure E4, E6) were compiled into reports organized by Aimag, then by Soum, and then in order of final overall score (Figure E7). See Appendix E for step-by-step description of this method with screenshots of the relevant Excel tables and Access queries.

## RESULTS

### **Species Determinations and Taxonomic Keys**

We documented a total of eight families comprised of 24 genera and 48 species (Table 3). Forty-two of the documented species confirmed 85% of the known historical records (49 species, modified from (Surenkhorloo 2009) to account for clearly erroneous records) leaving only six previously documented species unconfirmed some of which may not be valid species or have tenuous identifications based on only a few specimens from Mongolia. The 48 species catalogued include five records new from Mongolia and one species new to science. Species diagnosis pages for all species documented in our survey, as well as valid historical species, are given in Appendix A with a complete recording of the material examined in Appendix C.

Although various expeditions have explored a diversity of aquatic habitats in Mongolia, including over 10 years of field work associated with our project, many of these expeditions have been limited to the summer months presumably missing some species known to emerge earlier in the year, especially Taeniopterygidae and Capniidae stoneflies. This observation is confirmed by two species we collected from the family Capniidae which are new records for Mongolia. Both a male and female of *Isocapnia kudia* (Appendix A, p. 83) were collected at Arsayn Gol, 16.2 km N of Renchinlumbe town (N 51.2535° E 99.66687°; SRP2006070201). The male is indistinct, while the female has two distinct sclerotized lobes on the subgenital plate the apices of which point medially (Zenger and Baumann 2004). Another newly documented species which may be more abundant earlier in the season is *Mesocapnia altaica* (Appendix A, p. 86). We collected over 50 specimens, including nymphs, from 10 localities all in streams near Khoton Lake in the westernmost part of Mongolia. This species is characteristically brachypterous and endemic to the Altai mountains, previously only known from Russia. One new record from Perlodidae,

*Pictetiella asiatica* (Appendix A, p.149), was documented on an earlier expedition in 1995 with 1 male and 2 females at the northern shore of Lake Khovsgol (N 51.657941° E 100.530201°; JKG721). The male has minimal external genitalia, with only a short epiproct and distinct spinulose patches on the dorsal side of the terminal tergites. The female has a greatly expanded subgenital plate. Finally, two species of *Alloperla*, *A. mediata* and *A. rostellata*, were collected in the Khovsgol region at more than five localities each (Appendix A, p, 96-7). These records were noted through personal communication in an updated list of Mongolian stoneflies (Surenkhorloo 2009), but they are accounted for as new records here with complete locality information (Appendix C) because the specimens were collected by members of our expedition and I confirmed the identification of all existing specimens.

More than 10 species of Plecoptera were originally described from type specimens collected in Mongolia. Of these, half remain known only to Mongolia and are therefore considered endemic to the country. From our survey, we add one additional species from the genus *Nemoura* to this group of endemics. The specimens were collected from Hugin gol in 2006 (N 51.09845° E 99.32051°; SRP2006070101). The preliminary species diagnosis is given in Appendix A, p. 122.

## **Database**

The majority of Plecoptera specimens in our possession, regardless of original depository, were entered into the MAIS database along with habitus photographs. This totals to 885 records, with approximately 200 more pending data entry. A preliminary web interface of the species record database was published in February 2010 and is located at [http://clade.ansp.org/entomology/mongolia/mais\\_database.html](http://clade.ansp.org/entomology/mongolia/mais_database.html) (Figure 22, Figure 23).

Additional efforts are being made to accumulate records from all collaborators and incorporate functions from the desktop-based database (Figure 4, Appendix F) into the web version.

### **Species Distributions and Predicted Occurrence**

Considering global biogeography of each species, Mongolia is a dominantly Palearctic fauna and more specifically East Palearctic. Of the 54 species recognized for Mongolia (Table 3), 29 species, just over 50%, are noted as having East Palearctic biogeography (Zhiltzova 1997, 2009a, Teslenko 2009b). The majority of the remaining species have wide distributions across Asia, Europe, and North America, including 5 Holarctic species, 8 Trans-palearctic, and 1 Amphi-pacific.

A total of five species remain known only to Mongolia since their discovery. These are *Capnia khulsbagia*, *Isoperla potanini*, *Mesocapnia silvatica*, *Skwala asiatica*, and the yet unnamed species of *Nemoura*. Others, like *Alaskaperla longidentata* and *Nemoura nigrodentata*, have been found elsewhere, typically in Russia, since their original discovery in Mongolia. A few are restricted to the Altai range, namely *Arcynopteryx sajanensis* and *Mesocapnia altaica*. Two other species, *Agnentina cocandica* and *Filchneria mongolica*, have a slightly broader distribution beyond the Altai into Central Asia.

Specific to Mongolia, species are distributed according to regions defined by the 3 major drainage basins (Figure 1., Table 3). The Arctic Ocean Basin (AOB) which includes the Khovsgol, Khangai, and Selenge regions is the most diverse with 46 species documented by our survey, and 5 additional species in historical records. The Internal Drainage Basin (IDB) and the Pacific Ocean Basin (POB) in comparison are much less diverse, but this may be due in large part to difficult of access for sampling. We documented 23 species in the IDB, and 9 more are anticipated based on historical records. Assuming these historical records are accurate and

correctly identified, this indicates that more species could be documented in the Altai and we suspect from the Uvs region and southern Altai mountains in particular. There are areas where our expedition is planning to sample in coming years (Figure 2). Our expedition team has not yet sampled in the POB, but 16 species are historically recorded from the region.

Predicted maps produced using Maxent Ecological Niche Modeling (ENM) expand or clarify the general species distribution. With most species, the predicted maps indicate more specific areas within the range extent that are more likely for encounter, generally corresponding to the known restrictions of the species such as to high elevation streams or lowland rivers. Most predicted distributions successfully avoided high prediction in the Gobi desert, which obviously lacks streams and is a major dispersal barrier to stoneflies as evidenced in the marked differences from the Southeast Asian fauna. Species that showed assumedly inaccurate moderate predicted probability in the Gobi are primarily lowland river specialists, namely *Agnatina* and *Pteronarcys*. As expected, the predicted maps showed areas of suitable habitat in the Uvs (northwest) and Khentii (east) regions, where we did not sample and where historical records exist.

The predicted maps, when summed, also illustrate potential biodiversity “hotspots” within Mongolia (Figure 24). As expected, the areas in the Selenge and Altai regions where we actually sampled (Figure 25) were shown to have high predicted diversity. Within these regions, the northern tip of Mongolia, and areas in Arkhangai and Bulgan aimags where we did not have sampling locations also exhibited high predicted richness. Major rivers also are highlighted as having high predicted biodiversity. The Uvs (northwest) and Dornod (east) regions also stand out with high predicted richness, while Khentii aimag overall does not have high probability areas, though the rivers within it do show high probability of occurrence for multiple species.

Though the ability of predicted species and richness maps to identify river courses as highly probability areas provides preliminary indication of the models' ability to represent areas of high potential occurrence for a species, formal validation provides quantitative evidence. Predicted ranges for species with greater than 5 occurrences had an average AUC (area under the curve) value of 0.942597, indicating the models' abilities to predict presence and absence (an AUC of 0.5 would indicate that the predictions were no better than a random model). Species with less than 5 occurrences typically produced invariable maps of 0.5 probability for all areas, even those near the actual occurrence. In the external validation, the random points generated within the bounds of the true map produced predicted maps that were an average of 93.23% similar to the true map. In contrast, the random points generated throughout Mongolia unconstrained by the boundaries of the true map were only 57.11% similar to the true map. The means of the constrained and unconstrained maps are significantly different ( $p$ -value  $< 2.2e-16$ ).

Influential environmental variables used in ENM construction were assessed by percent contribution and jackknife importance when omitted or isolated (Table 4), with 4 main variables strongly contributing to the majority of models. These four variables were Annual Mean Temperature, Drainage Direction, Flow Accumulation, and Vegetation. Each of these variables had high average percent contributions, high counts of percent contributions greater than 10%, and were variables of high importance in the jackknife assessment of omission and isolation.

### **Levels of Expectedness**

Levels of Expectedness was computed for all species, except for specimens for which we had no accurate geo-referenced data including those from a historical collection housed at the MLBM and earlier expeditions of our collaborators. Examples of the resulting reports for representative soums in the Selenge and Altai, as well as examples of areas where we did not

actual sample, are given in Appendix D. A full appendix with reports for all soums is located in the electronic version of this thesis and as a PDF document by request

By binning the species at a single site using a standard score and categories determined by the quartiles, the distribution of species between the ratings was symmetrical and approximately normal (Figure 26, Figure 27). The “Highly Likely” (Table 2) category had an average of 3 species per site, “Likely” had an average of 9, “Probable” an average of 12, “Possible” an average of 12, “Predicted” an average of 9, and “Unlikely” with an average of 3. The distribution between the categories from each site is given in its respective report as count near the LOE categorization (Appendix D).

In terms of distribution of a single species across sites, these data were not normally distributed as expected due to variability in frequency, near distance, and Maxent mean as noted in the general appearance of ENM maps. At most, any one species received 68 ratings as “Highly Likely”, 182 as “Likely”, 182 as “Possible”, 118 as “Possible”, 147 for both “Predicted”, and 149 “Unlikely”. *Suwallia teleckojensis* was the species that achieved the maximum 68 ratings of “Highly Likely”.



## DISCUSSION

Over the course of our survey of the aquatic insects in Mongolia, we documented 48 species, the greatest number of species documented in any single survey of Mongolia. These documented species confirm the majority of historical records and extend the known range of most species especially by incorporating more accurate georeferenced data. The georeferenced occurrences are especially important as most species were previously known only descriptively in lists from Mongolia (Surenkhoro 2009). It is suspected that more winter emerging species, like *Isocapnia kudia* of which our expedition captured the first specimens from Mongolia despite it being a widely distributed species in the Palearctic (Teslenko 2009b), could be documented by sampling beginning in March or April though this is severely limited in Mongolia by road conditions. It should be noted that July collections have yielded greater-than-expected diversity of Capniidae and Taeniopterygidae considering the time of sampling and typical biology of these families. In particular, earlier sampling is projected to collect adult specimens of *Taeniopteryx nebulosa* which has been only documented in the nymphal stage which is quite unique but nevertheless unconfirmed by adult presence.

In addition to variety in seasonal sampling time, sampling in the Uvs (northwest) and Khentii/Dornod (east) regions is needed to complete this survey and to extend species ranges to the east. According to the predicted richness map (Figure 24), high species richness is predicted for these areas. Our expedition team has plans to extend to these regions (Figure 2) as future funding allows.

### **Species Determinations and Taxonomic Keys**

Of particular interest are species which are new records for Mongolia, including one that is new to science. On the 2006 expedition to the west of Khovsgol lake, we documented a new

species of *Nemoura*. The specimens were noted as superficially distinct from known *Nemoura*, namely *N. artica* and *N. sahlbergi*. Upon examination of the literature, we anticipated this species to be *Nemoura nigrodentata*, another Nemoridae endemic to Mongolia described from the Khentii region by Zhiltzova in 1980. However, the epiproct illustrations therein did not fit the general shape of our purported new species and the lack of a Russian translation of the paper precluded use of other diagnostic characters. We proceeded to consult with Dr. Peter Zwick on the possibility of this new species which he confirmed based on the spine armature and shape of the ventral sclerites (Zwick pers. comm. 2009). Because we had not seen any specimens of *N. nigrodentata*, we then more heavily pursued attaining a translation (Appendix B) of the original Russian description of *N. nigrodentata* to confirm the validity of our species as a new endemic species and in order to write an accurate diagnosis. It became clear that both species are morphologically similar to *N. sahlbergi*, but can be distinguished on the basis of the presence or lack of a lateral cercal process, which in the case of *Nemoura sp.*, is clearly lacking. The type specimens of *N. nigrodentata* should be examined to fully assess the differences between these species.

A number of recent taxonomic revisions involve species from Mongolia. Most recently, *Agnatina cocandica* was synonymized with *A. undata* (Zhiltzova 2009b), though this revision does not directly effect Mongolian specimens which have been historically identified as *Phasganophora cocandica*. *Triznaka longidentata*, a species first described from Mongolia by Rauser (1968) as *Chloroperla longidentata* was recently moved from the genus *Triznaka* to that of *Alaskaperla* (Zwick 2007). *Kaszabia spinulosa* was formally synonymized with *K. nigricauda* in 1979 (Zhiltzova 1979, Teslenko 2008), but a recent paper (Zwick and Surenkhorloo 2005) still employed the *K. spinulosa* name, perhaps indicating that this synonymy has not permeated

popular use perhaps due to a lack of translation from the original Russian. The same authors (Zwick and Surenkhorloo 2005) suggest that perhaps the genus *Kaszabia* should be moved entirely into *Isoperla*, due to its close affinity with *Isoperla* particularly indistinguishable in the nymphal stage (Teslenko 2008). Other species relevant revisions include *Isoperla potanini* (Zwick and Surenkhorloo 2005), previously *Mesoperlina potanini*, *Arcynopteryx polaris*, previously *A. altaica* (Zhiltzova 1995), *Kamimuria exilis*, previously *K. luteicauda* (Sivec et al. 1988), and *Skwala pusilla*, previously *S. brevis* (Zhiltzova 1982). These specimens are important to note as a number of the specimens I examined had identification labels that still referred to them by the invalid synonyms. A complete synonymy is given on each species page in Appendix A.

A few species presented some taxonomic problems and historical discrepancies. Among these, *Diura majuscula* is under scrutiny as a valid species. The designation of *Diura majuscula* as separate from *Diura nanseni* was first suggested by Brinck (1949) who determined that males of *D. majuscula* were actually *D. nanseni* and females belonged to *D. bicaudata*. Zhiltzova (1975) reversed this synonymy and again split *D. majuscula* from *D. nanseni* based on the shape of the subanal lobes and comparative body size. Most recently, Charles Nelson of the University of Tennessee has suggested that *D. nanseni* and *D. majuscula* are the same species based on the Brinck revision and original Klapalek (1912) illustrations (Nelson 2009), though he admitted he had not yet acquired an English translation of the Zhiltzova revision. I provided him with our translation of Zhiltzova (Appendix B) and he is investigating the validity of *D. majuscula* based on egg morphology and other features with plans to utilize some of our Mongolian specimens. To account for the possible validity of both species and their coexistence in Mongolia, I indicated on the identification labels possible superficially recognized morphospecies 1, 2, 3,

with 3 being an intermediate between the 1 and 2. For now I recognize all specimens herein as *D. majuscula* for consistency with historical records in the area.

Other problematic taxa included historical records that we were unable to confirm. These were *Eucapnopsis brevicauda*, *Filcheneria mongolica*, *Isoperla maculata*, *Mesocapnia silvatica*, *Paraperla sp.*, *Skwala asiatica*, and *Taeniopteryx nebulosa*. The species *Eucapnopsis brevicauda* and *Filcheneria mongolica* are readily accepted as present in Mongolia because of their distribution in areas, namely the Khentii region (Surenkhorloo 2009), where we have not yet sampled and because of their morphological distinctness in comparison to other Mongolian Plecoptera. However, some specimens have never been historically collected in adequate numbers or in the most diagnostic life stages to allow confident identification. Some of these problems were briefly mentioned in an updated list on the stoneflies of Mongolia (Surenkhorloo 2009) without proper indication of their tenuous standing. For instance, *Isoperla maculata* has only been documented as a single female which is called into question by Zwick and Surenkholoo (2005). Likewise, *Paraperla sp.* (which would also be a newly recorded genus for Mongolia) is known only from a single female, and only by personal communication in Surenkhorloo 2009, the specimen of which was collected by our expedition and identified by previous team members. When I acquired this specimen, I readily identified it as *Alaskaperla longidentata*. As such, *Paraperla sp.* and the previously mentioned *Isoperla maculata* are not included in my species lists and diagnoses pages herein because of their unconfirmed presence in Mongolia. In another case, *Taeniopteryx nebulosa* is documented only in the nymphal form (Zhiltzova and Varykhanova 1984), but this nymph is very unique with distinctive retractable coxal gills and dorsal abdominal processes giving a serrate appearance when viewed laterally (Zwick 2004). Because we lacked Mongolian adults, specimens from Sweden out of the MLBM

collection were used to depict the diagnostic features (Appendix A, p. 172). Similarly, *Kamimuria exilis* is known only from female specimens in Mongolia (Zhiltzova 1975, 1979), but we collected one such female specimen on our expeditions and I confirmed its identification as correct.

Although the species *Skwala asiatica* has been documented as both males and females from the type locality (Zhiltzova 1972), the size and epiproct shape characters given to separate *S. asiatica* from *S. pusilla* are subtle (Appendix B) and it is unclear if Mongolia has both species or if *S. pusilla* has been mistaken for *S. asiatica* or vice versa. Also, since the time of original description, this species has not been mentioned in the literature, including a noted absence in a summary paper concerning Perlodidae (Stark and Szczytko 1988). Until all *Skwala* collected from Mongolia are available for comparison to one another, both species are assumed to be valid.

In a similar situation, we were not able to collect specimens of *Mesocapnia silvatica*, perhaps due to lack of spring/winter sampling although the type specimens were collected in late July. This species is strikingly similar to *M. gorodkovi* Zhiltzova and Baumann 1985 and has some similarities to *M. altaica*, particularly in the epiproct, as well as shared female characteristics with *M. variabilis*. *Mesocapnia altaica*, however, is distinct from *M. silvatica* in that *M. silvatica* has long wings and *M. altaica* is brachypterous, as well as differences upon close examination of epiproct which is longer and skinnier in *M. altaica*. Multiple specimens of *M. variabilis* which I examined were misidentified as *M. silvatica* by multiple researchers, which leads us to believe that *M. silvatica* has been assumed to be the only *Mesocapnia* species from Mongolia, leading to many erroneous identifications over the years. Also, we have documented *M. variabilis* from areas near the type locality and both *M. variabilis* and *M. altaica* in the Altai

region, specifically Bayan Olgii aimag, where *M. silvatica* has been historically documented. As with *Skwala*, until all specimens and the type specimens are examined, this species is assumed to be valid and present in Mongolia despite our preliminary evidence that *M. silvatica* may need to be synonymized into *M. altaica*, *M. gorodkovi*, or *M. variabilis* with more likelihood for the former two based on gross morphological similarity.

Only minor identification problems arose with one genus, *Nemoura*. Within this genus, there are five species recorded from Mongolia. The females of these, as well as other Palearctic species, are relatively indistinct from one another with simple rounded subgenital plates.

Because confident identifications could not be made for lone females of *Nemoura*, they were omitted from all analyses and map construction. Also, Zhiltzova (1972) described a Mongolian subspecies of *N. arctica* aptly called *N. arctica mongolica*, which was not discriminated for the purposes of our study since no other taxa from Mongolia have recognized subspecies.

Surenkhorloo (2009) erroneously counted both *N. arctica* and this subspecies as two distinct species, but the morphological differences are not sufficient to justify this elevation. As such, specimens identified as *N. arctica mongolica* were treated as *N. arctica* in all analyses. As with *Nemoura* females, lone females identified by other researchers as *N. arctica mongolica* were eliminated from analyses.

The majority of taxa were not difficult to identify as adults nor taxonomically problematic, but for some genera we did not have adequate specimens available for confident nymph association. As mentioned in the Material and Methods section, where possible Nearctic congeners were substituted to assess characteristics and take needed photographs. The following genera lacked nymphs from Mongolia and are noted in the nymph key (Appendix A) with a single asterix: *Eucapnopsis*, *Haploperla*, *Isocapnia*, *Kaszabia*, *Leuctra*, *Paraleuctra*, *Pictetiella*,

*Taenionema*, and *Taeniopteryx*. Many of these nymphs are known to be rare or cryptic until just prior to emergence (Stark and Stewart 2008).

### **Species Distributions and Predicted Occurrence**

Our survey provides the first accumulation of georeferenced data for stoneflies in Mongolia as most historical collecting was done before the advent of GIS technology. The range and predicted maps provide baseline data about the distributions of Plecoptera species within Mongolia. These are an important reference for connecting the biogeography of the Palearctic and to make comparisons to range shifts in the future, in particular those that may result in response to climate change.

To produce stronger predictive models (ENM), more analysis could be done on model comparisons between available softwares and environmental coverage combinations. More importantly, these models grow in their predictive ability with increased number of occurrences (50-100+). This is difficult given the short sampling season and difficulty in navigating Mongolian streams, but will likely be obtained for some species in the remainder of the NSF project (Namkhai 2004, Gelhaus et al. 2007) and by utilizing the existing sampling sites of the Asia Foundation to collect adult specimens. I plan to create a tutorial for future researchers to use both ArcGIS and Maxent to utilize additional occurrence data for Plecoptera and other groups. Compiling models for all the aquatic groups, once the data is available, will be useful for determining future sampling regions that are predicted to be high in biodiversity (Figure 24). The necessary processing for running ENM softwares, namely occurrence data with associated species names and XY coordinates along with environmental coverages of a specified cell size, could be integrated into our existing database.

It should be noted here that the use of ecological niche models (ENM) is currently controversial mainly due to their assumptions of niche conservatism (Wiens and Graham 2005, Lozier et al. 2009) and the modeling techniques that are currently unable to consider local biological interactions and dispersal barriers (Araújo and Guisan 2006). Additionally, my data has a relatively low number of occurrences (usually less than 50) similar to the sample size in (Papeş and Gaubert 2007), but low as compared to the large data sets (1000+) used for comparing model strengths. Furthermore, the use of ENM for stream ecosystems is still being explored (Iguchi et al. 2004, McNyset 2005, Cordellier and Pfenninger 2009) because of additional geographical constraints of riparian corridors and dispersal restrictions not fully accounted for by climatic and topographical measures. Despite these drawbacks, I believe that ENM is an important tool to go another step further than documented occurrences and range maps. However, because of its weaknesses, I weighted it as the lowest “Level of Expectedness” (Table 2) as a measure of probability of encounter when no other measures (i.e. nearby local occurrences) are available due to our limited ability to sample throughout the country. For this study in particular, it allows us to expand our survey dataset to look at predicted areas of high richness which we should aim to sample in future years. ENM maps and their application in the Level of Expectedness analysis also provides taxonomic novices with a ballpark list of potential species they could encounter, as discussed below. The use of ENM is not intended as a wholesale acceptance of its assumptions but provides spatial hypotheses that can, and should, lead to additional validation studies using field sampling in predicted areas, genetics (phylogeography), and widely-used biomonitoring predictive models (Hawkins et al. 2000) for which our dataset with local water chemistry and environmental conditions is particularly equipped to do.



## **Levels of Expectedness**

The Levels of Expectedness reports (Appendix D) were primarily created to make expected species lists by soum for use by our collaborating researchers at the Institute of Meteorology and Hydrology (IMH) and the National University of Mongolia (NUM), as well as the Asia Foundation's Water Quality Monitoring network (MRR 2009), though they can also be constructed for any location of interest. Soums were used in this case for their familiarity and ease of reference for the varied institutions and range of taxonomic expertise that may use the reports as a preliminary reference for expected species in a given area. Combined with the nymph genus key (Appendix A), species diagnosis pages (Appendix A), LOE reports (Appendix D), and other images and range maps, I composed a booklet for use by our project's incoming postdoc, our collaborators at IHM and NUM, the Asia Foundation, and other interested parties. The booklet is intended to combine taxonomic, ecological, and biogeographical information to aid Mongolian scientists, sampling teams, and community water quality monitoring groups in confidentially identifying collected nymphs to genus and possibly species. "Levels of Expectedness" is one tool that helps these groups to narrow down the potential species they could encounter at their sampling site in an unbiased manner. Because these analyses document various levels of probable occurrence in addition to actual occurrence, a disclaimer is given at key points in the booklet that indicates how to properly use the species lists as a list of expected species that does not exclude the possibility of other species or preclude the use of the provided taxonomic keys.

Common species, such as *Suwallia teleckojensis* and *Arcynopteryx compacta*, frequently received a rating of "Highly Likely" or "Likely" concordant with their documented commonality within our study. Species with 2 or fewer occurrences yielded inconclusive predicted ENM maps with an average of 0.5 for all areas of interest. This resulted in some apparent artificial inflation

of the LOE ratings for those species, namely those of the genus *Isocapnia*. However, this is justifiable when looking at the original data such as near distances which indicate that these species did have documented occurrence within 50-100 kilometers of the particular soum. I chose not to remove such species from the LOE analysis or otherwise modify their LOE ratings because the high rating alerts the user to their presence, though measures need to be taken to indicate the relative rarity of species, quantitative information for which is pending analysis of the Rapid Bioassessment samples taken by our expedition team. Additionally, this occurred for Capniidae species, which as previously mentioned, are typically winter emerging species that likely are largely undocumented in Mongolia. Thus, their seemingly inflated LOE ratings is yet another indication that these species are poorly documented and that extended seasonal sampling beyond July would not only add new species records for Mongolia such as with *Isocapnia kudia*, but also increase availability of geo-referenced data to expand known distributions and improve the utility of LOE reports.

I would like to expand the Level of Expectedness reports to be part of an interactive standalone map comparable to GIS tools already employed (MRR 2009) by the Mongolian River Resources division of the Asia Foundation. These lists and the underlying ArcGIS layers they are derived from could become the basis for an interactive map for use by researchers wanting to know the possible species in the areas they are studying or sampling. I am currently consulting with Dr. Mark Jackson of the BYU Geography department as to the feasibility and hosting of this interactive map. Depending on future work involving tolerances and current water quality of Mongolian streams likely to be completed by the incoming MAIS postdoc, these lists could also use simple symbology to include information about if the species is particularly sensitive indicator species and how commonly it is encountered in Mongolian streams.

The LOE reports could be modified to look at the likeliness of a single species across multiple sites, rather than the current format which compares multiple species at a single site. This would be done using the same standard score method, but comparing sites for a single species. The current database contains all the necessary raw data for such an analysis and report generation, but would need to be restructured and recalibrated to compare sites rather than species. Such a format would allow a taxonomist, biogeographer, or phylogeneticist interested in a particular species to determine where they would most likely be able to capture that species. This would be particularly informative for choosing and prioritizing sampling sites, especially in the rugged terrain and short sampling season of Mongolia which limits sampling ability.

The Level of Expectedness method could also be further refined to more efficiently and easily perform this analysis for new areas, including those outside of Mongolia. In particular the method, like the ENM maps, should be validated and tested for accuracy of prediction which would require extensive spatial and temporal sampling, preferably in a taxonomically, biogeographically, and biologically well-known area such as the United States. It would also be interesting to incorporate local level data, such as water chemistry, into the models to expand and refine predictive ability beyond that currently capable with ENM. This would likely incorporate the tolerance values of the species involved, which are yet to be determined for Mongolia.

### **Summary and Broader Impacts**

Both industrialization and increased grazing pressures threaten Mongolia's freshwater resources in a variety of ways. As a result of industrialization, streams with already high natural mineral content are increasing in arsenic, mercury, and industrial byproducts (ADB 2005). Grazing, though a traditional practice, has become more centralized and intense which accelerates streambank erosion rates and decreases soil stability for both crops and native

grasses. Climate change is expected to exacerbate all these effects with losses of permafrost, glaciers, and lake ice that feed the streams of Mongolia which could potentially disappear should these sources cease to exist (Ma et al. 2003, Punsalmaa et al. 2004). Desertification and drought are an increasing reality if these conditions persist.

A number of Non-Governmental Organizations (NGOs) are involved in enacting conservation and citizen biomonitoring efforts to preserve freshwater resources (Namkhai 2004, Mongolia 2004). In particular, The Mongolian River Resources branch of The Asia Foundation sponsors a volunteer rapid bioassessment program for monitoring water quality and ecological integrity of water bodies (MRR 2009). Rapid bioassessment is widely practiced in the United States to monitor water quality through the use of identifying and analyzing the aquatic insect communities that reside in streams. The insect community structure and diversity are especially good indicators of actual water quality when compared to water chemistry and pollution measures alone. Additionally, such aquatic insect bioassessment programs are more cost-effective and sensitive to environmental disturbances than other measures of water quality. Through their proposed biomonitoring program, The Asia Foundation, is helping fulfill the government's goals to educate citizens on the importance of water quality and accomplishing the goal of a nationwide Water Monitoring Network by utilizing these citizens in the science, policy, and management of watersheds. These efforts are greatly needed in Mongolia to educate communities about the importance of water quality and to motivate active environmental protection as development progresses (Morse et al. 2007). Currently, this admirable program lacks the needed expertise and training to accurately perform rapid bioassessment using aquatic insects.

A stifling bottleneck in volunteer rapid bioassessment in third world countries is the dissemination of taxonomic information (Resh 1994). The role of universities, then, is to provide training and scientific expertise (Savan et al. 2003). Thus, our primary role in the field has been to initiate sampling and train native researchers in field and lab methodologies. Another important task we are seeking to fulfill is using our taxonomic expertise to perform species-level identification of the aquatic insect fauna of Mongolia which initially provides potential species lists for each watershed and ultimately yields identification keys for use by volunteers and researchers to confidentially identify the aquatic insects found in their follow-up sampling for accurate water quality assessment. With this thesis, that initial taxonomic work on Plecoptera is complete and awaits integration with that on other aquatic groups. Furthermore, the range and predicted maps can help inform our decisions about what species and habitats are most important to protect in light of the potential effects of climate change. This will be particularly informative as Mongolians are currently writing policies and passing laws that determine which lands are protected and how heavily they are protected from the effects of mining and grazing, the effects of which are compounded by climate change.

One of our main hopes is to collaborate with and relay our findings to governmental organizations, native collaborators, and The Asia Foundation in such a way that promotes accomplishment of the nation's goals (Mongolia 1995, 2004) to protect their valuable and dwindling water resources. We hope that this chapter of work in Mongolia will help preserve rivers in Mongolia and produce a strong model of conducting cross-cultural research in developing countries.

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Table 2. Species “Level of Expectedness” Rating. A custom summary statistic computed from compiled ArcGIS proximity, overlap, and zonal statistics analyses. The “Proximity” rating indicates nearest occurrence of that species from the selected site. The “Overall” rating incorporates the proximity rating along with frequency of occurrence, nearest occurrence distances, and average probability of predicted occurrence from MaxEnt outputs.

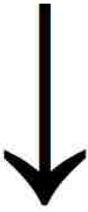
Likelihood of Encounter	Proximity		Overall	
	Category	Explanation	Category	Explanation
<b>High</b>    <b>Low</b>	<b>Actual</b>	Species occurrence within a 50 mile radius.	<b>Highly Likely</b>	Frequent occurrence within all proximity categories, including within 25 miles, as well as high probability in MaxEnt ENM prediction.
	<b>Nearby</b>	Species occurrence within a 100 mile radius or within the same soum as the selected site.	<b>Likely</b>	Frequent occurrence within 25 and 50 mile radiuses, as well as high probability in MaxEnt ENM prediction.
	<b>Within Aimag</b>	Species occurrence within the same aimag as the selected site.	<b>Probable</b>	Frequent occurrence in soum, aimag, or watershed, but not in immediate 25 50 mile radius, combined with high to moderate MaxEnt ENM prediction.
	<b>Within Drainage basin</b>	Species occurrence within the same drainage basin as the selected site.	<b>Possible</b>	Frequent occurrence in aimag or watershed, but not in other proximity boundaries, combined with high to moderate MaxEnt ENM predictions.
	<b>Predicted</b>	No species occurrence within any of the above boundaries, but MaxEnt ENM predictions show high to moderate probability of occurrence (i.e. suitable niche/habitat).	<b>Predicted</b>	No documented occurrences in any proximity boundary, but MaxEnt ENM predictions show high to moderate probability of occurrence.
	<b>Not Expected</b>	No species occurrence within any of the above boundaries and MaxEnt ENM predictions do not show likely probability of occurrence.	<b>Unlikely</b>	No documented occurrences in any proximity boundary and MaxEnt ENM predictions show low probability of occurrence.



Table 4. Maxent Influential Variables. This table provides a summary of the most influential variables in Maxent outputs. "% Contribution" includes Minimum ("Min"), Maximum ("Max"), and Average ("Avg") percent contribution of that variable to each species' predicted distribution (if the species had 5 or more occurrences), as well as a count ("#>10%") that indicates the variables that most often made the strongest contributions to determining a species' predicted distribution. "Jackknife Influence" includes counts of the species (if the species had 10 or more occurrences) for which the variable of interest was influential as measured by the jackknife procedure which ran the model with only the variable of interest ("Isolation") and with all variables except the variable of interest ("Omitted").

Variable	% Contribution				Jackknife influence	
	Min	Max	Avg	# > 10%	Isolation	Omitted
Annual Mean Temperature	0	74.0618	12.240516	12	10	6
Annual Precipitation	0	34.5838	6.5693081	10	5	0
Aspect	0	24.9393	1.4983216	1	0	0
Compound Topographical Index	0	38.2	7.3867459	10	1	2
Drainage Direction	0	31.879	4.2059108	5	1	0
Elevation	0	53.6719	16.7964	22	4	7
Flow Accumulation	0	68.3838	9.2519865	14	2	7
Isothermality	0	41.6255	3.1764541	3	0	0
Mean Diurnal Range	0	62.5689	6.3518595	6	1	0
Precipitation Seasonality	0	32.9875	7.0523838	11	0	1
Slope	0	28.6	5.0032081	6	2	2
Temperature Seasonality	0	25.2632	2.0384378	2	0	0
Vegetation	0.2153	55.9491	18.433851	23	4	5



## FIGURES

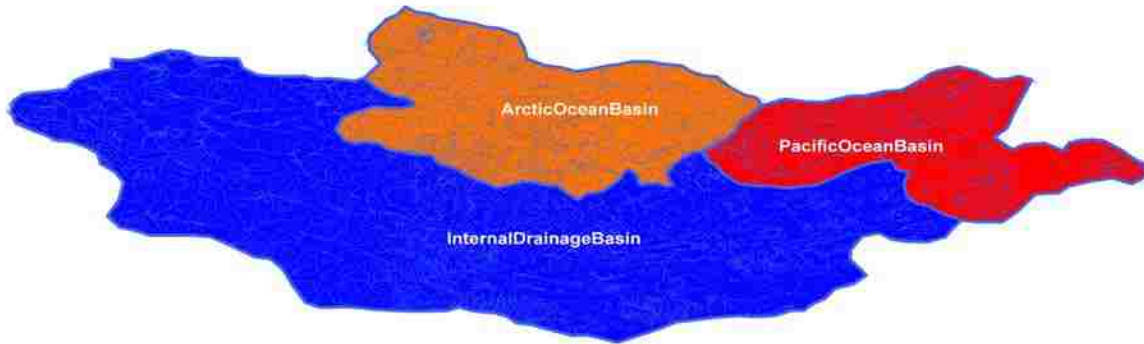


Figure 1. Drainage Basins of Mongolia. Three major drainage basins are recognized in Mongolia, the Arctic (alternatively called the Selenge River Basin), Pacific, and Internal, indicating the major oceans they drain to, or in the case of the Internal drainage basin, its lack of an outlet to the ocean.

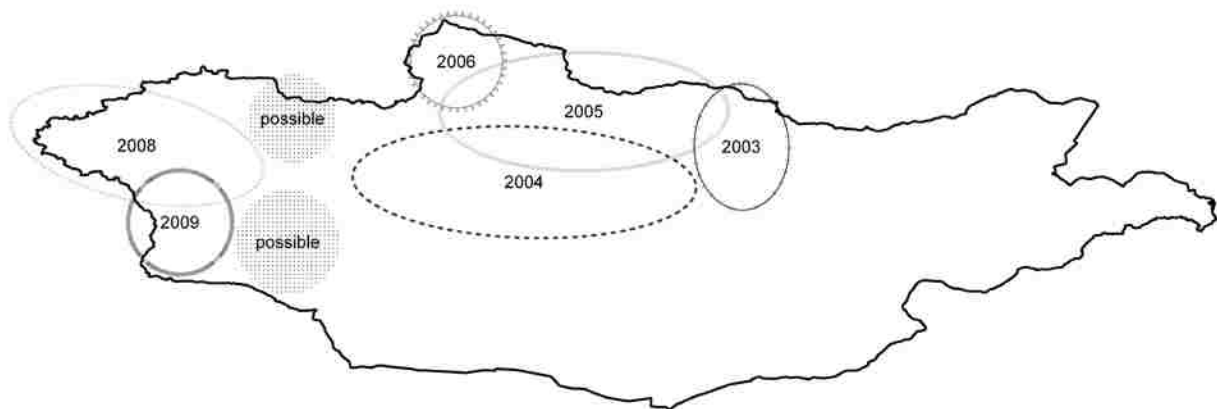


Figure 2. Map of Field Expeditions. The majority of specimens were collected in Central, North, and Western Mongolia from 2003 to 2009. Additional specimens come from the Selenge River Basin (Figure 1) in the same area as 2005-6 expeditions, as well as other scattered areas across the country with the exception of the south Gobi desert area.

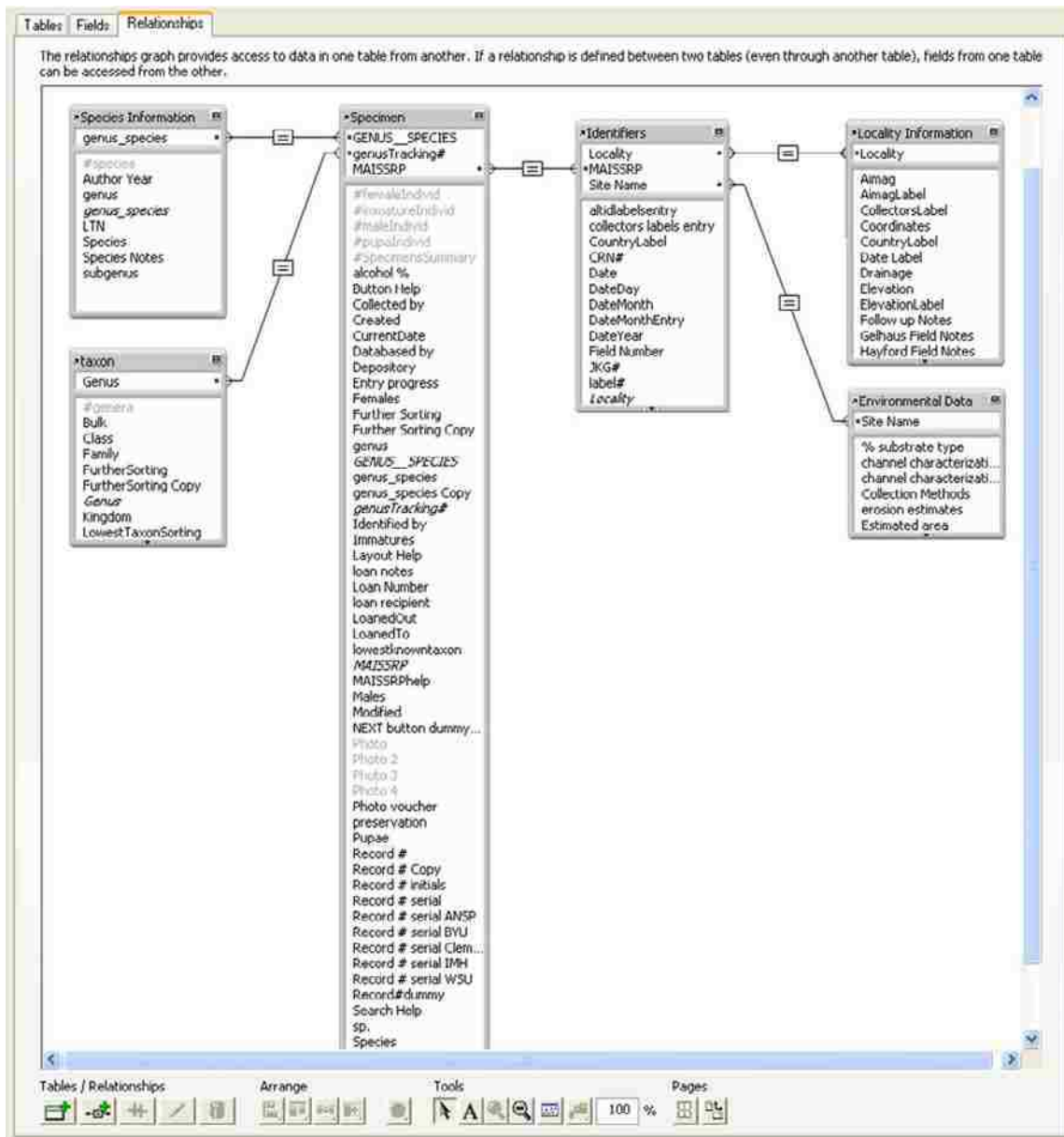


Figure 3. Table Relationships. The six displayed related tables (Species Information, Specimen, Identifiers, Locality Information, and Environmental Data) connect data in such a way to minimize databaser input and to prevent redundancy and data editing errors.

*Aquatic Invertebrates of Mongolia*

Return to Welcome  
New Specimen Record  
Delete Specimen Record  
Export Records

< Browse > Search Print Wet Labels Exit Original View View As Table

Specimen Locality Field Notes Reports Help

### Record Summary

Species:   
 OR Lower taxonomic level:   
 Record #:  M  F  Immature  Pupa   
 total # of specimens:   
 MAIS/SRP:   
 Date:   
 Locality:

### Complete Taxonomy

Kingdom:   
 Phylum:   
 Class:   
 Order:   
 Family:   
 Genus:   
 Species:   
 Author/Year:

Species Notes:   
 Does the sample need further sorting or identification?  Yes  No  
 Class  Order  Family  Genus  
 Revise Taxonomy  
 Either due to noticed inaccuracy or lower taxonomic determination.

### Curatorial Information

Collector(s):   
 Identifier:  Year:   
 Databaser:  Created:  Modified:   
 Depository:  On Loan?  Yes  No Loaned to:   
 Preservation:  Dry (pinned)  Wet (alcohol)  Other  70%  95-100% Ethanol  
 Photo:  Yes  No

Specimen Notes:

Research funded by the National Science Foundation  
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 http://data.biology.mongolianacademy.mn/

Figure 4. Main database navigation screen. Using this layout, users can browse records and search for specific species and localities using any available field such as Family, Date, or Identifier. Tabs and buttons allow easy access to additional information and other database features such as label printing (Figure 9) and report generation (Figures 7, 8).

Please enter the following information:

**Curation**

---

<b>Collector(s)</b>	<input type="text" value="JKGelhaus"/>	<b>Depository</b>	<input type="text" value="ANSP"/>
<b>Identifier</b>	<input type="text" value="SWJudson"/>	<b>Year IDed</b>	<input type="text" value="2008"/>
<b>Databaser</b>	<input type="text" value="SWJudson"/>	<b>Created</b>	3/10/2009
<b>Record #</b>	<input type="text" value="204ANSP"/>	<b>Modified</b>	4/1/2009

**Preservation**  Dry (pinned)  Wet (alcohol)  Other  70 %  95-100 % Ethanol

**Specimen Notes**

Enter any notes on specimen condition, preservation, or other relevant information to this specimen.

---

Please check all entry fields for correct content and then click "Next" to proceed.




Figure 5. Data Entry Layout. A series of pages, similar to the one shown for "Curation", guides the user through the data entry process step-by-step. Many of the pages require the user to select a few key pieces of information from drop down menus and the rest of the relevant data is automatically entered and linked to the new record. The box in the upper right hand corner informs the user of their progress in the data entry process. The user can review and modify all entered information at a final summary page once all required information is entered.

[Return to Welcome](#)  
[New Specimen Record](#)  
[Delete Specimen Record](#)  
[Export Records](#)

[Original View](#)   [View as Table](#)

Record #	GENUS_SPECIES	MAISSRP	Males	Females	Immatures	Pupae	Tota...	Depository	Collected by	Identified by	Databased by	preservation	alcohol %
001BYU 1/26/2009	Isoperla potanini	SRP2005071502A	16	5			21	BYU	CRNelson	SWJudson	SWJudson	<input type="checkbox"/> Dry (pinned) <input checked="" type="checkbox"/> Wet (alcohol)	<input checked="" type="checkbox"/> 70 <input type="checkbox"/> 95-100
SRP002B YU	Kasziabia spinulosa	SRP2005071502A		7			7	BYU	CRNelson	SWJudson	SWJudson	<input type="checkbox"/> Dry (pinned) <input checked="" type="checkbox"/> Wet (alcohol)	<input checked="" type="checkbox"/> 70 <input type="checkbox"/> 95-100
003BYU 1/26/2009	Isoperla asiatica	SRP2005071502A	1	2			3	BYU	CRNelson	SWJudson	SWJudson	<input type="checkbox"/> Dry (pinned) <input checked="" type="checkbox"/> Wet (alcohol)	<input checked="" type="checkbox"/> 70 <input type="checkbox"/> 95-100
004BYU 1/26/2009	Isoperla asiatica	SRP2005071601		1			1	BYU	CRNelson	SWJudson	SWJudson	<input type="checkbox"/> Dry (pinned) <input checked="" type="checkbox"/> Wet (alcohol)	<input checked="" type="checkbox"/> 70 <input type="checkbox"/> 95-100
005BYU 1/26/2009	Haploperla lepnevae	SRP2005071601	1	1			2	BYU	CRNelson	SWJudson	SWJudson	<input type="checkbox"/> Dry (pinned) <input checked="" type="checkbox"/> Wet (alcohol)	<input checked="" type="checkbox"/> 70 <input type="checkbox"/> 95-100
006BYU 1/26/2009	Triznaka longidentata	SRP2005071803		3			3	BYU	CRNelson	SWJudson	SWJudson	<input type="checkbox"/> Dry (pinned) <input checked="" type="checkbox"/> Wet (alcohol)	<input checked="" type="checkbox"/> 70 <input type="checkbox"/> 95-100
007BYU 1/26/2009	Isoperla potanini	SRP2005072301	31	7			38	BYU	CRNelson	SWJudson	SWJudson	<input type="checkbox"/> Dry (pinned) <input checked="" type="checkbox"/> Wet (alcohol)	<input checked="" type="checkbox"/> 70 <input type="checkbox"/> 95-100
008BYU 1/26/2009	Haploperla lepnevae	SRP2005072301		1			1	BYU	CRNelson	SWJudson	SWJudson	<input type="checkbox"/> Dry (pinned) <input checked="" type="checkbox"/> Wet (alcohol)	<input checked="" type="checkbox"/> 70 <input type="checkbox"/> 95-100
009BYU 1/26/2009	Isoperla potanini	SRP2005072401		1			1	BYU	CRNelson	SWJudson	SWJudson	<input type="checkbox"/> Dry (pinned) <input checked="" type="checkbox"/> Wet (alcohol)	<input checked="" type="checkbox"/> 70 <input type="checkbox"/> 95-100
010BYU 1/26/2009	Isoperla altaica	SRP2006063001	5	2			7	BYU	CRNelson	SWJudson	SWJudson	<input type="checkbox"/> Dry (pinned) <input checked="" type="checkbox"/> Wet (alcohol)	<input checked="" type="checkbox"/> 70 <input type="checkbox"/> 95-100
011BYU 1/26/2009	Isoperla altaica	SRP2006063002	16	17			33	BYU	CRNelson	SWJudson	SWJudson	<input type="checkbox"/> Dry (pinned) <input checked="" type="checkbox"/> Wet (alcohol)	<input type="checkbox"/> 70 <input checked="" type="checkbox"/> 95-100
012BYU 1/26/2009	Suwallia teleckojensis	SRP2006063002	18	39			57	BYU	CRNelson	SWJudson	SWJudson	<input type="checkbox"/> Dry (pinned) <input checked="" type="checkbox"/> Wet (alcohol)	<input checked="" type="checkbox"/> 70 <input type="checkbox"/> 95-100
013BYU 1/26/2009	Isoperla altaica	SRP2006070102	21	11			32	BYU	CRNelson	SWJudson	SWJudson	<input type="checkbox"/> Dry (pinned) <input checked="" type="checkbox"/> Wet (alcohol)	<input checked="" type="checkbox"/> 70 <input type="checkbox"/> 95-100
014BYU 1/26/2009	Suwallia teleckojensis	SRP2006070102	6	17			23	BYU	CRNelson	SWJudson	SWJudson	<input type="checkbox"/> Dry (pinned) <input checked="" type="checkbox"/> Wet (alcohol)	<input checked="" type="checkbox"/> 70 <input type="checkbox"/> 95-100
015BYU 1/26/2009	Isoperla altaica	none (CRN8477)	14	6			20	BYU	CRNelson	SWJudson	SWJudson	<input type="checkbox"/> Dry (pinned) <input checked="" type="checkbox"/> Wet (alcohol)	<input checked="" type="checkbox"/> 70 <input type="checkbox"/> 95-100

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 DDEB0146040 awards research to the National Science Foundation  
 DDEB0146040, Washington, DC 20540-5000, USA

Figure 6. Alternate database navigation screen. This and other layouts allow the user to navigate existing records in multiple ways. This particular type of table view shows multiple records at once.

**PLECOPTERA**

# of Specimen Lots for this ORDER: 469

**CAPNIIDAE**

# of Specimen Lots for this FAMILY:14

<i>Capnia nigra</i>	# of Lots: 10	Total # of Individuals: M: 19 F: 46	Immatures: 1	Pupae:
<i>Isocapnia guentheri</i>	# of Lots: 4	Total # of Individuals: M: 5 F: 7	Immatures:	Pupae:

**CHLOROPERLIDAE**

# of Specimen Lots for this FAMILY:139

<i>Alloperla deminuta</i>	# of Lots: 21	Total # of Individuals: M: 64 F: 121	Immatures:	Pupae:
<i>Alloperla joosti</i>	# of Lots: 15	Total # of Individuals: M: 68 F: 93	Immatures:	Pupae:
<i>Alloperla mediata</i>	# of Lots: 8	Total # of Individuals: M: 9 F: 35	Immatures:	Pupae:
<i>Alloperla rostellata</i>	# of Lots: 8	Total # of Individuals: M: 3 F: 33	Immatures:	Pupae:
<i>Haploperla lepnevae</i>	# of Lots: 12	Total # of Individuals: M: 13 F: 55	Immatures:	Pupae:
<i>Suwallia kerzhneri</i>	# of Lots: 15	Total # of Individuals: M: 56 F: 33	Immatures:	Pupae:
<i>Suwallia teleckojensis</i>	# of Lots: 33	Total # of Individuals: M: 383 F: 347	Immatures:	Pupae:
<i>Triznaka longidentata</i>	# of Lots: 27	Total # of Individuals: M: 75 F: 161	Immatures:	Pupae:

**LEUCTRIDAE**

# of Specimen Lots for this FAMILY:2

<i>Paraleuctra zapekinae</i>	# of Lots: 2	Total # of Individuals: M: 1 F: 4	Immatures:	Pupae:
------------------------------	--------------	-----------------------------------	------------	--------

**NEMOURIDAE**

# of Specimen Lots for this FAMILY:117

<i>Amphinemura borealis</i>	# of Lots: 26	Total # of Individuals: M: 110 F: 145	Immatures:	Pupae:
<i>Amphinemura standfussi</i>	# of Lots: 9	Total # of Individuals: M: 71 F: 31	Immatures: 3	Pupae:
<i>Nemoura arctica</i>	# of Lots: 52	Total # of Individuals: M: 406 F: 963	Immatures:	Pupae:
<i>Nemoura arctica mongolica</i>	# of Lots: 2	Total # of Individuals: M: 8 F: 9	Immatures:	Pupae:
<i>Nemoura cinerea</i>	# of Lots: 13	Total # of Individuals: M: 316 F: 195	Immatures: 4	Pupae:
<i>Nemoura sahlbergi</i>	# of Lots: 7	Total # of Individuals: M: 12 F: 82	Immatures:	Pupae:
<i>Nemurella pictetii</i>	# of Lots: 8	Total # of Individuals: M: 61 F: 90	Immatures:	Pupae:

**PERLIDAE**

# of Specimen Lots for this FAMILY:13

<i>Paragnetina flavatincta</i>	# of Lots: 13	Total # of Individuals: M: 129 F: 45	Immatures: 6	Pupae:
--------------------------------	---------------	--------------------------------------	--------------	--------

**PERLODIDAE**

# of Specimen Lots for this FAMILY:132

<i>Arcynopteryx compacta</i>	# of Lots: 27	Total # of Individuals: M: 119 F: 127	Immatures:	Pupae:
<i>Arcynopteryx polaris</i>	# of Lots: 19	Total # of Individuals: M: 169 F: 149	Immatures: 1	Pupae:
<i>Diura majuscula</i>	# of Lots: 8	Total # of Individuals: M: 4 F: 8	Immatures:	Pupae:
<i>Isoperla altaica</i>	# of Lots: 13	Total # of Individuals: M: 110 F: 74	Immatures:	Pupae:
<i>Isoperla asiatica</i>	# of Lots: 16	Total # of Individuals: M: 9 F: 28	Immatures:	Pupae:
<i>Isoperla kozlovi</i>	# of Lots: 8	Total # of Individuals: M: 22 F: 48	Immatures:	Pupae:
<i>Isoperla lunigera</i>	# of Lots: 7	Total # of Individuals: M: 3 F: 8	Immatures:	Pupae:
<i>Isoperla mongolica</i>	# of Lots: 1	Total # of Individuals: M: 1 F:	Immatures:	Pupae:
<i>Isoperla potanini</i>	# of Lots: 21	Total # of Individuals: M: 92 F: 46	Immatures:	Pupae:
<i>Kaszabia spinulosa</i>	# of Lots: 10	Total # of Individuals: M: 26 F: 89	Immatures:	Pupae:
<i>Megarcys ochracea</i>	# of Lots: 2	Total # of Individuals: M: 2 F: 1	Immatures:	Pupae:

Figure 7. Report organized by taxonomy. This report provides a complete taxonomic list of species organized by hierarchically by Order, Family, and Genus. It also displays information about the total number of specimens available, which will be useful to those perusing the database for potential loans for species revisions and biogeographical studies. The report can be printed and the associated records exported to Excel and other formats.

Altai Tavan Bogd National Park, Tavan Bogd Road's End Camp, springs above Tsagaan Gol, 20		MAIS2008071101
		Total Richness: 2
Nemoura arctica	Total # of Lots: 1	
	Record #	# of Specimens
	173BYU	45
sp. undet.	Total # of Lots: 2	
	Record #	# of Specimens
	MAIS332BY	
	MAIS462BY	
Tsagaan Gol crossing 1 km west of Zagastnuur Bag,		MAIS2008071301
		Total Richness: 4
Arcynopteryx compacta	Total # of Lots: 1	
	Record #	# of Specimens
	049BYU	2
Arcynopteryx polaris	Total # of Lots: 1	
	Record #	# of Specimens
	050BYU	1
Isoperla potanini	Total # of Lots: 1	
	Record #	# of Specimens
	051BYU	8
sp. undet.	Total # of Lots: 3	
	Record #	# of Specimens
	MAIS213BY	
	MAIS329BY	
	MAIS449BY	
Bagakhatuuglin Lake, junction Ikh Khatuuglin Gol,		MAIS2008071302
		Total Richness: 1
sp. undet.	Total # of Lots: 3	
	Record #	# of Specimens
	MAIS365BY	
	MAIS413BY	0
	MAIS440BY	
unnamed tributary of Mogotlin Gol, where canyons open to moraine plain, 13 km ESE of Asgat		MAIS2008071304
		Total Richness: 1
Nemoura arctica	Total # of Lots: 1	
	Record #	# of Specimens
	052BYU	5
Mogotlin Gol near its parallels with unnamed tributary, 13 km ESE of Asgat Peak,		MAIS2008071305
		Total Richness: 5
Nemoura arctica	Total # of Lots: 1	
	Record #	# of Specimens
	171BYU	93

Figure 8. Report organized by MAIS Field Number. This report provides species lists and richness calculations for each field site, along with the record numbers and specimen counts of each lot (a single alcohol vial or series of pinned specimens). This particular report is useful for tracking species identifications and doing preliminary analysis of species richness. The report can be printed and the associated records exported to Excel and other formats.

**Please enter the following information:**

MAISRP

Collector(s)

Alternate ID  ex: CRN8975 OR JKGN01

**Label Preview:**

MONGOLIA: Khovsgol Aimag, TsagaanUur  
 Soum, Uilgan Gol, 26 km ENE of Tsagaan-Uur  
 town,  
 N 50.62324°E 101.87412° Elev: 1158 msl  
 Date: 15 July 2005  
 Collector(s): S.W. Judson  
 Mongolian Aquatic Insect Survey  
 SRP2005071502A

**Label Options:**

(prints 20 labels for the same locality on one page; best for labelling after initial sorting or for ease of labelling)

(exports and opens pertinent label data as "label.doc"; best for compiling labels for multiple localities on one page)

(prints 40 labels for the same locality on one page; best for labelling after initial sorting or for ease of labelling)

**Please note that label printing is possible only when using a desktop version of Filemaker. Please contact MAISNSF( )gmail.com with questions.**

Figure 9. Label creation layout. By simply searching for a field number or coming from a specimen already associated with a field number, the user can easily print wet or dry labels with complete locality information and in the appropriate format. Label data can also be exported if printing a few labels from a variety of sites. This feature has been especially useful in our lab to accelerate the labelling process of bulk samples.

Does the sample need further sorting or identification?  Yes  No

Class  Order  Family  Genus

Figure 10. Specimen Identification Tracking. This feature appears on the main layout (Figure 4) to notify users which specimens are in need of further processing. The lower box indicates what taxonomic level the specimen is identified, in this example, the specimen has been identified to the Family level. A report of all specimens needing additional identification can be printed or exported.





Figure 11. Species point occurrence map. This ArcGIS map shows each locality at which our expedition has documented the occurrence of a particular species, in this case, *Agnetina brevipennis*. The political boundaries of Mongolia and its aimags and soums are shown for geographical reference.

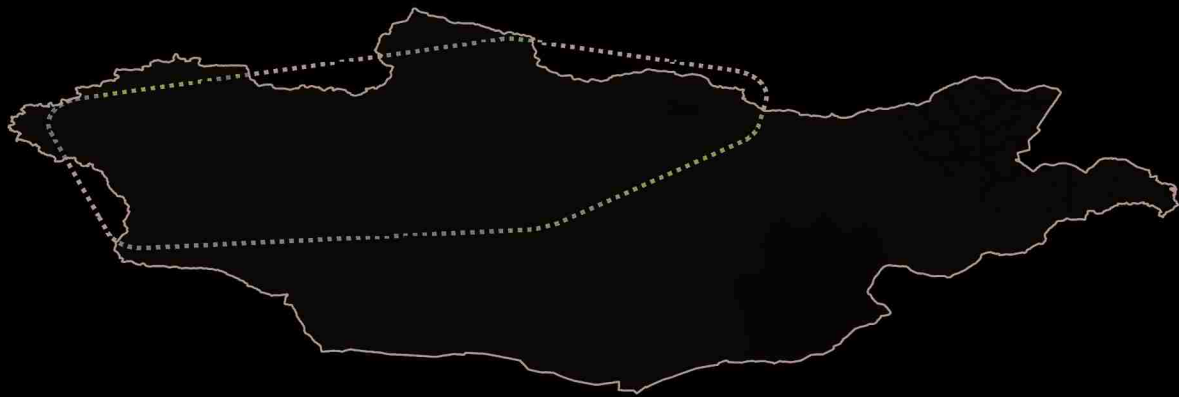


Figure 12. Species Range Map. Using buffers and aggregation techniques, the original point localities of a species are grouped into a single demarcated range or distribution. *Agnetina brevipennis* (Figure 11) is again used as the example species. The political boundaries of Mongolia and its aimags and soums are shown for geographical reference.

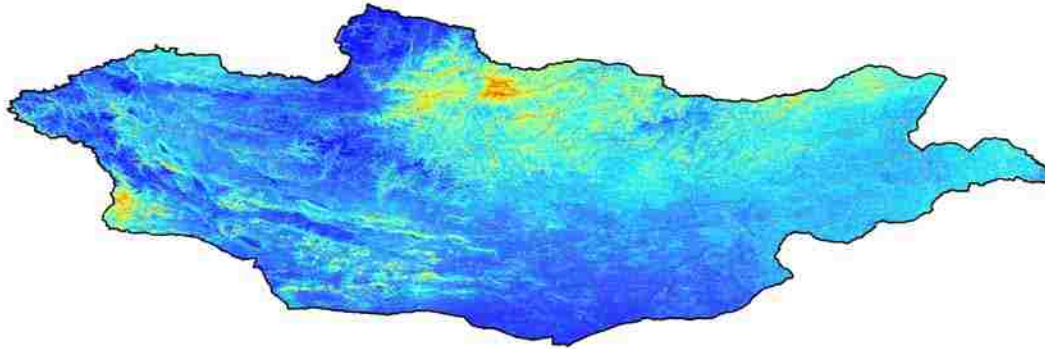


Figure 13. ENM Result with Bias File. This raster generated by Maxent displays the probability of occurrence for a species based on climatic and physical factors. Dark blue indicates low probability (0.0) progressing to intermediate probability (green/yellow; 0.50) with red as high probability (1.0) representing a high likelihood of occurrence. This particular result was obtained using a bias file (Figure 16) that accounted for our sampling bias in order to aid the model in extending to unsampled areas. *Agnetina brevipennis* is used as the example species.

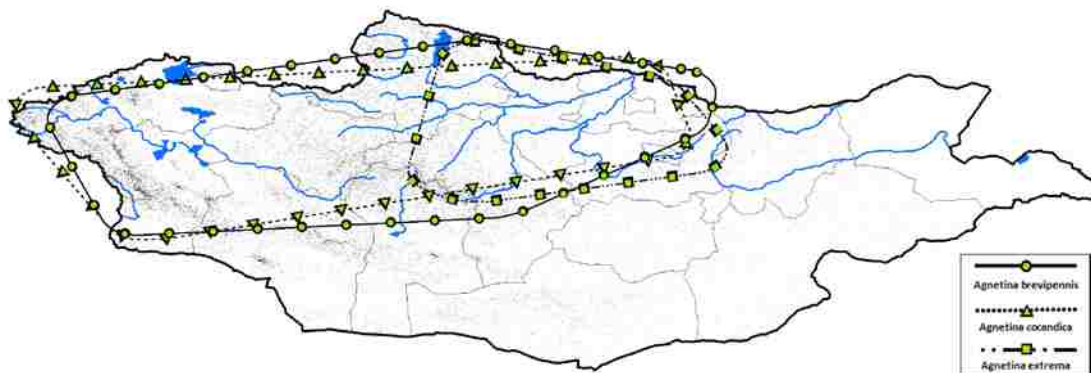


Figure 14. Genus Comparison Map. Individual range maps (Figure 12) are combined for comparison of overlap between congeners. The genus *Agnetina* is represented here. Maps for all species are in Appendix A.

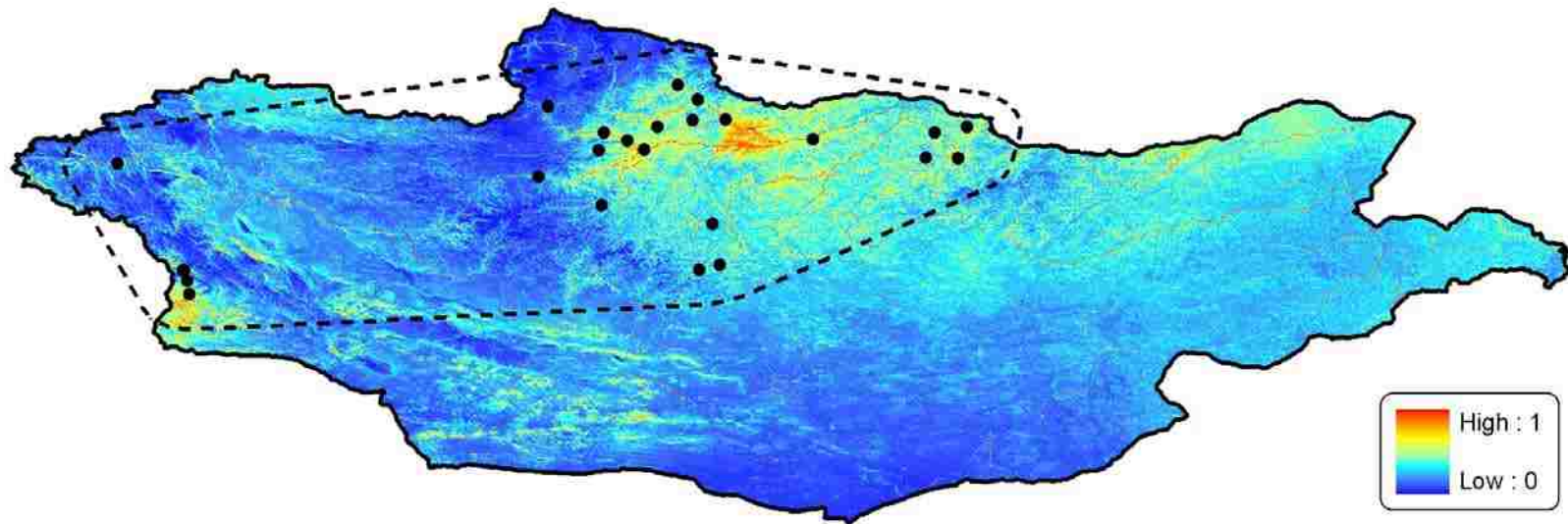


Figure 15. Predicted ENM Map with Documented Occurrences and Range Estimate. Maxent ENM map (Figure 13) combined with actual point occurrences (Figure 11) and range outline (Figure 12). *Agnetina brevipennis* is used as the example species. Maps for all species are in Appendix A

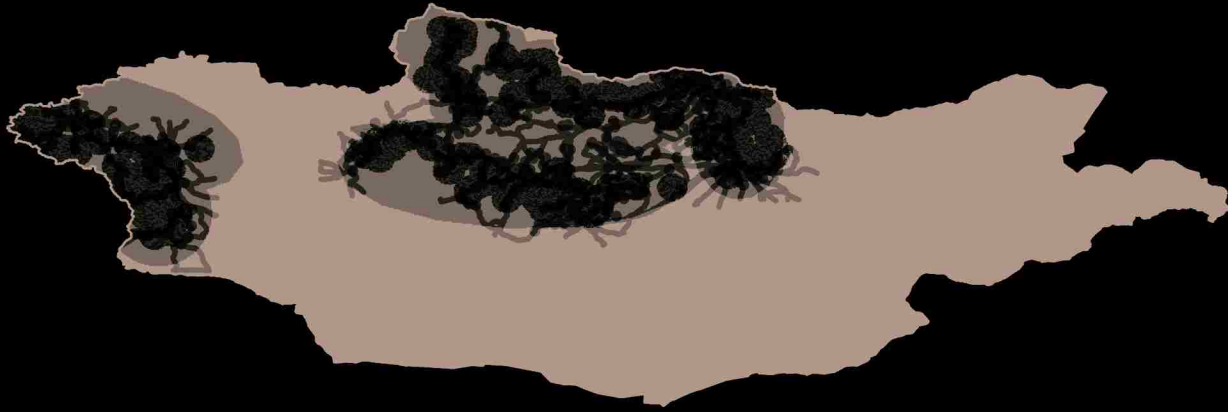


Figure 16. Maxent Bias File. A full coverage raster indicating the probability of sampling in a particular area. The layer was compiled as a sum of occurrences for roads, rivers, actual sampling events, and total expedition area to reflect potential and actual collection sites. A probability of 1 (represented in white) indicates the convergence of a road, river, and actual sampling site.

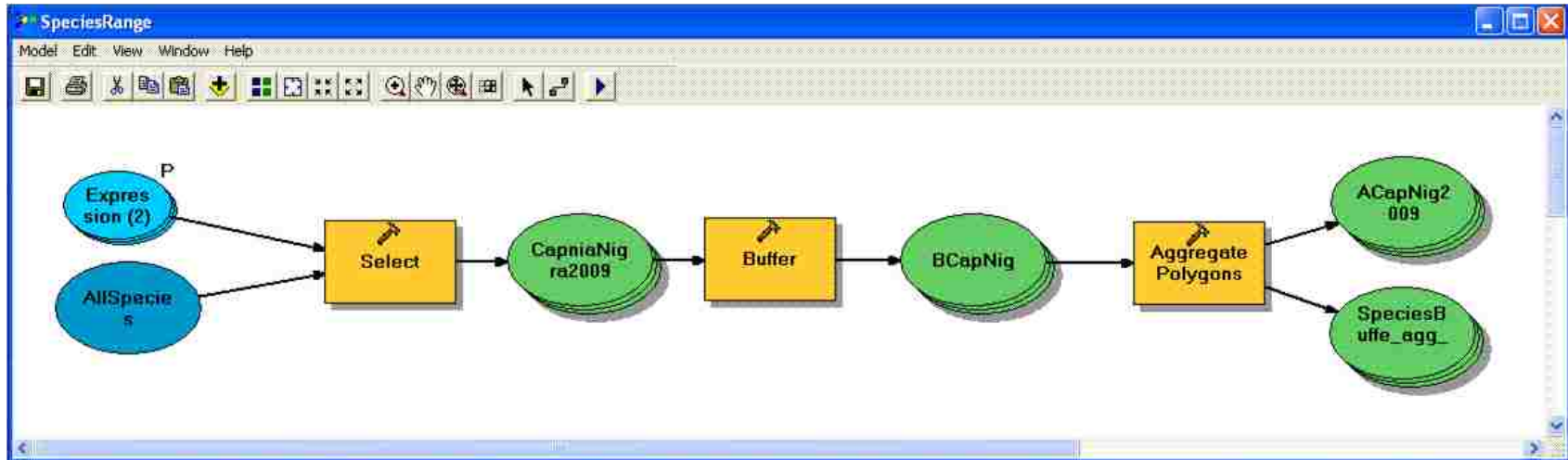


Figure 17. ArcGIS model example. Using the ArcINFO workstation, models can be created to automate and repeat lengthy analyses. Powerful computing processes available in the ArcGIS analysis toolboxes are combined and organized to run custom analyses. The model shown selects point localities of a particular species, draws a 50 mile buffer around each point, then groups the created buffers into a single polygon used as a species range (Figure 12). This model, as many I developed, repeats the analysis for each species as indicated by the stacked blue and green circles representing a batched mode

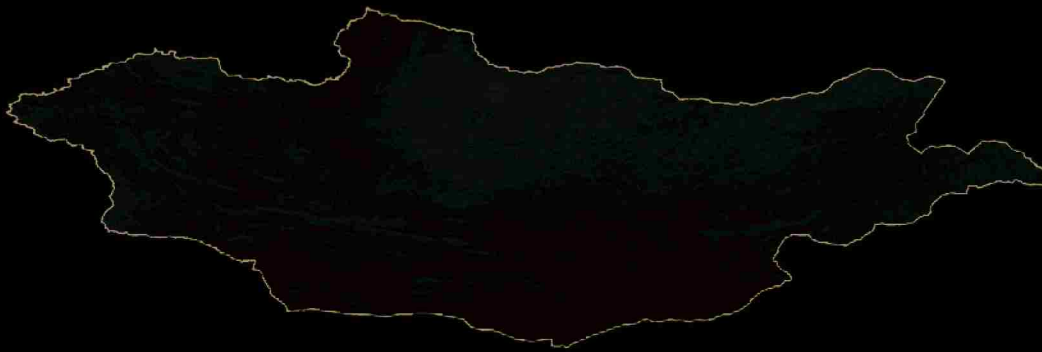


Figure 18. ENM Result without Bias File. This raster generated by Maxent displays the probability of occurrence for a species based on climatic and physical factors. Dark blue indicates low probability (0.0) up to red as high probability (1.0) representing a high likelihood of occurrence. This particular result was obtained without the use of a bias file (Figure 16) and the result is therefore more contracted than the model employing the bias file (Figure 13). *Agnetina brevipennis* is used as the example species.



Figure 19. True Map extracted from Annual Mean Temperature Raster. From the Annual Mean Temperature continuous environmental raster, two randomly selected numbers were used to select a geographic portion of the area of Mongolia. The area in black contains all values that fell within the limits of the two random numbers. Random points were generated within this area to simulate species occurrences. These species occurrences were used to externally validate the predictive power of Maxent (i.e. ability to match the true map) with low total species occurrences.

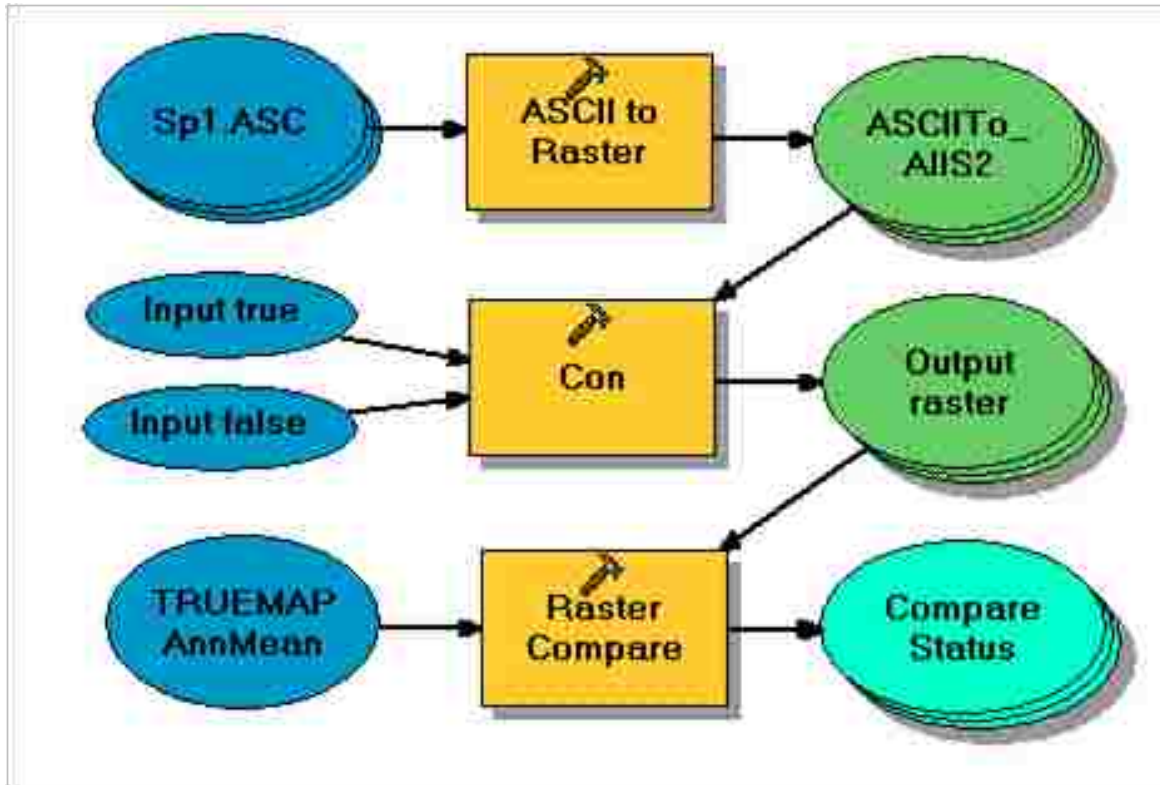


Figure 20. Model Validation by Raster Comparison in ArcGIS model. This series of processes takes the ENM map of each randomly generated species (Sp1=Species1) and compares it to the true map of known distribution, in this case a portion of the Annual Mean Temperature environmental raster from which the species occurrences were originally generated. The resulting output iteratively gives the number of cells out of the total that matched between the input (Species 1, Species 2, etc) and true maps.

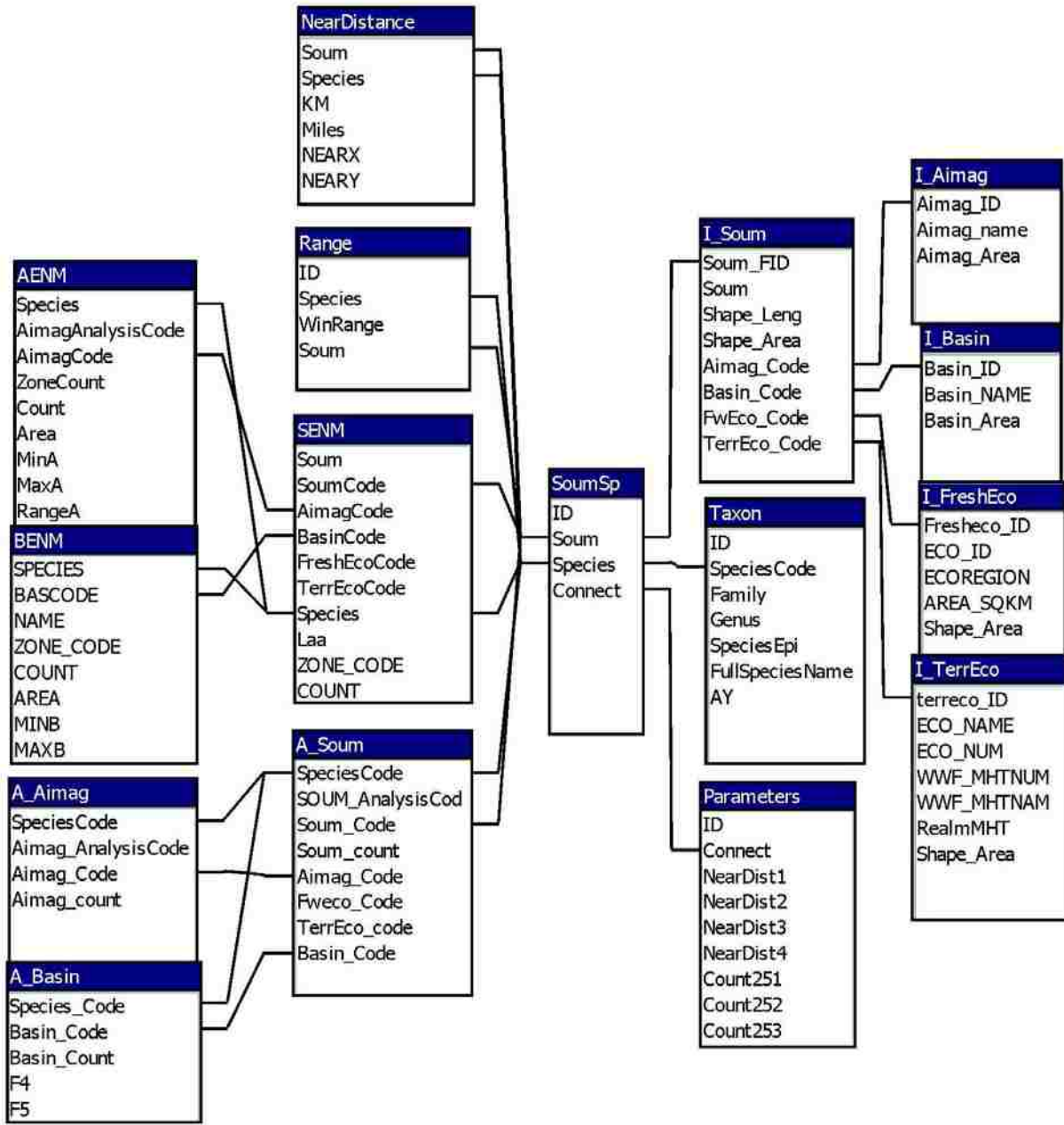


Figure 21. Access Table Relationships. The displayed related tables connect data in order to minimize redundant data, perform calculations with newly added data, and allow dynamic updates of calculation parameters.



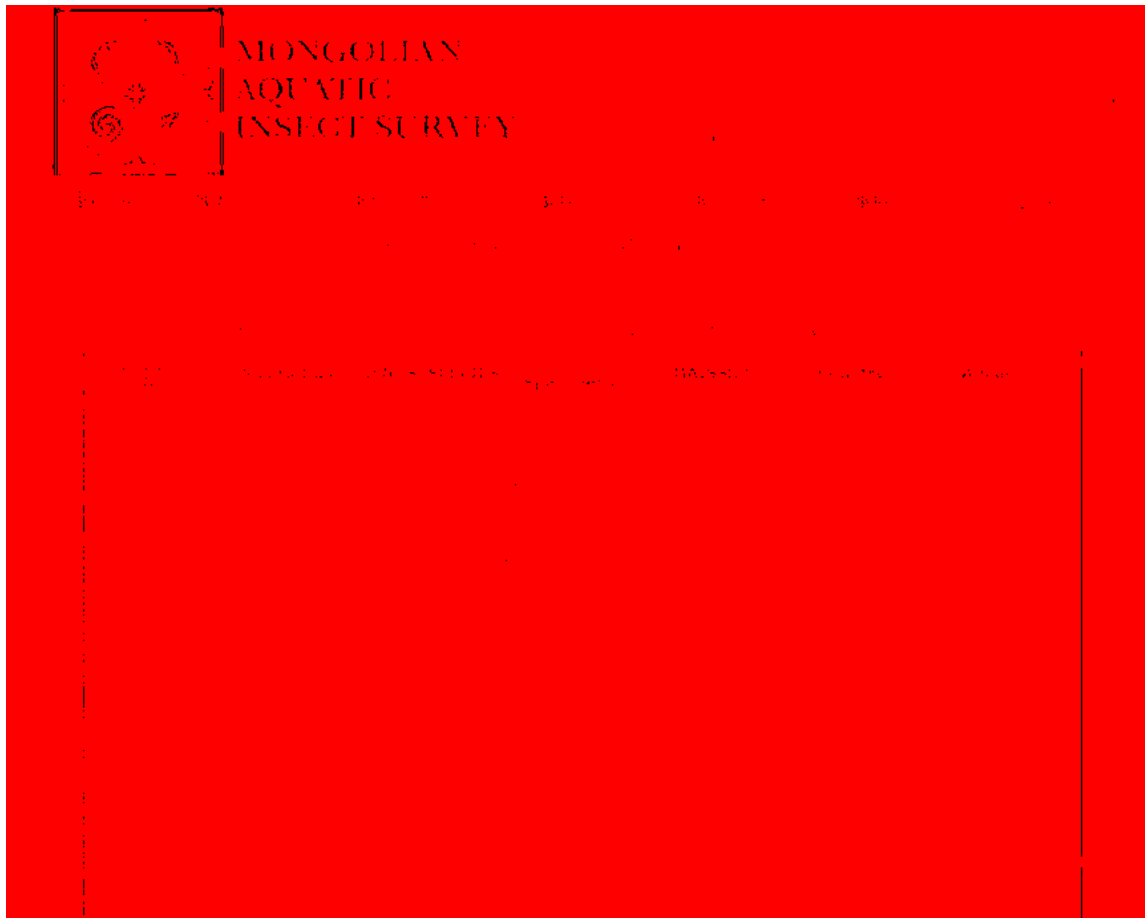


Figure 22. Online Database, Table View. This is a screenshot of the preliminary online version of the database at [http://clade.ansp.org/entomology/mongolia/mais\\_database.html](http://clade.ansp.org/entomology/mongolia/mais_database.html). The table view allows for hyperlink navigation through the nested hierarchy of taxonomy and geographic locations.

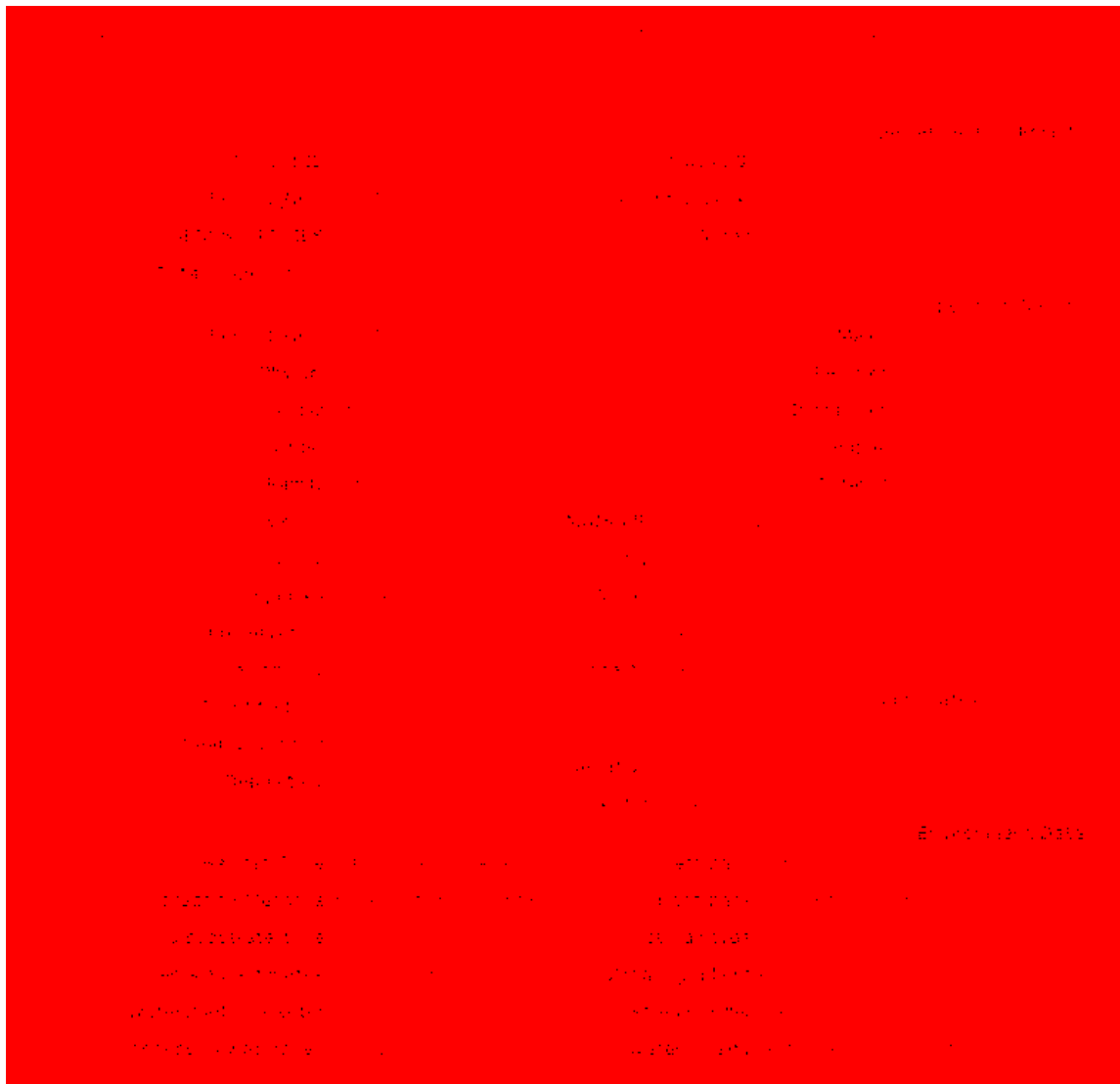


Figure 23. Online Database, Record View. This is a screenshot of the preliminary online version of the database at [http://clade.ansp.org/entomology/mongolia/mais\\_database.html](http://clade.ansp.org/entomology/mongolia/mais_database.html). The record view allows searching for specific criteria such as locality or species name and also allows browsing of details including preservation and environmental data.

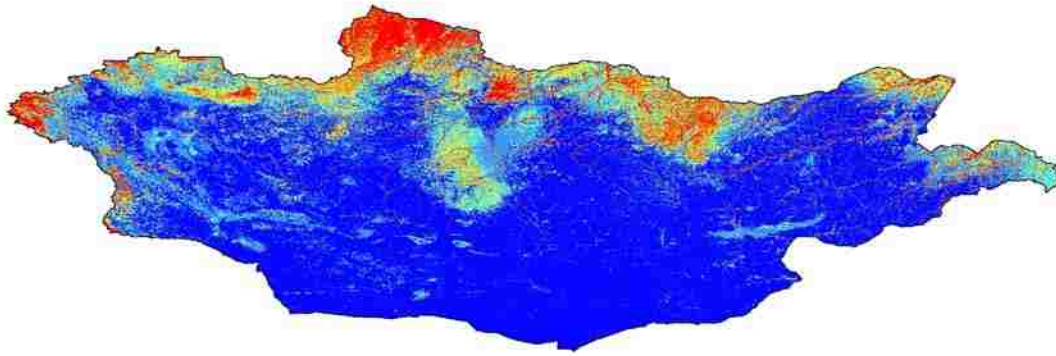


Figure 24. Predicted Richness Map. This map combines the individual species ENM maps (Figure 13), with probabilities over 0.65 equated to 1, to highlight potential areas of high richness including those where we have not yet sampled. Note the "hotspots" in Uvs and Dornod regions which are historically undersampled and not yet surveyed by our expedition team.

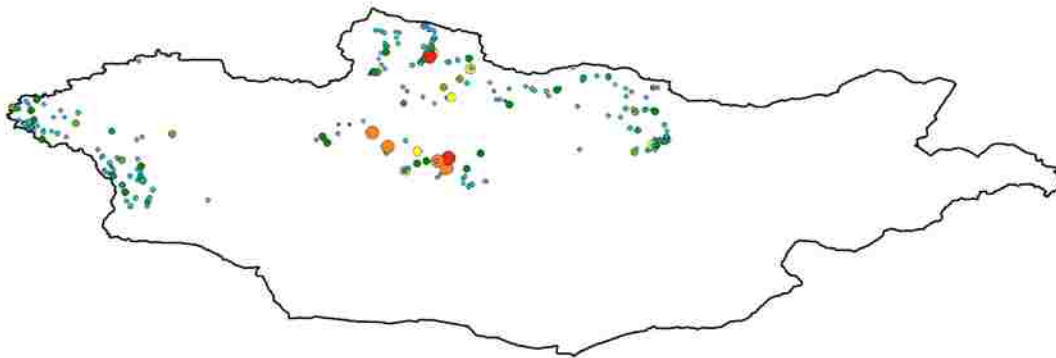


Figure 25. Actual Richness Map. This map combines the individual species occurrences to indicate areas of high richness in areas where we sampled. Large red circles indicate high richness and small blue circles indicate low richness, with a gradient of size and color representing intermediate richness.

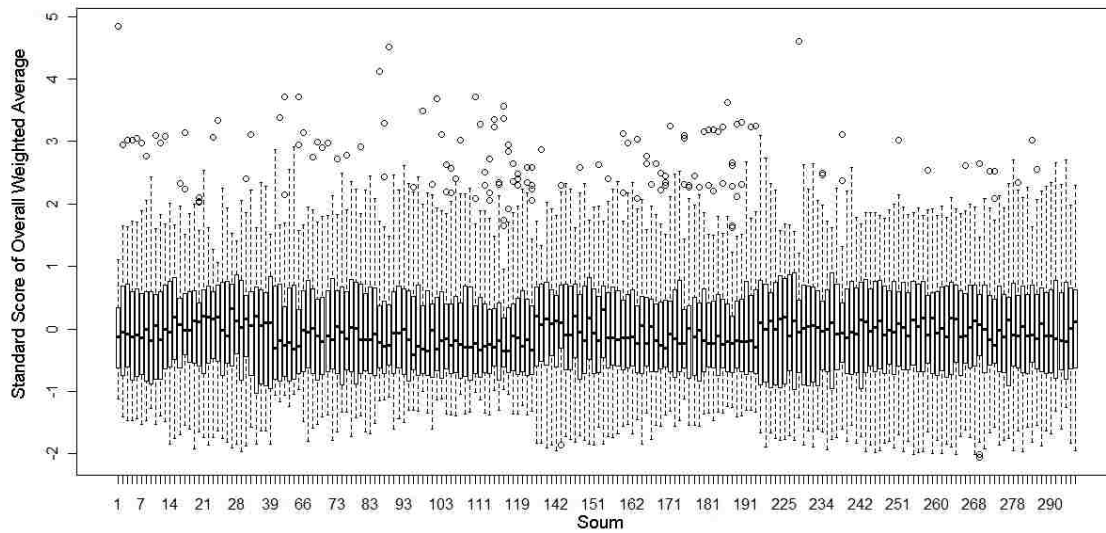


Figure 26. Boxplot of Overall Weighted Average Standard Scores by Soum. This boxplot demonstrates the approximately normal distribution of standard scores for each soum.

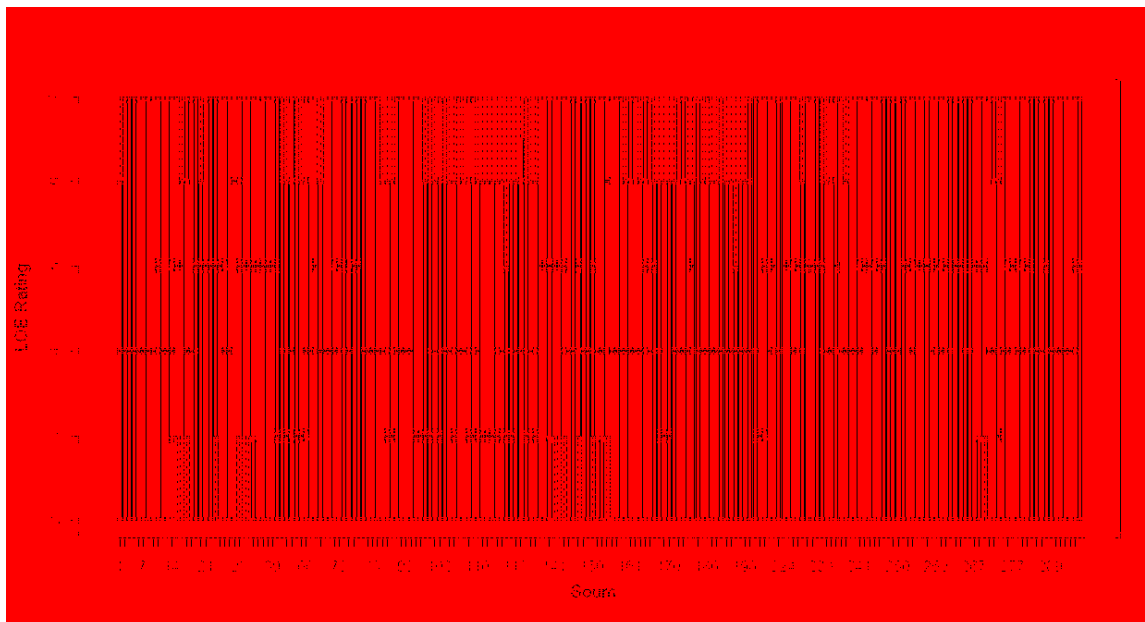


Figure 27. Boxplot of Level of Expectedness (LOE) Ratings by Soum. This boxplot illustrates the approximately normal distribution of LOE ratings for each soum. Overall Weighted Average Standard Scores were binned into the LOE categories (Table 2) according to the median and quartiles for each particular soum. This information is also available in the LOE reports as described in Appendix D.

## **APPENDIX A. NYMPH IDENTIFICATION KEYS AND SPECIES DIAGNOSIS PAGES.**

This compilation of keys, diagnoses, pictures, and maps was compiled using a series of master layouts in Adobe Indesign CS4.

### **NYMPH IDENTIFICATION KEY**

The family-level key is adapted with permission from a preliminary key composed by Will Bouchard (<http://www.entomology.umn.edu/midge/Projects/Taxonomy/Mongolia/Mongoliaguide.htm>). The terminal couplet for each species refers to a family-level diagnosis page which also contains a genera-level key. The genera keys were constructed with guidance from existing keys for the Palearctic (Lillehammer 1988, Zwick 2004, Teslenko and Zhiltzova 2009) and Nearctic (Merritt et al. 2008, Baumann 1973).

An asterix following a genera name in a terminal couplet indicates that our expeditions did not procure any specimens from that genera. Existing keys and characters therein were assumed to be accurate for diagnosis and were checked where possible using available specimens borrowed from the Monte L. Bean Museum, typically of Nearctic congeners.

Extended Focal Imaging Photographs (EFI) of diagnostic features are used to illustrate key couplets. If specimens of that genera were not available from Mongolia, either photographs of related taxa exhibiting the same characteristic or historical illustrations were used in their place. Unless otherwise noted, illustrations are adapted from Teslenko and Zhiltzova 2009.

## **DIAGNOSIS PAGES**

On each species page, diagnostic features are pictorially and textually described. As with the nymph key couplets, EFI photographs and re-drawings of historical illustrations were used to depict diagnostic features. Habitus photos of the specimens in life and when preserved are given. Preserved habitus photos were always taken of male specimens unless the species was only documented as females (i.e. *Kamimuria exilis*). A predicted ENM map superimposed with current documented range is included at the bottom of each species page. If the number of occurrences was too low to produce ENM maps, a simple “Range Map” is given which shows the known occurrences circumscribed by the range extent. If the species was not documented by our survey, an approximate “Historical Records map” is given instead which illustrates aimags of historical occurrence and an estimated range extent. On genus pages, a similar map is given that compares species ranges superimposed on a map with physical and political features, namely aimag borders, mountain ranges, and major rivers. The following diagnostic information is given on each species page. For the genus and family pages, comparable information is given excluding a complete synonymy.

**SYNONOMY:** A complete synonymy of each species is given along with the authors that described them or moved the species to a different genus. These author references are not given in the bibliography unless they deal directly with Mongolia.

**TYPE LOCALITY:** If available, the type locality is given. This was generally acquired from Zwick 1973 or more recent publications on specific genera (Zwick 2005, Sivec et al. 2005). As needed, localities were translated from Russian by Tristan McKnight. Localities listed in

Zwick 1973 as USSR were kept as such unless the locality description was specific enough to identify if the locality was in Russia or satellite countries.

**DIAGNOSIS:** This is a comparative description which highlights the main features of each species and compares it to similar species in Mongolia. Characters are given for males, females, and nymphs. The diagnosis does not consider other Palearctic species or congeners that do not occur in Mongolia. Tristan McKnight assisted with translations from Russian of original species descriptions for *Diura majuscula*, *Nemoura nigrodentata*, and *Skwala asiatica*.

## **DISTRIBUTION**

**Global:** Species were categorized according to established zoogeographical regions based on recent publications on Russian biogeography (Zhiltzova 1997, Zhiltzova 2009, Teslenko 2009) or noted as “Endemic to Mongolia”.

**Regional:** Abbreviations for each major drainage basin are used to indicate regional distribution of the species. The three drainages (Figure 1) are the Arctic Ocean Basin (AOB), Internal Drainage Basin (IDB), and Pacific Ocean Basin (POB). Our data was compared to the historical records documented in Surenkhorloo 2009. As in Table 3, an asterisk indicates an aimag occurrence documented by historical records but not by our survey, thus the lack of an asterisk indicates that we confirmed the local occurrence. Furthermore also as in Table 3, a ^ symbol indicates that we expanded the known range of the species with our survey records.

**Aimag:** Abbreviations for each aimag are used to indicate local distribution of the species. Our data was compared to the historical records documented in Surenkhorloo 2009.

However, because Surenkhorloo (2009) used our preliminary data in his assessment of aimag-level occurrence without validation of the actual specimens, we claim the novel records here and remove those for which we corrected the identifications. As in Table 3, an asterisk indicates an aimag occurrence documented by historical records but not by our survey, thus the lack of an asterisk indicates that we confirmed the local occurrence.

Furthermore also as in Table 3, a ^ symbol indicates that we expanded the known range of the species with our survey records. This section is condensed from the full material examined (Appendix C).

**DISCUSSION:** General comments on taxonomy, relevance to Mongolia, and biology are made here.



1. Finely branched gills present on thoracic segments (Figure A1); finely branched gills present or absent on abdomen (Figure A2).....2



Figure A1. Head and thorax of *Pteronarcys reticulata*, ventral. Photo by S. W. Judson.



Figure A2. Metathorax and first 3 abdominal segments of *Pteronarcys reticulata*, lateral. Photo by S. W. Judson.

1'. Finely branched gills absent from thoracic segments, although single gills may be present on neck and thoracic segments (Figure A3) or finely branched gills may be present on neck only; gills absent from abdomen.....3



Figure A3. Head and thorax of *Megarcys ochracea*, ventral. Photo by S. W. Judson.

2(1). Finely branched gills present on abdominal segments 1-2 (Figure A4); finely branched gills present on thorax (Figure A5).....**Pteronarcyidae** p. 167



Figure A4. Metathorax and first 3 abdominal segments of *Pteronarcys reticulata*, lateral. Photo by S. W. Judson.



Figure A5. Head and thorax of *Pteronarcys reticulata*, ventral. Photo by S. W. Judson.

2'. Finely branched gills absent from abdominal segments 1-2 (Figure A6); finely branched gills present on thoracic segments (Figure A6).....**Perlidae** p. 125



Figure A6. Head and thorax of *Agnetina cocandica*, ventral. Photo by S. W. Judson.

3(1'). Labium compact with three small notches (Figure A7); paraglossa not extending beyond glossa; labial palps robust (Figure A7).....4



Figure A7. Labium of *Capnia sp.*, ventral. Paraglossae and glossae outlined with dotted line. Photo by J. Ayala.

3'. Labium with deep notch and paraglossa extending beyond glossa (Figure A8); labial palps slender (Figure A8).....7



Figure A8. Labium of *Classenia sp.*, ventral. Paraglossae and glossae outlined with dotted line. Photo by S. W. Judson.

4(3). Tarsal segment 2 (T2) approximately equal to the length of segment 1 (T1) (Figure A9).....  
 .....**Taeniopterygidae** p. 169

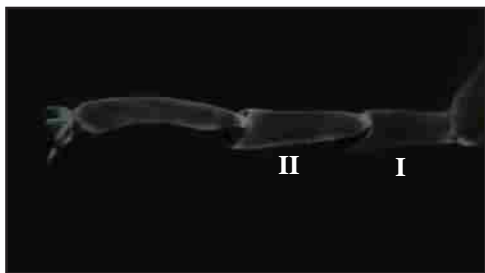


Figure A9. Tarsi and tarsal claw of *Taeniopterygidae*. Segments indicated with roman numerals. Photo by S. W.

4'. Tarsal segment 2 (T2) shorter than segment 1 (T1) (Figure A10).....5



Figure A10. Tarsi and tarsal claw of *Mesocapnia altaica*. Segments indicated with roman numerals. Photo by S. W. Judson.

5(4'). Robust larvae (Figure A11); extended hind legs reach about to tip of abdomen (Figure A11); meta-thoracic wings strongly divergent from midline (Figure A12 , Figure A11).....**Nemouridae** p. 111

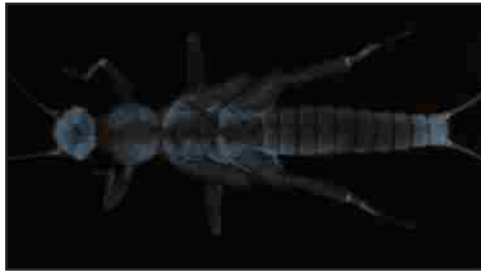


Figure A11. Body of *Nemoura cinerea*, dorsal. Photo by S. W. Judson.



Figure A12. Meso- and meta- thorax of *Nemoura cinerea*, dorsal. Photo by S. W. Judson.

5'. Long, slender larvae (Figure A13); extended hind legs far short of tip of abdomen (Figure A13); meta-thoracic wings not strongly divergent from midline (Figure A14, Figure A13).....6

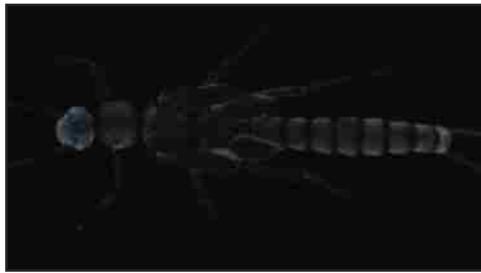


Figure A13. Body of *Mesocapnia altaica*, dorsal. Photo by S. W. Judson.

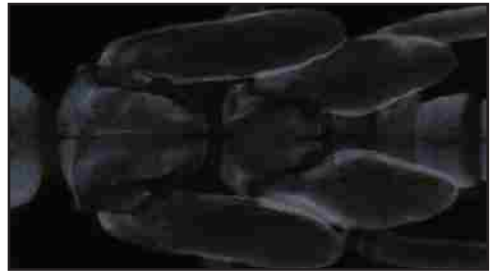


Figure A14. Meso- and meta- thorax of *Mesocapnia altaica*, dorsal. Photo by S. W. Judson.

6 (5'). Abdominal segments 1-9 separated by membranous pleural fold (Figure A15, Figure A16) which is more apparent in later instars; nymphs typically more robust and sclerotized (Figure A13) than Leuctridaenymphs.....**Capniidae**p.75

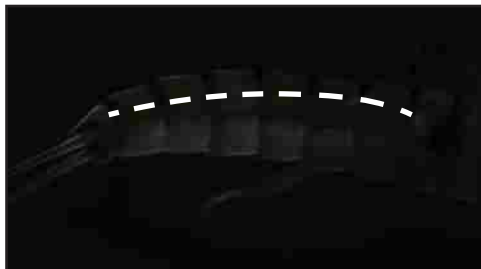


Figure A15. Abdomen of *Mesocapnia altaica*, lateral. The white dotted line is placed above the actual pleural fold for emphasis.



Figure A16. Abdomen of *Mesocapnia altaica*, ventral. Photo by S. W. Judson.

6'. Abdominal segments 7-9 without membranous pleural fold (Figure A17); nymphs especially elongate and typically less sclerotized (Figure A18) than Capniidae often making the pleural fold difficult to discern.....**Leuctridae**p. 106

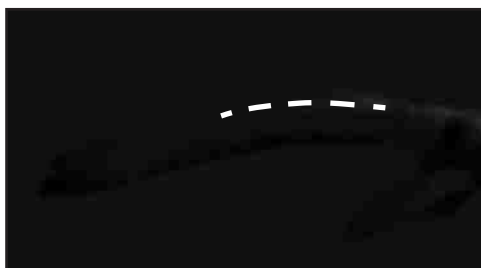


Figure A17. Abdomen of *Paraleuctra* sp., lateral. The white dotted line is placed above the actual pleural fold for emphasis.



Figure A18. Body of *Paraleuctra* sp., dorsal. Photo by S. W. Judson.

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7(3'). Cerci (tails) approximately  $\frac{3}{4}$  the length of abdomen and directed medially (Figure A19); hindwing pads parallel to or converging towards body axis and able to be circumscribed by an imaginary circle (Figure A20); head and thoracic terga without distinct pigmentation (Figure A20).....**Chloroperlidae** p. 91



Figure A19. Abdomen and cerci of *Suwallia teleckojensis*, dorsal. Photo by S. W. Judson.



Figure A20. Thoracic wingpads of *Suwallia teleckojensis*, dorsal. Photo by S. W. Judson.

7'. Cerci as long or longer than abdomen and directed outward (Figure A21); hindwing pads diverging from body axis (Figure A22); head and thoracic terga with distinct pigmentation (Figure A22).....  
.....**Perlodidae**p.135

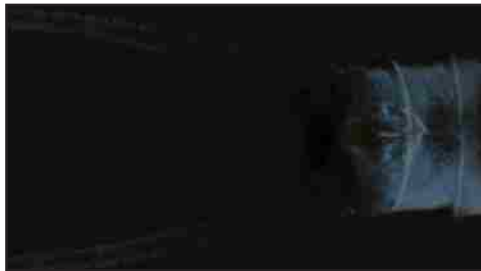


Figure A21. Abdomen and cerci of *Arcynopteryx polaris*, dorsal. Photo by S. W. Judson.

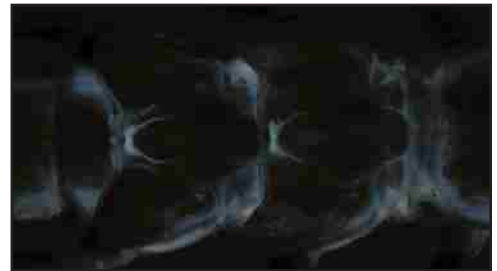


Figure A22. Thoracic wingpads of *Arcynopteryx polaris*, dorsal. Photo by S. W. Judson.

# CAPNIIDAE

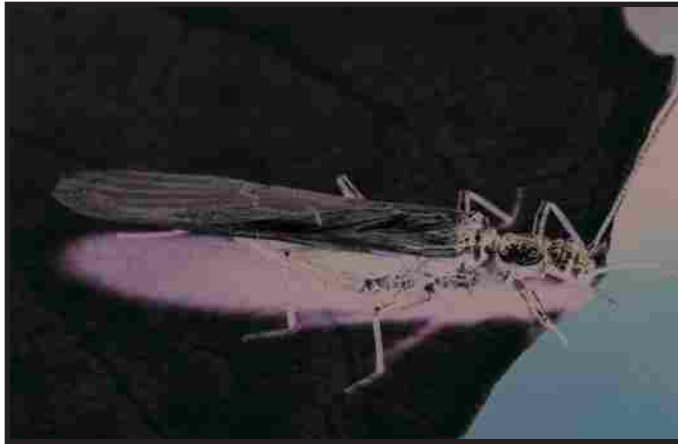


Figure A23. Habitus (live). *Isocapnia guentheri*, Terelj River (CRN 8949). Photo by C. R. Nelson.

**COMMON NAME:** Small Winter Stoneflies

**SIZE:** Small (5-10 mm)

**FEEDING GROUP:** Shredders

**TOLERANCE VALUE:** 1 (Low)

**DIAGNOSIS:** Adults usually dark brown to black in color (Figure A23), though some species are golden brown or faintly colored. Wing reduction (Figure A49, p. 81) is common in this family, although the majority of Mongolian species are macropterous. The adults, with the exception of the genus *Eucapnopsis*, have long many-segmented cerci. Male epiproct is either very long and skinny as in *Isocapnia* (Figure A52, p. 82) or short and wide as in *Capnia* (Figure A35, p. 78) or *Eucapnopsis* (Figure A45, p. 80). The female subgenital plate is usually little produced but heavily sclerotized in characteristic patterns. The nymphs are slender and elongate with pronotum only slightly

wider than abdomen. Nymph abdominal segments 1-9 are separated by a membranous pleural fold (Figure A15, p. 73). The paraglossa are subequal to the glossa and the labial palps are robust (Figure A7, p. 72).

**DISCUSSION:** Capniid nymphs are most common in small streams, including temporary streams and springs. The nymphs are relatively cryptic and inhabit the hyporheic zone. When they inhabit the main stem of the stream, they are usually located in gravel or detritus in sections of fast or moderate flow. Most capniid stoneflies emerge during cold months. They are often active on snow and are visible due to their dark color. Some species are found in temporary streams where they spend dry months burrowed down in the wetted substrate. The ecology of capniids in Mongolia is not well known and many species have been documented in late July at higher elevations.

- 1. Cerci with fringe of long lateral setae in addition to apical segmental whorls (Figure A24), fringe especially prominent on distal segments (Figure A25).....*Isocapnia*\* p. 81



Figure A24. Cerci of *Isocapnis* sp., ventral. Photo by S. W. Judson.



Figure A25. Distal cercal segments of *Isocapnis* sp., lateral. Photo by S. W. Judson.

- 1'. Cerci without fringe of lateral setae (Figure A26, Figure A27).....2

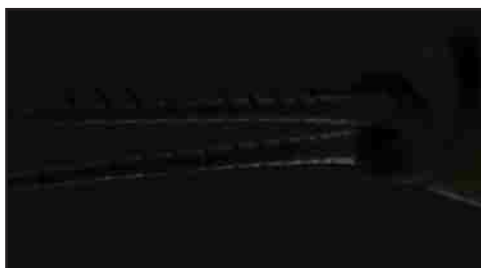


Figure A26. Cerci of *Mesocapnia altaica*, latero-ventral. Photo by S. W. Judson.

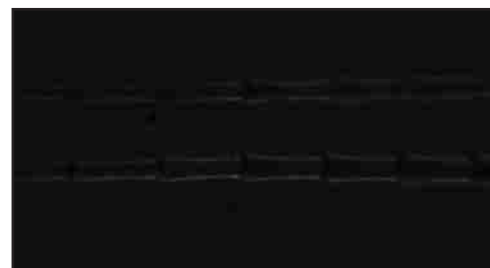


Figure A27. Distal cercal segments of *Mesocapnia altaica*, lateral. Photo by S. W. Judson.

2(1'). Ventral comb of lacinia with more than 30, even-length teeth (Figure A28); Only 13-16 cercal segments (Figure A29).....*Eucapnopsis brevicauda*\* p. 77, p. 80

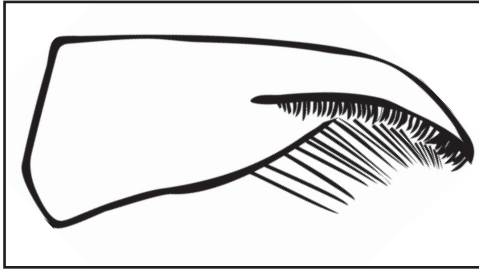


Figure A28. Lacinia of *Eucapnopsis* sp.. Illustration by S. W. Judson after Merritt et al. 2008.



Figure A29. Cerci of *Eucapnopsis brevicauda*, lateral. Photo by S. W. Judson.

2'. Ventral comb of lacinia with 16 or fewer uneven-length teeth (Figure A30); More than 20 cercal segments, though often distal segments are damaged or missing (Figure A31) .....  
 .....*Capnia* p. 77/*Mesocapnia* p. 85



Figure A30. Lacinia of *Capnia* sp.. Illustration by S. W. Judson after Merritt et al. 2008.



Figure A31. Cerci of *Mesocapnia altaica*, lateral. Photo by S. W. Judson.

^^ various hair characters have been proposed to separate these two genera, but they are not consistently supported nor were they useful in distinguishing the available Mongolian specimens

## CAPNIIDAE

# *Capnia*, *Eucapnopsis*



Figure A32. Habitus (live). *Capnia nigra*. Gunain Gol (SRP2006062903). Photo by C. R. Nelson. to determine such diagnostic coloration characters.

### *Capnia*

**DIAGNOSIS:** Adults of Mongolian *Capnia* species, unlike others throughout the Holarctic distribution, have a distinct two part epiproct with a simpler ventral section and a more varied upper section (Figure A42, p. 79). The epiproct tapers to an apical point which is more broadly rounded in the upper section than the lower. The female subgenital plate is not produced past the margin of sternum 8. In the center of the plate is a darkly sclerotized region, generally rectangular in shape (Figure A43, p. 79). Adult forewing venation with a curved R vein at its origin, whereas in other capniids this vein is straight. Nymphs are indeterminable to genus and cannot be consistently separated from *Mesocapnia*, though various hair characters have been proposed for discrimination. Within the Mongolian species, head coloration may be useful though we did not have enough specimens

**DISTRIBUTION - Global:** Holarctic - **Regional:** AOB, IDB - **Aimag:** BO<sup>^</sup>, KhG, UB\*, ZA

**DISCUSSION:** *Capnia* are relatively common in Mongolia compared to other capniids.

### *Eucapnopsis*

**DIAGNOSIS:** This genus is characterized by particularly short cerci, with fewer than 11 segments in adults and less than 16 in nymphs (Figure A29, p. 76). The male epiproct short and stout (Figure A45, p. 80), especially in comparison to other Mongolian capniids and *Capnia* in particular whose epiproct is of comparable width but is much longer. Male sternum 9 with a vesicle (Figure A46, p. 80) structure similar to ventral vesicles in *Isocapnia*. Female is membranous on sternum 8 with two lateral sclerites that extend towards the median (Figure A47, p. 80). The lacinia of the nymph has many (30+) even-length teeth (Figure A28, p. 76), whereas other capniids have fewer teeth that vary in size along the length of the ventral comb (Figure A30, p. 76).

**DISTRIBUTION - Global:** Amphi-Pacific - **Regional:** AOB\*, IDB\* - **Aimag:** KhD\*, SE\*

**DISCUSSION:** Our survey did not document *Eucapnopsis*, but the species *Eucapnopsis brevicauda* is known from the Eroo River (Purevdorj 2001).

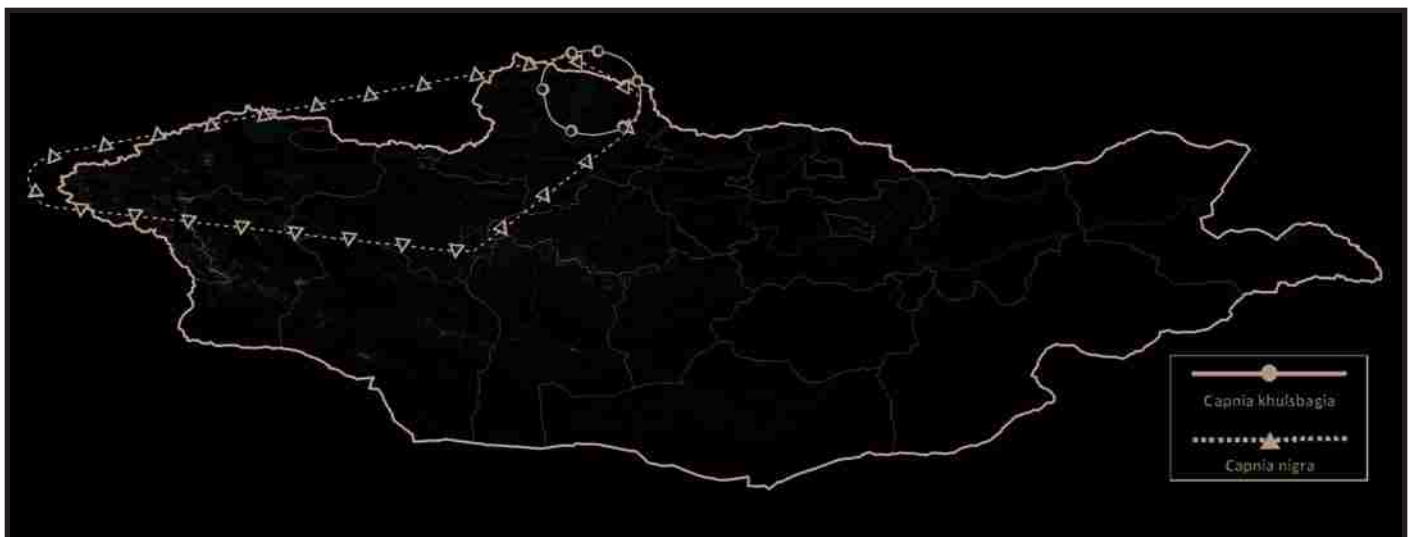


Figure A33. Comparative Distribution Map. *Capnia*. *Eucapnopsis* not shown due to lack of georeferenced localities from historical records.

## CAPNIIDAE

# *Capnia khubsugulica* Zhiltzova and Varykhanova, 1987



Figure A34. Habitus (preserved). *Capnia khubsugulica*. Photo by S. W. Judson.

### SYNONYMY

*Capnia khubsugulica* Zhiltzova and Varykhanova 1987

**TYPE LOCALITY:** Mongolia: Lake Khovsgol

**DIAGNOSIS:** Males and females are apterous (Figure A34) with no wing remnants, in contrast to *C. nigra* which is macropterous (Figure A40, p. 79). Male epiproct (Figure A35) composed of two portions (Figure A36), which appear to be fused whereas in *C. nigra* they are clearly separate (Figure A42, p. 79). The ventral portion gradually tapers to a point and the upper portion has an indentation with dark sclerotization along the median leading up to a broadly rounded tip. The female subgenital plate is truncate and has a strong sclerotized rectangle in the center (Figure A37). The sclerotized region is more round at the anterior margin than in *C.*

*nigra* (Figure A43, p. 79), and also more gradually fades from black to brown. Nymph unknown.

**DISTRIBUTION - Global:** Endemic to Mongolia - **Regional:** AOB - **Aimag:** KhG

**DISCUSSION:** This species is endemic to Mongolia and only known from the Lake Khovsgol region in the northern part of the country.



Figure A35. Male epiproct, dorsal. *Capnia khubsugulica*. Photo by S. W. Judson.



Figure A36. Male epiproct, lateral. *Capnia khubsugulica*. Photo by S. W. Judson.



Figure A37. Female subgenital plate. *Capnia khubsugulica*. Photo by J. Fazio.

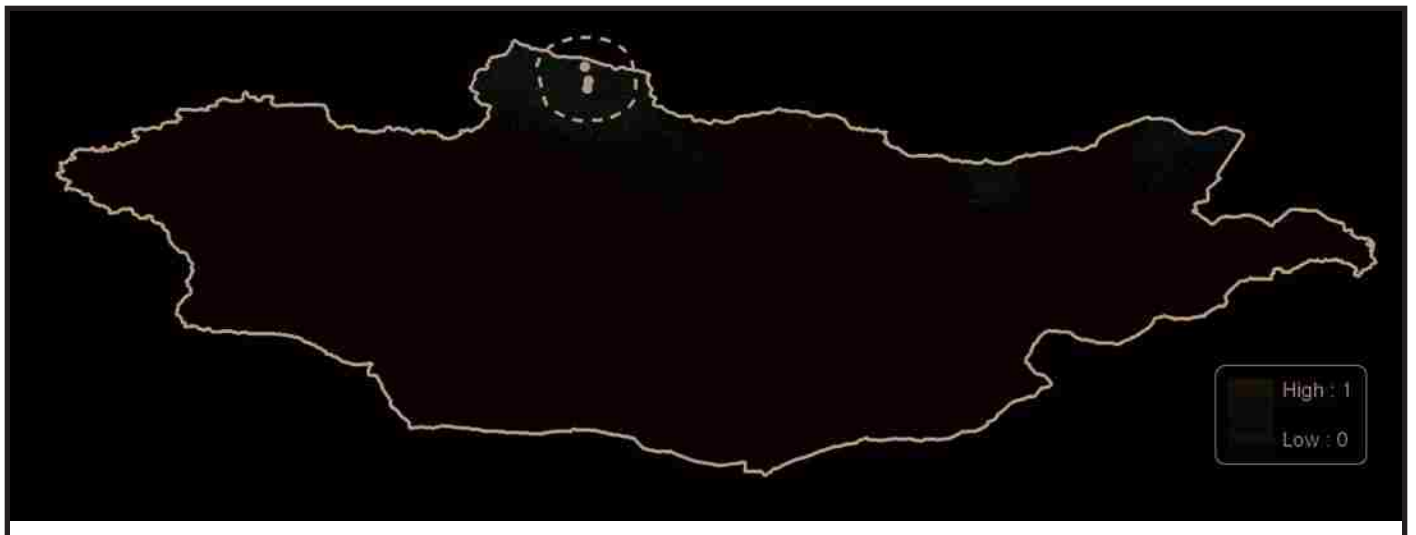


Figure A38. Predicted ENM Map with Documented Occurrences and Range Estimate. *Capnia khubsugulica*.



## CAPNIIDAE

# *Capnia nigra* (Pictet, 1833)

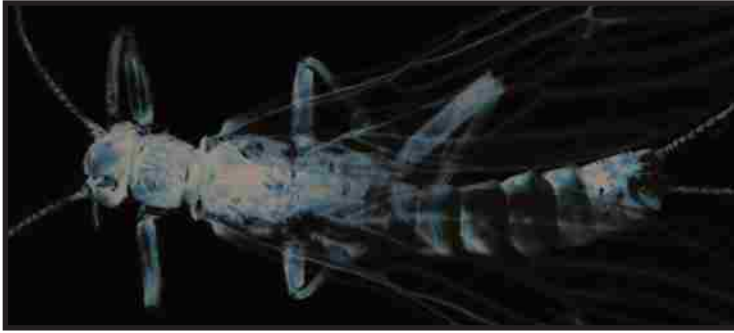


Figure A40. Habitus (preserved). *Capnia nigra*. Photo by S. W. Judson.

### SYNONYMY

*Perla nigra* Pictet 1833  
*Capnia conica* Klapalek 1909  
*Capnia maynari* Navas 1917  
*Capnia apicalis* Navas 1930  
*Capnia nigra* Zwick 1972

**TYPE LOCALITY:** Switzerland

**DIAGNOSIS:** Males and females are macropterous (Figure A40), whereas the highly similar *C. khubsugulica* is apterous (Figure A34, p. 78) without any wings or wing buds present even in the adult form. Male epiproct (Figure A41) composed of two separable portions (Figure A42), the ventral part simple and gradually tapering to the apex. These two portions appear fused in *C. khubsugulica*

(Figure A36, p. 78), but are clearly separate in *C. nigra*. The upper portion is more complex with fluctuations in width, especially with a bulge in the apical half which then quickly narrows to a blunt point. The female subgenital plate is slightly produced and has a strong sclerotized rectangle in the center (Figure A43). The lateral edges of the sclerotized region are more starkly contrasting and demarcated than in *C. khubsugulica* (Figure A37, p. 78), with sharply defined corners especially at the anterior margin. Nymph head and abdomen with dark spots, including 4 spots located around the anterior perimeter of the ocellar triangle. Nymph metanotum with regular rows of very small setae, a diagnostic character for distinguishing it from other Palearctic *Capnia*

**DISTRIBUTION - Global:** Trans-Palaearctic - **Regional:** AOB, IDB - **Aimag:** BO<sup>^</sup>, KhG, UB\*, ZA



Figure A41. Male epiproct, dorsal. *Capnia nigra*. Photo by S. W. Judson.



Figure A42. Male epiproct, lateral. *Capnia nigra*. Photo by J. Fazio.



Figure A43. Female subgenital plate. *Capnia nigra*. Photo by S. W. Judson.

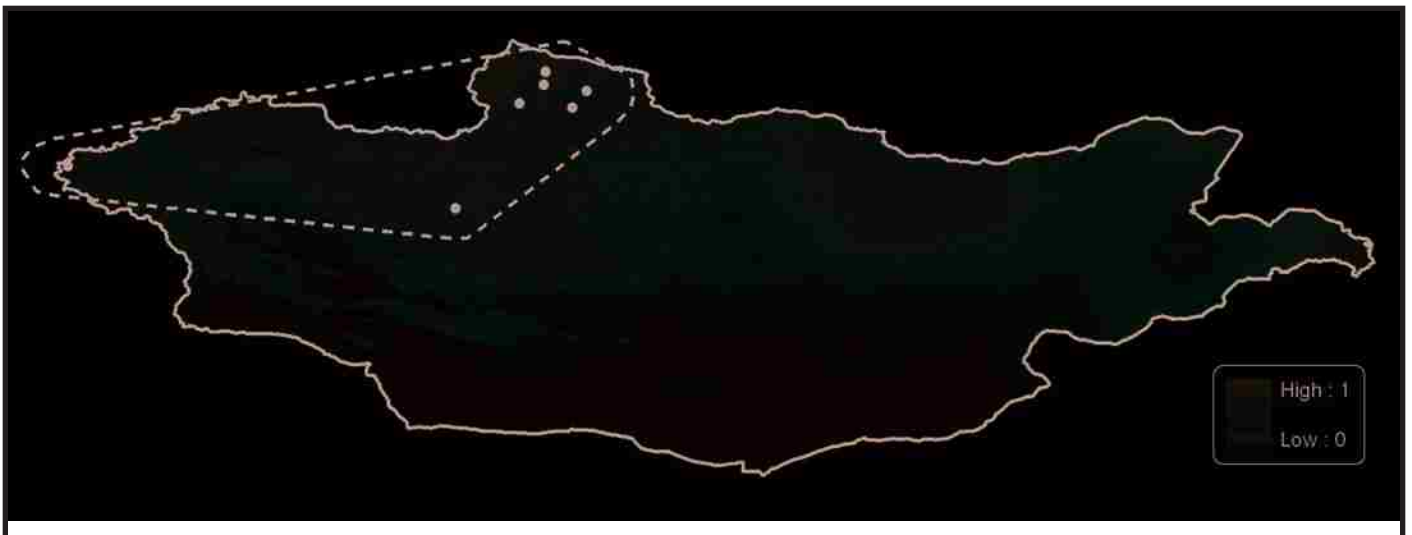


Figure A39. Predicted ENM Map with Documented Occurrences and Range Estimate. *Capnia nigra*.

## CAPNIIDAE

# *Eucapnopsis brevicauda* Claassen, 1924



Figure A44. Habitus (preserved). *Eucapnopsis brevicauda*. Photo by S. W. Judson.

### SYNONYMY

*Eucapnopsis brevicauda* Claassen 1924

**TYPE LOCALITY:** USA: Boulder, Colorado

**DIAGNOSIS:** Adults have characteristically short cerci (Figure A44), typically with 5-6 segments but always fewer than 11 segments. Male epiproct short and stout (Figure A45), especially in comparison to other Mongolian capniids and *Capnia nigra* (Figure A41, p. 79) in particular. Male sternum 9 with a vesicle structure that is roughly the same color as sternum 10 and therefore blends in (Figure A46), whereas the vesicles in *Isocapnia* are more strikingly contrasting and pronounced (Figure A53, p. 82). Female does not have an apparent subgenital plate, but rather two lateral sclerites that progress towards the membranous median (Figure

A47). Nymph also with short cerci, with fewer than 15 segments (Figure A29, p. 76). Nymphal lacinia with many (30+) even-length teeth (Figure A28, p. 76).

**DISTRIBUTION - Global:** Amphi-Pacific - **Regional:** AOB\*, IDB\* - **Aimag:** KhD\*, SE\*

**DISCUSSION:** *Eucapnopsis brevicauda* is a common species in the Nearctic as well, with the type locality near the hometown of the author, S. W. Judson.



Figure A45. Male epiproct. *Eucapnopsis brevicauda*. Photo by S. W. Judson.



Figure A46. Male, ventral. *Eucapnopsis brevicauda*. Photo by S. W. Judson.



Figure A47. Female subgenital plate. *Eucapnopsis brevicauda*. Photo by S. W. Judson.

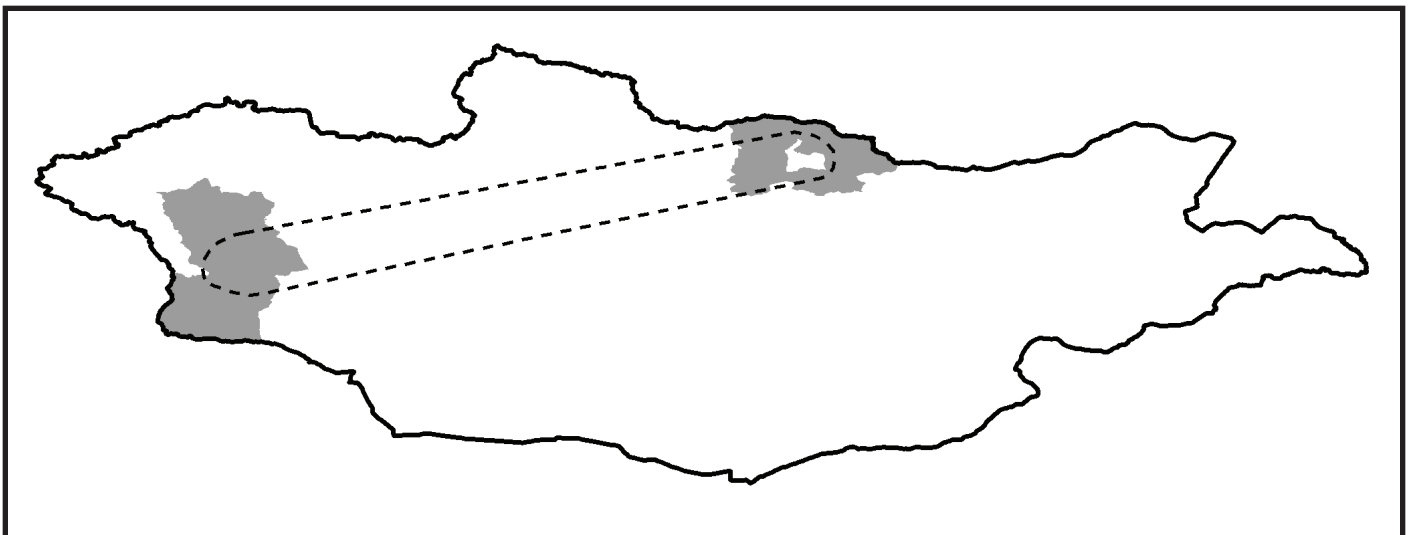


Figure A48. Historical Records Map with Range Estimate. *Eucapnopsis brevicauda*.

# CAPNIIDAE

## *Isocapnia*

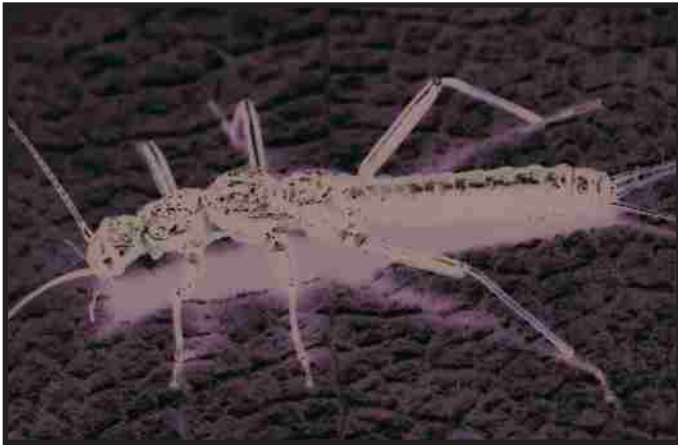


Figure A49. Habitus (live). *Isocapnia guentheri*. Terelj River (CRN8949). Photo by C. R. Nelson.

- **Aimag:** AR, BU<sup>^</sup>, KhD<sup>\*</sup>, KhG<sup>^</sup>, SE<sup>^</sup>, TO<sup>^</sup>, UB<sup>^</sup>, ZA

**DISCUSSION:** The *Isocapnia* of Mongolia seem to be restricted to the Selenge (AOB) drainage (Figure A50), with only a few specimens occurring in the eastern-most portions of the Internal Drainage basin. However, we suspect that this genus is more widespread due to the new record of *I. kudia* for Mongolia which demonstrates that members of this genus are rarely undersampled.

**DIAGNOSIS:** Dark brown in color (Figure A49) often with golden-brown patterning, especially behind the eyes and on the pronotum (Figure A51, p. 82). Male epiproct is long and narrow (Figure A52, p. 82), especially in comparison to *Capnia* and *Mesocapnia*. The epiproct is often characteristically shaped at the apex which can be seen only at high magnifications. Male has a ventral vesicle extending from sternum 9 (Figure A53, p. 82), which is similar to the vesicle of *Eucapnopsis* (Figure A46, p. 80) and superficially resembles the hammer or drum vesicles present in Nemouridae and *Isoperla*. Female subgenital plate often with distinct sclerotization which emphasizes general shape (Figure A54, p. 82) or creates a diagnostic pattern (Figure A59, p. 83). Nymph cerci with long intrasegmental hairs in addition to shorter apical whorls (Figure A25, p. 75). Later instar nymphs with posterior extension between the cerci encasing the developing epiproct.

**DISTRIBUTION - Global:** Holarctic - **Regional:** AOB, IDB



Figure A50. Comparative Distribution Map. *Isocapnia*.

## CAPNIIDAE

# *Isocapnia guentheri* (Joost, 1970)



Figure A51. Habitus (preserved). *Isocapnia guentheri*. Photo by S. W. Judson.

### SYNONYMY

*Capnia guentheri* Joost 1970

*Isocapnia guentheri* Zhiltzova 1972

**TYPE LOCALITY:** Mongolia: Archangai [Arkhangai], Tamir River

**DIAGNOSIS:** Male brachypterous (Figure A51), whereas other *Isocapnia* males are macropterous (Figure A56, p. 83). Male epiproct (Figure A52) approximately as long as 2 abdominal segments which is comparable to *I. kudia* (Figure A57, p. 83), but longer than that of *I. sibirica* (Figure A62, p. 84). Apex of epiproct forming a beak-shape, rounded at the tip and curved back to a point creating a subapical hook or process. In contrast, *I. kudia* has two points or hooks on the epiproct apex whereas *I. sibirica* is

truncate and without additional processes. The male's ventral vesicle of sternum 9 is narrow with prominent hairs at the posterior apex (Figure A53). Other *Isocapnia* have a more round vesicle (Figure A63, p. 84). Female subgenital plate truncate but with a U-shaped sclerotization pattern which causes it to look rounded and protruding (Figure A54). The plate of *I. sibirica* is more truncate and recessed without pronounced sclerite patterning or emphasis (Figure A64, p. 84), whereas *I. kudia* has a characteristic sclerite pattern (Figure A59, p. 83). Nymph with a central dark mark on the head and light area behind the eyes, where as *I. kudia* is dark behind the eyes.

**DISTRIBUTION - Global:** East Palaearctic - **Regional:** AOB, IDB - **Aimag:** AR, BU<sup>^</sup>, KhG<sup>^</sup>, SE<sup>^</sup>, TO<sup>^</sup>, UB<sup>^</sup>, ZA

**DISCUSSION:** *I. guentheri* was originally described from Mongolia by Joost (1970). It is the most widespread *Isocapnia* in Mongolia (Figure A55).



Figure A52. Male epiproct. *Isocapnia guentheri*. Photo by J. Fazio.

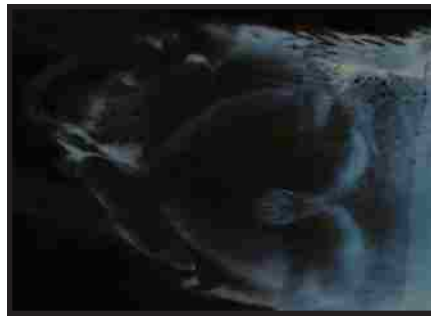


Figure A53. Male, ventral. *Isocapnia guentheri*. Photo by S. W. Judson.

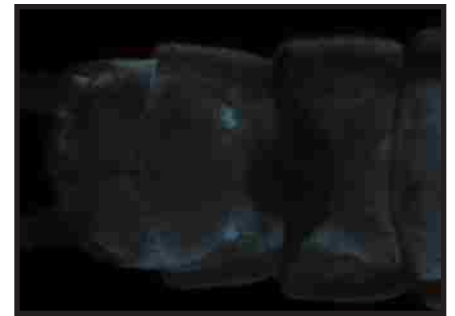


Figure A54. Female subgenital plate. *Isocapnia guentheria*. Photo by J. Fazio.

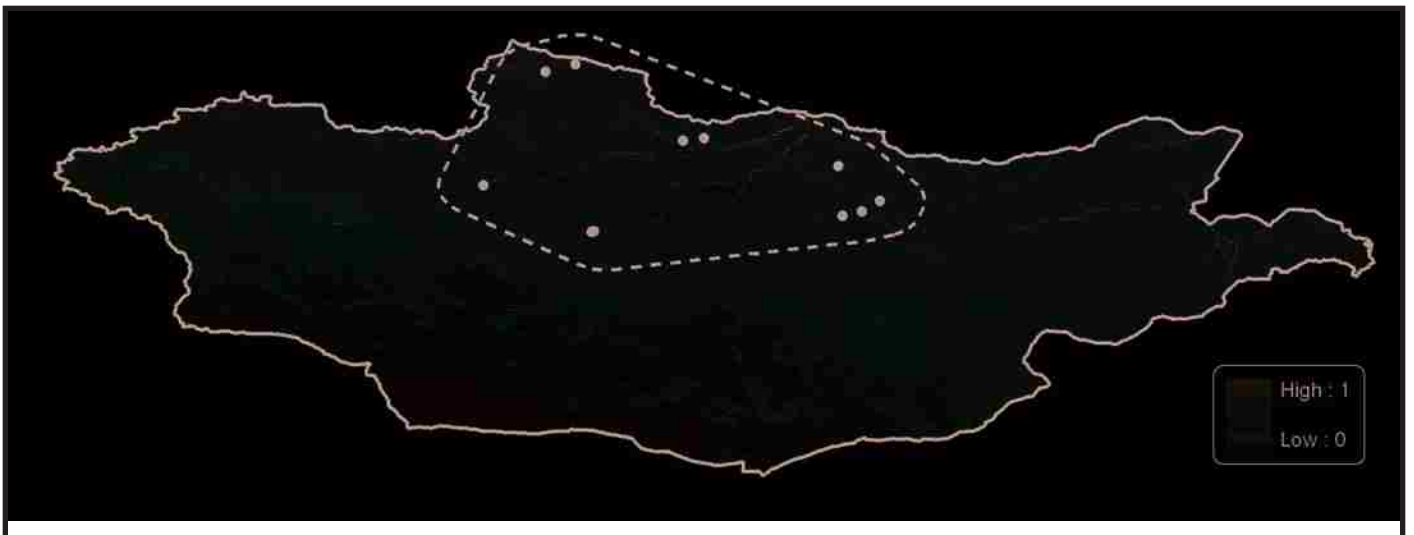


Figure A55. Predicted ENM Map with Documented Occurrences and Range Estimate. *Isocapnia guentheri*.

## CAPNIIDAE

# *Isocapnia kudia* Ricker, 1959



Figure A56. Habitus (preserved). *Isocapnia kudia*. Photo by S. W. Judson.

### SYNONYMY

*Isocapnia kudia* Ricker 1959

**TYPE LOCALITY:** USSR: Siberia, Amagu, Kudia river

**DIAGNOSIS:** Male epiproct (Figure A57) approximately as long as 2 abdominal segments which is comparable to *I. guentheri* (Figure A52, p. 82), but longer than that of *I. sibirica* (Figure A62, p. 84). Apex of epiproct with two hooks, one at the apex and one slightly farther down the epiproct. In contrast, *I. guentheri* has one subapical hook and *I. sibirica* has none. Epiproct also angular in cross section, whereas other *Isocapnia* are more cylindrical. The ventral vesicle of the male on sternum 9 is oval and with peripheral hairs which blend in with the body color (Figure A58). This is similar to *I. sibirica* which has a slightly more round vesicle (Fig-

ure A63, p. 84), but in stark contrast to *I. guentheri* (Figure A53, p. 82) which has a very narrow vesicle with more prominent hairs at the posterior apex. In our single specimen from Mongolia, the vesicle was recessed (Figure A58) but this character is likely undiagnostic. Female subgenital plate with distinctive sclerotization (Figure A59), forming two medially directed lobes similar in shape to the arms of the letter "C". Other *Isocapnia* have some sclerotization which emphasizes shape as in *I. guentheri* (Figure A54, p. 82), but no other species has such a diagnostic shape nor high contrast between sclerotized and membranous regions. Nymph with a central dark mark on the head which continues into a dark area behind the eyes, where as *I. guentheri* has light coloration behind the eyes.

**DISTRIBUTION - Global:** East Palaearctic - **Regional:** AOB<sup>^</sup> - **Aimag:** KhG<sup>^</sup>

**DISCUSSION:** This is the first documented occurrence of *I. kudia* in Mongolia. It is otherwise well known throughout the Palearctic.

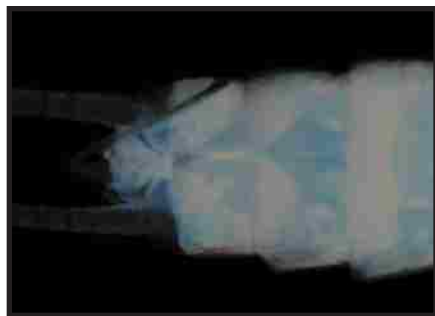


Figure A57. Male epiproct. *Isocapnia kudia*. Photo by J. Fazio.



Figure A58. Male, ventral *Isocapnia kudia*. Photo by S. W. Judson.



Figure A59. Female subgenital plate. *Isocapnia kudia*. Photo by J. Fazio.

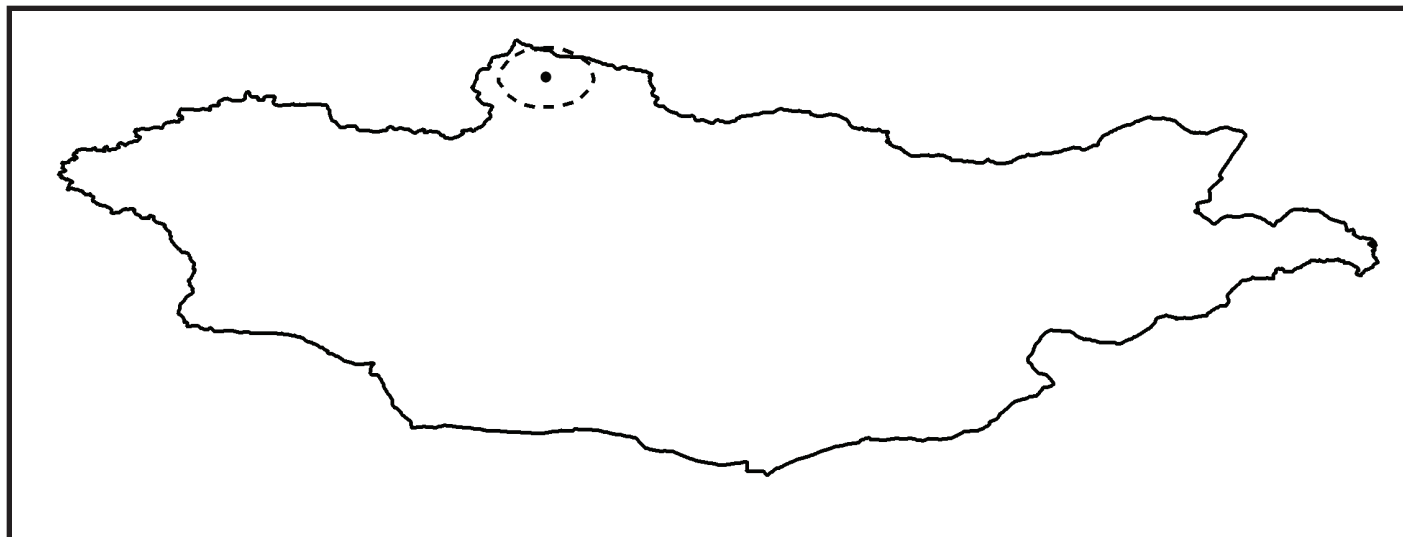


Figure A60. Range Map with Document Occurrences. *Isocapnia kudia*.

## CAPNIIDAE

# *Isocapnia sibirica* (Zapekina-Dulkeit 1955)

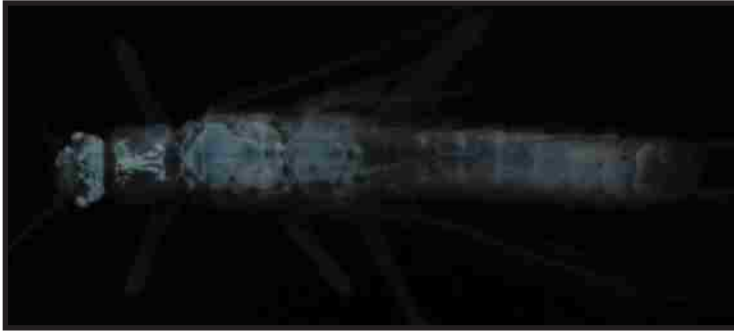


Figure A61. Habitus (preserved). *Species*. Photo by S. W. Judson. Photo by J. Fazio. Photo by C. R. Nelson.

very narrow vesicle (Figure A53, p. 82). Female subgenital plate truncate and slightly recessed (Figure A64), without sclerotization emphasis of the shape as in other *Isocapnia*. In comparison to *I. guentheri* (Figure A54, p. 82), the plate does not protrude and lacks a U-shaped sclerite outline. Nymph unknown.

**DISTRIBUTION - Global:** East Palearctic - **Regional:** AOB, IDB\* - **Aimag:** AR, KhD\*, TO<sup>^</sup>, ZA\*

**DISCUSSION:** The few specimens we documented were located at elevations ranging from 1500 to 1800 msl.

### SYNONYMY

*Capnia nigra sibirica* Zapekina-Dulkeit 1955

*Isocapnia sibirica* Zhiltzova 2003

**TYPE LOCALITY:** Russia: Altai Mountains, Teletskoye Lake

**DIAGNOSIS:** Male epiproct (Figure A62) slightly shorter than that of *I. kudia* and *I. guentheri* (Figure A57, p. 83), approximately the length of 1 abdominal segments rather than 2. Apex of epiproct truncate and bent at a 45 degree angle, in contrast to other *Isocapnia* which have round to pointed epiproct apices. On the male, the ventral vesicle of sternum 9 is round (Figure A63). This is similar to *I. kudia* which has a slightly more oval-shaped vesicle (Figure A58, p. 83), but in stark contrast to *I. guentheri* which has a

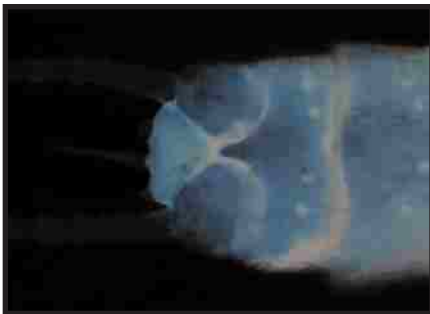


Figure A62. Male epiproct. *Isocapnia sibirica*. Photo by J. Fazio.

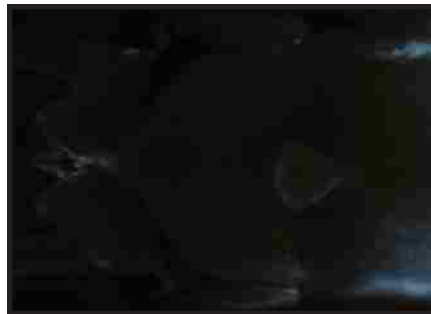


Figure A63. Male, ventral. *Isocapnia sibirica*. Photo by S. W. Judson.



Figure A64. Female subgenital plate. *Isocapnia sibirica*. Photo by S. W. Judson.

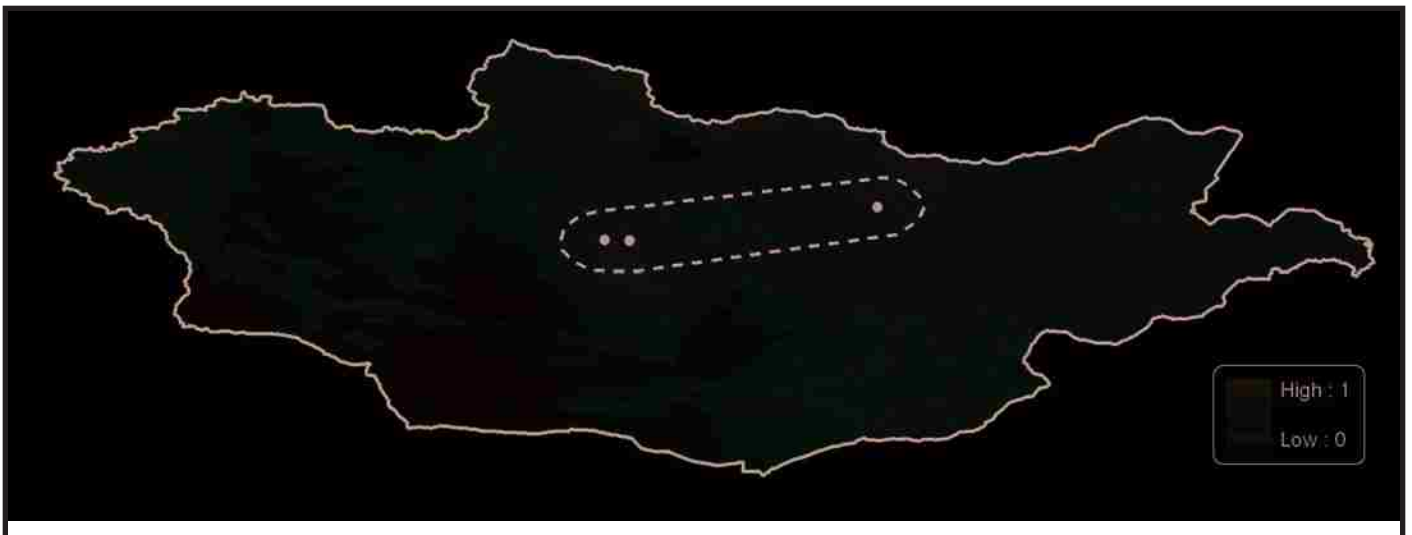


Figure A65. Predicted ENM Map with Documented Occurrences and Range Estimate. *Isocapnia sibirica*.

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# CAPNIIDAE

## *Mesocapnia*

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Figure A66. Habitus (live). *Mesocapnia altaica*. Ulaistai River (MAIS2008070802). Photo by C. R. Nelson.

**DIAGNOSIS:** Adult generally dark brown to black in color (Figure A66), with limited golden brown highlights. Male epiproct (Figure A69, p. 86.) more slender than *Capnia*, but wider than *Isocapnia*. Epiproct often variable in width (Figure A78, p. 88). along its length and usually gradually tapering to a narrow pointed apex. Female plate only slightly produced (Figure A70, p. 86). and without striking sclerotization patterns as in *Isocapnia*. Nymphs are indeterminable to genus and cannot be consistently separated from *Capnia*, though various hair characters have been proposed for discrimination.

**DISTRIBUTION - Global:** Holarctic- **Regional:** AOB, IDB - **Aimag:** AR, BO, KhG, TO, UB\*, UV\*, ZA^

**DISCUSSION:** Most of the specimens from this genus documented in Mongolia are from elevations greater than 2000 msl.

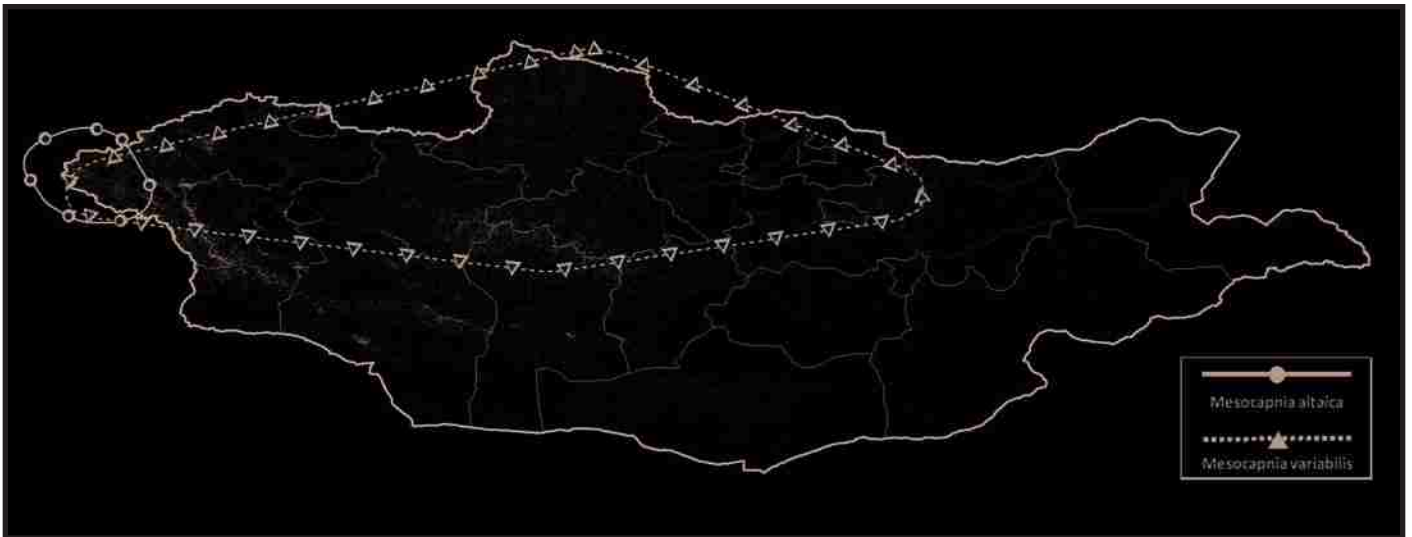


Figure A67. Comparative Distribution Map. *Mesocapnia*. *Mesocapnia silvatica* not shown due to lack of georeferenced localities from historical records.

## CAPNIIDAE

# *Mesocapnia altaica* (Zapekina-Dulkeit 1955)

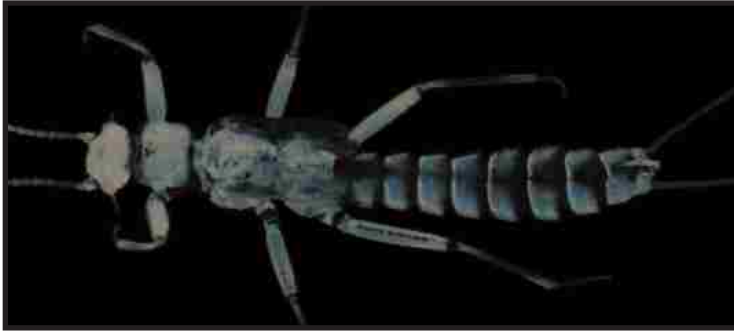


Figure A68. Habitus (preserved). *Mesocapnia altaica*. Photo by S. W. Judson.  
Photo by J. Fazio. Photo by C. R. Nelson.

### SYNONYMY

*Capnia vidua altaica* Zapekina-Dulkeit 1955  
*Mesocapnia altaica* Zwick 1973

**TYPE LOCALITY:** Siberia: Altai

**DIAGNOSIS:** Adult males are brachypterous (Figure A68) and their average wing length is 1-1.5 mm. Females are also brachypterous but with longer wings than males, approximately 3-4mm in length. Male epiproct is long (Figure A69), usually extending to the anterior margin of tergite 9. The epiproct is of relatively uniform width (Figure A69) from both the lateral and dorsal views, with a pronounced abrupt tapering at the apex. In *M. silvatica*, based on historical illustrations (Rausser 1968, Figure A73, p. 87), the epiproct is shorter at most extending halfway across tergite 9

and the epiproct is wider with more gradual tapering at the apex. Female subgenital plate has a small central bump (Figure A70), where as *M. silvatica* and *M. variabilis* are broadly rounded (Figure A80, p. 88). Nymphs (Figure A71) are indeterminable to genus or species and cannot be consistently separated from *Capnia*.

**DISTRIBUTION - Global:** Sayan & Altai Mountains - **Regional:** IDB - **Aimag:** BO^

**DISCUSSION:** This is the first documented occurrence of *M. altaica* in Mongolia. The species is endemic to the Altai mountains for which it is named. The nymph (Figure A71) is known only by association with adults from the same localities.



Figure A69. Male epiproct. *Mesocapnia altaica*. Photo by S. W. Judson.



Figure A70. Female subgenital plate. *Mesocapnia altaica*. Photo by R. Woodfield.



Figure A71. Nymph habitus. *Mesocapnia altaica*. Photo by S. W. Judson.

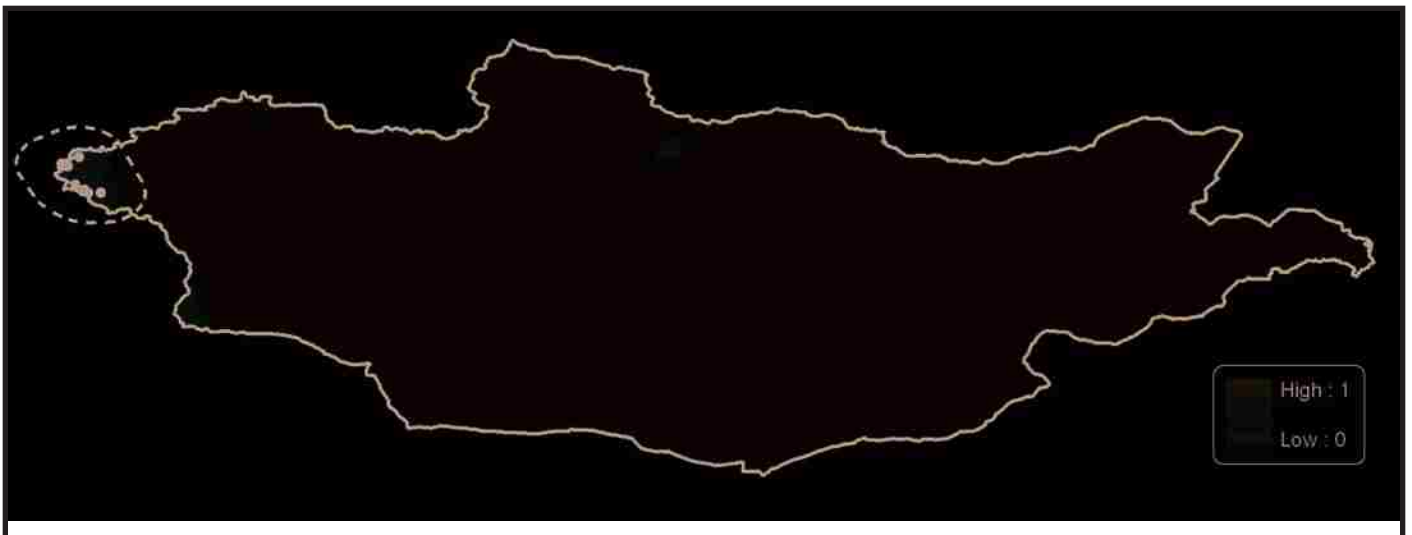


Figure A72. Predicted ENM Map with Documented Occurrences and Range Estimate. *Mesocapnia altaica*.



## CAPNIIDAE

# *Mesocapnia silvatica* Rauser 1968

### SYNONYMY

*Mesocapnia silvatica* Rauser 1968

**TYPE LOCALITY:** Mongolia: Ulan Bator, Nukht in Bogdo Ul

**DIAGNOSIS:** Based on historical description and illustrations (Rauser 1968), males and females are macropterous with wing lengths exceeding 10mm. In contrast, *M. altaica* is distinctly brachypterous (Figure A68, p. 86). Male epiproct (Figure A73) is shorter than *M. altaica* (Figure A69, p. 86), extending only halfway across tergite 9. The epiproct slightly widens and narrows multiple times along the length of the epiproct, most noticeable from the lateral view (Figure A74). At the tip, the epiproct gradually tapers, whereas in *M. altaica* the tapering is more abrupt. Rauser describes the overall shape from the lateral view as the profile of a snipe (bird) head that is craned forward (Figure A74). Female subgenital plate is broadly rounded (Figure A75) similar to *M. variabilis* (Figure A80, p. 88) and cannot be separated clearly based on illustrations, but *M. silvatica* lacks the central bump present in *M. altaica* (Figure A70, p. 86). Nymphs are indeterminable to genus or species and cannot be consistently separated from *Capnia*.

**DISTRIBUTION - Global:** Endemic to Mongolia - **Regional:** AOB\*, IDB\* - **Aimag:** AR\*, BO\*, KhG\*, TO\*, UB\*

**DISCUSSION:** Rauser first described the genus *Mesocapnia* from this species endemic to Mongolia. This species is similar to *M. altaica* and has shared female characteristics with *M. variabilis*, both species of which have been documented throughout the recorded range of *M. silvatica* (Figure A76). We have collected near the type locality and only documented *M. variabilis* in that region. Evaluation of the original type specimens and collecting during different parts of the season at the type locality are needed to confirm the validity of this species. Investigation as to the validity of the genus *Mesocapnia* as a whole is also warranted.

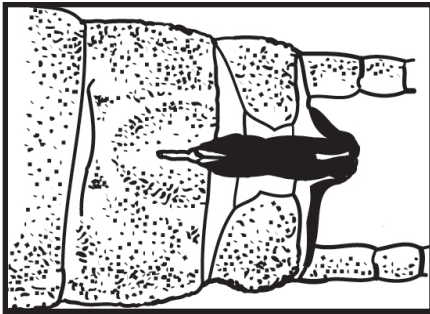


Figure A73. Male epiproct, dorsal. *Mesocapnia silvatica*. Illustration by S. W. Judson.

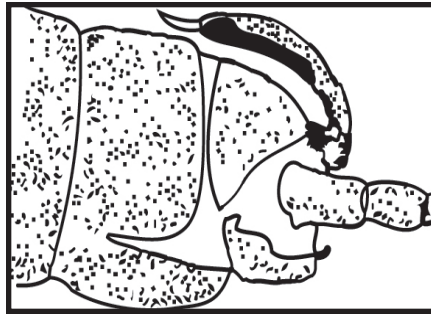


Figure A74. Male epiproct, lateral. *Mesocapnia silvatica*. Illustration by S. W. Judson.

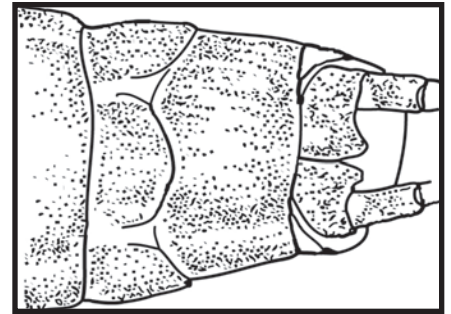


Figure A75. Female subgenital plate. *Mesocapnia silvatica*. Illustration by S. W. Judson.

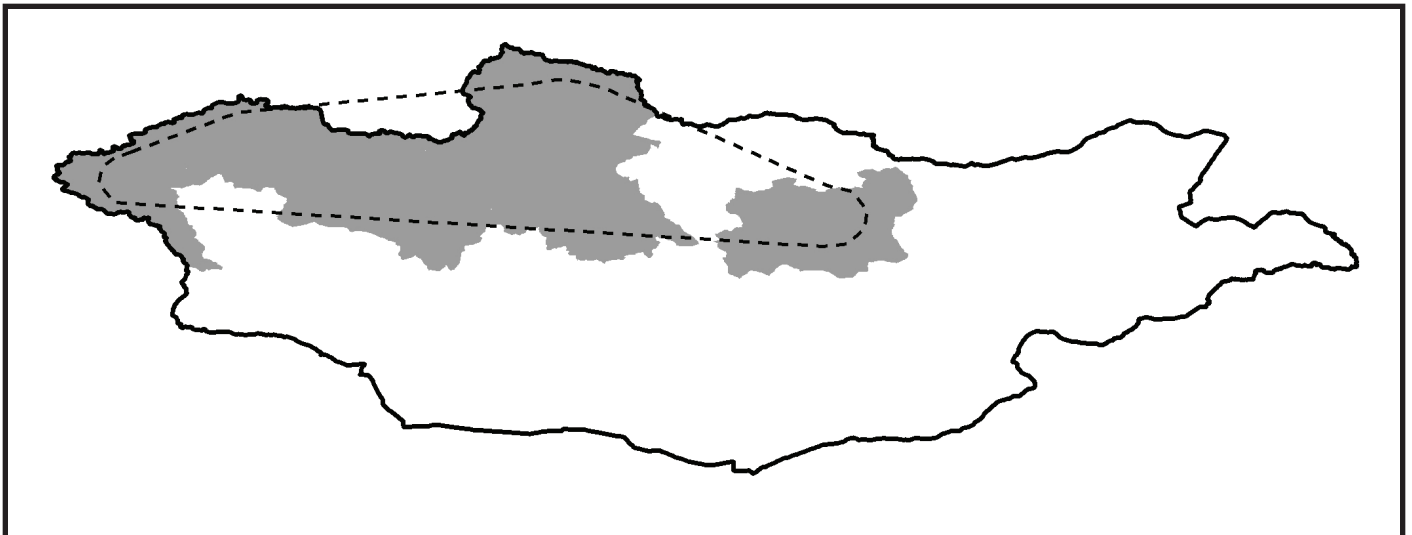


Figure A76. Historical Records Map with Range Estimate. *Mesocapnia silvatica*

## CAPNIIDAE

# *Mesocapnia variabilis* (Klapalek, 1920)

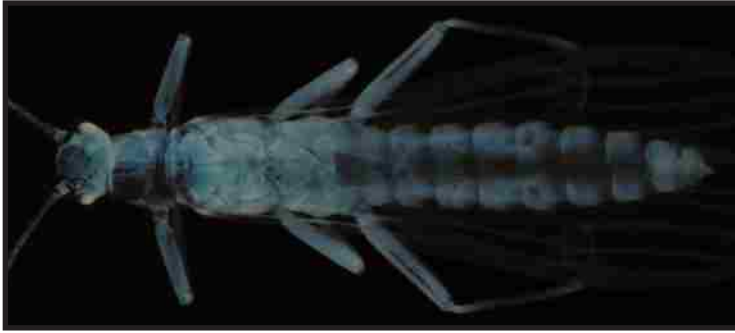


Figure A77. Habitus (preserved). *Mesocapnia variabilis*. Photo by S. W. Judson.

### SYNONYMY

*Capnia variabilis* Klapalek 1920  
*Mesocapnia variabilis* Zwick 1973

**TYPE LOCALITY:** North Siberia: Yakutsk, Jakutien

**DIAGNOSIS:** Males and females are macropterous (Figure A77), similar to *M. silvatica* but distinct from *M. altaica* (Figure A68, p. 86) which are brachypterous. Male epiproct has a pronounced swollen bulb towards the base best viewed dorsally (Figure A78), in contrast to *M. altaica* and *M. silvatica* which have epiprocts of relatively uniform width (Figure A69, p. 86). The epiproct narrows noticeably following the swollen bulb and then widens again before gradually tapering to a point (Figure A78, Figure A79). Female subgenital plate is broadly rounded (Figure

A80) similar to *M. silvatica* and cannot be separated clearly based on illustrations, but *M. variabilis* lacks the central bump present in *M. altaica* (Figure A70, p. 86) and may have more distinct sclerotization than *M. silvatica* (Figure A75, p. 87). Nymphs are indeterminable to genus or species and cannot be consistently separated from *Capnia*.

**DISTRIBUTION - Global:** Holarctic- **Regional:** AOB, IDB- **Aimag:** AR, BO, KhG, TO, UB\*, UV\*, ZA^

**DISCUSSION:** Historical specimens of *M. silvatica* that we validated were clearly *M. variabilis*. This continues to call the validity of *M. silvatica* (p. 87) into question.



Figure A78. Male epiproct, dorsal. *Mesocapnia variabilis*. Photo by S. W. Judson.

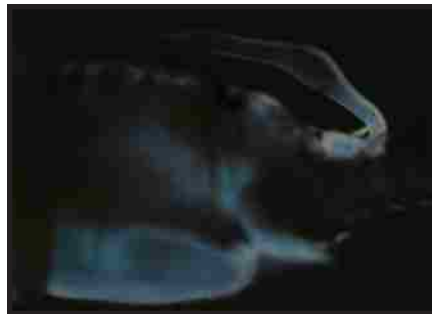


Figure A79. Male epiproct, lateral. *Mesocapnia variabilis*. Photo by S. W. Judson.



Figure A80. Female subgenital plate. *Mesocapnia variabilis*. Photo by J. Fazio.

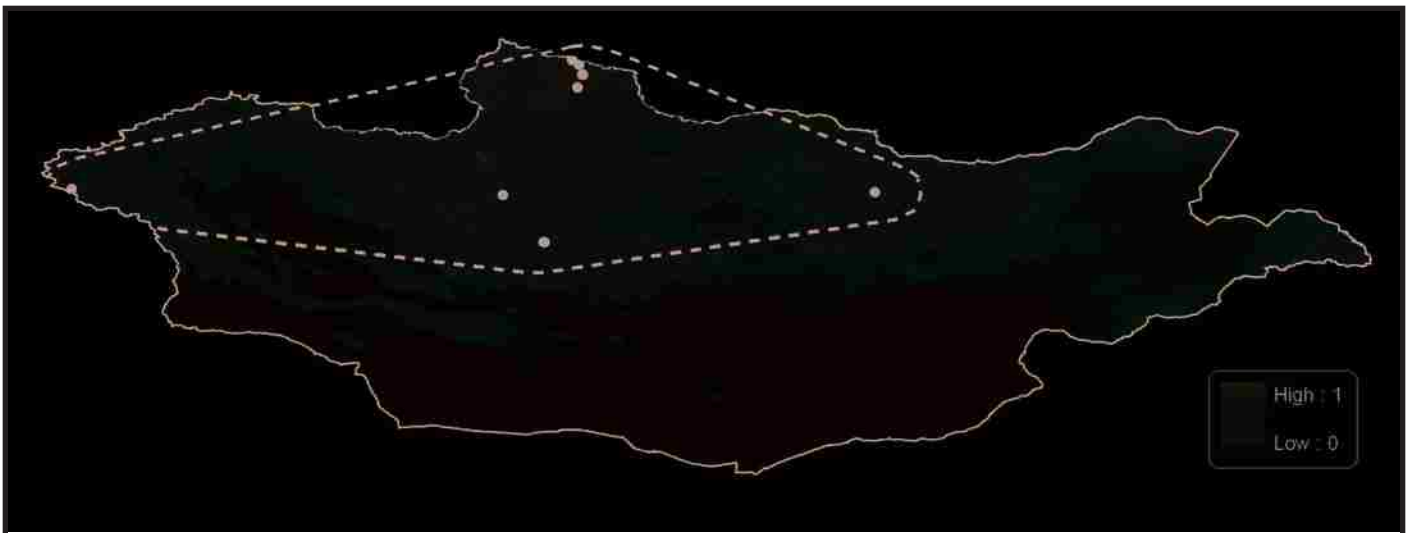


Figure A81. Predicted ENM Map with Documented Occurrences and Range Estimate. *Mesocapnia variabilis*.

Species Known from Mongolia (CAPNIIDAE: *Capnia*, *Mesocapnia*)

**Species:** *Capnia nigra*

**Characteristics:** Portions of epiproct clearly separate. Female plate with rectangle sclerite.

**Species:** *Capnia khulsbagia*

**Characteristics:** Epiproct portions fused. Female plate with more rounded rectangle sclerite.

**Species:** *Mesocapnia altaica*

**Characteristics:** Epiproct of uniform width. Female plate with central bump.

**Species:** *Mesocapnia silvatica*

**Characteristics:** Epiproct wide along entire length.

**Species:** *Mesocapnia variabilis*

**Characteristics:** Epiproct inflated near the base.

Figure A82. a-e.  
Nymph head.

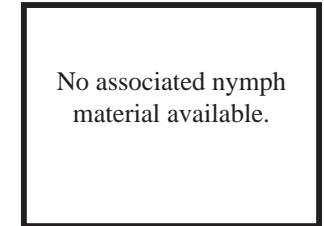
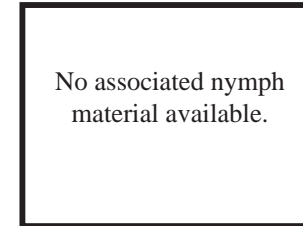
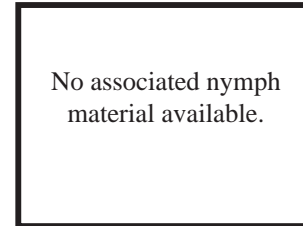
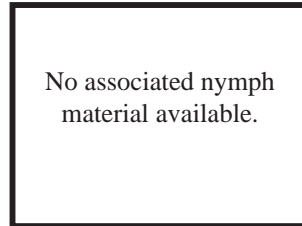
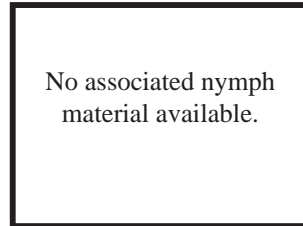


Figure A83. a-e.  
Adult head.

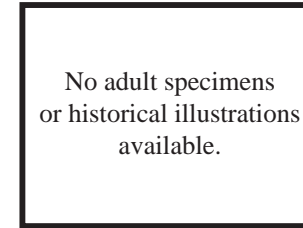
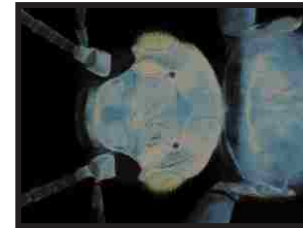


Figure A84. a-e.  
Male genitalia.

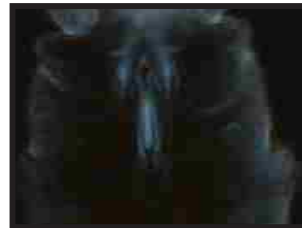


Figure A85. a-e.  
Female subgenital plate.

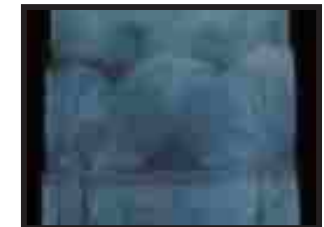
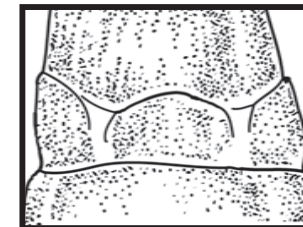


Figure A86. a-e.  
Distribution map.



Species Known from Mongolia (CAPNIIDAE: *Eucapnopsis*, *Isocapnia*)

**Species:** *Eucapnopsis brevicauda*

**Characteristics:** Epirproct short and stout. Female plate not sclerotized medially.

**Species:** *Isocapnia kudia*

**Characteristics:** Female plate with sclerotized medially directed lobes.

**Species:** *Isocapnia guentheri*

**Characteristics:** Golden brown reticulations across entire pronotum.

**Species:** *Isocapnia sibirica*

**Characteristics:** Epirproct relatively short. Female plate with central sclerotization.

Figure A87. a-d.  
Nymph head.

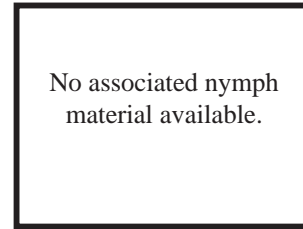
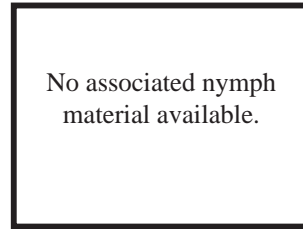
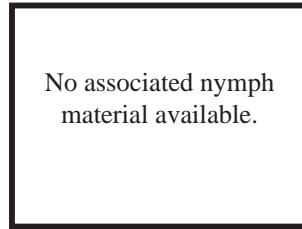


Figure A88. a-d.  
Adult head.

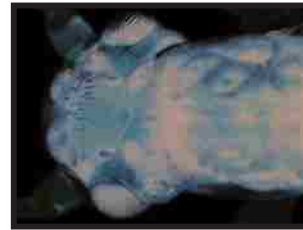
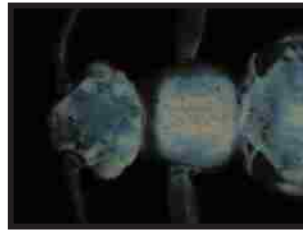


Figure A89. a-d.  
Male genitalia.

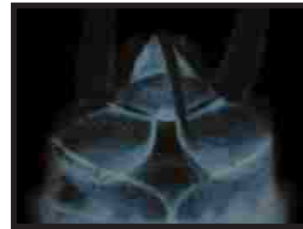


Figure A90. a-d.  
Female subgenital plate.

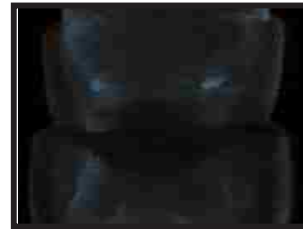


Figure A91. a-e.  
Distribution map.



# CHLOROPERLIDAE



Figure A92. Habitus (live). *Alaskaperla longidentata*. Klakham Stream (SRP2005071803). Photo by C. R. Nelson.

**COMMON NAME:** Green Stoneflies

**SIZE:** Small to Medium (10-20 mm)

**FEEDING GROUP:** Predators

**TOLERANCE VALUE:** 1 (Low)

**DIAGNOSIS:** Adults are bright yellow or green in life (Figure A92), this color fading to a dull yellow when preserved (Figure A93). Generally, size discrepancies can be used to separate Chloroperlidae from Perlodidae to which it is most similar. Furthermore, wing venation can be used to distinguish the two families where chloroperlids have the second anal vein forked after it exits the anal cell, whereas in perlodids it forks before the anal cell and exits as two distinct veins. Male epiproct usually small and inflated at the apex (Figure A119, p. 97). The epiproct either folds back on itself (Figure A107, p. 94) or

is directed towards the posterior (Figure A137, p. 102). Female subgenital plate often extending past the margin of sternum 8 (Figure A116, p. 96). Nymph body elongate with pronotum only slightly wider than abdomen. Nymphal wing pads do not diverge from mid-line and can be circumscribed by an imaginary circle (Figure A20, p. 74). Nymph cerci shorter than abdomen and often pointing more medially than laterally (Figure A19, p. 74). The paraglossa of the labium extend beyond the glossa and labial palps slender (Figure A8, p. 72).

**DISCUSSION:** Most Chloroperlidae nymphs are restricted to cool, clean, flowing waters often in mountainous areas. They are typically found among stones and gravel, but can also be located in leaf packs and snags.

1. Distal segments of cerci with intrasegmental hairs (Figure A93); head and pronotum concolorous (Figure A94).....*Alloperla* p. 93



Figure A93. Cerci of *Alloperla* sp., lateral. Photo by S. W. Judson.



Figure A94. Head and pronotum of *Alloperla* sp., dorsal. Photo by S. W. Judson.

1'. Distal segments of cerci without intrasegmental hairs, though may have long hairs extending from the apex of the segment (Figure A95); head and pronotum with contrasting coloration pattern (Figure A96).....2



Figure A95. Cerci of *Suwallia teleckojensis*, lateral. Photo by S. W. Judson.



Figure A96. Head and pronotum of *Alaskaperla longidentata*, dorsal. Photo by S. W. Judson.

2(1'). Nymph with thick pronotal stripe (Figure A97). in addition to contrasting coloration on the head (Figure A97). and abdomen (Figure A99).; rare.....*Haploperla lepnevae*\* p. 98, p. 100

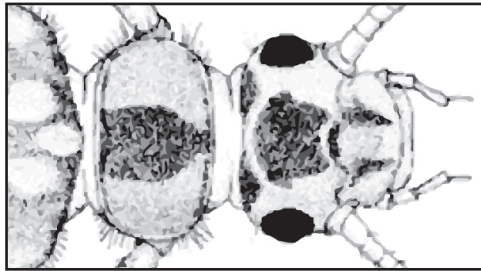


Figure A97. Head and pronotum of *Haploperla lepnevae*., dorsal. Photo by S. W. Judson.

2'. Nymph without thick pronotal stripe (Figure A98) but with diagnostic contrasting coloration on the head (Figure A98, Figure A103) and a stripe on the abdomen (Figure A99); common.....3



Figure A98. Head and pronotum of *Suwallia teleckojensis*, dorsal. Photo by S. W. Judson.



Figure A99. Abdomen of *Alaskaperla longidentata*, dorsal. Photo by S. W. Judson.

3(2'). Pronotum, mesonotum, and metanotum with dense black hairs (Figure A100); dark marking anterior to and between ocelli (Figure A101).....*Suwallia* p. 101



Figure A100. Thorax of *Suwallia teleckojensis*, dorsal. Photo by S. W. Judson.



Figure A101. Head and pronotum of *Suwallia teleckojensis*, dorsal. Photo by S. W. Judson.

3'. Dorsal thoracic segments without dense black hairs, though may have visible lighter hairs (Figure A102); pale marking anterior to the ocelli, bordered by a dark U-shaped marking that passes between the ocelli (Figure A103).....*Alaskaperla longidentata* p. 98, p. 99

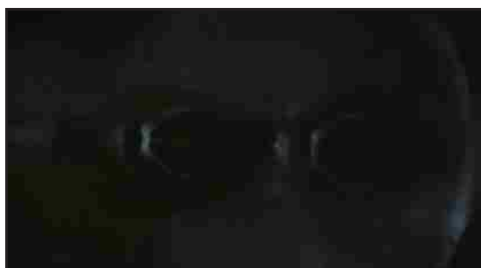


Figure A102. Thorax of *Alaskaperla longidentata*, dorsal. Photo by S. W. Judson.

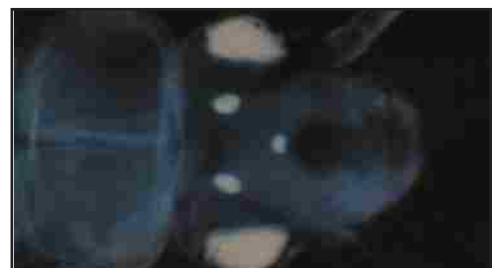


Figure A103. Head and pronotum of *Alaskaperla longidentata*, dorsal. Photo by S. W. Judson.

## CHLOROPERLIDAE

### *Alloperla*



Figure A104. Habitus (live). *Alloperla rostellata*. Tariakhtain Stream (SRP2005070902). Photo by C. R. Nelson.

SE<sup>^</sup>, TO<sup>^</sup>, UB, ZA

**DISCUSSION:** *Alloperla* in Mongolia most commonly occur at elevations between 800 and 1500 msl.

**DIAGNOSIS:** Adults often bright green in life (Figure A104). *Alloperla* has much less pigmentation than other Chloroperlids, though some species have characteristic pigmentation (Figure A118, p. 97). All species from Mongolia except *A. diminuta* have a medial dark abdominal stripe (Figure A110, p. 95) which is thinner in comparison to other Chloroperlidae, particularly *Haploperla*. Male epiproct at least slightly swollen at the base (Figure A115, p. 96). Most species have ventral spines near the apex of the epiproct, with the exception of *A. diminuta*. Female subgenital plates are typically triangular (Figure A112, p. 95), again with the exception of *A. diminuta* which has a small somewhat triangular protrusion only near the middle of the plate. Nymph is concolorous (Figure A94, p. 91) and characterized by many long intrasegmental hairs on the distal segments.

**DISTRIBUTION - Global:** Nearctic & East Palearctic -

**Regional:** AOB, POB\* - **Aimag:** AR, BU<sup>^</sup>, KhE\*, KhG, OV<sup>^</sup>,



Figure A105. Comparative Distribution Map. *Alloperla*.

## CHLOROPERLIDAE

# *Alloperla deminuta* Zapekina-Dulkeit 1970



Figure A106. Habitus (preserved). *Alloperla deminuta*. Photo by S. W. Judson.

### SYNONYMY

*Alloperla deminuta* Zapekina-Dulkeit 1970

**TYPE LOCALITY:** USSR/Siberia: Krasnojarsk, reservation "Stolbij", Mana River

**DIAGNOSIS:** No pronotal or abdominal pigmentation (Figure A106), whereas all other *Alloperla* from Mongolia have characteristic pigmentation (Figure A114, p. 96). *A. deminuta* does have some faint pigmentation on the inner margin of tergite 10 forming a rectangular outline around the epiproct origin (Figure A107), which *A. joosti* lacks. Like *A. joosti* (Figure A111, p. 95), the base of the epiproct is narrow and not greatly swollen (Figure A107) as in *A. mediata* (Figure A115, p. 96) and *A. rostellata* (Figure A119, p.

97). In contrast to *A. joosti*, the tip of *A. deminuta*'s epiproct is pointed (Figure A107) and without ventral spines. The epiproct is also shorter than all other Mongolian *Alloperla*. Female subgenital plate often difficult to discern due to lack of contrasting pigmentation (Figure A108). The plate is flat with a small rounded protrusion in the middle that barely extends over sternum 8, in comparison to *A. joosti* which gradually slopes to a point and extends slightly more over sternum 8 (Figure A112, p. 95). Nymphs are readily distinguishable to the genera level and we did not have enough material to attempt species separation.

**DISTRIBUTION - Global:** East Palearctic - **Regional:** AOB, POB\* - **Aimag:** AR, BU<sup>^</sup>, KhE\*, KhG, OV<sup>^</sup>, SE, TO<sup>^</sup>, UB

**DISCUSSION:** *A. deminuta* is the most common *Alloperla* species in Mongolia.

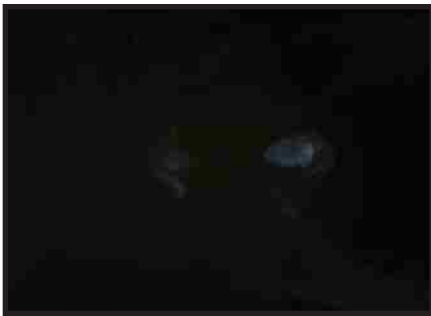


Figure A107. Male epiproct. *Alloperla deminuta*. Photo by J. Fazio.

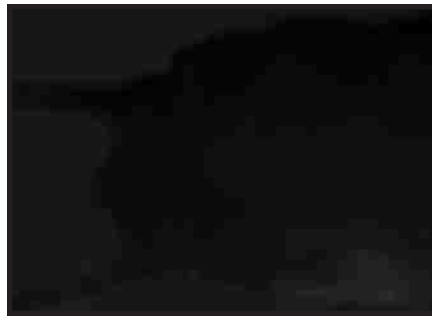


Figure A108. Female subgenital plate. *Alloperla deminuta*. Photo by S. W. Judson.

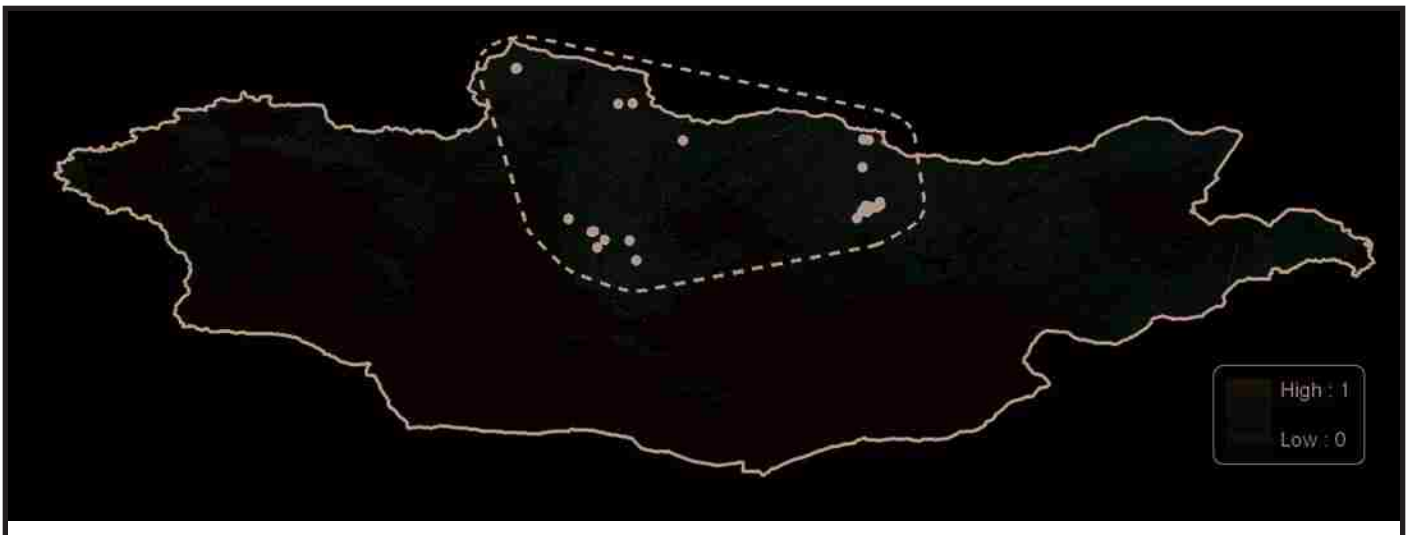


Figure A109. Predicted ENM Map with Documented Occurrences and Range Estimate. *Alloperla deminuta*.



# CHLOROPERLIDAE

## *Alloperla joosti* Zwick, 1972



Figure A110. Habitus (preserved). *Alloperla joosti*. Photo by S. W. Judson.

### SYNONYMY

*Alloperla joosti* Zwick 1972

**TYPE LOCALITY:** Mongolia: Arkhangai aimag, Somon Chencher at Urd-Tamir Gol.

**DIAGNOSIS:** Like *A. deminuta*, there is no pigmentation on the pronotum, but *A. joosti* (Figure A110) has a brown vertical stripe extending across multiple abdominal segments similar to *A. rostellata* (Figure A118, p. 97) and *A. mediata* (Figure A114, p. 96), as well as other Chloroperlidae. Like *A. deminuta* (Figure A119, p. 97), the base of the epiproct is narrow and not greatly swollen (Figure A111) as in *A. mediata* (Figure A115, p. 96) and *A. rostellata* (Figure A119, p. 97). In contrast to *A. deminuta* (Figure A119, p. 97), the epiproct is much longer and has a rounded, rather than

pointed, apex. Furthermore, *A. joosti* has spines along the ventral margin best seen laterally, which *A. deminuta* lacks. The epiproct superficially resembles *Alaskaperla longidentata* (Figure A125, p. 99), but *Ala. longidentata* has no swollen base (*Alloperla joosti* is only slightly swollen), is upturned, and very smooth on all sides especially lacking ventral spines. Female subgenital plate (Figure A112) often difficult to discern due to lack of contrasting pigmentation. The plate gradually slopes to a point, forming a triangle with a broad base, and extends slightly over sternum 8, in contrast to *Alloperla deminuta* which is flatter and protrudes only slightly in the middle, barely extending over sternum 8. Nymphs are readily distinguishable to the genera level and we did not have enough material to attempt species separation.

**DISTRIBUTION - Global:** East Palearctic - **Regional:** AOB- **Aimag:** AR, BU<sup>^</sup>, KhG<sup>^</sup>, OV<sup>^</sup>, SE<sup>^</sup>, TO<sup>^</sup>, UB, ZA

**DISCUSSION:** This species was originally described from Mongolia.



Figure A111. Male epiproct. *Alloperla joosti*. Photo by J. Fazio.



Figure A112. Female subgenital plate. *Alloperla joosti*. Photo by S. W. Judson.

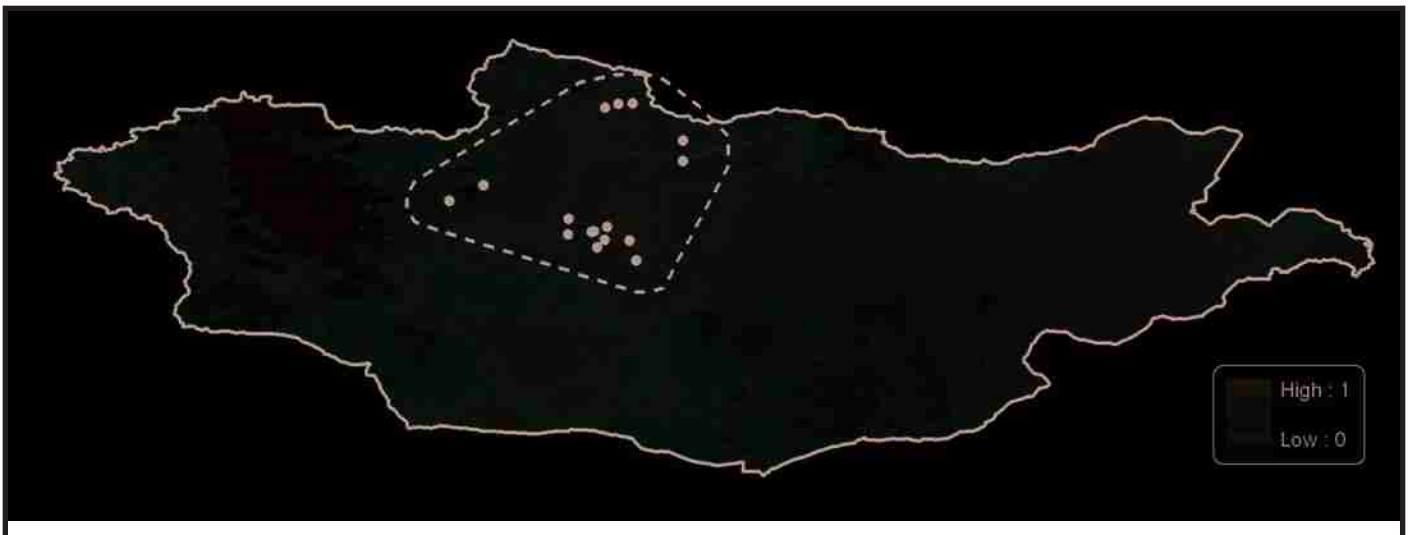


Figure A113. Predicted ENM Map with Documented Occurrences and Range Estimate. *Alloperla joosti*.

## CHLOROPERLIDAE

# *Alloperla mediata* (Navas, 1925)



Figure A114. Habitus (preserved). *Alloperla mediata*. Photo by S. W. Judson.

### SYNONYMY

*Chloroperla mediata* Navas 1925

*Alloperla alexanderi* Nelson and Hanson 1968

*Alloperla mediata* Zwick, Levanidova, & Zhiltzova 1971

**TYPE LOCALITY:** Siberia: Vladivostok

**DIAGNOSIS:** Pronotum with a dark stripe along the midline and abdomen with medial dark stripe (Figure A114). Like *A. rostallata* (Figure A119, p. 97), the base of the male epiproct is greatly swollen. In *A. mediata*, however, the tip of the epiproct (Figure A115) is subequal to or narrower than the swollen base and the tip gradually tapers to a point. Numerous lateral and ventral spines on the epiproct are visible from the dorsal view, unlike in *A. joosti*

where they are only visible laterally. From the lateral view, the epiproct is uniform in width, whereas in *A. rostallata* it is thinner near the tip. The female subgenital plate (Figure A116) is parallel sided at the base, then abruptly narrows at a 90 degree angle and forms a triangle that extends nearly to the posterior margin of sternum 8, the apical triangle about 5-7 times the length of the rectangular base. *A. rostallata* has a similar shaped plate (Figure A120, p. 97), but it only extends slightly over sternum 8. Nymphs are readily distinguishable to the genera level and we did not have enough material to attempt species separation.

**DISTRIBUTION - Global:** East Palearctic - **Regional:** AOB<sup>^</sup> - **Aimag:** BU<sup>^</sup>, KhG<sup>^</sup>

**DISCUSSION:** This species is a new record for Mongolia.

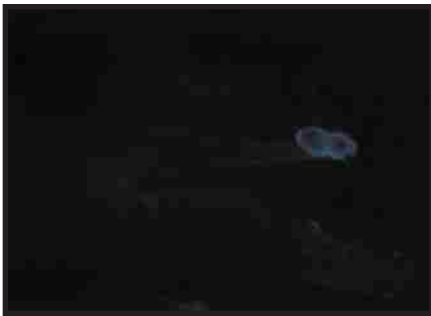


Figure A115. Male epiproct. *Alloperla mediata*. Photo by J. Fazio.



Figure A116. Female subgenital plate. *Alloperla mediata*. Photo by J. Fazio.

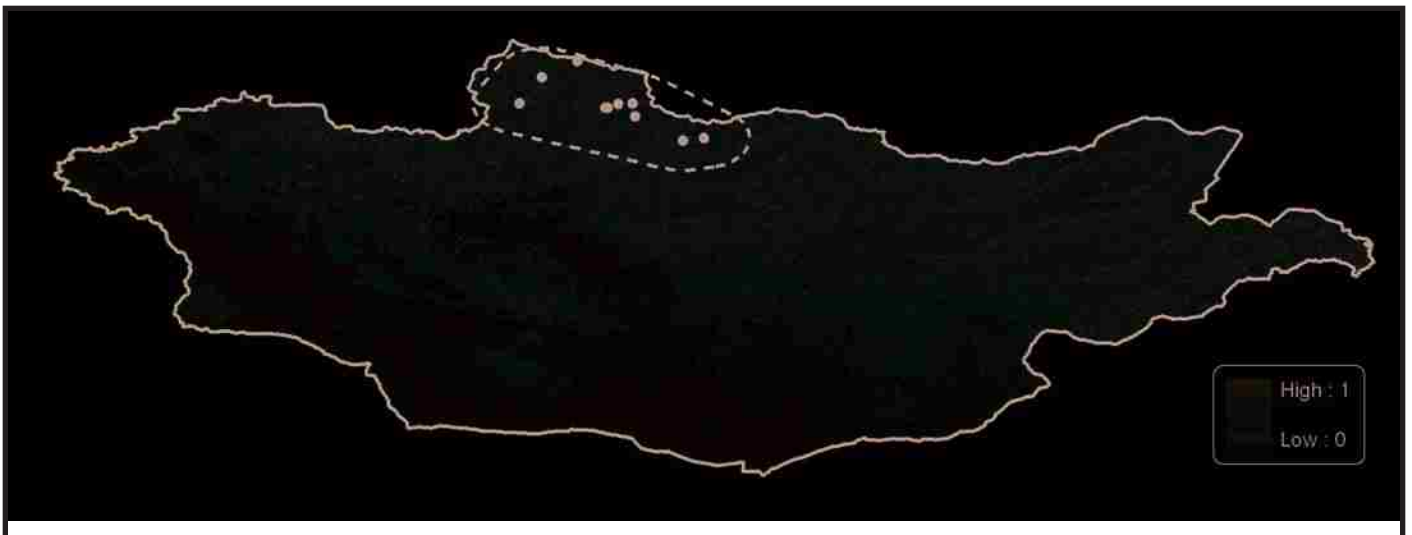


Figure A117. Predicted ENM Map with Documented Occurrences and Range Estimate. *Alloperla mediata*.

## CHLOROPERLIDAE

# *Alloperla rostellata* (Klapalek, 1923)



Figure A118. Habitus (preserved). *Alloperla rostellata*. Photo by S. W. Judson.

rounded, only abruptly forming a point in some specimens. Numerous lateral and ventral spines on the epiproct are visible from the dorsal view, unlike in *A. joosti* where they are only visible laterally. From the lateral view, the epiproct is depressed dorsally and therefore thinner near the tip, whereas in *A. mediata* is uniform in width. The female subgenital plate (Figure A120) is parallel sided and rectangular at the base, then abruptly narrows at a 90 degree angle and forms a triangle that extends slightly over sternum 8, the apical triangle about 3 times the length of the rectangular base. *A. mediata* has a similar shaped plate (Figure A116, p. 96), but extends much further on sternum 8. Nymphs are readily distinguishable to the genera level and we did not have enough material to attempt species separation.

**DISTRIBUTION - Global:** East Palearctic - **Regional:** AOB<sup>^</sup> - **Aimag:** AR<sup>^</sup>, BU<sup>^</sup>, KhG<sup>^</sup>, ZA<sup>^</sup>

**DISCUSSION:** This species is a new record for Mongolia.

### SYNONYMY

*Isopteryx rostellata* Klapalek 1923

*Chloroperla rostellata* Illies 1966

*Alloperla rostellata* Zwick, Levanidova, & Zhiltzova 1971

**TYPE LOCALITY:** USSR: Irutsk.

**DIAGNOSIS:** Pronotum covered with darker reticulations (Figure A118), sometimes faded. Abdomen with medial dark stripe (Figure A118). In some specimens, coloration is also evident on the head, particularly in the anterior and occipital regions. Like *A. mediata* (Figure A115, p. 96), the base of the male epiproct is greatly swollen. In *A. rostellata*, however, the tip of the epiproct (Figure A119) is wider than the swollen base and the tip is more broadly



Figure A119. Male epiproct. *Alloperla rostellata*. Photo by J. Fazio.



Figure A120. Female subgenital plate. *Alloperla rostellata*. Photo by J. Fazio.

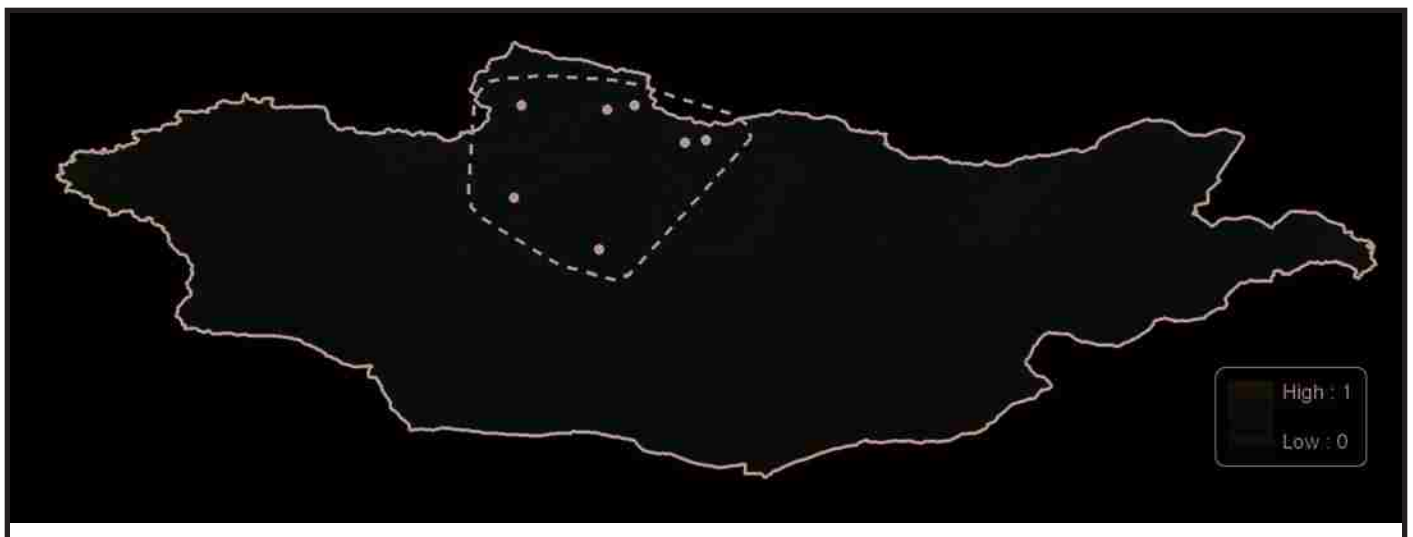


Figure A121. Predicted ENM Map with Documented Occurrences and Range Estimate. *Alloperla rostellata*

# CHLOROPERLIDAE

## *Alaskaperla*, *Haploperla*



Figure A122. Habitus (live). *Haploperla lepnevae*. Uur River (SRP2005071601). Photo by C. R. Nelson.

### *Alaskaperla*

**DIAGNOSIS:** Dark stripe extends from pronotum to tip of abdomen but (Figure A124, p. 99), unlike *Haploperla*, does not also have dark markings on the head. Male epiproct is smooth, cylindrical, and upturned (Figure A125, p. 99). Female plate completely covers sternum 8 (Figure A126, p. 99), is parallel sided, and is flat on the apical margin. Nymph with a pale marking anterior to the ocelli (Figure A127, p. 99), bordered by a dark U-shaped marking.

**DISTRIBUTION - Global:** Nearctic & East Palearctic - **Regional:** AOB - **Aimag:** AR<sup>^</sup>, KhG, OV<sup>^</sup>, SE<sup>^</sup>, TO<sup>^</sup>, UB\*, ZA<sup>^</sup>

### *Haploperla*

**DIAGNOSIS:** Distinct wide brown stripe extends along entire length of the body (Figure A129, p. 100), originating from an isolated dark spot on the head. *Alaskaperla* is similarly striped, but with a much narrower stripe and no markings on the head and other Chloroperlidae only have an abdominal stripe. Male epiproct is short, flat, and forming a small triangle (Figure A130, p. 100). Female subgenital plate round and barely protruding (Figure A131, p. 100). Nymph with similar coloration (Figure A132, p. 100) as the adult. Nymph with whorls of apical hairs on the cercal segments, and with long pronotal hairs on the posterior and anterior margins, but lacking or having sparse hairs along the lateral margin of the pronotum.

**DISTRIBUTION - Global:** Nearctic & East Palearctic - **Regional:** AOB, IDB, POB\* - **Aimag:** AR\*, BO, BU, DO\*, KhE\*, KhG<sup>^</sup>, SE<sup>^</sup>, TO, UB



Figure A123. Comparative Distribution Map. *Alaskaperla* and *Haploperla*.

## CHLOROPERLIDAE

# *Alaskaperla longidentata* (Rauser, 1968)



Figure A124. Habitus (preserved). *Alaskaperla longidentata*. Photo by S. W. Judson.

### SYNONYMY

*Chloroperla longidentata* Rauser 1968

*Triznaka longidentata* Zwick 1972

*Alaskaperla longidentata* Zwick 2007

**TYPE LOCALITY:** Mongolia: Ulan Bator, Nukht in Bogdo UI, 1600 m.

**DIAGNOSIS:** General coloration yellow when preserved (Figure A124), with a solid brown stripe extending from the pronotum to the tip of the abdomen. Male epiproct dark even from the origin (Figure A125). Epiproct smooth and curved upward (Figure A125), appearing concave when viewed laterally. Epiproct superficially resembles *Alloperla joosti* (Figure A111, p. 95), but the

epiproct of *A. joosti* is flat (not upturned or hinged), is swollen at the base, and has ventral spines near the apex. Female subgenital plate (Figure A126) is parallel sided and flat on its apical margin and very slightly and broadly indented in the middle. The plate completely covers sternum 8 and extends over 1/3 of sternum 9. The plate superficially resembles *Suwallia teleckojensis* (Figure A142, p. 103), but *S. teleckojensis* is more triangular and sloping. Nymph with characteristic head coloration (Figure A127) with a pale marking anterior to the ocelli, bordered by a dark U-shaped marking that passes between the ocelli.

**DISTRIBUTION - Global:** East Palearctic - **Regional:** AOB - **Aimag:** AR<sup>^</sup>, KhG, OV<sup>^</sup>, SE, TO<sup>^</sup>, UB\*, ZA<sup>^</sup>

**DISCUSSION:** This species was recently placed in *Alaskaperla* (Zwick 2007) but was originally described from Mongolia by Rauser (1968).

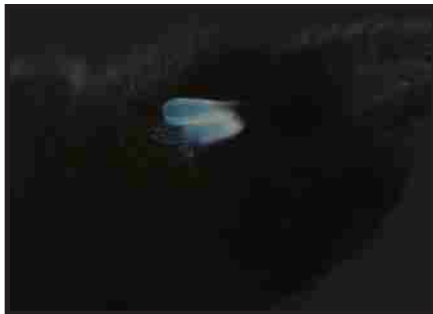


Figure A125. Male epiproct. *Alaskaperla longidentata*. Photo by S. W. Judson.



Figure A126. Female subgenital plate. *Alaskaperla longidentata*. Photo by S. W. Judson.



Figure A127. Nymph head. *Alaskaperla longidentata*. Photo by S. W. Judson.

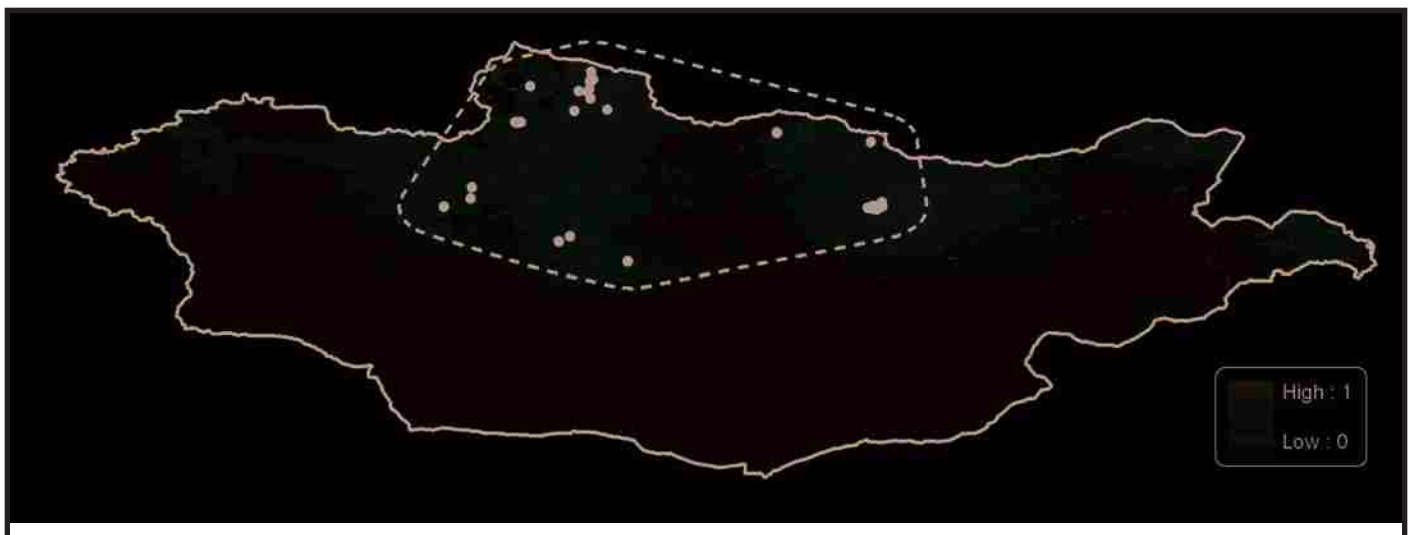


Figure A128. Predicted ENM Map with Documented Occurrences and Range Estimate. *Alaskaperla longidentata*.

# CHLOROPERLIDAE

## *Haploperla lepnevae* Zhiltzova and Zwick, 1971

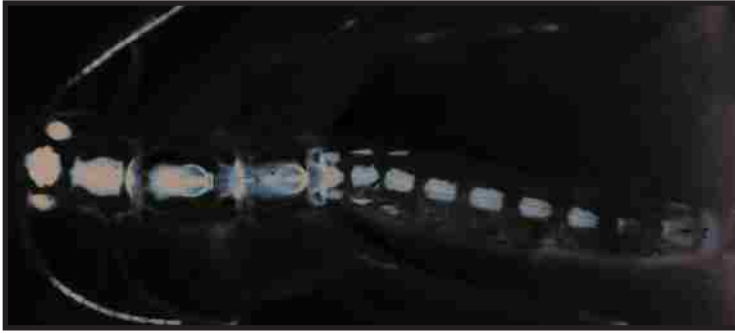


Figure A129. Habitus (preserved). *Haploperla lepnevae*. Photo by S. W. Judson.

### SYNONYMY

*Haploperla lepnevae* Zhiltzova and Zwick 1971

**TYPE LOCALITY:** USSR: Amur Basin, River Khor

**DIAGNOSIS:** General coloration very pale to white when preserved in alcohol (Figure A129), bright yellow in life (Figure A122, p. 98). Head with distinct central dark mark (Figure A129). A wide dark stripe continues from this head marking along the entire length of the body. Coloration superficially resembles *Isoperla lunigera* (Figure A378, p. 158), which also has a central dark head mark, but rather than one wide stripe, has two stripes on the pronotum that are separated by light coloration along the midline. Male epiproct, like *Alaskaperla longidentata* (Figure A125, p. 99), is darkly colored even from the origin (Figure A130). However,

the epiproct of *H. lepnevae* is much shorter than *A. longidentata* (Figure A125, p. 99) and forms a downturned triangle (Figure A130). Female subgenital plate round, but small and barely protruding (Figure A131) superficially similar to *A. diminuta* (Figure A108, p. 94) although *A. diminuta* is more pointed. Nymph coloration (Figure A132) resembles adult coloration, with a dark central mark and pronotal stripe which continues on the abdomen as well.

**DISTRIBUTION - Global:** East Palearctic - **Regional:** AOB, IDB, POB\* - **Aimag:** AR\*, BO, BU, DO\*, KhE\*, KhG^, SE^, TO, UB

**DISCUSSION:** In Mongolia, *H. lepnevae* is most commonly found in mid-elevation, mid-size streams.



Figure A130. Male epiproct. *Haploperla lepnevae*. Photo by S. W. Judson.

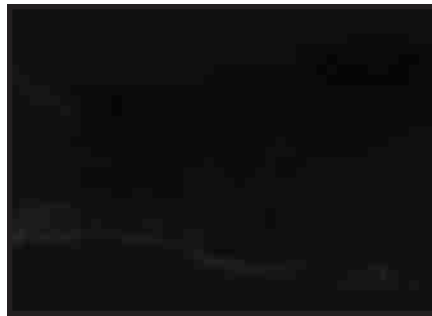


Figure A131. Female subgenital plate. *Haploperla lepnevae*. Photo by S. W. Judson.

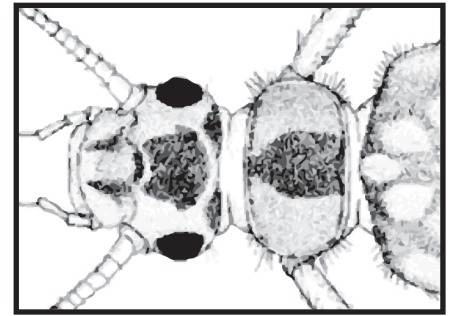


Figure A132. Nymph head and pronotum. *Haploperla lepnevae*. Illustration by S. W. Judson.

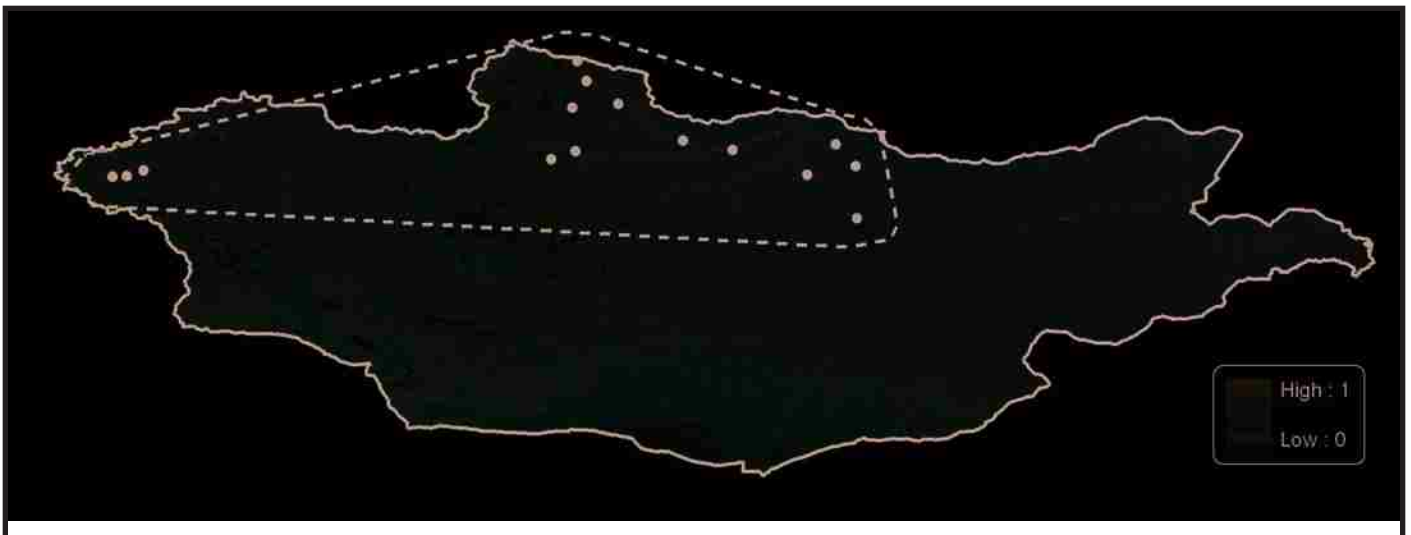


Figure A133. Predicted ENM Map with Documented Occurrences and Range Estimate. *Haploperla lepnevae*.

# CHLOROPERLIDAE

## *Suwallia*



Figure A134. Habitus (live). *Suwallia teleckojensis*. Ulastai River (MAIS 2008070802). Photo by C. R. Nelson.

**DIAGNOSIS:** General color yellow in alcohol and life (Figure A134), with dark pigmentation in the ocellar triangle, dark antennae, a thin medial stripe on the pronotum, U-shaped markings on the meso- and metanota, and a wide medial abdominal stripe extending most of the length of the abdomen. Setose finger-like medially-directed hemitergal processes originate from segment 10 (Figure A137, p. 102). Knob-like epiproct (Figure A137, p. 102) is unhinged and not recurved, distinct from all other Chloroperlidae. Female plate covers sternum 8 and gradually narrows to a rounded or truncate apex (Figure A138, p. 102). Nymph with a distinct dark pigmentation (Figure A143, p. 103) between and anterior to the ocellar region, and with dense dark hairs on the dorsal thoracic segments. Detailed species descriptions and SEMs given in Alexander and Stewart 1999.

AOB, IDB - **Aimag:**AR, BO, BU<sup>^</sup>, GA<sup>^</sup>, KhD, KhG, OV<sup>^</sup>, SE, TO, UB\*,UV\*, ZA

Distribution - **Global:** Nearctic & East Palearctic - **Regional:**

**DISCUSSION:** *Suwallia* is the most common genus of Chloroperlidae in Mongolia and is found in a large variety of habitat types.

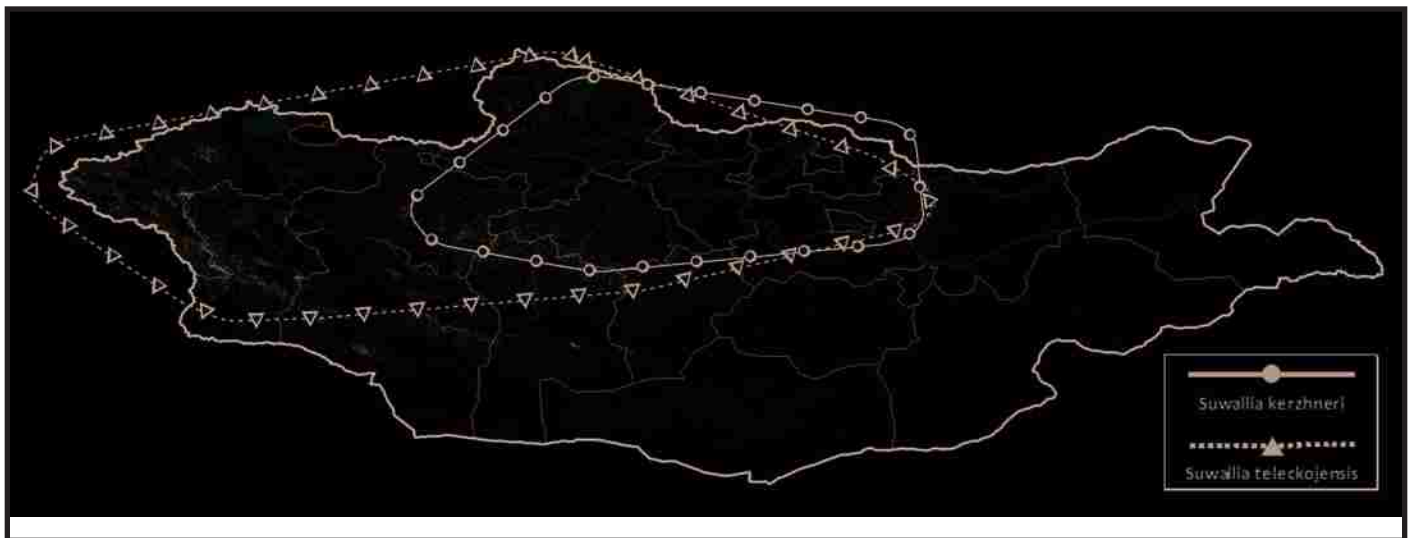


Figure A135. Comparative Distribution Map. *Suwallia*.

# CHLOROPERLIDAE

## *Suwallia kerzhneri* Zhiltzova and Zwick, 1971

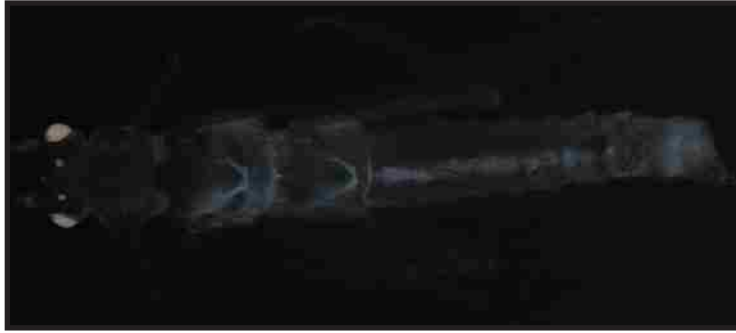


Figure A136. Habitus (preserved). *Suwallia kerzhneri*. Photo by S. W. Judson.

### SYNONYMY

*Suwallia kerzhneri* Zhiltzova and Zwick, 1971

**TYPE LOCALITY:** Mongolia: Ara-Khnagay (Arkhangai) aimag, 25 km west-southwest of Ikh-Tamir, flood-plain of the Khoyt-Tamryn-Gol river, 30-VIII-1967. Type depository: Zoological Institute, Russian Academy of Sciences, St. Petersburg, Russia.

**DIAGNOSIS:** General coloration like *S. teleckojensis* (Figure A140, p. 103), but *S. kerzhneri* (Figure A136) has dark pigmentation on the tibia, has a thinner medial dark stripe on the pronotum, and has a longer abdominal stripe, usually extending the whole length of the abdomen through segment 10. Medially directed hemitergal processes (Figure A137) flattened and coming to a point at the apex, in contrast to *S. teleckojensis* which are cylindrical. Hemitergal processes directed more anteriorly than medially (Figure A137), especially when compared to *S. teleckojensis* (Figure A141, p. 103). Knob of epiproct with long hairs only along the posterior margin (Figure A137), leaving the central region bare. Female subgenital plate laterally incisions at the base on abdominal segment 7 (Figure A138), unlike in *S. teleckojensis* which is broadly joined (Figure A142, p. 103). Plate covers most of segment 8, and is shorter in comparison to *S. teleckojensis*. The plate is truncate and darkly sclerotized at its apex. The nymph is unknown, but assumed to closely resemble *S. teleckojensis*.

**DISTRIBUTION - Global:** East Palearctic - **Regional:** AOB - **Aimag:** AR, KhG<sup>^</sup>, SE<sup>^</sup>, TO, UB\*, ZA

**DISCUSSION:** This species was originally described from Mongolia. It is a rare species relative to *S. teleckojensis*. Phylogenetic analysis indicates that it is in the same clade as *S. teleckojensis* (Zwick et al 1971).



Figure A137. Male epiproct. *Suwallia kerzhneri*. Photo by S. W. Judson.

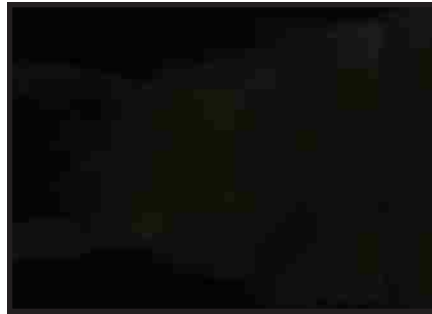


Figure A138. Female subgenital plate. *Suwallia kerzhneri*. Photo by S. W. Judson.

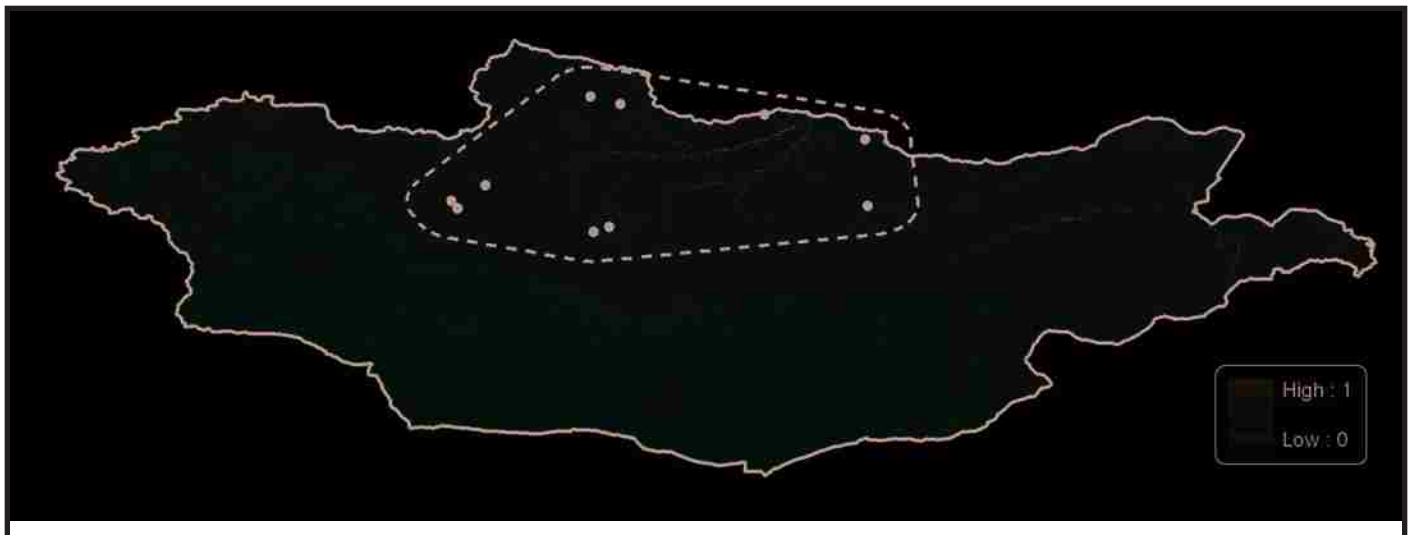


Figure A139. Predicted ENM Map with Documented Occurrences and Range Estimate. *Suwallia kerzhneri*.



# CHLOROPERLIDAE

## *Suwallia teleckojensis* (Samal, 1939)



Figure A140. Habitus (preserved). *Suwallia teleckojensis*. Photo by S. W. Judson.

### SYNONYMY

*Alloperla teleckojensis* Samal 1939

*Suwallia teleckojensis* Zwick et al. 1971

**TYPE LOCALITY:** Original type destroyed (Zwick et al 1971), paratypes recognized from Russia in the Baikal region.

**DIAGNOSIS:** General coloration like *S. kerzhneri* (Figure A136, p. 102), but *S. teleckojensis* (Figure A140) lacks dark pigmentation on the tibia, has a thicker medial dark stripe on the pronotum, and has a shorter abdominal stripe, only extending through segment 8. Medially directed hemitergal processes (Figure A141) cylindrical in cross section, not flattened nor pointed anteriorly as in *S. kerzhneri* (Figure A137, p. 102). Knob of epiproct (Figure A141) completely covered with fine hairs, as opposed to *S. kerzhneri* which only has hairs along the posterior margin (Figure A137, p. 102).

Female subgenital plate broadly joined at abdominal segment 7 (Figure A142), unlike in *S. kerzhneri* which is basally incised (Figure A138, p. 102). Plate completely covers segment 8, sometimes extending over segment 9 as well. The plate gradually narrows to a broadly rounded tip and is darkly sclerotized at the base, somewhat resembling *Alskaperla longidentata* (Figure A126, p. 99), but the plate of *A. longidentata* is parallel sided and does not slope inward. Nymph with a distinct dark pigmentation between and anterior to the ocellar region (Figure A143).

**DISTRIBUTION - Global:** East Palearctic - **Regional:** AOB, IDB - **Aimag:** AR, BO, BU<sup>^</sup>, GA<sup>^</sup>, KhD, KhG, OV<sup>^</sup>, SE, TO<sup>^</sup>, UV\*, ZA<sup>^</sup>

**DISCUSSION:** Levanidova and Zhiltzova (1979) attribute the restriction of *S. teleckojensis* to mountains in the southern reach of its range and to foothill rivers in the northern reach as a product of the species inability to adapt to climate change.



Figure A141. Male epiproct. *Suwallia teleckojensis*. Photo by S. W. Judson.



Figure A142. Female subgenital plate. *Suwallia teleckojensis*. Photo by S. W. Judson.



Figure A143. Nymph head. *Suwallia teleckojensis*. Photo by S. W. Judson.

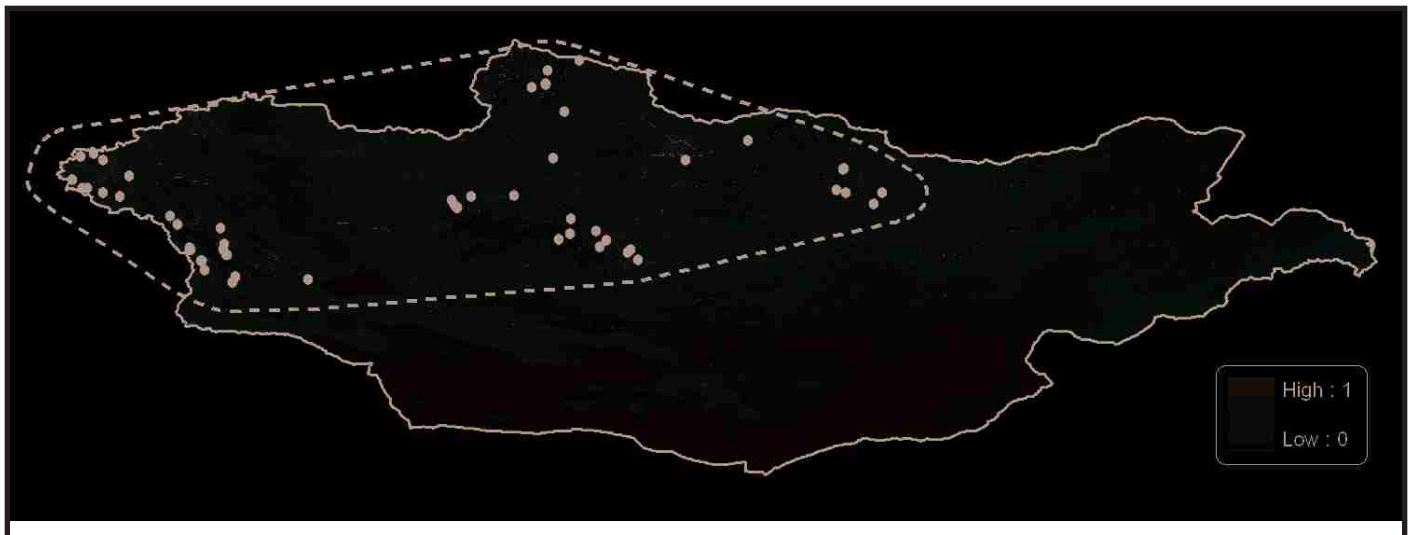


Figure A144. Predicted ENM Map with Documented Occurrences and Range Estimate. *Suwallia teleckojensis*.

Species Known from Mongolia (**CHLOROPERLIDAE: *Alloperla***)

**Species:** *Alloperla deminuta*  
**Characteristics:** Little pigmentation. Eiproct pointed at the apex.

**Species:** *Alloperla joosti*  
**Characteristics:** Pronotum without pigmentation, but striped on abdomen. Eiproct rounded.

**Species:** *Alloperla mediata*  
**Characteristics:** This stripe on pronotum. Apial half of eiproct mildly inflated.

**Species:** *Alloperla rostellata*  
**Characteristics:** Reticulations on pronotum. Apial half of eiproct highly inflated.

Figure A145. a-d.  
Nymph head.

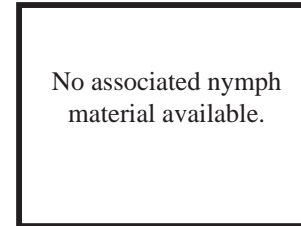
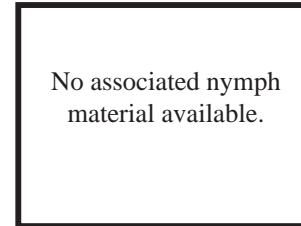
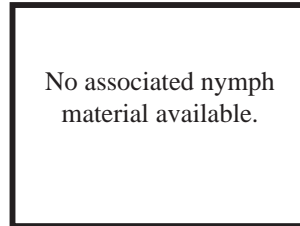
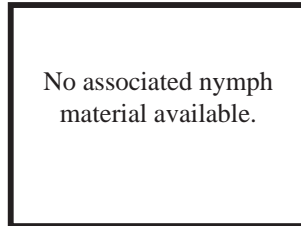


Figure A146. a-d.  
Adult head.



Figure A147. a-d.  
Male genitalia.

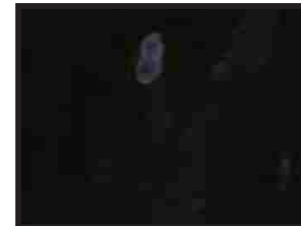
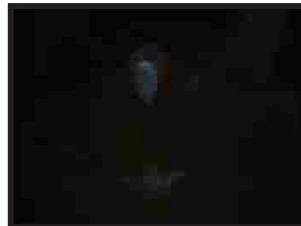


Figure A148. a-d.  
Female subgenital plate.

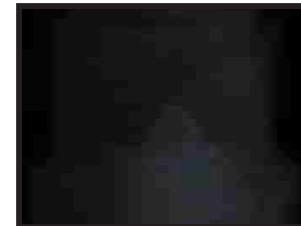
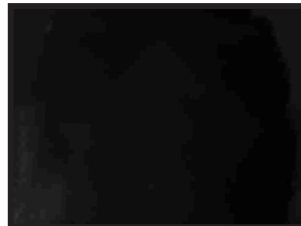


Figure A149. a-d.  
Distribution map.



Species Known from Mongolia (CHLOROPERLIDAE: *Haploperla*, *Suwallia*, *Triznaka*)

**Species:** *Alaskaperla longidentata*

**Characteristics:** Epiproct simple and bent back on itself. Female plate long and wide.

**Species:** *Haploperla lepnevae*

**Characteristics:** Dark central mark on head. Epiproct triangular at apex.

**Species:** *Suwallia kerzhneri*

**Characteristics:** Epiproct with peripherhal hairs only. Female plate sclerotized at apex.

**Species:** *Suwallia teleckojensis*

**Characteristics:** Epiproct covered with hairs. Female plate sclerotized at the base.

Figure A150. a-d.  
Nymph head.

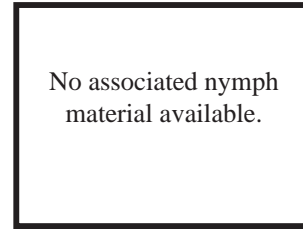


Figure A151. a-d.  
Adult head.

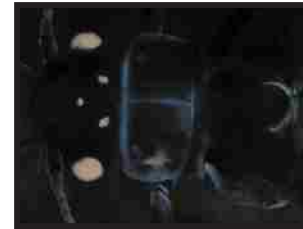
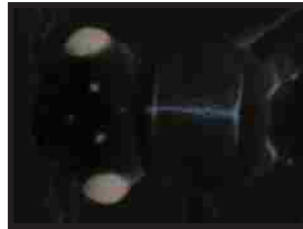


Figure A152. a-d.  
Male genitalia.

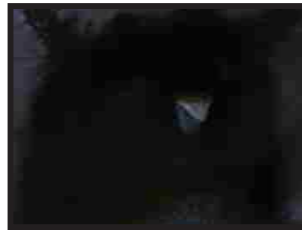


Figure A153. a-d.  
Female subgenital plate.

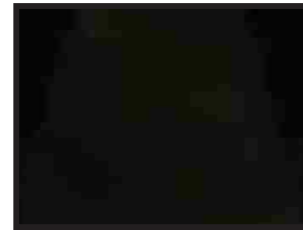
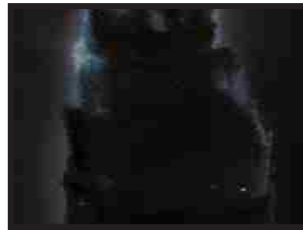


Figure A154. a-d.  
Distribution map.



# LEUCTRIDAE



Figure A155. Habitus (live). *Paraleuctra zapekinae*. Baruun Tsuuts River (SRP2005070601). Photo by C. R. Nelson.

**COMMON NAME:** Roll-Winged Stoneflies

**SIZE:** Small (6-10 mm)

**FEEDING GROUP:** Shredders

**TOLERANCE VALUE:** 0 (Low)

**DIAGNOSIS:** Adult slender and dark brown in color with wings rolled around the abdomen (Figure A155). Nymph elongate (Figure A18, p. 73) with pronotum only slightly wider than abdomen. Abdominal segments 7-9 without membranous pleural fold (Figure A17, p. 73). Paraglossa and glossa subequal, bordered by robust labial palps.

**DISCUSSION:** Leuctridae nymphs usually occur in smaller streams and the prefer microhabitats of gravel interstices and detritus in areas of swift current. Nymphs are not commonly

collected except when they are close to emergence.

1. Labial palps long, extending well beyond the tip of the paraglossae (Figure A156); Abdominal terga with a posterior fringe of short setae independent of long intrasegmental hairs (Figure A157).....

.....*Leuctra fusca*\* p. 107, p. 108

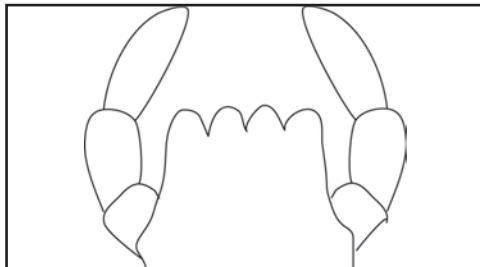


Figure A156. Labium of *Leuctra* sp., ventral. Illustration by S. W. Judson.

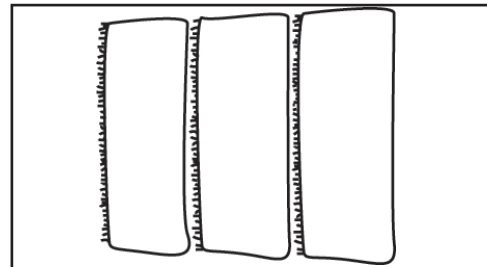


Figure A157. Abdomen of *Leuctra* sp., dorsal. Illustration by S. W. Judson.

1'. Labial palps shorter and nearly equal in length to paraglossae (Figure A158); Abdominal terga without a posterior fringe of setae (Figure A159).....*Paraleuctra zapekinae*\* p. 107, p. 109

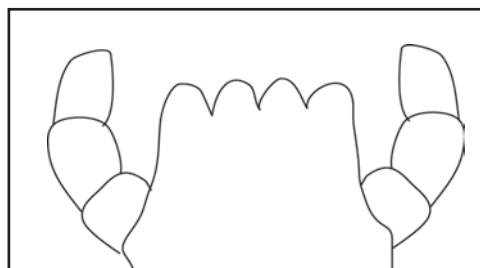


Figure A158. Labium of *Paraleuctra* sp., ventral. Illustration by S. W. Judson.

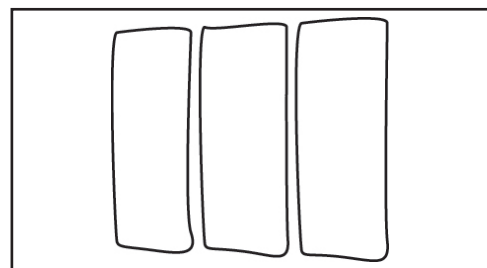


Figure A159. Abdomen of *Paraleuctra* sp., dorsal. Illustration by S. W. Judson.

## LEUCTRIDAE

### *Leuctra*, *Paraleuctra*



Figure A160. Habitus (live). *Paraleuctra zapekinae*. Baruun Tsuuts River (SRP2005070601). Photo by C. R. Nelson.

European populations, then the connection must be further north of Mongolia, in Russia rather than across Asia at the same latitude.

#### *Paraleuctra*

**DIAGNOSIS:** Coloration of *Paraleuctra* is dark brown and very slender (Figure A160). Cercal segments of male heavily modified, surrounding the simple short epiproct which is oriented perpendicular to the body (Figure A168, p. 109). The female plate has is bilobed and protrudes off the body (Figure A169, p. 109). Nymph with palps subequal to the glossae (Figure A158, p. 106), as opposed to *Leuctra* which has long palps. Nymph lacking posterior margin of short setae on abdominal tergites (Figure A159, p. 106) which *Leuctra* exhibits.

**DISTRIBUTION - Global:** Holarctic - **Regional:** AOB - **Aimag:** SE, TO

**DISCUSSION:** The genus *Paraleuctra* is richer in the Nearctic than the Palearctic. It is interesting that this points to connections east across Beringia while the distribution of *L. fusca*, which is similar in placement and extent to *P. zapekinae*, is to the west, Europe. More collections from this range is warranted.

#### *Leuctra*

**DIAGNOSIS:** Coloration of *Leuctra* lighter brown to pale orange. Male easily recognized by paired sclerotized processes (Figure A163, p. 108) on the dorsal side of the abdominal segments. Female subgenital plate with three lobes (Figure A164, p. 108), one more recessed than the other two. Nymph with long palps relative to the glossae (Figure A156, p. 106), as opposed to *Paraleuctra* which has short palps not surpassing the glossae apices. Nymph with posterior margin of short setae on abdominal tergites (Figure A157, p. 106) which *Paraleuctra* lacks.

**DISTRIBUTION - Global:** Holarctic, especially common in Europe - **Regional:** AOB - **Aimag:** SE, TO\*, UB\*

**DISCUSSION:** It is interesting to note that the distribution in Mongolia is limited to the north central aimags, despite intense collecting further west. If this species is conspecific with European populations, then the connection must be further north of Mongolia, in Russia rather than across Asia at the same latitude.

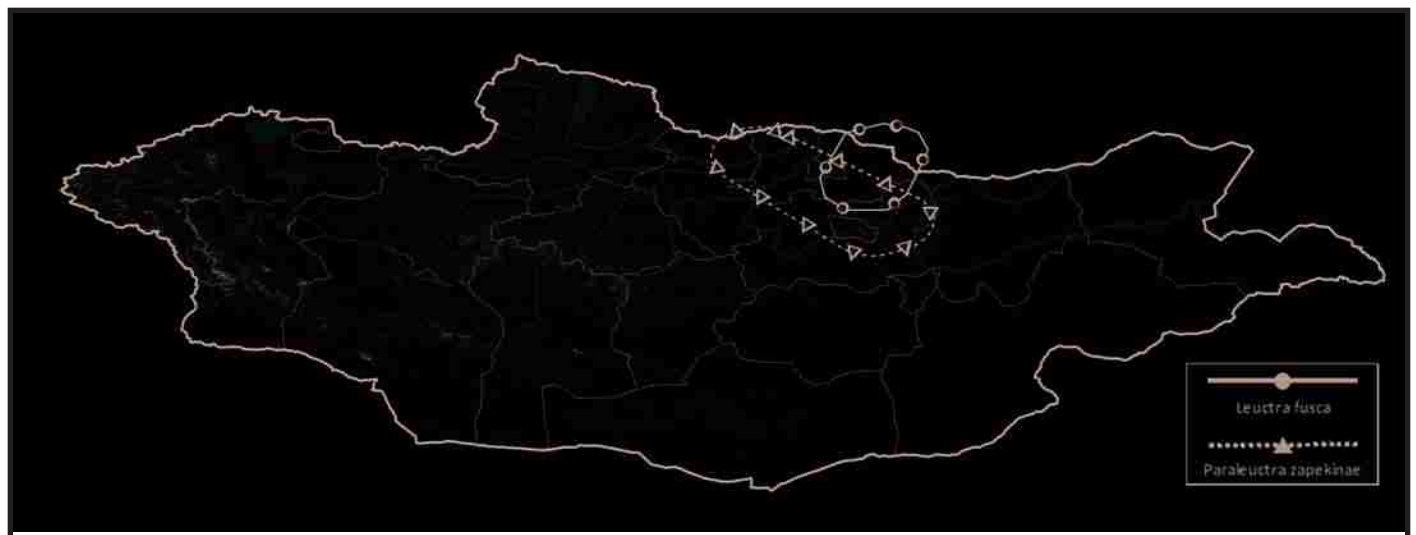


Figure A161. Comparative Distribution Map. Genus. Genus/species not shown due to lack of georeferenced localities from historical records.

## LEUCTRIDAE

### *Leuctra fusca* (Linneaus, 1758)



Figure A162. Habitus (preserved). *Leuctra fusca*. Photo by S. W. Judson.

#### SYNONYMY

*Phryganea fusca* Linneaus 1758  
*Leuctra cylindrica* Klapalek 1896  
*Leuctra klapaleki* Kempny 1898  
*Leuctra fusciventris* Mosely 1932  
*Leuctra carpentieri* Despax 1945  
*Leuctra fusca* Illies 1955

**TYPE LOCALITY:** Sweden: Fahlun

**DIAGNOSIS:** When preserved, whole body light brown with orangish tint (Figure A162). Male has paired sclerotized processes on the dorsal side of the 6th and 7th abdominal segments (Figure A163). The processes on the 6th segment are parallel and point distally, whereas the ones on the 7th segment point inward towards each other. Paraproct styles and other structures form simple rods at the tip of the abdomen (Figure A163). Female subgenital plate trapezoid shaped with two posterior lobes that are clearly delineated from a broadly rounded shallow central lobe (Figure A164). Nymph with long palps relative to the glossae (Figure A156, p. 106), as opposed to *Paraleuctra zapekinae* which has short palps not surpassing the glossae apices (Figure A158, p. 106).

**DISTRIBUTION - Global:** Trans-Palaeartic- **Regional:** AOB - **Aimag:** SE, TO\*, UB\*

**DISCUSSION:** This species is common in Europe where much work has been done on its biology and ecology.

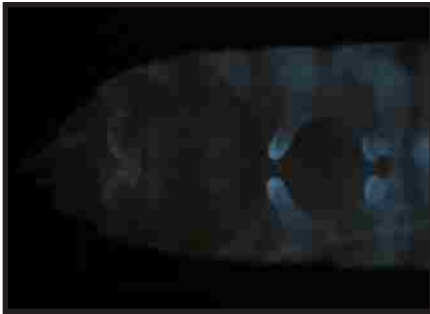


Figure A163. Male epiproct. *Leuctra fusca*. Photo by J. Fazio.



Figure A164. Female subgenital plate. *Leuctra fusca*. Photo by J. Fazio.

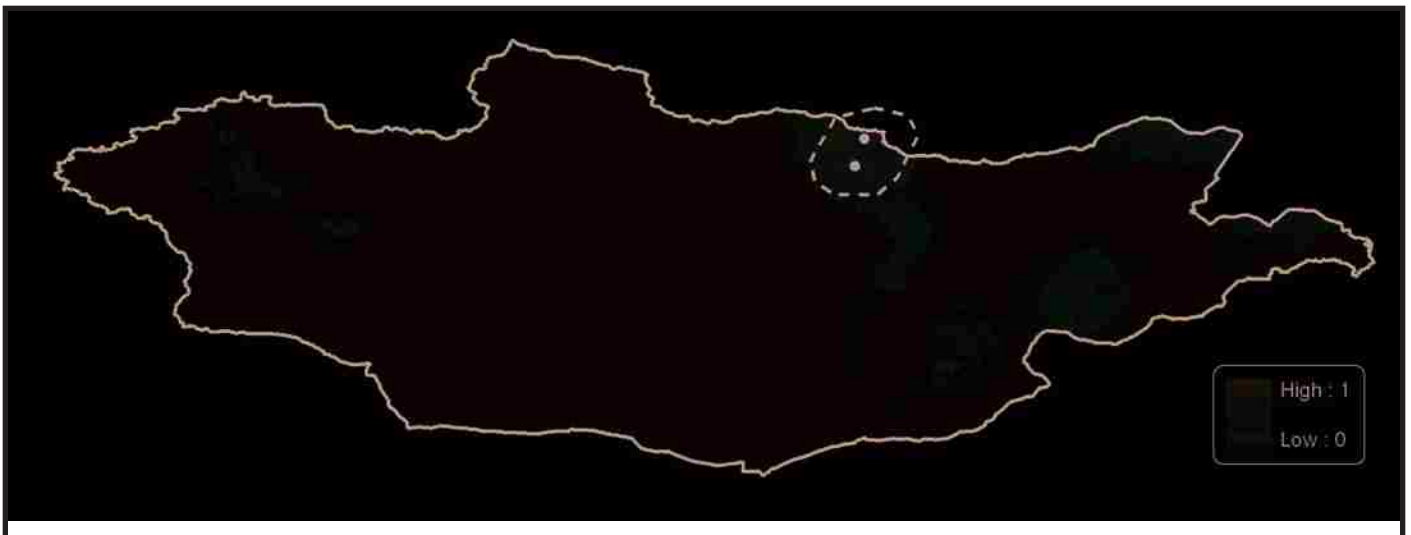


Figure A165. Predicted ENM Map with Documented Occurrences and Range Estimate. *Leuctra fusca*.

# LEUCTRIDAE

## *Paraleuctra zapekinae* Zhiltzova, 1974



Figure A166. Habitus (preserved). *Paraleuctra zapekinae*. Photo by S. W. Judson.

### SYNONYMY

*Paraleuctra zapekinae* Zhiltzova 1974

**TYPE LOCALITY:** Russia

**DIAGNOSIS:** Overall, *P. zapekinae* adults are dark brown and very slender (Figure A166). Cercal segments of male heavily modified, superficially appearing as though they interlock with one another and therefore surround the epiproct (Figure A167). The epiproct is a relatively simple short appendage that tapers slightly at the apex (Figure A167). When viewed laterally, the epiproct is perpendicular to the body (Figure A168). The female plate has distinctive black markings at the base and on the tips of the two posterior lobes (Figure A169). Unlike *Leuctra fusca*, the female plate does not have an additional central shallow lobe (Figure

A164, p. 108), though the two posterior lobes are still clearly divided. Nymph with palps subequal to the glossae (Figure A158, p. 106), as opposed to *L. fusca* which has long palps (Figure A156, p. 106).

**DISTRIBUTION - Global:** East Palaearctic - **Regional:** AOB - **Aimag:** SE, TO

**DISCUSSION:** *P. zapekinae* was only recently recorded from Mongolia (Purevdorj et al. 2003).

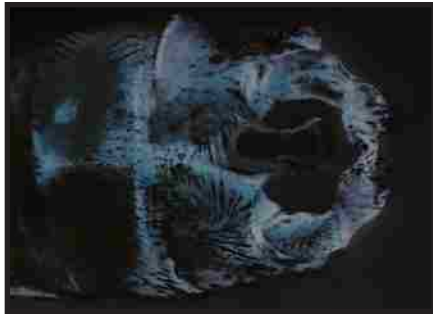


Figure A167. Male epiproct, dorsal. *Paraleuctra zapekinae*. Photo by S. W. Judson.



Figure A168. Male epiproct, lateral. *Paraleuctra zapekinae*. Photo by S. W. Judson.



Figure A169. Female subgenital plate. *Paraleuctra zapekinae*. Photo by S. W. Judson.

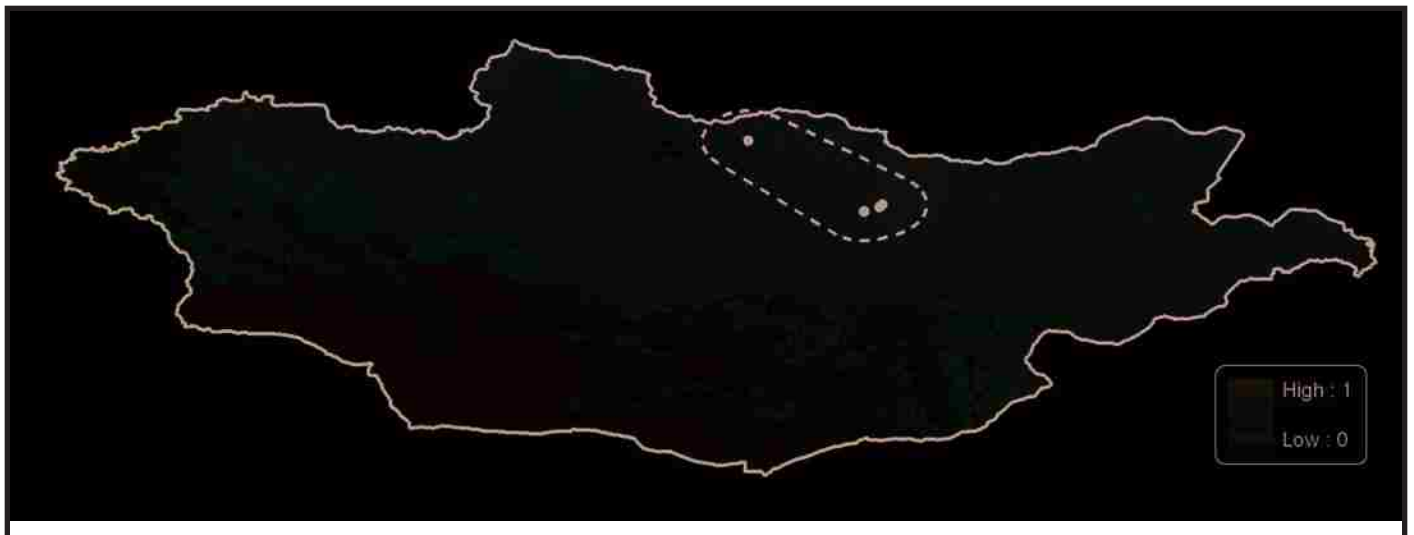


Figure A170. Predicted ENM Map with Documented Occurrences and Range Estimate. *Paraleuctra zapekinae*.

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Species Known from Mongolia (**LEUCTRIDAE: *Lecutra*, )**

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**Species:** *Lecutra fusca*  
**Characteristics:** ajdklj

**Species:** *Paraleuctra zapekinae*  
**Characteristics:** ajdklj

Figure A171. a-b.  
Nymph head.

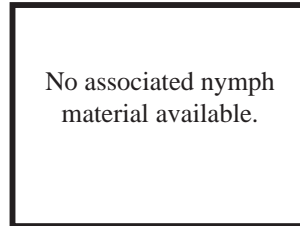
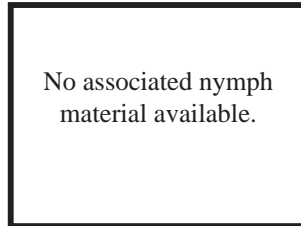


Figure A172. a-b.  
Adult head.

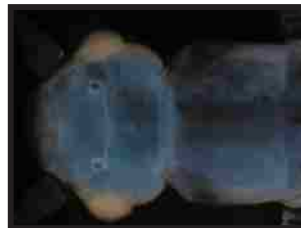


Figure A173. a-b.  
Male genitalia.

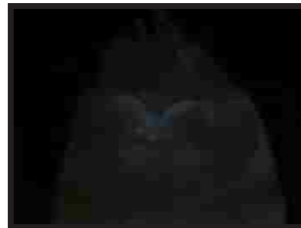


Figure A174. a-b.  
Female subgenital plate.



Figure A175. a-b.  
Distribution map.





# NEMOURIDAE



Figure A176. Habitus (live). *Nemoura cinerea*. Springs of Bagtagin River (SRP2006063001). Photo by C. R. Nelson.

**COMMON NAME:** Brown or Spring Stoneflies

**SIZE:** Small to medium (5-20 mm)

**FEEDING GROUP:** Shredders

**TOLERANCE VALUE:** 2 (Low)

**DIAGNOSIS:** Adults dark brown in life, with distinct “X” vein intersection in the distal half of the wing (Figure A176). Nymphs are generally stout, golden brown in color, and appear hairy (Figure A177). Some genera have gills present on the neck (Figure A177) between the thorax and head. Adults sometimes retain gill remnants. Nymphal wings pads diverge greatly from midline (Figure A12, p. 73). Tarsal segment 2 is much shorter than segment 1 (Figure A12, p. 72). Mouthparts (Figure A7, p. 72) with subequal paraglossa and glossa and with robust labial palps .

**DISCUSSION:** Nemourids are most common in small coldwater streams, but they can also be found in larger rivers and lake edges. They are usually found in leaf packs, roots, and snags. Most nemourids emerge in late spring and summer although some emerge in the fall.

1. With branched cervical gills (Figure A177) ..... *Amphinemura* p. 113



Figure A177. Cervical gills of *Amphinemura* sp., ventral. Photo by J. Ayala.

1'. Without gills (Figure A178)..... 2



Figure A178. Cervical region of *Nemoura cinerea*, ventral. Photo by S. W. Judson.

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2(1'). Tarsal segments 1 and 3 of equal length (Figure A179); Abdominal tergites with four pronounced setae, two of which are at least three times longer than other intercalary hairs (Figure A180).....*Nemurella pictetii* p. 113, p. 116

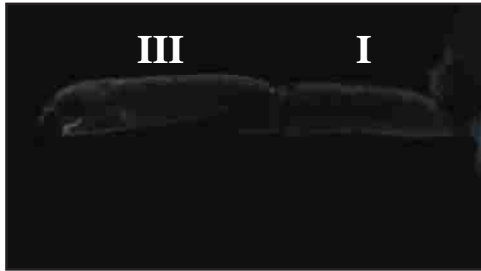


Figure A179. Tarsal segments of *Nemurella pictetii*. Photo by S. W. Judson.



Figure A180. Abdomen of *Nemurella pictetii*, dorsal. Photo by S. W. Judson.

2'. Tarsal segment 3 two to three times longer than segment 1 (Figure A181); Abdominal tergites with many short setae of approximately equal length (Figure A182).....*Nemoura* p. 117

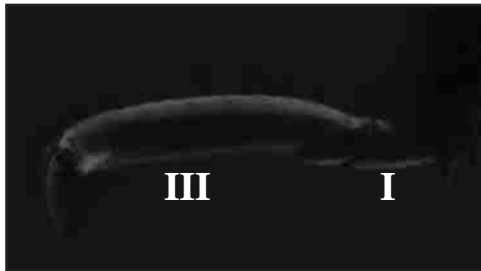


Figure A181. Tarsal segments of *Nemoura cinerea*. Photo by S. W. Judson.



Figure A182. Abdomen of *Nemoura cinerea*, dorsal. Photo by S. W. Judson.

## NEMOURIDAE

# *Amphinemura*, *Nemurella*



Figure A183. Habitus (live). *Amphinemura standfussi*. Khalkhan Stream (SRP2005071902). Photo by C. R. Nelson

lateral margins of the cervical sclerites. Gill remnants variable in adults, some with filamentous extensions others with only stubs vaguely reminiscent of gill insertion.

**DISTRIBUTION - Global:** Holarctic - **Regional:** AOB, IDB, POB\* - **Aimag:** AR, BO, BU, DO\*, KhD\*, KhE\*, KhG, OV<sup>^</sup>, SE, TO\*, UB, ZA<sup>^</sup>

### *Nemurella*

**DIAGNOSIS:** Coloration typically dark to golden brown in life and when preserved. Male most readily distinguished by its cercal segments which form a triangle around the genitalic structures (Figure A196, p. 116). Also, the paraprocts (Figure A197, p. 116) are readily diagnostics being divided into two thin, long lobes extending past the cercal bases, the inner lobes also surpassing the entire length of the cercal segment, in stark contrast to the short and stubby lobes in *Nemoura* and the wider lobes of *Amphinemura*. As in *Amphinemura*, the hypoproct (ventral) extends between the paraprocts. The epiproct is bifurcate from the lateral view. Female subgenital plate is broadly rounded like *Nemoura* species, but also has a central lobe which protrudes between the two sclerotized vaginal lobes of sternum 8. Nymphs are generally less pilous than other Nemouridae, but with thick stout hairs in characteristic locations, namely four stout hairs on abdominal tergites (Figure A180, p. 112), two of which are most pronounced and much longer than all other hairs present along the tergite margin, as well as a transverse row of hairs on the hind femur that are often longer than the femur width. In later instars, the first and third tarsal segments of the hind leg are equal in length (Figure A179, p. 112) and the male paraprocts are readily apparent and curve up between the cerci. In earlier instars, the cerci are as long as the body and the antennae have long hairs on the basal segments.

**DISTRIBUTION - Global:** Trans-Palaearctic - **Regional:** AOB - **Aimag:** KhG



Figure A184. Comparative Distribution Map. *Amphinemura* and *Nemurella*.

## NEMOURIDAE

# *Amphinemura borealis* (Morton, 1894)

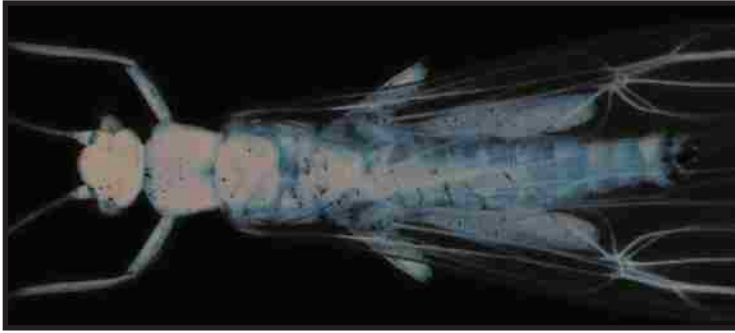


Figure A185. Habitus (preserved). *Amphinemura borealis*. Photo by S. W. Judson.

Epiproct is longer and extends further down than abdomen than in *A. standfussi* (Figure A192, p. 115) which is also much different in overall shape. Female sternum 8 well sclerotized and shaped in a way that mimics the subgenital plate on sternum 7, appearing as though there are two plates stacked on one another (Figure A188). Nymph with long hairs on femora and cercal segments, the hairs much longer and denser than those in *A. standfussi*.

**DISTRIBUTION - Global:** Trans-Palearctic - **Regional:** AOB, IDB, POB\* - **Aimag:** AR, BO, BU, DO\*, KhD\*, KhE\*, KhG, OV<sup>^</sup>, SE, UB, ZA<sup>^</sup>

**DISCUSSION:** We typically documented *A. borealis* in mid-size, low gradient streams. However, we also found it in a marshy habitat at one location.

### SYNONYMY

*Nemoura borealis* Morton 1894

*Amphinemura borealis* Claassen 1940

**TYPE LOCALITY:** Finland

**DIAGNOSIS:** Adults do not retain remnants of nymphal gills in the cervical region and have only small whitish stubs in their place, unlike *A. standfussi* which has longer fingerlike gill remnants. From dorsal view, the male epiproct is relatively uniform in width (Figure A186). Laterally, the epiproct is bent abruptly at the tip, appearing truncate (Figure A187). This bend points ventrally at a 45 degree angle, as compared to *A. standfussi* which forms a gradual point which is directed towards the anterior (Figure A191,



Figure A186. Male epiproct. *Amphinemura borealis*. Photo by J. Fazio.



Figure A187. Male epiproct, lateral. *Amphinemura borealis*. Photo by S. W. Judson.

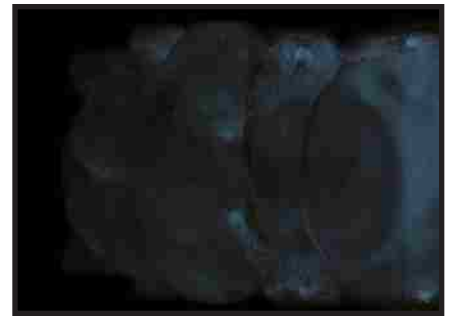


Figure A188. Female subgenital plate. *Amphinemura borealis*. Photo by J. Fazio.

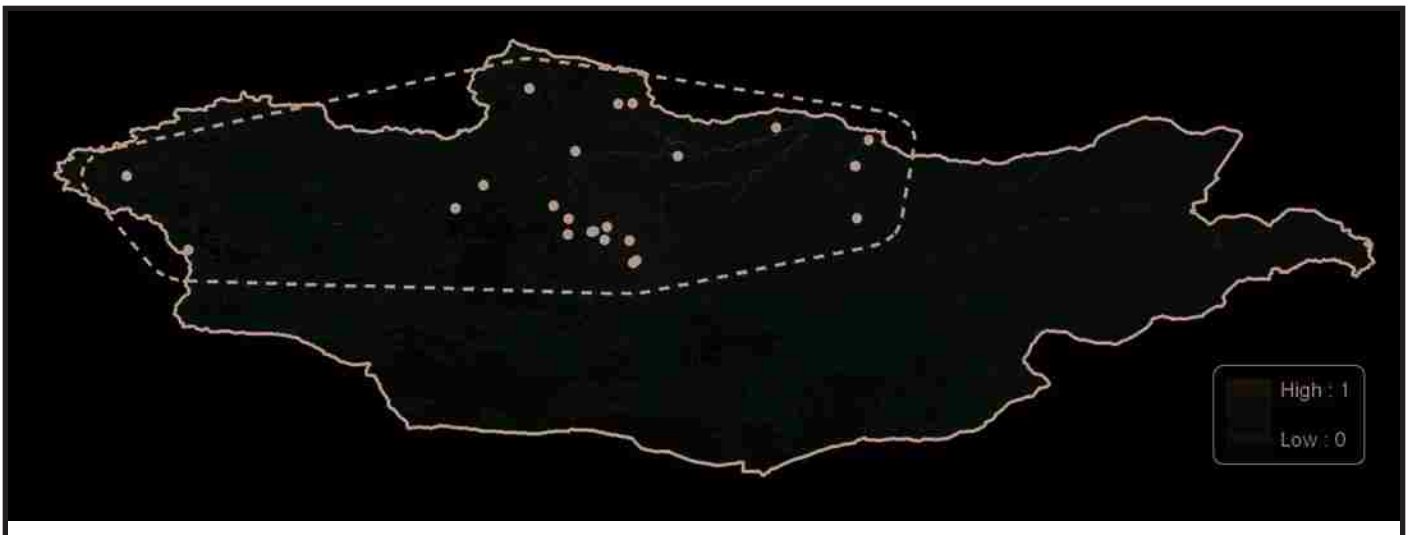


Figure A189. Predicted ENM Map with Documented Occurrences and Range Estimate. *Amphinemura borealis*.

## NEMOURIDAE

# *Amphinemura standfussi* Ris 1902



Figure A190. Habitus (preserved). *Amphinemura standfussi*. Photo by S. W. Judson.

gial plate of sternum 7. The sclerotized section is noticeably bilobed with a central notch on its posterior margin (Figure A193), as opposed to *A. borealis* which has a broadly rounded sclerotized region. Nymph with short, stout hairs on femora and cercal segments, whereas the hairs of *A. borealis* are much longer and more densely spaced.

**DISTRIBUTION - Global:** Trans-Palaearctic - **Regional:** AOB, POB\* - **Aimag:** AR\*, BU<sup>^</sup>, KhE\*, KhG, SE<sup>^</sup>, TO\*, UB\*, ZA<sup>^</sup>

**DISCUSSION:** In Mongolia, *A. standfussi* was documented at a large variety of localities including large rivers, small streams, and lakes.

### SYNONYMY

*Amphinemura standfussi* Ris 1902

**TYPE LOCALITY:** England

**DIAGNOSIS:** Adults retain filamentous remnants of nymphal gills in the cervical region, unlike *A. borealis* which only retains small stubs. Male epiproct (Figure A191) relatively short in comparison to *A. borealis* (Figure A186, p. 114). From the dorsal aspect, the epiproct is triangular with a rounded tip (Figure A191). Laterally, the epiproct is broadly rounded on the ventral margin and gradually narrows to a point which is directed towards the anterior (Figure A192). The epiproct shape is readily distinguished from *A. borealis* (Figure A187, p. 114) which is more rectangular. Female sternum 8 is sclerotized below and extending beyond the subgeni-



Figure A191. Male epiproct. *Amphinemura standfussi*. Photo by S. W. Judson.



Figure A192. Male epiproct, lateral. *Amphinemura standfussi*. Photo by S. W. Judson.



Figure A193. Female subgenital plate. *Amphinemura standfussi*. Photo by J. Fazio.

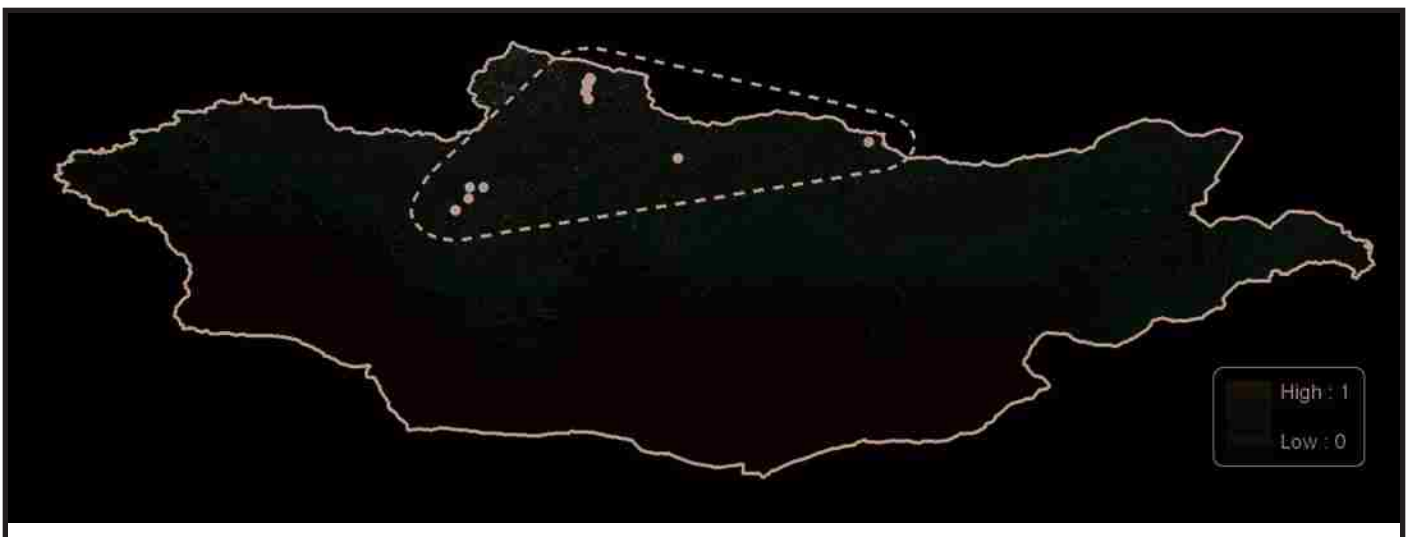


Figure A194. Predicted ENM Map with Documented Occurrences and Range Estimate. *Amphinemura standfussi*.

## NEMOURIDAE

### *Nemurella pictetii* (Klapalek 1900)

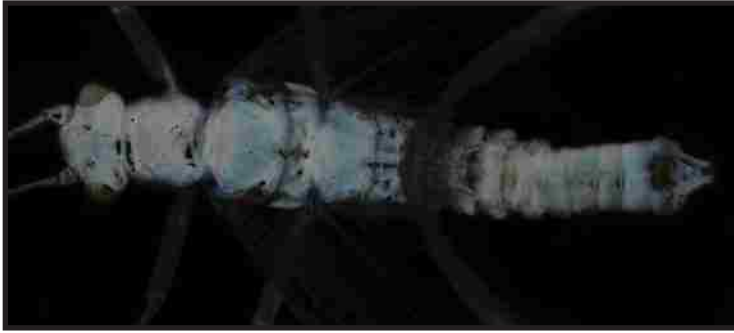


Figure A195. Habitus (preserved). *Nemurella pictetii*. Photo by S. W. Judson.

#### SYNONYMY

*Nemoura pictetii* Klapalek 1900

*Nemurella pictetii* Illies 1955

**TYPE LOCALITY:** Bohemia

**DIAGNOSIS:** Cercal segments of male long and touching at their apices (Figure A195, Figure A196), forming a triangle around the epiproct and the thin, long paraprocts (Figure A197). Epiproct triangular from dorsal view, somewhat similar to the general shape of *Aphinemura standfussi* (Figure A191, p. 115). From the lateral view, the epiproct is clearly bifurcated, the ventral and lateral sclerites coming to a junction where a dark sclerotized region crosses the width of the epiproct at a diagonal. Female subgenital plate has a central lobe which protrudes between the two sclero-

tized vaginal lobes of sternum 8 (Figure A198). Although nymphs are less pilous than other Nemouridae, they have four distinct hairs on the abdominal tergites (Figure A180, p. 112) and long hairs on the distal half of the femur. Late instar males nymphs exhibit external paraprocts. Early instars can be distinguished by their proportionally long cerci and long hairs on the basal antennal segments. In all instars, tarsal segments one and three are equal in length (Figure A179, p. 112).

**DISTRIBUTION - Global:** Trans-Palaearctic - **Regional:** AOB - **Aimag:** KhG

**DISCUSSION:** The biology and ecology of this species is well known in Europe (Zwick 2004). Depending on elevation, it has variable voltinism. It is more common than other Nemouridae in springs, percolating groundwater, and other low flow habitats including acidic peat bog outlets. Though relatively ubiquitous in Europe, it has been noted to be highly sensitive to the effects of pollution.



Figure A196. Male epiproct. *Nemurella pictetii*. Photo by S. W. Judson.



Figure A197. Male, lateral. *Nemurella pictetii*. Photo by S. W. Judson.

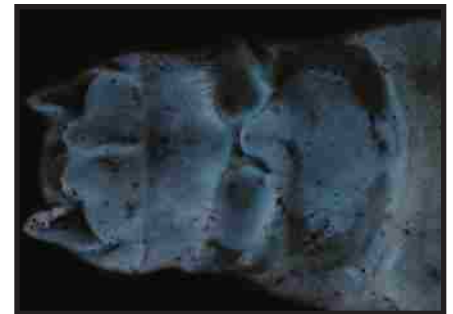


Figure A198. Female subgenital plate. *Nemurella pictetii*. Photo by S. W. Judson.

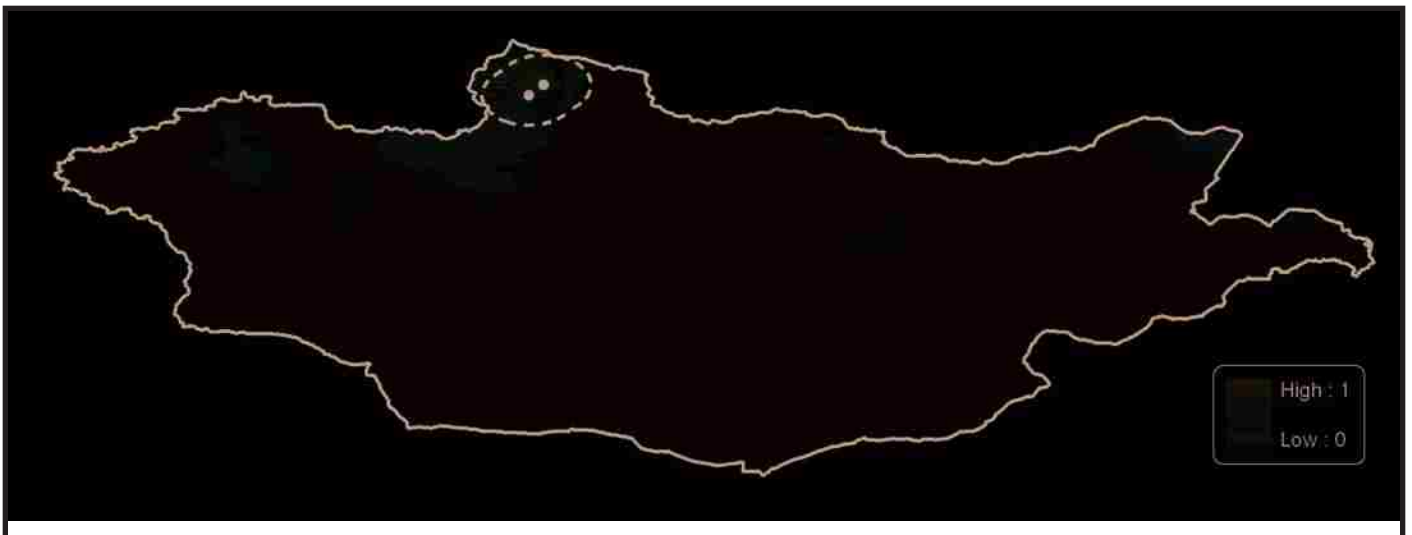


Figure A199. Predicted ENM Map with Documented Occurrences and Range Estimate. *Nemurella pictetii*.

# NEMOURIDAE

## *Nemoura*



Figure A200. Habitus (live). *Nemoura cinerea*. Baruun Tsuuts Stream (SRP2005070602). Photo by C. R. Nelson.

hairs in diagnostic locations on the pronotum and abdomen. Nymphs within the genus have been variably distinguished based on cercal or femora setation, however this varies between taxonomic treatments.

**DISTRIBUTION - Global:** Holarctic - **Regional:** AOB, IDB, POB\* - **Aimag:** AR, BO, BR\*, BU<sup>^</sup>, DO\*, GA\*, KhD, KhE\*, KhG, SE, TO, UB, UV\*, ZA

**DISCUSSION:** The genus *Nemoura*, and most of the species found in Mongolia, are well studied in Europe. Nymphs and recently emerged adults are often found in seeps or springs.

**DIAGNOSIS:** In life, adults are dark brown body with yellow intrasegmental membranes and clear wings patterned along the venation (Figure A201). Epiproct with the same general shape and sclerotization pattern (Figure A208, p. 119), with two curved lateral sclerites nearly converging at the midline and with apical sclerites (Figure A209, p. 119) that gradually narrow and touch at the midline. Epiproct (Figure A208, p. 119) wider, shorter and more recessed (held close to the body) than those of *Amphinemura*. Paraprocts divided into two lobes (Figure A210, p. 119), with the inner lobe reduced or covered by the hypoproct, and both lobes much shorter than those in *Nemurella*. Nymphs, like those of *Nemurella*, lack any true gill structures (Figure A178, p. 111), though have what appear to be gill nubs near the lateral cervical sclerites. Various parts of the body with many short, equal length, and regularly spaced hairs, including on the pronotum and tergite margins, where as other Nemoridae from Mongolia have longer



Figure A201. Comparative Distribution Map. *Nemoura*. *Nemoura nigrodentata* not shown due to lack of georeferenced localities from historical records.

## NEMOURIDAE

# *Nemoura arctica* Esben-Petersen, 1910

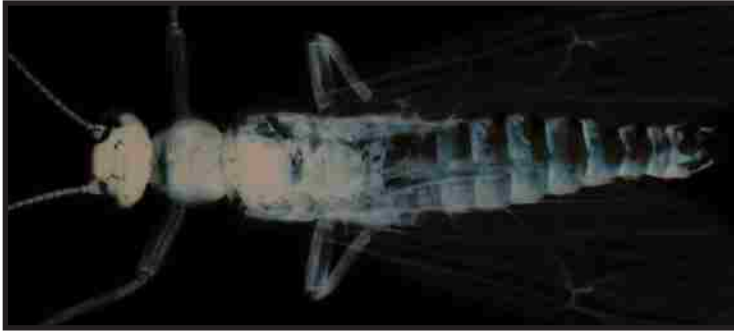


Figure A202. Habitus (preserved). *Nemoura arctica*. Photo by S. W. Judson. Photo by J. Fazio. Photo by C. R. Nelson.

*arctica*, like *N. sahlbergi*, has hairs on the galea, which *N. cinerea* lacks. *N. arctica* has long hairs at the corners of the pronotum and short hairs along the remainder of the pronotal margin, whereas *N. sahlbergi* has short hairs at the corners equal to the remainder of the marginal hairs. If distal cercal segments are intact, they have intrasegmental hairs which *N. sahlbergi* lacks.

**DISTRIBUTION - Global:** Holarctic - **Regional:** AOB, IDB, POB\* - **Aimag:** AR, BO, BR\*, BU<sup>^</sup>, DO\*, GA\*, KhD, KhG, SE, TO, UB, UV\*, ZA\*

**DISCUSSION:** This species is the most common Nemouridae in Mongolia.

### SYNONYMY

*Nemoura arctica* Esben-Petersen 1910

**TYPE LOCALITY:** Norway

**DIAGNOSIS:** Apical prongs of the epiproct ventral sclerite broadly flattened with spines on the lateral margins (Figure A203, Figure A204), whereas *N. cinerea* (Figure A209, p. 119) and *N. sahlbergi* (Figure A218, p. 121) are somewhat pointed with apical spines. Like *N. cinerea* (Figure A210, p. 119), the outer (major) lobe of the paraproct is convex, but unique to *N. arctica*, it is divided by a broadly rounded notch that creates an inward tilted cup (Figure A205). Cerci with only 2 apical spines perpendicular to the cercus. Female plate broadly rounded (Figure A234a) and not particularly diagnostic due to variation within the species. The nymph of *N.*



Figure A203. Male epiproct, dorsal. *Nemoura arctica*. Photo by S. W. Judson.



Figure A204. Male epiproct ventral sclerites, detail. *Nemoura arctica*. Photo by S. W. Judson.



Figure A205. Male paraprocts, ventral. *Nemoura arctica*. Photo by S. W. Judson.

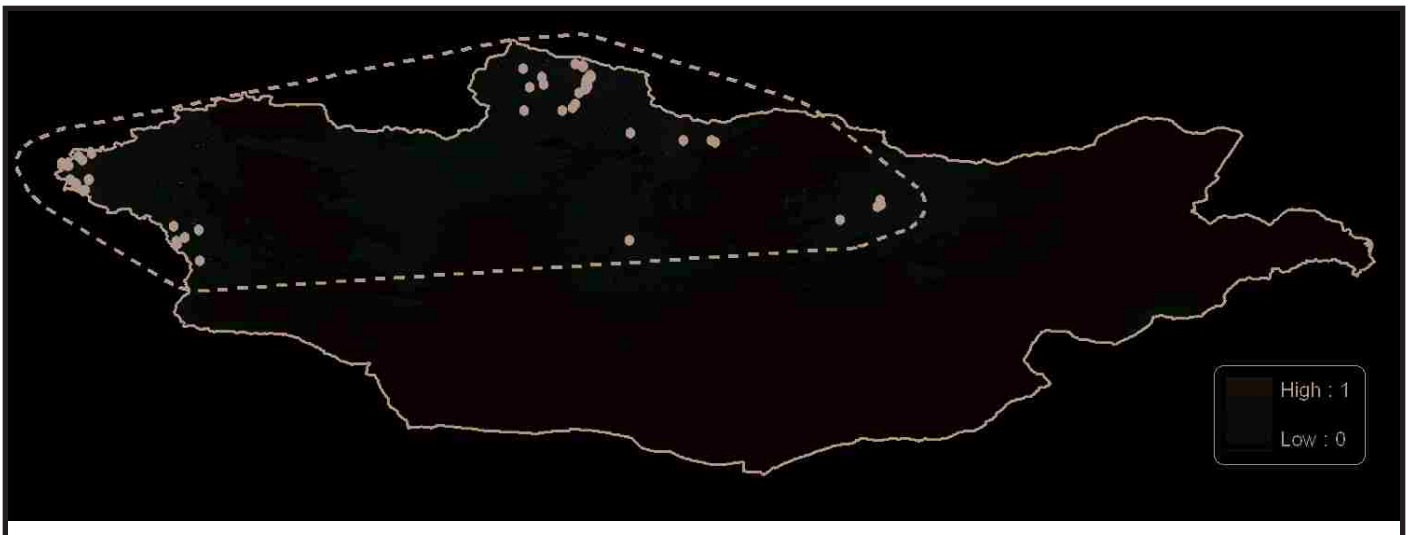


Figure A206. Predicted ENM Map with Documented Occurrences and Range Estimate. *Nemoura arctica*.



# NEMOURIDAE

## *Nemoura cinerea* (Retzius, 1783)

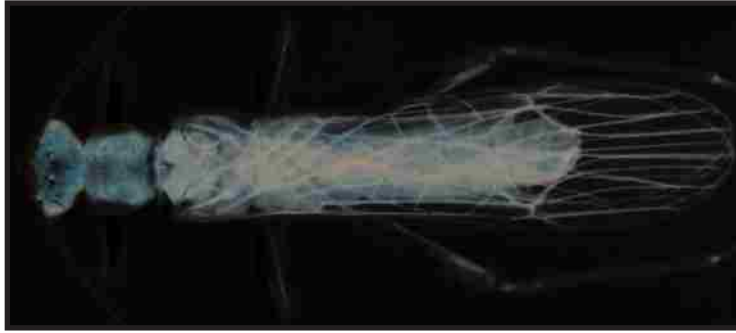


Figure A207. Habitus (preserved). *Nemoura cinerea*. Photo by S. W. Judson.

### SYNONYMY

*Perla cinerea* Retzius 1783  
*Nemura cinerea* Illies 1955

**TYPE LOCALITY:** Sweden

**DIAGNOSIS:** Apical prongs of the epiproct ventral sclerite triangular and coming to a point with a few spines at the apex (Figure A208, Figure A209), in contrast to *N. sahlbergi* of which the prongs are more rounded and have more spines (Figure A218, p. 121). Like *N. arctica* (Figure A205, p. 118), the outer (major) lobe of the paraproct is convex (Figure A210), but in *N. cinerea* the narrow dividing notch at the apex of the segment creates an asymmetrical structure that is hand-shaped with an outline in the shape of a mitten (Figure A210). Cerci with only 2 apical spines perpendicular to the cercus. Unlike other *Nemoura*, the cerci are twisted in

such a way that the black dot in the center of the membranous portion is readily visible ventrally (Figure A210). Female plate with a broad central bump (Figure A234b), but not particularly diagnostic because of variability within the species. *N. cinerea* is noted to have rather homogenous hair across the femora with some longer hairs dorsally near the distal margin. However, this character is only slightly distinguishable from *N. arctica* and *N. sahlbergi*, such that Lillehammer (1988) included *N. cinerea* in two portions of his key both with and without this type of setation. *N. cinerea* nymphs lack hairs on the galea, which *N. arctica* and *N. sahlbergi* possess.

**DISTRIBUTION - Global:** Trans-Palaearctic - **Regional:** AOB, IDB\* - **Aimag:** AR<sup>^</sup>, BU<sup>^</sup>, KhD\*, KhG<sup>^</sup>, SE\*, TO<sup>^</sup>, ZA<sup>^</sup>

**DISCUSSION:** Many European species of *Nemoura* have been historically placed in *N. cinerea*. These species are not treated in the synonymy due to lack of relevance for Mongolia.



Figure A208. Male epiproct, dorsal. *Nemoura cinerea*. Photo by S. W. Judson.



Figure A209. Male epiproct ventral sclerites, detail. *Nemoura cinerea*. Photo by S. W. Judson.



Figure A210. Male paraprocts, ventral. *Nemoura cinerea*. Photo by S. W. Judson.

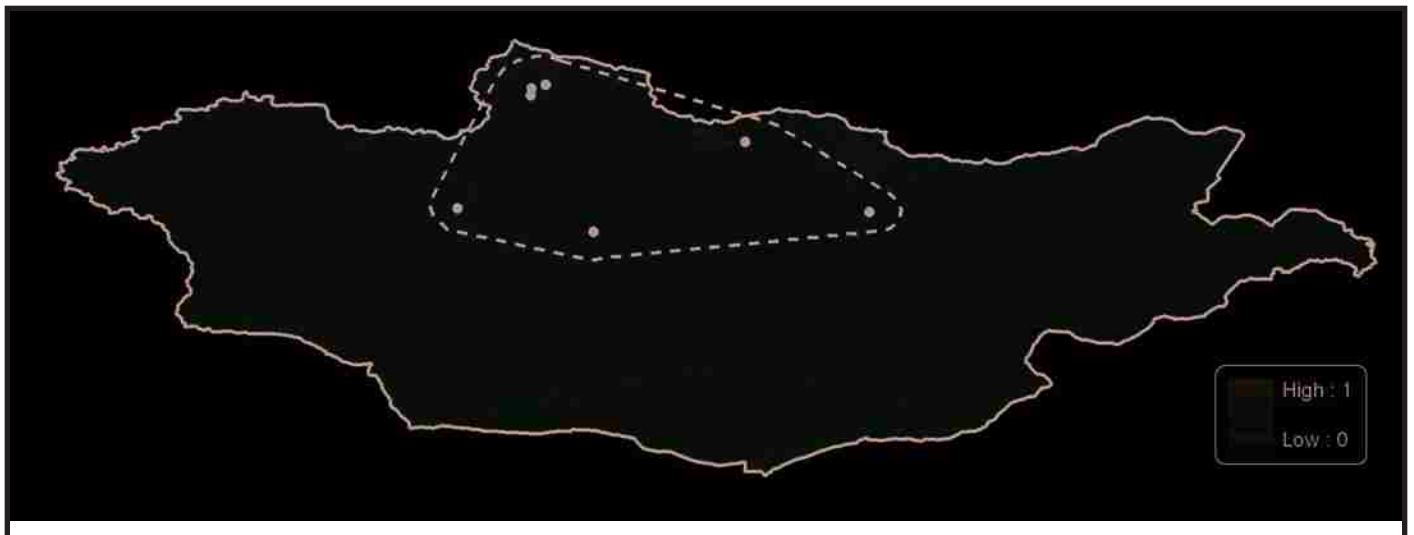


Figure A211. Predicted ENM Map with Documented Occurrences and Range Estimate. *Nemoura cinerea*.

# NEMOURIDAE

## *Nemoura nigrodentata* Zhiltzova 1980

### SYNONYMY

*Nemoura nigrodentata* Zhiltzova 1980

**TYPE LOCALITY:** Mongolia: Khentii Aimag, Onon River

**DIAGNOSIS:** The apical prongs of the epiproct ventral sclerite are rounded and gradually tapering with many short spines on the apex (Figure A212), very similar to *N. sahlbergi* (Figure A218, p. 121). Zhiltzova notes that main differences on the epiproct are “a slightly different form of apical sclerites and a larger diameter that they circumscribe [and] the dorsal sclerites are narrower and tighter” (translated from Russian). Like *N. sahlbergi* (Figure A219, p. 121) and *N. sp.* (Figure A224, p. 122), the outer (major) lobe of the paraproct is concave, though in *N. nigrodentata* it is more truncate (Figure A213). The main difference between *N. sahlbergi* and *N. nigrodentata* is the shape of the lateral process extending from the cerci (Figure A214). In *N. nigrodentata*, the additional spine that joins the cercus approximately 2 mm below the apex, is hook shaped and points toward the posterior (Figure A214), in contrast to *N. sahlbergi* in which the spine is triangular and points towards the anterior. Female plate broadly rounded and not particularly diagnostic due to variation within the species. Nymph unknown.

**DISTRIBUTION - Global:** Russian Far East - **Regional:** POB\* - **Aimag:** KhE\*

**DISCUSSION:** See Appendix B for full English translation of the original Russian description (Zhiltzova 1980). Replications of the original illustrations (Zhiltzova 1980) are given below.

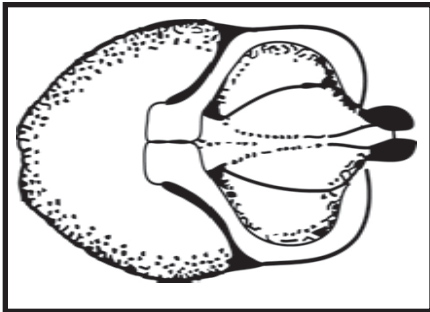


Figure A212. Male epiproct. *Nemoura nigrodentata*. Illustration by S. W. Judson.



Figure A213. Male, ventral. *Nemoura nigrodentata*. Illustration by S. W. Judson.

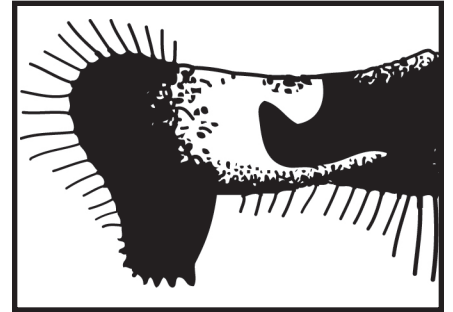


Figure A214. Male cerci, detail. *Nemoura nigrodentata*. Illustration by S. W. Judson.

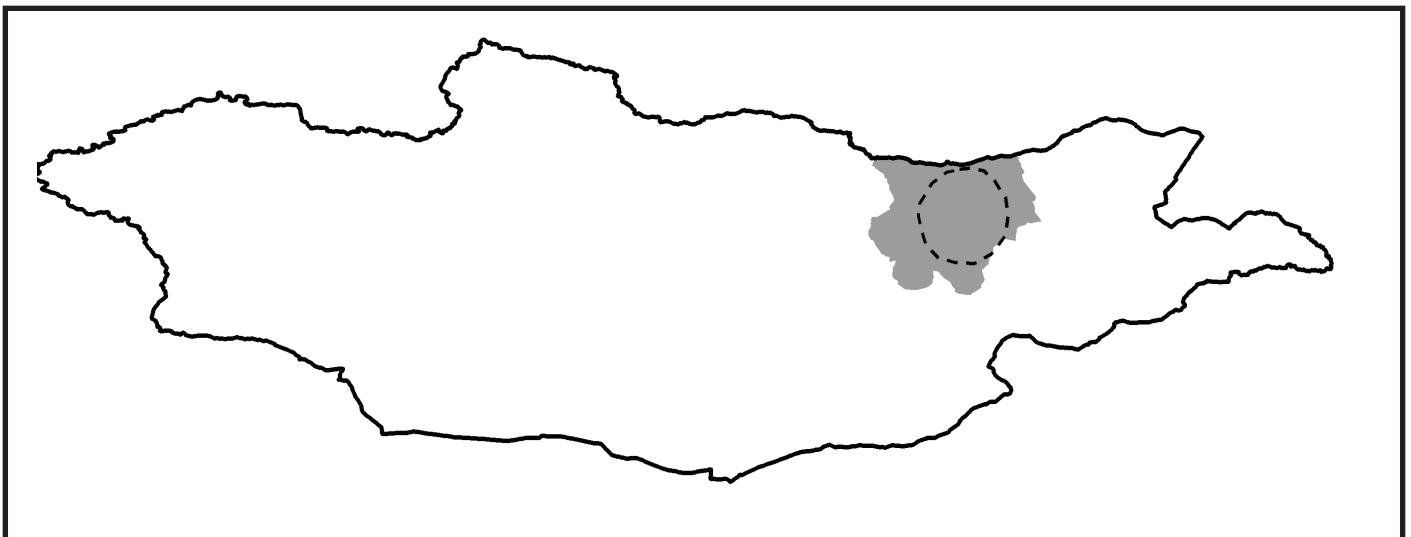


Figure A215. Historical Records Map with Range Estimate. *Nemoura nigrodentata*.

## NEMOURIDAE

# *Nemoura sahlbergi* Morton 1896

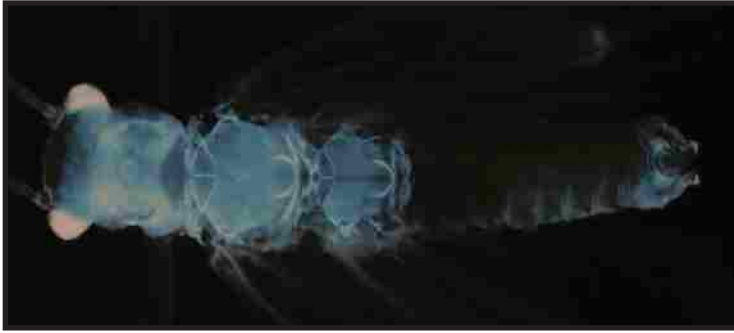


Figure A216. Habitus (preserved). *Nemoura sahlbergi*. Photo by S. W. Judson.

### SYNONYMY

*Nemoura sahlbergi* Morton 1896

**TYPE LOCALITY:** Finland

**DIAGNOSIS:** Apical prongs of the epiproct ventral sclerite rounded and gradually tapering with many spines on the apex (Figure A217, Figure A218), as opposed to *N. cinerea* which is more pointed and has fewer spines (Figure A209, p. 119). Like *N. nigrodentata* (Figure A213, p. 120), the outer (major) lobe of the paraproct is concave (Figure A219). Cerci with an additional spine that joins the cercus at a 45 degree angle approximately 2 mm below the apex, best seen laterally. In comparison to *N. nigrodentata* (Figure A214, p. 120), this spine is triangular and points towards the anterior. Female plate with narrow central bump (Figure A234d), but not

particularly diagnostic due to variation within the species. The nymph of *N. sahlbergi*, like *N. arctica*, has hairs on the galea, which *N. cinerea* lacks. *N. arctica* has short hairs at the corners of the pronotum equal in length to the short hairs along the remainder of the pronotal margin, whereas *N. arctica* has long hairs at the corners. If distal cercal segments are intact, they lack intrasegmental hairs which *N. arctica* has.

**DISTRIBUTION - Global:** Circumpolar - **Regional:** AOB, POB\* - **Aimag:** AR, BU<sup>^</sup>, DO\*, KhG, TO, UB\*

**DISCUSSION:** In Mongolia, *N. sahlbergi* is found in small (1st-3rd order) streams, often associated with springs.



Figure A217. Male epiproct, dorsal. *Nemoura sahlbergi*. Photo by J. Fazio.

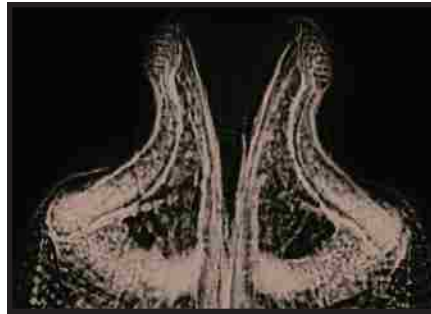


Figure A218. Male epiproct ventral sclerites, detail. *Nemoura sahlbergi*. Photo by S. W. Judson.

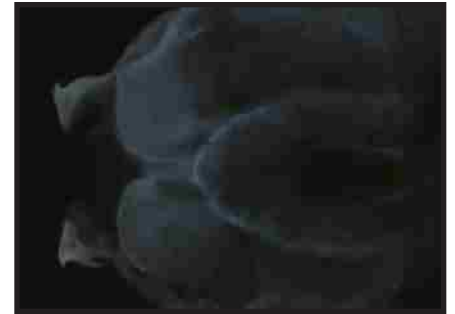


Figure A219. Male paraprocts, ventral. *Nemoura sahlbergi*. Photo by S. W. Judson.

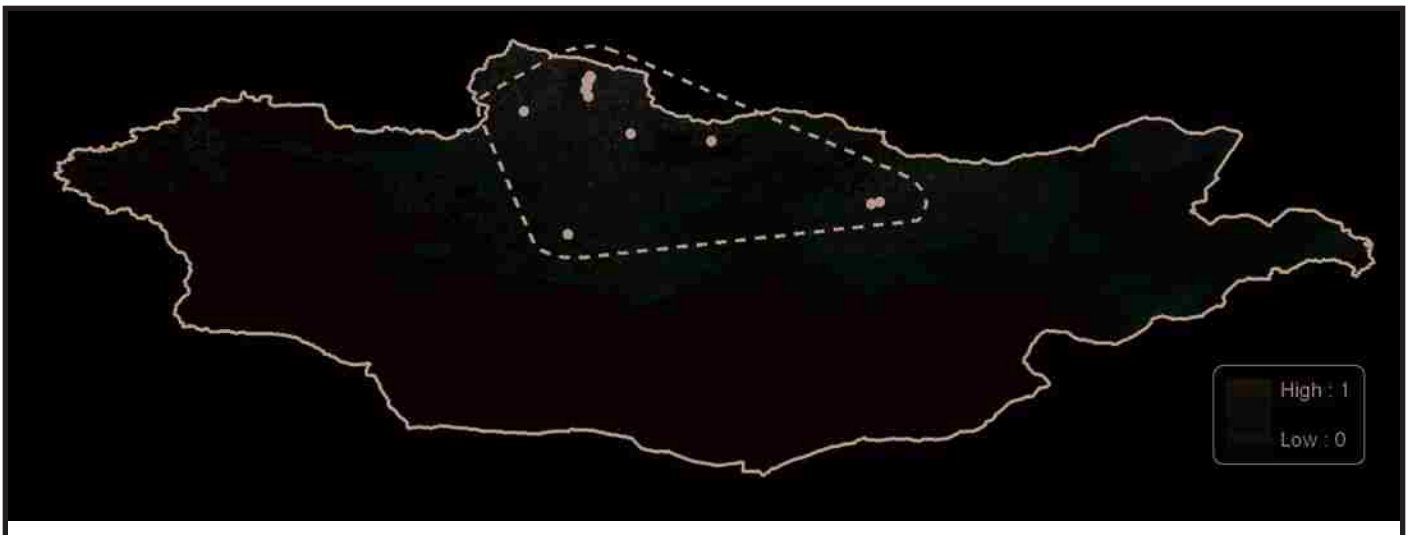


Figure A220. Predicted ENM Map with Documented Occurrences and Range Estimate. *Nemoura sahlbergi*.

# NEMOURIDAE

## *Nemoura* sp.

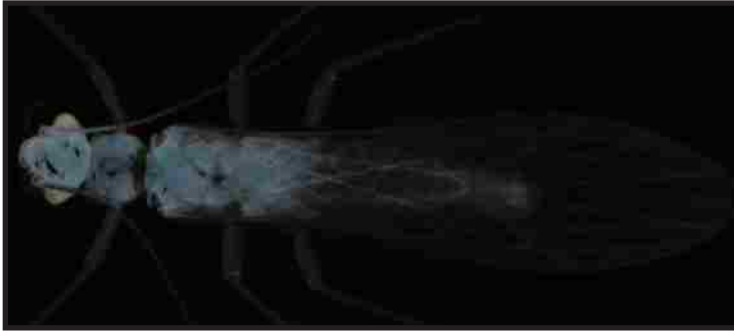


Figure A221. Habitus (preserved). *Nemoura* sp.. Photo by S. W. Judson. Photo by J. Fazio. Photo by C. R. Nelson.

### SYNONYMY

*Nemoura* sp. Judson and Nelson 2010 (in preparation)

**TYPE LOCALITY:** Mongolia: Khovsgol Aimag, Hugin Gol, (N 51.09845 degrees, E 99.32051 degrees; SRP2006070101)

**DIAGNOSIS:** Apical prongs of the male epiproct ventral sclerite (Figure A222, Figure A223) resembling a combination of *N. sahlbergi* (Figure A218, p. 121) and *N. arctica* (Figure A204, p. 118) Like *N. sahlbergi*, the prongs are rounded and gradually tapering, but at the tip they are somewhat flattened with a protruding flange about 1mm from the apex (Figure A223) which has spines on the lateral margin similar to *N. arctica*. Like *N. sahlbergi*, the outer (major) lobe of the paraproct is concave (Figure A219, p. 121). In contrast to *N. sahlbergi* (Figure A219, p. 121) and *N. nigrodentata*

(Figure A214, p. 120), the cercal segment lack any lateral process. Female plate broadly rounded (Figure A234e), but not particularly diagnostic due to variation within the species and similarity to other *Nemoura*. Nymph unknown.

**DISTRIBUTION - Global:** Endemic to Mongolia - **Regional:** AOB<sup>^</sup> - **Aimag:** KhG<sup>^</sup>

**DISCUSSION:** This is a newly discovered species from northern Mongolia.



Figure A222. Male epiproct, dorsal. *Nemoura* sp. Photo by S. W. Judson.



Figure A223. Male epiproct ventral sclerites, detail. *Nemoura* sp. Photo by S. W. Judson.

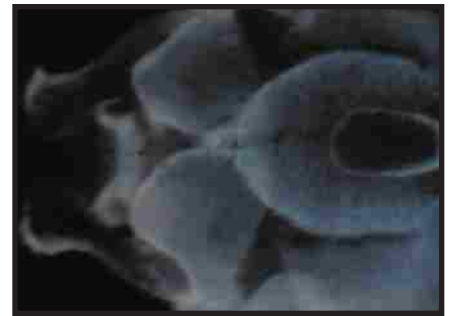


Figure A224. Male paraprocts, ventral. *Nemoura* sp. Photo by S. W. Judson.

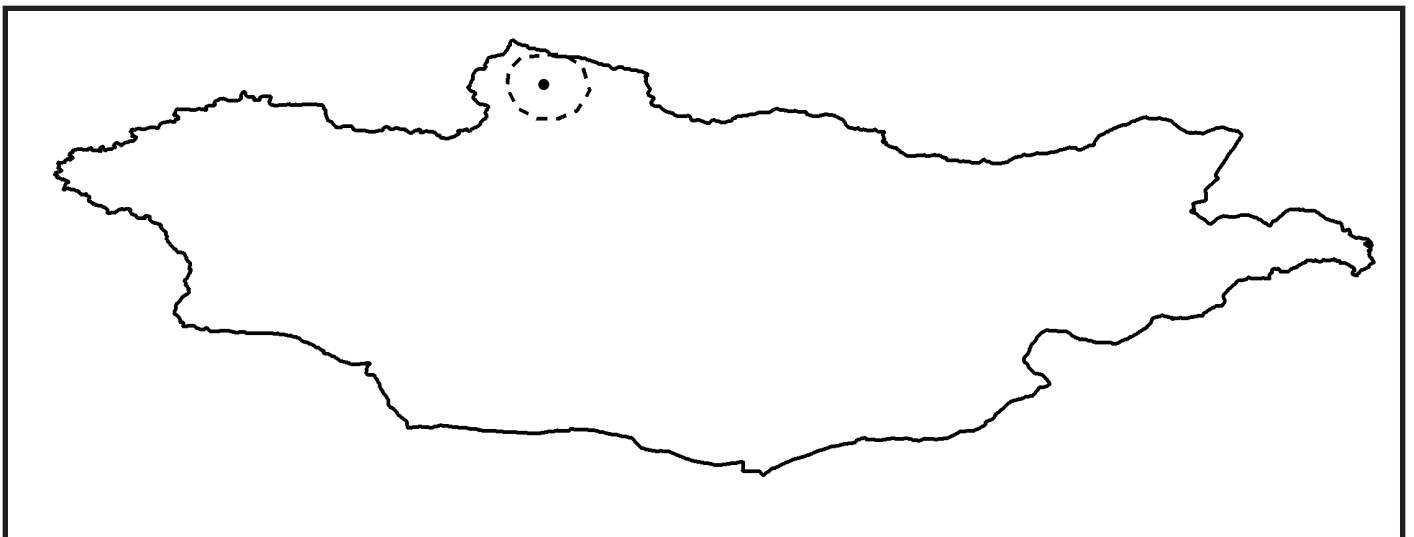


Figure A225. Range Map with Document Occurrences. *Nemoura* sp.

Species Known from Mongolia (NEMOURIDAE: *Amphinemura*, *Nemurella*)

**Species:** *Amphinemura borealis*

**Characteristics:** Adult retains stubs of cervical gills. Epiproct long and rectangular.

**Species:** *Amphinemura standfussi*

**Characteristics:** Adult retains filamentous remnants of cercial gills. Epiproct stout and triangular.

**Species:** *Nemurella pictetii*

**Characteristics:** Long cerci surround male genitalia.

Figure A226. a-c.  
Nymph head.

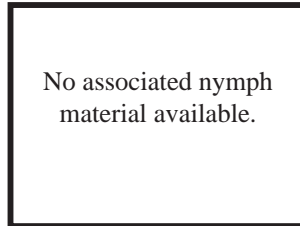
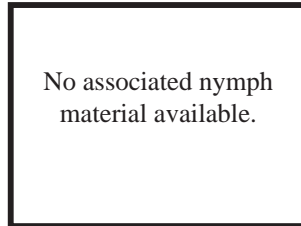


Figure A227. a-c.  
Adult head.

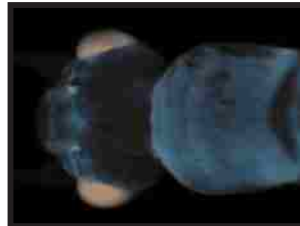


Figure A228. a-c.  
Male genitalia.



Figure A229. a-c.  
Female subgenital plate.

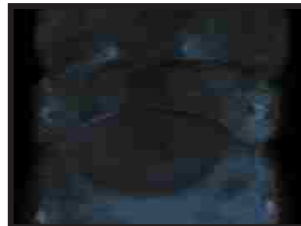


Figure A230. a-c.  
Distribution map.



Species Known from Mongolia (NEMOURIDAE: *Nemoura*)

**Species:** *Nemoura arctica*

**Characteristics:** Apical prongs of male epiproct flat at the apex.

**Species:** *Nemoura cinerea*

**Characteristics:** Apical prongs of male epiproct pointed at the apex.

**Species:** *Nemoura nigrodentata*

**Characteristics:** Apical prongs of male epiproct broadly rounded at the apex.

**Species:** *Nemoura sahlbergi*

**Characteristics:** Apical prongs of male epiproct broadly rounded at the apex.

**Species:** *Nemoura sp.*

**Characteristics:** Apical prongs of male epiproct intermediate between *N. arctica* and *N. sahlbergi*.

Figure A231. a-e.  
Nymph head.

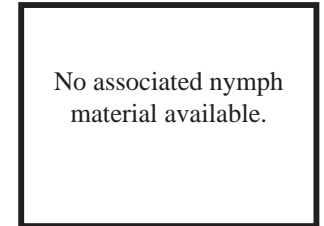
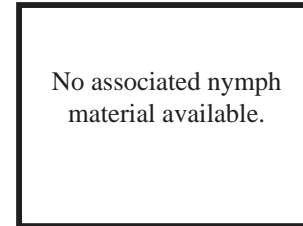
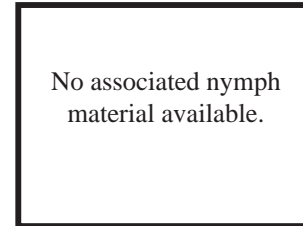
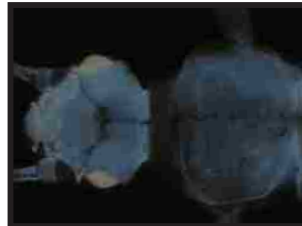
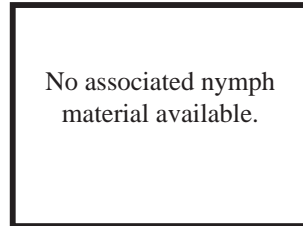


Figure A232. a-e.  
Adult head.

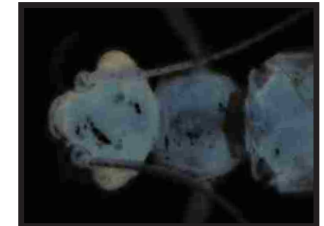
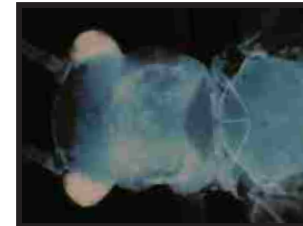
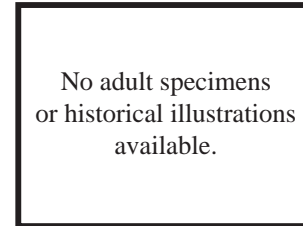
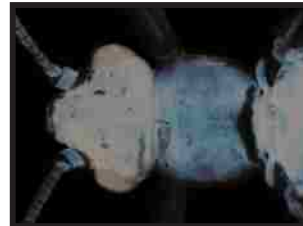


Figure A233. a-e.  
Male genitalia.

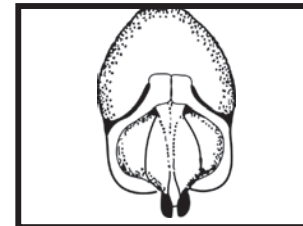
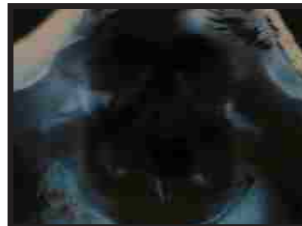


Figure A234. a-e.  
Female subgenital plate.

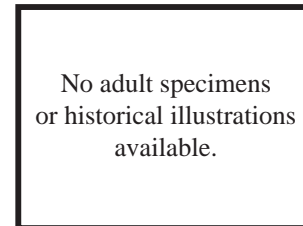
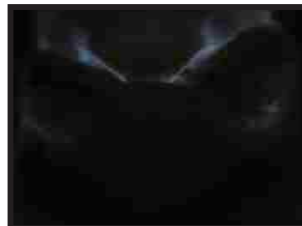


Figure A235. a-e.  
Distribution map.



# PERLIDAE

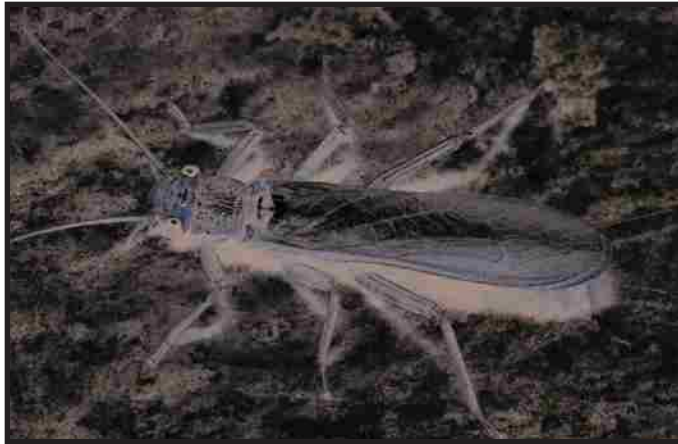


Figure A236. Habitus (live). *Agnetina cocandica*. Chono Kharaikh River (MAIS 2008070202). Photo by C. R. Nelson.

**COMMON NAME:** Common Stoneflies

**SIZE:** Large (20-50 mm)

**FEEDING GROUP:** Predators

**TOLERANCE VALUE:** 1 (Low)

**DIAGNOSIS:** Adults golden to yellow in color (Figure A236). Male with pronounced hemitergal processes that are curved (Figure A250, p. 128) or bent (Figure A272, p. 133) in unique ways useful for distinguishing species. Female plate variable, either deeply notched or truncate. The relatively large nymphs are strikingly patterned with high contrast coloration (Figure A238, Figure A240) similar to that of Perlodidae. All 3 thoracic segments have finely branched gills (Figure A6, p. 71), although such gills are absent from abdominal segments 1-2 as in Pteronarcyidae. As in other Systellognatha, the labium has a deep notch

and paraglossa extending beyond glossa (Figure A8, p. 72).

**DISCUSSION:** The nymphs of this family are found in streams and rivers of all sizes. They are often found under logs and stones and in snags where an abundance of prey can be found. The nymphs require 1-3 years to mature depending on their geographic location and as such, multiple instars with a wide range of sizes are often found when sampling.

1. Anal gills present (Figure A237); posterior setal fringe of abdominal segment seven (Ab7) complete (Figure A237); ocellar region completely dark or faded brown (Figure A238).....

.....*Agnetina* p. 127

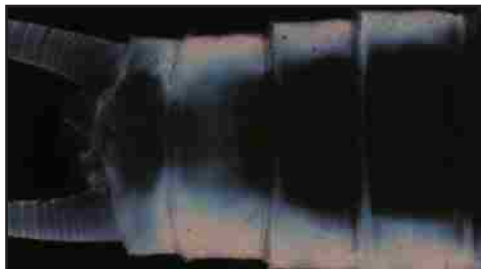


Figure A237. Abdomen of *Agnetina brevipennis*, ventral. Photo by S. W. Judson.



Figure A238. Head of *Agnetina extrema*, dorsal. Photo by S. W. Judson.

1'. Anal gills absent (Figure A239); posterior setal fringe of abdominal segment seven (Ab7) incomplete (Figure A239); ocellar region usually with light markings in the ocellar region (Figure A240).....

.....2

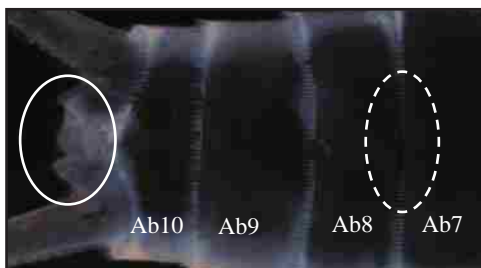


Figure A239. Abdomen of *Paragnetina flavotincta*, Ventral view. Absence of anal gills noted by solid circle. Incomplete hairs on Ab7 indicated by dashed circle. Photo by S. W. Judson



Figure A240. Head of *Paragnetina flavotincta*, dorsal. Photo by S. W. Judson

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2(1'). Head and thoracic pigmentation lighter overall, particularly in ocellar region which has a clearly delineated light oval (Figure A241), the anterior margin of the head which is almost entirely without dark pigmentation, and the prothorax which has dark pigmentation most predominantly along the outer margin...*Paragnetina flavotincta* p. 131, p. 133



Figure A241. Head of *Paragnetina flavotincta*, dorsal. Oval in ocellar region indicated by dashed circle. Photo by S. W. Judson

2'. Head and thoracic pigmentation darker overall, particularly in ocellar region which has only some faint light marks, the anterior margin of the head which is almost entirely darkly pigmented, and the prothorax which has restricted light markings near the middle (Figure A242).....*Kamimuria exilis* p. 131, p. 132

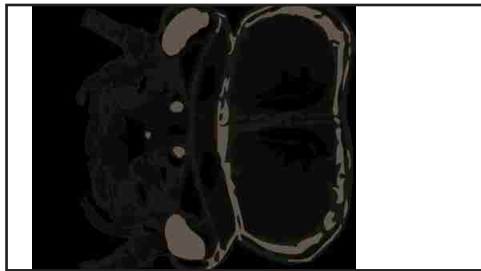


Figure A242. Head of *Kamimuria exilis*, dorsal. Illustration by S. W. Judson after Teslenko and Zhiltzova 2007.



# PERLIDAE

## *Agnetina*



Figure A243. Habitus (live). *Agnetina brevipennis*. Khovd River (MAIS2008070501). Photo by C. R. Nelson

**DIAGNOSIS:** Male hemitergal processes very long (Figure A250, p. 128), extending across tergite 8, in contrast to *Kamimuria* and *Paragnetina* which have much shorter processes. The hemitergal processes generally taper to the apex and are distinctly bent or otherwise shaped in each species. Female plate broadly rounded (Figure A251, p. 128), without a central notch as in *Kamimuria* and *Paragnetina*. Nymph with anal gills (Figure A237, p. 125) and a complete setal fringe on the posterior margin of abdominal segment 7 (Figure A237, p. 125) which other Mongolian Perlidae lack. Head of nymph with entirely dark pigmentation between the ocelli (Figure A252, p. 128, where as *Kamimuria* and *Paragnetina* have pale markings in the ocellar region.

**DISTRIBUTION - Global:** Holarctic - **Regional:** AOB, IDB, POB\* - **Aimag:** AR, BO, BR\*, BU, DA^, DO\*, GA\*, KhD, KhE\*, KhG^, OV, SE, TO, UB\*, UV\*, ZA^

**DISCUSSION:** Refer to Sivec et al. 2005 for complete species descriptions, illustrations, and identification key to all Palearctic species for both nymphs and adults.



Figure A244. Comparative Distribution Map. *Agnetina*.

## PERLIDAE

# *Agetina brevipennis* (Navas, 1912)

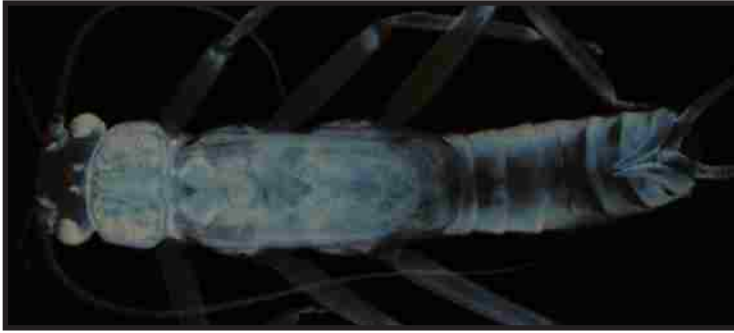


Figure A249. Habitus (preserved). *Agetina brevipennis*. Photo by S. W. Judson.  
Photo by J. Fazio. Photo by C. R. Nelson.

whereas the female of this species and other males in the genus are macropterous (Figure A254, p. 129, Figure A259, p. 130). The male hemitergal structures are simple, gradually tapering to the apex and with only gentle curves in the dorsal and lateral aspects (Figure A250). Female subgenital plate triangular, variably pointed or truncate (Figure A251). Nymph most closely resembles *A. extrema* (Figure A262, p. 130), both species with a unpigmented region on the clypeus and dark pigmentation on the labrum as opposed to *A. cocandica* which has an isolated M mark on the clypeus and a pale labrum with dark pigmentation only along the anterior margin (Figure A257, p. 129). In *A. brevipennis*, however, the light area on the clypeus gradually widens from the origin above the ocelli to form a rough-edged triangle (Figure A252), where as in *A. extrema* the light region is invaded by two dark arms leading to an overall mushroom shape. Also like *A. extrema*, the major proventricular bands are of uniform width, unlike *A. cocandica* which are very narrow in the middle.

**DISTRIBUTION - Global:** East Palearctic - **Regional:** AOB, IDB, POB\* - **Aimag:** AR, BO, BR\*, BU, DO\*, GA\*, KhD, KhE\*, KhG^, OV, SE, TO\*, UB\*, ZA^

### SYNONYMY

*Paragnetina brevipennis* Navas 1912  
*Acroneuria mongolica* Klapalek 1921  
*Marthamea producta* Klapalek 1921  
*Neophasganophora brevipennis* Zapekina-Dulkeit 1961  
*Phasganophora brevipennis* Zhiltzova 1975  
*Agetina brevipennis* Zwick 1984

**TYPE LOCALITY:** Siberia: Chabarovskiy district, River Kur

**DIAGNOSIS:** Head with golden-brown shading in the ocellar region and dark brown markings on the anterior margins of the head (Figure A249). Pronotum with pale rugosities distributed throughout (Figure A249). The male of *A. brevipennis* is brachypterous (Figure A249),



Figure A250. Male hemitergal processes. *Agetina brevipennis*. Photo by J. Fazio.



Figure A251. Female subgenital plate. *Agetina brevipennis*. Photo by J. Fazio.



Figure A252. Nymph head. *Agetina brevipennis*. Photo by S. W. Judson.

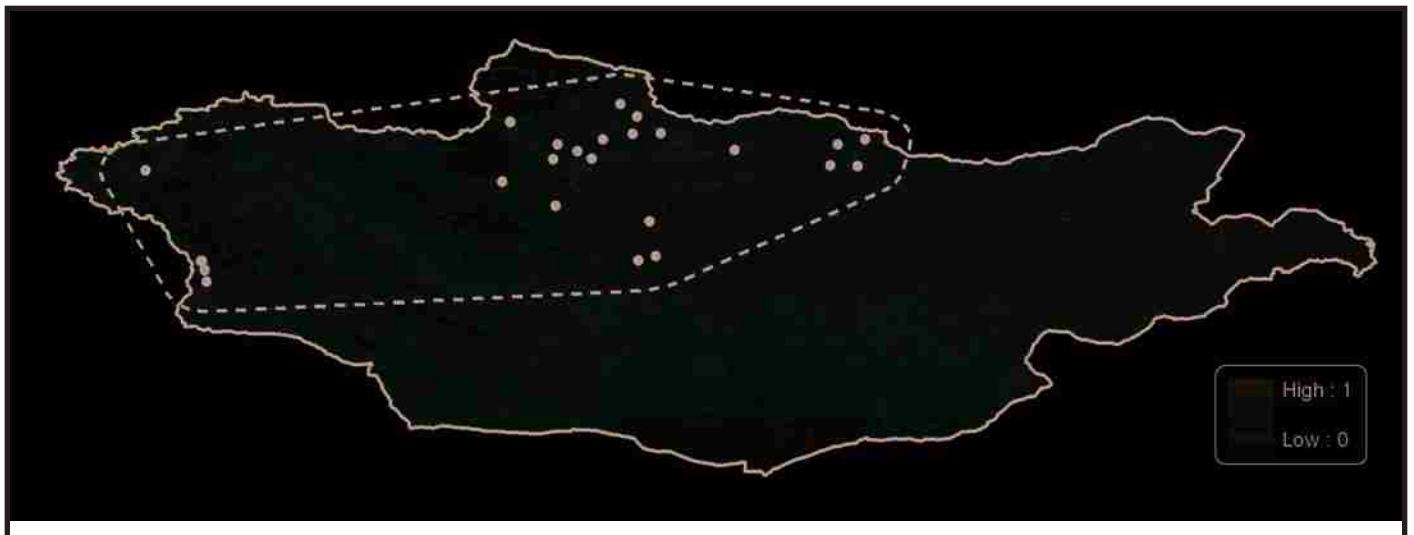


Figure A253. Predicted ENM Map with Documented Occurrences and Range Estimate. *Agetina brevipennis*.

## PERLIDAE

# *Agetina cocandica* (McLachlan, 1875)



Figure A254. Habitus (preserved). *Agetina cocandica*. Photo by S. W. Judson.

Photo by J. Fazio. Photo by C. R. Nelson.

From the lateral view, the hemiterga appear bent near the basal curve below the carina. Rather than a gradual tapering towards the apex as with *A. brevipennis* (Figure A250, p. 128), the tip of the hemiterga is wide. Female subgenital plate triangular and truncate at the apex (Figure A256). Nymph with an isolated light M-mark on the clypeus and a pale labrum with dark pigmentation only along the anterior margin (Figure A257), in contrast to *A. brevipennis* (Figure A252, p. 128) and *A. extrema* (Figure A252, p. 128) which have more open light areas on the clypeus and entirely dark labrums. The major proventricular bands are very narrow in the middle and expanded on either end, unlike other Mongolia *Agetina* which have major proventricular bands of uniform width.

### SYNONYMY

*Perla cocandica* McLachlan 1875  
*Phasganophora undata* Klapalek 1921  
*Kamimuria costulata* Navas 1923  
*Agetina cocandica* Klapalek 1923

**TYPE LOCALITY:** Uzbekistan: Kokand

**DIAGNOSIS:** Pale to golden brown over whole body with slightly darker accents in the ocellar region and pronotum (Figure A254). Male hemiterga with a large carina at the basal curve (Figure A255). From the lateral view, the hemiterga appear bent near the basal curve below the carina. Rather than a gradual tapering towards the apex as with *A. brevipennis* (Figure A250, p. 128), the tip

**DISTRIBUTION - Global:** Central Asian- **Regional:** AOB, IDB - **Aimag:** AR<sup>^</sup>, KhD, KhG<sup>^</sup>, SE, UV\*

**DISCUSSION:** *A. undata* was recently synonymized with *A. cocandica*. Sivec et al. 2005 note that the nymph of *A. cocandica* is undescribed, but it is unclear if the nymphs of *A. undata* nymph are described and illustrated. Our survey procured many *A. cocandica* nymphs for illustration purposes

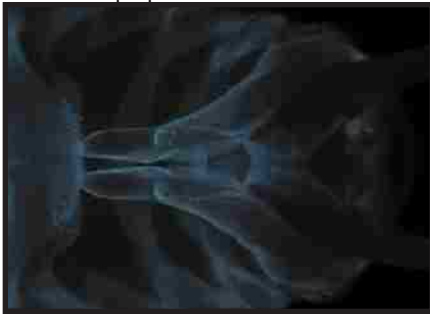


Figure A255. Male hemitergal processes. *Agetina cocandica*. Photo by J. Fazio.

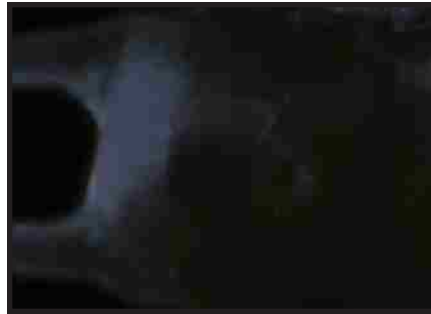


Figure A256. Female subgenital plate. *Agetina cocandica*. Photo by S. W. Judson. Photo



Figure A257. Nymph head. *Agetina cocandica*. Photo by S. W. Judson.

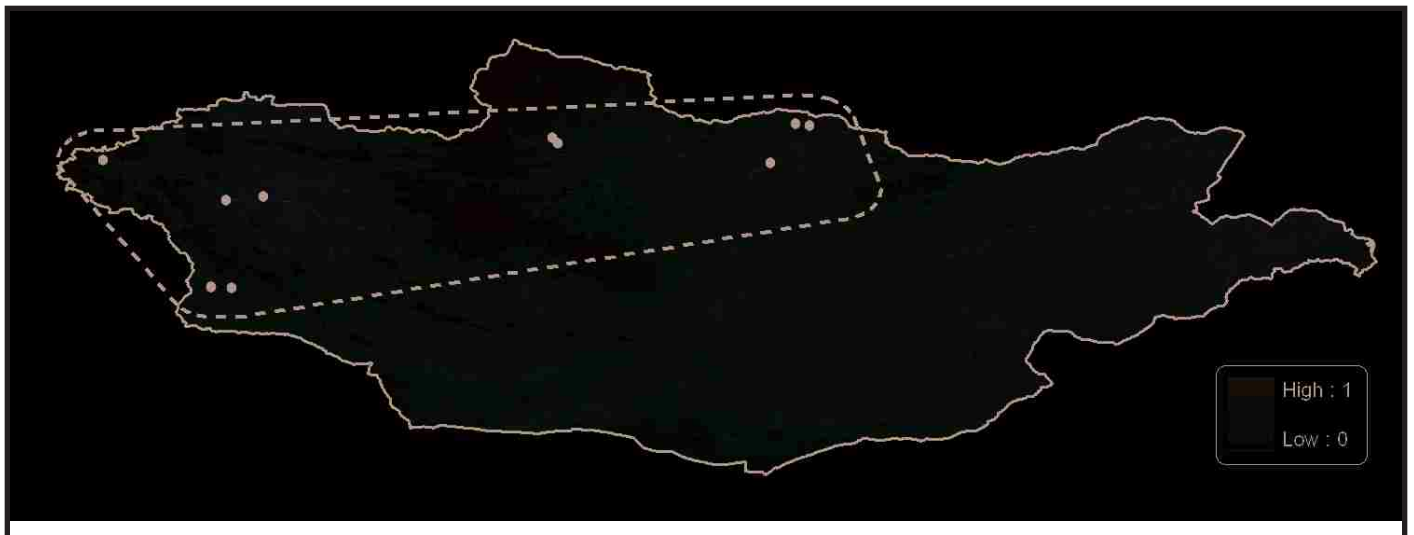


Figure A258. Predicted ENM Map with Documented Occurrences and Range Estimate. *Agetina cocandica*.

## PERLIDAE

### *Agetina extrema* (Navas, 1912)

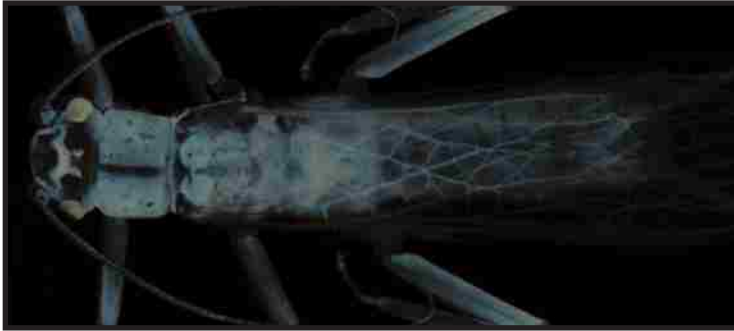


Figure A259. Habitus (preserved). *Agetina extrema*. Photo by S. W. Judson. Photo by J. Fazio. Photo by C. R. Nelson.

highly contrasting than other *Agetina* from Mongolia (Figure A249, p. 128, Figure A254, p. 129). The male hemitergal process (Figure A260) somewhat resembles *A. cocandica* (Figure A255, p. 129), but the carina at the basal curve does not extend the entire width of the hemiterga as it does in *A. cocandica*. From the lateral aspect, the hemiterga are only slightly sinuate. Female subgenital plate broadly rounded and sometimes notched (Figure A261). Nymph (Figure A262) most closely resembles *A. brevipennis* (Figure A252, p. 128), both species with a unpigmented region on the clypeus and dark pigmentation on the labrum as opposed to *A. cocandica* which has an isolated M mark on the clypeus and a pale labrum with dark pigmentation only along the anterior margin (Figure A257, p. 129). In *A. extrema* the light area is mushroom-shaped (Figure A262) because it is invaded by two dark arms on the same plane as the antennae insertion. Also like *A. brevipennis*, the major proventricular bands are of uniform width, unlike *A. cocandica* which are very narrow in the middle.

#### SYNONYMY

*Togoperla extrema* Navas 1912  
*Kamimuria sibirica* Klapalek 1916  
*Kamimuria costalis* Navas 1923  
*Perla navasa* Classen 1936  
*Phasgnophora brevipennis* Rauser 1968  
*Agetina extrema* Sivec et al. 1988

**TYPE LOCALITY:** Russia: Eugenievka, Primorskiy kray

**DIAGNOSIS:** Head distinctly patterned with a central dark mark that borders the posterior margin of the paler M-line and extends to the ocellar region (Figure A259). Pronotum dark brown except for a prominent yellow median line (Figure A259). The described coloration is more

**DISTRIBUTION - Global:** East Palearctic - **Regional:** AOB, IDB\*, POB\* - **Aimag:** AR<sup>^</sup>, DA<sup>^</sup>, DO\*, GA\*, KhD<sup>^</sup>, KhE\*, KhG<sup>^</sup>, OV, TO

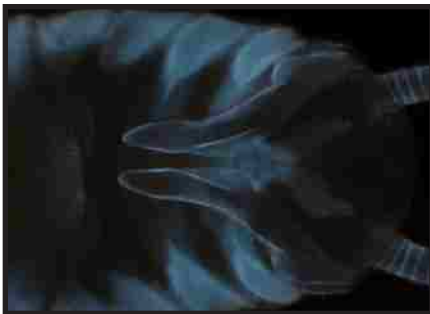


Figure A260. Male hemitergal processes. *Agetina extrema*. Photo by J. Fazio.



Figure A261. Female subgenital plate. *Agetina extrema*. Photo by J. Fazio.



Figure A262. Nymph head. *Agetina extrema*. Photo by S. W. Judson.

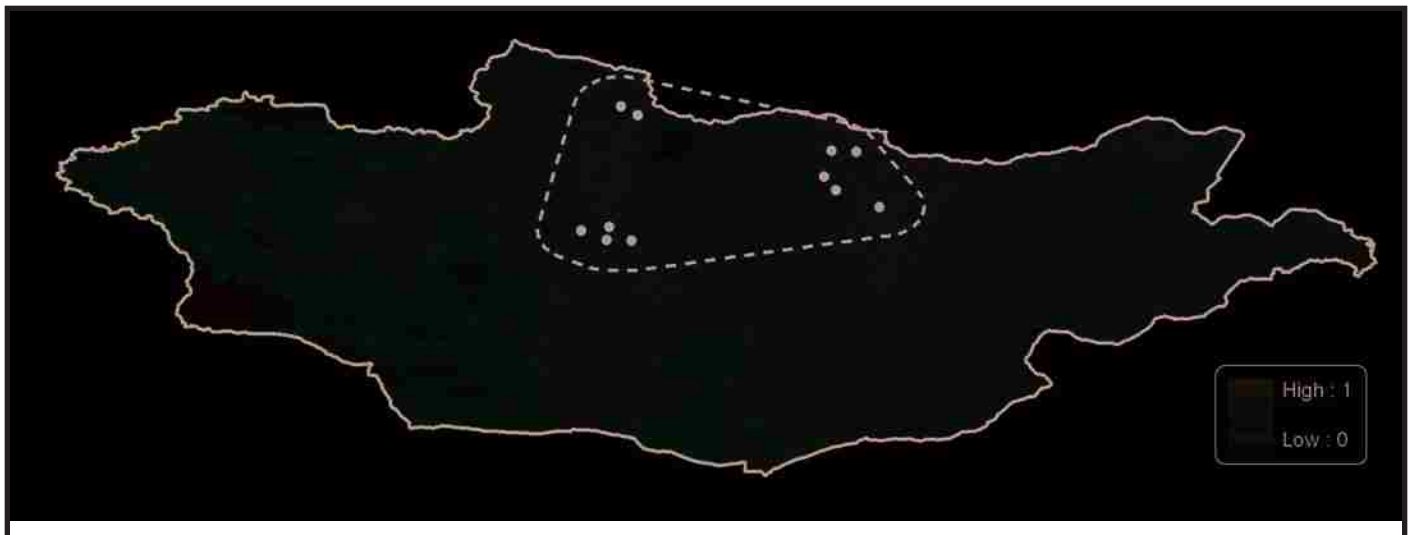


Figure A263. Predicted ENM Map with Documented Occurrences and Range Estimate. *Agetina extrema*.

## PERLIDAE

### *Kamimuria*, *Paragnetina*

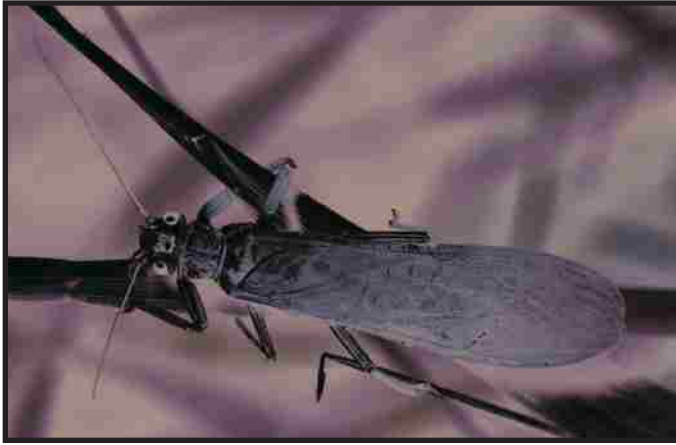


Figure A264. Habitus (live). *Paragnetina flavotincta*. Unit Stream (SRP2005072501). Photo by C. R. Nelson  
lar region with species specific pale marks on the clypeus.

#### *Kamimuria*

**DIAGNOSIS:** Male hemitergal short (Figure A267, p. 132) not extending over any other tergites, as compared to *Paragnetina* which bend over tergite 9 and *Agentina* which extend entirely across tergite 8. The hemitergal process are straight (Figure A267, p. 132), only slightly curved, not bent as in *Paragnetina*. Female plate shallow notched and bilobed, the lobes pointed (Figure A268, p. 132) whereas *Paragnetina* are longer and rounded. Nymph lacks anal gills (Figure A239, p. 125) and has an incomplete setal fringe on the posterior margin of abdominal segment 7 (Figure A239, p. 125), similar to *Paragnetina* but in contrast to *Agentina* which has gills and a complete fringe. Head and pronotum of nymph with a few indistinct pale markings (Figure A269, p. 132), where as *Paragnetina* has highly contrasting pattern with a pale oval between the ocelli and *Agentina* is entirely dark in the ocellar

**DISTRIBUTION - Global:** East Palearctic - **Regional:** AOB, IDB\*, POB\* - **Aimag:** AR\*, BO\*, DO\*, KhG<sup>^</sup>, TO\*

#### *Paragnetina*

**DIAGNOSIS:** Male hemitergal short barely covering tergite 9 (Figure A272, p. 133), as compared to *Agentina* which extend entirely across tergite 8. The hemitergal process are abruptly bent at a 90 degree angle (Figure A272, p. 133) whereas those in *Kamimuria*, which are of comparable length, are straight. Female plate deeply notched and bilobed (Figure A273, p. 133), the lobes rounder and longer than *Kamimuria* which are pointed and short. Nymph lacks anal gills (Figure A239, p. 125) and has an incomplete setal fringe on the posterior margin of abdominal segment 7 (Figure A239, p. 125), similar to *Kamimuria* but in contrast to *Agentina* which has gills and a complete fringe. Head of nymph with clearly delineated pale oval between the ocelli (Figure A274, p. 133), where as *Kamimuria* has indistinct pale markings and *Agentina* is entirely dark in the ocellar region.

**DISTRIBUTION - Global:** Holarctic - **Regional:** AOB, IDB\* - **Aimag:** BU<sup>^</sup>, KhG, KhD\*, SE, TO<sup>^</sup>



Figure A265. Comparative Distribution Map. *Kamimuria* and *Paragnetina*.

## PERLIDAE

# *Kamimuria exilis* (McLachlan, 1872)

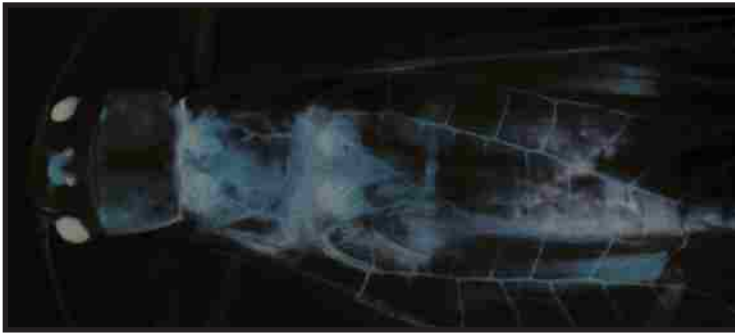


Figure A266. Habitus (preserved). *Kamimuria exilis*. Photo by S. W. Judson.

### SYNONYMY

*Perla exilis* McLachlan 1872  
*Marthamea luteicauda* Klapalek 1921  
*Kamimuria exilis* Sivec et al. 1981

**TYPE LOCALITY:** Siberia

**DIAGNOSIS:** Head with U-shaped central dark mark bisecting the ocelli (Figure A266), as opposed to *Paragnetina flavotincta* whose central mark covers the entire ocellar region (Figure A271, p. 133). Male hemitergal processes (Figure A267) much shorter than those of *Agetina* (Figure A260, p. 130) and *Paragnetina* (Figure A272, p. 133). Hemitergal processes are not bent (Figure A267) like those of *P. flavotincta* (Figure A272, p. 133), with spines on the inner margin of

the apex superficially similar to *I. mongolica* (Figure A385, p. 159) which can be distinguished by size and family level characters. The female subgenital plate is notched by a shallow triangle and the lobes on either side of the notch are pointed (Figure A268). In contrast to *P. flavotincta* (Figure A273, p. 133), the notch and lobes are much more shallow. The nymph of *K. exilis* has a subtle contrasting pattern of dark brown markings on a tan body. The nymph is readily distinguished from *Agetina* by its absence of anal gills (Figure A239, p. 125), but only distinguished from *P. flavotincta* (Figure A274, p. 133) on the basis of coloration. *K. exilis* is darker overall with small isolated pale regions on the head and pronotum (Figure A269), much smaller than the pale markings of *P. flavotincta* which also has a distinct pale oval between the ocelli where as *K. exilis* has less distinct light pigmentation within the ocellar region.

**DISTRIBUTION - Global:** East Palearctic- **Regional:** AOB, IDB\*, POB\* - **Aimag:** AR\*, BO\*, DO\*, KhG<sup>^</sup>, TO\*

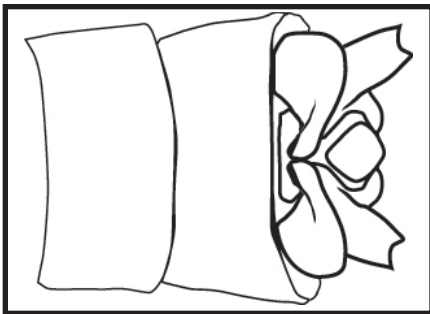


Figure A267. Male, dorsal. *Kamimuria exilis*. Illustration by S. W. Judson after Teslenko 2007.



Figure A268. Female subgenital plate. *Kamimuria exilis*. Photo by S. W. Judson.

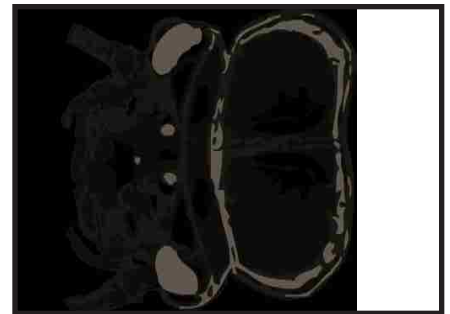


Figure A269. Nymph head. *Kamimuria exilis*. Illustration by S. W. Judson after Teslenko 2007.

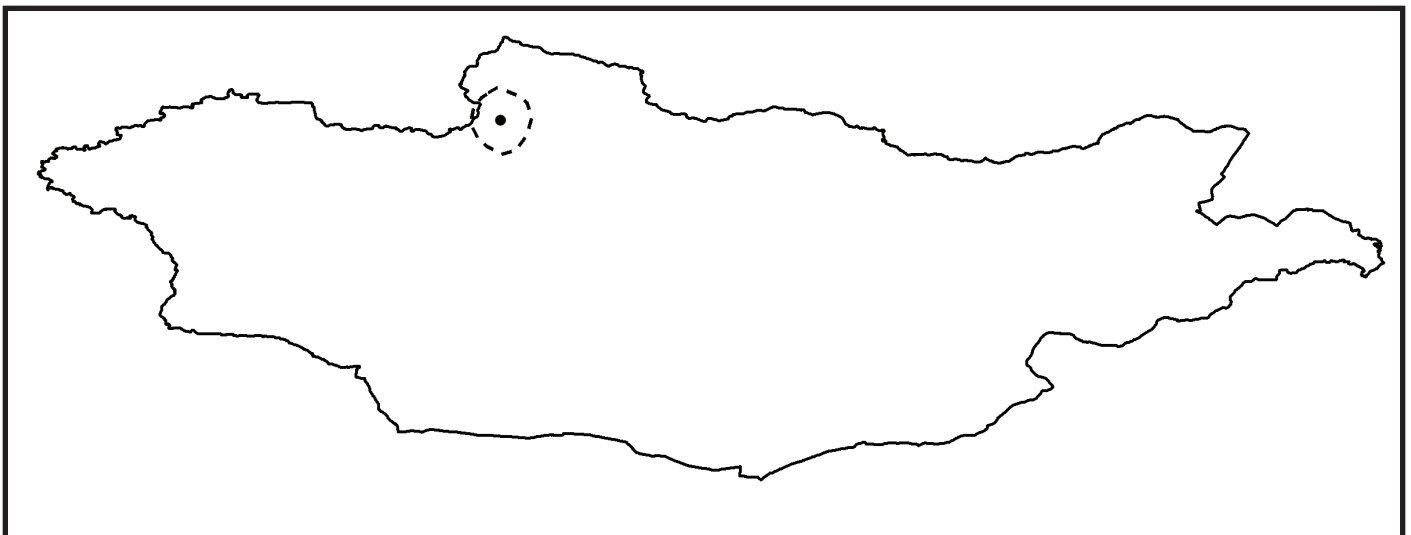


Figure A270. Range Map with Document Occurrences. *Kamimuria exilis*.

## PERLIDAE

# *Paragnetina flavotincta* (McLachlan, 1872)

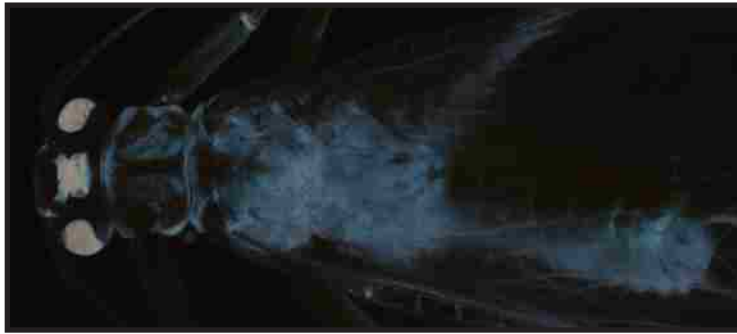


Figure A271. Habitus (preserved). *Paragnetina flavotincta*. Photo by S. W. Judson.

### SYNONYMY

*Perla flavotincta* McLachlan 1872  
*Paragnetina ocellata* Klapalek 1921  
*Paragnetina flavotincta* Illies 1966

**TYPE LOCALITY:** USSR: Pokrofska, Amur

**DIAGNOSIS:** Head with pronounced central dark marking covering entire ocellar region (Figure A271). Male hemitergal processes much shorter than those of *Agetina* (Figure A260, p. 130) and slightly longer than *Kamimuria exilis* (Figure A267, p. 132). Where the hemiterga bend to approximately form a 90 degree angle, there is a protruding knob (Figure A272). The female subgenital plate is strongly bilobed, forming a deep U-shape between the two lobes

(Figure A273). The plate shape is somewhat similar to that of *Pteronarcys reticulata* (Figure A427, p. 168), though the species can be distinguished by characteristics at the family level as well as by general coloration, *Paragnetina flavotincta* being golden brown and *Pteronarcys reticulata* a very dark gray-brown. The nymph of *Paragnetina flavotincta* has a high contrast pattern of dark brown markings on a tan body (Figure A274). In particular, the head has a distinctive pale oval intruding the ocellar region. The nymph is readily distinguished from *Agetina* by its absence of anal gills (Figure A239, p. 125), but only distinguished from *K. exilis* on the basis of coloration. *P. flavotincta* is lighter overall with an entirely pale region extending from the clypeus through the labrum and is paler than *K. exilis* (Figure A242, p. 126) on the pronotum as well.

**DISTRIBUTION - Global:** East Palearctic - **Regional:** AOB, IDB\*- **Aimag:** BU<sup>^</sup>, KhD\*, KhG, SE, TO<sup>^</sup>

**DISCUSSION:** *P. flavotincta* is found in larger low-gradient rivers.



Figure A272. Male hemitergal processes. *Paragnetina flavotincta*. Photo by S. W. Judson.



Figure A273. Female subgenital plate. *Paragnetina flavotincta*. Photo by S. W. Judson.

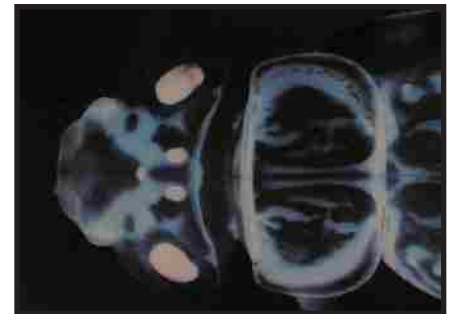


Figure A274. Nymph head. *Paragnetina flavotincta*. Photo by S. W. Judson.

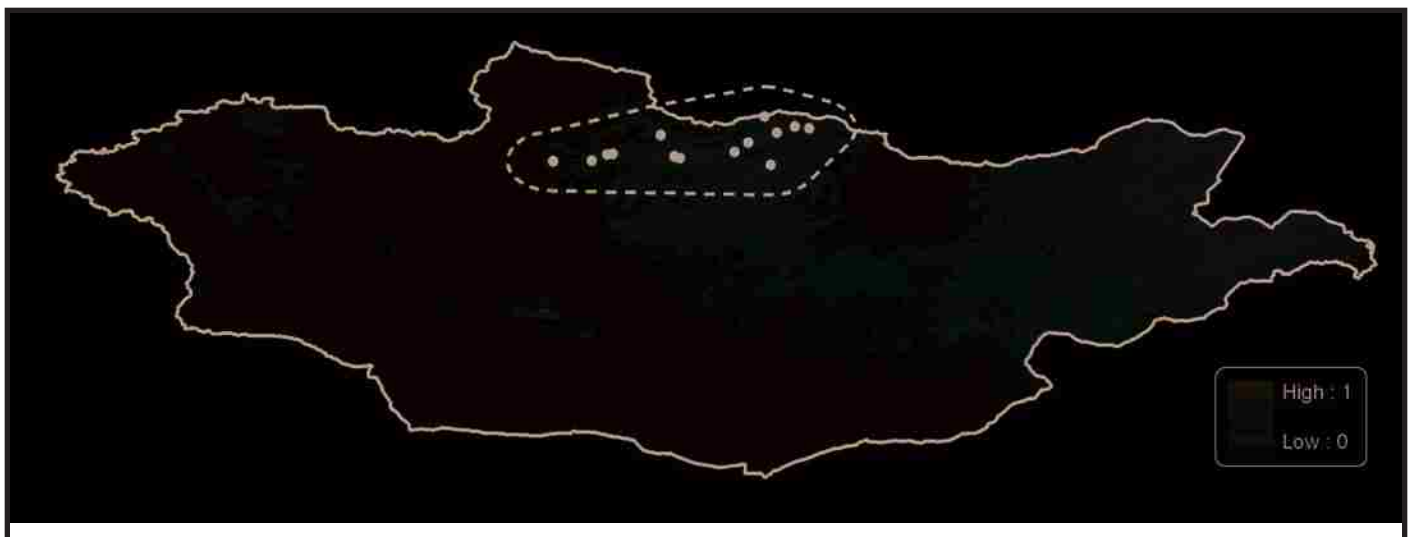


Figure A275. Predicted ENM Map with Documented Occurrences and Range Estimate. *Paragnetina flavotincta*.

Species Known from Mongolia (PERLIDAE)

**Species:** *Agnentina brevipennis*  
**Characteristics:** Male hemitergal processes gradually curve and come to a point.

**Species:** *Agnentina cocandica*  
**Characteristics:** Male with carina at the bend of the hemitergal processes.

**Species:** *Agnentina extrema*  
**Characteristics:** Male with slight carina at bend of hemitergal process. Head coloration distinct.

**Species:** *Kamimuria exilis*  
**Characteristics:** Male hemitergal processes short and straight. Female plate with pointed lobes.

**Species:** *Paragnetina flavotincta*  
**Characteristics:** Distinct head coloration. Male hemitergal processes short and strongly bent.

Figure A276. a-e.  
Nymph head.



Figure A277. a-e.  
Adult head.

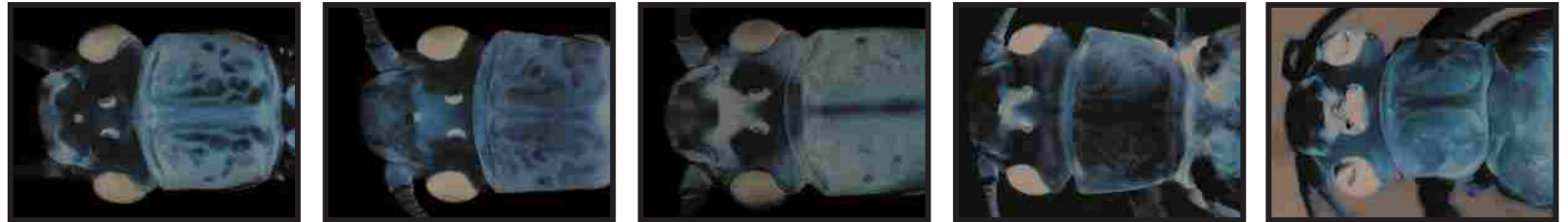


Figure A278. a-e.  
Male genitalia.

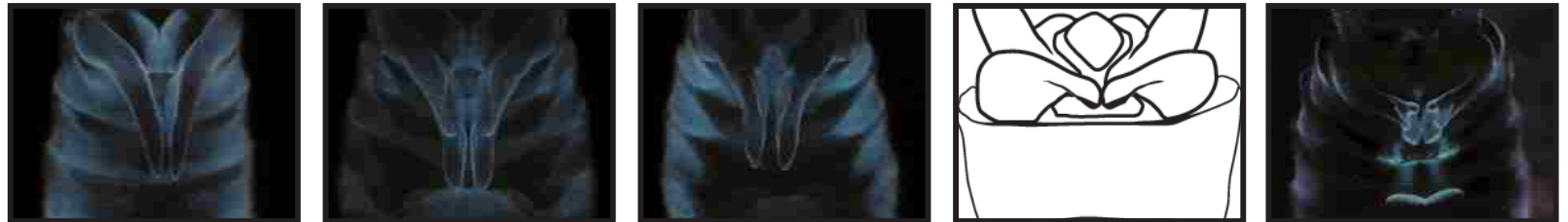


Figure A279. a-e.  
Female subgenital plate.



Figure A280. a-e.  
Distribution map.





# PERLODIDAE



Figure A281. Habitus (live). *Isoperla potanini*. Bugsei River (SRP2005072301). Photo by C. R. Nelson.

**COMMON NAME:** Patterned Stoneflies

**SIZE:** Medium to large (10-50 mm)

**FEEDING GROUP:** Predators

**TOLERANCE VALUE:** 2 (Low)

**DIAGNOSIS:** Adults dark or gray brown with golden or light brown patterns (Figure A281). Male genitalic structures are highly variable throughout the family, usually with uniquely shaped paraprocts. The female subgenital plate is also highly variable. The nymphs are usually have high contrast patterns similar to Perlidae stoneflies, but lack branched gills on the thoracic segments though one genus, *Megarcys* has unbranched fingerlike gills on the thorax (Figure A286, p. 136) and many species have submental gills (Figure A299, p. 138). Gill remnants often persist in adult forms. As in other Systellognatha, the labium

has a deep notch and paraglossa extending beyond glossa (Figure A8, p. 72). In contrast to Chloroperlidae in particular, the hind wing pads are divergent from the body axis (Figure A22, p. 74).

**DISCUSSION:** Perlodid stoneflies are most commonly found in flowing waters under stones and in snags and leaf packs. Occasionally, they are found along the edges of cold lakes. Most species emerge in the early spring or fall and diapause during the warm summer months as eggs.

1. Arms of mesosternal ridge pattern meet or approach anterior corners of furcal pits (Figure A282); mandibles deeply cleft, separating mandibular teeth into two major cusps (Figure A283).....2



Figure A282. Mesosternum of *Arcynopteryx polaris*, ventral. Photo by S. W. Judson.



Figure A283. Right mandible of *Arcynopteryx polaris*. Photo by S. W. Judson.

- 1'. Arms of mesosternal ridge pattern meet or approach posterior corners of furcal pits (Figure A284); mandibles not deeply cleft, teeth irregularly spaced (Figure A285).....4

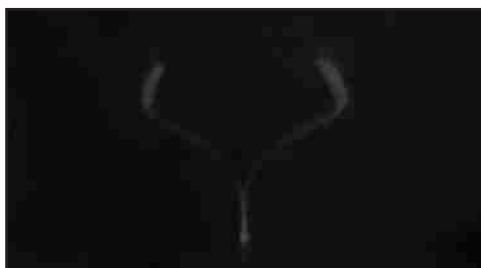


Figure A284. Mesosternum of *Diura bicaudata*, ventral. Photo by S. W. Judson.



Figure A285. Right mandible of *Diura bicaudata*. Photo by S. W. Judson.

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2(1). Finger-like thoracic gills present, located above each leg (Figure A286).....  
.....*Megarcys ochracea* p. 146, p. 148



Figure A286. Thorax of *Megarcys ochracea*, ventral. Photo by S. W. Judson.

2'. Gills absent from thorax (Figure A287).....3

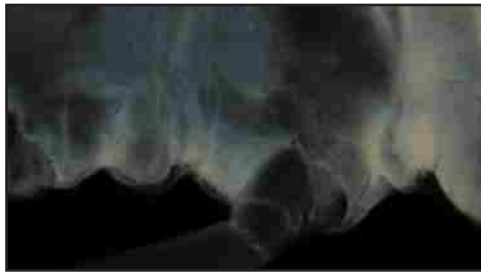


Figure A287. Thorax of *Skwala pusilla*, ventral. Photo by S. W. Judson.

3 (2'). Abdominal segments 1 through 3 divided by pleural fold (Figure A288).....  
.....*Arcynopteryx* p. 139



Figure A288. Basal abdominal segments of *Arcynopteryx polaris*, lateral. Photo by S. W. Judson.

3'. Only abdominal segments 1 and 2 divided by pleural fold (Figure A289).....*Skwala* p. 146, p. 150

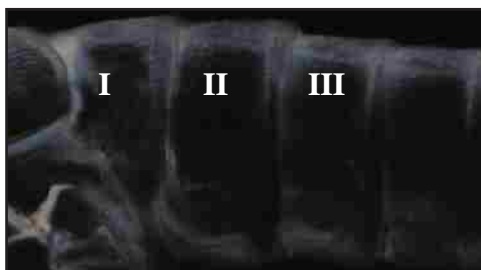


Figure A289. Basal abdominal segments of *Skwala pusilla*, lateral. Photo by S. W. Judson.

4(1'). Dorsal fringe on cerci present on all segments, including basal segments (Figure A290), and composed of long hairs that are equal to or longer than the length of the cercal segment. (Figure A291)..... 5



Figure A290. Basal cercal segments of *Diura bicaudata*. Photo by S. W. Judson.

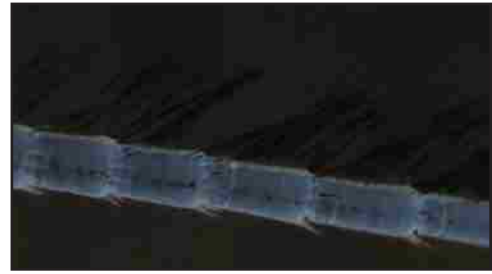


Figure A291. Distal cercal segments of *Diura sp.*. Photo by S. W. Judson.

4'. Cerci lacking dorsal fringe on basal segments (Figure A292) and where present on distal segments, the hairs are short, not exceeding the length of the cercal segment (Figure A293).....  
*Isoperla* p. 152/*Kaszabia nigricauda*\* p. 153, p. 162

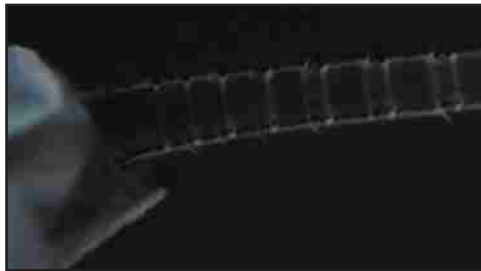


Figure A292. Basal cercal segments of *Isoperla potanini*. Photo by S. W. Judson.

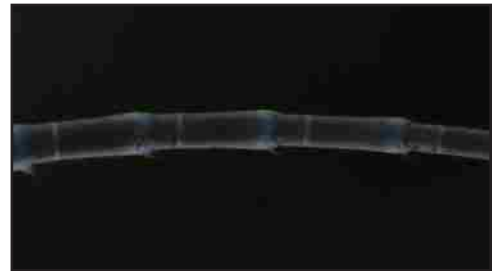


Figure A293. Distal cercal segments of *Isoperla potanini*. Photo by S. W. Judson.

5(4). Apical teeth of lacinia closely spaced, with the inner tooth 1/2 the length of the outer tooth (Figure A294); few to no hairs on the inner edge of the lacinia (Figure A294).....  
*Filchneriamongolica*\* p. 146, p. 147

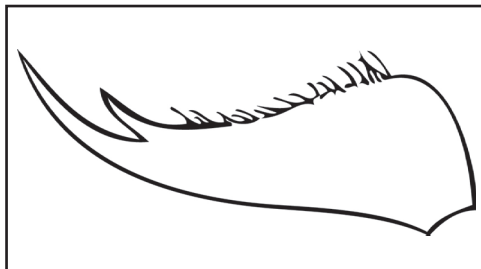


Figure A294. Lacinia of *Filchneriamongolica*. Illustration by S. W. Judson after Teselenko 2007.

5'. Apical teeth of lacinia more widely spaced with the inner tooth more than 1/2 the length of the outer tooth (Figure A295, Figure A298); fringe of many stout hairs along inner edge of lacinia (Figure A295, Figure A298).....6



Figure A295. Lacinia of *Skwala brevis*. Photo by S. W. Judson.

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6(5'). Galea long, surpassing the base of the lacinial teeth and approximately equal to the basal 4 segments of the maxillary palpus (Figure A296); Submental gills inconspicuous and barely projecting beyond submentum (Figure A297).....*Diura* p. 143



Figure A296. Maxillary palp, galea, and lacinia (Inside) of right lacinia of *Diura bicaudata* Photo by S. W. Judson.



Figure A297. Head of *Diura bicaudata*, ventral. Photo by S. W. Judson.

6'. Galea short, terminating near the base of the lacinial teeth and approximately equal to or shorter than the basal 3 segments of the maxillary palpus (Figure A298); Submental gills conspicuous (Figure A299).....*Pictetiella asiatica*\* p. 146, p. 149



Figure A298. Maxillary palp, galea, and lacinia (Inside) of right lacinia of *Megarcys ochracea*. Photo by S. W. Judson.

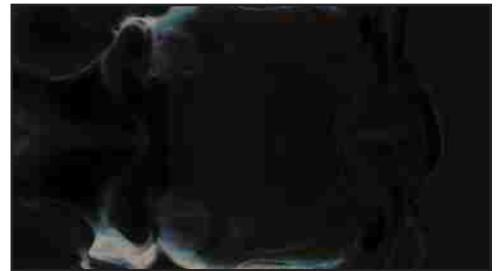


Figure A299. Head showing submental gills of *Megarcys ochracea*, ventral. Photo by S. W. Judson.

# PERLODIDAE

## *Arcynopteryx*



Figure A300. Habitus. *Arcynopteryx compacta*. Tsagaan Us River (MAIS2008071502). Photo by C. R. Nelson.

**DIAGNOSIS:** Male hemitergal processes longer than those of *Skwala* but much shorter than those of *Megarcys*. Male epiproct long and needle-like (Figure A303, p. 140; Figure A313, p. 142), especially useful for distinguishing from *Skwala* which lacks an external epiproct (Figure A348, p. 151). Female subgenital plate with broad depression (Figure A304, p. 140), slightly deeper than that of *Skwala*, with the lobes on either side of the depression projecting posteriorly more than *Skwala*.

**DISTRIBUTION - Global:** Holarctic - **Regional:** AOB, IDB - **Aimag:** AR<sup>^</sup>, BO<sup>^</sup>, BU<sup>^</sup>, KhG, KhD<sup>^</sup>, OV<sup>^</sup>, SE\*, TO, UB<sup>^</sup>, UV\*, ZA

**DISCUSSION:** *Arcynopteryx* in Mongolia are most often found at low to medium gradient rivers at higher elevations (greater than 1500 msl).



Figure A301. Comparative Distribution Map. *Arcynopteryx*. *A. sajanensis* not shown due to lack of georeferenced localities from historical records.

## PERLODIDAE

# *Arcynopteryx compacta* (McLachlan, 1872)

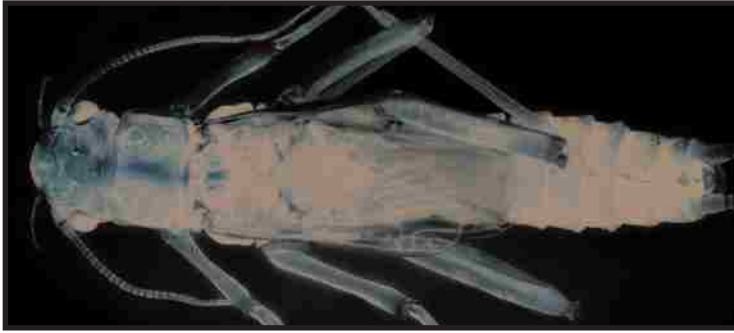


Figure A302. Habitus (preserved). *Arcynopteryx compacta*. Photo by S. W. Judson

### SYNONYMY

*Dictyopteryx compacta* McLachlan 1872  
*Arcynopterygoides vernalis* Rauser 1968  
*Arcynopteryx compacta* Brinck 1949

**TYPE LOCALITY:** East Siberia

**DIAGNOSIS:** Males often brachypterous (Figure A302). Male hemitergal processes (Figure A303) wider than *A. polaris* (Figure A308, p. 141), and with a dorsally projecting lobe at the apex that gives the processes the appearance of being curved anteriorly. Female subgenital plate with broad, shallow median notch and two rounded lobes (Figure A304). As compared to other *Arcynopteryx* (Figure A309, p. 141, Figure A314, p. 142), the sides of the plate are

gradually sloped inward to form the two lobes. Nymph (Figure A305) similar to *A. polaris* and *Skwala pusilla* (Figure A347, p. 151), however *A. compacta* has more pronounced light markings particularly on the head and generally shorter submental gills than *S. pusilla*.

**DISTRIBUTION - Global:** Circumpolar - **Regional:** AOB, IDB - **Aimag:** AR<sup>^</sup>, BO<sup>^</sup>, BU<sup>^</sup>, KhD<sup>^</sup>, KhG, OV<sup>^</sup>, SE\*, UB<sup>^</sup>

**DISCUSSION:** Many European species of *Arcynopteryx*, *Dictyopteryx*, and *Perlodes* were placed in *A. compacta*. These species are not treated in the synonymy due to lack of relevance for Mongolia. The species *Arcynopterygoides vernalis* described by Rauser (1968) from Mongolian specimens was later recognized as a mix of *Arcynopteryx compacta* and *Skwala pusilla*, probably due in part to the similarity in the female subgenital plate having a variably shallow depression in both species.



Figure A303. Male, dorsal. *Arcynopteryx compacta*. Photo by S. W. Judson.



Figure A304. Female subgenital plate. *Arcynopteryx compacta*. Photo by S. W. Judson.

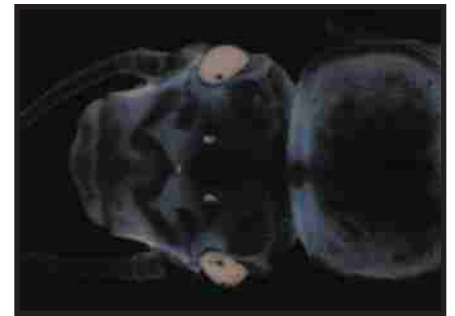


Figure A305. Nymph head. *Arcynopteryx compacta*. Photo by S. W. Judson.

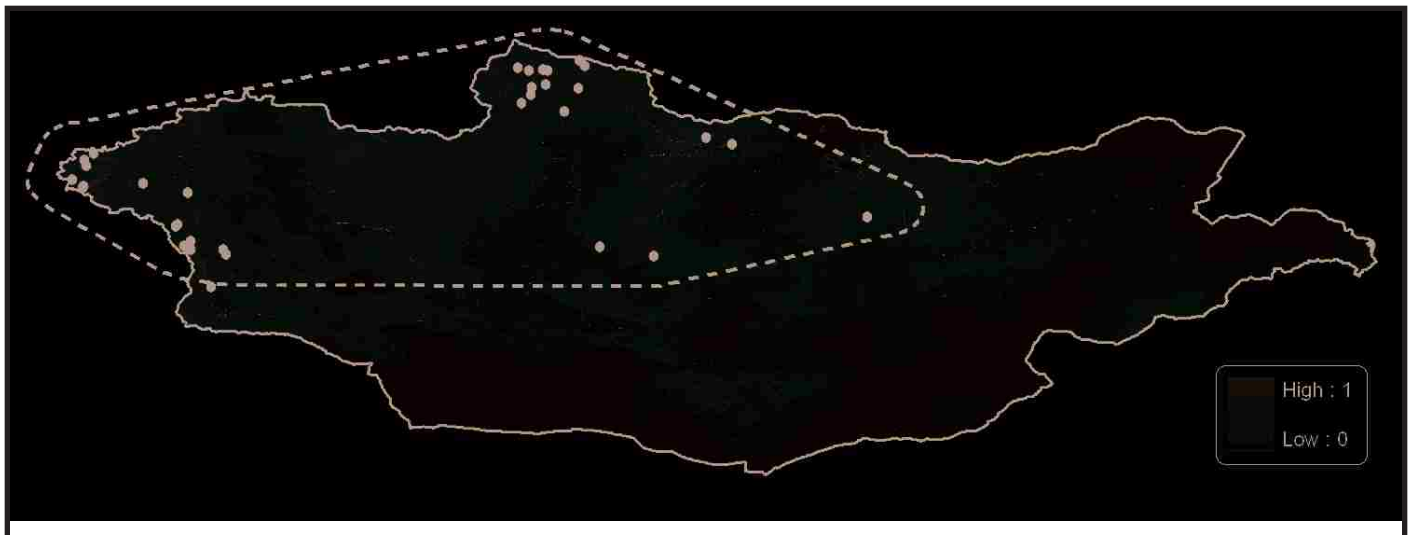


Figure A306. Predicted ENM Map with Documented Occurrences and Range Estimate. *Arcynopteryx compacta*.

## PERLODIDAE

# *Arcynopteryx polaris* (Klapalek, 1912)



Figure A307. Habitus (preserved). *Arcynopteryx polaris*. Photo by S. W. Judson.

and thus not sloped (Figure A304, p. 140) or parallel sided (Figure A314, p. 142) like *A. compacta* and *A. sajanensis* respectively. Nymph (Figure A310) similar to *A. compacta* and *Skwala pusilla* (Figure A350, p. 151), however *A. polaris* is darker overall especially with few light markings on the head.

**DISTRIBUTION - Global:** East Palearctic- **Regional:** AOB, IDB - **Aimag:** AR<sup>^</sup>, BO<sup>^</sup>, BU<sup>^</sup>, KhD<sup>^</sup>, KhG, TO, UV\*, ZA

**DISCUSSION:** Our scrutiny of the synonym of *A. polaris* aided the Plecoptera Species File in accurately updating their records concerning taxonomy of this group.

### SYNONYMY

*Arcynopteryx dichroa polaris* Klapalek 1912  
*Arcynopteryx altaica* Zapekina-Dulkeit 1957  
*Arcynopteryx dichroa* Illies 1966  
*Arcynopteryx polaris* Zhiltzova 1995

**TYPE LOCALITY:** USSR: Bykow, Lena-mudung

**DIAGNOSIS:** Males often brachypterous (Figure A307). Male hemitergal lobes slender and fingerlike (Figure A308), as opposed to *A. compacta* which are curved anteriorly (Figure A303, p. 140) and *A. sajanensis* (Figure A313, p. 142) which are short and blunt. Female subgenital plate with shallow median notch and short lobes (Figure A309), the entire plate can be circumscribed by a circle



Figure A308. Male, dorsal. *Arcynopteryx polaris*. Photo by S. W. Judson.



Figure A309. Female subgenital plate. *Arcynopteryx polaris*. Photo by S. W. Judson.

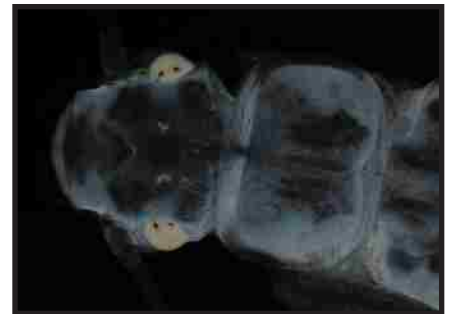


Figure A310. Nymph head. *Arcynopteryx polaris*. Photo by S. W. Judson.

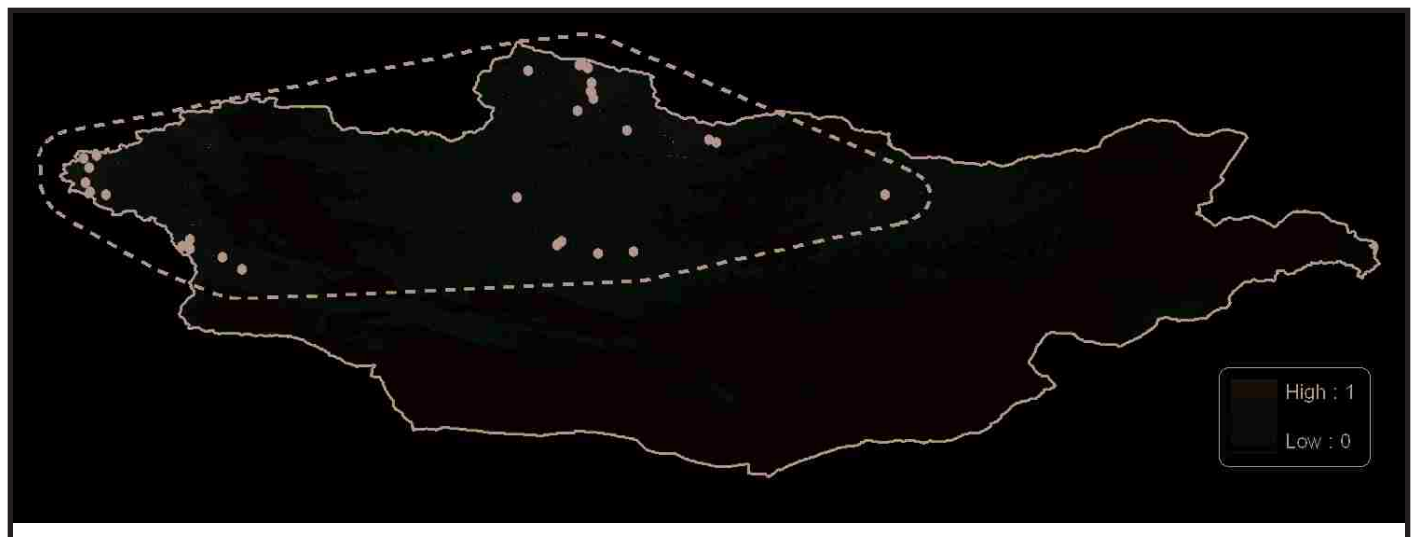


Figure A311. Predicted ENM Map with Documented Occurrences and Range Estimate. *Arcynopteryx polaris*.

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## PERLODIDAE

# *Arcynopteryx sajanensis* Zapekina-Dulkeit, 1957

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Figure A312. Habitus (preserved). *Arcynopteryx sajanensis*. Photo by S. W. Judson.

### SYNONYMY

*Arcynopteryx sajanensis* Zapekina-Dulkeit 1957

**TYPE LOCALITY:** USSR: Mana river tributaries

**DIAGNOSIS:** Males macropterous (Figure A312). Male hemitergal lobes short and blunt (Figure A313), superficially resembling *Skwala pusilla* (Figure A348, p. 151). However, *A. sajanensis* possesses a long needle-like epiproct (Figure A313) which *Skwala* lacks. Female subgenital plate with broad median notch more deeply incised than other *Arcynopteryx* (Figure A304, p. 140, Figure A309, p. 141). Lobes of the female plate pointed and plate leading up to the lobes is parallel sided (Figure A314). Nymph unknown.

**DISTRIBUTION - Global:** Altaian - **Regional:** AOB - **Aimag:** KhG

**DISCUSSION:** Previous to our survey, this species was recorded from Mongolia only as female specimens. Our records add 1 male specimen with 2 females from north of Khovsgol lake (Figure A315) and thereby confirm the validity of the historical record. Specimens from Mongolia may be erroneously identified as *A. amurensis* as were the specimens I examined.



Figure A313. Male, dorsal. *Arcynopteryx sajanensis*. Photo by S. W. Judson.



Figure A314. Female subgenital plate. *Arcynopteryx sajanensis*. Photo by S. W. Judson.

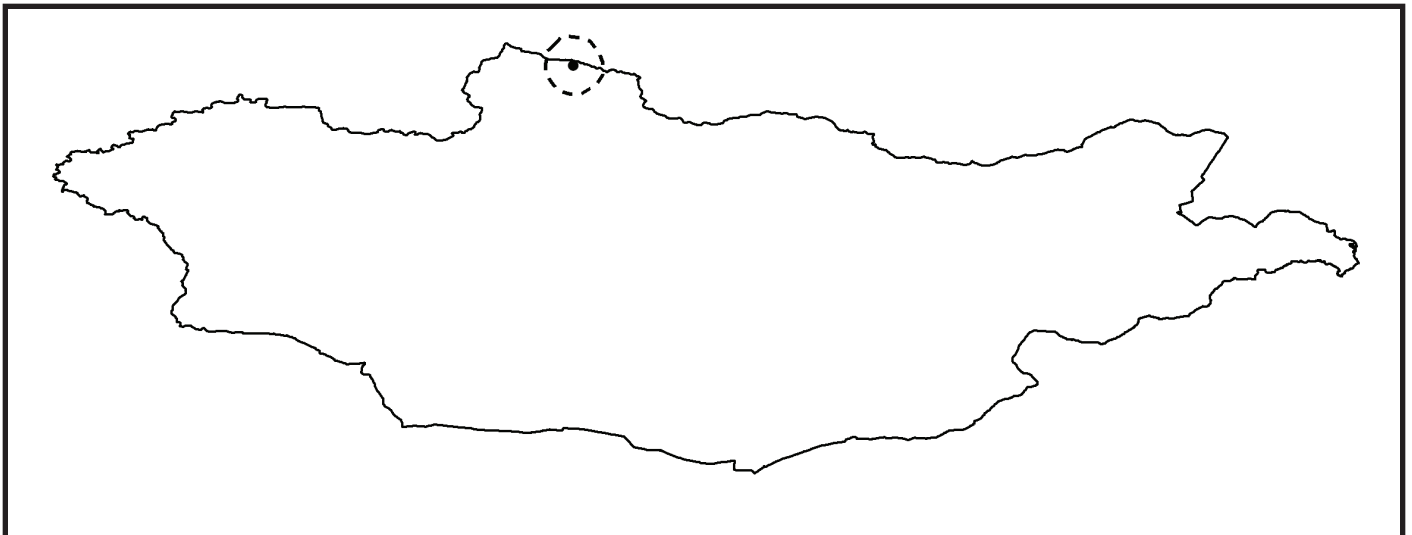


Figure A315. Range Map with Document Occurrences. *Arcynopteryx sajanensis*.



# PERLODIDAE

## *Diura*



Figure A316. Habitus (live). *Diura majuscula*. Hugin River (SRP2006070101). Photo by C. R. Nelson.

recorded from Mongolia), a complete revision of this genus and especially the Palearctic species, is warranted. C. H. Nelson (personal communication) is currently investigating this possibility with emphasis on egg morphology.

**DIAGNOSIS:** Tenth tergum of male not deeply cleft and without accessory hemitergal processes (Figure A324, p. 145), similar to *Filchneria* (Figure A330, p. 147). Male lacking external epiproct, as do *Filchneria* and *Skwala*. Paraprocts modified into dorso-posteriorly directed subanal lobes (Figure A320, p. 144). Female subgenital plate broad, extending to cover segment 8 (Figure A325, p. 145). Nymph with long galea relative to the lacinial teeth (Figure A296, p. 138). General coloration (Figure A316, p. 143) most similar to *Arycnopteryx* and *Skwala*, but *Diura* exhibits a mesosternal ridge pattern with the arms meeting at the posterior corner of the furcal pits (Figure A284, p. 135).

**DISTRIBUTION - Global:** Holarctic - **Regional:** AOB, IDB - **Aimag:** AR, BO, KhD, KhG, SE\*, TO^, UB\*, ZA^

**DISCUSSION:** Due to morphological and geographical overlap of *D. majuscula* with the highly similar *D. nanseni* (not



Figure A317. Comparative Distribution Map. *Diura*.

## PERLODIDAE

### *Diura bicaudata* (Linnaeus, 1758)



Figure A318. Habitus (preserved). *Diura bicaudata*. Photo by S. W. Judson.

#### SYNONYMY

*Phryganea bicaudata* Linnaeus 1758

*Perla bicaudata* Newman 1839

*Diura bicaudata* Ricker 1952

**TYPE LOCALITY:** Sweden: Lappland

**DIAGNOSIS:** Head with triangular pale mark in the ocellar region (Figure A318), as opposed to *D. majuscula* which is rounded anteriorly (Figure A323, p. 145). Pronotum with thinner pale median stripe than *D. majuscula*. Male short-winged (Figure A318). Male subanal lobes smooth (Figure A319, Figure A320), without setation whereas *D. majuscula* is noticeable pilous (Figure A324, p. 145). Female subgenital plate truncate on the posterior margin and

sometimes with a shallow depression (Figure A321), as opposed to *D. majuscula* which is broadly rounded (Figure A325, p. 145). Subgenital plate superficially resembles those of *Skwala asiatica* (Figure A345, p. 150) and *S. pusilla* (Figure A349, p. 151), but these are readily distinguished at the generic level by the mesosternal ridge pattern (Figure A284, p. 135). Nymph superficially similar to *Arcynopteryx* and *Skwala* in general coloration pattern, but distinguishable at the generic level by a long galea and the difference in mesosternal ridge pattern with the arms of *D. bicaudata* meeting at the posterior corner of the furcal pits.

**DISTRIBUTION - Global:** Circumpolar - **Regional:** AOB, IDB - **Aimag:** AR, BO, KhG<sup>^</sup>

**DISCUSSION:** Many European species of *Dictyopterygella*, *Dictyopteryx*, *Isogenus*, and *Perla* were placed in *D. bicaudata*. These species are not treated in the synonymy due to lack of relevance for Mongolia.



Figure A319. Male paraprocts. *Diura bicaudata*. Photo by S. W. Judson.



Figure A320. Male, lateral. *Diura bicaudata*. Photo by J. Fazio.



Figure A321. Female subgenital plate. *Diura bicaudata*. Photo by J. Fazio.

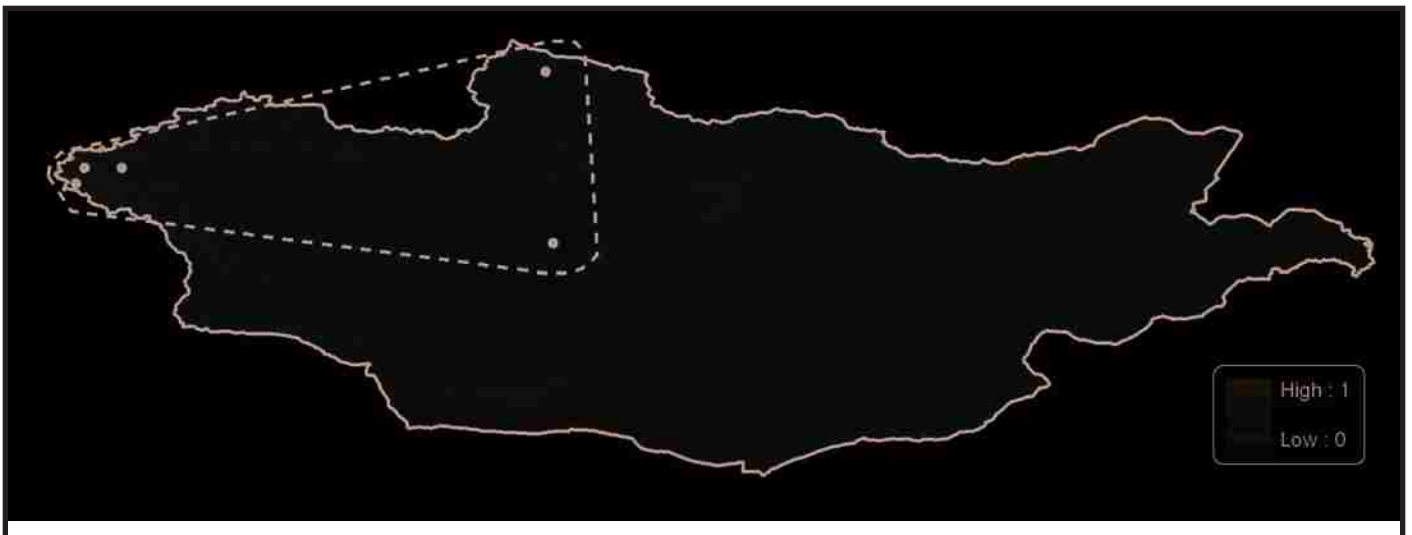


Figure A322. Predicted ENM Map with Documented Occurrences and Range Estimate. *Diura bicaudata*.

## PERLODIDAE

### *Diura majuscula* (Klapalek 1912)

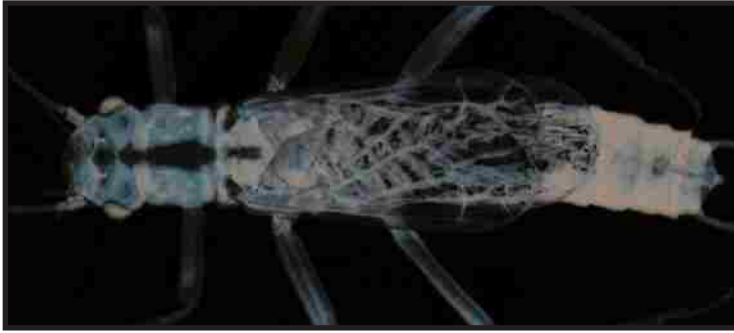


Figure A323. Habitus (preserved). *Diura majuscula*. Photo by S. W. Judson.

whereas *D. bicaudata* is short-winged only slightly extending beyond the thorax onto the first few abdominal segments. Male subanal lobes pilous (Figure A324), with long, dense setation whereas *D. bicaudata* is entirely glabrous (Figure A319, p. 144). Female subgenital plate broadly rounded at the apex (Figure A325), as opposed to *D. bicaudata* which is truncate (Figure A321, p. 144). Nymph unknown.

**DISTRIBUTION - Global:** East Palearctic - **Regional:** AOB, IDB - **Aimag:** AR, BO, KhD, KhG, SE\*, TO^, UB\*, ZA^

**DISCUSSION:** It is currently unclear if *D. majuscula* and the very similar *D. nanseni* are the same species. All specimens from Mongolia have been traditionally identified as *D. majuscula*, but this may be for historical and not taxonomic or morphological reasons. *D. nanseni* may occur sympatrically or be the same species.

#### SYNONYMY

*Dictyopterygella majuscula* Klapalek 1912

*Diura nanseni* (males) Brinck 1949

*Diura bicaudata* (females) Brinck 1949

*Diura majuscula* Zhiltzova 1975

**TYPE LOCALITY:** Russia: Lena River, Bazaikha (Krasnoyarsk) and Ust-Kutsk.

**DIAGNOSIS:** Head with round pale mark in the ocellar region (Figure A323), as opposed to *D. bicaudata* which is a pointed anteriorly (Figure A318, p. 144). Pronotum with thicker pale median stripe than *D. bicaudata*. Male variably short to long winged with wings at least reaching the middle of the abdomen (Figure A323),

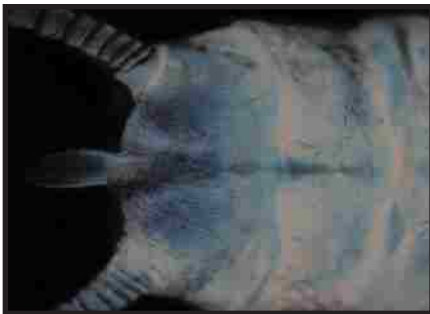


Figure A324. Male paraprocsts. *Diura majuscula*. Photo by J. Fazio.



Figure A325. Female subgenital plate. *Diura majuscula*. Photo by J. Fazio.



Figure A326. Key Feature 3 (Nymph). Photo by S. W. Judson. Photo by J. Fazio. Photo by C. R.

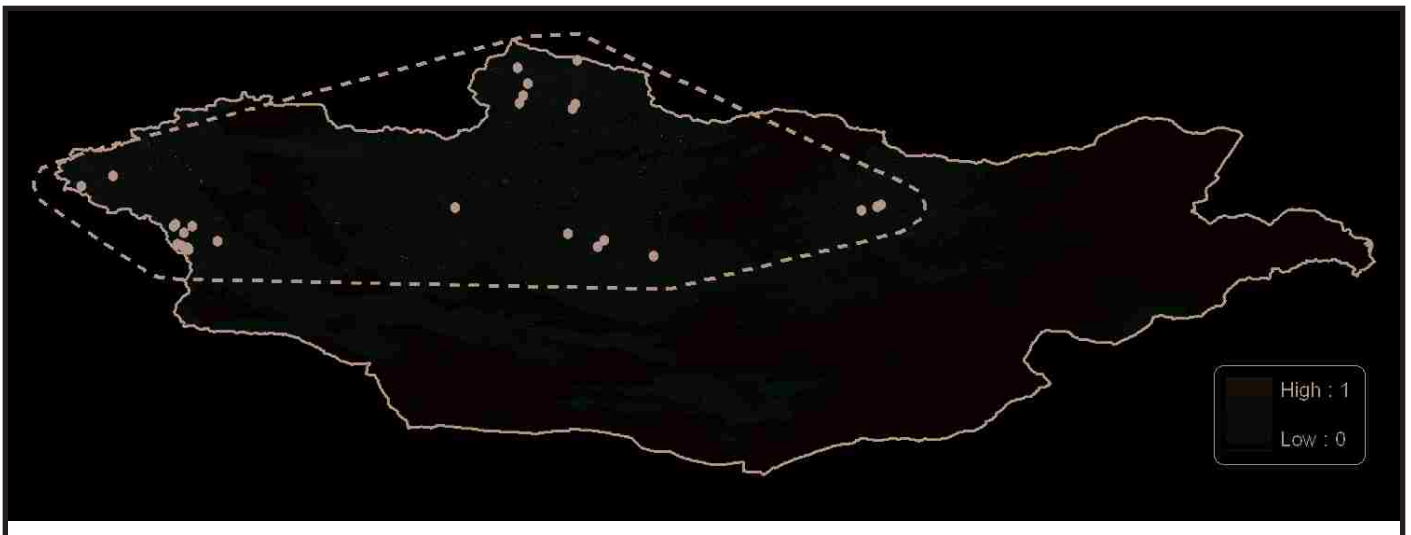


Figure A327. Predicted ENM Map with Documented Occurrences and Range Estimate. *Diura majuscula*.

## PERLODIDAE

# *Filchneria*, *Megarocys*, *Pictetiella*, *Skwala*



Figure A328. Habitus (live). *Skwala brevis*. Khoton Lake (MAIS 2008071402). Photo by C. R. Nelson.

those in *Arcynopteryx* and *Skwala* and curved towards the anterior, extending across tergite 9. Prominent male epiproct with lateral stylets (Figure A335, p. 148) which other Mongolian Perlodidae lack. Female subgenital plate with narrow but deep median notch (Figure A336, p. 148).

**DISTRIBUTION - Global:** Amphi-Pacific - **Regional:** AOB, IDB - **Aimag:** BU<sup>^</sup>, KhG<sup>^</sup>, SE, TO

### *Pictetiella*

**DIAGNOSIS:** Tenth tergum of male cleft (Figure A340, p. 149) and delineated by spinulose patches, but without projecting accessory hemitergal processes. Male with only a barely protruding posterior epiproct. Female plate largely expanded (Figure A341, p. 149). Nymph with conspicuous submental gills (Figure A299, p. 138) longer than those in *Arcynopteryx* and *Skwala*, but lacking thoracic gills as in *Megarocys*.

**DISTRIBUTION - Global:** Amphi-Pacific - **Regional:** AOB<sup>^</sup> - **Aimag:** KhG<sup>^</sup>

### *Skwala*

**DIAGNOSIS:** Male hemitergal processes shorter and stouter (Figure A348, p. 151) than those of *Arcynopteryx* and *Megarocys*. *Skwala*, like *Diura* and *Filchneria*, lacks an external epiproct specifically one that is needle-like epiproct as in *Arcynopteryx* which can be easily confused based on the hemitergal processes. Female subgenital plate with a slight broad depression (Figure A349, p. 151), appearing truncate at the apex. Nymph very similar to *Arcynopteryx*, distinguished by a shorter extension of the pleural fold only dividing abdominal segments 1 and 2 (Figure A289, p. 136).

**DISTRIBUTION - Global:** Amphi-Pacific - **Regional:** AOB<sup>\*</sup>, IDB - **Aimag:** AR<sup>\*</sup>, BR<sup>\*</sup>, BO, SE<sup>\*</sup>, OV<sup>\*</sup>, UB<sup>\*</sup>

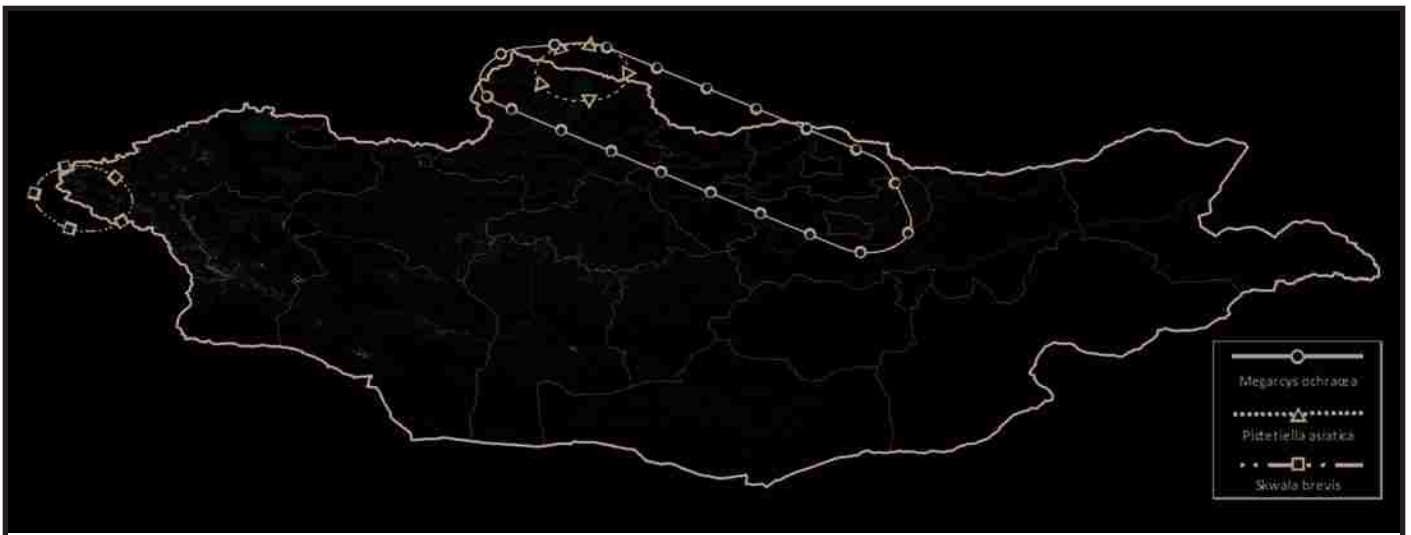


Figure A329. Comparative Distribution Map. *Perlodidae*. *Filchneria mongolica* and *Skwala asiatica* not shown due to lack of georeferenced localities from historical records.

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## PERLODIDAE

# *Filchneria mongolica* (Klapalek, 1901)

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### SYNONYMY

*Dictyopteryx mongolica* Klapalek 1901

*Filchneria mongolica* Klapalek 1908

**TYPE LOCALITY:** Mongolia: North-eastern region

**DIAGNOSIS:** Tenth tergum of male not split and lacking hemitergal processes (Figure A330), similar to *Diura* (Figure A324, p. 145). The 8th, 9th, and 10th tergites have protruding patches of spines (Figure A330). The male lacks an external genitalic features. Female subgenital plate heart shaped (Figure A331), with a strong median notch and the lobes broadly rounded. Nymph with diamond light mark in the ocellar region (Figure A332) similar to *Isoperla potanini* (Figure A413, p. 165). Nymph lacinia different from most other Mongolian Perlodidae with closely spaced teeth and fewer, shorter hairs on the inner edge (Figure A294, p. 137).

**DISTRIBUTION - Global:** Central Asian - **Regional:** POB\* - **Aimag:** DO\*, TO\*

**DISCUSSION:** This species was originally described from Mongolia on one of the earliest known zoological expeditions.

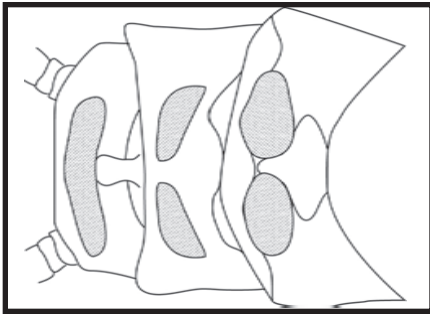


Figure A330. Male, dorsal. *Filchneria mongolica*. Illustration by S. W. Judson.

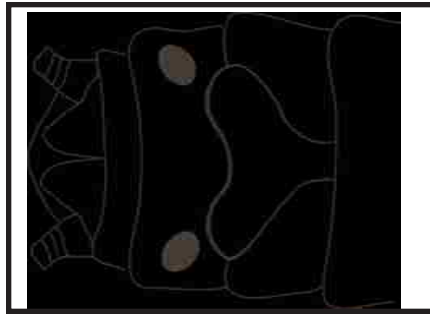


Figure A331. Female subgenital plate. *Filchneria mongolica*. Illustration by S. W. Judson.

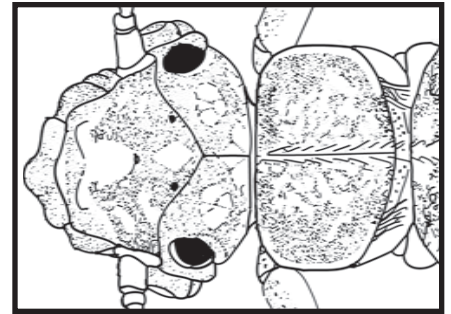


Figure A332. Nymph head. *Filchneria mongolica*. Illustration by S. W. Judson.

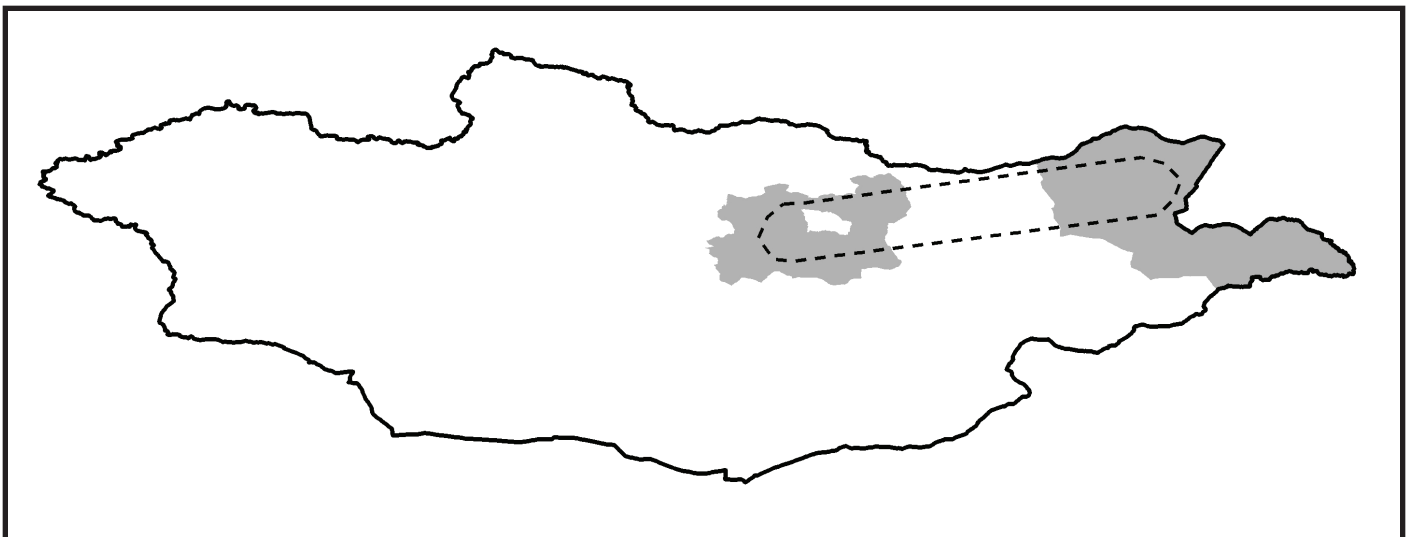


Figure A333. Historical Records Map with Range Estimate. *Filchneria mongolica*.

## PERLODIDAE

# *Megarcys ochracea* Klapalek, 1912



Figure A334. Habitus (preserved). *Megarcys ochracea*. Photo by S. W. Judson.

subgenital plate with narrow median notch with the two resulting lobes directed laterally (Figure A336), as opposed to *Arcynopteryx* species in which the notch is broad and the lobes are directed posteriorly (Figure A304, p. 140). Nymph with finger-like thoracic gills (Figure A286, p. 136) in addition to the submental gills (Figure A299, p. 138) also present in *Arcynopteryx*. Head coloration (Figure A337, p. 148) very similar to *A. compacta* nymphs.

**DISTRIBUTION - Global:** East Palearctic - **Regional:** AOB, IDB<sup>^</sup> - **Aimag:** BU<sup>^</sup>, KhG<sup>^</sup>, SE, TO

**DISCUSSION:** Most of the *M. ochracea* documented by our survey were from mid-range elevations (approx. 800-1500 msl).

### SYNONYMY

*Perlodes (Megarcys) ochracea* Klapalek 1912  
*Megarcys ochracea* Kasai 1938  
*Arcynopteryx (Megarcys) ochracea* Ricker 1952  
*Megarcys ochracea* Illies 1966

**TYPE LOCALITY:** USSR: Sachalin, Hokkadate

**DIAGNOSIS:** Adult retains remnants of nymphal thoracic (Figure A286, p. 136) and submental gills (Figure A299, p. 138). Male hemitergal processes strongly curved (Figure A335), pointing anteriorly and superficially resembling, but much shorter than, those on *Agnatina* species (Figure A278, p. 134). Epiproct with lateral stylets which extend slightly over the hemitergal processes. Female



Figure A335. Male, dorsal. *Megarcys ochracea*. Photo by S. W. Judson.



Figure A336. Female subgenital plate. *Megarcys ochracea*. Photo by S. W. Judson.

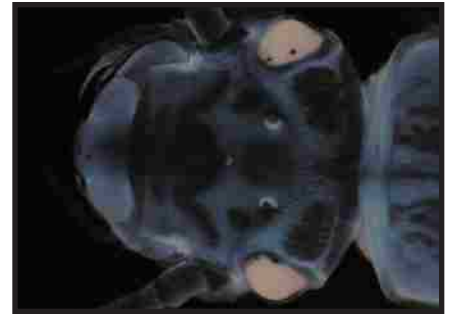


Figure A337. Nymph head. *Megarcys ochracea*. Photo by S. W. Judson.

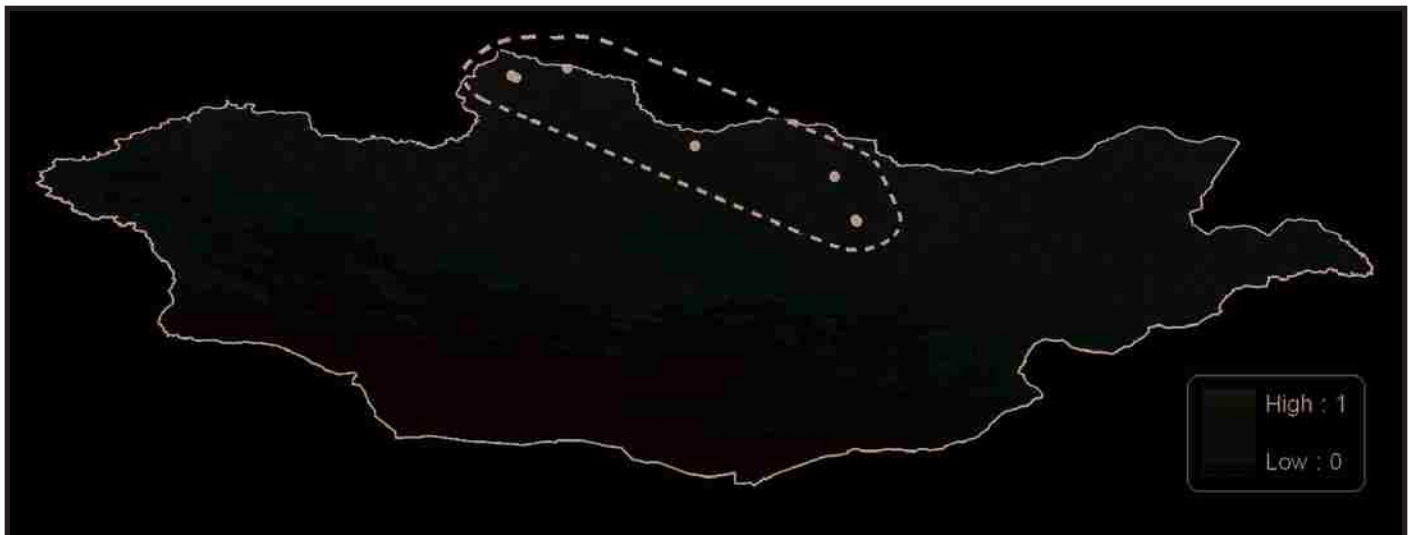


Figure A338. Predicted ENM Map with Documented Occurrences and Range Estimate. *Megarcys ochracea*.

## PERLODIDAE

# *Pictetiella asiatica* Zwick & Levanidova, 1971

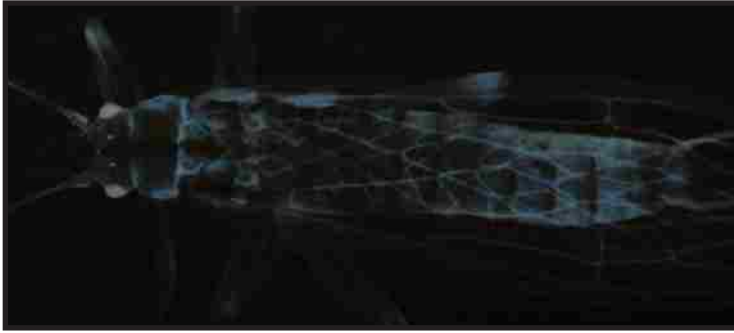


Figure A339. Habitus (preserved). *Pictetiella asiatica*. Photo by S. W. Judson.

### SYNONYMY

*Pictetiella asiatica* Zwick & Levanidova 1971

**TYPE LOCALITY:** Russia: Kamchatka

**DIAGNOSIS:** Tenth tergum of male divided (Figure A340), but without the distinct hemitergal processes found in *Arcynopteryx* (Figure A303, p. 140) and *Skwala* (Figure A348, p. 151). Rather, the hemitergal process is flat and broad primarily demarcated by a spinulose patch (Figure A340). Male paraproct and epiproct relatively inconspicuous externally (Figure A340), though the narrow, straight epiproct does protrude and point posteriorly. Female with large, broadly rounded plate with a slight median notch (Figure A341). The plate extends completely over sternum 9, whereas all other Perlodinae are much shorter (Figure A349, p. 151)

though some Isoperlinae have long, more triangular plates (Figure A376, p. 157, Figure A401, p. 162). Nymph head coloration subtle (Figure A342) and ventral side of head with long submental gills (Figure A299, p. 138).

**DISTRIBUTION - Global:** East Palearctic - **Regional:** AOB<sup>^</sup> - **Aimag:** KhG<sup>^</sup>

**DISCUSSION:** This species is a new record for Mongolia which seems to be restricted to the Khovsgol lake region.



Figure A340. Male, dorsal. *Pictetiella asiatica*. Photo by S. W. Judson.



Figure A341. Female subgenital plate. *Pictetiella asiatica* Photo by S. W. Judson.

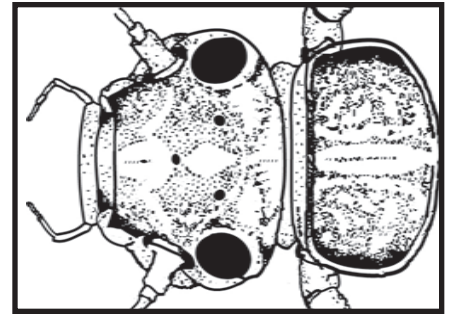


Figure A342. Nymph head. *Pictetiella asiatica*. Illustration by S. W. Judson.

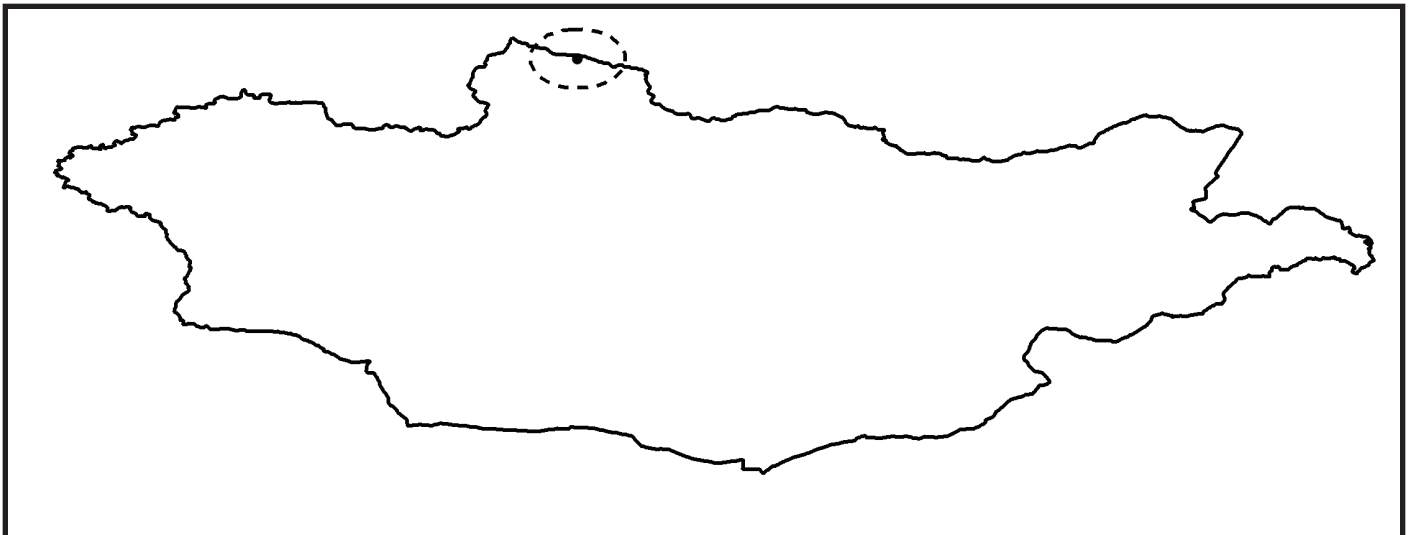


Figure A343. Range Map with Document Occurrences. *Pictetiella asiatica*.

## PERLODIDAE

# *Skwala asiatica* Zhiltzova, 1972

### SYNONYMY

*Skwala asiatica* Zhiltzova 1972

**TYPE LOCALITY:** Mongolia: Bayan-Khongor aimag

**DIAGNOSIS:** Male hemitergal processes short and blunt (Figure A344), similar to those of *S. pusilla* (Figure A348, p. 151) and *Arcynopteryx sajanensis* (Figure A313, p. 142). However, *Skwala* lacks the needle-like epiproct present in *Arcynopteryx*. *S. asiatica* is distinguished from *S. pusilla* primarily by internal epiproct characters (Appendix B). Female subgenital plate with a slight broad depression (Figure A345), indistinguishable from *S. pusilla* (Figure A349, p. 151). Nymph unknown.

**DISTRIBUTION - Global:** Endemic to Mongolia - **Regional:** AOB\*, IDB\* - **Aimag:** AR\*, BR\*, OV\*

**DISCUSSION:** *S. asiatica* is highly similar to *S. pusilla* and its validity is questionable due to this high similarity and because we collected no specimens for comparison. If possible, the type specimens should be obtained and compared to *S. pusilla* specimens from bordering areas.

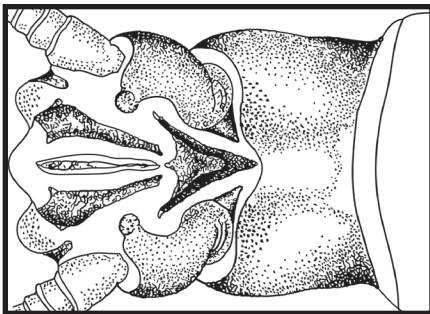


Figure A344. Male, dorsal. *Skwala asiatica*.  
Illustration by S. W. Judson, after Zhiltzova 1972.

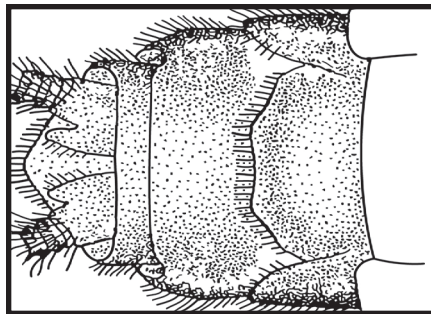


Figure A345. Female subgenital plate. *Skwala asiatica*.  
Illustration by S. W. Judson, after Zhiltzova 1972.

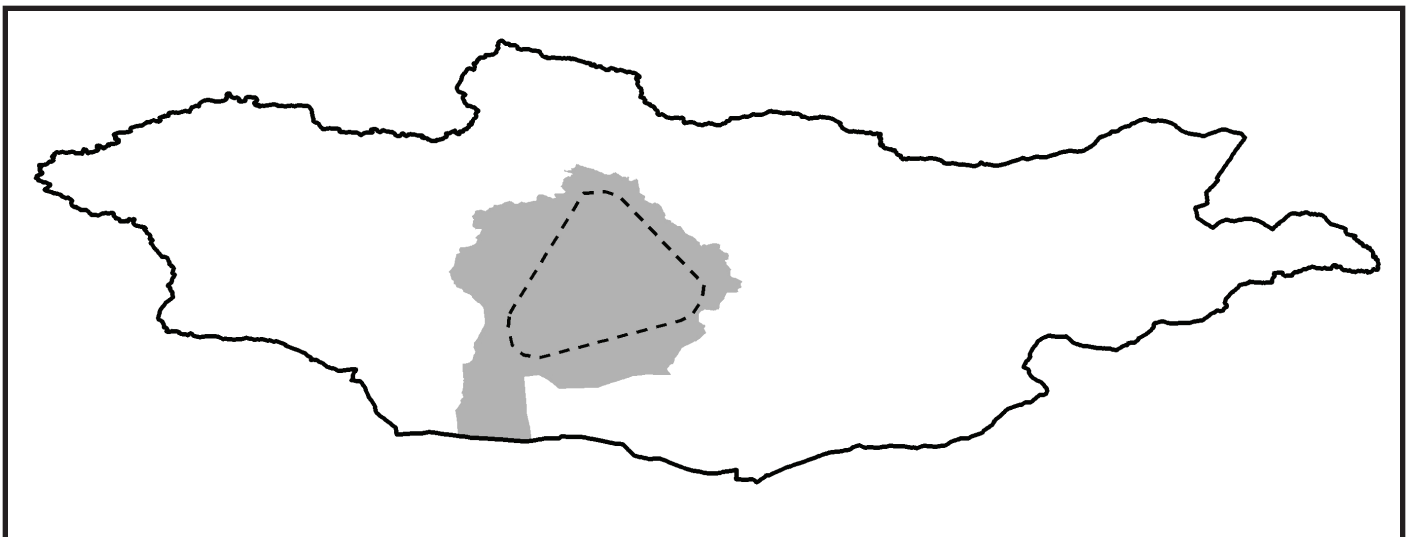


Figure A346. Historical Records Map with Range Estimate. *Skwala asiatica*.



## PERLODIDAE

### *Skwala pusilla* (Klapalek 1912)



Figure A347. Habitus (preserved). *Skwala pusilla*. Photo by S. W. Judson.

#### SYNONYMY

*Arcynopteryx compacta pusilla* Klapalek 1912  
*Arcynopteryx brevis* Koponen 1949  
*Arcynopterygoides vernalis* Rauser 1968  
*Skwala brevis* Zwick, Levanidova, and Zhiltzova 1971  
*Skwala pusilla* Zhiltzova 1982

**TYPE LOCALITY:** USSR: Krasnojarsk

**DIAGNOSIS:** Male hemitergal processes short and blunt (Figure A348), similar to those of *S. asiatica* (Figure A344, p. 150) and *Arcynopteryx sajanensis* (Figure A313, p. 142). However, *Skwala* lacks the needle-like epiproct present in *Arcynopteryx*. *S. pusilla* is distinguished from *S. asiatica* primarily by internal epiproct characters (Appendix B). Female subgenital plate with a slight broad depression (Figure A349), indistinguishable from *S. asiatica* (Figure A345, p. 150). Nymph (Figure A350) very similar to *Arcynopteryx*, distinguished by a shorter extension of the pleural fold only dividing abdominal segments 1 and 2 (Figure A289, p. 136).

**DISTRIBUTION - Global:** East Palearctic - **Regional:** AOB\*, IDB - **Aimag:** BO, SE\*, UB\*

**DISCUSSION:** The specimens of *S. pusilla* documented by our survey were found near lake outlets in abundant numbers.



Figure A348. Male, dorsal. *Skwala pusilla*. Photo by S. W. Judson.



Figure A349. Female subgenital plate. *Skwala pusilla*. Photo by S. W. Judson.

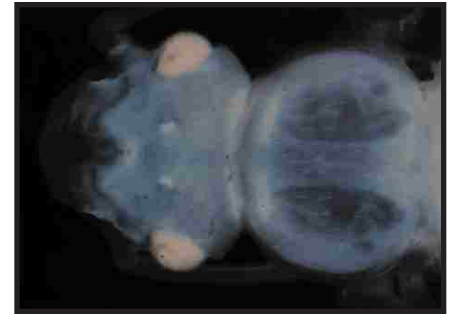


Figure A350. Nymph head. *Skwala pusilla*. Photo by S. W. Judson.

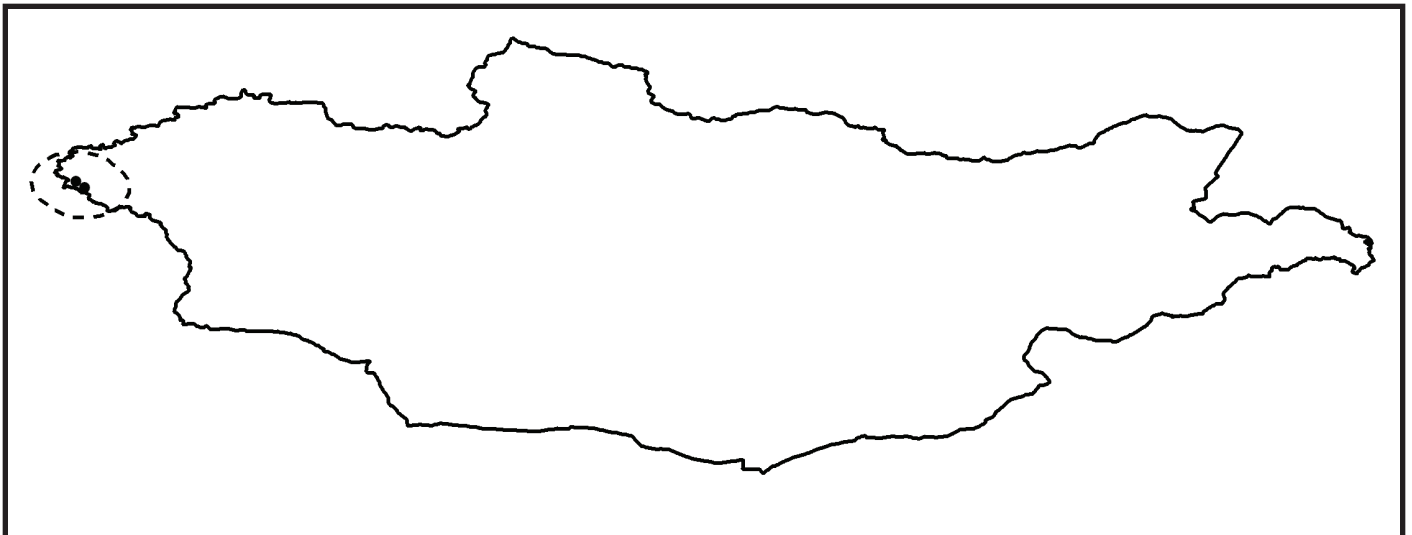


Figure A351. Range Map with Document Occurrences. *Skwala pusilla*.

PERLODIDAE

*Isoperla*, *Kaszabia*



Figure A353. Habitus (live). *Isoperla altaica*. Yamaatiin River (MAIS2008071703). Photo by C. R. Nelson.

lateral processes on abdominal segments 3 and 4. Females can also be discriminated on a species-by-species basis from various *Isoperla*, as the subgenital plate is similar to some *Isoperla*. Nymphs are indistinguishable from *Isoperla* using typically diagnostic characters of Perlodidae such as lacinia and setation (Teslenko 2008).

**DISTRIBUTION - Global:** East Palearctic - **Regional:** AOB, POB\* - **Aimag:** AR, DO\*, KhE\*, KhG, SE\*, TO, UB\*, ZA^

**DISCUSSION:** This genus was originally described from the Mongolian species, *Kaszabia nigricauda* (spinulosa). Recently, it was suggested that *Kaszabia* be moved to *Isoperla* based on nymphal and genitalic similarities (Zwick and Surenkhooloo 2005).

In the following series of maps, species are grouped according to morphological similarity in order to highlight areas of sympatry between similar species.



Figure A352. Comparative Distribution Map. *Isoperla*: !. *altaica*, *I. eximia*, *I. lunigera*.

*Isoperla*

**DIAGNOSIS:** Male subanal lobes hook-like. Males have no external epiproct. Female subgenital plate variable, often triangular. Nymphs lacking any gills and lacking dorsal fringe on cerci.

**DISTRIBUTION - Global:** Holarctic- **Regional:** AOB, IDB, POB\* - **Aimag:** AR, BO, BR\*, BU, DA\*, DO\*, GA, KhD, KhE\*, KhG, OV, SE, TO, UB, UV, ZA

**DISCUSSION:** Full description, illustrations, and identification key of adults given in Zwick and Surenkhooloo 2005. Nymphs have species-specific coloration patterns and are fully described in Teslenko and Zhiltzova (2006) which also has a species-level identification key based on comprehensive Palearctic specimens and reared nymphs.

*Kaszabia*

**DIAGNOSIS:** Males are distinguished from *Isoperla* mainly on the basis of species specific coloration and unique dorsally-directed

PERLODIDAE

*Isoperla*, *Kaszabia*

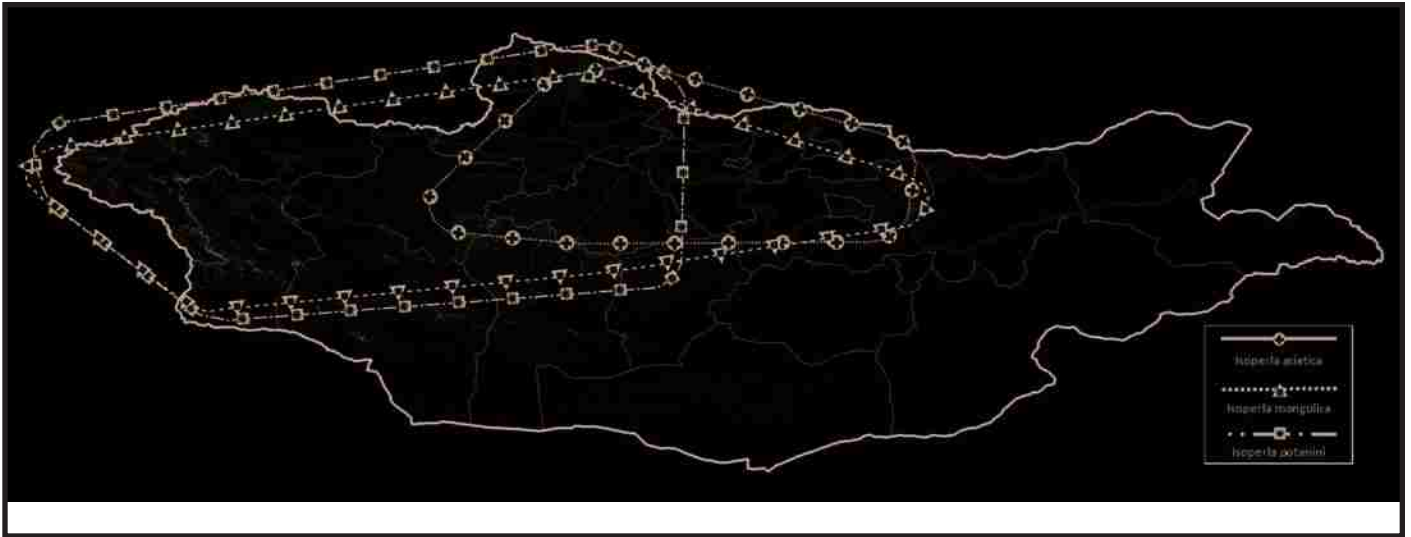


Figure A355. Comparative Distribution Map. *Isoperla*: !. *asiatica*, *I. mongolica*, *I. potanini*.



Figure A356. Habitus (live). *Isoperla asiatica*. Uur River (SRP2005071403). Photo by C. R. Nelson.

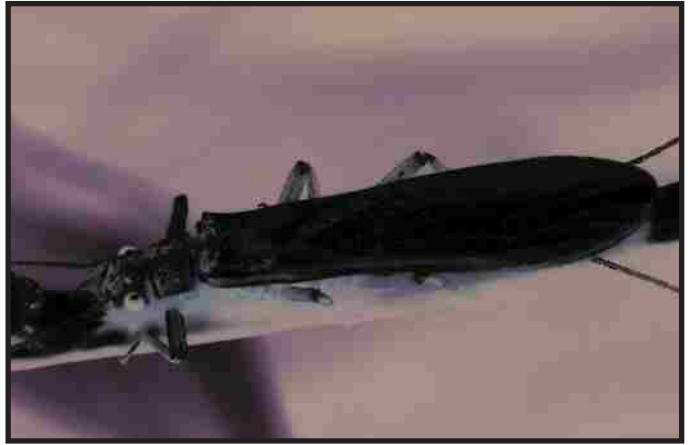


Figure A357. Habitus (live). *Isoperla kozlovi*. Haraa River (SRP2005070402). Photo by C. R. Nelson.



Figure A354. Comparative Distribution Map. *Isoperla* and *Kaszabia*: !. *kozlovi*, *I. obscura*, *K. nigricauda*.

## PERLODIDAE

# *Isoperla altaica* Samal, 1939



Figure A358. Habitus (preserved). *Isoperla altaica*. Photo by S. W. Judson.

### SYNONYMY

*Isoperla altaica* Samal 1939

**TYPE LOCALITY:** Russia: River Karas, outflow of Lake Kara-Koli (type specimen believed to be lost)

**DIAGNOSIS:** Head generally infusate (Figure A358), especially in ocellar region similar to *I. eximia* (Figure A368, p. 156) but distinct from other Mongolian *Isoperla* which lack pigmentation between the ocelli usually apparent as a pale central oval shape. *I. altaica* can be distinguished from *I. eximia* by dark pigmentation that extends from the ocellar shading to the eyes, seeming to connect the eyes in a straight line (Figure A358). Additionally, the middle of the mesoscutum is darker than the sides (Figure A358), as opposed *I. eximia* in which this region is pale (Figure A368, p. 156). Male has a distinctive

large penal sclerite that, like *I. eximia*, is asymmetrical in the caudal view in contrast to *I. lunigera* which has a symmetrical sclerite (Figure A380, p. 158). In *I. altaica*, the penal sclerite is wide at the base and twisted into a crest at the apex (Figure A360), in contrast to *I. eximia* which is narrow and uncrested (Figure A370, p. 156). Female subgenital plate barely produced over segment 8 (Figure A361) and not particularly useful for diagnosis. Coloration can be used to distinguish females from *I. eximia* and other *Isoperla* with short plates, specifically *I. asiatica*, *I. mongolica*, and *I. potanini*. Nymph superficially similar in coloration to *I. lunigera*, with the majority of the head dark especially in the ocellar region and pale areas near the eyes and center of the clypeus (Figure A413a). However, *I. altaica* has a vertical row of isolated pale circles on each thoracic segment, present on both sides of a pale median stripe.

**DISTRIBUTION - Global:** Altai mountains - **Regional:** AOB, IDB - **Aimag:** AR<sup>^</sup>, BO<sup>^</sup>, KhD, KhG<sup>^</sup>, SE, TO<sup>^</sup>, UV



Figure A359. Male paraprocts. *Isoperla altaica*. Photo by S. W. Judson.

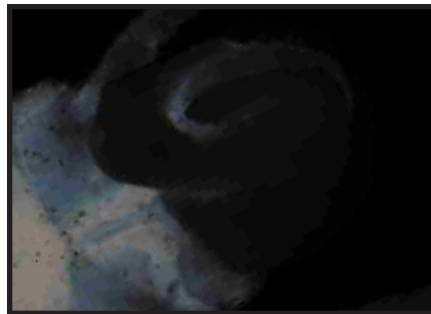


Figure A360. Male extruded penal sclerite. *Isoperla altaica*. Photo by S. W. Judson.



Figure A361. Female subgenital plate. *Isoperla altaica*. Photo by S. W. Judson.

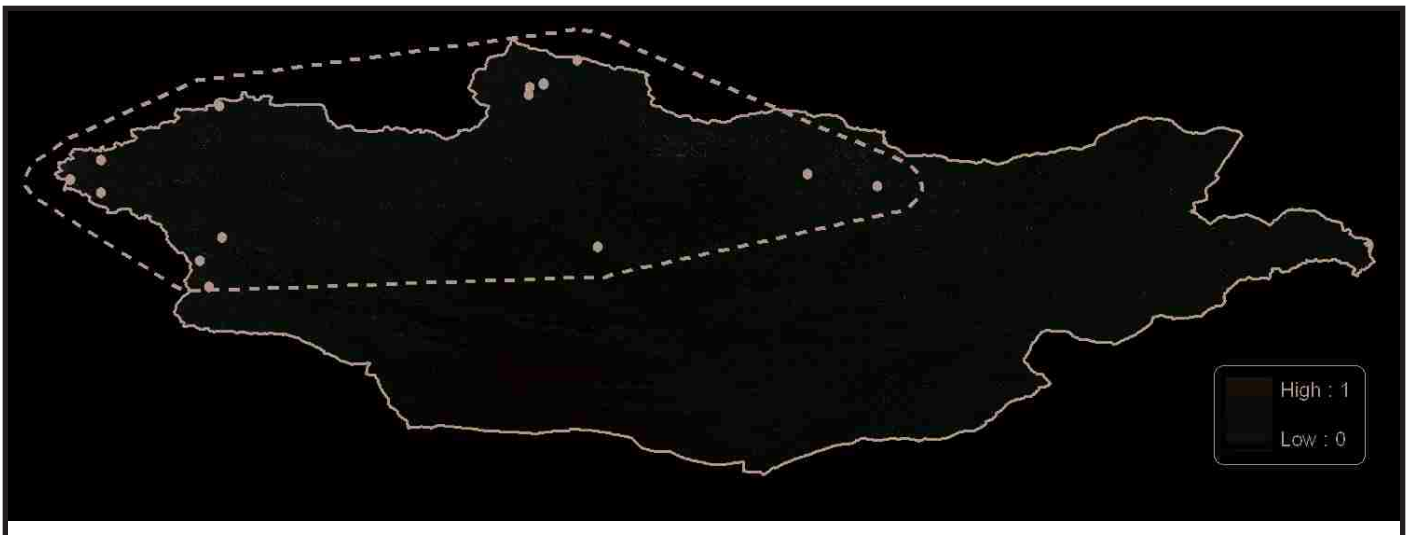


Figure A362. Predicted ENM Map with Documented Occurrences and Range Estimate. *Isoperla altaica*.

## PERLODIDAE

# *Isoperla asiatica* Samal, 1939



Figure A363. Habitus (preserved). *Isoperla asiatica*. Photo by S. W. Judson.

### SYNONYMY

*Isoperla asiatica* Samal 1939

**TYPE LOCALITY:** Mongolia, Sogino, Tula

**DIAGNOSIS:** Head pale, with dark pigmentation surrounding but not invading the ocellar region (Figure A363). The pale central mark between the ocelli is broadly rounded or blunt at the anterior, in contrast to *I. potanini* (Figure A393, p. 161) and *I. mongolica* (Figure A383, p. 159) which are pointed and other *Isoperla* which have a more narrow pale oval. Mesoscutum with golden-yellow markings on the anterior edge (Figure A363) similar to *I. kozlovi* (Figure A373, p. 157), *I. mongolica*, and *K. nigricauda*, but useful for distinguishing from *I. potanini* which is uniform in color on the mesoscutum (Figure A393, p. 161). Cercal segments with a single

long hair per segment, in contrast to *I. potanini* which has a whorl of long hairs on each segment. Male with only a slightly swollen ventral lobe that appears as a central bump on the posterior margin of sternite 8 (Figure A365), somewhat similar to *I. potanini* which entirely lacks a lobe and is smooth along the segment 8 (Figure A395, p. 161). Female with a short, broadly rounded plate (Figure A366), not notched as in *I. potanini* (Figure A396, p. 161). Female plate indistinguishable from *I. mongolica* (Figure A386, p. 159) but specimens can be distinguished by head coloration. Nymph with pale central ocellar mark (Figure A413c) very similar to the adult, but the head otherwise more darkly pigmented than the adult.

**DISTRIBUTION - Global:** East Palearctic - **Regional:** AOB, IDB<sup>^</sup>, POB\* - **Aimag:** AR<sup>^</sup>, BU<sup>^</sup>, DO\*, KhE\*, KhG<sup>^</sup>, SE, TO, UB, ZA<sup>^</sup>

**DISCUSSION:** In Mongolia, *I. asiatica* is most commonly found in low gradient streams with stream order ratings greater than 5 (according to the Strahler method).



Figure A364. Male paraprocts. *Isoperla asiatica*. Photo by J. Fazio.



Figure A365. Male, ventral. *Isoperla asiatica*. Photo by J. Fazio.

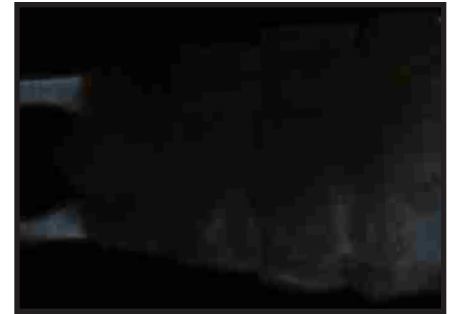


Figure A366. Female subgenital plate. *Isoperla asiatica*. Photo by S. W. Judson.

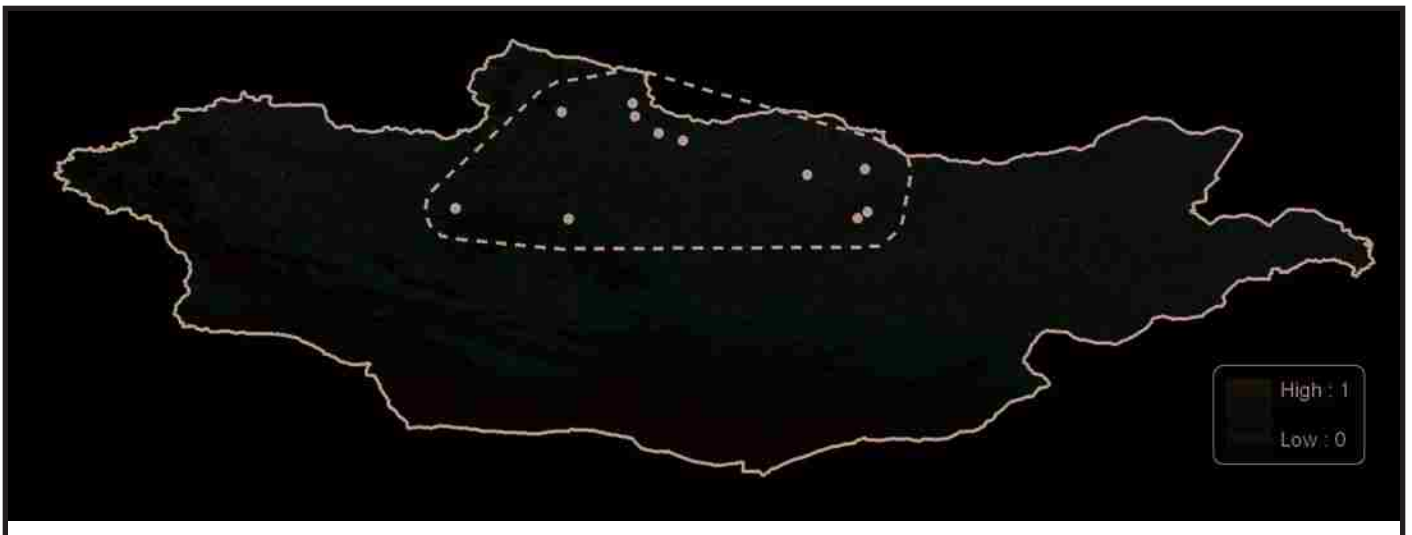


Figure A367. Predicted ENM Map with Documented Occurrences and Range Estimate. *Isoperla asiatica*.

## PERLODIDAE

# *Isoperla eximia* Zapekina-Dulkeit, 1975



Figure A368. Habitus (preserved). *Isoperla eximia*. Photo by S. W. Judson.

### SYNONYMY

*Isoperla eximia* Zapekina-Dulkeit 1975

**TYPE LOCALITY:** Russia

**DIAGNOSIS:** Head generally infusate (Figure A368), especially in ocellar region similar to *I. altaica* (Figure A358, p. 154) but distinct from other Mongolian *Isoperla* which lack pigmentation between the ocelli usually apparent as a pale central oval shape. *I. eximia* can be distinguished from *I. altaica* because it lacks a transverse line of dark pigmentation seemingly connecting the eyes (Figure A368). Additionally, the middle of the mesoscutum is lighter than the sides, as opposed *I. altaica* in which this region is dark (Figure A358, p. 154). Male has a distinctive large penal sclerite that, like *I. altaica*, is asymmetrical in the caudal view (Figure A370) in contrast to *I. lumigera*

which has a symmetrical sclerite (Figure A380, p. 158). In *I. eximia*, the penal sclerite is narrow at the base, and as a result is of relatively uniform length for the basal two thirds of the sclerite, as opposed to *I. altaica* which is abruptly wider at the base (Figure A360, p. 154). The penal sclerite lacks (Figure A370) the twisted crest present in *I. altaica* (Figure A360, p. 154). Female subgenital plate barely produced over segment 8 (Figure A371) and not useful for diagnosis. Coloration can be used to distinguish females from *I. altaica* and other *Isoperla* with short plates, specifically *I. asiatica*, *I. mongolica*, and *I. potanini*. Nymph surprisingly distinct from *I. altaica*, the vertical stripe coloration pattern (Figure A413b) superficially resembling those in Perlidae species.

**DISTRIBUTION - Global:** East Palearctic - **Regional:** AOB - **Aimag:** SE

**DISCUSSION:** This species is often found sympatrically with *I. altaica*, as was the case with both localities where we simultaneously

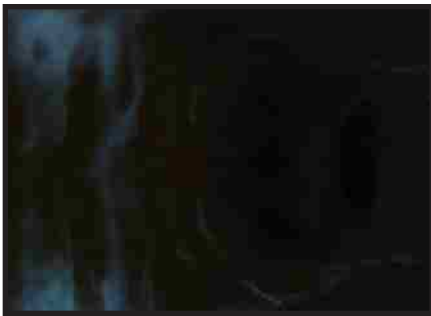


Figure A369. Male paraprocts. *Isoperla eximia*. Photo by S. W. Judson.

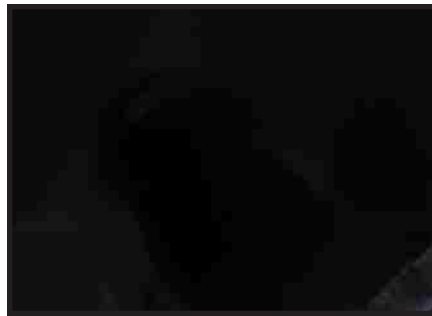


Figure A370. Male extruded penal sclerite. *Isoperla eximia*. Photo by S. W. Judson.

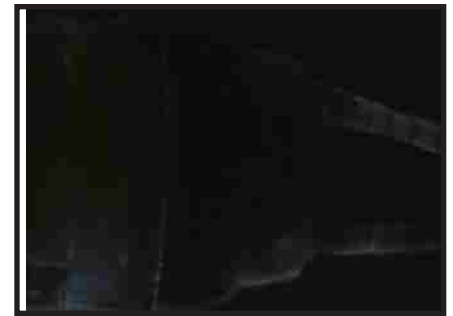


Figure A371. Female subgenital plate. *Isoperla eximia*. Photo by S. W. Judson.

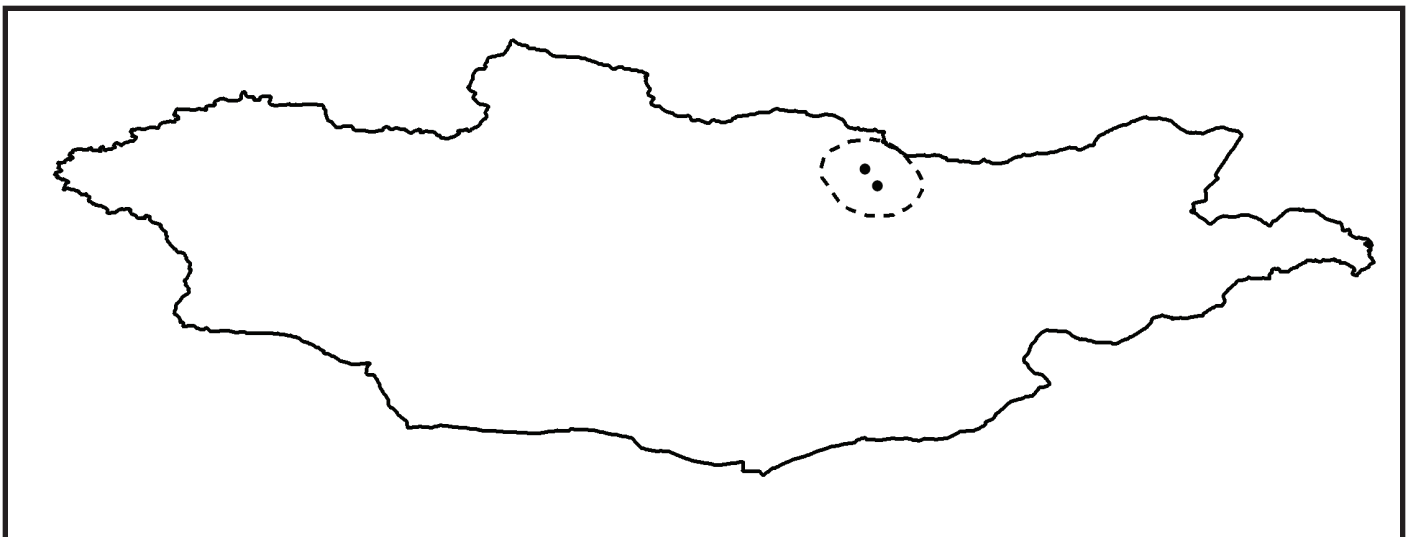


Figure A372. Range Map with Document Occurrences. *Isoperla eximia*.

## PERLODIDAE

# *Isoperla kozlovi* Zhiltzova, 1972

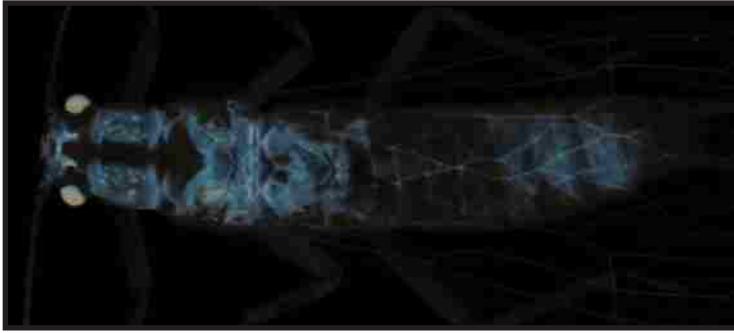


Figure A373. Habitus (preserved). *Isoperla kozlovi*. Photo by S. W. Judson.

### SYNONYMY

*Isoperla kozlovi* Zhiltzova 1972

**TYPE LOCALITY:** Mongolia: Khentii

**DIAGNOSIS:** Head more infusate on the anterior half, with pale oval in the ocellar region bordered on the posterior by subtle shading that completes the outline of the oval (Figure A373). Mesoscutum with golden-yellow markings on the anterior edge (Figure A373) similar to *I. asiatica* (Figure A363, p. 155), *I. mongolica* (Figure A383, p. 159), and *K. nigricauda* (Figure A398, p. 162), but useful for distinguishing from *I. mongolica* which has a dark mesoscutum (Figure A383, p. 159). Male penis with large paired sclerites (Figure A375) with their apices directed towards one another but not touching. When viewed ventrally, the sclerites

are apparent through the body wall as if the segment itself is pigmented (Figure A375). Female subgenital plate sometimes shallowly notched (Figure A376), resembling *I. obscura* (Figure A390, p. 160) and *Kaszabia nigricauda* (Figure A401, p. 162), but not as long and only covering part of segment 9. Nymph head coloration (Figure A418b) dark from the epicranial arm to the M-line with no dark markings near the eyes or the labrum.

**DISTRIBUTION - Global:** East Palearctic - **Regional:** AOB, IDB\*, POB\* - **Aimag:** AR, BO\*, BU, DO\*, KhE\*, KhG, SE, TO

**DISCUSSION:** Along with *I. mongolica*, this species was originally described from Mongolia by Zhiltzova (1972) in her first contribution to the Insects of Mongolia series.



Figure A374. Male paraprocts. *Isoperla kozlovi*. Photo by J. Fazio.



Figure A375. Male, ventral, showing penial sclerites. *Isoperla kozlovi*. Photo by J. Fazio.

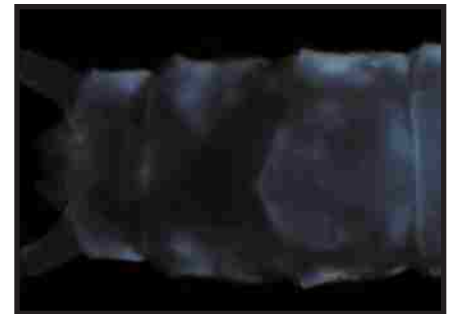


Figure A376. Female subgenital plate. *Isoperla kozlovi*. Photo by J. Fazio.

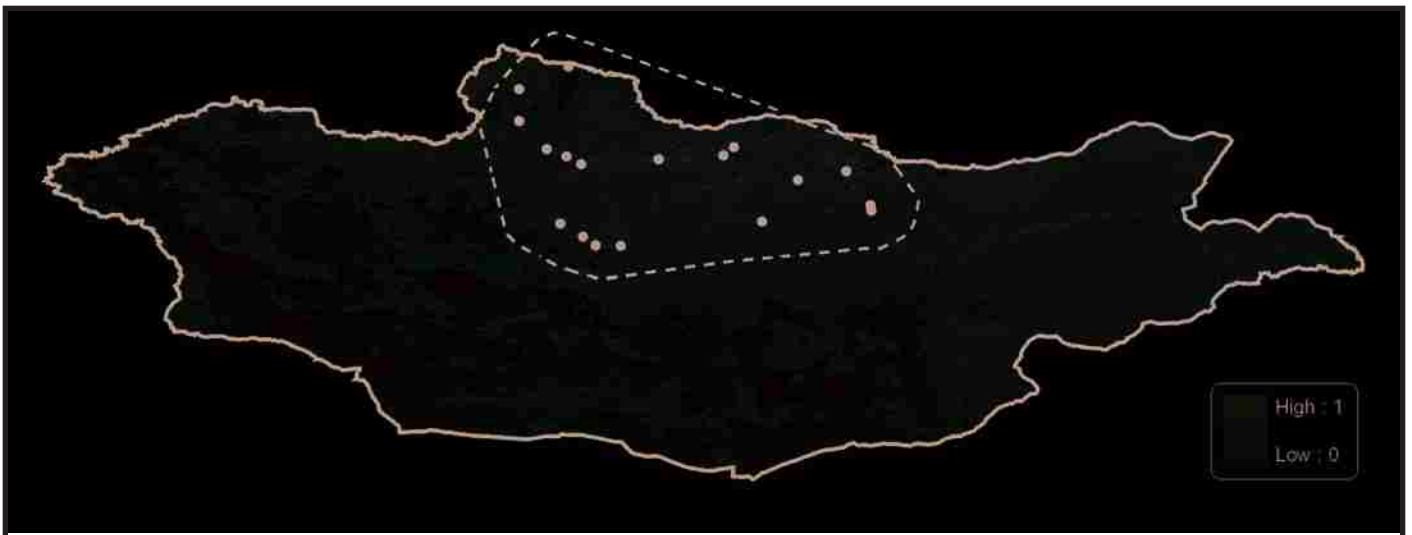


Figure A377. Predicted ENM Map with Documented Occurrences and Range Estimate. *Isoperla kozlovi*.

## PERLODIDAE

### *Isoperla lunigera* (Klapalek, 1923)



Figure A378. Habitus (preserved). *Isoperla lunigera*. Photo by S. W. Judson.

#### SYNONYMY

*Chloroperla lunigera* Klapalek 1923

*Isoperla lunigera* Zwick et al. 1971

**TYPE LOCALITY:** USSR: Irutsk

**DIAGNOSIS:** Head with isolated central dark mark (Figure A378), distinct from other *Isoperla* in Mongolia and superficially resembling the pigmentation of *Haploperla lepnevae* (Figure A129, p. 100). Pronotum with two dark stripes (Figure A378), as opposed to *H. lepnevae* which has a single median stripe (Figure A129, p. 100). Male has a distinctive large penal sclerite (Figure A380) that is symmetrical in the caudal view in contrast to *I. altaica* (Figure A360, p. 154) and *I. eximia* (Figure A370, p. 156) which have

asymmetrical sclerites. Female subgenital plate broadly joined at the base, with dark pigmentation along the anterior edge and a central bump that protrudes only slightly over segment 8 (Figure A381). Nymph superficially similar in coloration to *I. altaica*, with the majority of the head dark especially in the ocellar region and pale areas near the eyes and center of the clypeus (Figure A418a). However, *I. lunigera* has fewer dark regions particularly on the thorax and is more pale overall.

**DISTRIBUTION - Global:** East Palearctic - **Regional:** AOB, IDB, POB\* - **Aimag:** AR\*, BU<sup>^</sup>, DO\*, KhE\*, KhG, SE, TO<sup>^</sup>, UB<sup>^</sup>, ZA\*

**DISCUSSION:** Specimens of this species from Mongolia were misidentified as *Isoperla flavescens* in Purevdorj et al. 2003.



Figure A379. Male paraprocts. *Isoperla lunigera*. Photo by S. W. Judson.

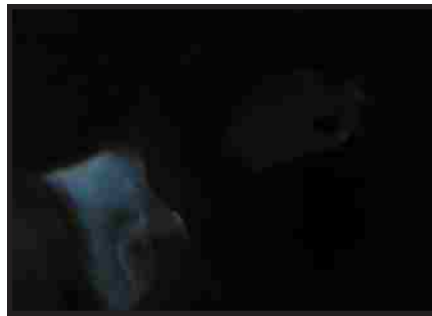


Figure A380. Male extruded penal sclerite. *Isoperla lunigera*. Photo by J. Fazio.



Figure A381. Female subgenital plate. *Isoperla lunigera*. Photo by J. Fazio.

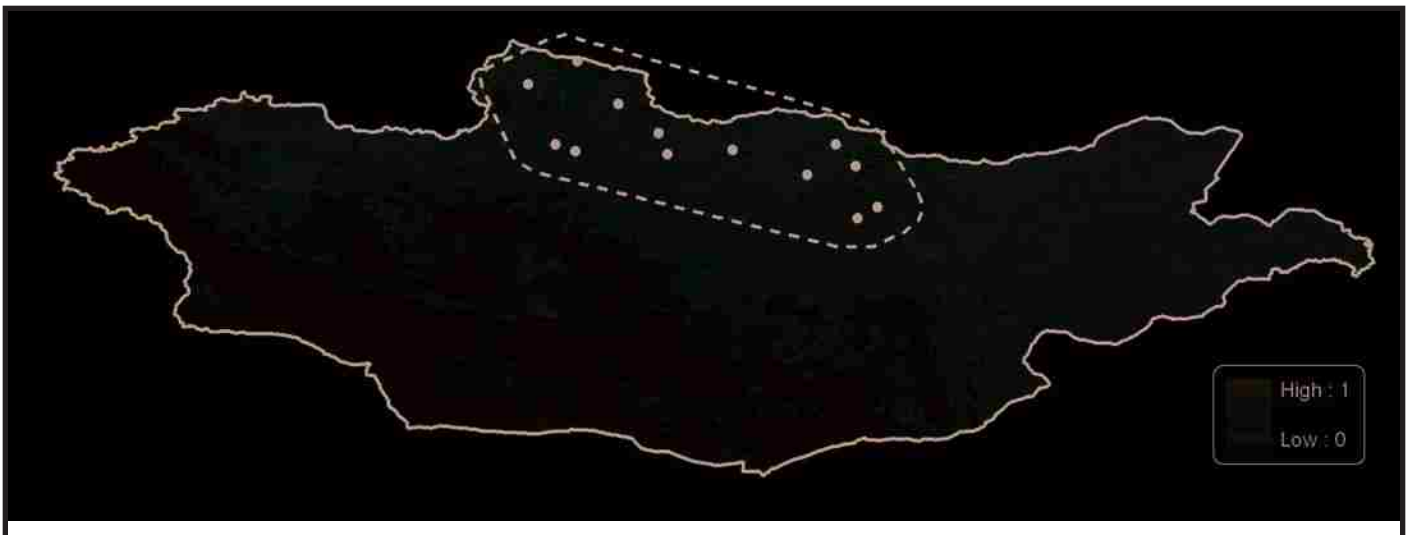


Figure A382. Predicted ENM Map with Documented Occurrences and Range Estimate. *Isoperla lunigera*.



## PERLODIDAE

# *Isoperla mongolica* Zhiltzova, 1972

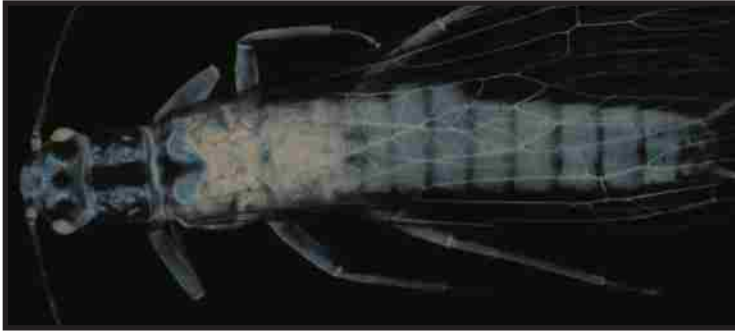


Figure A383. Habitus (preserved). *Isoperla mongolica*. Photo by S. W. Judson.

### SYNONYMY

*Isoperla mongolica* Zhiltzova 1972

**TYPE LOCALITY:** Mongolia: Tula River near Ulan Bator

**DIAGNOSIS:** Head coloration generally infusate (Figure A383), with a pale central oval between the ocelli, most closely resembling *I. potanini* which is darker overall color (Figure A393, p. 161). Male paraprocts rough on the inner margin near the apex (Figure A384, populated with small spines which are most evident from the lateral view (Figure A385). Female subgenital plate short and barely produced (Figure A385), similar to *I. potanini* and *I. asiatica* (Figure A366, p. 155) though *I. potanini* has a shallow medial notch (Figure A396, p. 161) and *I. asiatica* can be distinguished on the basis of head coloration (Figure A363, p. 155). Nymph head

coloration (Figure A413d) similar to *I. obscura* with a pale oval in the ocellar region in line with two other ovals located anterior and posterior to the ocellar oval, though *I. mongolica* is darker overall than *I. obscura*. Nymph also distinct from *I. obscura* based on abdominal coloration, specifically the placement of pale heart shaped marks of which *I. mongolica* has only one on the terminal abdominal segment.

**DISTRIBUTION - Global:** East Palearctic - **Regional:** AOB, IDB<sup>^</sup>, POB\* - **Aimag:** AR, BO, KhD, KhE\*, KhG, TO<sup>^</sup>, UB\*, ZA

**DISCUSSION:** Along with *I. kozlovi*, this species was originally described from Mongolia by Zhiltzova (1972) in her first contribution to the Insects of Mongolia series.



Figure A384. Male paraprocts. *Isoperla mongolica*. Photo by S. W. Judson.



Figure A385. Male, lateral. *Isoperla mongolica*. Photo by S. W. Judson.

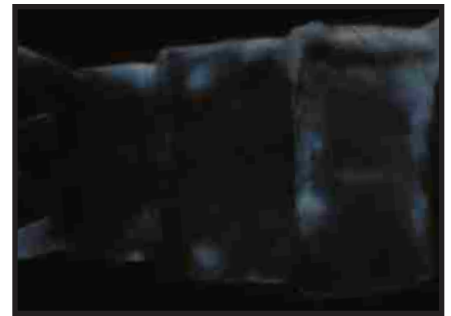


Figure A386. Female subgenital plate. *Isoperla mongolica*. Photo by S. W. Judson.

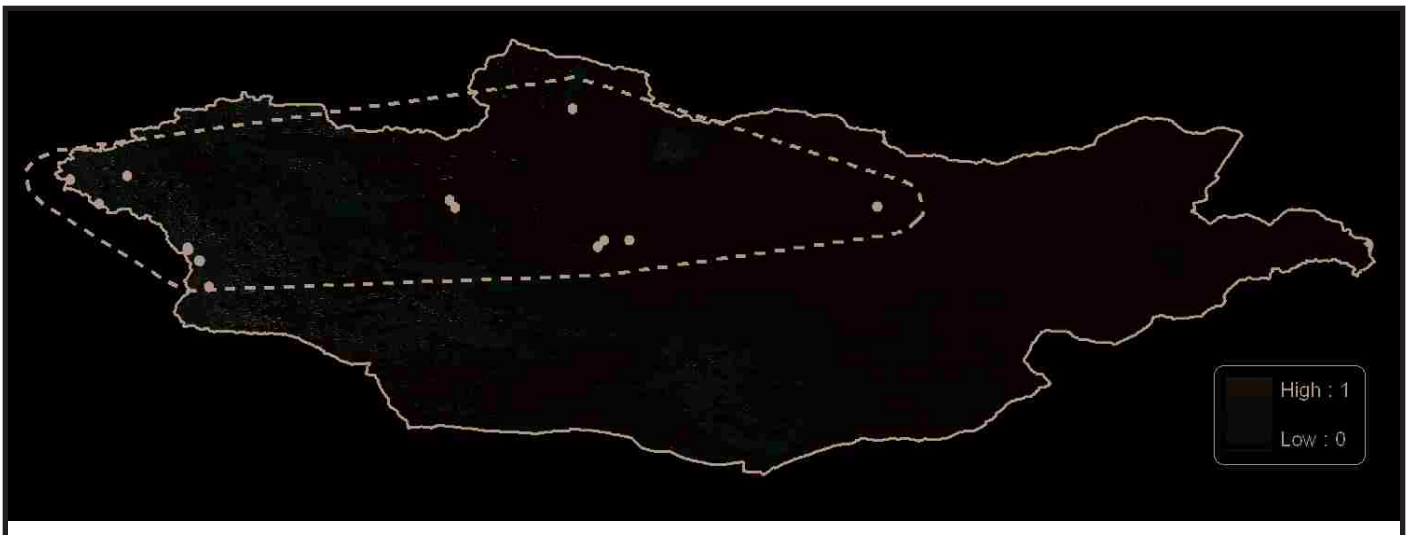


Figure A387. Predicted ENM Map with Documented Occurrences and Range Estimate. *Isoperla mongolica*.

## PERLODIDAE

### *Isoperla obscura* (Zetterstedt, 1840)



Figure A388. Habitus (preserved). *Isoperla obscura*. Photo by S. W. Judson.

#### SYNONYMY

*Perla obscura* Zetterstedt 1840  
*Perla griseipennis* Pictet 1841  
*Perla tenella* Rambur 1842  
*Chloroperla limbata* Bengtsson 1933  
*Isoperla obscura* Brinck 1952

**TYPE LOCALITY:** Sweden: Lappland

**DIAGNOSIS:** Head coloration generally infusate with dark pigmentation connecting ocelli and a pale oval isolated in the ocellar regionb (Figure A388). *I. obscura* lacks golden markings on the anterior lobes of the mesoscutum above the wing insertion points (Figure A388), which sets it apart from *Kaszabia nigricauda* and *I. kozlovi* which have vaguely

similar head coloration but they also have these golden mesoscutal markings (Figure A398, p. 162, Figure A373, p. 157). Male lacking macroscopic characters for distinction, other than head coloration. Male penis, if extruded, with V-shaped row of sharp teeth, lacking large sclerites as compared to those visible through the body wall in *I. kozlovi* (Figure A375, p. 157) from Female subgenital plate triangular with a rounded apex (Figure A390), resembling *K. nigricauda* and *I. kozlovi* (Figure A401, p. 162, Figure A376, p. 157). Also like *K. nigricauda*, plate long, completely covering segments 8 and 9, whereas the plate of *I. kozlovi* only extends over half of segment 9. Female specimens more readily distinguished by head and other coloration. Nymph head coloration (Figure A391) similar to *I. mongolica* with a pale oval in the ocellar region in line with two other ovals located anterior and poster to the ocellar oval, though *I. obscura* is lighter overall especially without dark pigmentation on the posterior margin of the head. Nymph also distinct from *I. mongolica* based on abdominal coloration, specifically the placement of pale heart shaped marks of which *I. obscura* has one medial marking on each of the anterior segments, but none on the terminal segment as in *I. mongolica*. Nymph also noted to have similar coloration to *K. nigricauda* (Teslekno 2008).



Figure A389. Male paraprocts. *Isoperla obscura*. Photo by J. Fazio.



Figure A390. Female subgenital plate. *Isoperla obscura*. Photo by J. Fazio.

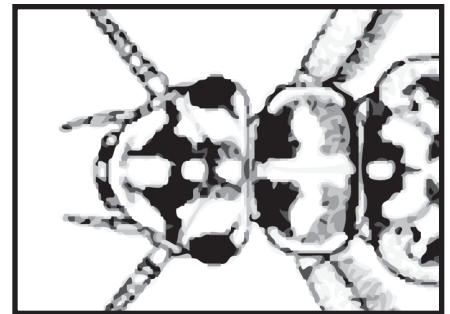


Figure A391. Nymph. *Isoperla obscura*. Illustration by S. W. Judson after Teslenko and Zhiltzova 2006.

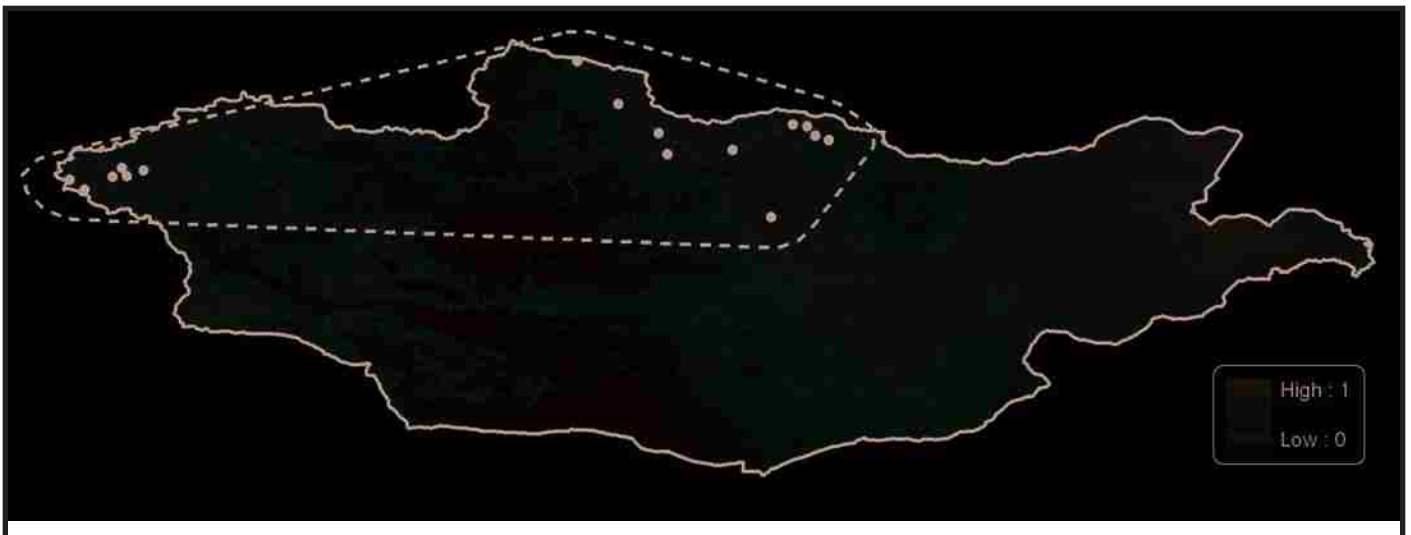


Figure A392. Predicted ENM Map with Documented Occurrences and Range Estimate. *Isoperla obscura*.

## PERLODIDAE

### *Isoperla potanini* (Klapalek, 1923)

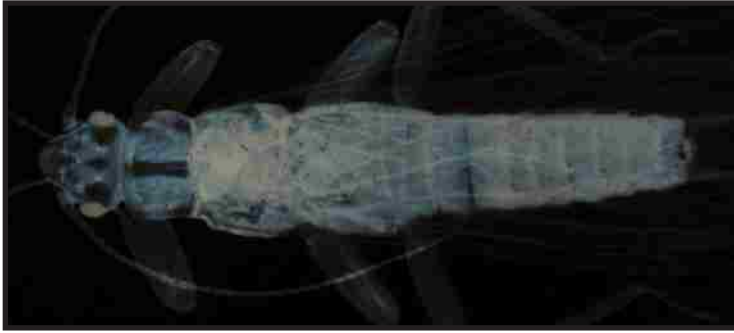


Figure A393. Habitus (preserved). *Isoperla potanini*. Photo by S. W. Judson.

#### SYNONYMY

*Mesoperlina potanini* Klapalek 1923  
*Isoperla chasaudina* Navas 1923  
*Isoperla potanini* Zwick and Surenkhorloo 2005

**TYPE LOCALITY:** Mongolia: Khangai Mountains

**DIAGNOSIS:** Head generally infusate and a darker overall color (Figure A393) than other *Isoperla*, with pale diamond-shaped central mark between the ocelli (Figure A393) as opposed to the more rounded pale ovals found in this region on other *Isoperla*. Cercal segments with a whorl of long hairs on each segment, useful for distinguishing from *I. asiatica* which has a single hair per segment. Male entirely without a ventral lobe on sternite 8 (Figure A395), making this segment smooth along the posterior edge whereas other *Isoperla* have distinct lobes (Figure A375, p. 157), or in the case of *I. asiatica*, only slightly swollen and barely protruding (Figure A365, p. 155). Female with a short, broadly bilobed plate with a shallow median notch (Figure A396). Nymph with head coloration very similar to the adult pigmentation (Figure A413e).

**DISTRIBUTION - Global:** Endemic to Mongolia - **Regional:** AOB, IDB - **Aimag:** AR, BO, BR\*, BU\*, GA, KhD, KhG, OV, UB\*, UV\*, ZA

**DISCUSSION:** This species was originally described from Mongolian material and continues to be recorded only from northern and western Mongolia. The nymph was originally described by Rauser in 1968. The species was recently moved from the genus *Mesoperlina* (Zwick and Surenkhorloo 2005) after having been noted as atypical for that genus by Zhiltzova (1970).



Figure A394. Male paraprocts. *Isoperla potanini*. Photo by S. W. Judson.

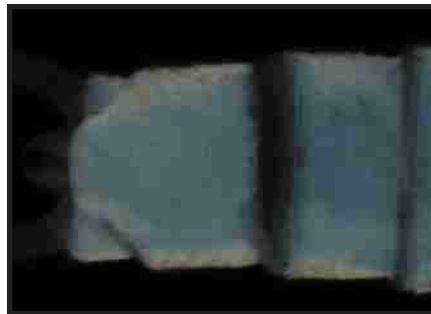


Figure A395. Male, ventral. *Isoperla potanini*. Photo by S. W. Judson.

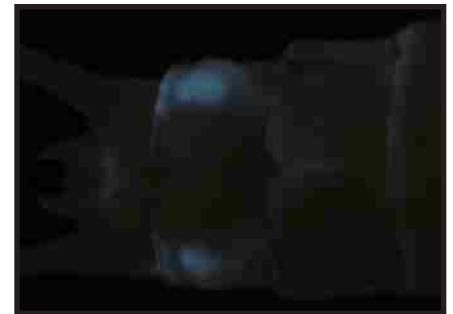


Figure A396. Female subgenital plate. *Isoperla potanini*. Photo by J. Fazio.

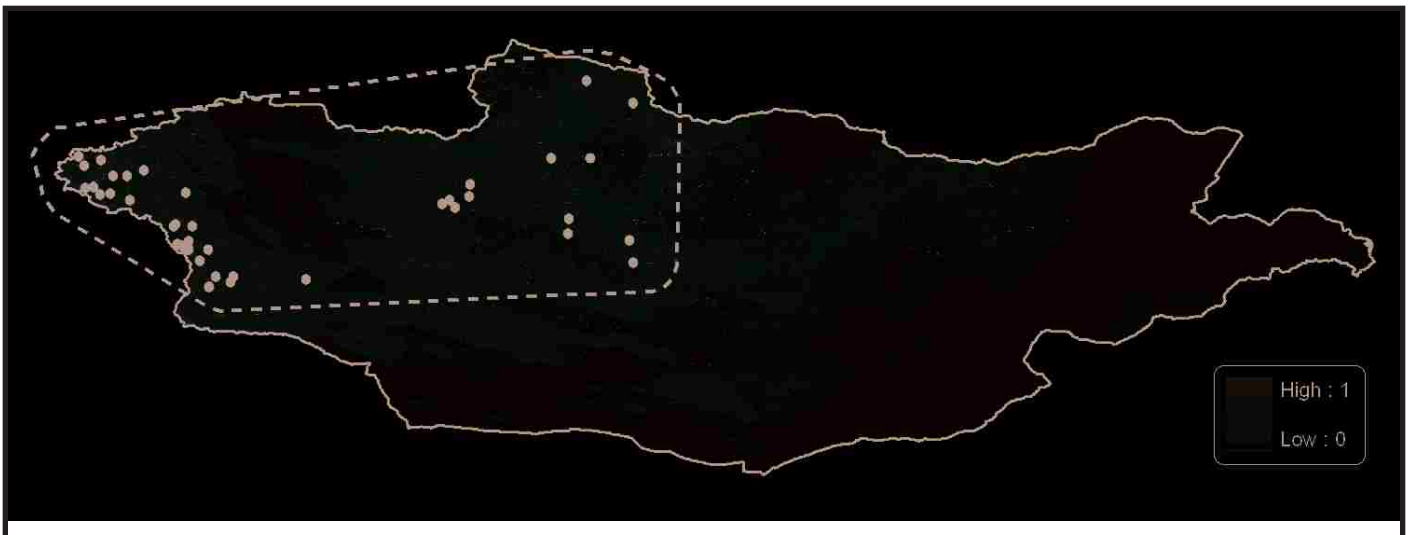


Figure A397. Predicted ENM Map with Documented Occurrences and Range Estimate. *Isoperla potanini*.

## PERLODIDAE

# *Kaszabia nigricauda* (Navas, 1923)



Figure A398. Habitus (preserved). *Kaszabia nigricauda*. Photo by S. W. Judson.

### SYNONYMY

*Isoperla nigricauda* Navas 1923  
*Kaszabia spinulosa* Rauser 1968  
*Kaszabia nigricauda* Zhiltzova 1979

**TYPE LOCALITY:** Mongolia

**DIAGNOSIS:** *K. nigricauda* has a dark central horseshoe-shaped marking on a otherwise pale head in addition to golden-yellow coloration on the anterior of the mesoscutum above the wing insertions (Figure A398). Similarly colored *I. kozlovi* (Figure A373, p. 157) shares these golden mesoscutum markings, but not the head coloration, whereas *I. obscura* lacks the golden markings but has a more infuscate head with fewer pale areas including an oval

parl mark in the ocellar region (Figure A388, p. 160) which *K. nigricauda* lacks. Male with unique dorsally-directed lateral processes on abdominal segments 3 and 4 (Figure A400). Male otherwise indistinct from *Isoperla* species. Female subgenital plate triangular with a rounded apex (Figure A401), resembling *I. obscura* and *I. kozlovi*. Also like *I. obscura*, plate long, completely covering segments 8 and 9 (Figure A390, p. 160), whereas the plate of *I. kozlovi* only extends over half of segment 9 (Figure A376, p. 157). Female specimens more readily distinguished by head and other coloration. Nymph coloration mimics adult pattern and is similar to *I. obscura* nymphs (Figure A418d, Teslenko 2008). Nymph otherwise highly similar to other *Isoperla*.

**DISTRIBUTION - Global:** East Palearctic - **Regional:** AOB, POB\* - **Aimag:** AR, DO\*, KhE\*, KhG, SE\*, TO, UB\*, ZA^

**DISCUSSION:** In Mongolia, *K. nigricauda* most often occurs in higher order streams (4+ order streams according to the Strahler method).



Figure A399. Male paraprocts. *Kaszabia nigricauda*. Photo by J. Fazio.

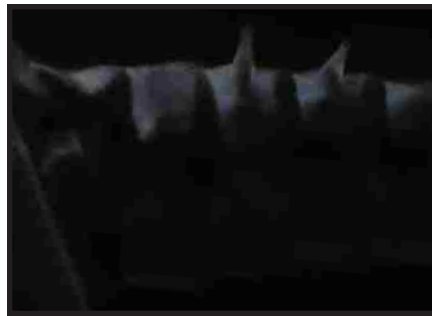


Figure A400. Male abdomen, lateral. *Kaszabia nigricauda*. Photo by S. W. Judson.

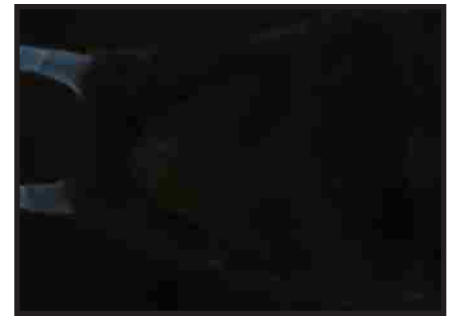


Figure A401. Female subgenital plate. *Kaszabia nigricauda*. Photo by J. Fazio.

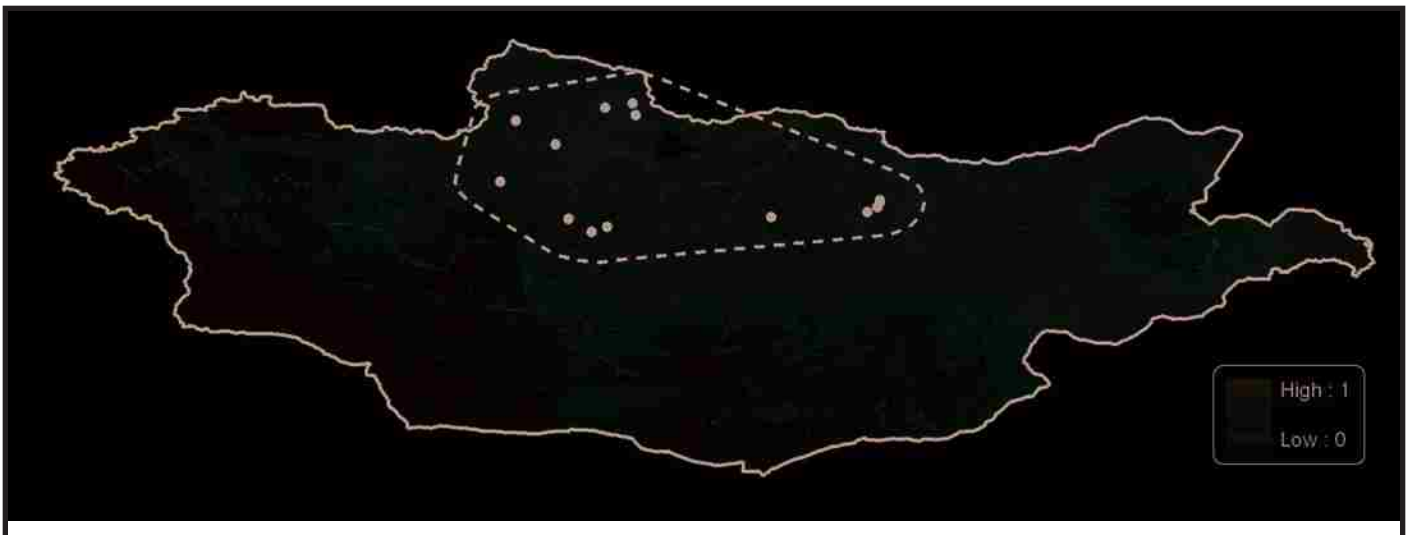


Figure A402. Predicted ENM Map with Documented Occurrences and Range Estimate. *Kaszabia nigricauda*.

Species Known from Mongolia (PERLODIDAE: *Arcynopteryx*, *Skwala*, *Diura*)

**Species:** *Arcynopteryx compacta*  
**Characteristics:** Male hemitergal processes curved. Sides of female plate gradually sloped.

**Species:** *Arcynopteryx polaris*  
**Characteristics:** Male hemitergal processes straight. Sides of female plate rounded.

**Species:** *Arcynopteryx sajanensis*  
**Characteristics:** Male hemitergal processes stout. Sides of female plate parallel and plate with broad depression..

**Species:** *Skwala asiatica*  
**Characteristics:** Male hemitergal processes stout. Male without external epiproct.

**Species:** *Skwala pusilla*  
**Characteristics:** Male hemitergal processes stout. Male without external epiproct.

Figure A403. a-e.  
Nymph head.

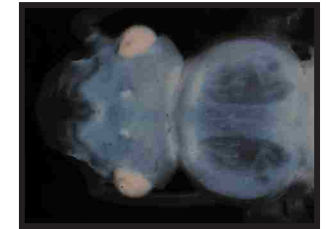
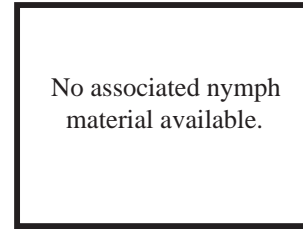
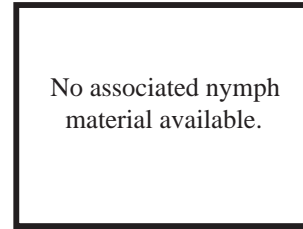
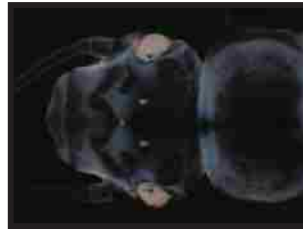


Figure A404. a-e.  
Adult head.

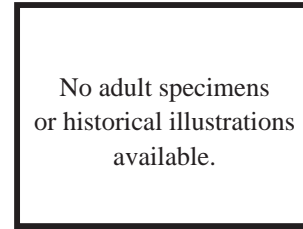
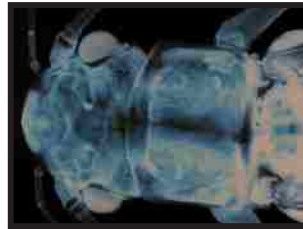


Figure A405. a-e.  
Male genitalia.

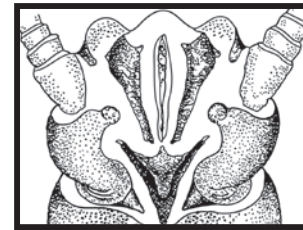


Figure A406. a-e.  
Female subgenital plate.

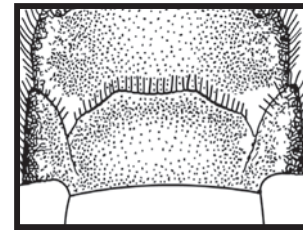
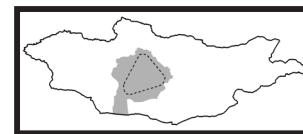
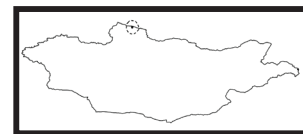


Figure A407. a-e.  
Distribution map.



Species Known from Mongolia (FAMILY: *Genus*)

**Species:** *Diura bicaudata*

**Characteristics:** Subanal lobes glabrous. Female plate shallowly notched.

**Species:** *Diura majuscula*

**Characteristics:** Subanal lobes hairy. Female plate broadly rounded.

**Species:** *Megarcys ochracea*

**Characteristics:** Thoracic and submental gills of nymph retained as remnants in adult.

**Species:** *Pictetiella asiatica*

**Characteristics:** Little external genitalia, but spinulose patches. Female plate greatly expanded.

**Species:** *Filchneria mongolica*

**Characteristics:** Spinulose patches on tergites. Female plate heart shaped.

Figure A408. a-e.  
Nymph head.

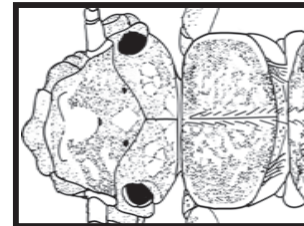
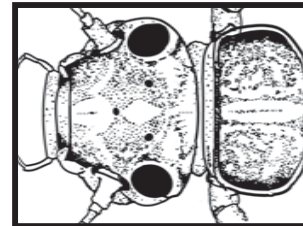
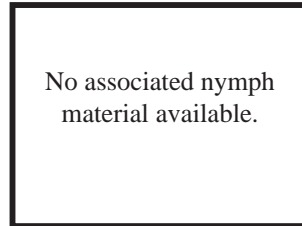
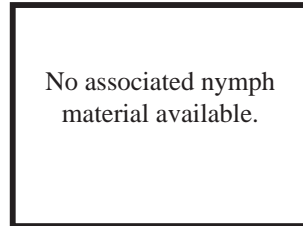


Figure A409. a-e.  
Adult head.

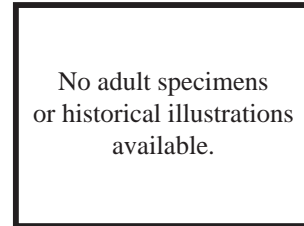
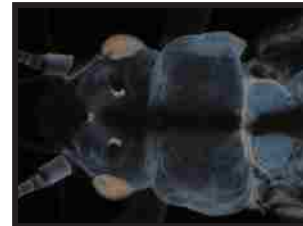
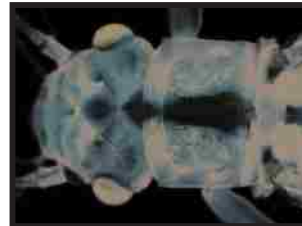


Figure A410. a-e.  
Male genitalia.

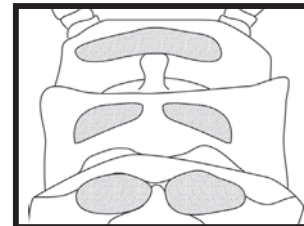
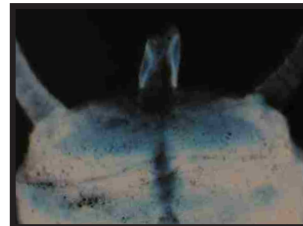


Figure A411. a-e.  
Female subgenital plate.

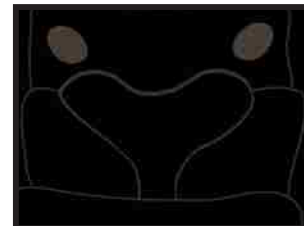
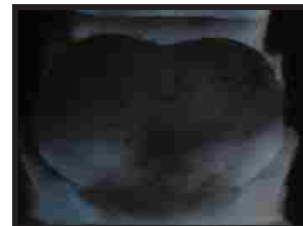


Figure A412. a-e.  
Distribution map.



Species Known from Mongolia (PERLODIDAE: *Isoperla*)

**Species:** *Isoperla altaica*

**Characteristics:** Center of head infuscate, with dark colored connections to the eyes.

**Species:** *Isoperla eximia*

**Characteristics:** Center of head infuscate, without continuation to connect to the eyes.

**Species:** *Isoperla asiatica*

**Characteristics:** Light mark in pronotum center rounded. Lobe present on sternum 8.

**Species:** *Isoperla mongolica*

**Characteristics:** Paraprocts spinulose. Female plate flush with sternum 8.

**Species:** *Isoperla potanini*

**Characteristics:** Diamond mark in center of head. Male lacking ventral lobe. Female plate bilobed.

Figure A413. a-e.  
Nymph head.



Figure A414. a-e.  
Adult head.



Figure A415. a-e.  
Male genitalia.

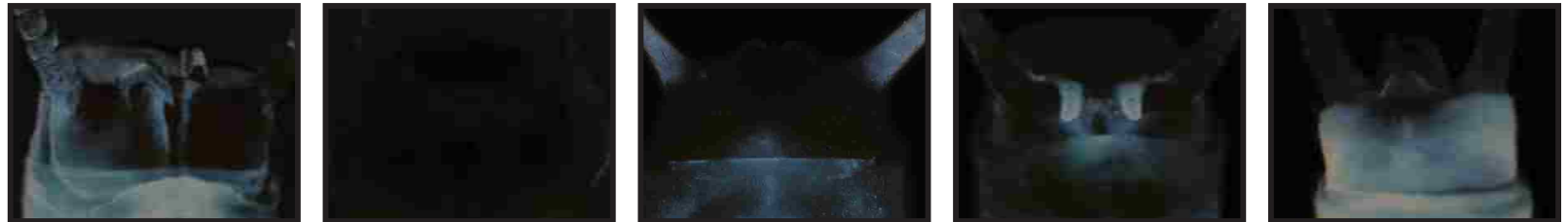


Figure A416. a-e.  
Female subgenital plate.

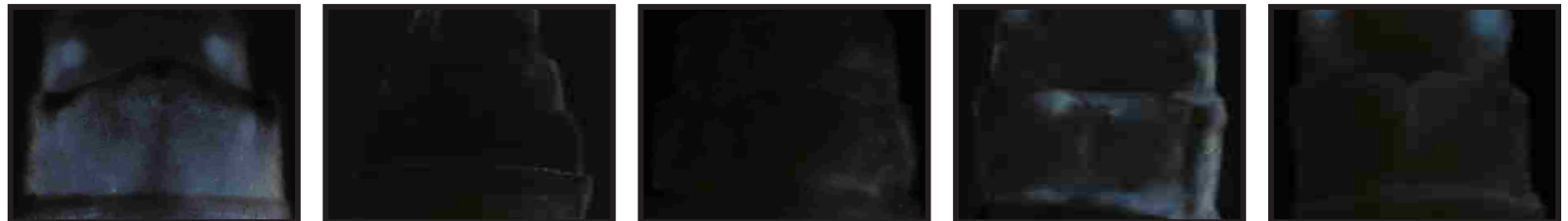


Figure A417. a-e.  
Distribution map.



Species Known from Mongolia (PERLODIDAE: *Isoperla*, *Kaszabia*, *Megarcsys*, *Pictetiella*)

**Species:** *Isoperla lunigera*

**Characteristics:** Light coloration with two lines on pronotum and central dark head mark.

**Species:** *Isoperla kozlovi*

**Characteristics:** Male with paired sclerites visible ventrally through the body wall.

**Species:** *Isoperla obscura*

**Characteristics:** Paraprocts often dark.

**Species:** *Kaszabia nigricauda*

**Characteristics:** Paraprocts stout. Female plate long.

Figure A418. a-d.  
Nymph head.

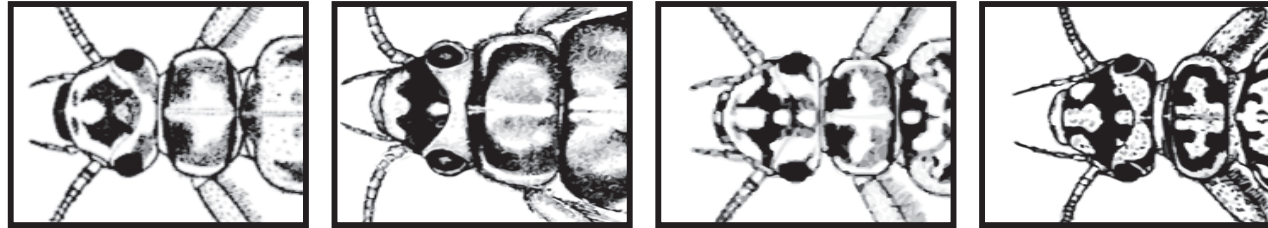


Figure A419. a-d.  
Adult head.

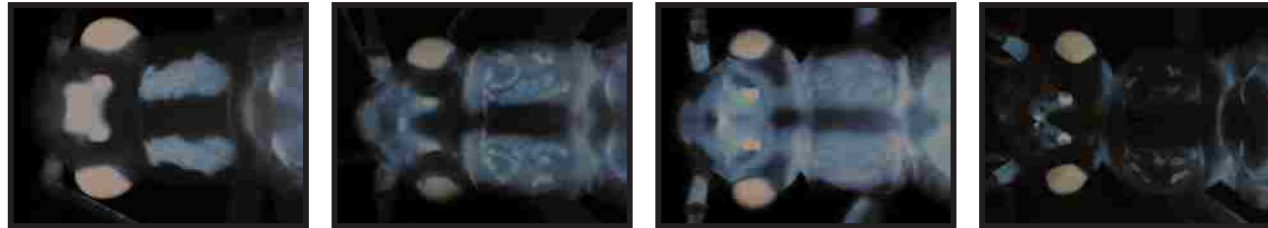


Figure A420. a-d.  
Male genitalia.



Figure A421. a-d.  
Female subgenital plate.



Figure A422. a-d.  
Distribution map.





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# PTERONARCYIDAE

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Figure A423. Habitus (live). *Pteronarcys reticulata*. Uur River (SRP2005071403). Photo by C. R. Nelson.

The nymphs of this family have an interesting way of reacting when disturbed by a predator. Pteronarcyid nymphs can autohemorrhage by forcing blood through pores in joints on the hind leg. This behavior is thought to cause a bad taste or serves to confuse predators.

**COMMON NAME:** Giant Stoneflies

**SIZE:** Large (15-70 mm)

**FEEDING GROUP:** Shredders

**TOLERANCE VALUE:** 0 (Low)

**CHARACTERISTICS:** Adults large, with characteristic red markings on the pronotal area (Figure A423) Nymphs have finely branched gills on all thoracic segments (Figure A5, p. 71) and the first two abdominal segments (Figure A4, p. 71). Shriveled remnants of these gills persist in the adults, although they are not as conspicuous as the remnants in Perlidae.

**NOTES:** The nymphs of these stoneflies are most commonly found in small swiftly flowing streams. They are found in areas of swift current in leaf packs and snags. The nymphs require 1-3 years to mature depending on their geographic location.

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## *Pteronarcys*

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**DIAGNOSIS:** Same as above.

**DISCUSSION:** The family Pteronarcyidae only has one representative from Mongolia, *Pteronarcys reticulata*. Many specimens were documented in the nymphal stage, but not as adults.

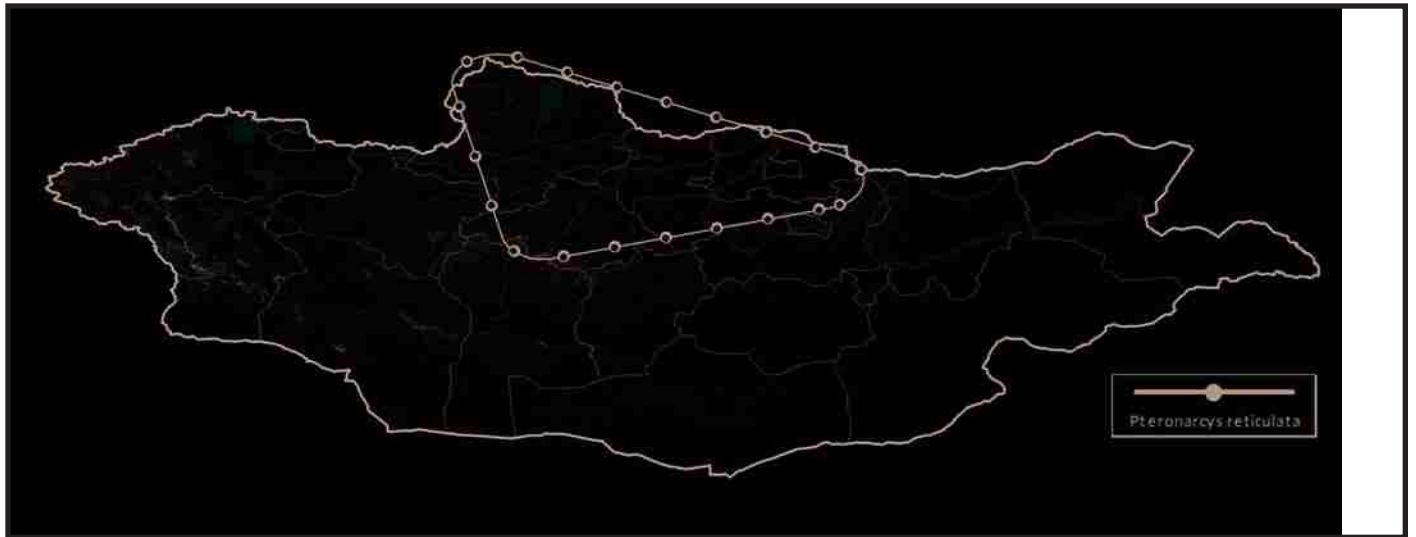


Figure A424. Comparative Distribution Map. *Pteronarcys*.

## PTERONARCYIDAE

### *Pteronarcys reticulata* (Burmeister, 1839)

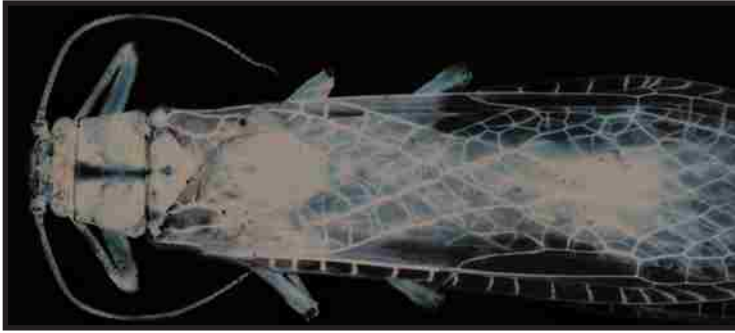


Figure A425. Habitus (preserved). *Pteronarcys reticulata*. Photo by S. W. Judson.

#### SYNONYMY

*Perla reticulata* Burmeister 1839  
*Pteronarcys reticulata* Pictet 1841  
*Allonarcys reticulata* Zwick et al. 1971  
*Pteronarcys reticulata* Nelson and Hanson 1971

**TYPE LOCALITY:** Siberia: Barnaul

**DIAGNOSIS:** This species is the only representative of Pteronarcyidae in Mongolia and can therefore be distinguished at the family level by size, coloration, and gill presence. Adult male hemitergal processes membranous with a medial sclerotized stripe (Figure A426). The hemitergal processes curve antero-medially towards sternum 10, as in Perlodidae like *Megarcys ochracea*

(Figure A335, p. 148). The female subgenital plate deeply notched with two tapered lobes directed towards the posterior (Figure A427). The plate superficially resembles *Paragnetina flavotincta* (Figure A273, p. 133). Nymph with outward extending protrusions on the corners of the pronotum (Figure A428). Nymph identity most readily confirmed by presence of branched gills on abdominal segments 1 and 2 (Figure A4, p. 71).

**DISTRIBUTION - Global:** East Palearctic - **Regional:** AOB - **Aimag:** AR<sup>^</sup>, BU, KhG<sup>^</sup>, SE

**DISCUSSION:** A similar species, *P. sachalina* Klapalek 1908, is widely known throughout the Palearctic and in sympatry with *P. reticulata*. It has yet to be documented in Mongolia but should not be dismissed from consideration in identifications. *P. reticulata* and *sachalina* are relatively indistinguishable in the nymphal stages (Zwick 2001).



Figure A426. Male, dorsal. *Pteronarcys reticulata*. Photo by J. Fazio.



Figure A427. Female subgenital plate. *Pteronarcys reticulata*. Photo by J. Fazio.



Figure A428. Nymph head. *Pteronarcys reticulata*. Photo by S. W. Judson.

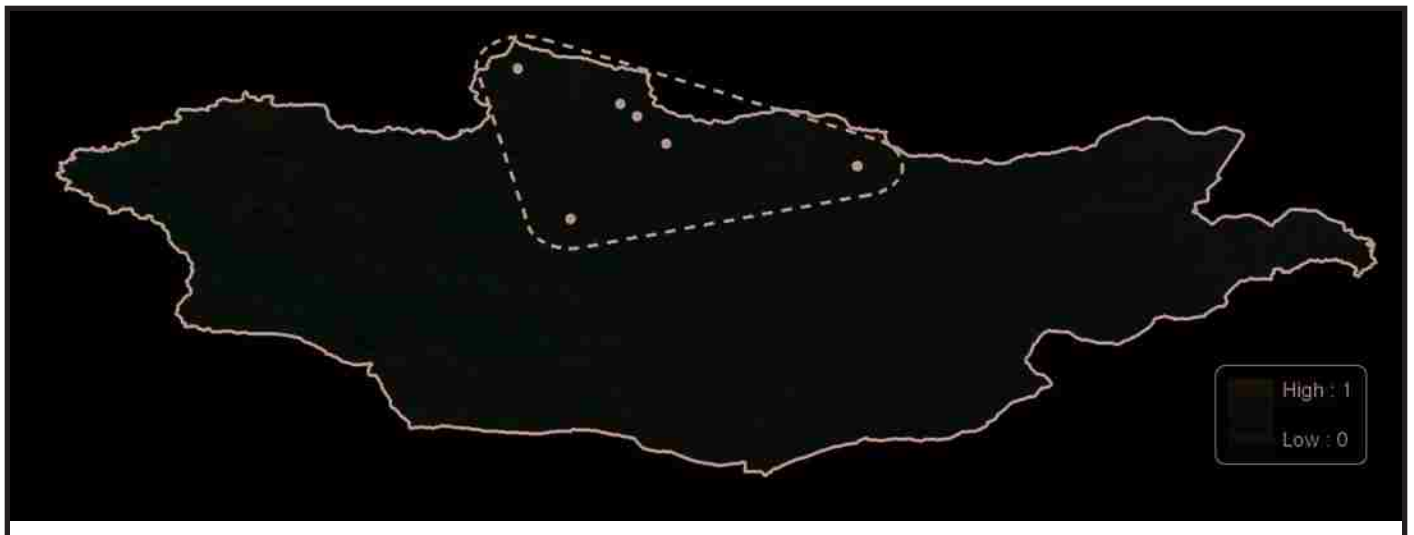


Figure A429. Predicted ENM Map with Documented Occurrences and Range Estimate. *Pteronarcys reticulata*.

# TAENIOPTERYGIDAE



Figure A430. Habitus (live). *Taenionema japonicum*. Springs of Shishged River (SRP2006063002). Photo by C. R. Nelson.

**COMMON NAME:** Winter Stoneflies

**SIZE:** Small to Medium (10-20 mm)

**FEEDING GROUP:** Shredders (Some Scrapers)

**TOLERANCE VALUE:** 2 (Low)

**DIAGNOSIS:** Both adults and nymphs distinguishable by the second tarsal segment being approximately equal to the first segment (Figure A9, p. 72). Adults superficially resemble those of the family Nemouridae in overall body shape, although they lack the characteristic “X” venation found in Nemouridae. In males, sternum 10 is long and often apparent from the dorsal view appearing to surround the genitalic structures like a cup (Figure A438, p. 171). The female subgenital plate is likewise long in most genera (Figure A439, p. 171), though barely produced in *Taeniopteryx* (Figure A445, p. 172). The nymphs are generally stout bodied with the pronotum considerably wider than abdomen.

The developing wing pads are greatly divergent from midline (Figure A12, p. 73). As with all Euholgnatha, the paraglossa of the labium do not extend beyond the glossa and the labial palps are robust (Figure A7, p. 72).

**DISCUSSION:** These stoneflies are found in flowing waters in root mats, snags, leaf packs and sometimes on stones. They are usually found at the edges of streams and rivers where the current is reduced. These stoneflies, like Capniidae, are known as winter stoneflies because the adults often emerge during cold months. Most species of this stonefly family are generally intolerant to pollution, but some species are well adapted to large polluted rivers.

1. Coxal gills present (Figure A431); dorsal processes present on abdomen (Figure A432); ventral triangular plate (Figure A434) absent.....*Taeniopteryx nebulosa*\* p.170, p.172

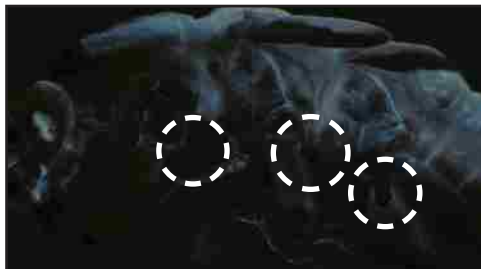


Figure A431. Thorax of *Taeniopteryx nivalis*, lateral. Location of coxal gills indicated by white dashed circles.

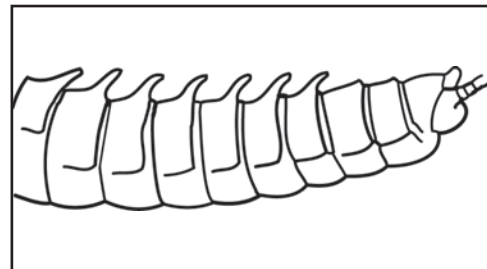


Figure A432. Abdomen of *Taeniopteryx nebulosa*, lateral. Illustration by S. W. Judson after Zwick 2004.

- 1'. No coxal gills (Figure A433); dorsal processes (Figure A432) absent from abdomen; ventral triangular plate present which extends to the apex of the abdomen (Figure A434).....  
 .....*Taeniopteryx japonicum*\* p.170, p.171

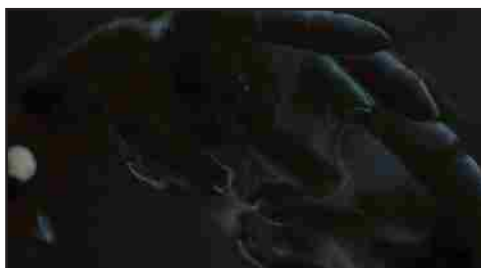


Figure A433. Thorax of *Taenionema pallidum*, lateral. Photo by S. W. Judson.



Figure A434. Terminal segments of abdomen of *Taenionema pallidum*, ventral. Photo by S. W. Judson.

## TAENIOPTERYGIDAE

### *Taenionema*, *Taeniopteryx*



Figure A435. Habitus (live). *Taenionema japonicum*. Springs of Shishged River (SRP2006063002). Photo by C. R. Nelson.

with ventral vesicle (Figure A444, p. 172) which *Taenionema* lacks. Cerci of male with an enlarged single segment appearing nearly touching the epiproct (Figure A443, p. 172). Female subgenital plate barely produced and broadly rounded (Figure A445, p. 172). Nymph with coxal gills (Figure A431, p. 169). Nymph abdomen with dorsal processes on each segment (Figure A432, p. 169). Nymph lacks the ventral triangular plate present in *Taenionema*.

**DISTRIBUTION - Global:** Holarctic - **Regional:** AOB\* - **Aimag:** KhG\*

#### *Taenionema*

**DIAGNOSIS:** Cerci with multiple segments (Figure A438, p. 171), whereas *Taeniopteryx* males has only one stout segment. Genitalia of male outlined with a sclerotized triangle (Figure A438, p. 171). Male sternum 10 long, surrounding the genitalia and cerci (Figure A438, p. 171). Female subgenital plate extends over sternum 9 and over half of sternum 10 (Figure A439, p. 171). Nymph with a ventral triangular plate which reaches the abdomen apex (Figure A434, p. 169). Nymph without the coxal gills and dorsal abdominal processes that are present in *Taeniopteryx*.

**DISTRIBUTION - Global:** Holarctic- **Regional:** AOB, IDB - **Aimag:** AR<sup>^</sup>, BO, KhG<sup>^</sup>, SE

#### *Taeniopteryx*

**DIAGNOSIS:** Male epiproct short (Figure A443, p. 172), nearly round from the dorsal view. Sternum 10 of male visible from dorsal aspect, but not extending around the genitalia and cerci as in *Taenionema*. Male

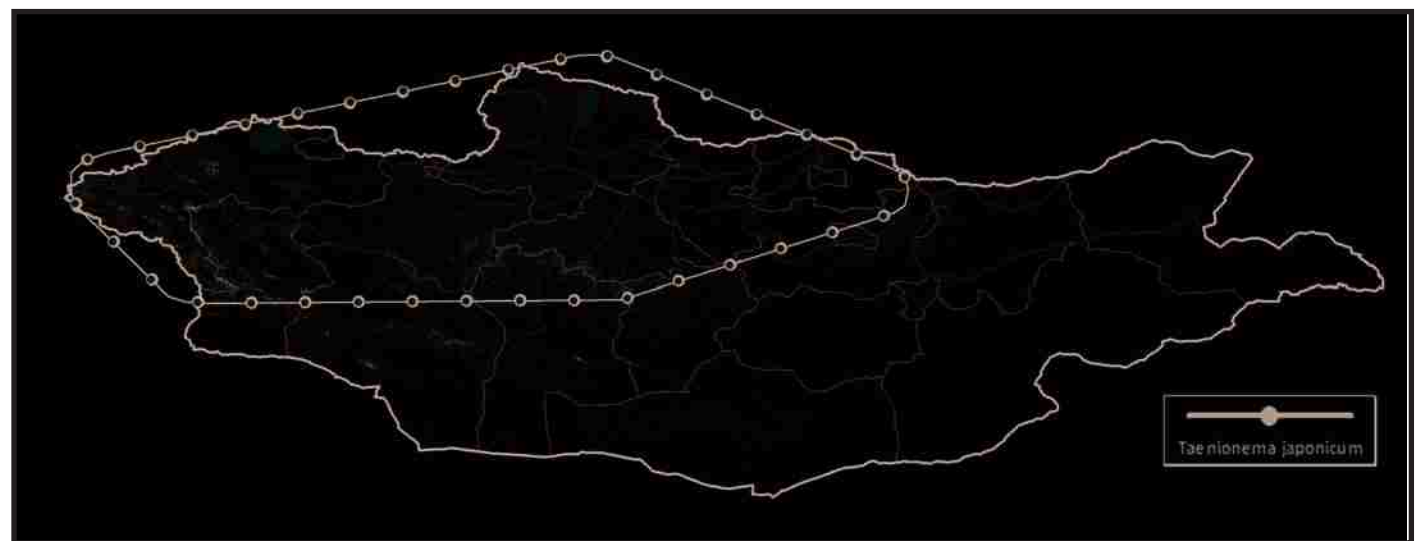


Figure A436. Comparative Distribution Map. *Taenionema*. *Taeniopteryx* not shown due to lack of georeferenced localities from historical records.

## TAENIOPTERYGIDAE

# *Taenionema japonicum* (Okamoto, 1922)



Figure A437. Habitus (preserved). *Taenionema japonicum*. Photo by S. W. Judson.

genitalia and cerci (Figure A438). *Taeniopteryx nebulosa* has a less pronounced sternum 10 (Figure A443, p. 172) and has a ventral vesicle (Figure A444, p. 172) which *Taenionema japonicum* lacks. Male cerci with multiple segments (Figure A438), whereas *Taeniopteryx nebulosa* has only one stout segment (Figure A443, p. 172). Female subgenital plate gradually tapering to a rounded tip (Figure A439). Plate long, completely bisecting sternum 9 and nearly extending to the abdomen apex. Nymph with a ventral triangular plate extending to the tip of the abdomen (Figure A434, p. 169). Nymph lacks the coxal gills and dorsal abdominal processes present in *Taeniopteryx nebulosa*.

**DISTRIBUTION - Global:** East Palaearctic - **Regional:** AOB, IDB - **Aimag:** AR<sup>^</sup>, BO, KhG<sup>^</sup>, SE

**DISCUSSION:** Although *T. japonicum* is commonly encountered in rivers of various size, we also documented it in springs and marshes in Mongolia.

### SYNONYMY

*Rhabdiopteryx japonica* Okamoto 1922  
*Taeniopteryx japonica* Ueno 1935  
*Rhabdiopteryx japonicum* Illies 1966  
*Taenionema japonicum* Ricker and Ross 1975

**TYPE LOCALITY:** Japan

**DIAGNOSIS:** Adult coloration highly contrasting (Figure A437), especially when preserved. The head with a light central mark and light markings near the eyes. Pronotum with contrasting reticulations, especially at the lateral margins. Male genitalia demarcated by a sclerotized triangle (Figure A438). Sternum 10 of male extends dorsally, forming a cup-like shape around the



Figure A438. Male epiproct. *Taenionema japonicum*. Photo by J. Fazio.



Figure A439. Female subgenital plate. *Taenionema japonicum*. Photo by J. Fazio.

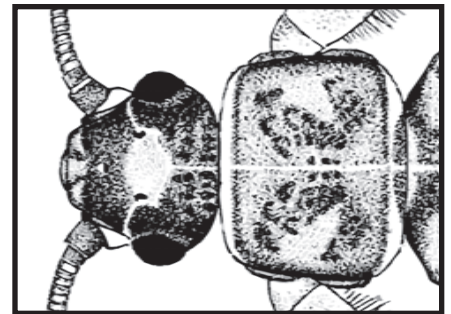


Figure A440. Nymph head. *Taenionema japonicum*. Illustration by S. W. Judson.

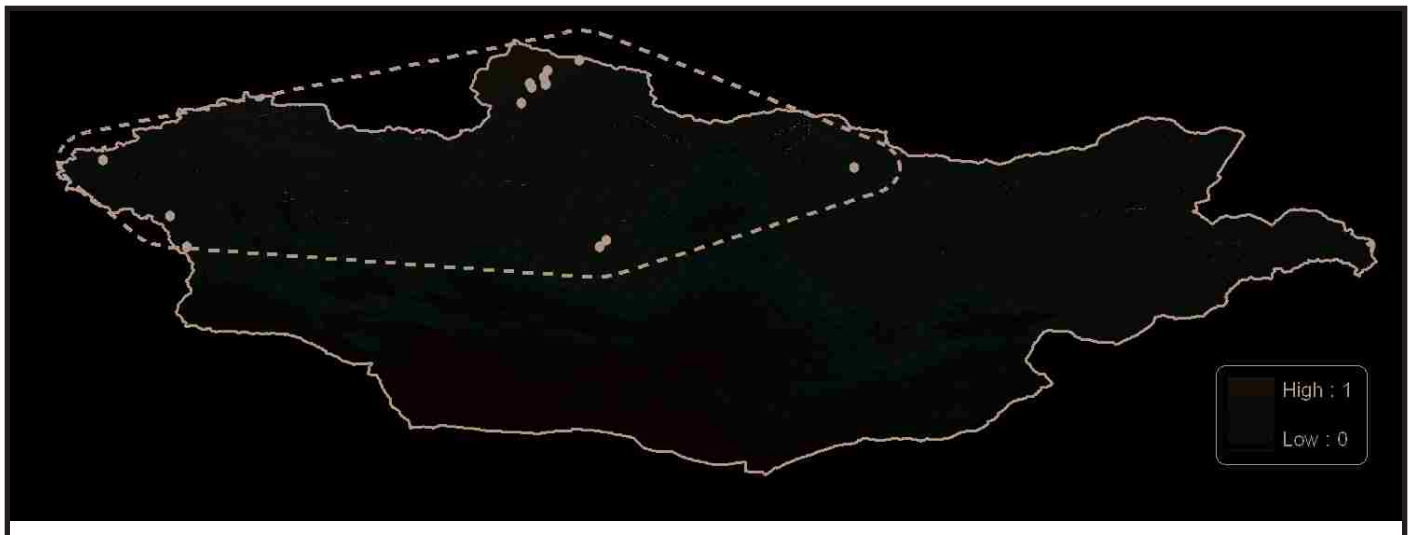


Figure A441. Predicted ENM Map with Documented Occurrences and Range Estimate. *Taenionema japonicum*.

## TAENIOPTERYGIDAE

### *Taeniopteryx nebulosa* (Linnaeus, 1758)



Figure A442. Habitus (preserved). *Taeniopteryx nebulosa*. Photo by S. W. Judson.

#### SYNONYMY

*Phryganea nebulosa* Linnaeus 1758  
*Nemoura nebulosa* Olivier 1811  
*Taeniopteryx nebulosa* Claassen 1940

**TYPE LOCALITY:** Sweden

**DIAGNOSIS:** Coloration uniform on head and pronotum (Figure A442), without reticulations or contrasting patterns as in *Taenionema japonicum* (Figure A437, p. 171). Male epiproct short and stout (Figure A443), resembling that of *Eucapnosia brevicauda* (Figure A45, p. 80). Tergum 10 has four shallow lobes on the posterior margin and closely borders the anterior side of the epiproct. Sternum 10 of male (Figure A443) not as dorsally

extended as in *Taenionema japonicum* (Figure A438, p. 171). Male with a ventral vesicle (Figure A444) superficially similar to those of *Nemoura* (Figure A205, p. 118). Cerci of male with a single segment appearing inflated and nearly touching either side of the epiproct (Figure A443), whereas *Taenionema japonicum* has multiple cercal segments (Figure A438, p. 171). Female subgenital plate barely produced and broadly rounded (Figure A445), in stark contrast to *Taenionema japonicum* whose plate extends nearly to the tip of the abdomen. Nymph has 3-segmented coxal gills that are telescopic (Figure A431, p. 169). Abdomen of nymph with dorsal processes (Figure A432, p. 169), causing the nymph to appear serrate from the lateral view. Nymph lacks the ventral triangular plate present in *Taenionema japonicum*.

**DISTRIBUTION - Global:** Trans-Palaeartic - **Regional:** AOB\* - **Aimag:** KhG\*

**DISCUSSION:** This species has only been documented in the nymphal stage at Lake Khovsgol. Adult records and additional nymph collecting are needed to confirm its occurrence in Mongolia.

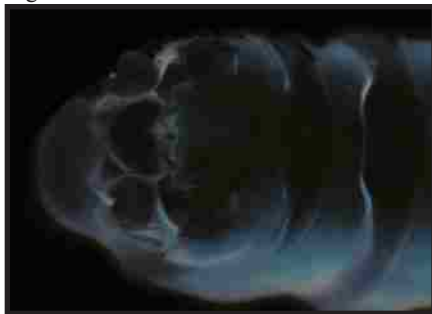


Figure A443. Male epiproct. *Taeniopteryx nebulosa*. Photo by S. W. Judson.



Figure A444. Male, ventral. *Taeniopteryx nebulosa*. Photo by S. W. Judson.



Figure A445. Female subgenital plate. *Taeniopteryx nebulosa*. Photo by J. Fazio.

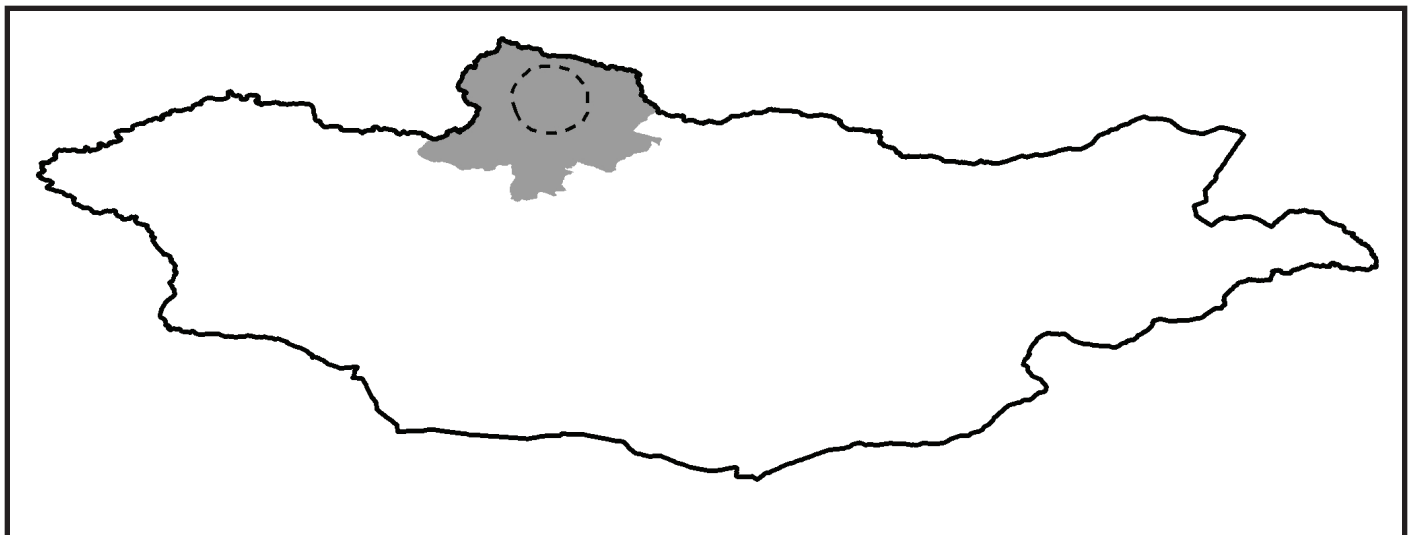


Figure A446. Historical Records Map with Range Estimate. *Taeniopteryx nebulosa*.

Species Known from Mongolia (FAMILY: *Genus*)

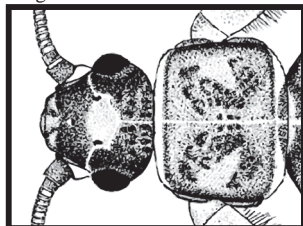
**Species:** *Taenionema japonicum*

**Characteristics:** Light markings on head and pronotum. Male with sclerotized triangle. Female plate long.

**Species:** *Taeniopteryx nebulosa*

**Characteristics:** Coloring uniform. Epiproct stout. Single cercal segment. Female plate short.

Figure A447. a-b.  
Nymph head.



No associated nymph material available.

Figure A448. a-b.  
Adult head.

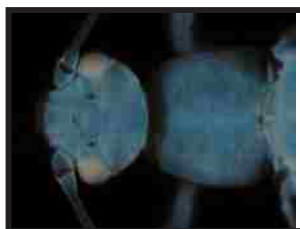


Figure A449. a-b.  
Male genitalia.



Figure A450. a-b.  
Female subgenital plate.



Figure A451. a-b.  
Distribution map.



## APPENDIX B. ENGLISH TRANSLATIONS OF SELECT SPECIES DESCRIPTIONS.

Relevant original species descriptions are given here as translated from Russian by Tristan A. McKnight. These descriptions are not readily available otherwise and were transmitted to taxonomic experts that expressed interest in them. The species descriptions are given in alphabetical order.

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*Diura majuscula* (Klapálek, 1912), sp. dist.

Translated from:

Zhiltzova, L. A. 1975. On the fauna of stoneflies (Plecoptera) of the Mongolian People's Republic, Second contribution. *Insects of Mongolia* 3:26-32.

Center: Ulan-Bataar city 14 June 1967 (K.), 1♂.

This species, initially described from two Siberian specimens (♂ and ♀), was later synonymized. Brinck (Brinck 1949) considered it to be an artificial grouping, with the male belonging to *D. nanseni* (Kempny) and the female to *D. bicaudata* (L.). All subsequent authors have followed Brinck and counted only two species of Palearctic *Diura*, *D. bicaudata* and *D. nanseni*, synonymizing all other species described from the region.

When we attempted to identify ♂ *Diura* from Mongolia it appeared that there were three—not two—distinguishable species. This male, together with a whole series of males from Siberia and the Far East, was noticeably larger than *D. nanseni*, but



resembled it in having pile on the subanal lobe. After further investigation, we discovered that the Mongolian specimen and the Siberian and Far East series exactly matched the description and type specimens of *D. majuscula*. Because of its clear (albeit quite minor) distinguishing characteristics, we now separate *D. majuscula* again as a stand-alone species. We were able to clearly distinguish all three species when we inspected the ZIN collection of *Diura*. The shape of the genital plate in ♀ *D. majuscula* is very similar to that of *D. bicaudata*, indeed, this was why the females of these species were formerly synonymized. Given the wide variability in genital plate form, it has been difficult to differentiate the females of these two species. In general, however, the genital plate in *D. bicaudata* is a little shorter, has a depression along the posterior edge, and is often slanted down the sides. The *D. majuscula* genital plate is longer, almost always flat along the posterior edge, and its sides are only rarely slanted. These differences are more apparent in alcohol-preserved specimens than dry ones.

The following are key distinguishing characters for ♂ *D. majuscula*:

- 1) Larger body size, especially in comparison to *D. nanseni*.
- 2) Although the subanal lobes are pilous like in *D. nanseni*, they clearly differ on the sides and venter, as shown in Klapálek (1912: 46, fig. 43, a-c). The lobe's upper sides are less gibbous (looking from the bottom) in *D. majuscula*. Also, *D. nanseni* has pillow-like protuberances forming a little ledge just underneath the top edge that are absent or unnoticeable on the smooth upper sides of *D. majuscula*'s lobe as depicted by Klapálek. Note also, that the distal apex of the subanal lobe (drawn by Klapálek with a blunt tip) is usually rounded, but appears blunt in dried specimens.

3) ♂ *D. majuscula*, just like *D. nanseni*, is long winged, but ♂ *D. bicaudata* has severely shortened wings.

Coloration in *Diura* species, like most stoneflies, is extremely variable, but it is possible to distinguish a few general differences in head coloration between the three species. In particular, *D. majuscula* has a characteristically sharply outlined light-colored “M”-line on the head, which appears in *D. bicaudata* usually as a dark and weakly defined line, sometimes growing lighter at the middle near the forward eyes or on the sides by the antennal bases. The dark-colored M-line in *D. nanseni* is nearly indistinguishable from this species’ general darker background coloration. Specimens in alcohol show these differences better than dry ones.

Distribution: Siberia, Far East, Mongolia. According to the material held at the ZIM collection, *D. majuscula* is found in Altai, Sayan, the Ob basin (lone specimens), the Yenisei river (up to its mouth), the Lena river (until Vilui), Kolyma (Omsukchan), Greater Shantar Island in the Sea of Okhotsk, the Sikhote-Alin mountains, the Amur river basin, and in Kamchatka. The type specimens (1 ♂ and 1 ♀) come from Bazaikha (Krasnoyarsk) and Ust-Kutsk on the Lena. Klapálek wrote the following label for the ♂: Kutek Mündung Sibir. bor. 18. V. 1875 leg. Czekanovski. Comparing this label to our knowledge of Czekanovski’s route, we are sure that this is a distortion of the word Ust-Kutsk.

We present the following key for ♂ of the three *Diura* species:

- 1(2). ♂ short-winged, subanal lobe smooth, without pile.....*D. bicaudata*
- 2(1). ♂ long-winged, subanal lobe with pile.
- 3(4). Small species, ♂ wingspan 22 mm, swellings on the subanal lobe are clearly visible

from the sides and venter.....*D. nanseni*  
4(3). Large species, ♂ wingspan 30-33 mm, swellings on the subanal lobe are  
unnoticeable from the sides.....*D. majuscula*

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*Nemoura nigrodentata* Zhiltzova, sp. n.

Zhiltzova, L. A. 1980. A new species of the genus *Nemoura* (Plecoptera, Nemouridae) from Mongolia and Khabarovsk district. *Insects of Mongolia*. 7:28-30.

Only three species from the genus *Nemoura* have been known until now from Mongolia: *N. arctica mongolica* Zhiltzova 1972, *N. sahlbergi* (Morton 1896), and *N. cinerea* Retzius 1783. After examining the Mongolian collections of I. M. Kerzhner and the Russian collections from Khabarovsk krai of V. V. Filippova and P. I. Yurchenko we here describe one more species, belonging to the *N. arctica* Esben-Petersen group. The holotype and paratypes of this new species have been deposited in the collection of the Zoological Institute of the USSR Academy of Sciences in Leningrad.

A relatively small species. Body length ♂ 5-6, ♀ 6.5-7.8 mm, forewing length ♂ 6, ♀ 7 mm, wingspan ♂ 12.5-13, ♀ 14.2-16 mm. Body color is blackish brown; head black, antennae long, black; pronotum black-brown with calloused sculpturing in the same color, pronotum sides lightly tapered posteriorly with widely rounded corners. Wings are boldly infuscated brown with brown veins, noticeably darker in the area of the X-shaped figure, both sexes have long wings. Legs are brownish-yellow, very elongate, especially in the male, and with dark stripes visible on the sides of the 3<sup>rd</sup> pair of legs: two long transverse stripes, and a short one rising from the base of the femur; these

stripes are either very weak or altogether absent on the femora of the other legs; second and third tarsomeres dark brown.

♂ (Fig. 1-5). Genital plate wide and short with rounded sides, distal end shortened, tapered ventral knob relatively short, wide and constricted at the base. Paraprocts wide, faintly outlined around the base, blunt at the tips with rounded corners and slightly concave posteriorly from which light, membranous lumps emerge with an elongate posterior-peripheral edge. Cerci large, black in the lateral half, sclerotized, tips with a wide and blunt laterally extending protuberance ending in a row of little teeth (these protuberances have a slightly different form in the males from Khabarovsk), top of the cercus rounded medially, covered in thick hairs; a black, twisted, hooked prong emerges medially over a light background patch of the cercus, this hook is pointed backwards and medially, but somewhat variable in shape. Epiproct widely oval, a little elongated, blunt anteriorly and constricted somewhat posteriorly, weakly rounded and with two pointed sclerites directed forward from the center. Inner sclerites trace two wide semicircles. Two dark stripes appear perpendicularly across the epiproct, slightly curving outward, narrow, but widening toward the edges of the epiproct.

♀. Sternite VII light, medial section swollen and elongated; genital plate covers the shortened sternite VIII and reaches the anterior edge of sternite IX. Genital plate light, with only a narrow stripe on its posterior edge dark; posterior region rounded, only gently protruding in an angular fashion in the middle. Cerci of normal shape, short, dark, cylindrical.

This species is very similar to *N. sahlbergi* in the shape of the male epiproct and paraprocts; the main differences between the two are the following: the strongly

sclerotized cerci, the form of the lateral prong on the tip of the cercus (wide, ending in a row of little teeth) and the shape of the extra prong on the dorsal side of the cercus (the prong in *N. sahlbergi* is thinner and directed forward, whereas in this species the prong is large, directed backward and forms a twisted hook). A few minor differences can also be noticed in the shape of the epiproct: a somewhat different shape in the inner sclerites and the larger diameter that they encompass, narrower slanted stripes on the upper side of the epiproct and so on. Genital plate in the female is less three-cornered and lighter than in *N. sahlbergi*.

Distribution: northern part of the river Amur basin.

Holotype: ♂, USSR, Khabarovsk krai, village Evoron (Amur basin), 30 VI 1977 (V. Filippova), Paratype. USSR. Khabarovsk krai: same locale as holotype (V. Filippova), 1♀; village Kharpichan, river Gorin (Amur basin), 23 VI 1977 (V. Filippova), 1♀; “Khabarovsk krai”, 6-11 VI 1969 (P. Yurchenko), 8♂ 13♀. Mongolia, Khenteiskiy aimag: river Onon at the somon Binder, 6 VII 1976 (I. Kerzhner), 1♂.

We studied a series of *N. sahlbergi* specimens from Mongolia, Altai and Sayan. All of them, despite a little variability, had clear differences compared to this new species in the shape of the cerci and paraproct. The most useful traits were how the extra prong on the dorsal side of the cercus is smaller, directed forward and has a different shape. The subspecies *N. sahlbergi problematica* described by Zwick (1973), is apparently yet another independent species close to *N. sahlbergi*, because it lacks the characteristic cercus prong of *N. sahlbergi* and *N. nigrodentata*.

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*Skwala asiatica* Zhiltzova, sp.n.

Translated from:

Zhiltzova, L. A. 1972. On the fauna of stoneflies (Plecoptera) of the Mongolian People's Republic. *Insects of Mongolia* 1:113–150.

Body length ♂ 15-17, ♀ 18-20 mm; forewing length ♂ 6-7, ♀ 20 mm, wingspan ♀ 43 mm (the ♂ has severely shortened wings). The body length of these dry specimens has apparently changed a little from the actual size.

Body coloration overall is dark brown, but there is a distinctly lighter triangular spot between the eyes (not protruding beyond them) which continues to the back of the head and appears to be a continuation of the light stripe on the pronotum. The forward edge of the head is straight or slightly convex medially, the foremost corners of the head are somewhat lighter, the frons [not sure here, it literally translates as “forehead callus”] is slightly convex, dark, but clearly delineated; there is a sunken lighter area from the ocelli outward along the epicranial suture. The palps and antennae are dark brown. The pronotum is dark, in dry specimens somewhat tapering forward and trapezoidal, and narrower at its apical end than the rear of the head. The pronotum has a clear yellow stripe that narrows slightly in the middle, and lumps on the sides that while not differing in coloration, are clear to the eye. The mesothorax and metathorax are both dark brown, with a lighter narrow stripe along the mesothorax (this stripe is not clear in ♀). The wings of the ♀ are normally developed and extend far beyond the end of the abdomen. The ♂, however, has severely shortened wings, with the forewing reaching only to the 4th tergite and the hindwing poking out under the forewing to the middle or posterior edge of the 5th tergite.

♂ (fig. 3-7). Abdominal tergites V-VIII are elevated and pilose [?] in their posterior corners, with the projections getting progressively larger toward the end of the abdomen. IX tergite is cut away on its posterior edge, pushed away from the medial line to the edges and covered in thick hairs, with strong bristles near the far edge (fig. 3). A light spot of uncertain shape is noticeable on the sides of tergites VI-VIII, and segments IX-X are lighter than the previous. Protrubances on the split 10-th tergite are directed to the middle and slightly forward (in dry specimens), with gibbous, almost spherical ends that are covered with fine hairs (fig. 3). The epiproct is slightly bent upwards at the tip, banded on the sides with two sclerotized stripes, which first go straight back, then turn down (fig. 7). The basal anchor of the epiproct (fig. 3) makes a point when seen from above, while the ventral arch (seen in profile) is very large and long, joined at the end with a fairly complicated structure, lighter than the ventral arch, and pointing back and above to the end of the epiproct. In all dry specimens this appears as a narrow and rounded point, from the sides (in profile, a little in front) are visible two shorter and darker protrubences, usually hidden in the shell of the epiproct, which go along its upper reaches. The cerci have a wreath of strong hairs along their posterior end.

♀ (fig. 8). The subgenital plate of the VIII sternite is wide and short, extending somewhat trapezoidally from the posterior edge, but with the center of the posterior edge being straight or slightly concave. The IX sternite has two indistinct dark spots near the posterior corners. The posterior edge of the X tergite extends rearward into a point.

Material. Mongolia. Bayan-Khongorskiy aimag: Tuin-Gol river, Erdene-Tsogt region somoni (?), 14 VI 1949 (Erlon), 7♂ 5♀ (including the ♂ holotype); Bayan-

Khongorskiy or Uver-Khangaiskiy aimag: from the river Tuin-Gol to Arbai-Khere, 16 VI 1949 (Erlon), 1♂ 1♀. Terminalia of 2♂, 1♀ are in mounts 1702, 1706.

Notes: The described species is very close to *S. brevis* Koponen (*vernalis* Rauser) because the absence of the lone stylet in the ♂. The main distinguishing features for this species are as follows: a more significant ventral arch in the basal anchor of the epiproct; an oblong process emerging from the tip of the epiproct that resembles the lone stylet of *Arcynopteryx* (in *S. brevis* this structure ends in a wide, membranous, round knob that is hidden inside the epiproct); a different form for the distal half of the epiproct's internal skeleton (the part going back from the end of the ventral arch of the basal anchor is strongly widened in the middle in *S. brevis*); and the presence of grooves (deeper in dry specimens) on the IX abdominal tergite♂. Some differences in size and external appearance are: larger body size, large wingspan (43 mm in *S. asiatica*, but only around 30 mm in *S. brevis*), ♀ wings that extend far beyond the end of the abdomen (*S. brevis* also has wings that reach beyond the tip of the abdomen, but they are somewhat shorter); severely shortened wings in♂ (the ♂ in *S. brevis* is long-winged); darker body color; the spot between the eyes is wider at its base and more blurry (in ♀ *S. brevis* this spot is constricted where it continues on the back of the head); the ornaments on the pronotum match the dark brown background coloration (in *S. brevis* these are darker from the side view); presence of a light stripe on the ♀ mesothorax.



## **APPENDIX C. MATERIAL EXAMINED.**

The material examined is recorded similar to specimen labels as follows:

BULGAN Aimag, Teshig Soum, Egiin Gol River above (12.7 km SW of) Teshig, N 49.88884°E 102.50909° , 997 msl, 11 July 2005, CRNelson, 2♂, 1♀, SRP2005071101, (003BYU).

The aimag (i.e. state/province) is given in all capital letters, followed by the soum, locality name, GPS coordinates (if available), elevation (if available), date (in the format DD Month YYYY), and collector. If specimen counts were taken, these are reported as Male and Female counts, if not, they are instead described as “1 lot” meaning 1 vial likely with multiple specimens therein. Finally, the MAIS or SRP field number of the locality is given, followed by the record number given in parentheses which, in order to be a unique identifier, includes the first three letters of the depository where the specimen is permanently housed. In the MAIS database (Appendix F) each specimen is assigned such a record number for tracking purposes which is also written on a label and placed in the vial associated with the specimen.

Such summation of localities is given for each species as recorded in the MAIS database. The material examined is organized alphabetically by family then by species.

Abbreviations for the depository institutions, which are also the sister universities of this project, are as follows:

ANSP = Academy of Natural Sciences, Philadelphia PA

BYU = Brigham Young University, Provo UT

CU = Clemson University, Clemson SC

IMH = Institute of Meteorology and Hydrology, Mongolia

NUM = National University of Mongolia, Mongolia

WSC = Wayne State College, Wayne NE

## **Capniidae**

***Capnia khulsbagia*** - MONGOLIA: KHOVSGOL Aimag, Khank Soum, Hosgol Lake at Khank , 15 June 1996, J. Gelhaus, 1 lot, JKG720, (608ANSP). KHOVSGOL Aimag, Soum, Sevsuuliyn gol , 1995, J. Gelhaus, 1 lot, JKG724, (619ANSP). KHOVSGOL Aimag, 1995, J. Gelhaus, 1 lot, JKG719, (606ANSP).

***Capnia nigra*** - MONGOLIA: BAYAN-OLGII Aimag, Tsengel Soum, Altai Tavan Bogd National Park, Tsagaan Gol, Tavan Bogd Road's End Camp, 20 km west of Zagastnuur Bag, N 49.09159° E 88.10411° , 2381 msl, 9 July 2008, CRNelson, 1♂, 1♀, MAIS2008070902, (044BYU). KHOVSGOL Aimag, Renchinlumbe Soum, Jarin Gol, 32.8 km N of Renchinlumbe, river crossing N 51.39852° E 99.75011°, 1575 msl, 2 July 2006, JKGelhaus, 2 ♂, SRP2006070203A, (036ANSP). KHOVSGOL Aimag, Renchinlumbe Soum, Jarin Gol, 32.8 km N of Renchinlumbe, river crossing N 51.39852° E 99.75011°, 1575 msl, 2 July 2006, JKGelhaus, 2♂, SRP2006070203A, (535BYU). KHOVSGOL Aimag, Renchinlumbe Soum, Jarin Gol, 32.8 km N of Renchinlumbe, river crossing N 51.39852° E 99.75011°, 1575 msl, 2 July 2006, JKGelhaus, 2 ♂, SRP2006070203A, (536ANSP). KHOVSGOL Aimag, Ulaanuul Soum, Gunain Gol, 12 km SW of Ulaan Uul N 50.61826° E 99.12094°, 1761 msl, 29 June 2006, JKGelhaus, 2♀, SRP2006062903, (020ANSP). KHOVSGOL Aimag, Soum, Locality data needs to be acquired from label 7 , 0, Da July Year, J. Gelhaus, 1 lot, JKG713, (601ANSP). KHOVSGOL Aimag, Soum, Locality data needs to be acquired from label 8 , 0, Da July Year, J. Gelhaus, 1 lot, JKG716\_751, (605ANSP). ZAVKHAN Aimag, Ider Soum, Dogshin/Nogoon Nuur ~21 km SE of Zuunmod/Ider N 48.06257° E 97.55064°, 2054 msl, 23 July 2004, JKGelhaus, 1♀, SRP2004072302, (041ANSP).

***Isocapnia guentheri*** - MONGOLIA: ARKHANGAI Aimag, Ikhtamir Soum, NW braid of Khoit Tamir Gol ~25 km SW of Ikhtamir N 47.50523° E 100.93208°, 1728 msl, 14 July 2004, SRP Team, 1 lot, SRP2004071402, (48IMH). ARKHANGAI Aimag, Ikhtamir Soum, Khoit Tamir Gol ~29 km SW of Ikhtamir N 47.48567° E 100.87875°, 1749 msl, 15 July 2004, SRP Team, 1 lot, SRP2004071501, (49IMH). BULGAN Aimag, Teshig Soum, Tariakhtain Gol Stream, junction by two major forks, N 49.77776° E 103.60860°, 1189 msl, 9 July 2005, C.R.Nelson, 1 lot, SRP2005070902, (000BYU). BULGAN Aimag, Teshig Soum, Tarvagatain (Marmot) Gol River at Egiin Gol River, N 49.70678° E 103.10288°, 909 msl, 10 July 2005, C.R.Nelson, 1 lot, SRP2005071001A, (1003BYU). KHOVSGOL Aimag, Renchinlumbe Soum, Jarin Gol, 32.8 km N of Renchinlumbe, river crossing N 51.39852° E 99.75011°, 1575 msl, 2 July 2006, CRNelson, 5 ♀, SRP2006070203A, (056BYU). KHOVSGOL Aimag, Soum, Ikh khoroo gol near Khovsgol Nuur , 0, Da July Year, J. Gelhaus, 1 lot, JKG722, (616ANSP). SELENGE Aimag, Bugant/Yaroo Soum, unnamed tributary of Yalbag Gol 49.7 km W of Zuunkharaa Bridge N 49.4577° E 106.5351°, 1115 msl, 17 July 2003, SRP Team, 1 lot, SRP2003071703, (14IMH). TOV Aimag, Soum, Ihtenger (town), Tul Gol and small streams, riparian dwarf Salix, S. of Ulaanbaatar N 47.88349° E 106.98829°, 23 June 2006, S. Podenas, 1 ♂, SRP2006062302, (064BYU). TOV Aimag, Soum, Gorkhi Terej National Park, Terej River just above Terej, N 47.99158° E 107.46717° , 1516, 28 July 2008, CRNelson, 2♂, 1♀, none (CRN8949), (059BYU). ZAVKHAN Aimag, Tosontsengel Soum, Delgarakhiin Gol ~16 km S of Tosontsengel N 48.61518° E 98.23096°, 1761 msl, 20 July 2004, SRP Team, 1 lot, SRP2004072001, (52IMH).

***Isocapnia kudia*** - MONGOLIA: KHOVSGOL Aimag, Renchinlumbe Soum, Arsayn Gol, 16.2 km N of Renchinlumbe town, N 51.25356° E 99.66687°, 1565 msl, 2 July 2006, C.R.Nelson, 1 lot, SRP2006070201, (96ANSP).

***Isocapnia sibirica*** - MONGOLIA: ARKHANGAI Aimag, Tsenkher Soum, Tsetseleg Gol ~17 km SW of Tavanbulag N 47.26999° E 101.80227°, 1684 msl, 10 July 2004, SRP Team, 1 lot, SRP2004071002, (40IMH). ARKHANGAY Aimag, Bulgan Soum, Urd Tamir Gol ~38 km SW of Tsetserleg N 47.28244° E 101.18793°, 1872 msl, 12 July 2004, SRP Team, 1 lot, SRP2004071201, (742IMH). TOV Aimag, Erdene Soum, Gorkhi Terej National Park, Tuul River 10.1 km upstream of Tuul River Bridge, N 48.09549° E 107.84265°, 1531 msl, 8 July 2003, SRP team, 1 lot, SRP2003070801, (699IMH).

***Mesocapnia altaica*** - MONGOLIA: BAYAN OLGII Aimag, Ulaanhus Soum, 21 km by air SE Syrgali N 48.44036° E 088.60204°, 2443 msl, 17 July 2008, C.R.Nelson, 1 lot, MAIS2008071701, (916BYU). BAYAN-OLGII Aimag, Sagsay Soum, Godon Gol, 18 km due North of Dayan, N 48.43687° E 88.90085° , 2245 msl, 17 July 2008, C.R.Nelson, 1 lot, MAIS2008071702, (917BYU). BAYAN-OLGII Aimag, Tsengel Soum, Altai Tavan Bogd National Park, Tsagaan Gol, Tavan Bogd Road's End Camp, 20 km west of Zagastnuur Bag, N 49.09159° E 88.10411° , 2381

msl, 9 July 2008, C.R.Nelson, 1 lot, MAIS2008070902, (904BYU). BAYAN-OLGII Aimag, Tsengel Soum, Altai Tavan Bogd National Park, Sul Uulim Gol, tributary of Tsagaan Gol, N 49.10450° E 88.04854° , 2795 msl, 10 July 2008, C.R.Nelson, 1 lot, MAIS2008071001, (905BYU). BAYAN-OLGII Aimag, Tsengel Soum, Altai Tavan Bogd National Park, unnamed tributary of Sul Uulim Gol, tributary of Tsagaan Gol, N 49.12007° E 88.01157° , 2912 msl, 10 July 2008, C.R.Nelson, 1 lot, MAIS2008071002, (906BYU). BAYAN-OLGII Aimag, Tsengel Soum, Altai Tavan Bogd National Park, Tavan Bogd ascent base camp, IMH Glacier Camp, unnamed creek tributary of Potitinini Gol of Tsagaan Gol, N 49.15035° E 87.94238° , 3099 msl, 10 July 2008, C.R.Nelson, 1 lot, MAIS2008071003, (907BYU). BAYAN-OLGII Aimag, Tsengel Soum, Altai Tavan Bogd National Park, Tavan Bogd Road's End Camp, springs above Tsagaan Gol, 20 km west of Zagaastnuur Bag, N 49.09754° E 88.10383° , 2538 msl, 12 July 2008, C.R.Nelson, 1 lot, MAIS2008071101, (908BYU). BAYAN-OLGII Aimag, Tsengel Soum, Khar Ovoo Gol, draining Khelkhee Lake, N 48.62918° E 88.28554° , 2147 msl, 15 July 2008, C.R.Nelson, 1 lot, MAIS2008071601, (914BYU). BAYAN-OLGII Aimag, Tsengel Soum, Sumdairag Gol, 12 km due South of Syrgal, N 48.50679° E 88.50977° , 2129 msl, 16 July 2008, C.R.Nelson, 1 lot, MAIS2008071604, (915BYU). BAYAN-OLGII Aimag, Ulaankhus Soum, Ulastai Gol, 2 km East of Khokh Ereg Military Base, N 49.31867° E 88.36613° , 2391 msl, 8 July 2008, C.R.Nelson, 1 lot, MAIS2008070802, (902BYU). BAYAN-OLGII Aimag, Soum, SWChorgon (Khurgan?) lake , 0, 17 July 1978, Puntsagdulan, 1 lot, Puntsagdulan17July1978, (883BYU). BAYAN-OLGII Aimag, Soum, SW Corgon-nuur(lake) , , 17 July 1978, , 2 ♀, 17-VII-1978 AltID (no MAIS/SRP), (429BYU).

*Mesocapnia variabilis* - MONGOLIA: ARKHANGAI Aimag, Chuluut Soum, ponds at Egiin Davaa ~47 km SW of Chuluut/Jargalant N 47.21198° E 99.91114°, 2582 msl, 16 July 2004, SRP Team, 1 lot, SRP2004071601, (750IMH). ARKHANGAI Aimag, Chuluut Soum, Chuluutin Gol ~45 km SW of Chuluut/Jargalant N 47.21768° E 99.92824°, 2471 msl, 16 July 2004, SRP Team, 1 lot, SRP2004071602, (751IMH). HOVSGOL Aimag, Khank Soum, Borsog River, near Hovsgol lake N 50.96147222° E 100.7250556° , 1689 msl, 27 Aug 2005, E. Sanaa, 1 lot, Hovsgol\_Borsog, (485IMH). HOVSGOL Aimag, Khank Soum, Shagnul River near Hovsgol Lake N 51.25869444° E 100.86000° , 1732 msl, 15 Aug 2005, E. Sanaa, 1 lot, Hovsgol\_Shagnuul, (502IMH). KHOVSGOL Aimag, Khank Soum, Khovsgol Lake, north side, Bayan gol N 51.6133404° E 100.6003475° , 20 July 1997, J. Gelhaus, 1 lot, JKG764, (650ANSP). KHOVSGOL Aimag, Soum, Hovsgol Nuur, Shagnuul gol , 0, Da July Year, J. Gelhaus, 1 lot, JKG767, (653ANSP). KHOVSGOL Aimag, Soum, Locality data needs to be acquired from label 15 , 0, Da July Year, J. Gelhaus, 1 lot, JKG765, (652ANSP). TOV Aimag, Erdene Soum, Gorkhi Terej National Park N 48.4208° E 107.91406°, 1818 msl, 28 July 2003, SRP Team, 1 lot, SRP2003072802, (737IMH). TOV Aimag, Erdene Soum, Gokhi Terej National Park, Tuul River 10.1 km upstream of Tuul River Bridge N 48.09549° E 107.84265° , 1531 msl, 8 July 2003, SRP Team, 1 lot, SRP2003070801, (99IMH). ZAVKHAN Aimag, Ikh-Uul Soum, Deed Tssetsukhiin Gol ~10 km NW of Solongotiin Davaa N 48.36436° E 98.92737° , 2072 msl, 25 July 2004, SRP Team, 1 lot, SRP2004072502, (758IMH).

## Chloroperlidae

*Alaskaperla longidentata* - MONGOLIA: ARKHANGAI Aimag, Chuluut Soum, Chuluutin Gol ~33 km SW of Chuluut/Jargalant N 47.29702° E 100.03136° , 2287 msl, 16 July 2004, ESanaa, 1 ♀, SRP2004071603, (063IMH). ARKHANGAI Aimag, Chuluut Soum, Khurmen/Davaat Gol 15 km SSE of Chuluut/Jargalant N 47.4258° E 100.3013° , 2104 msl, 15 July 2004, ESanaa, 12 ♂, 73 ♀, SRP2004071503, (062IMH). HOVSGOL Aimag, Khank Soum, Borsog River, near Hovsgol lake N 50.96147222° E 100.7250556° , 1689 msl, 14 July 2003, E. Sanaa, 1 lot, Hovsgol\_Borsog, (488IMH). HOVSGOL Aimag, Khank Soum, Dalbay River, near Hovsgol lake N 51.01908333° E 100.7595278° , 1662 msl, 18 July 2005, E. Sanaa, 1 lot, Hovsgol\_Dalbay, (492IMH). HOVSGOL Aimag, Khank Soum, Noyon gol, near Hovsgol Nuur N 51.20152778° E 100.8072778° , 1709 msl, 11 Aug 2003, E. Sanaa, 1 lot, Hovsgol\_Noyon, (496IMH). HOVSGOL Aimag, Khank Soum, Shagnul River near Hovsgol Lake N 51.25869444° E 100.86000° , 1732 msl, 4 Aug 2003, E. Sanaa, 1 lot, Hovsgol\_Shagnuul, (505IMH). HOVSGOL Aimag, Khank Soum, Turag River near Hovsgol Lake N 51.28775° E 100.8276389° , 1667 msl, 15 Aug 2005, E. Sanaa, 1 lot, Hovsgol\_Turag, (509IMH). KHOVSGOL Aimag, Khank Soum, Alag tsar river, near Hovsgol Lake , 1675, 13 July 1997, J. Gelhaus, 1 lot, JKG746Hay97061, (642ANSP). KHOVSGOL Aimag, Khank Soum, Hovsgol Nuur, Shagnuul gol , 0, Da July Year, J. Gelhaus, 1 lot, JKG767, (654ANSP). KHOVSGOL Aimag, Khank Soum, Noyon gol, near Hovsgol Nuur , 0, Da July Year, J. Gelhaus, 1 lot, JKG756, (645ANSP). KHOVSGOL Aimag, Khank Soum, Turagyn gol, E side Hovsgol Nuur N 51.2873608° E 100.8270800° , 17 July 1997, J. Gelhaus, 1 lot, JKG757, (646ANSP). KHOVSGOL Aimag, Renchinlumbe Soum, Hugin Gol, toll bridge, 46.8km N of Ulaan Uul town, N 51.09845° E 99.32051° , 1557 msl, 1 July 2006, CRNelson, 1 ♂, 3 ♀, SRP2006070101, (066BYU). KHOVSGOL Aimag,

Renchinlumbe Soum, Hugin Gol, toll bridge, 46.8km N of Ulaan Uul town, N 51.09845° E 99.32051°, 1557 msl, 1 July 2006, JKGelhaus, 2 ♂, 5 ♀, SRP2006070101, (017ANSP). KHOVSGOL Aimag, Renchinlumbe Soum, Hugin Gol, toll bridge, 46.8km N of Ulaan Uul town, N 51.09845° E 99.32051°, 1557 msl, 1 July 2006, JKGelhaus, 1 ♀, SRP2006070101, (203ANSP). KHOVSGOL Aimag, xx Soum, Altargana Gol stream, 4.2 km N of Bayanzurkh town, N 50.21340° E 98.96266°, 1679 msl, 21 July 2005, CRNelson, 1 ♂, SRP2005072103, (133BYU). KHOVSGOL Aimag, xx Soum, Khalkhan Gol Stream, above Bul Nai Hot Springs, 37.1 km NW of Chandmani Ondor town, N 50.78320° E 100.79585°, 1677 msl, 18 July 2005, CRNelson, 3 ♀, SRP2005071803, (006BYU). KHOVSGOL Aimag, xx Soum, Khalkhan Gol Stream, above Bul Nai Hot Springs, 37.1 km NW of Chandmani Ondor town, N 50.78320° E 100.79585°, 1677 msl, 18 July 2005, JKGelhaus, 10 ♂, SRP2005071803, (216ANSP). KHOVSGOL Aimag, Soum, Modon Hui Island, , 7 July 1995, J. Gelhaus, 1 lot, JKGHayModonHuiIsland, (656ANSP). KHOVSGOL Aimag, Soum, Toyn gol N 51.449084° E 100.81788°, , 18 July 1997, J. Gelhaus, 1 lot, JKG759, (647ANSP). KHOVSGOL Aimag, Bayanzurkh Soum, Beltes Gol River "road", start 10 km NE of Bayanzurkh, N 50.21920° E 99.09978°, 1698 msl, 5 July 2006, CRNelson, 1 ♀, none (CRN8501), (061BYU). KHOVSGOL Aimag, Bayanzurkh Soum, Beltes Gol River "road", start 10 km NE of Bayanzurkh, N 50.21920° E 99.09978°, 1698 msl, 5 July 2006, JKGelhaus, 25 ♂, 22 ♀, none (CRN8501), (039ANSP). KHOVSGOL Aimag, Bayanzurkh Soum, Beltes Gol, 4.7 km NE of Bayanzurkh town, N 50.19916° E 99.03117°, 1642 msl, 6 July 2006, CRNelson, 6 ♀, SRP2006070601, (067BYU). KHOVSGOL Aimag, Bayanzurkh Soum, Beltes Gol, 4.7 km NE of Bayanzurkh town, N 50.19916° E 99.03117°, 1642 msl, 6 July 2006, JKGelhaus, 3 ♂, 6 ♀, SRP2006070601, (007ANSP). KHOVSGOL Aimag, Bayanzurkh Soum, Beltes Gol, 4.7 km NE of Bayanzurkh town, N 50.19916° E 99.03117°, 1642 msl, 6 July 2006, JCMorse, 3 ♂, 10 ♀, SRP2006070601, (018ANSP). KHOVSGOL Aimag, Bayanzurkh Soum, Beltes Gol, 4.7 km NE of Bayanzurkh town, N 50.19916° E 99.03117°, 1642 msl, 6 July 2006, Ch. Suvdsetseg, 2 ♂, 2 ♀, SRP2006070601, (071ANSP). KHOVSGOL Aimag, TsagaanUur? Soum, Kholkhan Gol Stream, tributary of Aireg Gol, 22 km W of Tsagaan Uur town, N 50.51517° E 101.21073°, 1195 msl, 17 July 2005, SRP Team, 1 lot, SRP2005071702A, (18IMH).

OVORHANGAI Aimag, Batolzii Soum, Orhon N 46.82177° E 101.7052°, 0, 12 Aug 2007, NRG, 1 lot, AsiaFound70, (307NUM). SELENGE Aimag, Khuder Soum, Zerlegiin Gol c. 12 km E of Khuder N 49.7313° E 107.63484°, 763 msl, 25 July 2003, ESanaa, 1 ♀, SRP2003072401, (060IMH). SELENGE Aimag, Tsagaannuur Soum, SW shore of Tsagaan Nuur N 49.95588° E 105.33791°, 668 msl, 25 July 2003, ESanaa, 1 ♀, SRP2003072502, (061IMH). TOV Aimag, Erdene Soum, Gorkhi Terelj National Park, E Bayangin Gol 12.9 km upstream of Tuul River Bridge N 48.14846° E 107.75838°, 1596 msl, 7 July 2003, ESanaa, 8 ♂2♀, SRP2003070703, (054IMH). TOV Aimag, Erdene Soum, Gorkhi Terelj National Park, E Bayangin Gol 4.2 km upstream of Tuul River Bridge N 48.07956° E 107.77729°, 1526 msl, 7 July 2003, ESanaa, 1 ♀, SRP2003070704, (055IMH). TOV Aimag, Erdene Soum, Gorkhi Terelj National Park, mouth of Khag River @ confluence with Tuul N 48.25861° E 107.90251°, 1608 msl, 10 July 2003, ESanaa, 2 ♂, 8 ♀, SRP2003071002, (058IMH). TOV Aimag, Erdene Soum, Gorkhi Terelj National Park, Tuul River at Daichin crossing N 48.12416° E 107.5478.0°, 1598 msl, 10 July 2003, ESanaa, 1 ♂, SRP2003071003, (059IMH). TOV Aimag, Erdene Soum, Gorkhi Terelj National Park, unnamed braid of Tuul River N 48.14846° E 107.91267°, 1564 msl, 9 July 2003, ESanaa, 1 ♀, SRP2003070805, (056IMH). TOV Aimag, Erdene Soum, Gorkhi Terelj National Park, unnamed tributary of Tuul R on its W side c. 5 km upstream from Daichin crossing N 48.24734° E 107.90589°, 1610 msl, 10 July 2003, ESanaa, 1 ♂, SRP2003071001A, (057IMH). TOV Aimag, Erdene Soum, Gorkhi Terelj National Park, W Bayangin Gol 20.1 km upstream of Tuul R Road N 48.16668° E 107.69548°, 1623 msl, 6 July 2003, ESanaa, 1 ♂, 1 ♀, SRP2003070605, (052IMH). TOV Aimag, Erdene Soum, Gorkhi Terelj National Park, W Bayangin Gol at Tuul R Road crossing N 48.10757° E 107.65918°, 1492 msl, 7 July 2003, ESanaa, 1 ♂, 2 ♀, SRP2003070702, (053IMH). ZAVKHAN Aimag, Ider Soum, Zagastain Gol ~11 km NNE of Zagastain Davaa N 48.15779° E 97.21441°, 2108 msl, 24 July 2004, ESanaa, 1 ♀, SRP2004072401, (065IMH). ZAVKHAN Aimag, Tosontsengel Soum, Gunza Gol ~38 km SW of Tosontsengel N 48.62624° E 97.89617°, 1831 msl, 21 July 2004, ESanaa, 2 ♂, 9 ♀, SRP2004072102, (064IMH). ZAVKHAN Aimag, Tosontsengel Soum, Tegshiin Gol ~70 km SW of Tosontsengel N 48.3441° E 97.87312°, 1927 msl, 22 July 2004, SRP Team, 1 lot, SRP2004072201, (17IMH).

*Alloperla deminuta* - MONGOLIA: ARKHANGAI Aimag, Bulgan Soum, Urd Tamir Gol ~38 km SW of Tsetserleg N 47.28244° E 101.18793°, 1872 msl, 12 July 2004, ESanaa, 6 ♂, 12 ♀, SRP2004071201A, (009IMH). ARKHANGAI Aimag, Bulgan Soum, Urd Tamir Gol ~38 km SW of Tsetserleg N 47.28244° E 101.18793°, 1872 msl, 12 July 2004, JKGelhaus, 3 ♂, 5 ♀, SRP2004071201A, (044ANSP). ARKHANGAI Aimag, Bulgan Soum, Urd Tamir Gol braid upstream of bridge~63 km SW of Tsetserleg N 47.11192° E 101.01048°, 2066 msl, 13 July 2004, JKGelhaus, 1 ♂, 5 ♀, SRP2004071302, (045ANSP). ARKHANGAI Aimag, Chuluut Soum, Chuluutin Gol 40 km N of Chuluut/Jargalant N 47.8044° E 100.3181°, 1937 msl, 17 July 2004, ESanaa, 4 ♂, 11 ♀, SRP2004071701, (013IMH). ARKHANGAI

Aimag, Ikhtamir Soum, Khoit Tamir Gol ~29 km SW of Ikhtamir N 47.48567° E 100.87875°, 1749 msl, 15 July 2004, ESanaa, 6♂, 13♀, SRP2004071501, (012IMH). ARKHANGAI Aimag, Ikhtamir Soum, Khoit Tamir Gol ~29 km SW of Ikhtamir N 47.48567° E 100.87875°, 1749 msl, 15 July 2004, JKGelhaus, 1 ♀, SRP2004071501, (047ANSP). ARKHANGAI Aimag, Ikhtamir Soum, NW braid of Khoit Tamir Gol ~25 km SW of Ikhtamir N 47.50523° E 100.93208°, 1728 msl, 14 July 2004, ESanaa, 1 ♂, 7♀, SRP2004071402, (011IMH). ARKHANGAI Aimag, Ikhtamir Soum, NW braid of Khoit Tamir Gol ~25 km SW of Ikhtamir N 47.50523° E 100.93208°, 1728 msl, 14 July 2004, JKGelhaus, 1 ♀, SRP2004071402, (046ANSP). ARKHANGAI Aimag, Tsenkher Soum, Tsetseleg Gol ~17 km SW of Tavanbulag N 47.26999° E 101.80227°, 1684 msl, 10 July 2004, ESanaa, 4 ♀, SRP2004071002, (008IMH). ARKHANGAI Aimag, Tsenkher Soum, Tsetseleg Gol ~17 km SW of Tavanbulag N 47.26999° E 101.80227°, 1684 msl, 10 July 2004, JKGelhaus, 9 ♂, 6♀, SRP2004071002, (043ANSP). BULGAN Aimag, TeshigSoum, Tarvagatain (Marmot) Gol River at Egiin Gol River, N 49.70678° E 103.10288°, 909 msl, 10 July 2005, CRNelson, 1 ♂, 3♀, SRP2005071001A, (130BYU). KHOSVGOL Aimag, Tsagaan nuur Soum, Tengis N 51.47065° E 99.0262°, , 9 June 2008, BLM, 1 lot, AsiaFound13, (290NUM). KHOSVGOL Aimag, Tsagaan nuur Soum, Tengis N 51.48513° E 99.06127°, , 27 June 2007, Asia Foundation, 1 lot, AsiaFound14, (295NUM). KHOVSGOL Aimag, TsagaanUur Soum, Uilgan Gol, 26 km ENE of Tsagaan Uur town, N 50.62324° E 101.87412°, 1156 msl, 15 July 2005, C.R.Nelson, 1 lot, SRP2005071502A, (1013BYU). KHOVSGOL Aimag, TsagaanUur? Soum, Uur Gol River, 7 km N of Tsagaan Uur town, N 50.60031° E 101.52392°, 1155 msl, 16 July 2005, C.R.Nelson, 1 lot, SRP2005071601, (1016BYU). OVORKHANGAI Aimag, Batolziy Soum, Below Orkhon's Waterfall on Ulaan Gol~200 m S of Orkhon Gol, ~84 km W of Khujirt N 46.78742° E 101.96021°, 1809 msl, 7 July 2004, ESanaa, 1 ♂, 3♀, SRP2004070701A, (007IMH). OVORKHANGAI Aimag, Batolziy Soum, Below Orkhon's Waterfall on Ulaan Gol~200 m S of Orkhon Gol, ~84 km W of Khujirt N 46.78742° E 101.96021°, 1809 msl, 7 July 2004, JKGelhaus, 2 ♀, SRP2004070701A, (042ANSP). SELENGE Aimag, Bugant/Yaroo Soum, unnamed tributary of Ichilegiin Gol 8.5 km downstream of Yeroogiin Khaluun Rashaan N 49.06472° E 107.47257°, 990 msl, 19 July 2003, SRP Team, 1 lot, SRP2003071902, (23IMH). SELENGE Aimag, Khuder Soum, Tsagaan Shiluustiin Gol c. 5 km S of Khuder N 49.73763° E 107.49333°, 704 msl, 23 July 2003, SRP Team, 1 lot, SRP2003072202B, (727IMH). SELENGE Aimag, Khuder Soum, Zerlegiin Gol c. 12 km E of Khuder N 49.7313° E 107.63484°, 763 msl, 25 July 2003, SRP Team, 1 lot, SRP2003072401, (29IMH). TOV Aimag, Erdene Soum, Gorkhi Terelj National Park, E Bayangin Gol 4.2 km upstream of Tuul River Bridge N 48.07956° E 107.77729°, 1526 msl, 7 July 2003, ESanaa, 1 ♂, 1♀, SRP2003070704, (004IMH). TOV Aimag, Erdene Soum, Gorkhi Terelj National Park, Terelj Gol braid downstream of Terelj 10.6 km N of Mungut Rock Rd N 47.97944° E 107.47761°, 1487 msl, 5 July 2003, ESanaa, 1 ♂, 1♀, SRP2003070502, (003IMH). TOV Aimag, Erdene Soum, Gorkhi Terelj National Park, unnamed braid of Tuul River N 48.14846° E 107.91267°, 1564 msl, 9 July 2003, ESanaa, 1 ♂, SRP2003070805, (005IMH). TOV Aimag, Erdene Soum, Gorkhi Terelj National Park, unnamed tributary of Tuul R on its W side 1.6 km upstream from Daichin crossing N 48.2178° E 107.90392°, 1594 msl, 9 July 2003, ESanaa, 1 ♂, 1♀, SRP2003070902, (006IMH). TOV Aimag, Erdene Soum, unnamed tribE of Tuul river 8.5 km S of Galtain gol, 1542, Da July Year, E. Sanaa, 1 lot, Sanaa535, (747ANSP). TOV Aimag, Erdene Soum, Gorkhi Terelj National Park Tuul R c. 0.5 km upstream of Park Gate bridge N 47.82258° E 107.33613°, 1305 msl, 5 July 2003, ESanaa, 1 ♂, 2♀, SRP2003070501, (002IMH). TOV Aimag, Erdene Soum, Gorkhi Terelj National Park; Tuul R c. 100 m upstream of confluence with Terelj R N 47.96806° E 107.59365°, 1467 msl, 5 July 2003, SRP Team, 1 lot, SRP2003070503, (94IMH). TOV Aimag, Erdene Soum, Gorkhi Terelj National Park, W Bayangin Gol at Tuul R Road crossing N 48.10757° E 107.65918°, 1492 msl, 7 July 2003, SRP Team, 1 lot, SRP2003070702, (98IMH). TOV Aimag, Erdene Soum, Gorkhi Terelj National Park, Tuul River at Daichin crossing N 48.12416° E 107.5478.0°, 1598 msl, 10 July 2003, SRP Team, 1 lot, SRP2003071003, (08IMH). TOV Aimag, 0 Soum, Gorkhi Terelj National Park, Terelj River just above Terelj, N 47.99158° E 107.46717°, 1516, 28 July 2008, C.R.Nelson, 1 lot, none (CRN8949), (1042BY).

*Alloperla joosti* - MONGOLIA: ARKHANGAI Aimag, Bulgan Soum, Urd Tamir Gol ~38 km SW of Tsetserleg N 47.28244° E 101.18793°, 1872 msl, 12 July 2004, ESanaa, 21 ♂, 30♀, SRP2004071201A, (015IMH). ARKHANGAI Aimag, Bulgan Soum, Urd Tamir Gol ~38 km SW of Tsetserleg N 47.28244° E 101.18793°, 1872 msl, 12 July 2004, JKGelhaus, 3♂, 7♀, SRP2004071201A, (049ANSP). ARKHANGAI Aimag, Bulgan Soum, Urd Tamir Gol ~38 km SW of Tsetserleg N 47.28244° E 101.18793°, 1872 msl, 12 July 2004, JKGelhaus, 1 ♂, 1♀, SRP2004071201A, (224ANSP). ARKHANGAI Aimag, Bulgan Soum, Urd Tamir Gol braid upstream of bridge~63 km SW of Tsetserleg N 47.11192° E 101.01048°, 2066 msl, 13 July 2004, SRP Team, 1 lot, SRP2004071302, (44IMH). ARKHANGAI Aimag, Chuluut Soum, Chuluutin Gol 40 km N of Chuluut/Jargalant N 47.8044° E 100.3181°, 1937 msl, 17 July 2004, ESanaa, 1♂, 3♀, SRP2004071701, (021IMH). ARKHANGAI Aimag, Chuluut Soum, Khurmen/Davaat Gol 15 km

SSE of Chuluut/Jargalant N 47.4258° E 100.3013°, 2104 msl, 15 July 2004, ESanaa, 1 ♂, SRP2004071503, (020IMH). ARKHANGAI Aimag, Ikhtamir Soum, E side of Khoit Tamir Gol 4 km NE of Ikhtamir N 47.59928° E 101.24521°, 1602 msl, 14 July 2004, ESanaa, 8 ♂, 4♀, SRP2004071401, (017IMH). ARKHANGAI Aimag, Ikhtamir Soum, E side of Khoit Tamir Gol 4 km NE of Ikhtamir N 47.59928° E 101.24521°, 1602 msl, 14 July 2004, JKGelhaus, 4 ♂, SRP2004071401, (223ANSP). ARKHANGAI Aimag, Ikhtamir Soum, Khoit Tamir Gol ~29 km SW of Ikhtamir N 47.48567° E 100.87875°, 1749 msl, 15 July 2004, ESanaa, 2 ♂, 7♀, SRP2004071501, (019IMH). ARKHANGAI Aimag, Ikhtamir Soum, NW braid of Khoit Tamir Gol ~25 km SW of Ikhtamir N 47.50523° E 100.93208°, 1728 msl, 14 July 2004, ESanaa, 6 ♂, 10♀, SRP2004071402, (018IMH). ARKHANGAI Aimag, Tsenkher Soum, Tsetseleg Gol ~17 km SW of Tavanbulag N 47.26999° E 101.80227°, 1684 msl, 10 July 2004, ESanaa, 1 ♂, 9♀, SRP2004071002, (014IMH). ARKHANGAI Aimag, Tsenkher Soum, Tsetseleg Gol ~17 km SW of Tavanbulag N 47.26999° E 101.80227°, 1684 msl, 10 July 2004, JKGelhaus, 7 ♂, SRP2004071002, (048ANSP). BULGAN Aimag, Soum, Altat Gol 35.2 km SW of Khutag-Ondor N 49.21674° E 103.10725°, 1020 msl, 26 July 2005, SRP Team, 1 lot, SRP2005072601, (1034BYU). BULGAN Aimag, Teshig Soum, Tarvagatain (Marmot) Gol River at Egiin Gol River, N 49.70678° E 103.10288°, 909 msl, 10 July 2005, C.R.Nelson, 1 lot, SRP2005071001A, (1004BYU). KHOVSGOL Aimag, TsagaanUur Soum, Uilgan Gol, 26 km ENE of Tsagaan Uur town, N 50.62324° E 101.87412°, 1156 msl, 15 July 2005, JKGelhaus, 1 ♀, SRP2005071502A, (215ANSP). KHOVSGOL Aimag, TsagaanUur? Soum, Uur Gol River, 7 km N of Tsagaan Uur town, N 50.60031° E 101.52392°, 1155 msl, 16 July 2005, C.R.Nelson, 1 lot, SRP2005071601, (1017BYU). KHOVSGOL Aimag, TsagaanUur? Soum, Kholkhan Gol Stream, tributary of Aireg Gol, 22 km W of Tsagaan Uur town, N 50.51517° E 101.21073°, 1195 msl, 17 July 2005, C.R.Nelson, 1 lot, SRP2005071702A, (1023BYU). OVORKHANGAI Aimag, Batolziy Soum, Below Orkhon's Waterfall on Ulaan Gol~200 m S of Orkhon Gol, ~84 km W of Khujirt N 46.78742° E 101.96021°, 1809 msl, 7 July 2004, SRP Team, 1 lot, SRP2004070701a, (39IMH). ZAVKHAN Aimag, Ider Soum, Ideriin Gol ~4 km NE of Zuummod/Ider N 48.24995° E 97.40627°, 1929 msl, 22 July 2004, ESanaa, 2 ♂, 2♀, SRP2004072203, (023IMH). ZAVKHAN Aimag, Ider Soum, Ideriin Gol ~4 km NE of Zuummod/Ider N 48.24995° E 97.40627°, 1929 msl, 22 July 2004, SRP Team, 1 lot, SRP2004072203, (54IMH). ZAVKHAN Aimag, Tosontsengel Soum, Delgarakhiin Gol ~16 km S of Tosontsengel N 48.61518° E 98.23096°, 1761 msl, 20 July 2004, ESanaa, 3 ♀, SRP2004072001, (022IMH).

*Alloperla mediata* - MONGOLIA: BULGAN Aimag, Teshig Soum, Tariakhtain Gol Stream, junction by two major forks, N 49.77776° E 103.60860°, 1189 msl, 9 July 2005, CRNelson, 14 ♀, SRP2005070902, (082BYU). BULGAN Aimag, Teshig Soum, Tariakhtain Gol Stream, junction by two major forks, N 49.77776° E 103.60860°, 1189 msl, 9 July 2005, JKGelhaus, 1 ♂, 9♀, SRP2005070902, (208ANSP). BULGAN Aimag, Teshig Soum, Tariakhtain Gol Stream, junction by two major forks, N 49.77776° E 103.60860°, 1189 msl, 9 July 2005, JKGelhaus, 3 ♀, SRP2005070902, (210ANSP). BULGAN Aimag, Teshig Soum, Tarvagatain (Marmot) Gol River at Egiin Gol River, N 49.70678° E 103.10288°, 909 msl, 10 July 2005, C.R.Nelson, 1 lot, SRP2005071001A, (1005BYU). KHOVSGOL Aimag, Renchinlumbe Soum, Arsayn Gol, 16.2 km N of Renchinlumbe town, N 51.25356° E 99.66687°, 1565 msl, 2 July 2006, CRNelson, 2 ♀, SRP2006070201, (157BYU). KHOVSGOL Aimag, Ulaanuul Soum, Gunain Gol, 12 km SW of Ulaan Uul N 50.61826° E 99.12094°, 1761 msl, 29 June 2006, CRNelson, 3 ♂, 1♀, SRP2006062903, (139BYU). KHOVSGOL Aimag, Soum, Jargalant gol 25 km NW Khank, 0, Da July Year, J. Gelhaus, 1 lot, JKG721\_763, (610ANSP). KHOVSGOL Aimag, TsagaanUur Soum, Uilgan Gol, 26 km ENE of Tsagaan Uur town, N 50.62324° E 101.87412°, 1156 msl, 15 July 2005, JKGelhaus, 1 ♀, SRP2005071502A, (213ANSP). KHOVSGOL Aimag, TsagaanUur? Soum, tributary of Aireg Gol, 18.5 km W of Tsagaan Uur town, N 50.50861° E 101.26615°, 1208 msl, 17 July 2005, CRNelson, 1 ♂, 1♀, SRP2005071701A, (100BYU). KHOVSGOL Aimag, TsagaanUur? Soum, tributary of Aireg Gol, 18.5 km W of Tsagaan Uur town, N 50.50861° E 101.26615°, 1208 msl, 17 July 2005, JKGelhaus, 4 ♂, 4♀, SRP2005071701A, (217ANSP). KHOVSGOL Aimag, TsagaanUur? Soum, Uur Gol River, 7 km N of Tsagaan Uur town, N 50.60031° E 101.52392°, 1155 msl, 16 July 2005, C.R.Nelson, 1 lot, SRP2005071601, (1018BYU). KHOVSGOL Aimag, TsagaanUur? Soum, Kholkhan Gol Stream, tributary of Aireg Gol, 22 km W of Tsagaan Uur town, N 50.51517° E 101.21073°, 1195 msl, 17 July 2005, C.R.Nelson, 1 lot, SRP2005071702A, (1024BYU). KHOVSGOL Aimag, xx Soum, Uur Gol River, 32.3 km NE of Erdenebulgan, N 50.30188° E 101.92869°, 1063 msl, 14 July 2005, C.R.Nelson, 1 lot, SRP2005071403, (1012BYU).

*Alloperla rostellata* - MONGOLIA: ARKHANGAI Aimag, Bulgan Soum, Urd Tamir Gol braid upstream of bridge~63 km SW of Tsetserleg N 47.11192° E 101.01048°, 2066 msl, 13 July 2004, SRP Team, 1 lot, SRP2004071302, (45IMH). BULGAN Aimag, Teshig Soum, Tariakhtain Gol Stream, junction by two major forks, N 49.77776° E 103.60860°, 1189 msl, 9 July 2005, CRNelson, 1 ♂, 17♀, SRP2005070902, (083BYU). BULGAN Aimag, Teshig

Soum, Tariakhtain Gol Stream, junction by two major forks, N 49.77776° E 103.60860°, 1189 msl, 9 July 2005, JKGelhaus, 1 ♀, SRP2005070902, (211ANSP). BULGAN Aimag, Teshig Soum, Tarvagatain (Marmot) Gol River at Egiin Gol River, N 49.70678° E 103.10288°, 909 msl, 10 July 2005, CRNelson, 4 ♀, SRP2005071001A, (086BYU). KHOVSGOL Aimag, Ulaanuul Soum, Gunain Gol, 12 km SW of Ulaan Uul N 50.61826° E 99.12094°, 1761 msl, 29 June 2006, CRNelson, 2 ♂, SRP2006062903, (140BYU). KHOVSGOL Aimag, TsagaanUur Soum, Uilgan Gol, 26 km ENE of Tsagaan Uur town, N 50.62324° E 101.87412°, 1156 msl, 15 July 2005, C.R.Nelson, 1 lot, SRP2005071502A, (1014BYU). KHOVSGOL Aimag, TsagaanUur? Soum, Kholkhan Gol Stream, tributary of Aireg Gol, 22 km W of Tsagaan Uur town, N 50.51517° E 101.21073°, 1195 msl, 17 July 2005, CRNelson, 1 ♀, SRP2005071702A, (101BYU). ZAVKHAN Aimag, Ikh-Uul Soum, Deed Tsetsuukhiin Gol ~10 km NW of Solongotiin Davaa N 48.36436° E 98.92737°, 2072 msl, 25 July 2004, ESanaa, 1 ♀, SRP2004072502, (026IMH).

***Haploperla lepnevae*** - MONGOLIA: BAYAN OLGII Aimag, Tsengol Soum, Harganat Gol on route A15 at Usttolgoy N 48.83438° E 089.19849°, 2054 msl, 6 July 2008, C.R.Nelson, 1 lot, MAIS2008070601, (896BYU). BAYAN-OLGII Aimag, Olgii Soum, Khovd Gol above Olgii, N 48.97842° E 89.94995°, 1750 msl, 5 July 2008, CRNelson, 1 ♀, MAIS2008070501, (025BYU). BAYAN-OLGII Aimag, Sagsay Soum, Sagsay Gol, bridge 11 km NW Sagsay, N 48.84328° E 89.53623°, 1798 msl, 5 July 2008, CRNelson, 6 ♂, 25 ♀, MAIS2008070502, (027BYU). BULGAN Aimag, Teshig Soum, Tarvagatain (Marmot) Gol River at Egiin Gol River, N 49.70678° E 103.10288°, 909 msl, 10 July 2005, C.R.Nelson, 1 lot, SRP2005071001A, (1006BYU). BULGAN Aimag, xx Soum, Selenge River, bridge at Hyalganat town, N 49.48086° E 104.30864°, 786 msl, 8 July 2005, , 1 lot, SRP2005070801, (997BYU). KHOVSGOL Aimag, xx Soum, Bugsei Gol River, 45.5 km SW of Moron City, N 49.26170° E 99.88242°, 1597 msl, 23 July 2005, CRNelson, 1 ♀, SRP2005072301, (008BYU). KHOVSGOL Aimag, Soum, Sevsuuliyin gol , 0, Da July Year, J. Gelhaus, 1 lot, JKG724, (620ANSP). KHOVSGOL Aimag, Soum, Jargalant gol N 51.6497219° E 100.5295426°, 0, 20 July 1997, J. Gelhaus, 1 lot, JKG736, (632ANSP). KHOVSGOL Aimag, Soum, Alagtsar gol , 0, Da July 1995, J. Gelhaus, 1 lot, JKG713, (602ANSP). KHOVSGOL Aimag, Soum, Selenge River , 0, Da July 1997, J. Gelhaus, 1 lot, JKG733, (625ANSP). KHOVSGOL Aimag, TsagaanUur? Soum, Uur Gol River, 7 km N of Tsagaan Uur town, N 50.60031° E 101.52392°, 1155 msl, 16 July 2005, CRNelson, 1 ♂, 1 ♀, SRP2005071601, (005BYU). SELENGE Aimag, Bugant/Yaroo Soum, Khongiin Gol at Yeroo Gol confluence N 49.08636° E 107.3075°, 943 msl, 19 July 2003, JKGelhaus, 1 ♀, SRP2003071803, (050ANSP). SELENGE Aimag, Bugant/Yaroo Soum, Yeroo R c. 14 km upstream of Yavin/Yeroo bridge N 49.61985° E 106.82693°, 695 msl, 22 July 2003, JKGelhaus, 1 ♀, SRP2003072201, (051ANSP). SELENGE Aimag, Baruunharaa Soum, Haraa Gol River, 2.3 km S of Bayangol N 48.87748° E 106.12370°, 802 msl, 4 July 2005, CRNelson, 1 ♂, 3 ♀, SRP2005070402, (122BYU). TOV Aimag, Soum, Gorkhi Terelj National Park Tuul R c. 0.5 km upstream of Park Gate bridge N 47.82258° E 107.33613°, 1305 msl, 5 July 2003, ESanaa, 1 ♂, 5 ♀, SRP2003070501, (027IMH).

***Suwallia kerzhneri*** - MONGOLIA: ARKHANGAI Aimag, Ikhtamir Soum, E side of Khoit Tamir Gol 4 km NE of Ikhtamir N 47.59928° E 101.24521°, 1602 msl, 14 July 2004, ESanaa, 1 ♂, SRP2004071401, (031IMH). ARKHANGAI Aimag, Ikhtamir Soum, Khoit Tamir Gol ~29 km SW of Ikhtamir N 47.48567° E 100.87875°, 1749 msl, 15 July 2004, ESanaa, 10 ♂, 8 ♀, SRP2004071501, (033IMH). KHOVSGOL Aimag, xx Soum, Khalkhan Gd Stream, above Bul Nai Hot Springs, 37.1 km NW of Chandmani Ondor town, N 50.78320° E 100.79585°, 1677 msl, 18 July 2005, C.R.Nelson, 1 lot, SRP2005071803, (1025BYU). KHOVSGOL Aimag, TsagaanUur? Soum, Uur Gol River, 7 km N of Tsagaan Uur town, N 50.60031° E 101.52392°, 1155 msl, 16 July 2005, C.R.Nelson, 1 lot, SRP2005071601, (1019BYU). SELENGE Aimag, Khuder Soum, Tsagaan Shiluustiin Gol c. 5 km S of Khuder N 49.73763° E 107.49333°, 704 msl, 23 July 2003, SRP Team, 1 lot, SRP2003072302, (728IMH). SELENGE Aimag, Tushig Soum, Zelter Gol @ Zelter N 50.35162° E 105.04436°, 736 msl, 26 July 2003, SRP Team, 1 lot, SRP2003072601, (733IMH). TOV Aimag, Erdene Soum, Gorkhi Terelj National Park, Tuul River at Daichin crossing N 48.12416° E 107.5478.0°, 1598 msl, 10 July 2003, ESanaa, 1 ♀, SRP2003071003, (029IMH). ZAVKHAN Aimag, Ider Soum, Dogshin/Nogoon Nuur ~21 km SE of Zuummod/Ider N 48.06257° E 97.55064°, 2054 msl, 23 July 2004, ESanaa, 15 ♂, SRP2004072302, (036IMH). ZAVKHAN Aimag, Ider Soum, Ideriin Gol ~22 km SE of Zuummod/Ider N 48.05989° E 97.55073°, 2053 msl, 23 July 2004, ESanaa, 15 ♂, 6 ♀, SRP2004072303, (037IMH). ZAVKHAN Aimag, Ider Soum, Ideriin Gol ~22 km SE of Zuummod/Ider N 48.05989° E 97.55073°, 2053 msl, 23 July 2004, JKGelhaus, 1 ♂, 1 ♀, SRP2004072303, (055ANSP). ZAVKHAN Aimag, Ider Soum, Ideriin Gol ~4 km NE of Zuummod/Ider N 48.24995° E 97.40627°, 1929 msl, 22 July 2004, ESanaa, 1 ♂, SRP2004072203, (035IMH). ZAVKHAN Aimag, Tosontsengel Soum, Delgarakhiin Gol ~16 km S of Tosontsengel N 48.61518° E 98.23096°, 1761 msl, 20 July 2004, ESanaa, 6 ♂, 6 ♀, SRP2004072001, (034IMH). ZAVKHAN Aimag, Tosontsengel Soum,

Delgarakhiin Gol ~16 km S of Tosontsengel N 48.61518° E 98.23096°, 1761 msl, 20 July 2004, JKGelhaus, 1 ♂, 1 ♀, SRP2004072001, (053ANSP).

*Suwallia teleckojensis* - MONGOLIA: ARKHANGAI Aimag, Bulgan Soum, Urd Tamir Gol ~38 km SW of Tsetserleg N 47.28244° E 101.18793°, 1872 msl, 12 July 2004, ESanaa, 5 ♂, 1 ♀, SRP2004071201A, (042IMH). ARKHANGAI Aimag, Bulgan Soum, Urd Tamir Gol braid upstream of bridge~63 km SW of Tsetserleg N 47.11192° E 101.01048°, 2066 msl, 13 July 2004, SRP Team, 1 lot, SRP2004071302, (746IMH). ARKHANGAI Aimag, Chuluut Soum, Chuluutin Gol ~33 km SW of Chuluut/Jargalant N 47.29702° E 100.03136°, 2287 msl, 16 July 2004, ESanaa, 7 ♂, 18 ♀, SRP2004071603, (046IMH). ARKHANGAI Aimag, Chuluut Soum, Chuluutin Gol ~33 km SW of Chuluut/Jargalant N 47.29702° E 100.03136°, 2287 msl, 16 July 2004, JKGelhaus, 3 ♀, SRP2004071603, (057ANSP). ARKHANGAI Aimag, Chuluut Soum, Chuluutin Gol 40 km N of Chuluut/Jargalant N 47.8044° E 100.3181°, 1937 msl, 17 July 2004, ESanaa, 3 ♂, 2 ♀, SRP2004071701, (047IMH). ARKHANGAI Aimag, Chuluut Soum, Chuluutin Gol 40 km N of Chuluut/Jargalant N 47.8044° E 100.3181°, 1937 msl, 17 July 2004, JKGelhaus, 1 ♀, SRP2004071701, (058ANSP). ARKHANGAI Aimag, Chuluut Soum, Khurmen/Davaat Gol 15 km SSE of Chuluut/Jargalant N 47.4258° E 100.3013°, 2104 msl, 15 July 2004, ESanaa, 1 ♂, SRP2004071503, (045IMH). ARKHANGAI Aimag, Ikhtamir Soum, NW braid of Khoit Tamir Gol ~25 km SW of Ikhtamir N 47.50523° E 100.93208°, 1728 msl, 14 July 2004, ESanaa, 1 ♂, 2 ♀, SRP2004071402, (044IMH). ARKHANGAI Aimag, Tsenkher Soum, Tsetserleg Gol ~50 km SSW of Tavanbulag N 47.04409° E 101.76352°, 1902 msl, 11 July 2004, ESanaa, 2 ♀, SRP2004071102, (041IMH). ARKHANGAI Aimag, Tsenkher Soum, Uliin Gol in Budent valley~60 km SSW of Tavanbulag N 46.97927° E 101.69877°, 2075 msl, 11 July 2004, ESanaa, 6 ♂, 7 ♀, SRP2004071101, (040IMH). BAYAN OLGII Aimag, Buyant Soum, 5 km S of Buyant , , 19 July 2008, C.R.Nelson, 1 lot, MAIS2008071902, (923BYU). BAYAN-OLGII Aimag, Altai Soum, Khoit Bardam Gol, 13 km NW of Altai, (26 km by road), N 48.34519° E 89.32607° , 2438 msl, 18 July 2008, CRNelson, 1 ♂, MAIS2008071803, (189BYU). BAYANOLGII Aimag, Bulgan Soum, "Elstiin Davaa Gol" ~15 km N Bulgan N 47.03794 E 91.02931, 2016 msl, 8 July 2009, SWJudson, 1 lot, MAIS2009070802, (836BYU). BAYAN-OLGII Aimag, Bulgan Soum, Bulgan Gol ~15 km N Bulgan N 47.03954 E 91.03448, 2010 msl, 8 July 2009, SWJudson, 1 lot, MAIS2009070803, (842BYU). BAYAN-OLGII Aimag, Bulgan Soum, Bulgan Gol ~20 km S Bulgan N 46.78006 E 91.30396, 1801 msl, 9 July 2009, SWJudson, 1 lot, MAIS2009070901, (844BYU). BAYAN-OLGII Aimag, Bulgan Soum, Bulgan Gol ~25 km SE Bulgan N 46.77005 E 91.32336, 1792 msl, 9 July 2009, SWJudson, 1 lot, MAIS2009070902, (847BYU). BAYAN-OLGII Aimag, Bulgan Soum, Bulgan Gol, ~20 km N Bulgan N 47.08868 E 91.02686, 2056 msl, 6 July 2009, SWJudson, 1 lot, MAIS2009070604, (821BYU). BAYAN-OLGII Aimag, Bulgan Soum, Springs by Bulgan Gol ~25 km SE Bulgan N 46.77181 E 91.31750, 1797 msl, 10 July 2009, SWJudson, 1 lot, MAIS2009071001, (854BYU). BAYAN-OLGII Aimag, Deluun Soum, Gantsmodi Gol 27 km S Deluun N 47.66395 E 90.71841, 2196 msl, 5 July 2009, SWJudson, 1 lot, MAIS2009070502, (811BYU). BAYAN-OLGII Aimag, Deluun Soum, Teigertein Gol 15 Km SW Deluun Soum , 0, 21 July 1978, Puntsagdulan, 1 lot, Puntsagdulan21July1978, (887BYU). BAYAN-OLGII Aimag, Sagsay Soum, Sagsay Gol, bridge 11 km NW Sagsay, N 48.84328° E 89.53623° , 1798 msl, 5 July 2008, CRNelson, 2 ♀, MAIS2008070502, (029BYU). BAYAN-OLGII Aimag, Sagsay Soum, Godon Gol, 18 km due North of Dayan, N 48.43687° E 88.90085° , 2245 msl, 17 July 2008, C.R.Nelson, 1 lot, MAIS2008071702, (918BYU). BAYAN-OLGII Aimag, Tsengel Soum, Ikh Turgenii Gol 6 km SSW of Syrgal, N 48.54381° E 88.41416° , 2147 msl, 15 July 2008, CRNelson, 1 ♂, MAIS2008071503, (180BYU). BAYAN-OLGII Aimag, Tsengel Soum, Rashaanii Gol (dark water), bridge 1 km North of junction Tsagaan Us Gol, N 48.75577° E 88.15264° , 2115 msl, 15 July 2008, Morse and Chuluunbat, 2 ♂, 4 ♀, MAIS2008071501, (062BYU). BAYAN-OLGII Aimag, Ulaankhus Soum, Khar Yamaat Gol, (Yamaatiin?)at road crossing 14 km NE of Jalpak, N 49.38055° E 88.68401° , 2306 msl, 8 July 2008, CRNelson, 3 ♂, MAIS2008070801, (039BYU). BAYAN-OLGII Aimag, Ulaankhus Soum, Sogoog Gol, 3.5 km East of Khokh Khotol, hidden valley rapids, N 49.23285° E 88.90569° , 2090 msl, 7 July 2008, CRNelson, 1 ♂, 1 ♀, MAIS2008070702, (031BYU). BAYAN-OLGII Aimag, Ulaankhus Soum, Ulatai Gol, 2 km East of Khokh Ereg Military Base, N 49.31867° E 88.36613° , 2391 msl, 8 July 2008, CRNelson, 11 ♂, 4 ♀, MAIS2008070802, (042BYU). BAYAN-OLGII Aimag, Soum, TeigerteinGol, 15 Km SW Deluun Soum , , 21 July 1978, , 2 ♀,none (21-VII-1978 AltID), (432BYU). BULGAN Aimag, ? Soum, Altat Gol 35.2 km SW of Khutag-Ondor N 49.21674° E 103.10725°, 1020 msl, 26 July 2005, SRP Team, 1 lot, SRP2005072601, (1035BYU). GOVI-ALTAI Aimag, Tenchil Soum, Zuil Jel River N 46 deg 19'02" E 93 deg 53'659", 2254, 17 July 2002, J.Puntsagdulan, 2 ♀, 17UM--2002 AltID (no MAIS/SRP), (026MLB). GOVI-ALTAI Aimag, Tenchil Soum, Zuil Jel River N 46 deg 19'02" E 93 deg 53'659", 2254, 17 July 2002, , 2 ♀, 17-UM--2002 AltID (no MAIS/SRP), (433BYU). GOVI-ALTAI Aimag, Tenchil Soum, Zuil Jel River N 46 deg 19'02" E 93 deg 53'659", 2254, 17 July 2002, Puntsagdulan, 1 lot, Puntsagdulan17UM2002,



(886BYU). KHOVD Aimag, Bulgan Soum, River Bulgan Gol N 46.55312 E 91.38850, 1509 msl, 10 July 2009, SWJudson, 1 lot, MAIS2009071002b, (855BYU). KHOVD Aimag, Duut Soum, Tsagaan Burgasii Gol ~15 km NE Duut N 47.55936 E 91.76095, 1865 msl, 18 July 2009, SWJudson, 1 lot, MAIS2009071801, (880BYU). KHOVD Aimag, Monkhkhayrkhan Soum, Byan Sangiin Gol/Boorog Nuur Gol ~18 km SSE Monkhkhayrkhan N 46.90953 E 91.93488, 2339 msl, 14 July 2009, SWJudson, 1 lot, MAIS2009071402, (871BYU). KHOVD Aimag, Monkhkhayrkhan Soum, Bortin Gol ~14 km SSE Monkhkhayrkhan N 46.92136 E 91.91077, 2311 msl, 15 July 2009, SWJudson, 1 lot, MAIS2009071501, (873BYU). KHOVD Aimag, Monkhkhayrkhan Soum, Dund Tsenkher Gol @ bridge S edge of Monkhkhayrkhan N 47.05474 E 91.84868, 2090 msl, 16 July 2009, SWJudson, 1 lot, MAIS2009071602, (877BYU). KHOVD Aimag, Monkhkhayrkhan Soum, DundTsenkher Gol ~20 km N Monkhkhayrkhan N 47.17455 E 91.86262, 1901 msl, 16 July 2009, SWJudson, 1 lot, MAIS2009071604, (878BYU). KHOVD Aimag, Uyench Soum, Urd Jargalant Gol @Uyenchiiin Gol ~25 km N Uyench N 46.26055 E 92.07277, 1683 msl, 13 July 2009, SWJudson, 1 lot, MAIS2009071301, (865BYU). KHOVD Aimag, Uyench Soum, Uyenchiiin Gol @ Urd Jargalant Gol ~25 km N Uyench N 46.26107 E 92.07269, 1677 msl, 13 July 2009, SWJudson, 1 lot, MAIS2009071302, (867BYU). KHOVD Aimag, Uyench Soum, Uyenchiiin Gol ~40 km N Uyench N 46.38285 E 92.13062, 1939 msl, 13 July 2009, SWJudson, 1 lot, MAIS2009071303, (869BYU). KHOVSGOL Aimag, Renchinlumbe Soum, Jarin Gol, 32.8 km N of Renchinlumbe, river crossing N 51.39852° E 99.75011°, 1575 msl, 2 July 2006, Malaise Trap, 1 ♂, SRP2006070203A, (166ANSP). KHOVSGOL Aimag, Renchinlumbe Soum, springs of Shishged Gol, 36 km NNE of Ulaan Uul town, N 50.99171° E 99.35400°, 1584 msl, 30 June 2006, CRNelson, 18 ♂, 39 ♀, SRP2006063002, (012BYU). KHOVSGOL Aimag, xx Soum, Bugsei Gol River, 45.5 km SW of Moron City, N 49.26170° E 99.88242°, 1597 msl, 23 July 2005, C.R.Nelson, 1 lot, SRP2005072301, (1030BYU). KHOVSGOL Aimag, Soum, Jargalant gol 25 km NW Khank , 0, Da July Year, J. Gelhaus, 1 lot, JKG721\_763, (614ANSP). KHOVSGOL Aimag, Renchinlumbe Soum, Har-Us Spring, Jargalant Gol 4.2 km SE of Renchinlumbe N 51.07845° E 99.70774°, 1586 msl, 1 July 2006, CRNelson, 6 ♂, 17 ♀, SRP2006070102, (014BYU). KHOVSGOL Aimag, Renchinlumbe Soum, Har-Us Spring, Jargalant Gol 4.2 km SE of Renchinlumbe N 51.07845° E 99.70774°, 1586 msl, 1 July 2006, JKGelhaus, 4 ♀, SRP2006070102, (034ANSP). KHOVSGOL Aimag, Renchinlumbe Soum, Har-Us Spring, Jargalant Gol 4.2 km SE of Renchinlumbe N 51.07845° E 99.70774°, 1586 msl, 1 July 2006, JCMorse, 27 ♂, 17 ♀, SRP2006070102, (035ANSP). OVORKHANGAI Aimag, Batolziy Soum, Below Orkhon's Waterfall on Ulaan Gol~200 m S of Orkhon Gol, ~84 km W of Khujirt N 46.78742° E 101.96021°, 1809 msl, 7 July 2004, JKGelhaus, 1 ♂, SRP2004070701A, (056ANSP). SELENGE Aimag, Bugant/Yaroo Soum, Bar Chuluu Gd N 49.03282° E 106.96935°, 975 msl, 17 July 2003, SRP Team, 1 lot, SRP2003071704, (715IMH). SELENGE Aimag, Mandal Soum, Bar Chuluu at upstream bridge c. 6 km above downstream bridge N 48.99356° E 106.95023°, 1053 msl, 20 July 2003, ESanaa, 2 ♂, 3 ♀, SRP2003072001, (038IMH). SELENGE Aimag, xx Soum, Baruun Tsuuts Gol Stream, xx km W of Sangatay , N 49.71481° E 104.64203°, 748 msl, 6 July 2005, , 1 lot, SRP2005070602, (995BYU). TOV Aimag, Batsumber Soum, Segnogor Gol 14.3 km upstream of Segnogor Amralt N 48.43755° E 107.03066°, 1255 msl, 15 July 2003, SRP Team, 1 lot, SRP2003071501B, (710IMH). TOV Aimag, Batsumber Soum, Kharaa Gol 5.0 km upstream of Bayanbural N 48.50028° E 106.78434°, 1051 msl, 16 July 2003, SRP Team, 1 lot, SRP2003071601, (712IMH). TOV Aimag, Erdene Soum, Gorkhi Terej National Park N 48.4208° E 107.91406°, 1818 msl, 28 July 2003, ESanaa, 22 ♂, 26 ♀, SRP2003072802, (039IMH). TOV Aimag, Erdene Soum, Gorkhi Terej National Park, unnamed trib. of W Bayangin Gol N 48.16668° E 107.69548°, 1623 msl, 7 July 2003, SRP Team, 1 lot, SRP2003070701, (697IMH). ZAVKHAN Aimag, Ider Soum, Dogshin/Nogoon Nuur ~21 km SE of Zuunmod/Ider N 48.06257° E 97.55064°, 2054 msl, 23 July 2004, ESanaa, 12 ♂, 33 ♀, SRP2004072302, (049IMH). ZAVKHAN Aimag, Ider Soum, Dogshin/Nogoon Nuur ~21 km SE of Zuunmod/Ider N 48.06257° E 97.55064°, 2054 msl, 23 July 2004, JKGelhaus, 11 ♂, 16 ♀, SRP2004072302, (059ANSP). ZAVKHAN Aimag, Ider Soum, Ideriin Gol ~22 km SE of Zuunmod/Ider N 48.05989° E 97.55073°, 2053 msl, 23 July 2004, ESanaa, 11 ♂, 20 ♀, SRP2004072303, (050IMH). ZAVKHAN Aimag, Ider Soum, ponds by Ideriin Gol at Darkhjan Uul Brigade~12 km SE of Zuunmod/Ider N 48.13246° E 97.48425°, 2025 msl, 23 July 2004, ESanaa, 1 ♀, SRP2004072301, (048IMH). ZAVKHAN Aimag, Ide Soum, Ideriin Gol ~4 km NE of Zuunmod/Ider N 48.24995° E 97.40627°, 1929 msl, 22 July 2004, SRP Team, 1 lot, SRP2004072203, (755IMH). ZAVKHAN Aimag, Ikh-Uul Soum, Deed Tsetsuukhiin Gol ~10 km NW of Solongotiin Davaa N 48.36436° E 98.92737°, 2072 msl, 25 July 2004, ESanaa, 1 ♂, SRP2004072502, (051IMH). ZAVKHAN Aimag, Tosontsengel Soum, Tegshiin Gol ~70 km SW of Tosontsengel N 48.3441° E 97.87312°, 1927 msl, 22 July 2004, SRP Team, 1 lot, SRP2004072201, (753IMH).

## Leuctridae

*Leuctra fusca* - MONGOLIA: SELENGE Aimag, Khuder Soum, Khuder River, N 49.75372° E 107.5264°, 12 Sept 2008. Asia Foundation. 1 lot, (302NUM).

*Paraleuctra zapekinae* - MONGOLIA: SELENGE Aimag, xx Soum, Baruun Tsuuts Gol Stream, xx km W of Sangatay , N 49.71481° E 104.64203°, 748 msl, 6 July 2005, CRNelson, 1 ♂, 3 ♀, SRP2005070602, (071BYU). TOV Aimag, Soum, Gorkhi Terelj National Park, Terelj River just above Terelj, N 47.99158° E 107.46717°, 1516, 28 July 2008, CRNelson, 1 ♀, none (CRN8949), (057BYU).

## Nemouridae

*Amphinemura borealis* - MONGOLIA: ARKHANGAI Aimag, Bulgan Soum, Urd Tamir Gol ~38 km SW of Tsetserleg N 47.28244° E 101.18793°, 1872 msl, 12 July 2004, ESanaa, 2 ♂, 9 ♀, SRP2004071201A, (070IMH). ARKHANGAI Aimag, Chuluut Soum, Chuluutin Gol 40 km N of Chuluut/Jargalant N 47.8044° E 100.3181°, 1937 msl, 17 July 2004, ESanaa, 1 ♂, 9 ♀, SRP2004071701, (075IMH). ARKHANGAI Aimag, Chuluut Soum, Chuluutin Gol 40 km N of Chuluut/Jargalant N 47.8044° E 100.3181°, 1937 msl, 17 July 2004, JKGelhaus, 2 ♂, SRP2004071701, (064ANSP). ARKHANGAI Aimag, Chuluut Soum, Khurmen/Davaat Gol 15 km SSE of Chuluut/Jargalant N 47.4258° E 100.3013°, 2104 msl, 15 July 2004, ESanaa, 2 ♂, 1 ♀, SRP2004071503, (074IMH). ARKHANGAI Aimag, Ikhtamir Soum, E side of Khoit Tamir Gol 4 km NE of Ikhtamir N 47.59928° E 101.24521°, 1602 msl, 14 July 2004, ESanaa, 3 ♂, SRP2004071401, (071IMH). ARKHANGAI Aimag, Ikhtamir Soum, Khoit Tamir Gol ~29 km SW of Ikhtamir N 47.48567° E 100.87875°, 1749 msl, 15 July 2004, ESanaa, 9 ♂, 10 ♀, SRP2004071501, (073IMH). ARKHANGAI Aimag, Ikhtamir Soum, Khoit Tamir Gol ~29 km SW of Ikhtamir N 47.48567° E 100.87875°, 1749 msl, 15 July 2004, JKGelhaus, 2 ♂, 1 ♀, SRP2004071501, (063ANSP). ARKHANGAI Aimag, Ikhtamir Soum, NW braid of Khoit Tamir Gol ~25 km SW of Ikhtamir N 47.50523° E 100.93208°, 1728 msl, 14 July 2004, ESanaa, 12 ♂, 14 ♀, SRP2004071402, (072IMH). ARKHANGAI Aimag, Ikhtamir Soum, NW braid of Khoit Tamir Gol ~25 km SW of Ikhtamir N 47.50523° E 100.93208°, 1728 msl, 14 July 2004, JKGelhaus, 1 ♂, SRP2004071402, (062ANSP). ARKHANGAI Aimag, Tariat Soum, Nariin Gichgenii Gol/Urd Terkh Gol~5 km SE of Khorgo/Tariat N 48.12661° E 99.94128°, 2019 msl, 17 July 2004, JKGelhaus, 3 ♀, SRP2004071702, (065ANSP). ARKHANGAI Aimag, Tsenkher Soum, Tsetseleg Gol ~17 km SW of Tavanbulag N 47.26999° E 101.80227°, 1684 msl, 10 July 2004, ESanaa, 3 ♂, 10 ♀, SRP2004071002, (069IMH). ARKHANGAI Aimag, Tsenkher Soum, Tsetseleg Gol ~17 km SW of Tavanbulag N 47.26999° E 101.80227°, 1684 msl, 10 July 2004, JKGelhaus, 1 ♀, SRP2004071002, (061ANSP). BAYAN-OLGII Aimag, Bulgan Soum, Bulgan Gol ~15 km N Bulgan N 47.03954° E 91.03448, 2010 msl, 8 July 2009, SWJudson, 1 lot, MAIS2009070803, (837BYU). BAYAN-OLGII Aimag, Sagsay Soum, Sagsay Gol, bridge 11 km NW Sagsay, N 48.84328° E 89.53623°, 1798 msl, 5 July 2008, CRNelson, 1 ♀, MAIS2008070502, (028BYU). KHOVSGOL Aimag, KhutagOndor Soum, Unit Gol stream, 11 km SE of Selenge Gol River bridge, 20.8 km SE of Khutag Ondor town, N 49.33339° E 102.97786°, 924 msl, 25 July 2005, C.R.Nelson, 1 lot, SRP2005072501, (1032BYU). KHOVSGOL Aimag, Renchinlumbe Soum, springs of Shishged Gol, 36 km NNE of Ulaan Uul town, N 50.99171° E 99.35400°, 1584 msl, 30 June 2006, Malaise, 1 ♀, SRP2006063002, (024ANSP). KHOVSGOL Aimag, Renchinlumbe Soum, springs of Shishged Gol, 36 km NNE of Ulaan Uul town, N 50.99171° E 99.35400°, 1584 msl, 30 June 2006, JKGelhaus, 2 ♂, 3 ♀, SRP2006063002, (025ANSP). KHOVSGOL Aimag, Renchinlumbe Soum, springs of Shishged Gol, 36 km NNE of Ulaan Uul town, N 50.99171° E 99.35400°, 1584 msl, 30 June 2006, CRNelson, 8 ♂, 4 ♀, SRP2006063002, (129BYU). KHOVSGOL Aimag, Renchinlumbe Soum, springs of Shishged Gol, 36 km NNE of Ulaan Uul town, N 50.99171° E 99.35400°, 1584 msl, 30 June 2006, CRNelson, 10 ♂, 5 ♀, SRP2006063002, (143BYU). KHOVSGOL Aimag, Renchinlumbe Soum, springs of Shishged Gol, 36 km NNE of Ulaan Uul town, N 50.99171° E 99.35400°, 1584 msl, 30 June 2006, JKGelhaus, 1 ♂, 1 ♀, SRP2006063002, (206ANSP). KHOVSGOL Aimag, Soum, Selenge River, 0, Da July Year, J. Gelhaus, 1 lot, JKG733, (624ANSP). KHOVSGOL Aimag, TsagaanUur Soum, Uilgan Gol, 26 km ENE of Tsagaan Uur town, N 50.62324° E 101.87412°, 1156 msl, 15 July 2005, JKGelhaus, 1 ♂, SRP2005071502A, (207ANSP). KHOVSGOL Aimag, TsagaanUur? Soum, Uur Gol River, 7 km N of Tsagaan Uur town, N 50.60031° E 101.52392°, 1155 msl, 16 July 2005, C.R.Nelson, 1 lot, SRP2005071601, (1020BYU). OGORHANGAY Aimag, Bat olziy Soum, Ulaan Gol ~93 km W of Khujirt N 46.73093° E 101.88583°, 1894, 7 July 2004, ESanaa, 3 ♂, 12 ♀, SRP2004070702, (067IMH). OGORHANGAY

Aimag, Bat olziy Soum, tributary of Ulaan Gal ~92 km W of Khujirt N 46.72826° E 101.89317°, 1941, 8 July 2004, ESanaa, 15 ♂, 19 ♀, SRP2004070801, (068IMH). OVORKHANGAI Aimag, Batolziy Soum, Below Orkhon's Waterfall on Ulaan Gol ~200 m S of Orkhon Gol, ~84 km W of Khujirt N 46.78742° E 101.96021°, 1809 msl, 7 July 2004, ESanaa, 20 ♂, 25 ♀, SRP2004070701A, (066IMH). OVORKHANGAI Aimag, Batolziy Soum, Below Orkhon's Waterfall on Ulaan Gol ~200 m S of Orkhon Gol, ~84 km W of Khujirt N 46.78742° E 101.96021°, 1809 msl, 7 July 2004, JKGelhaus, 10 ♂, 14 ♀, SRP2004070701A, (060ANSP). SELENGE Aimag, Bugant/Yaroo Soum, Khongiin Gol at Yeroo Gol confluence N 49.08636° E 107.3075°, 943 msl, 19 July 2003, SRP Team, 1 lot, SRP2003071803, (718IMH). SELENGE Aimag, Khuder Soum, Zerlegiin Gol c. 12 km E of Khuder N 49.7313° E 107.63484°, 763 msl, 25 July 2003, SRP Team, 1 lot, SRP2003072401, (30IMH). SELENGE Aimag, Tsagaanuur Soum, Wetland 10.1 km SW of town of Tsagaanuur N 50.03671° E 105.37355°, 706 msl, 6 July 2005, , 1 lot, SRP2005070601, (993BYU). TOV Aimag, Erdene Soum, Gorkhi Terelj National Park Tuul R c. 0.5 km upstream of Park Gate bridge N 47.82258° E 107.33613°, 1305 msl, 5 July 2003, SRP Team, 1 lot, SRP2003070501, (93IMH). ZAVKHAN Aimag, Ider Soum, Ideriin Gol ~22 km SE of Zuummod/Ider N 48.05989° E 97.55073°, 2053 msl, 23 July 2004, ESanaa, 1 ♂, 1 ♀, SRP2004072303, (077IMH). ZAVKHAN Aimag, Tosontsengel Soum, Delgarakhiin Gol ~16 km S of Tosontsengel N 48.61518° E 98.23096°, 1761 msl, 20 July 2004, ESanaa, 1 ♂, SRP2004072001, (076IMH).

*Amphinemura standfussi* - MONGOLIA: HOVSGOL Aimag, Khank Soum, Borsog River, near Hovsgol lake N 50.96147222° E 100.7250556°, 1689 msl, 27 Aug 2003, E. Sanaa, 1 lot, Hovsgol\_Borsog, (483IMH). HOVSGOL Aimag, Khank Soum, Dalbay River, near Hovsgol lake N 51.01908333° E 100.7595278°, 1662 msl, 15 Aug 2005, E. Sanaa, 1 lot, Hovsgol\_Dalbay, (489IMH). HOVSGOL Aimag, Khank Soum, Noyon gol, near Hovsgol Nuur N 51.20152778° E 100.8072778°, 1709 msl, 11 Aug 2003, E. Sanaa, 1 lot, Hovsgol\_Noyon, (493IMH). HOVSGOL Aimag, Khank Soum, Sevsull river, near Hovsgol lake N 51.16361111° E 100.7521111°, 1656 msl, 25 Aug 2003, E. Sanaa, 1 lot, Hovsgol\_Sevsuul, (497IMH). HOVSGOL Aimag, Khank Soum, Shagnull River near Hovsgol Lake N 51.25869444° E 100.86000°, 1732 msl, 15 Aug 2005, E. Sanaa, 1 lot, Hovsgol\_Shagnuul, (501IMH). HOVSGOL Aimag, Khank Soum, Turag River near Hovsgol Lake N 51.28775° E 100.8276389°, 1667 msl, 15 Aug 2005, E. Sanaa, 1 lot, Hovsgol\_Turag, (506IMH). KHOVSGOL Aimag, Chandmani-Ondor Soum, Stream receiving Bolnain Rashaan Hot Spring 58 km NE of Hatgal N 50.77444° E 100.80067°, 1668 msl, 19 July 2005, C.R.Nelson, 1 lot, SRP2005071901E, (1026BYU). KHOVSGOL Aimag, KhutagOndor Soum, Unit Gol stream, 11 km SE of Selenge Gol River bridge, 20.8 km SE of Khutag Ondor town, N 49.33339° E 102.97786°, 924 msl, 25 July 2005, C.R.Nelson, 1 lot, SRP2005072501, (1033BYU). KHOVSGOL Aimag, xx Soum, Khalkhan Gol Stream at confluence with Bul Nai Khalkhan Hot Springs, 35 km NW of Chandmani Ondor town, N 50.77500° E 100.80006°, 1669 msl, 19 July 2005, CRNelson, 1 lot, SRP2005071902, (105BYU). KHOVSGOL Aimag, xx Soum, Khalkhan Gol Stream at confluence with Bul Nai Khalkhan Hot Springs, 35 km NW of Chandmani Ondor town, N 50.77500° E 100.80006°, 1669 msl, 19 July 2005, CRNelson, 21 ♂, 11 ♀, SRP2005071902, (104BYU). SELENGE Aimag, Khuder Soum, Zerlegiin Gol c. 12 km E of Khuder N 49.7313° E 107.63484°, 763 msl, 25 July 2003, SRP Team, 1 lot, SRP2003072401, (31IMH). ZAVKHAN Aimag, Ider Soum, Dogshin/Nogoon Nuur ~21 km SE of Zuummod/Ider N 48.06257° E 97.55064°, 2054 msl, 23 July 2004, ESanaa, 2 ♂, SRP2004072302, (080IMH). ZAVKHAN Aimag, Ider Soum, Dogshin/Nogoon Nuur ~21 km SE of Zuummod/Ider N 48.06257° E 97.55064°, 2054 msl, 23 July 2004, JKGelhaus, 2 ♂, SRP2004072302, (068ANSP). ZAVKHAN Aimag, Ider Soum, Ideriin Gol ~22 km SE of Zuummod/Ider N 48.05989° E 97.55073°, 2053 msl, 23 July 2004, ESanaa, 6 ♂, 7 ♀, SRP2004072303, (081IMH). ZAVKHAN Aimag, Tosontsengel Soum, Delgarakhiin Gol ~16 km S of Tosontsengel N 48.61518° E 98.23096°, 1761 msl, 20 July 2004, ESanaa, 1 ♀, SRP2004072001, (078IMH). ZAVKHAN Aimag, Tosontsengel Soum, Gunza Gol ~38 km SW of Tosontsengel N 48.62624° E 97.89617°, 1831 msl, 21 July 2004, ESanaa, 36 ♂, 10 ♀, SRP2004072102, (079IMH). ZAVKHAN Aimag, Tosontsengel Soum, Gunza Gol ~38 km SW of Tosontsengel N 48.62624° E 97.89617°, 1831 msl, 21 July 2004, JKGelhaus, 4 ♂, 1 ♀, SRP2004072102, (066ANSP). ZAVKHAN Aimag, Tosontsengel Soum, Tegshiin Gol ~70 km SW of Tosontsengel N 48.3441° E 97.87312°, 1927 msl, 22 July 2004, JKGelhaus, 1 ♀, SRP2004072201, (067ANSP).

*Nemoura arctica* - MONGOLIA: ARKHANGAI Aimag, Tsenkher Soum, Tsetseleg Gol ~17 km SW of Tavanbulag N 47.26999° E 101.80227°, 1684 msl, 10 July 2004, JKGelhaus, 1 ♂, 1 ♀, SRP2004071002, (069ANSP). BAYAN OLGIIY Aimag, Ulaanhus Soum, 12 km S Khokh Ereg Military Outpost N 49.23051° E 088.44516°, 2430 msl, 9 July 2008, C.R.Nelson, 1 lot, MAIS2008070901, (903BYU). BAYAN-OLGII Aimag, Bulgan Soum, Confluence of "Dood Asgat Uul Gol" and "Ulaagchiny Davaa Gol," ~30 km N Bulgan N 47.34660 E 90.96013, 2519 msl, 6 July 2009, SWJudson, 1 lot, MAIS2009070602, (814BYU). BAYAN-OLGII Aimag, Bulgan Soum, Northeast outfall river of

Khar Nuur (Black Lake), ~50 km NNW Bulgan N 47.24368 E 90.75253, 2560 msl, 7 July 2009, SWJudson, 1 lot, MAIS2009070704, (826BYU). BAYAN-OLGII Aimag, Bulgan Soum, Springs by Bulgan Gol ~25 km SE Bulgan N 46.77181 E 91.31750, 1797 msl, 10 July 2009, SWJudson, 1 lot, MAIS2009071001, (853BYU). BAYAN-OLGII Aimag, Bulgan Soum, Turgen Gol, ~40 km NNW Bulgan N 47.18333 E 90.77660, 2492 msl, 7 July 2009, SWJudson, 1 lot, MAIS2009070705, (830BYU). BAYAN-OLGII Aimag, Deluun Soum, Gantsmodi Gol, 33 km S Deluun N 47.62447 E 90.67194, 2241 msl, 5 July 2009, SWJudson, 1 lot, MAIS2009070501, (807BYU). BAYAN-OLGII Aimag, Tsengel Soum, Altai Tavan Bogd National Park, Sul Uulim Gol, tributary of Tsagaan Gol, N 49.10450° E 88.04854° , 2795 msl, 10 July 2008, CRNelson, 3 ♂, 55♀, MAIS2008071001, (046BYU). BAYAN-OLGII Aimag, Tsengel Soum, Altai Tavan Bogd National Park, Sul Uulim Gol, tributary of Tsagaan Gol, N 49.10450° E 88.04854° , 2795 msl, 10 July 2008, Malaise Trap, 37 ♂, 102♀, MAIS2008071001, (172BYU). BAYAN-OLGII Aimag, Tsengel Soum, Altai Tavan Bogd National Park, Tavan Bogd ascent base camp, IMH Glacier Camp, unnamed creek tributary of Potitinini Gol of Tsagaan Gol, N 49.15035° E 87.94238° , 3099 msl, 10 July 2008, CRNelson, 5 ♂, 7♀, MAIS2008071003, (048BYU). BAYAN-OLGII Aimag, Tsengel Soum, Altai Tavan Bogd National Park, Tavan Bogd Road's End Camp, springs above Tsagaan Gol, 20 km west of Zagaastnuur Bag, N 49.09754° E 88.10383° , 2538 msl, 12 July 2008, CRNelson, 25 ♂, 20♀, MAIS2008071101, (173BYU). BAYAN-OLGII Aimag, Tsengel Soum, Altai Tavan Bogd National Park, Tsagaan Gol, Tavan Bogd Road's End Camp, 20 km west of Zagastnuur Bag, N 49.09159° E 88.10411° , 2381 msl, 9 July 2008, CRNelson, 17 ♂, 30♀, MAIS2008070902, (045BYU). BAYAN-OLGII Aimag, Tsengel Soum, Altai Tavan Bogd National Park, unnamed tributary of Sul Uulim Gol, tributary of Tsagaan Gol, N 49.12007° E 88.01157° , 2912 msl, 10 July 2008, CRNelson, 10 ♂, 29♀, MAIS2008071002, (047BYU). BAYAN-OLGII Aimag, Tsengel Soum, Khar Ovoo Gol, draining Khelkhee Lake, N 48.62918° E 88.28554° , 2147 msl, 15 July 2008, CRNelson, 1 ♂, 7♀, MAIS2008071601, (053BYU). BAYAN-OLGII Aimag, Tsengel Soum, Khoton Lake, 15 km NW of Syrgal, N 48.66718° E 88.29908° , 2090 msl, 14 July 2008, CRNelson, 54 ♂, 32♀, MAIS2008071402, (174BYU). BAYAN-OLGII Aimag, Tsengel Soum, Khoton Lake, 15 km NW of Syrgal, N 48.66718° E 88.29908° , 2090 msl, 14 July 2008, JCMorse, 13 ♂, 9♀, MAIS2008071402, (175BYU). BAYAN-OLGII Aimag, Tsengel Soum, Mogoiitiin Gol near its parallels with unnamed tributary, 13 km ESE of Asgat Peak, N 48.76028° E 88.60029° , 2176 msl, 13 July 2008, CRNelson, 44 ♂, 49♀, MAIS2008071305, (171BYU). BAYAN-OLGII Aimag, Tsengel Soum, Sumdairag Gol, 12 km due South of Syrgal, N 48.50679° E 88.50977° , 2129 msl, 16 July 2008, CRNelson, 8 ♂, 13♀, MAIS2008071604, (182BYU). BAYAN-OLGII Aimag, Tsengel Soum, Sumdairag Gol, 12 km due South of Syrgal, N 48.50679° E 88.50977° , 2129 msl, 16 July 2008, JCMorse, 14 ♂, 16♀, MAIS2008071604, (183BYU). BAYAN-OLGII Aimag, Tsengel Soum, Tsagaan Us Gol 0.5 km upstream from junction Rashaanii Gol, N 48.75197° E 88.14987° , 2098 msl, 15 July 2008, CRNelson, 11 ♂, 20♀, MAIS2008071502, (177BYU). BAYAN-OLGII Aimag, Tsengel Soum, unnamed tributary of Mogoiitiin Gol, where canyons open to moraine plain, 13 km ESE of Asgat Peak, N 48.75576° E 88.60196° , 2145 msl, 13 July 2008, CRNelson, 1 ♂, 4♀, MAIS2008071304, (052BYU). BAYAN-OLGII Aimag, Ulaankhus Soum, Khar Yamaat Gol, (Yamaatiin?) at road crossing 14 km NE of Jalpak, N 49.38055° E 88.68401° , 2306 msl, 8 July 2008, CRNelson, 10 ♂, 387♀, MAIS2008070801, (038BYU). BAYAN-OLGII Aimag, Ulaankhus Soum, Ulastai Gol, 2 km East of Khokh Ereg Military Base, N 49.31867° E 88.36613° , 2391 msl, 8 July 2008, CRNelson, 7 ♂, 14♀, MAIS2008070802, (040BYU). BULGAN Aimag, Teshig Soum, Tarvagatain (Marmot) Gol River at Egiin Gol River, N 49.70678° E 103.10288° , 909 msl, 10 July 2005, C.R.Nelson, 1 lot, SRP2005071001A, (1007BYU). BULGAN Aimag, xx Soum, Tariakhtain Gol Stream, N 49.70184° E 103.80040° , 1436 msl, 9 July 2005, CRNelson, 1 ♂, SRP2005070901, (079BYU). BULGAN Aimag, xx Soum, Tarkhtain Gol stream, 33.8 km WNW of Hyalganat town, N 49.65142° E 103.88064° , 1510 msl, 8 July 2005, CRNelson, 2 ♂, SRP2005070802, (077BYU). HOVSGOL Aimag, Khank Soum, Borsog River, near Hovsgol lake N 50.96147222° E 100.7250556°, 1689 msl, 19 June 2003, E. Sanaa, 1 lot, Hovsgol\_Borsog, (486IMH). HOVSGOL Aimag, Khank Soum, Dalbay River, near Hovsgol lake N 51.01908333° E 100.7595278° , 1662 msl, 18 July 2005, E. Sanaa, 1 lot, Hovsgol\_Dalbay, (490IMH). HOVSGOL Aimag, Khank Soum, Noyon gol, near Hovsgol Nuur N 51.20152778° E 100.8072778° , 1709 msl, 18 Aug 2003, E. Sanaa, 1 lot, Hovsgol\_Noyon, (494IMH). HOVSGOL Aimag, Khank Soum, Sevsull river, near Hovsgol lake N 51.16361111° E 100.7521111° , 1656 msl, 13 June 2005, E. Sanaa, 1 lot, Hovsgol\_Sevsuul, (500IMH). HOVSGOL Aimag, Khank Soum, Shagnull River near Hovsgol Lake N 51.25869444° E 100.86000° , 1732 msl, 4 Aug 2003, E. Sanaa, 1 lot, Hovsgol\_Shagnuul, (503IMH). HOVSGOL Aimag, Khank Soum, Turag River near Hovsgol Lake N 51.28775° E 100.8276389° , 1667 msl, 7 June 2005, E. Sanaa, 1 lot, Hovsgol\_Turag, (507IMH). KHOVD Aimag, Duut Soum, Burgedtein Gol 11 km S Buyant Gol N 47.53183 E 91.28320, 2519 msl, 4 July 2009, SWJudson, 1 lot, MAIS2009070401, (801BYU). KHOVSGOL Aimag, Khank Soum, Hosgol Lake at Khank , 0, 15 June 1996, J. Gelhaus, 1 lot, JKG720, (609ANSP). KHOVSGOL Aimag, Khank Soum, Hovsgol Nuur N Side , 0, Da July Year, J. Gelhaus, 1 lot, JKG760, (648ANSP). KHOVSGOL Aimag, Renchinlumbe Soum, Arsayn Gol, 16.2 km

N of Renchinlumbe town, N 51.25356° E 99.66687°, 1565 msl, 2 July 2006, JKGelhaus, 1 ♂, SRP2006070201, (004ANSP). KHOVSGOL Aimag, Renchinlumbe Soum, Arsayn Gol, 16.2 km N of Renchinlumbe town, N 51.25356° E 99.66687°, 1565 msl, 2 July 2006, CRNelson, 9 ♂, 6♀, SRP2006070201, (158BYU). KHOVSGOL Aimag, Renchinlumbe Soum, Arsayn Gol, 16.2 km N of Renchinlumbe town, N 51.25356° E 99.66687°, 1565 msl, 2 July 2006, JKGelhaus, 1 ♂, SRP2006070201, (159ANSP). KHOVSGOL Aimag Renchinlumbe Soum, springs of Shishged Gol, 36 km NNE of Ulaan Uul town, N 50.99171° E 99.35400°, 1584 msl, 30 June 2006, CRNelson, 1 ♂, 3♀, SRP2006063002, (144BYU). KHOVSGOL Aimag, UlaanUul Soum, stream, 33.8 km NE of Bayanzurkh, N 50.42996° E 99.21727°, 2086 msl, 28 June 2006, JKGelhaus, 6 ♂, 6♀, SRP2006062803, (005ANSP). KHOVSGOL Aimag, Soum, East Shore Hovsgol Lake, 0, Da July Year, B. Hayford, 1 lot, Hay414Hay415, (561ANSP). KHOVSGOL Aimag, Soum, Hseg tsar cove, 0, 14 July 1997, J. Gelhaus, 1 lot, JK747Hay97062, (599ANSP). KHOVSGOL Aimag, Soum, Ikh Dalbayn gol, 0, Da July Year, J. Gelhaus, 1 lot, JKG754, (643ANSP). KHOVSGOL Aimag, Soum, Ikh khoroo gol near Khovsgol Nuur, 0, Da July Year, J. Gelhaus, 1 lot, JKG722, (617ANSP). KHOVSGOL Aimag, Soum, Noyon gol, 0, 18 June 1996, J. Gelhaus, 1 lot, JKG725, (623ANSP). KHOVSGOL Aimag, Soum, Noyon gol, near Hovsgol Nuur, 0, Da July Year, J. Gelhaus, 1 lot, JKG756, (644ANSP). KHOVSGOL Aimag, Soum, Sevsuuliyn gol, 0, Da July Year, J. Gelhaus, 1 lot, JKG724, (621ANSP). KHOVSGOL Aimag, Renchinlumbe Soum, Har-Us Spring, Jargalant Gol 4.2 km SE of Renchinlumbe N 51.07845° E 99.70774°, 1586 msl, 1 July 2006, Malaise, 7 ♀, SRP2006070102, (030ANSP). KHOVSGOL Aimag, Renchinlumbe Soum, Har Us Spring, Jargalant Gol 4.2 km SE of Renchinlumbe N 51.07845° E 99.70774°, 1586 msl, 1 July 2006, JKGelhaus, 1♀, SRP2006070102, (031ANSP). KHOVSGOL Aimag, TsagaanNuur Soum, stream, 16 km NW of Tsagaan Nuur town, N 51.46205° E 99.19994°, 1607 msl, 3 July 2006, JMorse, 1♀, SRP2006070302, (010ANSP). KHOVSGOL Aimag, TsagaanNuur Soum, stream, 16 km NW of Tsagaan Nuur town, N 51.46205° E 99.19994°, 1607 msl, 3 July 2006, JMorse, 1♀, SRP2006070302, (011ANSP). KHOVSGOL Aimag, TsagaanNuur Soum, stream, 16 km NW of Tsagaan Nuur town, N 51.46205° E 99.19994°, 1607 msl, 3 July 2006, JKGelhaus, 15 ♂, 10♀, SRP2006070302, (037ANSP). KHOVSGOL Aimag, TsagaanNuur Soum, stream, 16 km NW of Tsagaan Nuur town, N 51.46205° E 99.19994°, 1607 msl, 3 July 2006, JCMorse, 1♀, SRP2006070302, (038ANSP). KHOVSGOL Aimag, TsagaanNuur Soum, stream, 16 km NW of Tsagaan Nuur town, N 51.46205° E 99.19994°, 1607 msl, 3 July 2006, CRNelson, 77 ♂, 48♀, SRP2006070302, (167BYU). KHOVSGOL Aimag, TsagaanNuur Soum, stream, 16 km NW of Tsagaan Nuur town, N 51.46205° E 99.19994°, 1607 msl, 3 July 2006, JMorse, 1 ♂, 1♀, SRP2006070302, (009ANSP). KHOVSGOL Aimag, xx Soum, tributary of Emt Gol Stream, 33.2 km NW of Tarialyn town, N 49.87761° E 101.82039°, 1499 msl, 13 July 2005, CRNelson, 8♀, SRP2005071302A, (093BYU). KHOVSGOL Aimag, Zuunmod Soum, Turgeniy Gol 7.7 KM NNW of Zuunmod Soum Center N 47.77758° E 106.9278°, 1581 msl, 14 July 2006, JKGelhaus, 1 ♂, 1♀, SRP2006071401, (040ANSP). KHOVSGOL Aimag, Zuunmod Soum, Turgeniy Gol 7.7 KM NNW of Zuunmod Soum Center N 47.77758° E 106.9278°, 1581 msl, 14 July 2006, JKGelhaus, 1 ♂, SRP2006071401, (008ANSP). TOV Aimag, Erdene Soum, Gorkhi Terelj National Park, mouth of Khag River @ confluence with Tuul N 48.25861° E 107.90251°, 1608 msl, 10 July 2003, ESanaa, 2 ♂, 5♀, SRP2003071002, (094IMH). TOV Aimag, Erdene Soum, Gorkhi Terelj National Park, Tuul River 10.1 km upstream of Tuul River Bridge N 48.09549° E 107.84265°, 1531 msl, 8 July 2003, ESanaa, 1 ♂, 4♀, SRP2003070801, (084IMH). TOV Aimag, Erdene Soum, Gorkhi Terelj National Park, Tuul River 10.1 km upstream of Tuul River Bridge N 48.09549° E 107.84265°, 1531 msl, 8 July 2003, ESanaa, 6 ♂, 4♀, SRP2003070801, (093IMH). TOV Aimag, Erdene Soum, Gorkhi Terelj National Park, Galtain Gol at road crossing 19.1 km upstream of Tuul R Bridge N 48.1335° E 107.9199°, 1551 msl, 8 July 2003, SRP Team, 1 lot, SRP2003070802, (701IMH). TOV Aimag, Erdene Soum, Gorkhi Terelj National Park, unnamed braid of Tuul River N 48.14846° E 107.91267°, 1564 msl, 9 July 2003, SRP Team, 1 lot, SRP2003070805, (704IMH).

***Nemoura cinerea*** - MONGOLIA: ARKHANGAI Aimag, Ikhtamir Soum, Khoit Tamir Gol ~29 km SW of Ikhtamir N 47.48567° E 100.87875°, 1749 msl, 15 July 2004, JKGelhaus, 1 ♀, SRP2004071501, (074ANSP). BULGAN Aimag, xx Soum, Manhtai Spring, cold spring, N 49.68122° E 104.56461°, 866 msl, 7 July 2005, CRNelson, 5 ♂, 7♀, SRP2005070701, (073BYU). KHOVSGOL Aimag, Renchinlumbe Soum, springs of Shishged Gol, 36 km NNE of Ulaan Uul town, N 50.99171° E 99.35400°, 1584 msl, 30 June 2006, CRNelson, 138 ♂, 93♀, SRP2006063002, (142BYU). KHOVSGOL Aimag, Renchinlumbe Soum, springs of Shishged Gol, 36 km NNE of Ulaan Uul town, N 50.99171° E 99.35400°, 1584 msl, 30 June 2006, JKGelhaus, 6 ♂, 8♀, SRP2006063002, (002ANSP). KHOVSGOL Aimag, Ulaanuul Soum, big spring & bogs, 800 m from Bagtagin Gol, 17 km NNE of Ulaan Uul, N 50.81265° E 99.33803°, 1605 msl, 30 June 2006, CRNelson, 86 ♂, 44♀, SRP2006063001, (116BYU). KHOVSGOL Aimag, Renchinlumbe Soum, Har-Us Spring, Jargalant Gol 4.2 km SE of Renchinlumbe N 51.07845° E 99.70774°, 1586

msl, 1 July 2006, Malaise, 2 ♂, 1 ♀, SRP2006070102, (027ANSP). KHOVSGOL Aimag, Renchinlumbe Soum, Har-Us Spring, Jargalant Gol 4.2 km SE of Renchinlumbe N 51.07845° E 99.70774°, 1586 msl, 1 July 2006, JKGelhaus, 4 ♂, 2 ♀, SRP2006070102, (028ANSP). KHOVSGOL Aimag, Renchinlumbe Soum, Har-Us Spring, Jargalant Gol 4.2 km SE of Renchinlumbe N 51.07845° E 99.70774°, 1586 msl, 1 July 2006, JCMorse, 7 ♂, 2 ♀, SRP2006070102, (029ANSP). TOV Aimag, Erdene Soum, Gorkhi Terelj National Park; Tuul R c. 100 m upstream of confluence with Terelj R N 47.96806° E 107.59365°, 1467 msl, 5 July 2003, SRP Team, 1 lot, SRP2003070503, (695IMH). ZAVKHAN Aimag, Ider Soum, Dogshin/Nogoon Nuur ~21 km SE of Zuunmod/Ider N 48.06257° E 97.55064°, 2054 msl, 23 July 2004, ESanaa, 10 ♂, 13 ♀, SRP2004072302, (096IMH). ZAVKHAN Aimag, Ider Soum, Dogshin/Nogoon Nuur ~21 km SE of Zuunmod/Ider N 48.06257° E 97.55064°, 2054 msl, 23 July 2004, JKGelhaus, 1 ♂, 1 ♀, SRP2004072302, (075ANSP).

*Nemoura sahlbergi* - MONGOLIA: ARKHANGAI Aimag, Chuluut Soum, Khurmen/Davaat Gol 15 km SSE of Chuluut/Jargalant N 47.4258° E 100.3013°, 2104 msl, 15 July 2004, ESanaa, 4 ♂, 12 ♀, SRP2004071503, (098IMH). BULGAN Aimag, xx Soum, Tariakhtain Gol Stream, N 49.70184° E 103.80040°, 1436 msl, 9 July 2005, CRNelson, 2 ♂, 57 ♀, SRP2005070901, (078BYU). HOVSGOL Aimag, Khank Soum, Borsog River, near Hovsgol lake N 50.96147222° E 100.7250556°, 1689 msl, 28 July 2003, E. Sanaa, 1 lot, Hovsgol\_Borsog, (487IMH). HOVSGOL Aimag, Khank Soum, Dalbay River, near Hovsgol lake N 51.01908333° E 100.7595278°, 1662 msl, 18 July 2005, E. Sanaa, 1 lot, Hovsgol\_Dalbay, (491IMH). HOVSGOL Aimag, Khank Soum, Noyon gol, near Hovsgol Nuur N 51.20152778° E 100.8072778°, 1709 msl, 1 July 2003, E. Sanaa, 1 lot, Hovsgol\_Noyon, (495IMH). HOVSGOL Aimag, Khank Soum, Shagnull River near Hovsgol Lake N 51.25869444° E 100.86000°, 1732 msl, 21 July 2003, E. Sanaa, 1 lot, Hovsgol\_Shagnuul, (504IMH). HOVSGOL Aimag, Khank Soum, Turag River near Hovsgol Lake N 51.28775° E 100.8276389°, 1667 msl, 10 June 2005, E. Sanaa, 1 lot, Hovsgol\_Turag, (508IMH). KHOVSGOL Aimag, UlaanUul Soum, stream, 33.8 km NE of Bayanzurkh, N 50.42996° E 99.21727°, 2086 msl, 28 June 2006, JKGelhaus, 1 ♂, 2 ♀, SRP2006062803, (006ANSP). KHOVSGOL Aimag, xx Soum, Khalkhan Gol Stream, above Bul Nai Hot Springs, 37.1 km NW of Chandmani Ondor town, N 50.78320° E 100.79585°, 1677 msl, 18 July 2005, CRNelson, 1 ♂, SRP2005071803, (102BYU). KHOVSGOL Aimag, Soum, Sevsuuliyin gol, 0, Da July Year, J. Gelhaus, 1 lot, JKG724, (622ANSP). KHOVSGOL Aimag, xx Soum, tributary of Emt Gol Stream, 33.2 km NW of Tarialyn town, N 49.87761° E 101.82039°, 1499 msl, 13 July 2005, CRNelson, 1 ♂, 5 ♀, SRP2005071302A, (092BYU). TOV Aimag, Erdene Soum, Gorkhi Terelj National Park, W Bayangin Gol 20.1 km upstream of Tuul R Road N 48.16668° E 107.69548°, 1623 msl, 6 July 2003, ESanaa, 3 ♂, 2 ♀, SRP2003070605, (097IMH). TOV Aimag, Erdene Soum, Gorkhi Terelj National Park, unnamed tributary of Tuul R on its W side 1.6 km upstream from Daichin crossing N 48.2178° E 107.90392°, 1594 msl, 9 July 2003, SRP Team, 1 lot, SRP2003070902, (705IMH).

*Nemoura sp.* - MONGOLIA: KHOVSGOL Aimag, Renchinlumbe Soum, Hugin Gol, toll bridge, 46.8km N of Ulaan Uul town, N 51.09845° E 99.32051°, 1557 msl, 1 July 2006, , 12 ♂, 4 ♀ SRP2006070101, (396BYU).

*Nemurella pictetii* - MONGOLIA: KHOVSGOL Aimag, Ulaanul Soum, big spring & bogs, 800 m from Bagtagin Gol, 17 km NNE of Ulaan Uul, N 50.81265° E 99.33803°, 1605 msl, 30 June 2006, CRNelson, 36 ♂, 72 ♀, SRP2006063001, (118BYU). KHOVSGOL Aimag, Renchinlumbe Soum, Har-Us Spring, Jargalant Gol 4.2 km SE of Renchinlumbe N 51.07845° E 99.70774°, 1586 msl, 1 July 2006, JCMorse, 2 ♂, 4 ♀, SRP2006070102, (033ANSP). KHOVSGOL Aimag, Renchinlumbe Soum, Har-Us Spring, Jargalant Gol 4.2 km SE of Renchinlumbe N 51.07845° E 99.70774°, 1586 msl, 1 July 2006, JKGelhaus, 10 ♂, 3 ♀, SRP2006070102, (032ANSP).

## **Perlidae**

*Agneta brevipennis* - MONGOLIA: ARKHANGAI Aimag, Tamirin/Shandinam Gol Soum, Tamirin/Shandinam Gol ~25 km WNW of Zegstei N 47.73941° E 102.23811°, 1377 msl, 26 July 2004, ESanaa, 14 ♂, SRP2004072601, (104IMH). BAYAN-OLGII Aimag, Bulgan Soum, Bulgan Gol ~20 km S Bulgan N 46.78006 E 91.30396, 1801 msl, 9 July 2009, SWJudson, 1 lot, MAIS2009070901, (845BYU). BAYAN-OLGII Aimag, Bulgan Soum, Tsonkhol Gol/Turgen Gol ~25 km SE Bulgan N 46.76950 E 91.32759, 1788 msl, 9 July 2009, SWJudson, 1 lot, MAIS2009070903, (850BYU). BAYAN-OLGII Aimag, Olgii Soum, Khovd Gol above Olgii, N 48.97842° E 89.94995°, 1750 msl, 5 July 2008, CRNelson, 5 ♂, MAIS2008070501, (023BYU). BULGAN Aimag, Teshig Soum, Wetland 5 km SSW of Teshig N 49.90725° E 102.65665°, 936 msl, 10 July 2005, C.R.Nelson, 1 lot, SRP2005071003,

(1008BYU). BULGAN Aimag, Teshig Soum, Egiin Gol River above (12.7 km SW of) Teshig, N 49.88884° E 102.50909°, 997 msl, 11 July 2005, CRNelson, 2 ♂, 1 ♀, SRP2005071101, (089BYU). BULGAN Aimag, xx Soum, Selenge River, bridge at Hyalganat town, N 49.48086° E 104.30864°, 786 msl, 8 July 2005, CRNelson, 1 ♂, 1 ♀, SRP2005070801, (076BYU). KHOVD Aimag, Bulgan Soum, Bulgan Gol 25 Km NWN Bulgan Soum, , 0, 26 July 1978, Puntsagdulan, 1 lot, Puntsagdulan26July1978MLBM, (890BYU). KHOVD Aimag, Bulgan Soum, Bulgan Gol, 25 Km NWN Bulgan Soum, , 26 July 1978, , 1 ♀, 26-VII-1978 AltID (no MAIS/SRP), (426BYU). KHOVD Aimag, Bulgan Soum, River Bulgan Gol N 46.55312 E 91.38850, 1509 msl, 10 July 2009, SWJudson, 1 lot, MAIS2009071002b, (856BYU). KHOVSGOL Aimag, xx Soum, Bugsei Gol River, 45.5 km SW of Moron City, N 49.26170° E 99.88242°, 1597 msl, 23 July 2005, CRNelson, 13 ♂, 2 ♀, SRP2005072301, (110BYU). KHOVSGOL Aimag, xx Soum, Delgar Moron Gol River, 12 km SW of Moron City, N 49.62785° E 99.99523°, 1280 msl, 20 July 2005, CRNelson, 1 ♂, 2 ♀, SRP2005072001, (106BYU). KHOVSGOL Aimag, xx Soum, Delgar Moron Gol River, 8.3 km W of Bayanzurkh town, N 50.16278° E 98.84212°, 1576 msl, 22 July 2005, CRNelson, 19 ♂, SRP2005072201A, (108BYU). KHOVSGOL Aimag, xx Soum, Delgar Moron Gol River, 8.3 km W of Bayanzurkh town, N 50.16278° E 98.84212°, 1576 msl, 22 July 2005, JKGelhaus, 1 ♀, SRP2005072201A, (019ANSP). KHOVSGOL Aimag, xx Soum, Selenge Moron Gol River at Teel, 23.4 km S of Tosontsengel town, N 49.26765° E 100.82998°, 1157 msl, 24 July 2005, CRNelson, 1 ♀, SRP2005072401, (112BYU). KHOVSGOL Aimag, Soum, Selenge River, 0, Da July Year, J. Gelhaus, 1 lot, JKG733, (628ANSP). KHOVSGOL Aimag, TsagaanUur? Soum, Uur Gol River, 7 km N of Tsagaan Uur town, N 50.60031° E 101.52392°, 1155 msl, 16 July 2005, C.R.Nelson, 1 lot, SRP2005071601, (1015BYU). KHOVSGOL Aimag, xx Soum, tributary of Emt Gol Stream, 33.2 km NW of Tarialyn town, N 49.87761° E 101.82039°, 1499 msl, 13 July 2005, C.R.Nelson, 1 lot, SRP2005071302A, (1010BYU). KHOVSGOL Aimag, xx Soum, Uur Gol River, 32.3 km NE of Erdenebulgan, N 50.30188° E 101.92869°, 1063 msl, 14 July 2005, C.R.Nelson, 1 lot, SRP2005071403, (1011BYU). OVORKHANGAI Aimag, Batolziy Soum, Orkhon Gol ~34 km W of Khujirt N 46.89303° E 102.39457°, 1610 msl, 6 July 2004, ESanaa, 1 ♀, SRP2004070602, (100IMH). OVORKHANGAI Aimag, Batolziy Soum, Below Orkhon's Waterfall on Ulaan Gol~200 m S of Orkhon Gol, ~84 km W of Khujirt N 46.78742° E 101.96021°, 1809 msl, 7 July 2004, SRP Team, 1 lot, SRP2004070701a, (38IMH). SELENGE Aimag, Khuder Soum, Galtiin Gol c. 6 km S of Khuder N 49.73769° E 107.48766°, 702 msl, 24 July 2003, SRP Team, 1 lot, SRP2003072402, (32IMH). SELENGE Aimag, Mandal Soum, Sharingol headwaters 4.6 km below southern ridgetop N 49.10789° E 106.65275°, 1124 msl, 21 July 2003, SRP Team, 1 lot, SRP2003072101, (24IMH). ZAVKHAN Aimag, Ikh-Uul Soum, Ideriin Gol ~28 km E of Tosontsengel N 48.71968° E 98.65184°, 1654 msl, 19 July 2004, ESanaa, 31 ♂, 3 ♀, SRP2004071903, (103IMH).

*Agnentina cocandica* - MONGOLIA: BAYAN-OLGII Aimag, Ulaankhus Soum, Sogoog Gol, 3.5 km East of Khokh Khotol, hidden valley rapids, N 49.23285° E 88.90569°, 2090 msl, 7 July 2008, C.R.Nelson, 1 lot, MAIS2008070702, (901BYU). KHOVD Aimag, Bulgan Soum, Bulgan Gol ~5 km N Bulgan N 46.13457 E 91.54169, 1200 msl, 10 July 2009, SWJudson, 1 lot, MAIS2009071003, (861BYU). KHOVD Aimag, Bulgan Soum, Springfed stream and oxbow of Bulgan Gol ~5 km N Bulgan N 46.13823 E 91.54096, 1210 msl, 11 July 2009, SWJudson, 1 lot, MAIS2009071101, (863BYU). KHOVD Aimag, Khovd Soum, Khovd Gol ~3 km NW Myangad N 48.24562 E 91.90144, 1172 msl, 20 July 2009, SWJudson, 1 lot, MAIS2009072002, (881BYU). KHOVD Aimag, Uyench Soum, Uyenchiin Gol ~8km N Uyench N 46.12450 E 92.05411, 1475 msl, 12 July 2009, SWJudson, 1 lot, MAIS2009071202, (864BYU). KHOVD Aimag, Dorgon Soum, Chono KharaiKh Gol (Jumping Wolf River), East of Dorgon, 1 km below dam site, N 48.33136° E 92.81702°, 1145 msl, 2 July 2008, CRNelson, 7 ♂, 2 ♀, MAIS2008070202, (019BYU). KHOVSGOL Aimag, ? Soum, Khyadagiin Gol at Gantigiin Cold Spring XXXX km NW of Moron N 49.7639° E 99.86185°, 1497 msl, 20 July 2005, C.R.Nelson, 1 lot, SRP2005072101B, (1029BYU). KHOVSGOL Aimag, Khotol Soum, Orkhan Gol River, 15 km NW of Orkhan, N 49.16354° E 105.18880°, 739 msl, 26 July 2005, CRNelson, 1 ♂, SRP2005072602, (114BYU). KHOVSGOL Aimag, xx Soum, Delgar Moron Gol River, 12 km SW of Moron City, N 49.62785° E 99.99523°, 1280 msl, 20 July 2005, CRNelson, 1 ♂, SRP2005072001, (107BYU). SELENGE Aimag, Shaamar Soum, Orkhon R @ Delgerkhaan Bridge N 50.06476° E 106.13388°, 609 msl, 27 July 2003, ESanaa, 1 ♂, 2 ♀, SRP2003072701, (106IMH). SELENGE Aimag, Zuunburen Soum, small channel of Selenge River, 7.9 km SW ofDzuunburen N 50.10277° E 105.78217°, 627 msl, 5 July 2005, CRNelson, 6 ♂, SRP2005070501, (070BYU).

*Agnentina extrema* - MONGOLIA: ARKHANGAI Aimag, Bulgan Soum, Urd Tamir Gol ~38 km SW of Tsetserleg N 47.28244° E 101.18793°, 1872 msl, 12 July 2004, ESanaa, 1 ♀, SRP2004071201A, (109IMH). ARKHANGAI Aimag, Chuluut Soum, Khanui Gol ~60 km SW of Ikhtamir N 47.50949° E 100.5751°, 1981 msl, 15 July 2004, ESanaa, 10 ♀,

SRP2004071502, (111IMH). ARKHANGAI Aimag, Ikhtamir Soum, E side of Khoit Tamir Gol 4 km NE of Ikhtamir N 47.59928° E 101.24521°, 1602 msl, 14 July 2004, ESanaa, 1 ♂, SRP2004071401, (110IMH). ARKHANGAI Aimag, Tsenkher Soum, Tsetseleg Gol ~17 km SW of Tavanbulag N 47.26999° E 101.80227°, 1684 msl, 10 July 2004, JKGelhaus, 1 ♂, SRP2004071002, (076ANSP). DARKHAN-UUL Aimag, Shariingol Soum, Khuitnii Gol N 49.4645° E 106.66871°, 852 msl, 21 July 2003, ESanaa, 1 ♀, SRP2003072103, (108IMH). KHOVSGOL Aimag, TsagaanUur? Soum, about 0.5 km W of Uur Gol River, 1.2 km NE of Tsagaan Uur town, N 50.54915° E 101.53806°, 1112 msl, 16 July 2005, CRNelson, 1 ♀, none (CRN8219), (132BYU). KHOVSGOL Aimag, xx Soum, Zerleg Gol Stream, 35.3 km NE of Erdenebulgan N 50.32718° E 101.95046°, 1110 msl, 15 July 2005, CRNelson, 3 ♂, 2 ♀, SRP2005071501, (098BYU). SELENGE Aimag, Bugant Soum, Bugant N 49.43268° E 107.28335°, July 2007, Asia Foundation, 1 lot, AsiaFound46, (305NUM). SELENGE Aimag, Mandal Soum, Kharaa Gol near Zuunkharaa Bridge N 48.83322° E 106.49162°, 863 msl, 17 July 2003, SRP Team, 1 lot, SRP2003071701, (13IMH). TOV Aimag, Batsumber Soum, Kharaa Gol 5.0 km upstream of Bayanbuural N 48.50028° E 106.78434°, 1051 msl, 16 July 2003, SRP Team, 1 lot, SRP2003071601, (11IMH). TOV Aimag, Erdene Soum, Gorkhi Terej National Park, unnamed tributary of Tuul R on its E side 8.5 km downstream of Galtain Gol N 48.0972° E 107.84928°, 1542 msl, 11 July 2003, SRP Team, 1 lot, SRP2003071101, (09IMH).

***Kamimuria exilis*** – MONGOLIA: KHOVSGOL Aimag, Delgar Moron Gol River, 8.3 km W of Bayanzurkh town, N 50.16278° E 98.84212°, 1576 msl, 22 July 2005, SRP team, 1 ♀, SRP2005072201A, (1003ANSP).

***Paragnetina flavotincta*** - MONGOLIA: BULGAN Aimag, Teshig Soum, Egiin Gol River above (12.7 km SW of) Teshig, N 49.88884° E 102.50909°, 997 msl, 11 July 2005, CRNelson, 1 ♀, SRP200671101, (088BYU). BULGAN Aimag, xx Soum, Selenge River, bridge at Hyalganat town, N 49.48086° E 104.30864°, 786 msl, 8 July 2005, CRNelson, 59 ♂, 6 ♀, SRP2005070801, (075BYU). KHOVSGOL Aimag, Ikh-Uul Soum, Selenge Moron and Brain ~ 8 KM W of Center N 49.44641° E 101.33625°, 1069 msl, 7 July 2006, Ch. Suvdsetseg, 1 ♂, SRP2006070701, (082ANSP). KHOVSGOL Aimag, Khotol Soum, Orkhan Gol River, 15 km NW of Orkhan, N 49.16354° E 105.18880°, 739 msl, 26 July 2005, CRNelson, 12 ♂, 10 ♀, SRP2005072602, (115BYU). KHOVSGOL Aimag, KhutagOndor Soum, Unit Gol stream, 11 km SE of Selenge Gol River bridge, 20.8 km SE of Khutag Ondor town, N 49.33339° E 102.97786°, 924 msl, 25 July 2005, CRNelson, 5 ♂, 7 ♀, SRP2005072501, (113BYU). KHOVSGOL Aimag, xx Soum, Bugsei Gol River, 45.5 km SW of Moron City, N 49.26170° E 99.88242°, 1597 msl, 23 July 2005, CRNelson, 1 ♂, SRP2005072301, (109BYU). KHOVSGOL Aimag, xx Soum, Selenge Moron Gol River at Teel, 23.4 km S of Tosontsengel town, N 49.26765° E 100.82998°, 1157 msl, 24 July 2005, CRNelson, 12 ♂, 13 ♀, SRP2005072401, (111BYU). KHOVSGOL Aimag, xx Soum, leaving Selenge River near (perhaps 20 km) from Ikh Uul town, approaching "highway", 23.2 km e of Tosontsengel town, N 49.43131° E 101.20535°, 1093 msl, 25 July 2005, CRNelson, 1 ♂, 1 ♀, none (CRN8254), (134BYU). SELENGE Aimag, Shaamar Soum, Orkhon R @ Delgerkhaan Bridge N 50.06476° E 106.13388°, 609 msl, 27 July 2003, ESanaa, 1 ♀, SRP2003072701, (114IMH). SELENGE Aimag, Tsagaannuur Soum, SW shore of Tsagaan Nuur N 49.95588° E 105.33791°, 668 msl, 25 July 2003, ESanaa, 36 ♂, 5 ♀, SRP2003072502, (112IMH). SELENGE Aimag, Tushig Soum, Zelter Gol @ Zelter N 50.35162° E 105.04436°, 736 msl, 26 July 2003, ESanaa, 1 ♀, SRP2003072601, (113IMH). SELENGE Aimag, Soum, Selenge N 49.3744° E 102.83898°, 26 Aug 2008, OBG, 1 lot, AsiaFound159, (299NUM). SELENGE Aimag, xx Soum, Baruun Tsuuts Gol Stream, xx km W of Sangatay, N 49.71481° E 104.64203°, 748 msl, 6 July 2005, 1 lot, SRP2005070602, (994BYU). SELENGE Aimag, Zuunburen Soum, small channel of Selenge River, 7.9 km SW of Dzuunburen N 50.10277° E 105.78217°, 627 msl, 5 July 2005, CRNelson, 2 ♂, SRP2005070501, (069BYU).

## **Perlodidae**

***Arcynopteryx compacta*** - MONGOLIA: ARKHANGAI Aimag, Bulgan Soum, Urd Tamir Gol braid upstream of bridge~63 km SW of Tsetserleg N 47.11192° E 101.01048°, 2066 msl, 13 July 2004, ESanaa, 9 ♂, 10 ♀, SRP2004071302, (118IMH). BAYAN-OLGII Aimag, Bulgan Soum, "Ulaagchiny Davaa Gol," ~30 km N Bulgan N 47.25228° E 91.03558, 2371 msl, 6 July 2009, SWJudson, 1 lot, MAIS2009070603, (815BYU). BAYAN-OLGII Aimag, Bulgan Soum, Bulgan Gol ~15 km N Bulgan N 47.03954° E 91.03448, 2010 msl, 8 July 2009, SWJudson, 1 lot, MAIS2009070803, (838BYU). BAYAN-OLGII Aimag, Bulgan Soum, Bulgan Gol, ~20 km N Bulgan N 47.08868° E 91.02686, 2056 msl, 6 July 2009, SWJudson, 1 lot, MAIS2009070604, (817BYU). BAYAN-OLGII Aimag, Bulgan Soum, Bulgan Gol, ~33 km NNW Bulgan N 47.14513° E 90.88934, 2179 msl, 7 July 2009, SWJudson, 1 lot,



MAIS2009070702, (822BYU). BAYAN-OLGII Aimag, Deluun Soum, Gantsmodi Gol 27 km S Deluun N 47.66395 E 90.71841, 2196 msl, 5 July 2009, SWJudson, 1 lot, MAIS2009070502, (808BYU). BAYAN-OLGII Aimag, Deluun Soum, Gantsmodi Gol, 33 km S Deluun N 47.62447 E 90.67194, 2241 msl, 5 July 2009, SWJudson, 1 lot, MAIS2009070501, (804BYU). BAYAN-OLGII Aimag, Tsengel Soum, Ikh Turgenii Gol 6 km SSW of Syrgal, N 48.54381° E 88.41416° , 2147 msl, 15 July 2008, CRNelson, 2 ♂, 3 ♀, MAIS2008071503, (179BYU). BAYAN OLGII Aimag, Tsengel Soum, Syrgali Gol, bridge over outflow between Khoton Nuur and Khurgen Nuur at Syrgal, N 49.59925° E 88.43707° , 2095 msl, 16 July 2008, CRNelson, 7 ♂, 1 ♀, MAIS2008071603, (054BYU). BAYAN OLGII Aimag, Tsengel Soum, Tsagaan Gol crossing 1 km west of Zagastnuur Bag, N 49.09320° E 88.50469° , 2226 msl, 13 July 2008, CRNelson, 2 ♂, MAIS2008071301, (049BYU). BAYAN-OLGII Aimag, Tsengel Soum, Tsagaan Us Gol 0.5 km upstream from junction Rashaanii Gol, N 48.75197° E 88.14987° , 2098 msl, 15 July 2008, CRNelson, 29 ♂, 19 ♀, MAIS2008071502, (178BYU). BAYAN-OLGII Aimag, Ulaankhus Soum, Khar Yamaat Gol, (Yamaatiin?) at road crossing 14 km NE of Jalpak, N 49.38055° E 88.68401° , 2306 msl, 8 July 2008, CRNelson, 19 ♂, 19 ♀, MAIS2008070801, (036BYU). BULGAN Aimag, Teshig Soum, Tariakhtain Gol Stream, junction by two major forks, N 49.77776° E 103.60860° , 1189 msl, 9 July 2005, CRNelson, 5 ♀, SRP2005070902, (084BYU). BULGAN Aimag, Khyalgant Soum, Baruun Burkhiin Gol Stream, N 49.62414° E 104.24594° , 1015 msl, 7 July 2005, CRNelson, 2 ♂, 5 ♀, SRP2005070702A, (074BYU). KHOVD Aimag, Bulgan Soum, Bulgan Gol ~5 km N Bulgan N 46.13457 E 91.54169, 1200 msl, 10 July 2009, SWJudson, 1 lot, MAIS2009071003, (857BYU). KHOVD Aimag, Monkhhayrkhan Soum, Bortin Gol ~14 km SSE Monkhhayrkhan N 46.92136 E 91.91077, 2311 msl, 15 July 2009, SWJudson, 1 lot, MAIS2009071501, (872BYU). KHOVD Aimag, Monkhhayrkhan Soum, Dund Tsenkher Gol @ bridge S edge of Monkhhayrkhan N 47.05474 E 91.84868, 2090 msl, 16 July 2009, SWJudson, 1 lot, MAIS2009071602, (876BYU). KHOVD Aimag, Erdenetburen Soum, Hongor Olin Gol, jct Hongor Gol, N 48.32093° E 91.30888° , 1474 msl, 3 July 2008, CRNelson, 7 ♂, 7 ♀, MAIS2008070302, (020BYU). KHOVD Aimag, Tolbo Soum, Omno Gol, near Mantakh, N 48.64831° E 89.88409° , 2066 msl, 4 July 2008, CRNelson, 1 ♀, MAIS2008070403, (022BYU). KHOVSGOL Aimag, Renchinlumbe Soum, Jarin Gol, 32.8 km N of Renchinlumbe, river crossing N 51.39852° E 99.75011° , 1575 msl, 2 July 2006, JKGelhaus, 1 ♂, SRP2006070203A, (163ANSP). KHOVSGOL Aimag, Renchinlumbe Soum, springs of Shishged Gol, 36 km NNE of Ulaan Uul town, N 50.99171° E 99.35400° , 1584 msl, 30 June 2006, JKGelhaus, 1 ♀, SRP2006063002, (026ANSP). KHOVSGOL Aimag, Renchinlumbe Soum, springs of Shishged Gol, 36 km NNE of Ulaan Uul town, N 50.99171° E 99.35400° , 1584 msl, 30 June 2006, CRNelson, 7 ♂, 11 ♀, SRP2006063002, (145BYU). KHOVSGOL Aimag, Renchinlumbe Soum, Jarin Gol 34 KM N of Renchinlumbe Soum Center N 51.39835° E 99.75013° , 1577 msl, 2 July 2006, CRNelson, 9 ♂, 9 ♀, SRP2006070203, (162BYU). KHOVSGOL Aimag, Ulaanuul Soum, Gunain Gol, 12 km SW of Ulaan Uul N 50.61826° E 99.12094° , 1761 msl, 29 June 2006, JKGelhaus, 1 ♀, SRP2006062903, (001ANSP). KHOVSGOL Aimag, Ulaanuul Soum, Gunain Gol, 12 km SW of Ulaan Uul N 50.61826° E 99.12094° , 1761 msl, 29 June 2006, CRNelson, 2 ♀, SRP2006062903, (225BYU). KHOVSGOL Aimag, Ulaanuul Soum, big spring & bogs, 800 m from Bagtagin Gol, 17 km NNE of Ulaan Uul, N 50.81265° E 99.33803° , 1605 msl, 30 June 2006, SRP Team, 1 lot, SRP2006063001, (1037BYU). KHOVSGOL Aimag, Soum, Modon Hui Island , , 7 July 1995, J. Gelhaus, 1 lot, JKGHayModonHuiIsland, (655ANSP). KHOVSGOL Aimag, Soum, Locality data needs to be acquired from label 2 , 0, 14 July 1995, B. Hayford, 1 lot, Hay479, (562ANSP). KHOVSGOL Aimag, Soum, Locality data needs to be acquired from label 3 , 0, 13 July 1995, B. Hayford, 1 lot, Hayford477a approx, (565ANSP). KHOVSGOL Aimag, Soum, Locality data needs to be acquired from label 4 , 0, 21 July 1995, B. Hayford, 1 lot, Hayford494, (567ANSP). KHOVSGOL Aimag, Renchinlumbe Soum, Har-Us Spring, Jargalant Gol 4.2 km SE of Renchinlumbe N 51.07845° E 99.70774° , 1586 msl, 1 July 2006, JKGelhaus, 1 ♀, SRP2006070102, (003ANSP). KHOVSGOL Aimag, Renchinlumbe Soum, Har-Us Spring, Jargalant Gol 4.2 km SE of Renchinlumbe N 51.07845° E 99.70774° , 1586 msl, 1 July 2006, CRNelson, 1 ♀, SRP2006070102, (226BYU). OVORKHANGAI Aimag, Batolziy Soum, braid of Orkhon Gol ~40 km W of Khujirt N 46.88586° E 102.34386° , 1646 msl, 6 July 2004, ESanaa, 6 ♂, 2 ♀, SRP2004070603, (115IMH). TOV Aimag, Erdene Soum, Tuul N 47.84303° E 107.5533° , 12 June 2007, Asia Foundation, 1 lot, AsiaFound7, (306NUM).

*Arcynopteryx polaris* - MONGOLIA: ARKHANGAI Aimag, Bulgan Soum, Chandman Gol, tributary of Khairkhan Davaani Gol~80 km SW of Tsetserleg N 47.00226° E 100.91051° , 2228 msl, 13 July 2004, ESanaa, 2 ♂, 1 ♀, SRP2004071305, (123IMH). ARKHANGAI Aimag, Chuluut Soum, Chuluutin Gol ~33 km SW of Chuluut/Jargalant N 47.29702° E 100.03136° , 2287 msl, 16 July 2004, ESanaa, 6 ♂, 9 ♀, SRP2004071603, (125IMH). ARKHANGAI Aimag, Chuluut Soum, Chuluutin Gol ~45 km SW of Chuluut/Jargalant N 47.21768° E 99.92824° , 2471 msl, 16 July 2004, ESanaa, 9 ♂, 10 ♀, SRP2004071602, (124IMH). ARKHANGAI Aimag, Chuluut Soum, Chuluutin Gol ~45 km

SW of Chuluut/Jargalant N 47.21768° E 99.92824°, 2471 msl, 16 July 2004, JKGelhaus, 1 ♂, 1 ♀, SRP2004071602, (079ANSP). ARKHANGAI Aimag, Chuluut Soum, ponds at Egiin Davaa ~47 km SW of Chuluut/Jargalant N 47.21198° E 99.91114°, 2582 msl, 16 July 2004, JKGelhaus, 1 ♀, SRP2004071601, (078ANSP). ARKHANGAI Aimag, Tsenkher Soum, Tsetserleg Gol ~50 km SSW of Tavanbulag N 47.04409° E 101.76352°, 1902 msl, 11 July 2004, ESanaa, 10 ♂, 9 ♀, SRP2004071102, (122IMH). BAYAN-OLGII Aimag, Bulgan Soum, Bulgan Gol, roadside pools, and drying mud flats near ~28 km N Bulgan N 47.11549 E 90.94127, 2122 msl, 8 July 2009, SWJudson, 1 lot, MAIS2009070801, (831BYU). BAYAN-OLGII Aimag, Bulgan Soum, Confluence of “Dood Asgat Uul Gol” and “Ulaagchiny Davaa Gol,” ~30 km N Bulgan N 47.34660 E 90.96013, 2519 msl, 6 July 2009, SWJudson, 1 lot, MAIS2009070602, (813BYU). BAYAN-OLGII Aimag, Bulgan Soum, Turgen Gol, ~40 km NNW Bulgan N 47.18333 E 90.77660, 2492 msl, 7 July 2009, SWJudson, 1 lot, MAIS2009070705, (827BYU). BAYAN-OLGII Aimag, Sagsay Soum, Godon Gol, 18 km due North of Dayan, N 48.43687° E 88.90085° , 2245 msl, 17 July 2008, Enkhnasan, 1 ♂, MAIS2008071702, (184BYU). BAYAN-OLGII Aimag, Tsengel Soum, Sumdairag Gol, 12 km due South of Syrgal, N 48.50679° E 88.50977° , 2129 msl, 16 July 2008, CRNelson, 2 ♂, 3 ♀, MAIS2008071604, (181BYU). BAYAN-OLGII Aimag, Tsengel Soum, Tsagaan Gol crossing 1 km west of Zagastnuur Bag, N 49.09320° E 88.50469° , 2226 msl, 13 July 2008, CRNelson, 1 ♂, MAIS2008071301, (050BYU). BAYAN-OLGII Aimag, Tsengel Soum, Urt Khuiten Gol, 6 km SW of Asgat Peak, N 48.72628° E 88.40073° , 2439 msl, 14 July 2008, CRNelson, 4 ♂, 2 ♀, MAIS2008071401, (060BYU). BAYAN-OLGII Aimag, Ulaankhus Soum, Khar Yamaat Gol, (Yamaatiin?) at road crossing 14 km NE of Jalpak, N 49.38055° E 88.68401° , 2306 msl, 8 July 2008, CRNelson, 30 ♂, 26 ♀, MAIS2008070801, (037BYU). BAYAN-OLGII Aimag, Ulaankhus Soum, Ulastai Gol, 2 km East of Khokh Ereg Military Base, N 49.31867° E 88.36613° , 2391 msl, 8 July 2008, CRNelson, 90 ♂, 60 ♀, MAIS2008070802, (041BYU). BULGAN Aimag, Teshig Soum, Tariakhtain Gol Stream, junction by two major forks, N 49.77776° E 103.60860° , 1189 msl, 9 July 2005, C.R.Nelson, 1 lot, SRP2005070902, (1001BYU). BULGAN Aimag, xx Soum, Tariakhtain Gol Stream, N 49.70184 E 103.80040° , 1436 msl, 9 July 2005, CRNelson, 1 ♀, SRP2005070901, (080BYU). HOVSGOL Aimag, Khank Soum, Borsog River, near Hovsgol lake N 50.96147222° E 100.7250556° , 1689 msl, 4 July 2005, E. Sanaa, 1 lot, Hovsgol\_Borsog, (484IMH). HOVSGOL Aimag, Khank Soum, Sevnull river, near Hovsgol lake N 51.16361111° E 100.7521111° , 1656 msl, Da July Year, E. Sanaa, 1 lot, Hovsgol\_Sevsuul, (498IMH). KHOVD Aimag, Monkkhkha yrkhan Soum, Trib. of Bortin Gol below Khokh Nuur ~19 km SW Monkkhkha yrkhan N 46.91475 E 91.74711, 2708 msl, 15 July 2009, SWJudson, 1 lot, MAIS2009071503, (874BYU). KHOVD Aimag, Must Soum, Bodonchiin Gol ~8 km E Ikh Ulaan Davaa N 46.62011 E 92.23067, 2544 msl, 14 July 2009, SWJudson, 1 lot, MAIS2009071401, (870BYU). KHOVSGOL Aimag, Khank Soum, Hosgol Lake at Khank, 0, 15 June 1996, J. Gelhaus, 1 lot, JKG720, (607ANSP). KHOVSGOL Aimag, Khank Soum, Khovsgol Nuur shor, 29 km NW of Khank , 1645, Da July Year, J. Gelhaus, 1 lot, JKG723, (618ANSP). KHOVSGOL Aimag, Khank Soum, Khovsgol Nuur shore, 29 km NW of Khank N 51 deg 36' 44" E 100 deg 30' 30", 1645, 19 July 1996, JKGelhaus and EHunter, 1 lot, none (JKG723), (291ANSP). KHOVSGOL Aimag, Khank Soum, Locality data needs to be acquired from label 6 , 0, Da July Year, J. Gelhaus, 1 lot, JKG\_15\_VI\_1996\_khank pier, (600ANSP). KHOVSGOL Aimag, xx Soum, Khalkhan Gol Stream, above Bul Nai Hot Springs, 37.1 km NW of Chandmani Ondor town, N 50.78320° E 100.79585° , 1677 msl, 18 July 2005, CRNelson, 1 ♀, SRP2005071803, (103BYU). KHOVSGOL Aimag, Soum, Alag tsar river, near Hovsgol Lake , 1675, 13 July 1997, J. Gelhaus, 1 lot, JKG746Hay97061, (640ANSP). KHOVSGOL Aimag, Soum, Ikh Horoo Gol N 51.5889215° E 100.4610175°, 0, 19 July 1997, J. Gelhaus, 1 lot, JKG761, (649ANSP). KHOVSGOL Aimag, Soum, Locality data needs to be acquired from label 8 , 0, Da July Year, J. Gelhaus, 1 lot, JKG716\_751, (604ANSP). KHOVSGOL Aimag, TsagaanNuur Soum, stream, 16 km NW of Tsagaan Nuur town, N 51.46205° E 99.19994°, 1607 msl, 3 July 2006, CRNelson, 1 ♂, SRP2006070302, (169BYU). KHOVSGOL Aimag, xx Soum, tributary of Egiin Gol River, 13 km S of Erdenbulgan, N 49.99851° E 101.60799° , 1361 msl, 14 July 2005, CRNelson, 8 ♂, 2 ♀, SRP2005071402, (094BYU). TOV Aimag, Erdene Soum, Gorkhi Terelj National Park N 48.4208° E 107.91406°, 1818 msl, 28 July 2003, ESanaa, 1 ♂, 2 ♀, SRP2003072802, (121IMH). ZAVKHAN Aimag, Ikh-Uul Soum, Deed Tsatsuukhiin Gol ~10 km NW of Solongotiin Davaa N 48.36436° E 98.92737°, 2072 msl, 25 July 2004, ESanaa, 3 ♂, 19 ♀, SRP2004072502, (126IMH). ZAVKHAN Aimag, Ikh-Uul Soum, Deed Tsatsuukhiin Gol ~10 km NW of Solongotiin Davaa N 48.36436° E 98.92737°, 2072 msl, 25 July 2004, JKGelhaus, 2 ♀, SRP2004072502, (080ANSP).

*Arcynopteryx sajanensis* - MONGOLIA: KHOVSGOL Aimag, Khank Soum, Khovsgol Lake, north side, Bayan gol N 51.6133404° E 100.6003475° , 20 July 1997, C.R.Nelson, 1 lot, JKG764, (1004ANSP).

*Diura bicaudata* - MONGOLIA: ARKHANGAI Aimag, Chuluut Soum, Chuluutin Gol ~45 km SW of Chuluut/Jargalant N 47.21768° E 99.92824°, 2471 msl, 16 July 2004, ESanaa, 1 ♀, SRP2004071602, (131IMH). BAYAN OLGII Aimag, Tsengel Soum, Upstream of junction with Baya Khatuugiin Nuur Stream N 49.04517° E 088.50878°, 2382 msl, 13 July 2008, C.R.Nelson, 1 lot, MAIS2008071302, (909BYU). BAYAN OLGII Aimag, Ulaanhus Soum, 1 km upstream of bridge west of the town of Ulaanhus N 49.0419° E 089.41659°, 1775 msl, 6 July 2008, C.R.Nelson, 1 lot, MAIS2008070602, (900BYU). BAYAN-OLGII Aimag, Tsengel Soum, Khoton Lake, 15 km NW of Syrgal, N 48.66718° E 88.29908°, 2090 msl, 14 July 2008, C.R.Nelson, 1 lot, MAIS2008071402, (911BYU). KHOVSGOL Aimag, Renchinlumbe Soum, Jarin Gol, 32.8 km N of Renchinlumbe, river crossing N 51.39852° E 99.75011°, 1575 msl, 2 July 2006, SRP Team, 1 lot, SRP2006070203A, (1041BYU).

*Diura majuscula* - MONGOLIA: BAYAN OLGII Aimag, Tsengel Soum, Harganat Gol on route A15 at Usttolgoy N 48.83438° E 089.19849°, 2054 msl, 6 July 2008, C.R.Nelson, 1 lot, MAIS2008070601, (1052BY). BAYAN-OLGII Aimag, Bulgan Soum, "Ulaagchiny Davaa Gol," ~50 km SSE Deluun N 47.45456 E 90.92342, 2631 msl, 6 July 2009, SWJudson, 1 lot, MAIS2009070601, (812BYU). BAYAN-OLGII Aimag, Bulgan Soum, Bulgan Gol ~15 km N Bulgan N 47.03954 E 91.03448, 2010 msl, 8 July 2009, SWJudson, 1 lot, MAIS2009070803, (839BYU). BAYAN-OLGII Aimag, Bulgan Soum, Bulgan Gol, ~20 km N Bulgan N 47.08868 E 91.02686, 2056 msl, 6 July 2009, SWJudson, 1 lot, MAIS2009070604, (818BYU). BAYAN-OLGII Aimag, Bulgan Soum, Bulgan Gol, ~33 km NNW Bulgan N 47.14513 E 90.88934, 2179 msl, 7 July 2009, SWJudson, 1 lot, MAIS2009070702, (823BYU). BAYAN-OLGII Aimag, Bulgan Soum, Khar Nuur (Black Lake), ~50 km NNW Bulgan N 47.24133 E 90.75316, 2563 msl, 7 July 2009, SWJudson, 1 lot, MAIS2009070703, (825BYU). BAYAN-OLGII Aimag, Bulgan Soum, Turgen Gol, ~40 km NNW Bulgan N 47.18333 E 90.77660, 2492 msl, 7 July 2009, SWJudson, 1 lot, MAIS2009070705, (828BYU). BAYAN-OLGII Aimag, Deluun Soum, Buyant Gol 46 km SE Deluun N 47.6915 E 91.13574, 1947 msl, 4 July 2009, SWJudson, 1 lot, MAIS2009070404, (802BYU). BAYAN-OLGII Aimag, Deluun Soum, Gantsmodi Gol 27 km S Deluun N 47.66395 E 90.71841, 2196 msl, 5 July 2009, SWJudson, 1 lot, MAIS2009070502, (809BYU). BAYAN-OLGII Aimag, Deluun Soum, Gantsmodi Gol, 33 km S Deluun N 47.62447 E 90.67194, 2241 msl, 5 July 2009, SWJudson, 1 lot, MAIS2009070501, (805BYU). BAYAN-OLGII Aimag, Tsengel Soum, Syrgali Gol, bridge over outflow between Khoton Nuur and Khurgen Nuur at Syrgal, N 49.59925° E 88.43707°, 2095 msl, 16 July 2008, C.R.Nelson, 1 lot, MAIS2008071603, (1053BY). KHOVSGOL Aimag, Renchinlumbe Soum, Hugin Gol, toll bridge, 46.8 km N of Ulaan Uul town, N 51.09845° E 99.32051°, 1557 msl, 1 July 2006, SRP Team, 1 lot, SRP2006070101, (1057BYU). KHOVSGOL Aimag, Soum, Hseg tsar cove, 0, 14 July 1997, J. Gelhaus, 1 lot, JK747Hay97062, (598ANSP). KHOVSGOL Aimag, Soum, Jargalant gol, 0, 14 July 1995, B. Hayford, 1 lot, Hay479, (563ANSP). OVORKHANGAI Aimag, Batolziy Soum, Orkhon Gol ~34 km W of Khujirt N 46.89303° E 102.39457°, 1610 msl, 6 July 2004, C.R.Nelson, 1 lot, SRP2004070602, (824IMH). TOV Aimag, Erdene Soum, Gorkhi Terelj National Park, Galtain Gol at road crossing 19.1 km upstream of Tuul R Bridge N 48.1335° E 107.9199°, 1551 msl, 8 July 2003, C.R.Nelson, 1 lot, SRP2003070802, (22IMH). TOV Aimag, Erdene Soum, Gorkhi Terelj National Park, unnamed tributary of Tuul R on its E side 8.5 km downstream of Galtain Gol N 48.0972° E 107.84928°, 1542 msl, 11 July 2003, C.R.Nelson, 1 lot, SRP2003071101, (823IMH). TOV Aimag, 0 Soum, Gorkhi Terelj National Park, Terelj River just above Terelj, N 47.99158° E 107.46717°, 1516, 28 July 2008, C.R.Nelson, 1 lot, none (CRN8949), (1043BYU). xx Aimag, xx Soum, Tengis, N 51.48513° E 99.06127°, 27 June 2007, Asia Foundation, 1 lot, AsiaFound14, (296NUM).

*Isoperla altaica* - MONGOLIA: ARKHANGAI Aimag, Bulgan Soum, Urd Tamir Gol braid upstream of bridge~63 km SW of Tsetserleg N 47.11192° E 101.01048°, 2066 msl, 13 July 2004, ESanaa, 11 ♂, 18♀, SRP2004071302, (133IMH). ARKHANGAI Aimag, Bulgan Soum, Urd Tamir Gol braid upstream of bridge~63 km SW of Tsetserleg N 47.11192° E 101.01048°, 2066 msl, 13 July 2004, JKGelhaus, 3 ♂, 2♀, SRP2004071302, (081ANSP). BAYAN OLGII Aimag, Bulgan Soum, Springs by Bulgan Gol ~25 km SE Bulgan N 46.77181 E 91.31750, 1797 msl, 10 July 2009, SWJudson, 1 lot, MAIS2009071001, (851BYU). BAYAN-OLGII Aimag, Sagsay Soum, Godon Gol, 18 km due North of Dayan, N 48.43687° E 88.90085°, 2245 msl, 17 July 2008, C.R.Nelson, 1 lot, MAIS2008071702, (919BYU). BAYAN-OLGII Aimag, Tsengel Soum, Rashaanii Gol (dark water), bridge 1 km North of junction Tsagaan Us Gol, N 48.75577° E 88.15264°, 2115 msl, 15 July 2008, Morse and Chuluunbat, 4 ♂, 5♀, MAIS2008071501, (063BYU). BAYAN-OLGII Aimag, Tsengel Soum, Tsagaan Us Gol 0.5 km upstream from junction Rashaanii Gol, N 48.75197° E 88.14987°, 2098 msl, 15 July 2008, C.R.Nelson, 1 lot, MAIS2008071502, (913BYU). BAYAN-OLGII Aimag, Ulaankhus Soum, Sogoog Gol, 3.5 km East of Khokh Khotol, hidden valley rapids, N 49.23285° E 88.90569°, 2090 msl, 7 July 2008, CRNelson, 1 ♂, MAIS2008070702, (034BYU). KHOVD

Aimag, Bulgan Soum, Bulgan Gol ~5 km N Bulgan N 46.13457 E 91.54169, 1200 msl, 10 July 2009, SWJudson, 1 lot, MAIS2009071003, (858BYU). KHOVD Aimag, Duut Soum, Khoyd Tsenkher Gol ~28 km SE Duut N 47.33992 E 91.86317, 1762 msl, 17 July 2009, SWJudson, 1 lot, MAIS2009071701, (879BYU). KHOVSGOL Aimag, Renchinlumbe Soum, springs of Shishged Gol, 36 km NNE of Ulaan Uul town, N 50.99171° E 99.35400°, 1584 msl, 30 June 2006, CRNelson, 16 ♂, 17 ♀, SRP2006063002, (011BYU). KHOVSGOL Aimag, Ulaanuul Soum, big spring & bogs, 800 m from Bagtagin Gol, 17 km NNE of Ulaan Uul, N 50.81265° E 99.33803°, 1605 msl, 30 June 2006, CRNelson, 5 ♂, 2 ♀, SRP2006063001, (010BYU). KHOVSGOL Aimag, Soum, Jargalant gol 25 km NW Khank , 0, Da July Year, J. Gelhaus, 1 lot, JKG721\_763, (611ANSP). KHOVSGOL Aimag, Renchinlumbe Soum, Har-Us Spring, Jargalant Gol 4.2 km SE of Renchinlumbe N 51.07845° E 99.70774°, 1586 msl, 1 July 2006, CRNelson, 21 ♂, 11 ♀, SRP2006070102, (013BYU). KHOVSGOL Aimag, Renchinlumbe Soum, Har-Us Spring, Jargalant Gol 4.2 km SE of Renchinlumbe N 51.07845° E 99.70774°, 1586 msl, 1 July 2006, JKGelhaus, 2 ♂, 3 ♀, SRP2006070102, (219ANSP). SELENGE Aimag, Mandal Soum, Ichilegiin Gol @ Yeroogiin Khaluun Rashaan N 49.01878° E 107.54551°, 1076 msl, 19 July 2003, , 1 lot, SRP2003071901, (2003BYU). SELENGE Aimag, Baruunharaa Soum, Haraa Gol River, 2.3 km S of Bayangol N 48.87748° E 106.12370°, 802 msl, 4 July 2005, CRNelson, 1 ♂, 1 ♀, SRP2005070402, (121BYU). TOV Aimag, Erdene Soum, Gorkhi Terelj National Park N 48.60223° E 107.84171°, 1444 msl, 28 July 2003, SRP Team, 1 lot, SRP2003072801B, (735IMH). TOV Aimag, Erdene Soum, Gorkhi Terelj National Park; Tuul R c. 100 m upstream of confluence with Terelj R N 47.96806° E 107.59365°, 1467 msl, 5 July 2003, , 1 lot, SRP2003070503, (2002BYU).

***Isoperla asiatica*** - MONGOLIA: ARKHANGAI Aimag, Chuluut Soum, Chuluutin Gol 40 km N of Chuluut/Jargalant N 47.8044° E 100.3181°, 1937 msl, 17 July 2004, ESanaa, 1 ♀, SRP2004071701, (137IMH). ARKHANGAI Aimag, Chuluut Soum, Chuluutin Gol 40 km N of Chuluut/Jargalant N 47.8044° E 100.3181°, 1937 msl, 17 July 2004, JKGelhaus, 3 ♀, SRP2004071701, (083ANSP). BULGAN Aimag, Teshig Soum, Egiin Gol River above (12.7 km SW of) Teshig, N 49.88884° E 102.50909°, 997 msl, 11 July 2005, CRNelson, 1 ♀, SRP200671101, (126BYU). BULGAN Aimag, Teshig Soum, Tarvagatain (Marmot) Gol River at Egiin Gol River, N 49.70678° E 103.10288°, 909 msl, 10 July 2005, CRNelson, 1 ♂, 2 ♀, SRP2005071001A, (124BYU). KHOVSGOL Aimag, Soum, bridge Egingol Hatgol , , 21 July 1995, B. Hayford, 1 lot, Hayford494, (568ANSP). KHOVSGOL Aimag, TsagaanUur Soum, Uilgan Gol, 26 km ENE of Tsagaan Uur town, N 50.62324° E 101.87412°, 1156 msl, 15 July 2005, CRNelson, 1 ♂, 2 ♀, SRP2005071502A, (003BYU). KHOVSGOL Aimag, xx Soum, Uur Gol River, 32.3 km NE of Erdenebulgan, N 50.30188° E 101.92869°, 1063 msl, 14 July 2005, , 1 lot, SRP2005071403, (SRP199). SELENGE Aimag, Mandal Soum, Ichilegiin Gol @ Yeroogiin Khaluun Rashaan N 49.01878° E 107.54551°, 1076 msl, 19 July 2003, SRP Team, 1 lot, SRP2003071901, (21IMH). SELENGE Aimag, Baruunharaa Soum, Haraa Gol River, 2.3 km S of Bayangol N 48.87748° E 106.12370°, 802 msl, 4 July 2005, C.R.Nelson, 1 lot, SRP2005070402, (91BYU). TOV Aimag, Erdene Soum, Gorkhi Terelj National Park; Tuul R c. 100 m upstream of confluence with Terelj R N 47.96806° E 107.59365°, 1467 msl, 5 July 2003, SRP Team, 1 lot, SRP2003070503, (96IMH). TOV Aimag, Soum, Gorkhi Terelj National Park, Tuul Gol at mouth Gorkhi Valley, N 47.82110° E 107.35422°, 1384, 28 July 2008, CRNelson, 1 ♂, none (CRN8952), (018BYU). ZAVKHAN Aimag, Ider Soum, Ideriin Gol ~22 km SE of Zuummod/Ider N 48.05989° E 97.55073°, 2053 msl, 23 July 2004, ESanaa, 3 ♀, SRP2004072303, (139IMH).

***Isoperla eximia*** - MONGOLIA: SELENGE Aimag, Mandal Soum, Ichilegiin Gol @ Yeroogiin Khaluun Rashaan N 49.01878° E 107.54551°, 1076 msl, 19 July 2003, SRP Team, 1 lot, SRP2003071901, (722IMH). TOV Aimag, Erdene Soum, Gorkhi Terelj National Park N 48.60223° E 107.84171°, 1444 msl, 28 July 2003, SRP Team, 1 lot, SRP2003072801B, (736IMH).

***Isoperla kozlovi*** - MONGOLIA: ARKHANGAI Aimag, Bulgan Soum, Urd Tamir Gol ~38 km SW of Tsetserleg N 47.28244° E 101.18793°, 1872 msl, 12 July 2004, ESanaa, 1 ♀, SRP2004071201A, (141IMH). ARKHANGAI Aimag, Chuluut Soum, Chuluutin Gol 40 km N of Chuluut/Jargalant N 47.8044° E 100.3181°, 1937 msl, 17 July 2004, ESanaa, 1 ♀, SRP2004071701, (143IMH). ARKHANGAI Aimag, Ikhtamir Soum, Khoit Tamir Gol ~29 km SW of Ikhtamir N 47.48567° E 100.87875°, 1749 msl, 15 July 2004, ESanaa, 1 ♂, 1 ♀, SRP2004071501, (142IMH). ARKHANGAI Aimag, Tsenkher Soum, Tsetseleg Gol ~17 km SW of Tavanbulag N 47.26999° E 101.80227°, 1684 msl, 10 July 2004, ESanaa, 1 ♂, SRP2004071002, (140IMH). BULGAN Aimag, xx Soum, Manhtai Spring, cold spring, N 49.68122° E 104.56461°, 866 msl, 7 July 2005, , 1 lot, SRP2005070701, (996BYU). BULGAN Aimag, xx Soum, Selenge River, bridge at Hyalganat town, N 49.48086° E 104.30864°, 786 msl, 8 July 2005, , 1 lot, SRP2005070801, (999BYU). KHOVSGOL Aimag, ? Soum, Mainstream of Selenge Gol at Teel, birth of Selenge below confluence of the five rivers N 49.26764° E 100.82688°, 1182 msl, 24 July 2005, C.R.Nelson, 1 lot,

SRP2005072401A, (1031BYU). KHOVSGOL Aimag, Ikh-Uul Soum, Selenge Moron and Brain ~ 8 KM W of Center N 49.44641° E 101.33625°, 1069 msl, 7 July 2006, JKGelhaus, 1 ♂, 4♀, SRP2006070701, (194ANSP). #N/AKHOVSGOL Aimag, xx Soum, Delgar Moron Gol River, 12 km SW of Moron City, N 49.62785° E 99.99523°, 1280 msl, 20 July 2005, C.R.Nelson, 1 lot, SRP2005072001, (1027BYU). KHOVSGOL Aimag, Soum, Jargalant gol N 51.6497219° E 100.5295426°, 0, 20 July 1997, J. Gelhaus, 1 lot, JKG736, (633ANSP). KHOVSGOL Aimag, Soum, Selenge River, 0, Da July 1997, J. Gelhaus, 1 lot, JKG733, (626ANSP). KHOVSGOL Aimag, Soum, Selenge River, 0, Da July 1997, J. Gelhaus, 1 lot, JKG735, (629ANSP). SELENGE Aimag, Bugant/Yaroo Soum, Khongiin Gol at Yeroo Gol confluence N 49.08636° E 107.3075°, 943 msl, 19 July 2003, SRP Team, 1 lot, SRP2003071803, (19IMH). SELENGE Aimag, Baruunharaa Soum, Haraa Gol River, 2.3 km S of Bayangol N 48.87748° E 106.12370°, 802 msl, 4 July 2005, CRNelson, 17 ♂, 38♀, SRP2005070402, (119BYU). TOV Aimag, Erdene Soum, Gorkhi Terelj National Park, Galtain Gol at road crossing 19.1 km upstream of Tuul R Bridge N 48.1335° E 107.9199°, 1551 msl, 8 July 2003, SRP Team, 1 lot, SRP2003070802, (02IMH). TOV Aimag, Erdene Soum, Gorkhi Terelj National Park, pond in floodplain of Galtain Gol N 48° 07' 50.4"° E 107° 55' 16.4"°, 1563 msl, 8 July 2003, SRP Team, 1 lot, SRP2003070803, (03IMH). TOV Aimag, Erdene Soum, Gorkhi Terelj National Park, mouth of Khag River @ confluence with Tuul N 48.25861° E 107.90251°, 1608 msl, 10 July 2003, SRP Team, 1 lot, SRP2003071002, (07IMH). TOV Aimag, Soum, Tuul River 4km W Lun, 0, Da July 1997, J. Gelhaus, 1 lot, JKG738, (637ANSP).

*Isoperla lunigera* - MONGOLIA: BULGAN Aimag, Teshig Soum, Egiin Gol River above (12.7 km SW of) Teshig, N 49.88884° E 102.50909°, 997 msl, 11 July 2005, CRNelson, 1 ♀, SRP2005071101, (125BYU). BULGAN Aimag, xx Soum, Selenge River, bridge at Hyalganat town, N 49.48086° E 104.30864°, 786 msl, 8 July 2005, CRNelson, 1 ♀, SRP2005070801, (123BYU). KHOVSGOL Aimag, Renchinlumbe Soum, Hugin Gol, toll bridge, 46.8km N of Ulaan Uul town, N 51.09845° E 99.32051°, 1557 msl, 1 July 2006, Suvdaa, 1 ♂, 2♀, SRP2006070101, (146BYU). KHOVSGOL Aimag, xx Soum, Delgar Moron Gol River, 12 km SW of Moron City, N 49.62785° E 99.99523°, 1280 msl, 20 July 2005, C.R.Nelson, 1 lot, SRP2005072001, (1028BYU). KHOVSGOL Aimag, Soum, Jargalant gol N 51.6497219° E 100.5295426°, 0, 20 July 1997, J. Gelhaus, 1 lot, JKG736, (634ANSP). KHOVSGOL Aimag, Soum, Selenge River, 0, Da July Year, J. Gelhaus, 1 lot, JKG733, (627ANSP). KHOVSGOL Aimag, Soum, Selenge River, 0, Da July Year, J. Gelhaus, 1 lot, JKG735, (630ANSP). KHOVSGOL Aimag, TsagaanUur? Soum, Uur Gol River, 7 km N of Tsagaan Uur town, N 50.60031° E 101.52392°, 1155 msl, 16 July 2005, C.R.Nelson, 1 lot, SRP2005071601, (1022BYU). SELENGE Aimag, Bugant/Yaroo Soum, Khongiin Gol at Yeroo Gol confluence N 49.08636° E 107.3075°, 943 msl, 19 July 2003, SRP Team, 1 lot, SRP2003071803, (20IMH). SELENGE Aimag, Bugant/Yaroo Soum, Yeroo R c. 14 km upstream of Yavin/Yeroo bridge N 49.61985° E 106.82693°, 695 msl, 22 July 2003, SRP Team, 1 lot, SRP2003072201, (25IMH). SELENGE Aimag, Baruunharaa Soum, Haraa Gol River, 2.3 km S of Bayangol N 48.87748° E 106.12370°, 802 msl, 4 July 2005, CRNelson, 1 ♀, SRP2005070402, (120BYU). TOV Aimag, Erdene Soum, Gorkhi Terelj National Park, Tuul River 10.1 km upstream of Tuul River Bridge N 48.09549° E 107.84265°, 1531 msl, 8 July 2003, ESanaa, 1 ♂, SRP2003070801, (145IMH). TOV Aimag, Soum, Gorkhi Terelj National Park, Tuul Gol at mouth Gorkhi Valley, N 47.82110° E 107.35422°, 1384, 28 July 2008, CRNelson, 1 ♀, none (CRN8952), (017BYU).

*Isoperla mongolica* - MONGOLIA: ARKHANGAI Aimag, Bulgan Soum, Urd Tamir Gol braid upstream of bridge~63 km SW of Tsetserleg N 47.11192° E 101.01048°, 2066 msl, 13 July 2004, SRP Team, 1 lot, SRP2004071302, (47IMH). ARKHANGAI Aimag, Tsenkher Soum, Tsetseleg Gol ~17 km SW of Tavanbulag N 47.26999° E 101.80227°, 1684 msl, 10 July 2004, SRP Team, 1 lot, SRP2004071002, (41IMH). ARKHANGAY Aimag, Bulgan Soum, Urd Tamir Gol ~38 km SW of Tsetserleg N 47.28244° E 101.18793°, 1872 msl, 12 July 2004, SRP Team, 1 lot, SRP2004071201, (743IMH). BAYAN OLGII Aimag, Sagsay Soum, 40 km by road SSW Dayan N 48.1672° E 08885415°, 2065 msl, 17 July 2008, C.R.Nelson, 1 lot, MAIS2008071703, (920BYU). BAYAN-OLGII Aimag, Bulgan Soum, "Elstiin Davaa Gol" ~15 km N Bulgan N 47.03794° E 91.02931, 2016 msl, 8 July 2009, SWJudson, 1 lot, MAIS2009070802, (834BYU). BAYAN-OLGII Aimag, Bulgan Soum, Bulgan Gol ~15 km N Bulgan N 47.03954° E 91.03448, 2010 msl, 8 July 2009, SWJudson, 1 lot, MAIS2009070803, (840BYU). BAYAN-OLGII Aimag, Bulgan Soum, Bulgan Gol ~20 km S Bulgan N 46.78006° E 91.30396, 1801 msl, 9 July 2009, SWJudson, 1 lot, MAIS2009070901, (843BYU). BAYAN-OLGII Aimag, Bulgan Soum, Bulgan Gol ~25 km SE Bulgan N 46.77005° E 91.32336, 1792 msl, 9 July 2009, SWJudson, 1 lot, MAIS2009070902, (846BYU). BAYAN-OLGII Aimag, Bulgan Soum, Bulgan Gol, ~20 km N Bulgan N 47.08868° E 91.02686, 2056 msl, 6 July 2009, SWJudson, 1 lot, MAIS2009070604, (819BYU). BAYAN-OLGII Aimag, Bulgan Soum, Springs by Bulgan Gol ~25 km SE Bulgan N

46.77181 E 91.31750, 1797 msl, 10 July 2009, SWJudson, 1 lot, MAIS2009071001, (852BYU). BAYAN-OLGII Aimag, Bulgan Soum, Tsonkhol Gol/Turgen Gol ~25 km SE Bulgan N 46.76950 E 91.32759, 1788 msl, 9 July 2009, SWJudson, 1 lot, MAIS2009070903, (848BYU). BAYAN-OLGII Aimag, Sagsay Soum, Sagsay Gol, bridge 11 km NW Sagsay, N 48.84328° E 89.53623° , 1798 msl, 5 July 2008, C.R.Nelson, 1 lot, MAIS2008070502, (895BYU). BAYAN-OLGII Aimag, Tsengel Soum, Tsagaan Us Gol 0.5 km upstream from junction Rashaanii Gol, N 48.75197° E 88.14987° , 2098 msl, 15 July 2008, CRNelson, 1 ♂, MAIS2008071502, (176BYU). KHOVD Aimag, Bulgan Soum, Bulgan Gol ~5 km N Bulgan N 46.13457 E 91.54169, 1200 msl, 10 July 2009, SWJudson, 1 lot, MAIS2009071003, (859BYU). KHOVSGOL Aimag, Soum, Alag tsar river, near Hovsgol Lake , 1675, 13 July 1997, J. Gelhaus, 1 lot, JKG746Hay97061, (641ANSP). TOV Aimag, Erdene Soum, unnamed tribE of Tuul river 8.5 km S of Galtain gol , 1542, Da July Year, E. Sanaa, 1 lot, Sanaa535, (748ANSP). TOV Aimag, Erdene Soum, Gorkhi Terelj National Park, Tuul River 10.1 km upstream of Tuul River Bridge N 48.09549° E 107.84265° , 1531 msl, 8 July 2003, SRP Team, 1 lot, SRP2003070801, (700IMH). ZAVKHAN Aimag, Ider Soum, Ideriin Gol ~4 km NE of Zuunmod/Ider N 48.24995° E 97.40627° , 1929 msl, 22 July 2004, SRP Team, 1 lot, SRP2004072203, (56IMH). ZAVKHAN Aimag, Ider Soum, Dogshin/Nogoon Nuur ~21 km SE of Zuunmod/Ider N 48.06257° E 97.55064° , 2054 msl, 23 July 2004, SRP Team, 1 lot, SRP2004072302, (57IMH).

***Isoperla obscura*** - MONGOLIA: BAYAN OLGIIY Aimag, Tsengel Soum, Harganat Gol on route A15 at Usttolgoy N 48.83438° E 089.19849° , 2054 msl, 6 July 2008, C.R.Nelson, 1 lot, MAIS2008070601, (897BYU). BAYAN OLGIIY Aimag, Ulaanhus Soum, 1 km upstream of bridge west of the town of Ulaanhus N 49.0419° E 089.41659° , 1775 msl, 6 July 2008, C.R.Nelson, 1 lot, MAIS2008070602, (899BYU). BAYAN-OLGII Aimag, Olgii Soum, Khovd Gol above Olgii, N 48.97842° E 89.94995° , 1750 msl, 5 July 2008, C.R.Nelson, 1 lot, MAIS2008070501, (893BYU). BAYAN-OLGII Aimag, Sagsay Soum, Sagsay Gol, bridge 11 km NW Sagsay, N 48.84328° E 89.53623° , 1798 msl, 5 July 2008, C.R.Nelson, 1 lot, MAIS2008070502, (894BYU). BAYAN-OLGII Aimag, Tsengel Soum, Rashaanii Gol (dark water), bridge 1 km North of junction Tsagaan Us Gol, N 48.75577° E 88.15264° , 2115 msl, 15 July 2008, C.R.Nelson, 1 lot, MAIS2008071501, (912BYU). BAYAN-OLGII Aimag, Soum, SWChorgon (Khurgan?) lake , 0, 17 July 1978, Puntsagdulan, 1 lot, Puntsagdulan17July1978, (738ANSP). BULGAN Aimag, Teshig Soum, Egiin Gol River above (12.7 km SW of) Teshig, N 49.88884 E 102.50909° , 997 msl, 11 July 2005, C.R.Nelson, 1 lot, SRP2005071101, (1009BYU). BULGAN Aimag, xx Soum, Selenge River, bridge at Hyalganat town, N 49.48086° E 104.30864° , 786 msl, 8 July 2005, , 1 lot, SRP2005070801, (998BYU). KHOVSGOL Aimag, Soum, Jargalant gol N 51.6497219° E 100.5295426° , 0, 20 July 1997, J. Gelhaus, 1 lot, JKG736, (635ANSP). KHOVSGOL Aimag, Soum, Selenge River , 0, Da July Year, J. Gelhaus, 1 lot, JKG735, (631ANSP). KHOVSGOL Aimag, TsagaanUur? Soum, Uur Gol River, 7 km N of Tsagaan Uur town, N 50.60031° E 101.52392° , 1155 msl, 16 July 2005, C.R.Nelson, 1 lot, SRP2005071601, (1021BYU). SELENGE Aimag, Bugant/Yaroo Soum, Yeroo R c. 14 km upstream of Yavin/Yeroo bridge N 49.61985° E 106.82693° , 695 msl, 22 July 2003, SRP Team, 1 lot, SRP2003072202B, (726IMH). SELENGE Aimag, Shaamar Soum, Orkhon R @ Delgerkhaan Bridge N 50.06476° E 106.13388° , 609 msl, 27 July 2003, SRP Team, 1 lot, SRP2003072701, (734IMH). SELENGE Aimag, Soum, Eroo N 49.7212° E 106.65553° , 19 July 2007, NRG, 1 lot, AsiaFound38, (304NUM). SELENGE Aimag, Zuunburen Soum, small channel of Selenge River, 7.9 km SW ofDzuunburen N 50.10277° E 105.78217° , 627 msl, 5 July 2005, , 1 lot, SRP2005070501, (992BYU). TOV Aimag, Soum, Tuul River 4km W, 1997, J. Gelhaus, 1 lot, JKG738, (638ANSP).

***Isoperla potanini*** - MONGOLIA: ARKHANGAI Aimag, Chuluut Soum, Chuluutin Gol 40 km N of Chuluut/Jargalant N 47.8044° E 100.3181° , 1937 msl, 17 July 2004, ESanaa, 2 ♂, 2♀, SRP2004071701, (149IMH). ARKHANGAI Aimag, Chuluut Soum, Khurmen/Davaat Gol 15 km SSE of Chuluut/Jargalant N 47.4258° E 100.3013° , 2104 msl, 15 July 2004, ESanaa, 7 ♂, 8♀, SRP2004071503, (148IMH). ARKHANGAI Aimag, Tsenkher Soum, Tsetseleg Gol ~17 km SW of Tavanbulag N 47.26999° E 101.80227° , 1684 msl, 10 July 2004, ESanaa, 2 ♀, SRP2004071002, (147IMH). ARKHANGAI Aimag, Tsenkher Soum, Tsetseleg Gol ~17 km SW of Tavanbulag N 47.26999° E 101.80227° , 1684 msl, 10 July 2004, JKGelhaus, 1 ♂, SRP2004071002, (085ANSP). BAYAN OLGIIY Aimag, Altai Soum, At bridge 10 km S of Altai by air N 48.24123° E 89.60168° , 2137 msl, 19 July 2008, C.R.Nelson, 1 lot, MAIS2008071901, (922BYU). BAYAN OLGIIY Aimag, Buyant Soum, 5 km S of Buyant , , 19 July 2008, C.R.Nelson, 1 lot, MAIS2008071902, (924BYU). BAYAN OLGIIY Aimag, Sagsay Soum, 17 km by road N of Dayan N 48.39223° E 088.88369° , 2184 msl, 18 July 2008, C.R.Nelson, 1 lot, MAIS2008071802, (921BYU). BAYAN OLGIIY Aimag, Tsengel Soum, Harganat Gol on route A15 at Usttolgoy N 48.83438° E 089.19849° , 2054 msl, 6 July 2008, C.R.Nelson, 1 lot, MAIS2008070601, (898BYU). BAYAN-OLGII Aimag, Bulgan Soum, “Elstiin Davaa Gol” ~15 km N Bulgan N 47.03794 E 91.02931, 2016 msl, 8 July 2009, SWJudson, 1 lot, MAIS2009070802, (835BYU). BAYAN-

OLGII Aimag, Bulgan Soum, "Ulaagchiny Davaa Gol," ~30 km N Bulgan N 47.25228 E 91.03558, 2371 msl, 6 July 2009, SWJudson, 1 lot, MAIS2009070603, (816BYU). BAYAN-OLGII Aimag, Bulgan Soum, Bulgan Gol ~15 km N Bulgan N 47.03954 E 91.03448, 2010 msl, 8 July 2009, SWJudson, 1 lot, MAIS2009070803, (841BYU). BAYAN-OLGII Aimag, Bulgan Soum, Bulgan Gol, ~20 km N Bulgan N 47.08868 E 91.02686, 2056 msl, 6 July 2009, SWJudson, 1 lot, MAIS2009070604, (820BYU). BAYAN-OLGII Aimag, Bulgan Soum, Bulgan Gol, ~33 km NNW Bulgan N 47.14513 E 90.88934, 2179 msl, 7 July 2009, SWJudson, 1 lot, MAIS2009070702, (824BYU). BAYAN-OLGII Aimag, Bulgan Soum, Bulgan Gol, roadside pools, and drying mud flats near ~28 km N Bulgan N 47.11549 E 90.94127, 2122 msl, 8 July 2009, SWJudson, 1 lot, MAIS2009070801, (832BYU). BAYAN-OLGII Aimag, Bulgan Soum, Ich-Jargalantiin Gol 20 Km NWN Bulgan Soum, 0, 23 July 1973, Puntsagdulan, 1 lot, Puntsagdulan23July1973, (889BYU). BAYAN-OLGII Aimag, Bulgan Soum, Tsonkhol Gol/Turgen Gol ~25 km SE Bulgan N 46.76950 E 91.32759, 1788 msl, 9 July 2009, SWJudson, 1 lot, MAIS2009070903, (849BYU). BAYAN-OLGII Aimag, Bulgan Soum, Turgen Gol, ~40 km NNW Bulgan N 47.18333 E 90.77660, 2492 msl, 7 July 2009, SWJudson, 1 lot, MAIS2009070705, (829BYU). BAYAN-OLGII Aimag, Deluun Soum, Buyant Gol 46 km SE Deluun N 47.6915 E 91.13574, 1947 msl, 4 July 2009, SWJudson, 1 lot, MAIS2009070404, (803BYU). BAYAN-OLGII Aimag, Deluun Soum, Gantsmodi Gol 27 km S Deluun N 47.66395 E 90.71841, 2196 msl, 5 July 2009, SWJudson, 1 lot, MAIS2009070502, (810BYU). BAYAN-OLGII Aimag, Deluun Soum, Gantsmodi Gol, 33 km S Deluun N 47.62447 E 90.67194, 2241 msl, 5 July 2009, SWJudson, 1 lot, MAIS2009070501, (806BYU). BAYAN-OLGII Aimag, Olgii Soum, Khovd Gol above Olgii, N 48.97842° E 89.94995° , 1750 msl, 5 July 2008, CRNelson, 1 ♂, MAIS2008070501, (024BYU). BAYAN-OLGII Aimag, Sagsay Soum, Sagsay Gol, bridge 11 km NW Sagsay, N 48.84328° E 89.53623° , 1798 msl, 5 July 2008, CRNelson, 15 ♂, 11 ♀, MAIS2008070502, (026BYU). BAYAN-OLGII Aimag, Tsengel Soum, Tsagaan Gol crossing 1 km west of Zagastnuur Bag, N 49.09320° E 88.50469° , 2226 msl, 13 July 2008, CRNelson, 8 ♂, MAIS2008071301, (051BYU). BAYAN-OLGII Aimag, Ulaankhus Soum, Sogoog Gol, 3.5 km East of Khokh Khotol, hidden valley rapids, N 49.23285° E 88.90569° , 2090 msl, 7 July 2008, CRNelson, 1 ♂, MAIS2008070702, (033BYU). BAYAN-OLGII Aimag, Ulaankhus Soum, Ulatai Gol, 2 km East of Khokh Ereg Military Base, N 49.31867° E 88.36613° , 2391 msl, 8 July 2008, CRNelson, 4 ♂, MAIS2008070802, (043BYU). GOVI-ALTAI Aimag, Tenchil Soum, Zuil Jel River N 46 deg 19'02" E 93 deg 53'659", 2254, 17 July 2002, J. Puntsagdulan, 1 ♂, 17-UM--2002 AltID (no MAIS/SRP), (423BYU). GOVI-ALTAI Aimag, Tenchil Soum, Zuil Jel River N 46 deg 19'02" E 93 deg 53'659", 2254, 17 July 2002, Puntsagdulan, 1 lot, Puntsagdulan17UM2002, (885BYU). HOVSGOL Aimag, Khank Soum, Sevnull river, near Hovsgol lake N 51.16361111° E 100.7521111° , 1656 msl, Da July Year, E. Sanaa, 1 lot, Hovsgol\_Sevsuul, (499IMH). KHOVD Aimag, Bulgan Soum, Bulgan Gol ~5 km N Bulgan N 46.13457 E 91.54169, 1200 msl, 10 July 2009, SWJudson, 1 lot, MAIS2009071003, (860BYU). KHOVD Aimag, Bulgan Soum, Springfed stream and oxbow of Bulgan Gol ~5 km N Bulgan N 46.13823 E 91.54096, 1210 msl, 11 July 2009, SWJudson, 1 lot, MAIS2009071101, (862BYU). KHOVD Aimag, Monkhkhayrkhan Soum, Doloon Nuurin Gol ~25 km W Monkhkhayrkhan N 47.05344 E 91.52650, 2711 msl, 16 July 2009, SWJudson, 1 lot, MAIS2009071601, (875BYU). KHOVD Aimag, Uyenich Soum, Uyenchiin Gol @ Urd Jargalant Gol ~25 km N Uyenich N 46.26107 E 92.07269, 1677 msl, 13 July 2009, SWJudson, 1 lot, MAIS2009071302, (866BYU). KHOVD Aimag, Uyenich Soum, Uyenchiin Gol ~40 km N Uyenich N 46.38285 E 92.13062, 1939 msl, 13 July 2009, SWJudson, 1 lot, MAIS2009071303, (868BYU). KHOVD Aimag, Erdenetburen Soum, Hongor Olin Gol, jct Hongor Gol, N 48.32093° E 91.30888° , 1474 msl, 3 July 2008, CRNelson, 1 ♂, MAIS2008070302, (021BYU). KHOVSGOL Aimag, xx Soum, Bugsei Gol River, 45.5 km SW of Moron City, N 49.26170° E 99.88242° , 1597 msl, 23 July 2005, CRNelson, 31 ♂, 7 ♀, SRP2005072301, (007BYU). KHOVSGOL Aimag, xx Soum, Bugsei Gol River, 45.5 km SW of Moron City, N 49.26170° E 99.88242° , 1597 msl, 23 July 2005, JKGelhaus, 3 ♂, SRP2005072301, (205ANSP). KHOVSGOL Aimag, xx Soum, Selenge Moron Gol River at Teel, 23.4 km S of Tosontsengel town, N 49.26765° E 100.82998° , 1157 msl, 24 July 2005, CRNelson, 1 ♀, SRP2005072401, (009BYU). KHOVSGOL Aimag, TsagaanUur Soum, Uilgan Gol, 26 km ENE of Tsagaan Uur town, N 50.62324° E 101.87412° , 1156 msl, 15 July 2005, CRNelson, 16 ♂, 5 ♀, SRP2005071502A, (001BYU). KHOVSGOL Aimag, TsagaanUur Soum, Uilgan Gol, 26 km ENE of Tsagaan Uur town, N 50.62324° E 101.87412° , 1156 msl, 15 July 2005, JKGelhaus, 1 ♀, SRP2005071502A, (204ANSP). OVORHANGAY Aimag, Bat olziy Soum, Ulaan Gol ~93 km W of Khujirt N 46.73093° E 101.88583° , 1894 msl, 7 July 2004, ESanaa, 1 ♂, SRP2004070702, (146IMH). ZAVKHAN Aimag Ider Soum, Dogshin/Nogoon Nuur ~21 km SE of Zuummod/Ider N 48.06257° E 97.55064° , 2054 msl, 23 July 2004, ESanaa, 1 ♀, SRP2004072302, (152IMH). ZAVKHAN Aimag, Ider Soum, Ideriin Gol ~4 km NE of Zuummod/Ider N 48.24995° E 97.40627° , 1929 msl, 22 July 2004, ESanaa, 2 ♀, SRP2004072203, (151IMH). ZAVKHAN Aimag, Ider Soum, Zagastain Gol ~11 km NNE of Zagastain Davaa N 48.15779° E 97.21441° , 2108 msl, 24 July 2004, JKGelhaus, 2 ♀, SRP2004072401, (087ANSP). ZAVKHAN Aimag, Tosontsengel Soum, Gunza Gol ~38 km SW of Tosontsengel N 48.62624° E

97.89617°, 1831 msl, 21 July 2004, ESanaa, 1 ♂, 3 ♀, SRP2004072102, (150IMH). ZAVKHAN Aimag, Tosontsengel Soum, Tegshiin Gol ~70 km SW of Tosontsengel N 48.3441° E 97.87312°, 1927 msl, 22 July 2004, JKGelhaus, 1 ♀, SRP2004072201, (086ANSP).

***Kaszabia nigricauda*** - MONGOLIA: ARKhangai Aimag, Chuluut Soum, Chuluutin Gol 40 km N of Chuluut/Jargalant N 47.8044° E 100.3181°, 1937 msl, 17 July 2004, ESanaa, 3 ♀, SRP2004071701, (157IMH). ARKhangai Aimag, Ikhtamir Soum, E side of Khoit Tamir Gol 4 km NE of Ikhtamir N 47.59928° E 101.24521°, 1602 msl, 14 July 2004, ESanaa, 1 ♂, 1 ♀, SRP2004071401, (155IMH). ARKhangai Aimag, Ikhtamir Soum, Khoit Tamir Gol ~29 km SW of Ikhtamir N 47.48567° E 100.87875°, 1749 msl, 15 July 2004, ESanaa, 1 ♂, 1 ♀, SRP2004071501, (156IMH). KHOVSGOL Aimag, xx Soum, Delgar Moron Gol River, 12 km SW of Moron City, N 49.62785° E 99.99523°, 1280 msl, 20 July 2005, C.R.Nelson, 1 lot, SRP2005072001, (04ANSP). KHOVSGOL Aimag, Bayanzurkh Soum, Beltes Gol, 4.7 km NE of Bayanzurkh town, N 50.19916° E 99.03117°, 1642 msl, 6 July 2006, CRNelson, 1 ♂, 4 ♀, SRP2006070601, (016BYU). KHOVSGOL Aimag, Bayanzurkh Soum, Beltes Gol, 4.7 km NE of Bayanzurkh town, N 50.19916° E 99.03117°, 1642 msl, 6 July 2006, JMorse, 15 ♂, 58 ♀, SRP2006070601, (012ANSP). KHOVSGOL Aimag, TsagaanUur Soum, Uilgan Gol, 26 km ENE of Tsagaan Uur town, N 50.62324° E 101.87412°, 1156 msl, 15 July 2005, CRNelson, 7 ♀, SRP2005071502A, (002BYU). KHOVSGOL Aimag, TsagaanUur? Soum, Kholkhan Gol Stream, tributary of Aireg Gol, 22 km W of Tsagaan Uur town, N 50.51517° E 101.21073°, 1195 msl, 17 July 2005, C.R.Nelson, 1 lot, SRP2005071702A, (03ANSP). KHOVSGOL Aimag, xx Soum, Zerleg Gol Stream, 35.3 km NE of Erdenebulgan N 50.32718° E 101.95046°, 1110 msl, 15 July 2005, C.R.Nelson, 1 lot, SRP2005071501, (00ANSP). TOV Aimag, Erdene Soum, Gorkhi Terej National Park, mouth of Khag River @ confluence with Tuul N 48.25861° E 107.90251°, 1608 msl, 10 July 2003, ESanaa, 6 ♂, SRP2003071002, (154IMH). TOV Aimag, Erdene Soum, Gorkhi Terej National Park, Tuul River 10.1 km upstream of Tuul River Bridge N 48.09549° E 107.84265°, 1531 msl, 8 July 2003, ESanaa, 1 ♂, SRP2003070801, (153IMH). TOV Aimag, Erdene Soum, Gorkhi Terej National Park, unnamed tributary of Tuul R on its W side 1.6 km upstream from Daichin crossing N 48.2178° E 107.90392°, 1594 msl, 9 July 2003, C.R.Nelson, 1 lot, SRP2003070902, (813IMH). TOV Aimag, Erdene Soum, Gorkhi Terej National Park, unnamed tributary of Tuul R on its E side 8.5 km downstream of Galtain Gol N 48.0972° E 107.84928°, 1542 msl, 11 July 2003, SRP Team, 1 lot, SRP2003071101, (814IMH). TOV Aimag, Erdene Soum, Gorkhi Terej National Park; Tuul R c. 100 m upstream of confluence with Terej R N 47.96806° E 107.59365°, 1467 msl, 5 July 2003, C.R.Nelson, 1 lot, SRP2003070503, (819IMH). TOV Aimag, Soum, Tuul River 4 km W Lun, 0, Da July Year, J. Gelhaus, 1 lot, JKG738, (639ANSP). ZAVKHAN Aimag, Ikh-Uul Soum, Ideriin Gol ~28 km E of Tosontsengel N 48.71968° E 98.65184°, 1654 msl, 19 July 2004, ESanaa, 1 ♂, SRP2004071903, (158IMH).

***Megarcys ochracea*** - MONGOLIA: BULGAN Aimag, Teshig Soum, Tariakhtain Gol Stream, junction by two major forks, N 49.77776° E 103.60860°, 1189 msl, 9 July 2005, C.R.Nelson, 1 lot, SRP2005070902, (1002BYU). KHOSVGOL Aimag, Tsagaan nuur Soum, Hagargo N 51.40978° E 99.30157°, 27 June 2007, OBG, 1 lot, AsiaFound15, (298NUM). KHOVSGOL Aimag, Soum, Jargalant gol 25 km NW Khank, 0, Da July Year, J. Gelhaus, 1 lot, JKG721\_763, (612ANSP). KHOVSGOL Aimag, TsagaanNuur Soum, stream, 16 km NW of Tsagaan Nuur town, N 51.46205° E 99.19994°, 1607 msl, 3 July 2006, CRNelson, 1 ♂, 1 ♀, SRP2006070302, (168BYU). KHOVSGOL Aimag, Soum, Jargalant gol N 51.6497219° E 100.5295426°, 0, 20 July 1997, J. Gelhaus, 1 lot, JKG736, (636ANSP). KHOVSGOL Aimag, Soum, Locality data needs to be acquired from label 2, 0, 14 July 1995, B. Hayford, 1 lot, Hay479, (564ANSP). SELENGE Aimag, Bugant/Yaroo Soum, Bar Chuluu Gol N 49.03282° E 106.96935°, 975 msl, 17 July 2003, SRP Team, 1 lot, SRP2003071704, (16IMH). TOV Aimag, Soum, Gorkhi Terej National Park, Terej River just above Terej, N 47.99158° E 107.46717°, 1516, 28 July 2008, CRNelson, 1 ♂, none (CRN8949), (058BYU).

***Pictetiella asiatica*** - MONGOLIA: KHOVSGOL Aimag, Khank Soum, Jargalant gol 25 km NW Khank, 1995, JKGelhaus, 1 lot, JKG721\_763, (1002ANSP).

***Skwala pusilla*** - MONGOLIA: BAYAN-OLGII Aimag, SWChorgon (Khurgan?) lake, 17 July 1978, J. Puntsagdulan, (1066BYU). BAYAN-OLGII Aimag, Tsengel Soum, Khoton Lake, 15 km NW of Syrgal, N 48.66718° E 88.29908°, 2090 msl, 14 July 2008, C. R. Nelson, MAIS2008071402, (910BYU).



## Pteronarcyidae

*Pteronarcys reticulata* - MONGOLIA: ARKHANGAI Aimag, Chuluut Soum, Chuluutin Gol 40 km N of Chuluut/Jargalant N 47.8044° E 100.3181°, 1937 msl, 17 July 2004, ESanaa, 1 ♂, 1 ♀, SRP2004071701, (161IMH). BULGAN Aimag, Teshig Soum, Airhan Lake, W of Hongor, 26.8 km N of Khutag Ondor, N 49.63453° E 102.64845°, 953 msl, 13 July 2005, CRNelson, 1 ♀, SRP2005071301, (091BYU). KHOVSGOL Aimag, Tsagaan nuur Soum, Tengis N 51.47065° E 99.0262°, , 9 June 2008, BLM, 1 lot, AsiaFound13, (292NUM). KHOVSGOL Aimag, TsagaanUur? Soum, Uur Gol River, 7 km N of Tsagaan Uur town, N 50.60031° E 101.52392°, 1155 msl, 16 July 2005, CRNelson, 1 lot, SRP2005071601, (099BYU). KHOVSGOL Aimag, xx Soum, Uur Gol River, 32.3 km NE of Erdenebulgan, N 50.30188° E 101.92869°, 1063 msl, 14 July 2005, CRNelson, 1 ♂, 1 ♀, SRP2005071403, (SRPBYU). SELENGE Aimag, Bugant/Yaroo Soum, Khongiin Gol at Yeroo Gol confluence N 49.08636° E 107.3075°, 943 msl, 19 July 2003, ESanaa, 1 ♀, SRP2003071803, (160IMH).

## Taeniopterygidae

*Taenionema japonicum* - MONGOLIA: ARKHANGAI Aimag, Bulgan Soum, Urd Tamir Gol ~38 km SW of Tsetserleg N 47.28244° E 101.18793°, 1872 msl, 12 July 2004, ESanaa, 8 ♀, SRP2004071201A, (162IMH). ARKHANGAI Aimag, Bulgan Soum, Urd Tamir Gol ~38 km SW of Tsetserleg N 47.28244° E 101.18793°, 1872 msl, 12 July 2004, JKGelhaus, 1 ♀, SRP2004071201A, (088ANSP). ARKHANGAI Aimag, Bulgan Soum, Urd Tamir Gol ~38 km SW of Tsetserleg N 47.28244° E 101.18793°, 1872 msl, 12 July 2004, JKGelhaus, 1 ♀, SRP2004071201A, (199ANSP). ARKHANGAI Aimag, Bulgan Soum, Urd Tamir Gol braid upstream of bridge~63 km SW of Tsetserleg N 47.11192° E 101.01048°, 2066 msl, 13 July 2004, ESanaa, 4 ♂, 16 ♀, SRP2004071302, (163IMH). ARKHANGAI Aimag, Bulgan Soum, Urd Tamir Gol braid upstream of bridge~63 km SW of Tsetserleg N 47.11192° E 101.01048°, 2066 msl, 13 July 2004, JKGelhaus, 2 ♂, SRP2004071302, (090ANSP). BAYANOLGII Aimag, Bulgan Soum, Bulgan Gol, roadside pools, and drying mud flats near ~28 km N Bulgan N 47.11549° E 90.94127, 2122 msl, 8 July 2009, SWJudson, 1 lot, MAIS2009070801, (833BYU). BAYAN-OLGII Aimag, Deluun Soum, Tcigertein Gol 15 Km SW Deluun Soum, 0, 21 July 1978, Puntsagdulan, 1 lot, Puntsagdulan21July1978, (888BYU). BAYAN-OLGII Aimag, Ulaankhus Soum, Sogoog Gol, 3.5 km East of Khokh Khotol, hidden valley rapids, N 49.23285° E 88.90569°, 2090 msl, 7 July 2008, CRNelson, 1 ♂, 18 ♀, MAIS2008070702, (Q35BYU). KHOVSGOL Aimag, Renchinlumbe Soum, Hugin Gol, toll bridge, 46.8km N of Ulaan Uul town, N 51.09845° E 99.32051°, 1557 msl, 1 July 2006, CRNelson, 1 ♀, SRP2006070101, (117BYU). KHOVSGOL Aimag, Renchinlumbe Soum, Hugin Gol, toll bridge, 46.8km N of Ulaan Uul town, N 51.09845° E 99.32051°, 1557 msl, 1 July 2006, CRNelson, 1 ♀, SRP2006070101, (147BYU). KHOVSGOL Aimag, Renchinlumbe Soum, Jarin Gol, 32.8 km N of Renchinlumbe, river crossing N 51.39852° E 99.75011°, 1575 msl, 2 July 2006, CRNelson, 3 ♀ SRP2006070203A, (164BYU). KHOVSGOL Aimag, Renchinlumbe Soum, Jarin Gol, 32.8 km N of Renchinlumbe, river crossing N 51.39852° E 99.75011°, 1575 msl, 2 July 2006, JKGelhaus, 1 ♀, SRP2006070203A, (165ANSP). KHOVSGOL Aimag, Renchinlumbe Soum, springs of Shishged Gol, 36 km NNE of Ulaan Uul town, N 50.99171° E 99.35400°, 1584 msl, 30 June 2006, Malaise, 5 ♂, 15 ♀, SRP2006063002, (022ANSP). KHOVSGOL Aimag, Renchinlumbe Soum, springs of Shishged Gol, 36 km NNE of Ulaan Uul town, N 50.99171° E 99.35400°, 1584 msl, 30 June 2006, JKGelhaus, 10 ♀, SRP2006063002, (023ANSP). KHOVSGOL Aimag, Renchinlumbe Soum, springs of Shishged Gol, 36 km NNE of Ulaan Uul town, N 50.99171° E 99.35400°, 1584 msl, 30 June 2006, CRNelson, 34 ♂, 90 ♀, SRP2006063002, (141BYU). KHOVSGOL Aimag, Renchinlumbe Soum, Arsayn Gol, 16.2 km N of Renchinlumbe town, N 51.25356° E 99.66687°, 1565 msl, 2 July 2006, SRP Team, 1 lot, SRP2006070201, (1039BYU). KHOVSGOL Aimag, Ulaanuul Soum, Gunain Gol, 12 km SW of Ulaan Uul N 50.61826° E 99.12094°, 1761 msl, 29 June 2006, CRNelson, 1 ♀, SRP2006062903, (138BYU). KHOVSGOL Aimag, Soum, Jargalant gol 25 km NW Khank, 0, Da July Year, J. Gelhaus, 1 lot, JKG721\_763, (615ANSP). KHOVSGOL Aimag, Renchinlumbe Soum, Har-Us Spring, Jargalant Gol 4.2 km SE of Renchinlumbe N 51.07845° E 99.70774°, 1586 msl, 1 July 2006, SRP Team, 1 lot, SRP2006070102, (1038BYU). SELENGE Aimag, Bugant/Yaroo Soum, pond near Yeroo R N 49.05466° E 107.23749°, 907 msl, 18 July 2003, SRP Team, 1 lot, SRP2003071802, (717IMH).

## **APPENDIX D. LEVELS OF EXPECTEDNESS REPORTS.**

\*If you are printing a hard copy of this thesis, the author requests that you do not print all of Appendix D to conserve paper. If it is necessary to print, please print Appendix D with two pages to a page and double sided. The entire 600 + page appendix is provided for the ETD version of this thesis, primarily for ease of access purposes for our project collaborators, interested parties, and associated non-profit organizations. Thank you.

Levels of Expectedness (LOE) categories range from “Highly Likely” to “Unlikely” according to the conceptual framework laid out in Table 2. Using standard score methods described in Appendix E and the Materials and Methods, species were assigned to the LOE categories in a way standard method with parameters adaptive to each area of interest. The assignment of species to the LOE categories is thereby unbiased and is symmetrically and approximately normally distributed for each soum. To demonstrate this, the number of species per category is given in the “Total” field to the right of the LOE header. Database construction and report generation are detailed in Appendix E.

The LOE report is organized hierarchically first by drainage basin, down to soum, and then according to LOE ranking and taxonomic family. In the page header, the basin, aimag, and soum are displayed along with the intersecting ecoregions and Asia Foundation’s water quality monitoring (WQM) sites that fall within the soum. The report then gives an expected species list for that soum organized according to LOE ranking and family. By each species name, information is given about whether this location falls within the documented species range, as well as the distance to the nearest known occurrence and corresponding XY coordinates of that known occurrence. The database can be accessed in multiple tables and queries to compare the LOE ranking of a species for a particular site to its raw near distance, frequency, and ENM data (Appendix E). The soums for which the LOE rankings are based only on predicted ENM maps are indicated by the phrase “LOE Ranking Based on Predicted ENM Maps Only” directly below the soum name (Figure E7).

## Levels of Expectedness by Soum

Basin: Arctic Ocean Basin

Aimags: Arkhangai

Soums: **Battsengel**

Freshwater Ecoregion: Lake Baikal

Terrestrial Ecoregion: Selenge-Orkhon Forest Steppe

WQM Sites:

WQM Sites: # 99 (Hoid tamir River @ N 47.78422° E 101.56372°)

<b>LOE Rating:</b>	<b>Highly Likely</b>	<b>Total:</b>	<b>3</b>
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Family: Chloroperlidae

Alloperla joosti      **Within Known Range?** Y      **Nearest Occurrence:** 68.25 KM      47.26999 °N      101.80227 °E

Family: Nemouridae

Amphinemura borealis      **Within Known Range?** Y      **Nearest Occurrence:** 68.25 KM      47.26999 °N      101.80227 °E

Family: Perlidae

Agnetina brevipennis      **Within Known Range?** Y      **Nearest Occurrence:** 42.37 KM      47.73941 °N      102.23811 °E

<b>LOE Rating:</b>	<b>Likely</b>	<b>Total:</b>	<b>16</b>
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Family: Capniidae

Isocapnia guentheri      **Within Known Range?** Y      **Nearest Occurrence:** 113.43 KM      47.50523 °N      100.93208 °E

Isocapnia kudia      **Within Known Range?** N      **Nearest Occurrence:** 448.08 KM      51.25356 °N      99.66687 °E

Isocapnia sibirica      **Within Known Range?** Y      **Nearest Occurrence:** 68.25 KM      47.26999 °N      101.80227 °E

Family: Chloroperlidae

Alloperla deminuta      **Within Known Range?** Y      **Nearest Occurrence:** 68.25 KM      47.26999 °N      101.80227 °E

Alloperla rostellata      **Within Known Range?** Y      **Nearest Occurrence:** 128.99 KM      47.11192 °N      101.01048 °E

Suwallia kerzhneri      **Within Known Range?** Y      **Nearest Occurrence:** 77.33 KM      47.59928 °N      101.24521 °E

Suwallia teleckojensis      **Within Known Range?** Y      **Nearest Occurrence:** 93.85 KM      47.04409 °N      101.76352 °E

Family: Nemouridae

Nemoura cinerea      **Within Known Range?** Y      **Nearest Occurrence:** 119.74 KM      47.48567 °N      100.87875 °E

Family: Perlidae

Agnetina extrema      **Within Known Range?** Y      **Nearest Occurrence:** 68.25 KM      47.26999 °N      101.80227 °E

Kamimuria exilis      **Within Known Range?** N      **Nearest Occurrence:** 422.86 KM      50.16278 °N      98.84212 °E

Family: Perlodidae

Arcynopteryx polaris      **Within Known Range?** Y      **Nearest Occurrence:** 93.85 KM      47.04409 °N      101.76352 °E

Arcynopteryx sajanensis      **Within Known Range?** N      **Nearest Occurrence:** 439.11 KM      51.61397 °N      100.59972 °E

Diura majuscula      **Within Known Range?** Y      **Nearest Occurrence:** 101.90 KM      47.28244 °N      101.18793 °E

Isoperla kozlovi      **Within Known Range?** Y      **Nearest Occurrence:** 68.25 KM      47.26999 °N      101.80227 °E

Kaszabia nigricauda      **Within Known Range?** Y      **Nearest Occurrence:** 77.33 KM      47.59928 °N      101.24521 °E

Pictetiella asiatica      **Within Known Range?** N      **Nearest Occurrence:** 445.52 KM      51.65822 °N      100.53000 °E

<b>LOE Rating:</b>	<b>Probable</b>	<b>Total:</b>	<b>4</b>
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Family: Chloroperlidae

Haploperla lepnevae      **Within Known Range?** Y      **Nearest Occurrence:** 234.59 KM      49.45317 °N      100.47234 °E

Family: Perlodidae

Diura bicaudata      **Within Known Range?** N      **Nearest Occurrence:** 229.08 KM      47.21768 °N      99.92824 °E

Isoperla potanini      **Within Known Range?** Y      **Nearest Occurrence:** 68.37 KM      47.26999 °N      101.80227 °E

Family: Pteronarcyidae

Pteronarcys reticulata      **Within Known Range?** Y      **Nearest Occurrence:** 173.90 KM      47.80440 °N      100.31810 °E

**Basin:** Arctic Ocean Basin  
**Aimags:** Arkhangai  
**Soums:** Battengel

Freshwater Ecoregion: Lake Baikal  
 Terrestrial Ecoregion: Selenge-Orkhon Forest Steppe

**WQM Sites:**

WQM Sites: # 99 (Hoid tamir River @ N 47.78422° E 101.56372°)

<b>LOE Rating:</b>	<b>Possible</b>	<b>Total:</b>	<b>4</b>
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Family: Nemouridae						
Nemoura arctica	Within Known Range? Y	Nearest Occurrence:	68.37 KM	47.26999°N	101.80227°E	
Family: Perlodidae						
Arcynopteryx compacta	Within Known Range? Y	Nearest Occurrence:	121.72 KM	46.88627°N	102.34304°E	
Isoperla asiatica	Within Known Range? Y	Nearest Occurrence:	173.90 KM	47.80440°N	100.31810°E	
Family: Taeniopterygidae						
Taenionema japonicum	Within Known Range? Y	Nearest Occurrence:	101.90 KM	47.28244°N	101.18793°E	

<b>LOE Rating:</b>	<b>Predicted</b>	<b>Total:</b>	<b>16</b>
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Family: Capniidae						
Capnia khulsbagia	Within Known Range? N	Nearest Occurrence:	368.57 KM	50.98944°N	100.71944°E	
Capnia nigra	Within Known Range? N	Nearest Occurrence:	334.99 KM	50.51003°N	100.40375°E	
Mesocapnia variabilis	Within Known Range? Y	Nearest Occurrence:	229.49 KM	47.21768°N	99.92824°E	
Family: Chloroperlidae						
Alaskaperla longidentata	Within Known Range? Y	Nearest Occurrence:	119.06 KM	46.82177°N	101.70479°E	
Alloperla mediata	Within Known Range? N	Nearest Occurrence:	243.87 KM	49.70678°N	103.10288°E	
Family: Leuctridae						
Paraleuctra zapekinae	Within Known Range? N	Nearest Occurrence:	367.82 KM	49.71481°N	104.64203°E	
Family: Nemouridae						
Amphinemura standfussi	Within Known Range? N	Nearest Occurrence:	202.02 KM	49.33339°N	102.97786°E	
Nemoura sahlbergi	Within Known Range? Y	Nearest Occurrence:	182.65 KM	47.42580°N	100.30130°E	
Family: Perlidae						
Agnetina cocandica	Within Known Range? Y	Nearest Occurrence:	286.12 KM	49.62785°N	99.99523°E	
Paragnetina flavotincta	Within Known Range? N	Nearest Occurrence:	184.21 KM	49.44641°N	101.33625°E	
Family: Perlodidae						
Isoperla altaica	Within Known Range? Y	Nearest Occurrence:	129.23 KM	47.11192°N	101.01048°E	
Isoperla lunigera	Within Known Range? N	Nearest Occurrence:	191.14 KM	49.38617°N	102.71667°E	
Isoperla mongolica	Within Known Range? Y	Nearest Occurrence:	68.37 KM	47.26999°N	101.80227°E	
Isoperla obscura	Within Known Range? Y	Nearest Occurrence:	191.14 KM	49.38617°N	102.71667°E	
Megarcys ochracea	Within Known Range? N	Nearest Occurrence:	284.76 KM	49.77776°N	103.60860°E	
Skwala pusilla	Within Known Range? N	Nearest Occurrence:	1,485.95 KM	48.51277°N	88.51107°E	

<b>LOE Rating:</b>	<b>Unlikely</b>	<b>Total:</b>	<b>4</b>
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Family: Capniidae						
Mesocapnia altaica	Within Known Range? N	Nearest Occurrence:	1,442.34 KM	48.43684°N	88.90094°E	
Family: Leuctridae						
Leuctra fusca	Within Known Range? N	Nearest Occurrence:	614.90 KM	49.08643°N	107.28952°E	
Family: Nemouridae						
Nemurella pictetii	Within Known Range? N	Nearest Occurrence:	429.40 KM	51.07896°N	99.70857°E	
Family: Perlodidae						
Isoperla eximia	Within Known Range? N	Nearest Occurrence:	641.02 KM	49.01829°N	107.54453°E	



**Basin:** Arctic Ocean Basin

**Aimags:** Arkhangai

**Soums:** Chuluut

Freshwater Ecoregion: Lake Baikal

Terrestrial Ecoregion: Khangai Mountains Alpine Meadow

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Highly Likely Total: 4**

Family: Chloroperlidae

Alloperla joosti Within Known Range? Y Nearest Occurrence: 16.60 KM 47.42580°N 100.30130°E

Suwallia teleckoensis Within Known Range? Y Nearest Occurrence: 16.63 KM 47.42580°N 100.30130°E

Family: Nemouridae

Amphinemura borealis Within Known Range? Y Nearest Occurrence: 16.60 KM 47.42580°N 100.30130°E

Family: Perlodidae

Arcynopteryx polaris Within Known Range? Y Nearest Occurrence: 29.01 KM 47.29702°N 100.03136°E

**LOE Rating: Likely Total: 13**

Family: Capniidae

Isocapnia guentheri Within Known Range? Y Nearest Occurrence: 77.72 KM 47.48567°N 100.87875°E

Isocapnia sibirica Within Known Range? N Nearest Occurrence: 114.84 KM 47.28244°N 101.18793°E

Mesocapnia variabilis Within Known Range? Y Nearest Occurrence: 43.01 KM 47.21768°N 99.92824°E

Family: Chloroperlidae

Alaskaperla longidentata Within Known Range? Y Nearest Occurrence: 16.60 KM 47.42580°N 100.30130°E

Alloperla deminuta Within Known Range? Y Nearest Occurrence: 35.93 KM 47.80440°N 100.31810°E

Alloperla rostellata Within Known Range? Y Nearest Occurrence: 102.41 KM 47.11192°N 101.01048°E

Suwallia kerzhneri Within Known Range? Y Nearest Occurrence: 77.72 KM 47.48567°N 100.87875°E

Family: Perlidae

Agnetina extrema Within Known Range? Y Nearest Occurrence: 43.96 KM 47.50949°N 100.57510°E

Family: Perlodidae

Diura bicaudata Within Known Range? Y Nearest Occurrence: 42.93 KM 47.21768°N 99.92824°E

Diura majuscula Within Known Range? Y Nearest Occurrence: 16.63 KM 47.42580°N 100.30130°E

Isoperla kozlovi Within Known Range? Y Nearest Occurrence: 35.93 KM 47.80440°N 100.31810°E

Isoperla potanini Within Known Range? Y Nearest Occurrence: 16.63 KM 47.42580°N 100.30130°E

Kaszabia nigricauda Within Known Range? Y Nearest Occurrence: 35.93 KM 47.80440°N 100.31810°E

**LOE Rating: Probable Total: 6**

Family: Capniidae

Isocapnia kudia Within Known Range? N Nearest Occurrence: 419.18 KM 51.25356°N 99.66687°E

Family: Nemouridae

Nemoura cinerea Within Known Range? Y Nearest Occurrence: 77.72 KM 47.48567°N 100.87875°E

Family: Perlidae

Kamimuria exilis Within Known Range? N Nearest Occurrence: 330.14 KM 50.16278°N 98.84212°E

Family: Perlodidae

Arcynopteryx sajanensis Within Known Range? N Nearest Occurrence: 458.53 KM 51.61397°N 100.59972°E

Pictetiella asiatica Within Known Range? N Nearest Occurrence: 461.87 KM 51.65822°N 100.53000°E

Family: Pteronarcyidae

Pteronarcys reticulata Within Known Range? Y Nearest Occurrence: 35.93 KM 47.80440°N 100.31810°E

**Basin:** Arctic Ocean Basin  
**Aimags:** Arkhangai  
**Soums:** Chuluut

Freshwater Ecoregion: Lake Baikal  
 Terrestrial Ecoregion: Khangai Mountains Alpine Meadow

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Possible Total: 7**

Family: Capniidae					
<i>Capnia nigra</i>	Within Known Range? N	Nearest Occurrence:	298.09 KM	48.06257°N	97.55064 °E
Family: Chloroperlidae					
<i>Haploperla lepnevae</i>	Within Known Range? Y	Nearest Occurrence:	196.99 KM	49.26170°N	99.88242 °E
Family: Nemouridae					
<i>Nemoura sahlbergi</i>	Within Known Range? Y	Nearest Occurrence:	16.60 KM	47.42580°N	100.30130 °E
Family: Perlidae					
<i>Agnetina brevipennis</i>	Within Known Range? Y	Nearest Occurrence:	73.15 KM	48.12661°N	99.94128 °E
Family: Perlodidae					
<i>Arcynopteryx compacta</i>	Within Known Range? Y	Nearest Occurrence:	102.60 KM	47.11192°N	101.01048 °E
<i>Isoperla asiatica</i>	Within Known Range? Y	Nearest Occurrence:	35.93 KM	47.80440°N	100.31810 °E
Family: Taeniopterygidae					
<i>Taenionema japonicum</i>	Within Known Range? Y	Nearest Occurrence:	102.60 KM	47.11192°N	101.01048 °E

**LOE Rating: Predicted Total: 12**

Family: Chloroperlidae					
<i>Alloperla mediata</i>	Within Known Range? N	Nearest Occurrence:	352.47 KM	50.51517°N	101.21073 °E
Family: Leuctridae					
<i>Paraleuctra zapekinae</i>	Within Known Range? N	Nearest Occurrence:	552.44 KM	49.71481°N	104.64203 °E
Family: Nemouridae					
<i>Amphinemura standfussi</i>	Within Known Range? N	Nearest Occurrence:	248.51 KM	48.61518°N	98.23096 °E
<i>Nemoura arctica</i>	Within Known Range? Y	Nearest Occurrence:	182.49 KM	47.26999°N	101.80227 °E
Family: Perlidae					
<i>Agnetina cocandica</i>	Within Known Range? Y	Nearest Occurrence:	236.17 KM	49.62785°N	99.99523 °E
<i>Paragnetina flavotincta</i>	Within Known Range? N	Nearest Occurrence:	196.99 KM	49.26170°N	99.88242 °E
Family: Perlodidae					
<i>Isoperla altaica</i>	Within Known Range? Y	Nearest Occurrence:	102.60 KM	47.11192°N	101.01048 °E
<i>Isoperla lunigera</i>	Within Known Range? N	Nearest Occurrence:	217.91 KM	49.45317°N	100.47234 °E
<i>Isoperla mongolica</i>	Within Known Range? Y	Nearest Occurrence:	102.60 KM	47.11192°N	101.01048 °E
<i>Isoperla obscura</i>	Within Known Range? Y	Nearest Occurrence:	350.16 KM	49.38617°N	102.71667 °E
<i>Megaracys ochracea</i>	Within Known Range? N	Nearest Occurrence:	443.48 KM	51.40978°N	99.30136 °E
<i>Skwala pusilla</i>	Within Known Range? N	Nearest Occurrence:	1,299.91 KM	48.51277°N	88.51107 °E

**LOE Rating: Unlikely Total: 5**

Family: Capniidae					
<i>Capnia khulsbagia</i>	Within Known Range? N	Nearest Occurrence:	390.62 KM	50.98944°N	100.71944 °E
<i>Mesocapnia altaica</i>	Within Known Range? N	Nearest Occurrence:	1,256.08 KM	48.43684°N	88.90094 °E
Family: Leuctridae					
<i>Leuctra fusca</i>	Within Known Range? N	Nearest Occurrence:	808.37 KM	49.08643°N	107.28952 °E
Family: Nemouridae					
<i>Nemurella pictetii</i>	Within Known Range? N	Nearest Occurrence:	378.08 KM	50.81265°N	99.33803 °E
Family: Perlodidae					
<i>Isoperla eximia</i>	Within Known Range? N	Nearest Occurrence:	834.48 KM	49.01829°N	107.54453 °E

**Basin:** Arctic Ocean Basin  
**Aimag:** Arkhangai  
**Soum:** Erdenemandal

Freshwater Ecoregion: Lake Baikal  
 Terrestrial Ecoregion: Selenge-Orkhon Forest Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Highly Likely Total: 4**

Family: Chloroperlidae					
Alloperla joosti	Within Known Range? Y	Nearest Occurrence:	91.55 KM	47.59928 °N	101.24521 °E
Suwallia teleckojensis	Within Known Range? Y	Nearest Occurrence:	115.09 KM	47.50523 °N	100.93208 °E
Family: Nemouridae					
Amphinemura borealis	Within Known Range? Y	Nearest Occurrence:	91.55 KM	47.59928 °N	101.24521 °E
Family: Perlidae					
Agnentina extrema	Within Known Range? Y	Nearest Occurrence:	91.55 KM	47.59928 °N	101.24521 °E

**LOE Rating: Likely Total: 15**

Family: Capniidae					
Isocapnia guentheri	Within Known Range? Y	Nearest Occurrence:	114.88 KM	47.50523 °N	100.93208 °E
Isocapnia kudia	Within Known Range? N	Nearest Occurrence:	374.45 KM	51.25356 °N	99.66687 °E
Isocapnia sibirica	Within Known Range? N	Nearest Occurrence:	127.20 KM	47.28244 °N	101.18793 °E
Family: Chloroperlidae					
Alloperla deminuta	Within Known Range? Y	Nearest Occurrence:	114.88 KM	47.50523 °N	100.93208 °E
Alloperla rostellata	Within Known Range? Y	Nearest Occurrence:	150.96 KM	47.11192 °N	101.01048 °E
Suwallia kerzhneri	Within Known Range? Y	Nearest Occurrence:	91.55 KM	47.59928 °N	101.24521 °E
Family: Nemouridae					
Nemoura cinerea	Within Known Range? Y	Nearest Occurrence:	119.83 KM	47.48567 °N	100.87875 °E
Family: Perlidae					
Agnentina brevipennis	Within Known Range? Y	Nearest Occurrence:	113.04 KM	47.73941 °N	102.23811 °E
Kamimuria exilis	Within Known Range? N	Nearest Occurrence:	351.17 KM	50.16278 °N	98.84212 °E
Family: Perlodidae					
Arcynopteryx polaris	Within Known Range? Y	Nearest Occurrence:	154.06 KM	47.04409 °N	101.76352 °E
Arcynopteryx sajanensis	Within Known Range? N	Nearest Occurrence:	370.41 KM	51.61397 °N	100.59972 °E
Diura majuscula	Within Known Range? Y	Nearest Occurrence:	127.43 KM	47.28244 °N	101.18793 °E
Isoperla kozlovi	Within Known Range? Y	Nearest Occurrence:	119.36 KM	49.26765 °N	100.82998 °E
Kaszabia nigricauda	Within Known Range? Y	Nearest Occurrence:	91.55 KM	47.59928 °N	101.24521 °E
Pictetiella asiatica	Within Known Range? N	Nearest Occurrence:	376.54 KM	51.65822 °N	100.53000 °E

**LOE Rating: Probable Total: 4**

Family: Chloroperlidae					
Haploperla lepnevae	Within Known Range? Y	Nearest Occurrence:	160.56 KM	49.45317 °N	100.47234 °E
Family: Perlodidae					
Diura bicaudata	Within Known Range? N	Nearest Occurrence:	214.44 KM	47.21768 °N	99.92824 °E
Isoperla potanini	Within Known Range? Y	Nearest Occurrence:	119.58 KM	49.26765 °N	100.82998 °E
Family: Pteronarcyidae					
Pteronarcys reticulata	Within Known Range? Y	Nearest Occurrence:	142.68 KM	47.80440 °N	100.31810 °E



**Basin:** Arctic Ocean Basin  
**Aimags:** Arkhangai  
**Soums:** Erdenemandal

**Freshwater Ecoregion:** Lake Baikal  
**Terrestrial Ecoregion:** Selenge-Orkhon Forest Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

<b>LOE Rating:</b>	<b>Possible</b>	<b>Total:</b>	<b>4</b>
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<b>Family:</b> Nemouridae			
Nemoura arctica	Within Known Range? Y	Nearest Occurrence:	130.86 KM 47.26999°N 101.80227 °E
Nemoura sahlbergi	Within Known Range? Y	Nearest Occurrence:	167.68 KM 47.42580°N 100.30130 °E
<b>Family:</b> Perlodidae			
Isoperla asiatica	Within Known Range? Y	Nearest Occurrence:	142.68 KM 47.80440°N 100.31810 °E
<b>Family:</b> Taeniopterygidae			
Taenionema japonicum	Within Known Range? Y	Nearest Occurrence:	127.43 KM 47.28244°N 101.18793 °E

<b>LOE Rating:</b>	<b>Predicted</b>	<b>Total:</b>	<b>16</b>
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<b>Family:</b> Capniidae			
Capnia khulsbagia	Within Known Range? N	Nearest Occurrence:	299.39 KM 50.98944°N 100.71944 °E
Capnia nigra	Within Known Range? N	Nearest Occurrence:	262.31 KM 50.51003°N 100.40375 °E
Mesocapnia variabilis	Within Known Range? Y	Nearest Occurrence:	214.84 KM 47.21768°N 99.92824 °E
<b>Family:</b> Chloroperlidae			
Alaskaperla longidentata	Within Known Range? Y	Nearest Occurrence:	167.68 KM 47.42580°N 100.30130 °E
Alloperla mediata	Within Known Range? N	Nearest Occurrence:	217.90 KM 50.30188°N 101.92869 °E
<b>Family:</b> Leuctridae			
Paraleuctra zapekinae	Within Known Range? N	Nearest Occurrence:	382.41 KM 49.71481°N 104.64203 °E
<b>Family:</b> Nemouridae			
Amphinemura standfussi	Within Known Range? Y	Nearest Occurrence:	198.10 KM 49.33339°N 102.97786 °E
<b>Family:</b> Perlidae			
Agnetina cocandica	Within Known Range? Y	Nearest Occurrence:	212.80 KM 49.62785°N 99.99523 °E
Paragnetina flavotincta	Within Known Range? N	Nearest Occurrence:	117.42 KM 49.44641°N 101.33625 °E
<b>Family:</b> Perlodidae			
Arcynopteryx compacta	Within Known Range? Y	Nearest Occurrence:	151.24 KM 47.11192°N 101.01048 °E
Isoperla altaica	Within Known Range? Y	Nearest Occurrence:	151.24 KM 47.11192°N 101.01048 °E
Isoperla lunigera	Within Known Range? N	Nearest Occurrence:	160.56 KM 49.45317°N 100.47234 °E
Isoperla mongolica	Within Known Range? Y	Nearest Occurrence:	127.43 KM 47.28244°N 101.18793 °E
Isoperla obscura	Within Known Range? Y	Nearest Occurrence:	177.66 KM 49.38617°N 102.71667 °E
Megarcys ochracea	Within Known Range? N	Nearest Occurrence:	283.63 KM 49.77776°N 103.60860 °E
Skwala pusilla	Within Known Range? N	Nearest Occurrence:	1,437.32 KM 48.51277°N 88.51107 °E

<b>LOE Rating:</b>	<b>Unlikely</b>	<b>Total:</b>	<b>4</b>
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<b>Family:</b> Capniidae			
Mesocapnia altaica	Within Known Range? N	Nearest Occurrence:	1,393.99 KM 48.43684°N 88.90094 °E
<b>Family:</b> Leuctridae			
Leuctra fusca	Within Known Range? N	Nearest Occurrence:	651.67 KM 49.08643°N 107.28952 °E
<b>Family:</b> Nemouridae			
Nemurella pictetii	Within Known Range? N	Nearest Occurrence:	355.63 KM 51.07896°N 99.70857 °E
<b>Family:</b> Perlodidae			
Isoperla eximia	Within Known Range? N	Nearest Occurrence:	678.98 KM 49.01829°N 107.54453 °E





**Basin:** Arctic Ocean Basin  
**Aimags:** Arkhangai  
**Soums:** Ikhtamir

Freshwater Ecoregion: Lake Baikal  
 Terrestrial Ecoregion: Selenge-Orkhon Forest Steppe

**WQM Sites:**

WQM Sites: # 98 (Hunui River @ N 48.0811° E 101.47218°)

**LOE Rating: Highly Likely Total: 3**

Family: Chloroperlidae

Alloperla joosti Within Known Range? Y Nearest Occurrence: 7.82 KM 47.50523°N 100.93208 °E  
 Suwallia kerzhneri Within Known Range? Y Nearest Occurrence: 13.37 KM 47.48567°N 100.87875 °E

Family: Nemouridae

Amphinemura borealis Within Known Range? Y Nearest Occurrence: 7.82 KM 47.50523°N 100.93208 °E

**LOE Rating: Likely Total: 11**

Family: Capniidae

Isocapnia guentheri Within Known Range? Y Nearest Occurrence: 7.82 KM 47.50523°N 100.93208 °E  
 Isocapnia sibirica Within Known Range? Y Nearest Occurrence: 39.68 KM 47.28244°N 101.18793 °E

Family: Chloroperlidae

Alloperla deminuta Within Known Range? Y Nearest Occurrence: 7.82 KM 47.50523°N 100.93208 °E  
 Alloperla rostellata Within Known Range? Y Nearest Occurrence: 50.52 KM 47.11192°N 101.01048 °E  
 Suwallia teleckojensis Within Known Range? Y Nearest Occurrence: 7.84 KM 47.50523°N 100.93208 °E

Family: Nemouridae

Nemoura cinerea Within Known Range? Y Nearest Occurrence: 13.37 KM 47.48567°N 100.87875 °E

Family: Perlidae

Agnetina extrema Within Known Range? Y Nearest Occurrence: 30.87 KM 47.59928°N 101.24521 °E

Family: Perlodidae

Arcynopteryx polaris Within Known Range? Y Nearest Occurrence: 62.94 KM 47.00226°N 100.91051 °E  
 Diura majuscula Within Known Range? Y Nearest Occurrence: 39.75 KM 47.28244°N 101.18793 °E  
 Isoperla kozlovi Within Known Range? Y Nearest Occurrence: 13.37 KM 47.48567°N 100.87875 °E  
 Kaszabia nigricauda Within Known Range? Y Nearest Occurrence: 13.37 KM 47.48567°N 100.87875 °E

**LOE Rating: Probable Total: 8**

Family: Capniidae

Isocapnia kudia Within Known Range? N Nearest Occurrence: 434.18 KM 51.25356°N 99.66687 °E

Family: Perlidae

Agnetina brevipennis Within Known Range? Y Nearest Occurrence: 130.01 KM 48.12661°N 99.94128 °E  
 Kamimuria exilis Within Known Range? N Nearest Occurrence: 373.34 KM 50.16278°N 98.84212 °E

Family: Perlodidae

Arcynopteryx sajanensis Within Known Range? N Nearest Occurrence: 452.10 KM 51.61397°N 100.59972 °E  
 Diura bicaudata Within Known Range? Y Nearest Occurrence: 121.81 KM 47.21768°N 99.92824 °E  
 Isoperla potanini Within Known Range? Y Nearest Occurrence: 75.87 KM 47.42580°N 100.30130 °E  
 Pictetiella asiatica Within Known Range? N Nearest Occurrence: 456.94 KM 51.65822°N 100.53000 °E

Family: Pteronarcyidae

Pteronarcys reticulata Within Known Range? Y Nearest Occurrence: 76.99 KM 47.80440°N 100.31810 °E



**Basin:** Arctic Ocean Basin  
**Aimags:** Arkhangai  
**Soums:** Ikhtamir

Freshwater Ecoregion: Lake Baikal  
 Terrestrial Ecoregion: Selenge-Orkhon Forest Steppe

**WQM Sites:**

WQM Sites: # 98 (Hunui River @ N 48.0811° E 101.47218°)

**LOE Rating: Possible Total: 7**

Family: Capniidae						
Mesocapnia variabilis	Within Known Range? Y	Nearest Occurrence:	122.03 KM	47.21768°N	99.92824°E	
Family: Chloroperlidae						
Alaskaperla longidentata	Within Known Range? Y	Nearest Occurrence:	75.73 KM	47.42580°N	100.30130°E	
Haploperla lepnevae	Within Known Range? Y	Nearest Occurrence:	216.70 KM	49.45317°N	100.47234°E	
Family: Nemouridae						
Nemoura arctica	Within Known Range? Y	Nearest Occurrence:	98.28 KM	47.26999°N	101.80227°E	
Family: Perlodidae						
Arcynopteryx compacta	Within Known Range? Y	Nearest Occurrence:	50.61 KM	47.11192°N	101.01048°E	
Isoperla asiatica	Within Known Range? Y	Nearest Occurrence:	76.99 KM	47.80440°N	100.31810°E	
Family: Taeniopterygidae						
Taenionema japonicum	Within Known Range? Y	Nearest Occurrence:	39.75 KM	47.28244°N	101.18793°E	

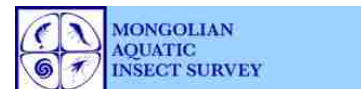
**LOE Rating: Predicted Total: 13**

Family: Capniidae						
Capnia nigra	Within Known Range? N	Nearest Occurrence:	332.85 KM	50.51003°N	100.40375°E	
Family: Chloroperlidae						
Alloperla mediata	Within Known Range? N	Nearest Occurrence:	321.91 KM	50.30188°N	101.92869°E	
Family: Leuctridae						
Paraleuctra zapekinae	Within Known Range? N	Nearest Occurrence:	472.38 KM	49.71481°N	104.64203°E	
Family: Nemouridae						
Amphinemura standfussi	Within Known Range? N	Nearest Occurrence:	297.04 KM	49.33339°N	102.97786°E	
Nemoura sahlbergi	Within Known Range? Y	Nearest Occurrence:	75.73 KM	47.42580°N	100.30130°E	
Family: Perlidae						
Agnetina cocandica	Within Known Range? Y	Nearest Occurrence:	253.65 KM	49.62785°N	99.99523°E	
Paragnetina flavotincta	Within Known Range? N	Nearest Occurrence:	189.61 KM	49.26765°N	100.82998°E	
Family: Perlodidae						
Isoperla altaica	Within Known Range? Y	Nearest Occurrence:	50.61 KM	47.11192°N	101.01048°E	
Isoperla lunigera	Within Known Range? N	Nearest Occurrence:	216.70 KM	49.45317°N	100.47234°E	
Isoperla mongolica	Within Known Range? Y	Nearest Occurrence:	39.75 KM	47.28244°N	101.18793°E	
Isoperla obscura	Within Known Range? Y	Nearest Occurrence:	280.15 KM	49.38617°N	102.71667°E	
Megarcys ochracea	Within Known Range? N	Nearest Occurrence:	382.30 KM	49.77776°N	103.60860°E	
Skwala pusilla	Within Known Range? N	Nearest Occurrence:	1,386.85 KM	48.51277°N	88.51107°E	

**LOE Rating: Unlikely Total: 5**

Family: Capniidae						
Capnia khulsbagia	Within Known Range? N	Nearest Occurrence:	381.10 KM	50.98944°N	100.71944°E	
Mesocapnia altaica	Within Known Range? N	Nearest Occurrence:	1,343.06 KM	48.43684°N	88.90094°E	
Family: Leuctridae						
Leuctra fusca	Within Known Range? N	Nearest Occurrence:	721.59 KM	49.08643°N	107.28952°E	
Family: Nemouridae						
Nemurella pictetii	Within Known Range? N	Nearest Occurrence:	403.39 KM	50.81265°N	99.33803°E	
Family: Perlodidae						
Isoperla eximia	Within Known Range? N	Nearest Occurrence:	747.47 KM	49.01829°N	107.54453°E	

Research funded by the National Science Foundation  
 DEB-BSI #0206674: A Survey of the Aquatic Insects of the Selenge River Basin. P.I.'s: JKGelhaus, JCMorse, BHayford.  
 DEB # 0743732: Aquatic Insects of the Altai and Hangai Mountain Drainages. P.I.'s: JKGelhaus, JCMorse, CRNelson.  
<http://clade.ansp.org/entomology/mongolia/index.html>



**Basin:** Arctic Ocean Basin  
**Aimags:** Arkhangai  
**Soums:** Jargalant

Freshwater Ecoregion: Lake Baikal  
 Terrestrial Ecoregion: Selenge-Orkhon Forest Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Highly Likely Total: 4**

Family: Chloroperlidae					
Alloperla joosti	Within Known Range? Y	Nearest Occurrence:	106.46 KM	47.80440°N	100.31810°E
Suwallia teleckojensis	Within Known Range? Y	Nearest Occurrence:	106.65 KM	47.80440°N	100.31810°E
Family: Nemouridae					
Amphinemura borealis	Within Known Range? Y	Nearest Occurrence:	91.97 KM	49.45317°N	100.47234°E
Family: Perlidae					
Agnentina extrema	Within Known Range? Y	Nearest Occurrence:	129.79 KM	47.50949°N	100.57510°E

**LOE Rating: Likely Total: 16**

Family: Capniidae					
Isocapnia guentheri	Within Known Range? Y	Nearest Occurrence:	130.86 KM	47.50523°N	100.93208°E
Isocapnia kudia	Within Known Range? N	Nearest Occurrence:	310.59 KM	51.25356°N	99.66687°E
Isocapnia sibirica	Within Known Range? N	Nearest Occurrence:	161.74 KM	47.28244°N	101.18793°E
Family: Chloroperlidae					
Alloperla deminuta	Within Known Range? Y	Nearest Occurrence:	106.46 KM	47.80440°N	100.31810°E
Alloperla rostellata	Within Known Range? Y	Nearest Occurrence:	175.36 KM	47.11192°N	101.01048°E
Haploperla lepnevae	Within Known Range? Y	Nearest Occurrence:	91.97 KM	49.45317°N	100.47234°E
Suwallia kerzhneri	Within Known Range? Y	Nearest Occurrence:	131.38 KM	47.59928°N	101.24521°E
Family: Nemouridae					
Nemoura cinerea	Within Known Range? Y	Nearest Occurrence:	132.16 KM	47.48567°N	100.87875°E
Family: Perlidae					
Agnentina brevipennis	Within Known Range? Y	Nearest Occurrence:	67.41 KM	49.26765°N	100.82998°E
Kamimuria exilis	Within Known Range? N	Nearest Occurrence:	268.31 KM	50.16278°N	98.84212°E
Family: Perlodidae					
Arcynopteryx polaris	Within Known Range? Y	Nearest Occurrence:	171.38 KM	47.29702°N	100.03136°E
Arcynopteryx sajanensis	Within Known Range? N	Nearest Occurrence:	327.97 KM	51.61397°N	100.59972°E
Diura majuscula	Within Known Range? Y	Nearest Occurrence:	146.31 KM	47.42580°N	100.30130°E
Isoperla kozlovi	Within Known Range? Y	Nearest Occurrence:	67.41 KM	49.26765°N	100.82998°E
Kaszabia nigricauda	Within Known Range? Y	Nearest Occurrence:	106.46 KM	47.80440°N	100.31810°E
Pictetiella asiatica	Within Known Range? N	Nearest Occurrence:	332.73 KM	51.65822°N	100.53000°E

**LOE Rating: Probable Total: 3**

Family: Perlodidae					
Diura bicaudata	Within Known Range? Y	Nearest Occurrence:	184.24 KM	47.21768°N	99.92824°E
Isoperla potanini	Within Known Range? Y	Nearest Occurrence:	67.53 KM	49.26765°N	100.82998°E
Family: Pteronarcyidae					
Pteronarcys reticulata	Within Known Range? Y	Nearest Occurrence:	106.46 KM	47.80440°N	100.31810°E



Basin: Arctic Ocean Basin

Aimags: Arkhangai

Soums: Jargalant

Freshwater Ecoregion: Lake Baikal

Terrestrial Ecoregion: Selenge-Orkhon Forest Steppe

WQM Sites:

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Possible Total: 5**

Family: Capniidae						
Mesocapnia variabilis	Within Known Range? Y	Nearest Occurrence:	184.57 KM	47.21768 °N	99.92824 °E	
Family: Leuctridae						
Paraleuctra zapekinae	Within Known Range? N	Nearest Occurrence:	448.89 KM	49.71481 °N	104.64203 °E	
Family: Nemouridae						
Nemoura arctica	Within Known Range? Y	Nearest Occurrence:	180.68 KM	49.87761 °N	101.82039 °E	
Family: Perlodidae						
Isoperla asiatica	Within Known Range? Y	Nearest Occurrence:	106.46 KM	47.80440 °N	100.31810 °E	
Family: Taeniopterygidae						
Taenionema japonicum	Within Known Range? Y	Nearest Occurrence:	162.03 KM	47.28244 °N	101.18793 °E	

**LOE Rating: Predicted Total: 16**

Family: Capniidae						
Capnia khulsbagia	Within Known Range? N	Nearest Occurrence:	257.72 KM	50.98944 °N	100.71944 °E	
Capnia nigra	Within Known Range? N	Nearest Occurrence:	207.80 KM	50.51003 °N	100.40375 °E	
Family: Chloroperlidae						
Alaskaperla longidentata	Within Known Range? Y	Nearest Occurrence:	146.05 KM	47.42580 °N	100.30130 °E	
Alloperla mediata	Within Known Range? N	Nearest Occurrence:	211.73 KM	50.51517 °N	101.21073 °E	
Family: Nemouridae						
Amphinemura standfussi	Within Known Range? Y	Nearest Occurrence:	233.96 KM	50.77444 °N	100.80067 °E	
Nemoura sahlbergi	Within Known Range? Y	Nearest Occurrence:	146.05 KM	47.42580 °N	100.30130 °E	
Nemurella pictetii	Within Known Range? N	Nearest Occurrence:	284.19 KM	50.81265 °N	99.33803 °E	
Family: Perlidae						
Agnetina cocandica	Within Known Range? Y	Nearest Occurrence:	134.85 KM	49.62785 °N	99.99523 °E	
Paragnetina flavotincta	Within Known Range? Y	Nearest Occurrence:	67.41 KM	49.26765 °N	100.82998 °E	
Family: Perlodidae						
Arcynopteryx compacta	Within Known Range? Y	Nearest Occurrence:	175.68 KM	47.11192 °N	101.01048 °E	
Isoperla altaica	Within Known Range? Y	Nearest Occurrence:	175.68 KM	47.11192 °N	101.01048 °E	
Isoperla lunigera	Within Known Range? Y	Nearest Occurrence:	91.97 KM	49.45317 °N	100.47234 °E	
Isoperla mongolica	Within Known Range? Y	Nearest Occurrence:	162.03 KM	47.28244 °N	101.18793 °E	
Isoperla obscura	Within Known Range? Y	Nearest Occurrence:	231.67 KM	50.60031 °N	101.52392 °E	
Megarcys ochracea	Within Known Range? N	Nearest Occurrence:	331.75 KM	51.64934 °N	100.53020 °E	
Skwala pusilla	Within Known Range? N	Nearest Occurrence:	1,357.07 KM	48.51277 °N	88.51107 °E	

**LOE Rating: Unlikely Total: 3**

Family: Capniidae						
Mesocapnia altaica	Within Known Range? N	Nearest Occurrence:	1,313.93 KM	48.43684 °N	88.90094 °E	
Family: Leuctridae						
Leuctra fusca	Within Known Range? N	Nearest Occurrence:	728.93 KM	49.08643 °N	107.28952 °E	
Family: Perlodidae						
Isoperla eximia	Within Known Range? N	Nearest Occurrence:	756.76 KM	49.01829 °N	107.54453 °E	

**Basin:** Arctic Ocean Basin  
**Aimags:** Arkhangai  
**Soums:** Khaikhan

Freshwater Ecoregion: Lake Baikal  
 Terrestrial Ecoregion: Selenge-Orkhon Forest Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Highly Likely Total: 3**

Family: Chloroperlidae					
Alloperla joosti	Within Known Range? Y	Nearest Occurrence:	134.19 KM	47.59928 °N	101.24521 °E
Family: Nemouridae					
Amphinemura borealis	Within Known Range? Y	Nearest Occurrence:	134.19 KM	47.59928 °N	101.24521 °E
Family: Perlidae					
Agnetina extrema	Within Known Range? Y	Nearest Occurrence:	134.19 KM	47.59928 °N	101.24521 °E

**LOE Rating: Likely Total: 18**

Family: Capniidae					
Isocapnia guentheri	Within Known Range? Y	Nearest Occurrence:	164.76 KM	47.50523 °N	100.93208 °E
Isocapnia kudia	Within Known Range? N	Nearest Occurrence:	392.54 KM	51.25356 °N	99.66687 °E
Isocapnia sibirica	Within Known Range? N	Nearest Occurrence:	145.28 KM	47.26999 °N	101.80227 °E
Family: Chloroperlidae					
Alloperla deminuta	Within Known Range? Y	Nearest Occurrence:	145.28 KM	47.26999 °N	101.80227 °E
Alloperla rostellata	Within Known Range? Y	Nearest Occurrence:	178.43 KM	49.70678 °N	103.10288 °E
Haploperla lepnevae	Within Known Range? Y	Nearest Occurrence:	178.43 KM	49.70678 °N	103.10288 °E
Suwallia kerzhneri	Within Known Range? Y	Nearest Occurrence:	134.19 KM	47.59928 °N	101.24521 °E
Suwallia teleckojensis	Within Known Range? Y	Nearest Occurrence:	145.78 KM	49.21675 °N	103.10750 °E
Family: Nemouridae					
Nemoura cinerea	Within Known Range? Y	Nearest Occurrence:	170.47 KM	47.48567 °N	100.87875 °E
Family: Perlidae					
Agnetina brevipennis	Within Known Range? Y	Nearest Occurrence:	96.76 KM	47.73941 °N	102.23811 °E
Kamimuria exilis	Within Known Range? N	Nearest Occurrence:	390.22 KM	50.16278 °N	98.84212 °E
Family: Perlodidae					
Arcynopteryx polaris	Within Known Range? Y	Nearest Occurrence:	164.01 KM	49.99851 °N	101.60799 °E
Arcynopteryx sajanensis	Within Known Range? N	Nearest Occurrence:	371.29 KM	51.61397 °N	100.59972 °E
Diura majuscula	Within Known Range? Y	Nearest Occurrence:	167.25 KM	47.28244 °N	101.18793 °E
Isoperla kozlovi	Within Known Range? Y	Nearest Occurrence:	123.07 KM	49.38617 °N	102.71667 °E
Kaszabia nigricauda	Within Known Range? Y	Nearest Occurrence:	134.19 KM	47.59928 °N	101.24521 °E
Pictetiella asiatica	Within Known Range? N	Nearest Occurrence:	378.31 KM	51.65822 °N	100.53000 °E
Family: Pteronarcyidae					
Pteronarcys reticulata	Within Known Range? Y	Nearest Occurrence:	140.40 KM	49.63453 °N	102.64845 °E

**LOE Rating: Probable Total: 2**

Family: Perlodidae					
Diura bicaudata	Within Known Range? N	Nearest Occurrence:	271.55 KM	47.21768 °N	99.92824 °E
Isoperla potanini	Within Known Range? Y	Nearest Occurrence:	145.54 KM	47.26999 °N	101.80227 °E

**Basin:** Arctic Ocean Basin  
**Aimags:** Arkhangai  
**Soums:** Khairkhan

Freshwater Ecoregion: Lake Baikal  
 Terrestrial Ecoregion: Selenge-Orkhon Forest Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

LOE Rating:	Possible	Total:				
<b>Family: Chloroperlidae</b>						
	Alloperla mediata	Within Known Range? N	Nearest Occurrence:	178.43 KM	49.70678 °N	103.10288 °E
<b>Family: Leuctridae</b>						
	Paraleuctra zapekinae	Within Known Range? N	Nearest Occurrence:	322.94 KM	49.71481 °N	104.64203 °E
<b>Family: Nemouridae</b>						
	Nemoura arctica	Within Known Range? Y	Nearest Occurrence:	145.54 KM	47.26999 °N	101.80227 °E
	Nemoura sahlbergi	Within Known Range? Y	Nearest Occurrence:	146.26 KM	49.87761 °N	101.82039 °E
<b>Family: Perlodidae</b>						
	Arcynopteryx compacta	Within Known Range? Y	Nearest Occurrence:	191.63 KM	46.88627 °N	102.34304 °E
	Isoperla asiatica	Within Known Range? Y	Nearest Occurrence:	158.41 KM	49.88884 °N	102.50909 °E
	Isoperla lunigera	Within Known Range? Y	Nearest Occurrence:	123.07 KM	49.38617 °N	102.71667 °E
<b>Family: Taeniopterygidae</b>						
	Taenionema japonicum	Within Known Range? Y	Nearest Occurrence:	167.25 KM	47.28244 °N	101.18793 °E
LOE Rating:	Predicted	Total:				
<b>Family: Capniidae</b>						
	Capnia khulsbagia	Within Known Range? N	Nearest Occurrence:	302.38 KM	50.98944 °N	100.71944 °E
	Capnia nigra	Within Known Range? N	Nearest Occurrence:	276.78 KM	50.51003 °N	100.40375 °E
	Mesocapnia variabilis	Within Known Range? Y	Nearest Occurrence:	272.05 KM	47.21768 °N	99.92824 °E
<b>Family: Chloroperlidae</b>						
	Alaskaperla longidentata	Within Known Range? Y	Nearest Occurrence:	196.05 KM	46.82177 °N	101.70479 °E
<b>Family: Nemouridae</b>						
	Amphinemura standfussi	Within Known Range? Y	Nearest Occurrence:	140.63 KM	49.33339 °N	102.97786 °E
<b>Family: Perlidae</b>						
	Aagnetina cocandica	Within Known Range? Y	Nearest Occurrence:	249.02 KM	49.62785 °N	99.99523 °E
	Paragnetina flavotincta	Within Known Range? Y	Nearest Occurrence:	120.08 KM	49.44641 °N	101.33625 °E
<b>Family: Perlodidae</b>						
	Isoperla altaica	Within Known Range? Y	Nearest Occurrence:	193.82 KM	47.11192 °N	101.01048 °E
	Isoperla mongolica	Within Known Range? Y	Nearest Occurrence:	145.54 KM	47.26999 °N	101.80227 °E
	Isoperla obscura	Within Known Range? Y	Nearest Occurrence:	123.07 KM	49.38617 °N	102.71667 °E
	Megarcys ochracea	Within Known Range? N	Nearest Occurrence:	226.24 KM	49.77776 °N	103.60860 °E
	Skwala pusilla	Within Known Range? N	Nearest Occurrence:	1,493.74 KM	48.51277 °N	88.51107 °E
LOE Rating:	Unlikely	Total:				
<b>Family: Capniidae</b>						
	Mesocapnia altaica	Within Known Range? N	Nearest Occurrence:	1,450.53 KM	48.43684 °N	88.90094 °E
<b>Family: Leuctridae</b>						
	Leuctra fusca	Within Known Range? N	Nearest Occurrence:	593.47 KM	49.08643 °N	107.28952 °E
<b>Family: Nemouridae</b>						
	Nemurella pictetii	Within Known Range? N	Nearest Occurrence:	374.93 KM	51.07896 °N	99.70857 °E
<b>Family: Perlodidae</b>						
	Isoperla eximia	Within Known Range? N	Nearest Occurrence:	621.00 KM	49.01829 °N	107.54453 °E



**Basin:** Arctic Ocean Basin  
**Aimags:** Arkhangai  
**Soums:** Khangai

Freshwater Ecoregion: Lake Baikal  
 Terrestrial Ecoregion: Khangai Mountains Alpine Meadow

**WQM Sites:**

WQM Sites: # 92 (Urd terh River @ N 48.04292° E 99.32858°)

**LOE Rating: Highly Likely Total: 4**

Family: Chloroperlidae

Alloperla joosti	Within Known Range? Y	Nearest Occurrence: 102.89 KM	47.80440°N	100.31810 °E
Alloperla rostellata	Within Known Range? Y	Nearest Occurrence: 84.02 KM	48.36436°N	98.92737 °E
Suwallia teleckojensis	Within Known Range? Y	Nearest Occurrence: 84.17 KM	48.36436°N	98.92737 °E

Family: Nemouridae

Amphinemura borealis	Within Known Range? Y	Nearest Occurrence: 72.90 KM	48.12661°N	99.94128 °E
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**LOE Rating: Likely Total: 15**

Family: Capniidae

Isocapnia guentheri	Within Known Range? Y	Nearest Occurrence: 159.61 KM	48.61518°N	98.23096 °E
Isocapnia kudia	Within Known Range? N	Nearest Occurrence: 388.24 KM	51.25356°N	99.66687 °E
Isocapnia sibirica	Within Known Range? N	Nearest Occurrence: 206.48 KM	47.28244°N	101.18793 °E
Mesocapnia variabilis	Within Known Range? Y	Nearest Occurrence: 84.17 KM	48.36436°N	98.92737 °E

Family: Chloroperlidae

Suwallia kerzhneri	Within Known Range? Y	Nearest Occurrence: 159.61 KM	48.61518°N	98.23096 °E
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Family: Nemouridae

Nemoura cinerea	Within Known Range? Y	Nearest Occurrence: 167.96 KM	47.48567°N	100.87875 °E
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Family: Perlidae

Agnetina extrema	Within Known Range? N	Nearest Occurrence: 134.40 KM	47.50949°N	100.57510 °E
Kamimuria exilis	Within Known Range? N	Nearest Occurrence: 273.37 KM	50.16278°N	98.84212 °E

Family: Perlodidae

Arcynopteryx polaris	Within Known Range? Y	Nearest Occurrence: 84.17 KM	48.36436°N	98.92737 °E
Arcynopteryx sajanensis	Within Known Range? N	Nearest Occurrence: 448.40 KM	51.61397°N	100.59972 °E
Diura bicaudata	Within Known Range? Y	Nearest Occurrence: 85.20 KM	47.21768°N	99.92824 °E
Diura majuscula	Within Known Range? Y	Nearest Occurrence: 108.00 KM	47.42580°N	100.30130 °E
Isoperla kozlovi	Within Known Range? Y	Nearest Occurrence: 102.89 KM	47.80440°N	100.31810 °E
Isoperla potanini	Within Known Range? Y	Nearest Occurrence: 103.08 KM	47.80440°N	100.31810 °E
Pictetiella asiatica	Within Known Range? N	Nearest Occurrence: 450.05 KM	51.65822°N	100.53000 °E

**LOE Rating: Probable Total: 5**

Family: Capniidae

Capnia nigra	Within Known Range? N	Nearest Occurrence: 207.00 KM	48.06257°N	97.55064 °E
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Family: Chloroperlidae

Alloperla deminuta	Within Known Range? Y	Nearest Occurrence: 102.89 KM	47.80440°N	100.31810 °E
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Family: Perlidae

Agnetina brevipennis	Within Known Range? Y	Nearest Occurrence: 72.90 KM	48.12661°N	99.94128 °E
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Family: Perlodidae

Kaszabia nigricauda	Within Known Range? Y	Nearest Occurrence: 102.89 KM	47.80440°N	100.31810 °E
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Family: Pteronarcyidae

Pteronarcys reticulata	Within Known Range? Y	Nearest Occurrence: 102.89 KM	47.80440°N	100.31810 °E
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**Basin:** Arctic Ocean Basin  
**Aimag:** Arkhangai  
**Soum:** Khangai

Freshwater Ecoregion: Lake Baikal  
 Terrestrial Ecoregion: Khangai Mountains Alpine Meadow

**WQM Sites:**

WQM Sites: # 92 (Urd terh River @ N 48.04292° E 99.32858°)

<b>LOE Rating:</b>	<b>Possible</b>	<b>Total:</b>	<b>3</b>
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Family: Chloroperlidae					
Alaskaperla longidentata	Within Known Range? Y	Nearest Occurrence:	88.07 KM	47.29702 °N	100.03136 °E
Haploperla lepnevae	Within Known Range? Y	Nearest Occurrence:	174.65 KM	49.26170 °N	99.88242 °E
Family: Taeniopterygidae					
Taenionema japonicum	Within Known Range? Y	Nearest Occurrence:	194.16 KM	47.11192 °N	101.01048 °E

<b>LOE Rating:</b>	<b>Predicted</b>	<b>Total:</b>	<b>15</b>
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Family: Chloroperlidae					
Alloperla mediata	Within Known Range? N	Nearest Occurrence:	317.95 KM	50.61826 °N	99.12094 °E
Family: Leuctridae					
Paraleuctra zapekinae	Within Known Range? N	Nearest Occurrence:	621.59 KM	49.71481 °N	104.64203 °E
Family: Nemouridae					
Amphinemura standfussi	Within Known Range? Y	Nearest Occurrence:	159.61 KM	48.61518 °N	98.23096 °E
Nemoura arctica	Within Known Range? Y	Nearest Occurrence:	273.67 KM	47.26999 °N	101.80227 °E
Nemoura sahlbergi	Within Known Range? Y	Nearest Occurrence:	107.80 KM	47.42580 °N	100.30130 °E
Family: Perlidae					
Agnetina cocandica	Within Known Range? Y	Nearest Occurrence:	217.56 KM	49.62785 °N	99.99523 °E
Paragnetina flavotincta	Within Known Range? N	Nearest Occurrence:	174.65 KM	49.26170 °N	99.88242 °E
Family: Perlodidae					
Arcynopteryx compacta	Within Known Range? Y	Nearest Occurrence:	194.16 KM	47.11192 °N	101.01048 °E
Isoperla altaica	Within Known Range? Y	Nearest Occurrence:	194.16 KM	47.11192 °N	101.01048 °E
Isoperla asiatica	Within Known Range? Y	Nearest Occurrence:	102.89 KM	47.80440 °N	100.31810 °E
Isoperla lunigera	Within Known Range? N	Nearest Occurrence:	217.17 KM	49.62785 °N	99.99523 °E
Isoperla mongolica	Within Known Range? Y	Nearest Occurrence:	194.16 KM	47.11192 °N	101.01048 °E
Isoperla obscura	Within Known Range? Y	Nearest Occurrence:	393.62 KM	50.60031 °N	101.52392 °E
Megarcys ochracea	Within Known Range? N	Nearest Occurrence:	404.50 KM	51.40978 °N	99.30136 °E
Skwala pusilla	Within Known Range? N	Nearest Occurrence:	1,210.61 KM	48.51277 °N	88.51107 °E

<b>LOE Rating:</b>	<b>Unlikely</b>	<b>Total:</b>	<b>5</b>
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Family: Capniidae					
Capnia khulsbagia	Within Known Range? N	Nearest Occurrence:	386.88 KM	50.98944 °N	100.71944 °E
Mesocapnia altaica	Within Known Range? N	Nearest Occurrence:	1,166.87 KM	48.43684 °N	88.90094 °E
Family: Leuctridae					
Leuctra fusca	Within Known Range? N	Nearest Occurrence:	888.79 KM	49.08643 °N	107.28952 °E
Family: Nemouridae					
Nemurella pictetii	Within Known Range? N	Nearest Occurrence:	338.15 KM	50.81265 °N	99.33803 °E
Family: Perlodidae					
Isoperla eximia	Within Known Range? N	Nearest Occurrence:	915.54 KM	49.01829 °N	107.54453 °E





**Basin:** Arctic Ocean Basin  
**Aimag:** Arkhangai  
**Soum:** Khashaht

Freshwater Ecoregion: Lake Baikal  
 Terrestrial Ecoregion: Mongolian-Manchurian Grassland

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Highly Likely Total: 4**

Family: Chloroperlidae

Alloperla joosti	Within Known Range? Y	Nearest Occurrence: 151.79 KM	46.78742 °N	101.96021 °E
Alloperla rostellata	Within Known Range? N	Nearest Occurrence: 241.60 KM	47.11192 °N	101.01048 °E
Suwallia teleckojensis	Within Known Range? Y	Nearest Occurrence: 152.06 KM	46.78742 °N	101.96021 °E

Family: Nemouridae

Amphinemura borealis	Within Known Range? Y	Nearest Occurrence: 151.79 KM	46.78742 °N	101.96021 °E
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**LOE Rating: Likely Total: 17**

Family: Capniidae

Isocapnia guentheri	Within Known Range? Y	Nearest Occurrence: 247.66 KM	47.50523 °N	100.93208 °E
Isocapnia kudia	Within Known Range? N	Nearest Occurrence: 574.28 KM	51.25356 °N	99.66687 °E
Isocapnia sibirica	Within Known Range? Y	Nearest Occurrence: 152.13 KM	47.26999 °N	101.80227 °E

Family: Chloroperlidae

Haploperla lepnevae	Within Known Range? Y	Nearest Occurrence: 251.78 KM	49.70678 °N	103.10288 °E
Suwallia kerzhneri	Within Known Range? Y	Nearest Occurrence: 213.54 KM	47.59928 °N	101.24521 °E

Family: Nemouridae

Nemoura cinerea	Within Known Range? Y	Nearest Occurrence: 253.53 KM	47.48567 °N	100.87875 °E
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Family: Perlidae

Agnetina brevipennis	Within Known Range? Y	Nearest Occurrence: 104.59 KM	46.89303 °N	102.39457 °E
Agnetina extrema	Within Known Range? Y	Nearest Occurrence: 152.13 KM	47.26999 °N	101.80227 °E
Kamimuria exilis	Within Known Range? N	Nearest Occurrence: 567.90 KM	50.16278 °N	98.84212 °E

Family: Perlodidae

Arcynopteryx polaris	Within Known Range? Y	Nearest Occurrence: 161.63 KM	47.04409 °N	101.76352 °E
Arcynopteryx sajanensis	Within Known Range? N	Nearest Occurrence: 544.71 KM	51.61397 °N	100.59972 °E
Diura majuscula	Within Known Range? Y	Nearest Occurrence: 104.78 KM	46.89303 °N	102.39457 °E
Isoperla kozlovi	Within Known Range? Y	Nearest Occurrence: 152.13 KM	47.26999 °N	101.80227 °E
Isoperla potanini	Within Known Range? N	Nearest Occurrence: 152.40 KM	47.26999 °N	101.80227 °E
Kaszabia nigricauda	Within Known Range? Y	Nearest Occurrence: 213.54 KM	47.59928 °N	101.24521 °E
Pictetiella asiatica	Within Known Range? N	Nearest Occurrence: 551.98 KM	51.65822 °N	100.53000 °E

Family: Pteronarcyidae

Pteronarcys reticulata	Within Known Range? N	Nearest Occurrence: 250.26 KM	49.63453 °N	102.64845 °E
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**LOE Rating: Probable Total: 2**

Family: Chloroperlidae

Alloperla deminuta	Within Known Range? Y	Nearest Occurrence: 151.79 KM	46.78742 °N	101.96021 °E
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Family: Perlodidae

Diura bicaudata	Within Known Range? N	Nearest Occurrence: 359.82 KM	47.21768 °N	99.92824 °E
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**Basin:** Arctic Ocean Basin  
**Aimag:** Arkhangai  
**Soum:** Khashaat

Freshwater Ecoregion: Lake Baikal  
 Terrestrial Ecoregion: Mongolian-Manchurian Grassland

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

<b>LOE Rating:</b>	<b>Possible</b>	<b>Total:</b>	<b>6</b>
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Family: Leuctridae						
Paraleuctra zapekinae	Within Known Range? N	Nearest Occurrence:	301.29 KM	49.71481°N	104.64203°E	
Family: Perlidae						
Agnentina cocandica	Within Known Range? Y	Nearest Occurrence:	295.88 KM	49.16354°N	105.18880°E	
Family: Perlodidae						
Arcynopteryx compacta	Within Known Range? Y	Nearest Occurrence:	109.92 KM	46.88627°N	102.34304°E	
Isoperla asiatica	Within Known Range? Y	Nearest Occurrence:	251.78 KM	49.70678°N	103.10288°E	
Isoperla lunigera	Within Known Range? N	Nearest Occurrence:	221.69 KM	49.38617°N	102.71667°E	
Family: Taeniopterygidae						
Taenionema japonicum	Within Known Range? Y	Nearest Occurrence:	220.24 KM	47.28244°N	101.18793°E	

<b>LOE Rating:</b>	<b>Predicted</b>	<b>Total:</b>	<b>14</b>
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Family: Capniidae						
Capnia khulsbagia	Within Known Range? N	Nearest Occurrence:	478.35 KM	50.98944°N	100.71944°E	
Capnia nigra	Within Known Range? N	Nearest Occurrence:	458.19 KM	50.51003°N	100.40375°E	
Mesocapnia variabilis	Within Known Range? Y	Nearest Occurrence:	360.47 KM	47.21768°N	99.92824°E	
Family: Chloroperlidae						
Alaskaperla longidentata	Within Known Range? Y	Nearest Occurrence:	175.71 KM	46.82177°N	101.70479°E	
Alloperla mediata	Within Known Range? N	Nearest Occurrence:	251.78 KM	49.70678°N	103.10288°E	
Family: Nemouridae						
Amphinemura standfussi	Within Known Range? N	Nearest Occurrence:	211.24 KM	49.33339°N	102.97786°E	
Nemoura arctica	Within Known Range? Y	Nearest Occurrence:	152.40 KM	47.26999°N	101.80227°E	
Nemoura sahlbergi	Within Known Range? Y	Nearest Occurrence:	260.94 KM	49.70184°N	103.80040°E	
Family: Perlidae						
Paragnetina flavotincta	Within Known Range? N	Nearest Occurrence:	211.24 KM	49.33339°N	102.97786°E	
Family: Perlodidae						
Isoperla altaica	Within Known Range? Y	Nearest Occurrence:	242.04 KM	47.11192°N	101.01048°E	
Isoperla mongolica	Within Known Range? Y	Nearest Occurrence:	152.40 KM	47.26999°N	101.80227°E	
Isoperla obscura	Within Known Range? Y	Nearest Occurrence:	221.69 KM	49.38617°N	102.71667°E	
Megarcys ochracea	Within Known Range? N	Nearest Occurrence:	264.26 KM	49.77776°N	103.60860°E	
Skwala pusilla	Within Known Range? N	Nearest Occurrence:	1,630.65 KM	48.51277°N	88.51107°E	

<b>LOE Rating:</b>	<b>Unlikely</b>	<b>Total:</b>	<b>4</b>
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Family: Capniidae						
Mesocapnia altaica	Within Known Range? N	Nearest Occurrence:	1,586.88 KM	48.43684°N	88.90094°E	
Family: Leuctridae						
Leuctra fusca	Within Known Range? N	Nearest Occurrence:	493.26 KM	49.08643°N	107.28952°E	
Family: Nemouridae						
Nemurella pictetii	Within Known Range? N	Nearest Occurrence:	556.95 KM	51.07896°N	99.70857°E	
Family: Perlodidae						
Isoperla eximia	Within Known Range? N	Nearest Occurrence:	517.04 KM	49.01829°N	107.54453°E	



**Basin:** Arctic Ocean Basin  
**Aimags:** Arkhangai  
**Soums:** Khotont

Freshwater Ecoregion: Lake Baikal  
 Terrestrial Ecoregion: Mongolian-Manchurian Grassland

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Highly Likely Total: 3**

Family: Chloroperlidae

Alloperla joosti	Within Known Range? Y	Nearest Occurrence:	65.63 KM	47.26999°N	101.80227°E
Suwallia teleckojensis	Within Known Range? Y	Nearest Occurrence:	71.99 KM	46.78742°N	101.96021°E

Family: Nemouridae

Amphinemura borealis	Within Known Range? Y	Nearest Occurrence:	65.63 KM	47.26999°N	101.80227°E
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**LOE Rating: Likely Total: 17**

Family: Capniidae

Isocapnia guentheri	Within Known Range? Y	Nearest Occurrence:	164.34 KM	47.50523°N	100.93208°E
Isocapnia kudia	Within Known Range? N	Nearest Occurrence:	535.99 KM	51.25356°N	99.66687°E
Isocapnia sibirica	Within Known Range? Y	Nearest Occurrence:	65.63 KM	47.26999°N	101.80227°E

Family: Chloroperlidae

Alloperla deminuta	Within Known Range? Y	Nearest Occurrence:	65.63 KM	47.26999°N	101.80227°E
Alloperla rostellata	Within Known Range? Y	Nearest Occurrence:	154.50 KM	47.11192°N	101.01048°E
Suwallia kerzhneri	Within Known Range? Y	Nearest Occurrence:	132.65 KM	47.59928°N	101.24521°E

Family: Nemouridae

Nemoura cinerea	Within Known Range? Y	Nearest Occurrence:	169.87 KM	47.48567°N	100.87875°E
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Family: Perlidae

Agnetina brevipennis	Within Known Range? Y	Nearest Occurrence:	41.66 KM	46.89303°N	102.39457°E
Agnetina extrema	Within Known Range? Y	Nearest Occurrence:	65.63 KM	47.26999°N	101.80227°E
Kamimuria exilis	Within Known Range? N	Nearest Occurrence:	509.47 KM	50.16278°N	98.84212°E

Family: Perlodidae

Arcynopteryx polaris	Within Known Range? Y	Nearest Occurrence:	74.37 KM	47.04409°N	101.76352°E
Arcynopteryx sajanensis	Within Known Range? N	Nearest Occurrence:	522.78 KM	51.61397°N	100.59972°E
Diura majuscula	Within Known Range? Y	Nearest Occurrence:	41.74 KM	46.89303°N	102.39457°E
Isoperla kozlovi	Within Known Range? Y	Nearest Occurrence:	65.63 KM	47.26999°N	101.80227°E
Isoperla potanini	Within Known Range? Y	Nearest Occurrence:	65.75 KM	47.26999°N	101.80227°E
Kaszabia nigricauda	Within Known Range? Y	Nearest Occurrence:	132.65 KM	47.59928°N	101.24521°E
Pictetiella asiatica	Within Known Range? N	Nearest Occurrence:	529.37 KM	51.65822°N	100.53000°E

**LOE Rating: Probable Total: 3**

Family: Chloroperlidae

Haploperla lepnevae	Within Known Range? N	Nearest Occurrence:	281.89 KM	49.70678°N	103.10288°E
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Family: Perlodidae

Diura bicaudata	Within Known Range? N	Nearest Occurrence:	273.71 KM	47.21768°N	99.92824°E
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Family: Pteronarcyidae

Pteronarcys reticulata	Within Known Range? N	Nearest Occurrence:	237.94 KM	47.80440°N	100.31810°E
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**Basin:** Arctic Ocean Basin  
**Aimags:** Arkhangai  
**Soums:** Khotont

**Freshwater Ecoregion:** Lake Baikal  
**Terrestrial Ecoregion:** Mongolian-Manchurian Grassland

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Possible Total: 4**

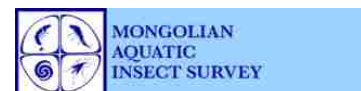
Family: Nemouridae						
Nemoura arctica	Within Known Range? Y	Nearest Occurrence:	65.75 KM	47.26999 °N	101.80227 °E	
Family: Perlodidae						
Arcynopteryx compacta	Within Known Range? Y	Nearest Occurrence:	42.86 KM	46.88627 °N	102.34304 °E	
Isoperla asiatica	Within Known Range? Y	Nearest Occurrence:	237.94 KM	47.80440 °N	100.31810 °E	
Family: Taeniopterygidae						
Taenionema japonicum	Within Known Range? Y	Nearest Occurrence:	134.08 KM	47.28244 °N	101.18793 °E	

**LOE Rating: Predicted Total: 15**

Family: Capniidae						
Capnia nigra	Within Known Range? N	Nearest Occurrence:	422.21 KM	50.51003 °N	100.40375 °E	
Mesocapnia variabilis	Within Known Range? Y	Nearest Occurrence:	274.20 KM	47.21768 °N	99.92824 °E	
Family: Chloroperlidae						
Alaskaperla longidentata	Within Known Range? Y	Nearest Occurrence:	91.12 KM	46.82177 °N	101.70479 °E	
Alloperla mediata	Within Known Range? N	Nearest Occurrence:	281.89 KM	49.70678 °N	103.10288 °E	
Family: Leuctridae						
Paraleuctra zapekinae	Within Known Range? N	Nearest Occurrence:	368.83 KM	49.71481 °N	104.64203 °E	
Family: Nemouridae						
Amphinemura standfussi	Within Known Range? N	Nearest Occurrence:	238.22 KM	49.33339 °N	102.97786 °E	
Nemoura sahlbergi	Within Known Range? Y	Nearest Occurrence:	232.90 KM	47.42580 °N	100.30130 °E	
Family: Perlidae						
Agnetina cocandica	Within Known Range? Y	Nearest Occurrence:	374.12 KM	49.62785 °N	99.99523 °E	
Paragnetina flavotincta	Within Known Range? N	Nearest Occurrence:	238.22 KM	49.33339 °N	102.97786 °E	
Family: Perlodidae						
Isoperla altaica	Within Known Range? Y	Nearest Occurrence:	154.78 KM	47.11192 °N	101.01048 °E	
Isoperla lunigera	Within Known Range? N	Nearest Occurrence:	237.80 KM	49.38617 °N	102.71667 °E	
Isoperla mongolica	Within Known Range? Y	Nearest Occurrence:	65.75 KM	47.26999 °N	101.80227 °E	
Isoperla obscura	Within Known Range? Y	Nearest Occurrence:	237.80 KM	49.38617 °N	102.71667 °E	
Megarcys ochracea	Within Known Range? N	Nearest Occurrence:	309.48 KM	49.77776 °N	103.60860 °E	
Skwala pusilla	Within Known Range? N	Nearest Occurrence:	1,547.14 KM	48.51277 °N	88.51107 °E	

**LOE Rating: Unlikely Total: 5**

Family: Capniidae						
Capnia khulsbagia	Within Known Range? N	Nearest Occurrence:	452.92 KM	50.98944 °N	100.71944 °E	
Mesocapnia altaica	Within Known Range? N	Nearest Occurrence:	1,503.29 KM	48.43684 °N	88.90094 °E	
Family: Leuctridae						
Leuctra fusca	Within Known Range? N	Nearest Occurrence:	579.71 KM	49.08643 °N	107.28952 °E	
Family: Nemouridae						
Nemurella pictetii	Within Known Range? N	Nearest Occurrence:	517.43 KM	51.07896 °N	99.70857 °E	
Family: Perlodidae						
Isoperla eximia	Within Known Range? N	Nearest Occurrence:	603.85 KM	49.01829 °N	107.54453 °E	



Basin: Arctic Ocean Basin

Aimags: Arkhangai

Soums: Ogiinuur

Freshwater Ecoregion: Lake Baikal

Terrestrial Ecoregion: Mongolian-Manchurian Grassland

WQM Sites:

WQM Sites: # 100 (Orhon River @ N 47.81575° E 102.60433°)

**LOE Rating: Highly Likely Total: 2**

Family: Chloroperlidae

Alloperla joosti Within Known Range? Y Nearest Occurrence: 103.30 KM 47.26999°N 101.80227°E

Family: Nemouridae

Amphinemura borealis Within Known Range? Y Nearest Occurrence: 103.30 KM 47.26999°N 101.80227°E

**LOE Rating: Likely Total: 20**

Family: Capniidae

Isocapnia guentheri Within Known Range? Y Nearest Occurrence: 188.12 KM 47.50523°N 100.93208°E

Isocapnia kudia Within Known Range? N Nearest Occurrence: 509.88 KM 51.25356°N 99.66687°E

Isocapnia sibirica Within Known Range? Y Nearest Occurrence: 103.30 KM 47.26999°N 101.80227°E

Family: Chloroperlidae

Alloperla deminuta Within Known Range? Y Nearest Occurrence: 103.30 KM 47.26999°N 101.80227°E

Alloperla rostellata Within Known Range? Y Nearest Occurrence: 190.50 KM 47.11192°N 101.01048°E

Haploperla lepnevae Within Known Range? Y Nearest Occurrence: 226.24 KM 49.70678°N 103.10288°E

Suwallia kerzhneri Within Known Range? Y Nearest Occurrence: 152.40 KM 47.59928°N 101.24521°E

Suwallia teleckojensis Within Known Range? Y Nearest Occurrence: 121.24 KM 47.04409°N 101.76352°E

Family: Nemouridae

Nemoura cinerea Within Known Range? Y Nearest Occurrence: 194.28 KM 47.48567°N 100.87875°E

Family: Perlidae

Agnetina brevipennis Within Known Range? Y Nearest Occurrence: 41.53 KM 47.73941°N 102.23811°E

Agnetina extrema Within Known Range? Y Nearest Occurrence: 103.30 KM 47.26999°N 101.80227°E

Kamimuria exilis Within Known Range? N Nearest Occurrence: 499.02 KM 50.16278°N 98.84212°E

Family: Perlodidae

Arcynopteryx polaris Within Known Range? Y Nearest Occurrence: 121.24 KM 47.04409°N 101.76352°E

Arcynopteryx sajanensis Within Known Range? N Nearest Occurrence: 486.56 KM 51.61397°N 100.59972°E

Diura majuscula Within Known Range? Y Nearest Occurrence: 96.02 KM 46.89303°N 102.39457°E

Isoperla kozlovi Within Known Range? Y Nearest Occurrence: 103.30 KM 47.26999°N 101.80227°E

Isoperla potanini Within Known Range? Y Nearest Occurrence: 103.50 KM 47.26999°N 101.80227°E

Kaszabia nigricauda Within Known Range? Y Nearest Occurrence: 152.40 KM 47.59928°N 101.24521°E

Pictetiella asiatica Within Known Range? N Nearest Occurrence: 493.64 KM 51.65822°N 100.53000°E

Family: Pteronarcyidae

Pteronarcys reticulata Within Known Range? Y Nearest Occurrence: 211.60 KM 49.63453°N 102.64845°E

**LOE Rating: Probable Total: 1**

Family: Perlodidae

Diura bicaudata Within Known Range? N Nearest Occurrence: 303.26 KM 47.21768°N 99.92824°E

Basin: Arctic Ocean Basin

Aimag: Arkhangai

Soum: Ogiinuur

Freshwater Ecoregion: Lake Baikal

Terrestrial Ecoregion: Mongolian-Manchurian Grassland

WQM Sites:

WQM Sites: # 100 (Orhon River @ N 47.81575° E 102.60433°)

**LOE Rating: Possible Total: 5**

Family: Chloroperlidae

Alloperla mediata Within Known Range? N Nearest Occurrence: 226.24 KM 49.70678°N 103.10288°E

Family: Perlodidae

Arcynopteryx compacta Within Known Range? Y Nearest Occurrence: 98.33 KM 46.88627°N 102.34304°E

Isoperla asiatica Within Known Range? Y Nearest Occurrence: 226.24 KM 49.70678°N 103.10288°E

Isoperla lunigera Within Known Range? N Nearest Occurrence: 184.36 KM 49.38617°N 102.71667°E

Family: Taeniopterygidae

Taenionema japonicum Within Known Range? Y Nearest Occurrence: 165.96 KM 47.28244°N 101.18793°E

**LOE Rating: Predicted Total: 15**

Family: Capniidae

Capnia khulsbagia Within Known Range? N Nearest Occurrence: 418.51 KM 50.98944°N 100.71944°E

Capnia nigra Within Known Range? N Nearest Occurrence: 394.22 KM 50.51003°N 100.40375°E

Mesocapnia variabilis Within Known Range? Y Nearest Occurrence: 303.81 KM 47.21768°N 99.92824°E

Family: Chloroperlidae

Alaskaperla longidentata Within Known Range? Y Nearest Occurrence: 142.39 KM 46.82177°N 101.70479°E

Family: Leuctridae

Paraleuctra zapekinae Within Known Range? N Nearest Occurrence: 315.24 KM 49.71481°N 104.64203°E

Family: Nemouridae

Amphinemura standfussi Within Known Range? N Nearest Occurrence: 182.70 KM 49.33339°N 102.97786°E

Nemoura arctica Within Known Range? Y Nearest Occurrence: 103.50 KM 47.26999°N 101.80227°E

Nemoura sahlbergi Within Known Range? Y Nearest Occurrence: 254.22 KM 49.87761°N 101.82039°E

Family: Perlidae

Agnetina cocandica Within Known Range? Y Nearest Occurrence: 327.96 KM 49.16354°N 105.18880°E

Paragnetina flavotincta Within Known Range? N Nearest Occurrence: 182.70 KM 49.33339°N 102.97786°E

Family: Perlodidae

Isoperla altaica Within Known Range? Y Nearest Occurrence: 190.85 KM 47.11192°N 101.01048°E

Isoperla mongolica Within Known Range? Y Nearest Occurrence: 103.50 KM 47.26999°N 101.80227°E

Isoperla obscura Within Known Range? Y Nearest Occurrence: 184.36 KM 49.38617°N 102.71667°E

Megarcys ochracea Within Known Range? N Nearest Occurrence: 252.93 KM 49.77776°N 103.60860°E

Skwala pusilla Within Known Range? N Nearest Occurrence: 1,567.63 KM 48.51277°N 88.51107°E

**LOE Rating: Unlikely Total: 4**

Family: Capniidae

Mesocapnia altaica Within Known Range? N Nearest Occurrence: 1,523.97 KM 48.43684°N 88.90094°E

Family: Leuctridae

Leuctra fusca Within Known Range? N Nearest Occurrence: 540.63 KM 49.08643°N 107.28952°E

Family: Nemouridae

Nemurella pictetii Within Known Range? N Nearest Occurrence: 492.12 KM 51.07896°N 99.70857°E

Family: Perlodidae

Isoperla eximia Within Known Range? N Nearest Occurrence: 565.91 KM 49.01829°N 107.54453°E

**Basin:** Arctic Ocean Basin  
**Aimags:** Arkhangai  
**Soums:** Olziit

Freshwater Ecoregion: Lake Baikal  
 Terrestrial Ecoregion: Selenge-Orkhon Forest Steppe

**WQM Sites:**

WQM Sites: # 155 (Orhon River @ N 48.08392° E 102.5616°)

<b>LOE Rating:</b>	<b>Highly Likely</b>	<b>Total:</b>	<b>2</b>
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Family: Chloroperlidae  
 Alloperla joosti      **Within Known Range?** Y      **Nearest Occurrence:** 120.21 KM      47.26999°N      101.80227 °E

Family: Nemouridae  
 Amphinemura borealis      **Within Known Range?** Y      **Nearest Occurrence:** 120.21 KM      47.26999°N      101.80227 °E

<b>LOE Rating:</b>	<b>Likely</b>	<b>Total:</b>	<b>19</b>
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Family: Capniidae  
 Isocapnia guentheri      **Within Known Range?** Y      **Nearest Occurrence:** 186.96 KM      47.50523°N      100.93208 °E  
 Isocapnia kudia      **Within Known Range?** N      **Nearest Occurrence:** 472.51 KM      51.25356°N      99.66687 °E  
 Isocapnia sibirica      **Within Known Range?** Y      **Nearest Occurrence:** 120.21 KM      47.26999°N      101.80227 °E

Family: Chloroperlidae  
 Alloperla deminuta      **Within Known Range?** Y      **Nearest Occurrence:** 120.21 KM      47.26999°N      101.80227 °E  
 Alloperla rostellata      **Within Known Range?** Y      **Nearest Occurrence:** 191.30 KM      49.70678°N      103.10288 °E  
 Haploperla lepnevae      **Within Known Range?** Y      **Nearest Occurrence:** 191.30 KM      49.70678°N      103.10288 °E  
 Suwallia kerzhneri      **Within Known Range?** Y      **Nearest Occurrence:** 150.75 KM      47.59928°N      101.24521 °E  
 Suwallia teleckojensis      **Within Known Range?** Y      **Nearest Occurrence:** 141.92 KM      49.21675°N      103.10750 °E

Family: Nemouridae  
 Nemoura cinerea      **Within Known Range?** Y      **Nearest Occurrence:** 193.26 KM      47.48567°N      100.87875 °E

Family: Perlidae  
 Agnetina brevipennis      **Within Known Range?** Y      **Nearest Occurrence:** 49.21 KM      47.73941°N      102.23811 °E  
 Agnetina extrema      **Within Known Range?** Y      **Nearest Occurrence:** 120.21 KM      47.26999°N      101.80227 °E  
 Kamimuria exilis      **Within Known Range?** N      **Nearest Occurrence:** 468.86 KM      50.16278°N      98.84212 °E

Family: Perlodidae  
 Arcynopteryx polaris      **Within Known Range?** Y      **Nearest Occurrence:** 142.84 KM      47.04409°N      101.76352 °E  
 Arcynopteryx sajanensis      **Within Known Range?** N      **Nearest Occurrence:** 446.10 KM      51.61397°N      100.59972 °E  
 Diura majuscula      **Within Known Range?** Y      **Nearest Occurrence:** 133.49 KM      46.89303°N      102.39457 °E  
 Isoperla kozlovi      **Within Known Range?** Y      **Nearest Occurrence:** 120.21 KM      47.26999°N      101.80227 °E  
 Kaszabia nigricauda      **Within Known Range?** Y      **Nearest Occurrence:** 150.75 KM      47.59928°N      101.24521 °E  
 Pictetiella asiatica      **Within Known Range?** N      **Nearest Occurrence:** 453.33 KM      51.65822°N      100.53000 °E

Family: Pteronarcyidae  
 Pteronarcys reticulata      **Within Known Range?** Y      **Nearest Occurrence:** 172.37 KM      49.63453°N      102.64845 °E

<b>LOE Rating:</b>	<b>Probable</b>	<b>Total:</b>	<b>2</b>
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Family: Perlodidae  
 Diura bicaudata      **Within Known Range?** N      **Nearest Occurrence:** 302.67 KM      47.21768°N      99.92824 °E  
 Isoperla potanini      **Within Known Range?** Y      **Nearest Occurrence:** 120.44 KM      47.26999°N      101.80227 °E



**Basin:** Arctic Ocean Basin  
**Aimag:** Arkhangai  
**Soum:** Olziit

Freshwater Ecoregion: Lake Baikal  
 Terrestrial Ecoregion: Selenge-Orkhon Forest Steppe

**WQM Sites:**

WQM Sites: # 155 (Orhon River @ N 48.08392° E 102.5616°)

**LOE Rating: Possible Total: 6**

Family: Chloroperlidae						
Alloperla mediata	Within Known Range? N	Nearest Occurrence:	191.30 KM	49.70678 °N	103.10288 °E	
Family: Leuctridae						
Paraleuctra zapekinae	Within Known Range? N	Nearest Occurrence:	297.49 KM	49.71481 °N	104.64203 °E	
Family: Perlodidae						
Arcynopteryx compacta	Within Known Range? Y	Nearest Occurrence:	134.92 KM	46.88627 °N	102.34304 °E	
Isoperla asiatica	Within Known Range? Y	Nearest Occurrence:	191.30 KM	49.70678 °N	103.10288 °E	
Isoperla lunigera	Within Known Range? N	Nearest Occurrence:	145.91 KM	49.38617 °N	102.71667 °E	
Family: Taeniopterygidae						
Taenionema japonicum	Within Known Range? Y	Nearest Occurrence:	172.37 KM	47.28244 °N	101.18793 °E	

**LOE Rating: Predicted Total: 14**

Family: Capniidae						
Capnia khulsbagia	Within Known Range? N	Nearest Occurrence:	378.63 KM	50.98944 °N	100.71944 °E	
Capnia nigra	Within Known Range? N	Nearest Occurrence:	356.49 KM	50.51003 °N	100.40375 °E	
Mesocapnia variabilis	Within Known Range? Y	Nearest Occurrence:	303.22 KM	47.21768 °N	99.92824 °E	
Family: Chloroperlidae						
Alaskaperla longidentata	Within Known Range? Y	Nearest Occurrence:	166.68 KM	46.82177 °N	101.70479 °E	
Family: Nemouridae						
Amphinemura standfussi	Within Known Range? N	Nearest Occurrence:	147.61 KM	49.33339 °N	102.97786 °E	
Nemoura arctica	Within Known Range? Y	Nearest Occurrence:	120.44 KM	47.26999 °N	101.80227 °E	
Nemoura sahlbergi	Within Known Range? Y	Nearest Occurrence:	213.02 KM	49.87761 °N	101.82039 °E	
Family: Perlidae						
Agnetina cocandica	Within Known Range? Y	Nearest Occurrence:	320.75 KM	49.16354 °N	105.18880 °E	
Paragnetina flavotincta	Within Known Range? N	Nearest Occurrence:	147.35 KM	49.37440 °N	102.83880 °E	
Family: Perlodidae						
Isoperla altaica	Within Known Range? Y	Nearest Occurrence:	199.17 KM	47.11192 °N	101.01048 °E	
Isoperla mongolica	Within Known Range? Y	Nearest Occurrence:	120.44 KM	47.26999 °N	101.80227 °E	
Isoperla obscura	Within Known Range? Y	Nearest Occurrence:	145.91 KM	49.38617 °N	102.71667 °E	
Megarcys ochracea	Within Known Range? N	Nearest Occurrence:	223.60 KM	49.77776 °N	103.60860 °E	
Skwala pusilla	Within Known Range? N	Nearest Occurrence:	1,554.87 KM	48.51277 °N	88.51107 °E	

**LOE Rating: Unlikely Total: 4**

Family: Capniidae						
Mesocapnia altaica	Within Known Range? N	Nearest Occurrence:	1,511.38 KM	48.43684 °N	88.90094 °E	
Family: Leuctridae						
Leuctra fusca	Within Known Range? N	Nearest Occurrence:	541.72 KM	49.08643 °N	107.28952 °E	
Family: Nemouridae						
Nemurella pictetii	Within Known Range? N	Nearest Occurrence:	455.10 KM	51.07896 °N	99.70857 °E	
Family: Perlodidae						
Isoperla eximia	Within Known Range? N	Nearest Occurrence:	568.03 KM	49.01829 °N	107.54453 °E	



**Basin:** Arctic Ocean Basin  
**Aimags:** Arkhangai  
**Soums:** Ondor-ulaan

**Freshwater Ecoregion:** Lake Baikal  
**Terrestrial Ecoregion:** Selenge-Orkhon Forest Steppe

**WQM Sites:**

WQM Sites: # 95 (Chuluut River @ N 48.09035° E 100.32127°) # 96 (Teel River @ N 48.02102° E 100.41977°) # 97 (Hanui River @ N 48.11577° E 101.1035°)

<b>LOE Rating:</b>	<b>Highly Likely</b>	<b>Total:</b>	<b>4</b>
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<b>Family:</b> Chloroperlidae			
Alloperla joosti	Within Known Range? Y	Nearest Occurrence:	53.02 KM 47.80440°N 100.31810°E
Suwallia teleckojensis	Within Known Range? Y	Nearest Occurrence:	53.11 KM 47.80440°N 100.31810°E
<b>Family:</b> Nemouridae			
Amphinemura borealis	Within Known Range? Y	Nearest Occurrence:	53.02 KM 47.80440°N 100.31810°E
<b>Family:</b> Perlidae			
Agnatina extrema	Within Known Range? Y	Nearest Occurrence:	62.60 KM 47.50949°N 100.57510°E

<b>LOE Rating:</b>	<b>Likely</b>	<b>Total:</b>	<b>17</b>
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<b>Family:</b> Capniidae			
Isocapnia guentheri	Within Known Range? Y	Nearest Occurrence:	64.95 KM 47.50523°N 100.93208°E
Isocapnia kudia	Within Known Range? N	Nearest Occurrence:	374.23 KM 51.25356°N 99.66687°E
Isocapnia sibirica	Within Known Range? N	Nearest Occurrence:	99.71 KM 47.28244°N 101.18793°E
<b>Family:</b> Chloroperlidae			
Alloperla deminuta	Within Known Range? Y	Nearest Occurrence:	53.02 KM 47.80440°N 100.31810°E
Alloperla rostellata	Within Known Range? Y	Nearest Occurrence:	109.11 KM 47.11192°N 101.01048°E
Suwallia kerzhneri	Within Known Range? Y	Nearest Occurrence:	65.20 KM 47.48567°N 100.87875°E
<b>Family:</b> Nemouridae			
Nemoura cinerea	Within Known Range? Y	Nearest Occurrence:	65.20 KM 47.48567°N 100.87875°E
<b>Family:</b> Perlidae			
Agnatina brevipennis	Within Known Range? Y	Nearest Occurrence:	87.49 KM 48.12661°N 99.94128°E
Kamimuria exilis	Within Known Range? N	Nearest Occurrence:	314.54 KM 50.16278°N 98.84212°E
<b>Family:</b> Perlodidae			
Arcynopteryx polaris	Within Known Range? Y	Nearest Occurrence:	114.15 KM 47.29702°N 100.03136°E
Arcynopteryx sajanensis	Within Known Range? N	Nearest Occurrence:	396.25 KM 51.61397°N 100.59972°E
Diura bicaudata	Within Known Range? Y	Nearest Occurrence:	128.20 KM 47.21768°N 99.92824°E
Diura majuscula	Within Known Range? Y	Nearest Occurrence:	84.22 KM 47.42580°N 100.30130°E
Isoperla kozlovi	Within Known Range? Y	Nearest Occurrence:	53.02 KM 47.80440°N 100.31810°E
Isoperla potanini	Within Known Range? Y	Nearest Occurrence:	53.11 KM 47.80440°N 100.31810°E
Kaszabia nigricauda	Within Known Range? Y	Nearest Occurrence:	53.02 KM 47.80440°N 100.31810°E
Pictetiella asiatica	Within Known Range? N	Nearest Occurrence:	400.79 KM 51.65822°N 100.53000°E

<b>LOE Rating:</b>	<b>Probable</b>	<b>Total:</b>	<b>2</b>
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<b>Family:</b> Chloroperlidae			
Haploperla lepnevae	Within Known Range? Y	Nearest Occurrence:	157.97 KM 49.45317°N 100.47234°E
<b>Family:</b> Pteronarcyidae			
Pteronarcys reticulata	Within Known Range? Y	Nearest Occurrence:	53.02 KM 47.80440°N 100.31810°E



**Basin:** Arctic Ocean Basin  
**Aimags:** Arkhangai  
**Soums:** Ondor-ulaan

**Freshwater Ecoregion:** Lake Baikal  
**Terrestrial Ecoregion:** Selenge-Orkhon Forest Steppe

**WQM Sites:**

WQM Sites: # 95 (Chuluut River @ N 48.09035° E 100.32127°) # 96 (Teel River @ N 48.02102° E 100.41977°) # 97 (Hanui River @ N 48.11577° E 101.1035°)

<b>LOE Rating:</b>	<b>Possible</b>	<b>Total:</b>	<b>6</b>
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<b>Family:</b> Capniidae			
Mesocapnia variabilis	Within Known Range? Y	Nearest Occurrence:	128.43 KM 47.21768°N 99.92824 °E
<b>Family:</b> Nemouridae			
Nemoura arctica	Within Known Range? Y	Nearest Occurrence:	147.99 KM 47.26999°N 101.80227 °E
Nemoura sahlbergi	Within Known Range? Y	Nearest Occurrence:	84.06 KM 47.42580°N 100.30130 °E
<b>Family:</b> Perlodidae			
Arcynopteryx compacta	Within Known Range? Y	Nearest Occurrence:	109.31 KM 47.11192°N 101.01048 °E
Isoperla asiatica	Within Known Range? Y	Nearest Occurrence:	53.02 KM 47.80440°N 100.31810 °E
<b>Family:</b> Taeniopterygidae			
Taenionema japonicum	Within Known Range? Y	Nearest Occurrence:	99.89 KM 47.28244°N 101.18793 °E

<b>LOE Rating:</b>	<b>Predicted</b>	<b>Total:</b>	<b>14</b>
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<b>Family:</b> Capniidae			
Capnia khulsbagia	Within Known Range? N	Nearest Occurrence:	325.96 KM 50.98944°N 100.71944 °E
Capnia nigra	Within Known Range? N	Nearest Occurrence:	275.08 KM 50.51003°N 100.40375 °E
<b>Family:</b> Chloroperlidae			
Alaskaperla longidentata	Within Known Range? Y	Nearest Occurrence:	84.06 KM 47.42580°N 100.30130 °E
Alloperla mediata	Within Known Range? N	Nearest Occurrence:	278.56 KM 50.51517°N 101.21073 °E
<b>Family:</b> Leuctridae			
Paraleuctra zapekinae	Within Known Range? N	Nearest Occurrence:	472.20 KM 49.71481°N 104.64203 °E
<b>Family:</b> Nemouridae			
Amphinemura standfussi	Within Known Range? Y	Nearest Occurrence:	283.90 KM 48.61518°N 98.23096 °E
<b>Family:</b> Perlidae			
Agnetina cocandica	Within Known Range? Y	Nearest Occurrence:	193.08 KM 49.62785°N 99.99523 °E
Paragnetina flavotincta	Within Known Range? N	Nearest Occurrence:	135.34 KM 49.26765°N 100.82998 °E
<b>Family:</b> Perlodidae			
Isoperla altaica	Within Known Range? Y	Nearest Occurrence:	109.31 KM 47.11192°N 101.01048 °E
Isoperla lunigera	Within Known Range? N	Nearest Occurrence:	157.97 KM 49.45317°N 100.47234 °E
Isoperla mongolica	Within Known Range? Y	Nearest Occurrence:	99.89 KM 47.28244°N 101.18793 °E
Isoperla obscura	Within Known Range? Y	Nearest Occurrence:	265.95 KM 49.38617°N 102.71667 °E
Megarcys ochracea	Within Known Range? N	Nearest Occurrence:	372.88 KM 49.77776°N 103.60860 °E
Skwala pusilla	Within Known Range? N	Nearest Occurrence:	1,356.82 KM 48.51277°N 88.51107 °E

<b>LOE Rating:</b>	<b>Unlikely</b>	<b>Total:</b>	<b>4</b>
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<b>Family:</b> Capniidae			
Mesocapnia altaica	Within Known Range? N	Nearest Occurrence:	1,313.28 KM 48.43684°N 88.90094 °E
<b>Family:</b> Leuctridae			
Leuctra fusca	Within Known Range? N	Nearest Occurrence:	737.53 KM 49.08643°N 107.28952 °E
<b>Family:</b> Nemouridae			
Nemurella pictetii	Within Known Range? N	Nearest Occurrence:	342.90 KM 50.81265°N 99.33803 °E
<b>Family:</b> Perlodidae			
Isoperla eximia	Within Known Range? N	Nearest Occurrence:	764.40 KM 49.01829°N 107.54453 °E



**Basin:** Arctic Ocean Basin  
**Aimags:** Arkhangai  
**Soums:** Tariat

**Freshwater Ecoregion:** Lake Baikal  
**Terrestrial Ecoregion:** Selenge-Orkhon Forest Steppe

**WQM Sites:**

WQM Sites: # 93 (Suman River @ N 48.16628° E 99.8899°) # 94 (Gichgene River @ N 48.1502° E 99.96337°)

**LOE Rating: Highly Likely Total: 3**

Family: Chloroperlidae						
Alloperla joosti	Within Known Range? Y	Nearest Occurrence:	68.02 KM	47.80440°N	100.31810°E	
Family: Nemouridae						
Amphinemura borealis	Within Known Range? Y	Nearest Occurrence:	13.44 KM	48.12661°N	99.94128°E	
Family: Perlidae						
Agnentina brevipennis	Within Known Range? Y	Nearest Occurrence:	13.44 KM	48.12661°N	99.94128°E	

**LOE Rating: Likely Total: 16**

Family: Capniidae						
Isocapnia guentheri	Within Known Range? Y	Nearest Occurrence:	138.54 KM	47.48567°N	100.87875°E	
Isocapnia kudia	Within Known Range? N	Nearest Occurrence:	336.59 KM	51.25356°N	99.66687°E	
Isocapnia sibirica	Within Known Range? N	Nearest Occurrence:	179.56 KM	47.28244°N	101.18793°E	
Family: Chloroperlidae						
Alloperla rostellata	Within Known Range? Y	Nearest Occurrence:	106.35 KM	48.36436°N	98.92737°E	
Suwallia kerzhneri	Within Known Range? Y	Nearest Occurrence:	138.54 KM	47.48567°N	100.87875°E	
Suwallia teleckojensis	Within Known Range? Y	Nearest Occurrence:	68.14 KM	47.80440°N	100.31810°E	
Family: Nemouridae						
Nemoura cinerea	Within Known Range? Y	Nearest Occurrence:	138.54 KM	47.48567°N	100.87875°E	
Family: Perlidae						
Agnentina extrema	Within Known Range? Y	Nearest Occurrence:	111.33 KM	47.50949°N	100.57510°E	
Kamimuria exilis	Within Known Range? N	Nearest Occurrence:	243.88 KM	50.16278°N	98.84212°E	
Family: Perlodidae						
Arcynopteryx polaris	Within Known Range? Y	Nearest Occurrence:	105.01 KM	47.29702°N	100.03136°E	
Arcynopteryx sajanensis	Within Known Range? N	Nearest Occurrence:	384.99 KM	51.61397°N	100.59972°E	
Diura majuscula	Within Known Range? Y	Nearest Occurrence:	101.02 KM	47.42580°N	100.30130°E	
Isoperla kozlovi	Within Known Range? Y	Nearest Occurrence:	68.02 KM	47.80440°N	100.31810°E	
Isoperla potanini	Within Known Range? Y	Nearest Occurrence:	68.14 KM	47.80440°N	100.31810°E	
Kaszabia nigricauda	Within Known Range? Y	Nearest Occurrence:	68.02 KM	47.80440°N	100.31810°E	
Pictetiella asiatica	Within Known Range? N	Nearest Occurrence:	387.57 KM	51.65822°N	100.53000°E	

**LOE Rating: Probable Total: 4**

Family: Capniidae						
Mesocapnia variabilis	Within Known Range? Y	Nearest Occurrence:	106.54 KM	48.36436°N	98.92737°E	
Family: Chloroperlidae						
Alloperla deminuta	Within Known Range? Y	Nearest Occurrence:	68.02 KM	47.80440°N	100.31810°E	
Family: Perlodidae						
Diura bicaudata	Within Known Range? Y	Nearest Occurrence:	112.34 KM	47.21768°N	99.92824°E	
Family: Pteronarcyidae						
Pteronarcys reticulata	Within Known Range? Y	Nearest Occurrence:	68.02 KM	47.80440°N	100.31810°E	

**Basin:** Arctic Ocean Basin  
**Aimags:** Arkhangai  
**Soums:** Tariat

**Freshwater Ecoregion:** Lake Baikal  
**Terrestrial Ecoregion:** Selenge-Orkhon Forest Steppe

**WQM Sites:**

WQM Sites: # 93 (Suman River @ N 48.16628° E 99.8899°) # 94  
 (Gichgene River @ N 48.1502° E 99.96337°)

**LOE Rating: Possible Total: 4**

Family: Capniidae					
<i>Capnia nigra</i>	Within Known Range? N	Nearest Occurrence:	258.74 KM	48.06257°N	97.55064 °E
Family: Chloroperlidae					
<i>Haploperla lepnevae</i>	Within Known Range? Y	Nearest Occurrence:	114.70 KM	49.26170°N	99.88242 °E
Family: Perlodidae					
<i>Isoperla asiatica</i>	Within Known Range? Y	Nearest Occurrence:	68.02 KM	47.80440°N	100.31810 °E
Family: Taeniopterygidae					
<i>Taenionema japonicum</i>	Within Known Range? Y	Nearest Occurrence:	177.02 KM	47.11192°N	101.01048 °E

**LOE Rating: Predicted Total: 15**

Family: Chloroperlidae					
<i>Alaskaperla longidentata</i>	Within Known Range? Y	Nearest Occurrence:	100.84 KM	47.42580°N	100.30130 °E
<i>Alloperla mediata</i>	Within Known Range? N	Nearest Occurrence:	278.19 KM	50.61826°N	99.12094 °E
Family: Leuctridae					
<i>Paraleuctra zapekinae</i>	Within Known Range? N	Nearest Occurrence:	554.19 KM	49.71481°N	104.64203 °E
Family: Nemouridae					
<i>Amphinemura standfussi</i>	Within Known Range? Y	Nearest Occurrence:	187.55 KM	48.61518°N	98.23096 °E
<i>Nemoura arctica</i>	Within Known Range? Y	Nearest Occurrence:	239.28 KM	47.26999°N	101.80227 °E
<i>Nemoura sahlbergi</i>	Within Known Range? Y	Nearest Occurrence:	100.84 KM	47.42580°N	100.30130 °E
Family: Perlidae					
<i>Agnetina cocandica</i>	Within Known Range? Y	Nearest Occurrence:	156.18 KM	49.62785°N	99.99523 °E
<i>Paragnetina flavotincta</i>	Within Known Range? N	Nearest Occurrence:	114.70 KM	49.26170°N	99.88242 °E
Family: Perlodidae					
<i>Arcynopteryx compacta</i>	Within Known Range? Y	Nearest Occurrence:	177.02 KM	47.11192°N	101.01048 °E
<i>Isoperla altaica</i>	Within Known Range? Y	Nearest Occurrence:	177.02 KM	47.11192°N	101.01048 °E
<i>Isoperla lunigera</i>	Within Known Range? N	Nearest Occurrence:	151.22 KM	49.45317°N	100.47234 °E
<i>Isoperla mongolica</i>	Within Known Range? Y	Nearest Occurrence:	177.02 KM	47.11192°N	101.01048 °E
<i>Isoperla obscura</i>	Within Known Range? Y	Nearest Occurrence:	320.60 KM	50.60031°N	101.52392 °E
<i>Megarcys ochracea</i>	Within Known Range? N	Nearest Occurrence:	358.84 KM	51.40978°N	99.30136 °E
<i>Skwala pusilla</i>	Within Known Range? N	Nearest Occurrence:	1,261.87 KM	48.51277°N	88.51107 °E

**LOE Rating: Unlikely Total: 5**

Family: Capniidae					
<i>Capnia khulsbagia</i>	Within Known Range? N	Nearest Occurrence:	320.46 KM	50.98944°N	100.71944 °E
<i>Mesocapnia altaica</i>	Within Known Range? N	Nearest Occurrence:	1,218.42 KM	48.43684°N	88.90094 °E
Family: Leuctridae					
<i>Leuctra fusca</i>	Within Known Range? N	Nearest Occurrence:	828.42 KM	49.08643°N	107.28952 °E
Family: Nemouridae					
<i>Nemurella pictetii</i>	Within Known Range? N	Nearest Occurrence:	292.99 KM	50.81265°N	99.33803 °E
Family: Perlodidae					
<i>Isoperla eximia</i>	Within Known Range? N	Nearest Occurrence:	855.74 KM	49.01829°N	107.54453 °E

**Basin:** Arctic Ocean Basin  
**Aimag:** Arkhangai  
**Soum:** Tsakhir

**Freshwater Ecoregion:** Lake Baikal  
**Terrestrial Ecoregion:** Khangai Mountains Alpine Meadow

**WQM Sites:**

WQM Sites: # 91 (Hoid terh River @ N 48.03192° E 98.75973°)

**LOE Rating: Highly Likely Total: 6**

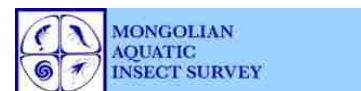
<b>Family: Capniidae</b>						
Isocapnia guentheri	Within Known Range? Y	Nearest Occurrence:	87.74 KM	48.61518°N	98.23096°E	
<b>Family: Chloroperlidae</b>						
Alloperla joosti	Within Known Range? Y	Nearest Occurrence:	87.74 KM	48.61518°N	98.23096°E	
Alloperla rostellata	Within Known Range? Y	Nearest Occurrence:	52.00 KM	48.36436°N	98.92737°E	
Suwallia kerzhneri	Within Known Range? Y	Nearest Occurrence:	87.74 KM	48.61518°N	98.23096°E	
Suwallia teleckojensis	Within Known Range? Y	Nearest Occurrence:	52.09 KM	48.36436°N	98.92737°E	
<b>Family: Nemouridae</b>						
Amphinemura borealis	Within Known Range? Y	Nearest Occurrence:	87.74 KM	48.61518°N	98.23096°E	

**LOE Rating: Likely Total: 13**

<b>Family: Capniidae</b>						
Capnia nigra	Within Known Range? N	Nearest Occurrence:	125.97 KM	48.06257°N	97.55064°E	
Isocapnia kudia	Within Known Range? N	Nearest Occurrence:	381.00 KM	51.25356°N	99.66687°E	
Isocapnia sibirica	Within Known Range? N	Nearest Occurrence:	288.38 KM	47.28244°N	101.18793°E	
Mesocapnia variabilis	Within Known Range? Y	Nearest Occurrence:	52.09 KM	48.36436°N	98.92737°E	
<b>Family: Nemouridae</b>						
Nemoura cinerea	Within Known Range? Y	Nearest Occurrence:	125.97 KM	48.06257°N	97.55064°E	
<b>Family: Perlidae</b>						
Agnetina extrema	Within Known Range? N	Nearest Occurrence:	216.21 KM	47.50949°N	100.57510°E	
Kamimuria exilis	Within Known Range? N	Nearest Occurrence:	244.97 KM	50.16278°N	98.84212°E	
<b>Family: Perlodidae</b>						
Arcynopteryx polaris	Within Known Range? Y	Nearest Occurrence:	52.09 KM	48.36436°N	98.92737°E	
Arcynopteryx sajanensis	Within Known Range? N	Nearest Occurrence:	458.36 KM	51.61397°N	100.59972°E	
Diura bicaudata	Within Known Range? Y	Nearest Occurrence:	161.39 KM	47.21768°N	99.92824°E	
Diura majuscula	Within Known Range? Y	Nearest Occurrence:	126.20 KM	48.06257°N	97.55064°E	
Isoperla potanini	Within Known Range? Y	Nearest Occurrence:	99.24 KM	48.34410°N	97.87312°E	
Pictetiella asiatica	Within Known Range? N	Nearest Occurrence:	458.37 KM	51.65822°N	100.53000°E	

**LOE Rating: Probable Total: 5**

<b>Family: Chloroperlidae</b>						
Alloperla deminuta	Within Known Range? N	Nearest Occurrence:	182.55 KM	47.80440°N	100.31810°E	
<b>Family: Perlidae</b>						
Agnetina brevipennis	Within Known Range? Y	Nearest Occurrence:	83.76 KM	48.71968°N	98.65184°E	
<b>Family: Perlodidae</b>						
Isoperla kozlovi	Within Known Range? Y	Nearest Occurrence:	182.55 KM	47.80440°N	100.31810°E	
Kaszabia nigricauda	Within Known Range? Y	Nearest Occurrence:	83.76 KM	48.71968°N	98.65184°E	
<b>Family: Taeniopterygidae</b>						
Taenionema japonicum	Within Known Range? Y	Nearest Occurrence:	275.85 KM	47.11192°N	101.01048°E	



**Basin:** Arctic Ocean Basin

**Aimag:** Arkhangai

**Soum:** Tsakhir

Freshwater Ecoregion: Lake Baikal

Terrestrial Ecoregion: Khangai Mountains Alpine Meadow

**WQM Sites:**

WQM Sites: # 91 (Hoid terh River @ N 48.03192° E 98.75973°)

**LOE Rating: Possible Total: 3**

Family: Chloroperlidae					
Haploperla lepnevae	Within Known Range? Y	Nearest Occurrence:	196.13 KM	49.26170°N	99.88242 °E
Family: Nemouridae					
Amphinemura standfussi	Within Known Range? Y	Nearest Occurrence:	87.74 KM	48.61518°N	98.23096 °E
Family: Pteronarcyidae					
Pteronarcys reticulata	Within Known Range? N	Nearest Occurrence:	182.55 KM	47.80440°N	100.31810 °E

**LOE Rating: Predicted Total: 15**

Family: Chloroperlidae					
Alaskaperla longidentata	Within Known Range? Y	Nearest Occurrence:	99.07 KM	48.34410°N	97.87312 °E
Alloperla mediata	Within Known Range? N	Nearest Occurrence:	298.45 KM	50.61826°N	99.12094 °E
Family: Leuctridae					
Paraleuctra zapekinae	Within Known Range? N	Nearest Occurrence:	689.53 KM	49.71481°N	104.64203 °E
Family: Nemouridae					
Nemoura arctica	Within Known Range? Y	Nearest Occurrence:	280.43 KM	50.42996°N	99.21727 °E
Nemoura sahlbergi	Within Known Range? N	Nearest Occurrence:	189.53 KM	47.42580°N	100.30130 °E
Family: Perlidae					
Agnetina cocandica	Within Known Range? Y	Nearest Occurrence:	235.60 KM	49.62785°N	99.99523 °E
Paragnetina flavotincta	Within Known Range? N	Nearest Occurrence:	196.13 KM	49.26170°N	99.88242 °E
Family: Perlodidae					
Arcynopteryx compacta	Within Known Range? Y	Nearest Occurrence:	275.85 KM	47.11192°N	101.01048 °E
Isoperla altaica	Within Known Range? Y	Nearest Occurrence:	275.85 KM	47.11192°N	101.01048 °E
Isoperla asiatica	Within Known Range? Y	Nearest Occurrence:	125.94 KM	48.05989°N	97.55073 °E
Isoperla lunigera	Within Known Range? N	Nearest Occurrence:	235.18 KM	49.62785°N	99.99523 °E
Isoperla mongolica	Within Known Range? Y	Nearest Occurrence:	126.20 KM	48.06257°N	97.55064 °E
Isoperla obscura	Within Known Range? Y	Nearest Occurrence:	430.21 KM	50.60031°N	101.52392 °E
Megarcys ochracea	Within Known Range? N	Nearest Occurrence:	388.44 KM	51.40978°N	99.30136 °E
Skwala pusilla	Within Known Range? N	Nearest Occurrence:	1,130.54 KM	48.51277°N	88.51107 °E

**LOE Rating: Unlikely Total: 5**

Family: Capniidae					
Capnia khulsbagia	Within Known Range? N	Nearest Occurrence:	404.76 KM	50.98944°N	100.71944 °E
Mesocapnia altaica	Within Known Range? N	Nearest Occurrence:	1,086.89 KM	48.43684°N	88.90094 °E
Family: Leuctridae					
Leuctra fusca	Within Known Range? N	Nearest Occurrence:	963.57 KM	49.08643°N	107.28952 °E
Family: Nemouridae					
Nemurella pictetii	Within Known Range? N	Nearest Occurrence:	324.31 KM	50.81265°N	99.33803 °E
Family: Perlodidae					
Isoperla eximia	Within Known Range? N	Nearest Occurrence:	990.72 KM	49.01829°N	107.54453 °E

**Basin:** Arctic Ocean Basin

**Aimag:** Arkhangai

**Soum:** Tsenkher

**Freshwater Ecoregion:** Lake Baikal

**Terrestrial Ecoregion:** Selenge-Orkhon Forest Steppe

**WQM Sites:**

WQM Sites: # 71 (Budantai River @ N 46.93615° E 101.7066°) # 72 (Budantai River @ N 46.97703° E 101.70525°) # 73 (Nariin ha River @ N 47.07398° E 101.75733°) # 74 (Tsetserleg River @ N 47.1118° E 101.7787°) # 75 (Tsenher\_arh River @ N 47.20282° E 101.

**LOE Rating: Highly Likely Total: 4**

Family: Chloroperlidae

Alloperla joosti Within Known Range? Y Nearest Occurrence: 15.92 KM 47.26999°N 101.80227 °E

Suwallia teleckojensis Within Known Range? Y Nearest Occurrence: 17.05 KM 47.04409°N 101.76352 °E

Family: Nemouridae

Amphinemura borealis Within Known Range? Y Nearest Occurrence: 15.92 KM 47.26999°N 101.80227 °E

Family: Perlidae

Agnentina extrema Within Known Range? Y Nearest Occurrence: 15.92 KM 47.26999°N 101.80227 °E

**LOE Rating: Likely Total: 10**

Family: Capniidae

Isocapnia guentheri Within Known Range? Y Nearest Occurrence: 91.70 KM 47.50523°N 100.93208 °E

Isocapnia sibirica Within Known Range? Y Nearest Occurrence: 15.92 KM 47.26999°N 101.80227 °E

Family: Chloroperlidae

Alloperla deminuta Within Known Range? Y Nearest Occurrence: 15.92 KM 47.26999°N 101.80227 °E

Alloperla rostellata Within Known Range? Y Nearest Occurrence: 75.93 KM 47.11192°N 101.01048 °E

Suwallia kerzhneri Within Known Range? Y Nearest Occurrence: 68.00 KM 47.59928°N 101.24521 °E

Family: Nemouridae

Nemoura arctica Within Known Range? Y Nearest Occurrence: 15.95 KM 47.26999°N 101.80227 °E

Family: Perlodidae

Arcynopteryx polaris Within Known Range? Y Nearest Occurrence: 17.05 KM 47.04409°N 101.76352 °E

Diura majuscula Within Known Range? Y Nearest Occurrence: 57.13 KM 47.28244°N 101.18793 °E

Isoperla kozlovi Within Known Range? Y Nearest Occurrence: 15.92 KM 47.26999°N 101.80227 °E

Isoperla potanini Within Known Range? Y Nearest Occurrence: 15.95 KM 47.26999°N 101.80227 °E

**LOE Rating: Probable Total: 8**

Family: Capniidae

Isocapnia kudia Within Known Range? N Nearest Occurrence: 504.99 KM 51.25356°N 99.66687 °E

Family: Nemouridae

Nemoura cinerea Within Known Range? Y Nearest Occurrence: 96.38 KM 47.48567°N 100.87875 °E

Family: Perlidae

Agnentina brevipennis Within Known Range? Y Nearest Occurrence: 52.76 KM 46.78742°N 101.96021 °E

Kamimuria exilis Within Known Range? N Nearest Occurrence: 458.74 KM 50.16278°N 98.84212 °E

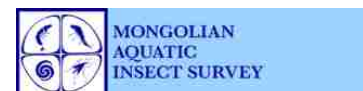
Family: Perlodidae

Arcynopteryx sajanensis Within Known Range? N Nearest Occurrence: 507.86 KM 51.61397°N 100.59972 °E

Diura bicaudata Within Known Range? N Nearest Occurrence: 195.73 KM 47.21768°N 99.92824 °E

Kaszabia nigricauda Within Known Range? Y Nearest Occurrence: 68.00 KM 47.59928°N 101.24521 °E

Pictetiella asiatica Within Known Range? N Nearest Occurrence: 513.60 KM 51.65822°N 100.53000 °E



**Basin:** Arctic Ocean Basin

**Aimags:** Arkhangai

**Soum:** Tsenkher

**Freshwater Ecoregion:** Lake Baikal

**Terrestrial Ecoregion:** Selenge-Orkhon Forest Steppe

**WQM Sites:**

WQM Sites: # 71 (Budantai River @ N 46.93615° E 101.7066°) # 72 (Budantai River @ N 46.97703° E 101.70525°) # 73 (Nariin ha River @ N 47.07398° E 101.75733°) # 74 (Tsetserleg River @ N 47.1118° E 101.7787°) # 75 (Tsenher\_arh River @ N 47.20282° E 101.

**LOE Rating: Possible Total: 7**

Family: Chloroperlidae						
Haploperla lepnevae	Within Known Range? N	Nearest Occurrence:	286.38 KM	49.45317°N	100.47234 °E	
Family: Leuctridae						
Paraleuctra zapekinae	Within Known Range? N	Nearest Occurrence:	431.85 KM	49.71481°N	104.64203 °E	
Family: Perlodidae						
Arcynopteryx compacta	Within Known Range? Y	Nearest Occurrence:	76.06 KM	47.11192°N	101.01048 °E	
Isoperla asiatica	Within Known Range? Y	Nearest Occurrence:	167.47 KM	47.80440°N	100.31810 °E	
Isoperla mongolica	Within Known Range? Y	Nearest Occurrence:	15.95 KM	47.26999°N	101.80227 °E	
Family: Pteronarcyidae						
Pteronarcys reticulata	Within Known Range? N	Nearest Occurrence:	167.47 KM	47.80440°N	100.31810 °E	
Family: Taeniopterygidae						
Taenionema japonicum	Within Known Range? Y	Nearest Occurrence:	57.13 KM	47.28244°N	101.18793 °E	

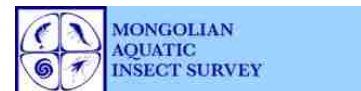
**LOE Rating: Predicted Total: 13**

Family: Capniidae						
Capnia nigra	Within Known Range? N	Nearest Occurrence:	396.37 KM	50.51003°N	100.40375 °E	
Mesocapnia variabilis	Within Known Range? Y	Nearest Occurrence:	196.09 KM	47.21768°N	99.92824 °E	
Family: Chloroperlidae						
Alaskaperla longidentata	Within Known Range? Y	Nearest Occurrence:	39.71 KM	46.82177°N	101.70479 °E	
Alloperla mediata	Within Known Range? N	Nearest Occurrence:	321.35 KM	49.70678°N	103.10288 °E	
Family: Nemouridae						
Amphinemura standfussi	Within Known Range? N	Nearest Occurrence:	278.51 KM	49.33339°N	102.97786 °E	
Nemoura sahlbergi	Within Known Range? Y	Nearest Occurrence:	156.69 KM	47.42580°N	100.30130 °E	
Family: Perlidae						
Agnetina cocandica	Within Known Range? Y	Nearest Occurrence:	331.22 KM	49.62785°N	99.99523 °E	
Paragnetina flavotincta	Within Known Range? N	Nearest Occurrence:	250.75 KM	49.26765°N	100.82998 °E	
Family: Perlodidae						
Isoperla altaica	Within Known Range? Y	Nearest Occurrence:	76.06 KM	47.11192°N	101.01048 °E	
Isoperla lunigera	Within Known Range? N	Nearest Occurrence:	270.12 KM	49.38617°N	102.71667 °E	
Isoperla obscura	Within Known Range? N	Nearest Occurrence:	270.12 KM	49.38617°N	102.71667 °E	
Megarcys ochracea	Within Known Range? N	Nearest Occurrence:	358.46 KM	49.77776°N	103.60860 °E	
Skwala pusilla	Within Known Range? N	Nearest Occurrence:	1,470.46 KM	48.51277°N	88.51107 °E	

**LOE Rating: Unlikely Total: 5**

Family: Capniidae						
Capnia khulsbagia	Within Known Range? N	Nearest Occurrence:	436.47 KM	50.98944°N	100.71944 °E	
Mesocapnia altaica	Within Known Range? N	Nearest Occurrence:	1,426.56 KM	48.43684°N	88.90094 °E	
Family: Leuctridae						
Leuctra fusca	Within Known Range? N	Nearest Occurrence:	656.48 KM	49.08643°N	107.28952 °E	
Family: Nemouridae						
Nemurella pictetii	Within Known Range? N	Nearest Occurrence:	480.50 KM	50.81265°N	99.33803 °E	
Family: Perlodidae						
Isoperla eximia	Within Known Range? N	Nearest Occurrence:	681.03 KM	49.01829°N	107.54453 °E	

Research funded by the National Science Foundation  
DEB-BSI #0206674: A Survey of the Aquatic Insects of the Selenge River Basin. P.I.'s: JKGelhaus, JCMorse, BHayford.  
DEB # 0743732: Aquatic Insects of the Altai and Hangai Mountain Drainages. P.I.'s: JKGelhaus, JCMorse, CRNelson.  
<http://clade.ansp.org/entomology/mongolia/index.html>





**Basin:** Arctic Ocean Basin  
**Aimags:** Arkhangai  
**Soums:** Tsetserleg

**Freshwater Ecoregion:** Lake Baikal  
**Terrestrial Ecoregion:** Khangai Mountains Alpine Meadow

**WQM Sites:**

WQM Sites: # 76 (Zuun mod River @ N 47.32165° E 101.1145°) #  
 77 (Tamir River @ N 47.2206° E 101.12233°)

**LOE Rating: Highly Likely Total: 3**

<b>Family: Chloroperlidae</b>					
Alloperla joosti	Within Known Range? Y	Nearest Occurrence:	13.15 KM	47.28244°N	101.18793°E
Suwallia teleckojensis	Within Known Range? Y	Nearest Occurrence:	13.17 KM	47.28244°N	101.18793°E
<b>Family: Nemouridae</b>					
Amphinemura borealis	Within Known Range? Y	Nearest Occurrence:	13.15 KM	47.28244°N	101.18793°E

**LOE Rating: Likely Total: 10**

<b>Family: Capniidae</b>					
Isocapnia guentheri	Within Known Range? Y	Nearest Occurrence:	43.80 KM	47.50523°N	100.93208°E
Isocapnia sibirica	Within Known Range? Y	Nearest Occurrence:	13.15 KM	47.28244°N	101.18793°E
<b>Family: Chloroperlidae</b>					
Alloperla deminuta	Within Known Range? Y	Nearest Occurrence:	13.15 KM	47.28244°N	101.18793°E
Alloperla rostellata	Within Known Range? Y	Nearest Occurrence:	16.27 KM	47.11192°N	101.01048°E
Suwallia kerzhneri	Within Known Range? Y	Nearest Occurrence:	45.56 KM	47.48567°N	100.87875°E
<b>Family: Perlidae</b>					
Agnetina extrema	Within Known Range? Y	Nearest Occurrence:	13.15 KM	47.28244°N	101.18793°E
<b>Family: Perlodidae</b>					
Arcynopteryx polaris	Within Known Range? Y	Nearest Occurrence:	32.13 KM	47.00226°N	100.91051°E
Diura majuscula	Within Known Range? Y	Nearest Occurrence:	13.17 KM	47.28244°N	101.18793°E
Isoperla kozlovi	Within Known Range? Y	Nearest Occurrence:	13.15 KM	47.28244°N	101.18793°E
<b>Family: Taeniopterygidae</b>					
Taenionema japonicum	Within Known Range? Y	Nearest Occurrence:	13.17 KM	47.28244°N	101.18793°E

**LOE Rating: Probable Total: 10**

<b>Family: Capniidae</b>					
Isocapnia kudia	Within Known Range? N	Nearest Occurrence:	481.77 KM	51.25356°N	99.66687°E
<b>Family: Nemouridae</b>					
Nemoura cinerea	Within Known Range? Y	Nearest Occurrence:	45.56 KM	47.48567°N	100.87875°E
<b>Family: Perlidae</b>					
Kamimuria exilis	Within Known Range? N	Nearest Occurrence:	419.64 KM	50.16278°N	98.84212°E
<b>Family: Perlodidae</b>					
Arcynopteryx compacta	Within Known Range? Y	Nearest Occurrence:	16.31 KM	47.11192°N	101.01048°E
Arcynopteryx sajanensis	Within Known Range? N	Nearest Occurrence:	497.59 KM	51.61397°N	100.59972°E
Diura bicaudata	Within Known Range? N	Nearest Occurrence:	135.04 KM	47.21768°N	99.92824°E
Isoperla mongolica	Within Known Range? Y	Nearest Occurrence:	13.17 KM	47.28244°N	101.18793°E
Isoperla potanini	Within Known Range? Y	Nearest Occurrence:	73.99 KM	47.26999°N	101.80227°E
Kaszabia nigricauda	Within Known Range? Y	Nearest Occurrence:	45.56 KM	47.48567°N	100.87875°E
Pictetiella asiatica	Within Known Range? N	Nearest Occurrence:	502.57 KM	51.65822°N	100.53000°E



Basin: Arctic Ocean Basin

Aimags: Arkhangai

Soums: Tsetserleg

Freshwater Ecoregion: Lake Baikal

Terrestrial Ecoregion: Khangai Mountains Alpine Meadow

WQM Sites:

WQM Sites: # 76 (Zuun mod River @ N 47.32165° E 101.1145°) #  
77 (Tamir River @ N 47.2206° E 101.12233°)

**LOE Rating: Possible Total: 6**

Family: Capniidae						
Mesocapnia variabilis	Within Known Range? Y	Nearest Occurrence:	135.29 KM	47.21768°N	99.92824°E	
Family: Chloroperlidae						
Haploperla lepnevae	Within Known Range? N	Nearest Occurrence:	263.92 KM	49.45317°N	100.47234°E	
Family: Nemouridae						
Nemoura arctica	Within Known Range? Y	Nearest Occurrence:	73.99 KM	47.26999°N	101.80227°E	
Family: Perlidae						
Agnetina brevipennis	Within Known Range? Y	Nearest Occurrence:	100.17 KM	46.78742°N	101.96021°E	
Family: Perlodidae						
Isoperla altaica	Within Known Range? Y	Nearest Occurrence:	16.31 KM	47.11192°N	101.01048°E	
Family: Pteronarcyidae						
Pteronarcys reticulata	Within Known Range? N	Nearest Occurrence:	115.44 KM	47.80440°N	100.31810°E	

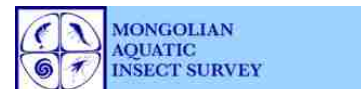
**LOE Rating: Predicted Total: 13**

Family: Capniidae						
Capnia nigra	Within Known Range? N	Nearest Occurrence:	379.48 KM	50.51003°N	100.40375°E	
Family: Chloroperlidae						
Alaskaperla longidentata	Within Known Range? Y	Nearest Occurrence:	73.41 KM	46.82177°N	101.70479°E	
Alloperla mediata	Within Known Range? N	Nearest Occurrence:	355.55 KM	49.70678°N	103.10288°E	
Family: Leuctridae						
Paraleuctra zapekinae	Within Known Range? N	Nearest Occurrence:	480.01 KM	49.71481°N	104.64203°E	
Family: Nemouridae						
Amphinemura standfussi	Within Known Range? N	Nearest Occurrence:	314.60 KM	49.33339°N	102.97786°E	
Nemoura sahlbergi	Within Known Range? Y	Nearest Occurrence:	97.68 KM	47.42580°N	100.30130°E	
Family: Perlidae						
Agnetina cocandica	Within Known Range? Y	Nearest Occurrence:	301.45 KM	49.62785°N	99.99523°E	
Paragnetina flavotincta	Within Known Range? N	Nearest Occurrence:	235.17 KM	49.26765°N	100.82998°E	
Family: Perlodidae						
Isoperla asiatica	Within Known Range? Y	Nearest Occurrence:	115.44 KM	47.80440°N	100.31810°E	
Isoperla lunigera	Within Known Range? N	Nearest Occurrence:	263.92 KM	49.45317°N	100.47234°E	
Isoperla obscura	Within Known Range? N	Nearest Occurrence:	301.43 KM	49.38617°N	102.71667°E	
Megarcys ochracea	Within Known Range? N	Nearest Occurrence:	398.09 KM	49.77776°N	103.60860°E	
Skwala pusilla	Within Known Range? N	Nearest Occurrence:	1,410.12 KM	48.51277°N	88.51107°E	

**LOE Rating: Unlikely Total: 5**

Family: Capniidae						
Capnia khulsbagia	Within Known Range? N	Nearest Occurrence:	426.31 KM	50.98944°N	100.71944°E	
Mesocapnia altaica	Within Known Range? N	Nearest Occurrence:	1,366.21 KM	48.43684°N	88.90094°E	
Family: Leuctridae						
Leuctra fusca	Within Known Range? N	Nearest Occurrence:	714.47 KM	49.08643°N	107.28952°E	
Family: Nemouridae						
Nemurella pictetii	Within Known Range? N	Nearest Occurrence:	451.06 KM	50.81265°N	99.33803°E	
Family: Perlodidae						
Isoperla eximia	Within Known Range? N	Nearest Occurrence:	739.42 KM	49.01829°N	107.54453°E	

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DEB-BSI #0206674: A Survey of the Aquatic Insects of the Selenge River Basin. P.I.'s: JKGelhaus, JCMorse, BHayford.  
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<http://clade.ansp.org/entomology/mongolia/index.html>



**Basin:** Arctic Ocean Basin  
**Aimags:** Arkhangai  
**Soum:** Tsetserleg1

Freshwater Ecoregion: Lake Baikal  
 Terrestrial Ecoregion: Selenge-Orkhon Forest Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Highly Likely Total: 3**

Family: Chloroperlidae					
Alloperla joosti	Within Known Range? Y	Nearest Occurrence:	148.91 KM	47.59928 °N	101.24521 °E
Family: Nemouridae					
Amphinemura borealis	Within Known Range? Y	Nearest Occurrence:	93.83 KM	49.45317 °N	100.47234 °E
Family: Perlidae					
Agnentina extrema	Within Known Range? Y	Nearest Occurrence:	148.91 KM	47.59928 °N	101.24521 °E

**LOE Rating: Likely Total: 17**

Family: Capniidae					
Isocapnia guentheri	Within Known Range? Y	Nearest Occurrence:	160.60 KM	47.50523 °N	100.93208 °E
Isocapnia kudia	Within Known Range? N	Nearest Occurrence:	304.84 KM	51.25356 °N	99.66687 °E
Isocapnia sibirica	Within Known Range? N	Nearest Occurrence:	183.70 KM	47.28244 °N	101.18793 °E
Family: Chloroperlidae					
Alloperla deminuta	Within Known Range? Y	Nearest Occurrence:	155.42 KM	47.80440 °N	100.31810 °E
Alloperla rostellata	Within Known Range? Y	Nearest Occurrence:	175.37 KM	50.51517 °N	101.21073 °E
Haploperla lepnevae	Within Known Range? Y	Nearest Occurrence:	93.83 KM	49.45317 °N	100.47234 °E
Suwallia kerzhneri	Within Known Range? Y	Nearest Occurrence:	148.91 KM	47.59928 °N	101.24521 °E
Suwallia teleckojensis	Within Known Range? Y	Nearest Occurrence:	144.61 KM	49.26170 °N	99.88242 °E
Family: Nemouridae					
Nemoura cinerea	Within Known Range? Y	Nearest Occurrence:	163.69 KM	47.48567 °N	100.87875 °E
Family: Perlidae					
Agnentina brevipennis	Within Known Range? Y	Nearest Occurrence:	50.45 KM	49.26765 °N	100.82998 °E
Kamimuria exilis	Within Known Range? N	Nearest Occurrence:	289.77 KM	50.16278 °N	98.84212 °E
Family: Perlodidae					
Arcynopteryx polaris	Within Known Range? Y	Nearest Occurrence:	128.95 KM	49.99851 °N	101.60799 °E
Arcynopteryx sajanensis	Within Known Range? N	Nearest Occurrence:	303.73 KM	51.61397 °N	100.59972 °E
Diura majuscula	Within Known Range? Y	Nearest Occurrence:	184.04 KM	47.28244 °N	101.18793 °E
Isoperla kozlovi	Within Known Range? Y	Nearest Occurrence:	50.45 KM	49.26765 °N	100.82998 °E
Kaszabia nigricauda	Within Known Range? Y	Nearest Occurrence:	148.58 KM	49.62785 °N	99.99523 °E
Pictetiella asiatica	Within Known Range? N	Nearest Occurrence:	309.61 KM	51.65822 °N	100.53000 °E

**LOE Rating: Probable Total: 3**

Family: Perlodidae					
Diura bicaudata	Within Known Range? N	Nearest Occurrence:	233.56 KM	47.21768 °N	99.92824 °E
Isoperla potanini	Within Known Range? Y	Nearest Occurrence:	50.54 KM	49.26765 °N	100.82998 °E
Family: Pteronarcyidae					
Pteronarcys reticulata	Within Known Range? Y	Nearest Occurrence:	155.42 KM	47.80440 °N	100.31810 °E

**Basin:** Arctic Ocean Basin  
**Aimags:** Arkhangai  
**Soum:** Tsetserleg1

Freshwater Ecoregion: Lake Baikal  
 Terrestrial Ecoregion: Selenge-Orkhon Forest Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

<b>LOE Rating:</b>	<b>Possible</b>	<b>Total:</b>	<b>5</b>
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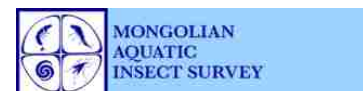
<b>Family:</b> Nemouridae			
Nemoura arctica	Within Known Range? Y	Nearest Occurrence:	129.00 KM 49.87761°N 101.82039°E
Nemoura sahlbergi	Within Known Range? Y	Nearest Occurrence:	128.78 KM 49.87761°N 101.82039°E
<b>Family:</b> Perlodidae			
Isoperla asiatica	Within Known Range? Y	Nearest Occurrence:	155.42 KM 47.80440°N 100.31810°E
Isoperla lunigera	Within Known Range? Y	Nearest Occurrence:	93.83 KM 49.45317°N 100.47234°E
<b>Family:</b> Taeniopterygidae			
Taenionema japonicum	Within Known Range? Y	Nearest Occurrence:	184.04 KM 47.28244°N 101.18793°E

<b>LOE Rating:</b>	<b>Predicted</b>	<b>Total:</b>	<b>16</b>
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<b>Family:</b> Capniidae			
Capnia khulsbagia	Within Known Range? N	Nearest Occurrence:	232.61 KM 50.98944°N 100.71944°E
Capnia nigra	Within Known Range? N	Nearest Occurrence:	192.88 KM 50.51003°N 100.40375°E
Mesocapnia variabilis	Within Known Range? Y	Nearest Occurrence:	229.90 KM 50.96186°N 100.72506°E
<b>Family:</b> Chloroperlidae			
Alaskaperla longidentata	Within Known Range? Y	Nearest Occurrence:	175.37 KM 50.51517°N 101.21073°E
Alloperla mediata	Within Known Range? N	Nearest Occurrence:	174.91 KM 50.30188°N 101.92869°E
<b>Family:</b> Leuctridae			
Paraleuctra zapekinae	Within Known Range? N	Nearest Occurrence:	398.03 KM 49.71481°N 104.64203°E
<b>Family:</b> Nemouridae			
Amphinemura standfussi	Within Known Range? Y	Nearest Occurrence:	207.46 KM 50.77444°N 100.80067°E
Nemurella pictetii	Within Known Range? N	Nearest Occurrence:	286.08 KM 51.07896°N 99.70857°E
<b>Family:</b> Perlidae			
Agnetina cocandica	Within Known Range? Y	Nearest Occurrence:	148.85 KM 49.62785°N 99.99523°E
Paragnetina flavotincta	Within Known Range? Y	Nearest Occurrence:	50.45 KM 49.26765°N 100.82998°E
<b>Family:</b> Perlodidae			
Arcynopteryx compacta	Within Known Range? Y	Nearest Occurrence:	198.20 KM 50.41594°N 100.14716°E
Isoperla altaica	Within Known Range? Y	Nearest Occurrence:	203.45 KM 47.11192°N 101.01048°E
Isoperla mongolica	Within Known Range? Y	Nearest Occurrence:	184.04 KM 47.28244°N 101.18793°E
Isoperla obscura	Within Known Range? Y	Nearest Occurrence:	181.81 KM 49.38617°N 102.71667°E
Megarcys ochracea	Within Known Range? N	Nearest Occurrence:	289.31 KM 49.77776°N 103.60860°E
Skwala pusilla	Within Known Range? N	Nearest Occurrence:	1,402.78 KM 48.51277°N 88.51107°E

<b>LOE Rating:</b>	<b>Unlikely</b>	<b>Total:</b>	<b>3</b>
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<b>Family:</b> Capniidae			
Mesocapnia altaica	Within Known Range? N	Nearest Occurrence:	1,359.84 KM 48.43684°N 88.90094°E
<b>Family:</b> Leuctridae			
Leuctra fusca	Within Known Range? N	Nearest Occurrence:	682.62 KM 49.08643°N 107.28952°E
<b>Family:</b> Perlodidae			
Isoperla eximia	Within Known Range? N	Nearest Occurrence:	710.79 KM 49.01829°N 107.54453°E



**Basin:** Arctic Ocean Basin  
**Aimags:** Arkhangai  
**Soums:** Tuvshruulekh

Freshwater Ecoregion: Lake Baikal  
 Terrestrial Ecoregion: Mongolian-Manchurian Grassland

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Highly Likely Total: 3**

Family: Chloroperlidae					
Alloperla joosti	Within Known Range? Y	Nearest Occurrence:	34.20 KM	47.26999°N	101.80227°E
Suwallia teleckojensis	Within Known Range? Y	Nearest Occurrence:	54.76 KM	47.04409°N	101.76352°E
Family: Nemouridae					
Amphinemura borealis	Within Known Range? Y	Nearest Occurrence:	34.20 KM	47.26999°N	101.80227°E

**LOE Rating: Likely Total: 18**

Family: Capniidae					
Isocapnia guentheri	Within Known Range? Y	Nearest Occurrence:	125.66 KM	47.50523°N	100.93208°E
Isocapnia kudia	Within Known Range? N	Nearest Occurrence:	500.27 KM	51.25356°N	99.66687°E
Isocapnia sibirica	Within Known Range? Y	Nearest Occurrence:	34.20 KM	47.26999°N	101.80227°E
Family: Chloroperlidae					
Alloperla deminuta	Within Known Range? Y	Nearest Occurrence:	34.20 KM	47.26999°N	101.80227°E
Alloperla rostellata	Within Known Range? Y	Nearest Occurrence:	122.13 KM	47.11192°N	101.01048°E
Suwallia kerzhneri	Within Known Range? Y	Nearest Occurrence:	92.46 KM	47.59928°N	101.24521°E
Family: Nemouridae					
Nemoura cinerea	Within Known Range? Y	Nearest Occurrence:	131.46 KM	47.48567°N	100.87875°E
Family: Perlidae					
Agnetina brevipennis	Within Known Range? Y	Nearest Occurrence:	38.97 KM	47.73941°N	102.23811°E
Agnetina extrema	Within Known Range? Y	Nearest Occurrence:	34.20 KM	47.26999°N	101.80227°E
Kamimuria exilis	Within Known Range? N	Nearest Occurrence:	469.22 KM	50.16278°N	98.84212°E
Family: Perlodidae					
Arcynopteryx polaris	Within Known Range? Y	Nearest Occurrence:	54.76 KM	47.04409°N	101.76352°E
Arcynopteryx sajanensis	Within Known Range? N	Nearest Occurrence:	492.25 KM	51.61397°N	100.59972°E
Diura bicaudata	Within Known Range? N	Nearest Occurrence:	238.08 KM	47.21768°N	99.92824°E
Diura majuscula	Within Known Range? Y	Nearest Occurrence:	70.78 KM	46.89303°N	102.39457°E
Isoperla kozlovi	Within Known Range? Y	Nearest Occurrence:	34.20 KM	47.26999°N	101.80227°E
Isoperla potanini	Within Known Range? Y	Nearest Occurrence:	34.26 KM	47.26999°N	101.80227°E
Kaszabia nigricauda	Within Known Range? Y	Nearest Occurrence:	92.46 KM	47.59928°N	101.24521°E
Pictetiella asiatica	Within Known Range? N	Nearest Occurrence:	498.59 KM	51.65822°N	100.53000°E

**LOE Rating: Probable Total: 2**

Family: Chloroperlidae					
Haploperla lepnevae	Within Known Range? Y	Nearest Occurrence:	277.31 KM	49.70678°N	103.10288°E
Family: Pteronarcyidae					
Pteronarcys reticulata	Within Known Range? Y	Nearest Occurrence:	197.85 KM	47.80440°N	100.31810°E

**LOE Rating: Possible Total: 4**

Family: Nemouridae					
Nemoura arctica	Within Known Range? Y	Nearest Occurrence:	34.26 KM	47.26999°N	101.80227°E
Family: Perlodidae					
Arcynopteryx compacta	Within Known Range? Y	Nearest Occurrence:	68.63 KM	46.88627°N	102.34304°E
Isoperla asiatica	Within Known Range? Y	Nearest Occurrence:	197.85 KM	47.80440°N	100.31810°E
Family: Taeniopterygidae					
Taenionema japonicum	Within Known Range? Y	Nearest Occurrence:	98.68 KM	47.28244°N	101.18793°E

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<http://clade.ansp.org/entomology/mongolia/index.html>



**Basin:** Arctic Ocean Basin  
**Aimags:** Arkhangai  
**Soums:** Tuvshruulekh

Freshwater Ecoregion: Lake Baikal  
 Terrestrial Ecoregion: Mongolian-Manchurian Grassland

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

<b>LOE Rating:</b>	<b>Predicted</b>	<b>Total:</b>	15
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<b>Family:</b> Capniidae			
Capnia nigra	Within Known Range? N	Nearest Occurrence: 387.73 KM	50.51003 °N 100.40375 °E
Mesocapnia variabilis	Within Known Range? Y	Nearest Occurrence: 238.51 KM	47.21768 °N 99.92824 °E
<b>Family:</b> Chloroperlidae			
Alaskaperla longidentata	Within Known Range? Y	Nearest Occurrence: 78.84 KM	46.82177 °N 101.70479 °E
Alloperla mediata	Within Known Range? N	Nearest Occurrence: 277.31 KM	49.70678 °N 103.10288 °E
<b>Family:</b> Leuctridae			
Paraleuctra zapekinae	Within Known Range? N	Nearest Occurrence: 382.12 KM	49.71481 °N 104.64203 °E
<b>Family:</b> Nemouridae			
Amphinemura standfussi	Within Known Range? N	Nearest Occurrence: 233.89 KM	49.33339 °N 102.97786 °E
Nemoura sahlbergi	Within Known Range? Y	Nearest Occurrence: 195.44 KM	47.42580 °N 100.30130 °E
<b>Family:</b> Perlidae			
Agnentina cocandica	Within Known Range? Y	Nearest Occurrence: 335.03 KM	49.62785 °N 99.99523 °E
Paragnetina flavotincta	Within Known Range? N	Nearest Occurrence: 231.83 KM	49.37440 °N 102.83880 °E
<b>Family:</b> Perlodidae			
Isoperla altaica	Within Known Range? Y	Nearest Occurrence: 122.35 KM	47.11192 °N 101.01048 °E
Isoperla lunigera	Within Known Range? N	Nearest Occurrence: 228.37 KM	49.38617 °N 102.71667 °E
Isoperla mongolica	Within Known Range? Y	Nearest Occurrence: 34.26 KM	47.26999 °N 101.80227 °E
Isoperla obscura	Within Known Range? Y	Nearest Occurrence: 228.37 KM	49.38617 °N 102.71667 °E
Megarcys ochracea	Within Known Range? N	Nearest Occurrence: 311.54 KM	49.77776 °N 103.60860 °E
Skwala pusilla	Within Known Range? N	Nearest Occurrence: 1,508.90 KM	48.51277 °N 88.51107 °E

<b>LOE Rating:</b>	<b>Unlikely</b>	<b>Total:</b>	5
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<b>Family:</b> Capniidae			
Capnia khulsbagia	Within Known Range? N	Nearest Occurrence: 421.68 KM	50.98944 °N 100.71944 °E
Mesocapnia altaica	Within Known Range? N	Nearest Occurrence: 1,465.10 KM	48.43684 °N 88.90094 °E
<b>Family:</b> Leuctridae			
Leuctra fusca	Within Known Range? N	Nearest Occurrence: 608.50 KM	49.08643 °N 107.28952 °E
<b>Family:</b> Nemouridae			
Nemurella pictetii	Within Known Range? N	Nearest Occurrence: 481.44 KM	51.07896 °N 99.70857 °E
<b>Family:</b> Perlodidae			
Isoperla eximia	Within Known Range? N	Nearest Occurrence: 633.41 KM	49.01829 °N 107.54453 °E



**Basin:** Arctic Ocean Basin  
**Aimag:** Bulgan  
**Soum:** Bayan-agt

Freshwater Ecoregion: Lake Baikal  
 Terrestrial Ecoregion: Selenge-Orkhon Forest Steppe

**WQM Sites:**

WQM Sites: # 156 (Hanui River @ N 48.95458° E 102.13438°)

**LOE Rating: Highly Likely Total: 6**

Family: Capniidae						
Isocapnia guentheri	Within Known Range? Y	Nearest Occurrence:	130.36 KM	49.70678 °N	103.10288 °E	
Family: Chloroperlidae						
Alloperla joosti	Within Known Range? Y	Nearest Occurrence:	112.68 KM	49.21675 °N	103.10750 °E	
Alloperla rostellata	Within Known Range? Y	Nearest Occurrence:	130.36 KM	49.70678 °N	103.10288 °E	
Haploperla lepnevae	Within Known Range? Y	Nearest Occurrence:	130.36 KM	49.70678 °N	103.10288 °E	
Family: Perlidae						
Agnetina brevipennis	Within Known Range? Y	Nearest Occurrence:	92.08 KM	49.87761 °N	101.82039 °E	
Family: Perlodidae						
Isoperla kozlovi	Within Known Range? Y	Nearest Occurrence:	75.67 KM	49.38617 °N	102.71667 °E	

**LOE Rating: Likely Total: 18**

Family: Capniidae						
Isocapnia kudia	Within Known Range? N	Nearest Occurrence:	360.90 KM	51.25356 °N	99.66687 °E	
Isocapnia sibirica	Within Known Range? N	Nearest Occurrence:	205.40 KM	47.26999 °N	101.80227 °E	
Family: Chloroperlidae						
Alloperla mediata	Within Known Range? N	Nearest Occurrence:	130.36 KM	49.70678 °N	103.10288 °E	
Suwallia kerzhneri	Within Known Range? Y	Nearest Occurrence:	178.74 KM	50.60031 °N	101.52392 °E	
Suwallia teleckojensis	Within Known Range? Y	Nearest Occurrence:	112.87 KM	49.21675 °N	103.10750 °E	
Family: Nemouridae						
Amphinemura borealis	Within Known Range? Y	Nearest Occurrence:	100.98 KM	49.33339 °N	102.97786 °E	
Nemoura arctica	Within Known Range? Y	Nearest Occurrence:	92.25 KM	49.87761 °N	101.82039 °E	
Nemoura cinerea	Within Known Range? Y	Nearest Occurrence:	224.34 KM	47.48567 °N	100.87875 °E	
Family: Perlidae						
Agnetina extrema	Within Known Range? Y	Nearest Occurrence:	137.61 KM	50.32719 °N	101.95058 °E	
Kamimuria exilis	Within Known Range? N	Nearest Occurrence:	381.15 KM	50.16278 °N	98.84212 °E	
Paragnetina flavotincta	Within Known Range? Y	Nearest Occurrence:	87.67 KM	49.37440 °N	102.83880 °E	
Family: Perlodidae						
Arcynopteryx polaris	Within Known Range? Y	Nearest Occurrence:	114.24 KM	49.99851 °N	101.60799 °E	
Arcynopteryx sajanensis	Within Known Range? N	Nearest Occurrence:	325.87 KM	51.61397 °N	100.59972 °E	
Isoperla asiatica	Within Known Range? Y	Nearest Occurrence:	99.01 KM	49.88884 °N	102.50909 °E	
Isoperla lunigera	Within Known Range? Y	Nearest Occurrence:	75.67 KM	49.38617 °N	102.71667 °E	
Isoperla obscura	Within Known Range? Y	Nearest Occurrence:	75.67 KM	49.38617 °N	102.71667 °E	
Pictetiella asiatica	Within Known Range? N	Nearest Occurrence:	333.49 KM	51.65822 °N	100.53000 °E	
Family: Pteronarcyidae						
Pteronarcys reticulata	Within Known Range? Y	Nearest Occurrence:	85.32 KM	49.63453 °N	102.64845 °E	

**LOE Rating: Probable Total: 1**

Family: Perlodidae						
Arcynopteryx compacta	Within Known Range? Y	Nearest Occurrence:	184.11 KM	49.77776 °N	103.60860 °E	

Basin: Arctic Ocean Basin

Aimags: Bulgan

Soums: Bayan-agt

Freshwater Ecoregion: Lake Baikal

Terrestrial Ecoregion: Selenge-Orkhon Forest Steppe

WQM Sites:

WQM Sites: # 156 (Hanui River @ N 48.95458° E 102.13438°)

**LOE Rating: Possible Total: 5**

Family: Chloroperlidae						
Alloperla deminuta	Within Known Range? Y	Nearest Occurrence:	130.36 KM	49.70678 °N	103.10288 °E	
Family: Leuctridae						
Paraleuctra zapekinae	Within Known Range? N	Nearest Occurrence:	290.44 KM	49.71481 °N	104.64203 °E	
Family: Nemouridae						
Amphinemura standfussi	Within Known Range? Y	Nearest Occurrence:	100.98 KM	49.33339 °N	102.97786 °E	
Family: Perlodidae						
Kaszabia nigricauda	Within Known Range? Y	Nearest Occurrence:	137.61 KM	50.32719 °N	101.95058 °E	
Megarcys ochracea	Within Known Range? N	Nearest Occurrence:	183.79 KM	49.77776 °N	103.60860 °E	

**LOE Rating: Predicted Total: 13**

Family: Capniidae						
Capnia khulsbagia	Within Known Range? N	Nearest Occurrence:	260.04 KM	50.98944 °N	100.71944 °E	
Capnia nigra	Within Known Range? N	Nearest Occurrence:	245.06 KM	50.51003 °N	100.40375 °E	
Mesocapnia variabilis	Within Known Range? Y	Nearest Occurrence:	257.67 KM	50.96186 °N	100.72506 °E	
Family: Chloroperlidae						
Alaskaperla longidentata	Within Known Range? Y	Nearest Occurrence:	185.83 KM	50.51517 °N	101.21073 °E	
Family: Nemouridae						
Nemoura sahlbergi	Within Known Range? Y	Nearest Occurrence:	92.08 KM	49.87761 °N	101.82039 °E	
Family: Perlidae						
Agnetina cocandica	Within Known Range? Y	Nearest Occurrence:	241.35 KM	49.62785 °N	99.99523 °E	
Family: Perlodidae						
Diura bicaudata	Within Known Range? N	Nearest Occurrence:	318.71 KM	47.21768 °N	99.92824 °E	
Diura majuscula	Within Known Range? Y	Nearest Occurrence:	225.76 KM	47.28244 °N	101.18793 °E	
Isoperla altaica	Within Known Range? Y	Nearest Occurrence:	251.73 KM	47.11192 °N	101.01048 °E	
Isoperla mongolica	Within Known Range? Y	Nearest Occurrence:	205.77 KM	47.26999 °N	101.80227 °E	
Isoperla potanini	Within Known Range? Y	Nearest Occurrence:	142.46 KM	49.26765 °N	100.82998 °E	
Skwala pusilla	Within Known Range? N	Nearest Occurrence:	1,509.71 KM	48.51277 °N	88.51107 °E	
Family: Taeniopterygidae						
Taenionema japonicum	Within Known Range? Y	Nearest Occurrence:	225.76 KM	47.28244 °N	101.18793 °E	

**LOE Rating: Unlikely Total: 4**

Family: Capniidae						
Mesocapnia altaica	Within Known Range? N	Nearest Occurrence:	1,466.87 KM	48.43684 °N	88.90094 °E	
Family: Leuctridae						
Leuctra fusca	Within Known Range? N	Nearest Occurrence:	576.09 KM	49.08643 °N	107.28952 °E	
Family: Nemouridae						
Nemurella pictetii	Within Known Range? N	Nearest Occurrence:	344.77 KM	51.07896 °N	99.70857 °E	
Family: Perlodidae						
Isoperla eximia	Within Known Range? N	Nearest Occurrence:	604.45 KM	49.01829 °N	107.54453 °E	



**Basin:** Arctic Ocean Basin  
**Aimags:** Bulgan  
**Soums:** Bayannuur

Freshwater Ecoregion: Lake Baikal  
 Terrestrial Ecoregion: Mongolian-Manchurian Grassland

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Highly Likely Total: 8**

<b>Family: Capniidae</b>					
Isocapnia guentheri	Within Known Range? Y	Nearest Occurrence:	237.69 KM	49.77776 °N	103.60860 °E
<b>Family: Chloroperlidae</b>					
Alloperla joosti	Within Known Range? N	Nearest Occurrence:	219.16 KM	49.21675 °N	103.10750 °E
Alloperla rostellata	Within Known Range? N	Nearest Occurrence:	237.69 KM	49.77776 °N	103.60860 °E
Haploperla lepnevae	Within Known Range? Y	Nearest Occurrence:	183.45 KM	49.48086 °N	104.30864 °E
<b>Family: Perlidae</b>					
Agnetina brevipennis	Within Known Range? Y	Nearest Occurrence:	183.45 KM	49.48086 °N	104.30864 °E
Paragnetina flavotincta	Within Known Range? N	Nearest Occurrence:	164.12 KM	49.16354 °N	105.18880 °E
<b>Family: Perlodidae</b>					
Isoperla kozlovi	Within Known Range? Y	Nearest Occurrence:	81.12 KM	47.85250 °N	105.25567 °E
Isoperla lunigera	Within Known Range? Y	Nearest Occurrence:	183.45 KM	49.48086 °N	104.30864 °E

**LOE Rating: Likely Total: 13**

<b>Family: Capniidae</b>					
Isocapnia sibirica	Within Known Range? Y	Nearest Occurrence:	308.82 KM	47.26999 °N	101.80227 °E
<b>Family: Chloroperlidae</b>					
Alloperla mediata	Within Known Range? N	Nearest Occurrence:	237.69 KM	49.77776 °N	103.60860 °E
Suwallia kerzhneri	Within Known Range? Y	Nearest Occurrence:	284.43 KM	50.35162 °N	105.04436 °E
Suwallia teleckojensis	Within Known Range? Y	Nearest Occurrence:	208.62 KM	49.71481 °N	104.64203 °E
<b>Family: Nemouridae</b>					
Amphinemura borealis	Within Known Range? Y	Nearest Occurrence:	238.50 KM	49.33339 °N	102.97786 °E
Nemoura cinerea	Within Known Range? Y	Nearest Occurrence:	204.16 KM	49.68122 °N	104.56461 °E
<b>Family: Perlidae</b>					
Agnetina cocandica	Within Known Range? Y	Nearest Occurrence:	164.42 KM	49.16354 °N	105.18880 °E
Agnetina extrema	Within Known Range? Y	Nearest Occurrence:	244.44 KM	48.83420 °N	106.49113 °E
<b>Family: Perlodidae</b>					
Arcynopteryx sajanensis	Within Known Range? N	Nearest Occurrence:	605.33 KM	51.61397 °N	100.59972 °E
Isoperla asiatica	Within Known Range? Y	Nearest Occurrence:	211.41 KM	48.87748 °N	106.12370 °E
Isoperla obscura	Within Known Range? Y	Nearest Occurrence:	81.12 KM	47.85250 °N	105.25567 °E
Pictetiella asiatica	Within Known Range? N	Nearest Occurrence:	613.22 KM	51.65822 °N	100.53000 °E
<b>Family: Pteronarcyidae</b>					
Pteronarcys reticulata	Within Known Range? Y	Nearest Occurrence:	288.03 KM	49.63453 °N	102.64845 °E

**LOE Rating: Probable Total: 4**

<b>Family: Capniidae</b>					
Isocapnia kudia	Within Known Range? N	Nearest Occurrence:	658.91 KM	51.25356 °N	99.66687 °E
<b>Family: Leuctridae</b>					
Paraleuctra zapekinae	Within Known Range? N	Nearest Occurrence:	208.25 KM	49.71481 °N	104.64203 °E
<b>Family: Nemouridae</b>					
Nemoura arctica	Within Known Range? Y	Nearest Occurrence:	213.55 KM	49.65142 °N	103.88064 °E
<b>Family: Perlidae</b>					
Kamimuria exilis	Within Known Range? N	Nearest Occurrence:	682.58 KM	50.16278 °N	98.84212 °E

**Basin:** Arctic Ocean Basin

**Aimags:** Bulgan

**Soums:** Bayannuur

Freshwater Ecoregion: Lake Baikal

Terrestrial Ecoregion: Mongolian-Manchurian Grassland

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Possible Total: 5**

Family: Nemouridae

Amphinemura standfussi Within Known Range? N Nearest Occurrence: 238.50 KM 49.33339°N 102.97786°E

Family: Perlodidae

Arcynopteryx compacta Within Known Range? Y Nearest Occurrence: 200.55 KM 49.62414°N 104.24594°E

Arcynopteryx polaris Within Known Range? Y Nearest Occurrence: 221.92 KM 49.70184°N 103.80040°E

Kaszabia nigricauda Within Known Range? Y Nearest Occurrence: 81.12 KM 47.85250°N 105.25567°E

Megarcys ochracea Within Known Range? N Nearest Occurrence: 237.69 KM 49.77776°N 103.60860°E

**LOE Rating: Predicted Total: 15**

Family: Capniidae

Capnia khulsbagia Within Known Range? N Nearest Occurrence: 548.14 KM 50.98944°N 100.71944°E

Capnia nigra Within Known Range? N Nearest Occurrence: 540.49 KM 50.92452°N 100.75528°E

Mesocapnia variabilis Within Known Range? Y Nearest Occurrence: 382.32 KM 48.42080°N 107.91406°E

Family: Chloroperlidae

Alaskaperla longidentata Within Known Range? Y Nearest Occurrence: 251.36 KM 49.95588°N 105.33791°E

Alloperla deminuta Within Known Range? Y Nearest Occurrence: 260.28 KM 49.70678°N 103.10288°E

Family: Leuctridae

Leuctra fusca Within Known Range? N Nearest Occurrence: 336.51 KM 49.08643°N 107.28952°E

Family: Nemouridae

Nemoura sahlbergi Within Known Range? Y Nearest Occurrence: 221.52 KM 49.70184°N 103.80040°E

Family: Perlodidae

Diura bicaudata Within Known Range? N Nearest Occurrence: 514.93 KM 47.21768°N 99.92824°E

Diura majuscula Within Known Range? Y Nearest Occurrence: 259.36 KM 46.89303°N 102.39457°E

Isoperla altaica Within Known Range? Y Nearest Occurrence: 211.79 KM 48.87748°N 106.12370°E

Isoperla eximia Within Known Range? N Nearest Occurrence: 359.69 KM 49.01829°N 107.54453°E

Isoperla mongolica Within Known Range? Y Nearest Occurrence: 309.38 KM 47.26999°N 101.80227°E

Isoperla potanini Within Known Range? N Nearest Occurrence: 309.38 KM 47.26999°N 101.80227°E

Skwala pusilla Within Known Range? N Nearest Occurrence: 1,779.10 KM 48.51277°N 88.51107°E

Family: Taeniopterygidae

Taenionema japonicum Within Known Range? Y Nearest Occurrence: 329.78 KM 49.05411°N 107.23175°E

**LOE Rating: Unlikely Total: 2**

Family: Capniidae

Mesocapnia altaica Within Known Range? N Nearest Occurrence: 1,735.52 KM 48.43684°N 88.90094°E

Family: Nemouridae

Nemurella pictetii Within Known Range? N Nearest Occurrence: 644.12 KM 51.07896°N 99.70857°E

**Basin:** Arctic Ocean Basin

**Aimag:** Bulgan

**Soum:** Bugat

Freshwater Ecoregion: Lake Baikal

Terrestrial Ecoregion: Selenge-Orkhon Forest Steppe

**WQM Sites:**

WQM Sites: # 160 (Achut River @ N 48.82423° E 103.5018°)

**LOE Rating: Highly Likely Total: 2**

Family: Chloroperlidae

Alloperla joosti Within Known Range? Y Nearest Occurrence: 39.78 KM 49.21675°N 103.10750°E

Suwallia teleckojensis Within Known Range? Y Nearest Occurrence: 39.85 KM 49.21675°N 103.10750°E

**LOE Rating: Likely Total: 15**

Family: Capniidae

Isocapnia guentheri Within Known Range? Y Nearest Occurrence: 78.27 KM 49.70678°N 103.10288°E

Isocapnia sibirica Within Known Range? N Nearest Occurrence: 271.82 KM 47.26999°N 101.80227°E

Family: Chloroperlidae

Alloperla mediata Within Known Range? Y Nearest Occurrence: 78.27 KM 49.70678°N 103.10288°E

Alloperla rostellata Within Known Range? Y Nearest Occurrence: 78.27 KM 49.70678°N 103.10288°E

Haploperla lepnevae Within Known Range? Y Nearest Occurrence: 78.27 KM 49.70678°N 103.10288°E

Suwallia kerzhneri Within Known Range? Y Nearest Occurrence: 226.46 KM 50.35162°N 105.04436°E

Family: Nemouridae

Amphinemura borealis Within Known Range? Y Nearest Occurrence: 58.26 KM 49.33339°N 102.97786°E

Nemoura cinerea Within Known Range? Y Nearest Occurrence: 140.89 KM 49.68122°N 104.56461°E

Family: Perlidae

Agnetina brevipennis Within Known Range? Y Nearest Occurrence: 105.58 KM 49.48086°N 104.30864°E

Paragnetina flavotincta Within Known Range? Y Nearest Occurrence: 58.26 KM 49.33339°N 102.97786°E

Family: Perlodidae

Arcynopteryx polaris Within Known Range? Y Nearest Occurrence: 78.83 KM 49.77776°N 103.60860°E

Arcynopteryx sajanensis Within Known Range? N Nearest Occurrence: 422.80 KM 51.61397°N 100.59972°E

Isoperla asiatica Within Known Range? Y Nearest Occurrence: 78.27 KM 49.70678°N 103.10288°E

Isoperla kozlovi Within Known Range? Y Nearest Occurrence: 87.04 KM 49.38617°N 102.71667°E

Isoperla lunigera Within Known Range? Y Nearest Occurrence: 87.04 KM 49.38617°N 102.71667°E

**LOE Rating: Probable Total: 7**

Family: Capniidae

Isocapnia kudia Within Known Range? N Nearest Occurrence: 483.07 KM 51.25356°N 99.66687°E

Family: Nemouridae

Nemoura arctica Within Known Range? Y Nearest Occurrence: 78.41 KM 49.70678°N 103.10288°E

Family: Perlidae

Kamimuria exilis Within Known Range? N Nearest Occurrence: 525.29 KM 50.16278°N 98.84212°E

Family: Perlodidae

Arcynopteryx compacta Within Known Range? Y Nearest Occurrence: 78.83 KM 49.77776°N 103.60860°E

Isoperla obscura Within Known Range? Y Nearest Occurrence: 87.04 KM 49.38617°N 102.71667°E

Pictetiella asiatica Within Known Range? N Nearest Occurrence: 431.10 KM 51.65822°N 100.53000°E

Family: Pteronarcyidae

Pteronarcys reticulata Within Known Range? Y Nearest Occurrence: 106.93 KM 49.63453°N 102.64845°E

**Basin:** Arctic Ocean Basin  
**Aimags:** Bulgan  
**Soums:** Bugat

Freshwater Ecoregion: Lake Baikal  
 Terrestrial Ecoregion: Selenge-Orkhon Forest Steppe

**WQM Sites:**

WQM Sites: # 160 (Achut River @ N 48.82423° E 103.5018°)

**LOE Rating: Possible Total: 7**

Family: Leuctridae						
Paraleuctra zapekinae	Within Known Range? N	Nearest Occurrence:	150.23 KM	49.71481°N	104.64203°E	
Family: Nemouridae						
Amphinemura standfussi	Within Known Range? Y	Nearest Occurrence:	58.26 KM	49.33339°N	102.97786°E	
Family: Perlidae						
Agnetina cocandica	Within Known Range? Y	Nearest Occurrence:	194.40 KM	49.16354°N	105.18880°E	
Agnetina extrema	Within Known Range? Y	Nearest Occurrence:	215.20 KM	50.32719°N	101.95058°E	
Family: Perlodidae						
Isoperla potanini	Within Known Range? N	Nearest Occurrence:	243.97 KM	50.62324°N	101.87412°E	
Kaszabia nigricauda	Within Known Range? Y	Nearest Occurrence:	215.20 KM	50.32719°N	101.95058°E	
Megarcys ochracea	Within Known Range? Y	Nearest Occurrence:	78.69 KM	49.77776°N	103.60860°E	

**LOE Rating: Predicted Total: 12**

Family: Capniidae						
Capnia khulsbagia	Within Known Range? N	Nearest Occurrence:	368.59 KM	50.98944°N	100.71944°E	
Capnia nigra	Within Known Range? N	Nearest Occurrence:	361.22 KM	50.92452°N	100.75528°E	
Mesocapnia variabilis	Within Known Range? Y	Nearest Occurrence:	366.99 KM	50.96186°N	100.72506°E	
Family: Chloroperlidae						
Alaskaperla longidentata	Within Known Range? Y	Nearest Occurrence:	231.40 KM	49.95588°N	105.33791°E	
Alloperla deminuta	Within Known Range? Y	Nearest Occurrence:	78.27 KM	49.70678°N	103.10288°E	
Family: Nemouridae						
Nemoura sahlbergi	Within Known Range? Y	Nearest Occurrence:	78.83 KM	49.70184°N	103.80040°E	
Family: Perlodidae						
Diura bicaudata	Within Known Range? N	Nearest Occurrence:	441.89 KM	47.21768°N	99.92824°E	
Diura majuscula	Within Known Range? Y	Nearest Occurrence:	270.52 KM	46.89303°N	102.39457°E	
Isoperla altaica	Within Known Range? Y	Nearest Occurrence:	299.11 KM	48.87748°N	106.12370°E	
Isoperla mongolica	Within Known Range? Y	Nearest Occurrence:	272.31 KM	47.26999°N	101.80227°E	
Skwala pusilla	Within Known Range? N	Nearest Occurrence:	1,658.58 KM	48.51277°N	88.51107°E	
Family: Taeniopterygidae						
Taenionema japonicum	Within Known Range? Y	Nearest Occurrence:	321.21 KM	47.28244°N	101.18793°E	

**LOE Rating: Unlikely Total: 4**

Family: Capniidae						
Mesocapnia altaica	Within Known Range? N	Nearest Occurrence:	1,615.70 KM	48.43684°N	88.90094°E	
Family: Leuctridae						
Leuctra fusca	Within Known Range? N	Nearest Occurrence:	427.06 KM	49.08643°N	107.28952°E	
Family: Nemouridae						
Nemurella pictetii	Within Known Range? N	Nearest Occurrence:	469.64 KM	51.07896°N	99.70857°E	
Family: Perlodidae						
Isoperla eximia	Within Known Range? N	Nearest Occurrence:	455.43 KM	49.01829°N	107.54453°E	

**Basin:** Arctic Ocean Basin

**Aimags:** Bulgan

**Soums:** Buregkhangai

Freshwater Ecoregion: Lake Baikal

Terrestrial Ecoregion: Selenge-Orkhon Forest Steppe

**WQM Sites:**

WQM Sites: # 9 (Tuul River @ N 48.28095° E 104.38125°) # 10 (Tuul River @ N 48.33878° E 104.44827°) # 11 (Tuul River @ N 48.37555° E 104.5036°)

**LOE Rating: Highly Likely Total: 8**

Family: Capniidae

Isocapnia guentheri Within Known Range? Y Nearest Occurrence: 164.81 KM 49.77776°N 103.60860°E

Family: Chloroperlidae

Alloperla joosti Within Known Range? N Nearest Occurrence: 144.28 KM 49.21675°N 103.10750°E

Alloperla rostellata Within Known Range? N Nearest Occurrence: 164.81 KM 49.77776°N 103.60860°E

Haploperla lepnevae Within Known Range? Y Nearest Occurrence: 124.80 KM 49.48086°N 104.30864°E

Family: Perlidae

Agnetina brevipennis Within Known Range? Y Nearest Occurrence: 124.80 KM 49.48086°N 104.30864°E

Paragnetina flavotincta Within Known Range? N Nearest Occurrence: 124.80 KM 49.48086°N 104.30864°E

Family: Perlodidae

Isoperla kozlovi Within Known Range? Y Nearest Occurrence: 124.80 KM 49.48086°N 104.30864°E

Isoperla lunigera Within Known Range? Y Nearest Occurrence: 124.80 KM 49.48086°N 104.30864°E

**LOE Rating: Likely Total: 13**

Family: Capniidae

Isocapnia sibirica Within Known Range? N Nearest Occurrence: 282.97 KM 47.26999°N 101.80227°E

Family: Chloroperlidae

Alloperla mediata Within Known Range? N Nearest Occurrence: 164.81 KM 49.77776°N 103.60860°E

Suwallia kerzhneri Within Known Range? Y Nearest Occurrence: 243.08 KM 50.35162°N 105.04436°E

Suwallia teleckojensis Within Known Range? Y Nearest Occurrence: 144.54 KM 49.21675°N 103.10750°E

Family: Leuctridae

Paraleuctra zapekinae Within Known Range? N Nearest Occurrence: 160.34 KM 49.71481°N 104.64203°E

Family: Nemouridae

Amphinemura borealis Within Known Range? Y Nearest Occurrence: 163.63 KM 49.33339°N 102.97786°E

Nemoura cinerea Within Known Range? Y Nearest Occurrence: 153.79 KM 49.68122°N 104.56461°E

Family: Perlidae

Agnetina extrema Within Known Range? Y Nearest Occurrence: 270.34 KM 48.83420°N 106.49113°E

Family: Perlodidae

Arcynopteryx sajanensis Within Known Range? N Nearest Occurrence: 530.13 KM 51.61397°N 100.59972°E

Isoperla asiatica Within Known Range? Y Nearest Occurrence: 184.49 KM 49.70678°N 103.10288°E

Isoperla obscura Within Known Range? Y Nearest Occurrence: 124.80 KM 49.48086°N 104.30864°E

Pictetiella asiatica Within Known Range? N Nearest Occurrence: 538.20 KM 51.65822°N 100.53000°E

Family: Pteronarcyidae

Pteronarcys reticulata Within Known Range? Y Nearest Occurrence: 213.15 KM 49.63453°N 102.64845°E

**LOE Rating: Probable Total: 4**

Family: Capniidae

Isocapnia kudia Within Known Range? N Nearest Occurrence: 586.55 KM 51.25356°N 99.66687°E

Family: Nemouridae

Nemoura arctica Within Known Range? Y Nearest Occurrence: 143.86 KM 49.65142°N 103.88064°E

Family: Perlidae

Agnetina cocandica Within Known Range? Y Nearest Occurrence: 149.50 KM 49.16354°N 105.18880°E

Kamimuria exilis Within Known Range? N Nearest Occurrence: 617.40 KM 50.16278°N 98.84212°E

Research funded by the National Science Foundation

DEB-BSI #0206674: A Survey of the Aquatic Insects of the Selenge River Basin. P.I.'s: JKGelhaus, JCMorse, BHayford.

DEB # 0743732: Aquatic Insects of the Altai and Hangai Mountain Drainages. P.I.'s: JKGelhaus, JCMorse, CRNelson.

<http://clade.ansp.org/entomology/mongolia/index.html>



**Basin:** Arctic Ocean Basin

**Aimags:** Bulgan

**Soums:** Buregkhangai

**Freshwater Ecoregion:** Lake Baikal

**Terrestrial Ecoregion:** Selenge-Orkhon Forest Steppe

**WQM Sites:**

WQM Sites: # 9 (Tuul River @ N 48.28095° E 104.38125°) # 10 (Tuul River @ N 48.33878° E 104.44827°) # 11 (Tuul River @ N 48.37555° E 104.5036°)

**LOE Rating: Possible Total: 5**

**Family:** Nemouridae

Amphinemura standfussi Within Known Range? N Nearest Occurrence: 163.63 KM 49.33339°N 102.97786 °E

**Family:** Perlodidae

Arcynopteryx compacta Within Known Range? Y Nearest Occurrence: 139.72 KM 49.62414°N 104.24594 °E

Arcynopteryx polaris Within Known Range? Y Nearest Occurrence: 151.10 KM 49.70184°N 103.80040 °E

Kaszabia nigricauda Within Known Range? Y Nearest Occurrence: 140.94 KM 47.85250°N 105.25567 °E

Megarcys ochracea Within Known Range? N Nearest Occurrence: 164.81 KM 49.77776°N 103.60860 °E

**LOE Rating: Predicted Total: 15**

**Family:** Capniidae

Capnia khulsbagia Within Known Range? N Nearest Occurrence: 474.20 KM 50.98944°N 100.71944 °E

Capnia nigra Within Known Range? N Nearest Occurrence: 466.65 KM 50.92452°N 100.75528 °E

Mesocapnia variabilis Within Known Range? Y Nearest Occurrence: 424.26 KM 48.42080°N 107.91406 °E

**Family:** Chloroperlidae

Alaskaperla longidentata Within Known Range? Y Nearest Occurrence: 222.83 KM 49.95588°N 105.33791 °E

Alloperla deminuta Within Known Range? Y Nearest Occurrence: 184.49 KM 49.70678°N 103.10288 °E

**Family:** Leuctridae

Leuctra fusca Within Known Range? N Nearest Occurrence: 362.81 KM 49.08643°N 107.28952 °E

**Family:** Nemouridae

Nemoura sahlbergi Within Known Range? Y Nearest Occurrence: 150.83 KM 49.70184°N 103.80040 °E

**Family:** Perlodidae

Diura bicaudata Within Known Range? N Nearest Occurrence: 480.49 KM 47.21768°N 99.92824 °E

Diura majuscula Within Known Range? Y Nearest Occurrence: 251.25 KM 46.89303°N 102.39457 °E

Isoperla altaica Within Known Range? Y Nearest Occurrence: 231.94 KM 48.87748°N 106.12370 °E

Isoperla eximia Within Known Range? N Nearest Occurrence: 389.03 KM 49.01829°N 107.54453 °E

Isoperla mongolica Within Known Range? Y Nearest Occurrence: 283.48 KM 47.26999°N 101.80227 °E

Isoperla potanini Within Known Range? N Nearest Occurrence: 283.48 KM 47.26999°N 101.80227 °E

Skwala pusilla Within Known Range? N Nearest Occurrence: 1,730.33 KM 48.51277°N 88.51107 °E

**Family:** Taeniopterygidae

Taenionema japonicum Within Known Range? Y Nearest Occurrence: 345.81 KM 47.28244°N 101.18793 °E

**LOE Rating: Unlikely Total: 2**

**Family:** Capniidae

Mesocapnia altaica Within Known Range? N Nearest Occurrence: 1,687.00 KM 48.43684°N 88.90094 °E

**Family:** Nemouridae

Nemurella pictetii Within Known Range? N Nearest Occurrence: 572.28 KM 51.07896°N 99.70857 °E

**Basin:** Arctic Ocean Basin  
**Aimag:** Bulgan  
**Soum:** Dashinchilen

**Freshwater Ecoregion:** Lake Baikal  
**Terrestrial Ecoregion:** Mongolian-Manchurian Grassland

**WQM Sites:**

WQM Sites: # 101 (Harbuh River @ N 47.87642° E 103.88038°)

**LOE Rating: Highly Likely Total: 8**

<b>Family: Capniidae</b>					
Isocapnia guentheri	Within Known Range? Y	Nearest Occurrence:	228.69 KM	49.77776 °N	103.60860 °E
<b>Family: Chloroperlidae</b>					
Alloperla joosti	Within Known Range? N	Nearest Occurrence:	194.67 KM	49.21675 °N	103.10750 °E
Alloperla rostellata	Within Known Range? N	Nearest Occurrence:	228.69 KM	49.77776 °N	103.60860 °E
Haploperla lepnevae	Within Known Range? Y	Nearest Occurrence:	189.99 KM	49.48086 °N	104.30864 °E
<b>Family: Perlidae</b>					
Agnetina brevipennis	Within Known Range? Y	Nearest Occurrence:	189.99 KM	49.48086 °N	104.30864 °E
Paragnetina flavotincta	Within Known Range? N	Nearest Occurrence:	189.99 KM	49.48086 °N	104.30864 °E
<b>Family: Perlodidae</b>					
Isoperla kozlovi	Within Known Range? Y	Nearest Occurrence:	127.00 KM	47.85250 °N	105.25567 °E
Isoperla lunigera	Within Known Range? N	Nearest Occurrence:	189.99 KM	49.48086 °N	104.30864 °E

**LOE Rating: Likely Total: 14**

<b>Family: Capniidae</b>					
Isocapnia kudia	Within Known Range? N	Nearest Occurrence:	626.32 KM	51.25356 °N	99.66687 °E
Isocapnia sibirica	Within Known Range? Y	Nearest Occurrence:	262.76 KM	47.26999 °N	101.80227 °E
<b>Family: Chloroperlidae</b>					
Alloperla mediata	Within Known Range? N	Nearest Occurrence:	228.69 KM	49.77776 °N	103.60860 °E
Suwallia kerzhneri	Within Known Range? Y	Nearest Occurrence:	303.52 KM	50.35162 °N	105.04436 °E
Suwallia teleckojensis	Within Known Range? Y	Nearest Occurrence:	195.02 KM	49.21675 °N	103.10750 °E
<b>Family: Nemouridae</b>					
Amphinemura borealis	Within Known Range? Y	Nearest Occurrence:	213.57 KM	49.33339 °N	102.97786 °E
Nemoura cinerea	Within Known Range? Y	Nearest Occurrence:	216.84 KM	49.68122 °N	104.56461 °E
<b>Family: Perlidae</b>					
Agnetina cocandica	Within Known Range? Y	Nearest Occurrence:	194.80 KM	49.16354 °N	105.18880 °E
Agnetina extrema	Within Known Range? Y	Nearest Occurrence:	262.76 KM	47.26999 °N	101.80227 °E
<b>Family: Perlodidae</b>					
Arcynopteryx sajanensis	Within Known Range? N	Nearest Occurrence:	578.29 KM	51.61397 °N	100.59972 °E
Isoperla asiatica	Within Known Range? Y	Nearest Occurrence:	241.48 KM	49.70678 °N	103.10288 °E
Isoperla obscura	Within Known Range? Y	Nearest Occurrence:	127.00 KM	47.85250 °N	105.25567 °E
Pictetiella asiatica	Within Known Range? N	Nearest Occurrence:	586.11 KM	51.65822 °N	100.53000 °E
<b>Family: Pteronarcyidae</b>					
Pteronarcys reticulata	Within Known Range? Y	Nearest Occurrence:	262.32 KM	49.63453 °N	102.64845 °E

**LOE Rating: Probable Total: 3**

<b>Family: Leuctridae</b>					
Paraleuctra zapekinae	Within Known Range? N	Nearest Occurrence:	222.58 KM	49.71481 °N	104.64203 °E
<b>Family: Nemouridae</b>					
Nemoura arctica	Within Known Range? Y	Nearest Occurrence:	209.67 KM	49.65142 °N	103.88064 °E
<b>Family: Perlidae</b>					
Kamimuria exilis	Within Known Range? N	Nearest Occurrence:	643.29 KM	50.16278 °N	98.84212 °E

**Basin:** Arctic Ocean Basin

**Aimags:** Bulgan

**Soums:** Dashinchilen

Freshwater Ecoregion: Lake Baikal

Terrestrial Ecoregion: Mongolian-Manchurian Grassland

**WQM Sites:**

WQM Sites: # 101 (Harbuh River @ N 47.87642° E 103.88038°)

**LOE Rating: Possible Total: 5**

Family: Nemouridae

Amphinemura standfussi Within Known Range? N Nearest Occurrence: 213.57 KM 49.33339°N 102.97786°E

Family: Perlodidae

Arcynopteryx compacta Within Known Range? Y Nearest Occurrence: 205.55 KM 49.62414°N 104.24594°E

Arcynopteryx polaris Within Known Range? Y Nearest Occurrence: 216.49 KM 49.70184°N 103.80040°E

Kaszabia nigricauda Within Known Range? Y Nearest Occurrence: 127.00 KM 47.85250°N 105.25567°E

Megarcys ochracea Within Known Range? N Nearest Occurrence: 228.69 KM 49.77776°N 103.60860°E

**LOE Rating: Predicted Total: 15**

Family: Capniidae

Capnia khulsbagia Within Known Range? N Nearest Occurrence: 518.49 KM 50.98944°N 100.71944°E

Capnia nigra Within Known Range? N Nearest Occurrence: 510.66 KM 50.92452°N 100.75528°E

Mesocapnia variabilis Within Known Range? Y Nearest Occurrence: 428.55 KM 48.42080°N 107.91406°E

Family: Chloroperlidae

Alaskaperla longidentata Within Known Range? Y Nearest Occurrence: 277.08 KM 49.95588°N 105.33791°E

Alloperla deminuta Within Known Range? Y Nearest Occurrence: 241.48 KM 49.70678°N 103.10288°E

Family: Leuctridae

Leuctra fusca Within Known Range? N Nearest Occurrence: 381.15 KM 49.08643°N 107.28952°E

Family: Nemouridae

Nemoura sahlbergi Within Known Range? Y Nearest Occurrence: 216.10 KM 49.70184°N 103.80040°E

Family: Perlodidae

Diura bicaudata Within Known Range? N Nearest Occurrence: 468.77 KM 47.21768°N 99.92824°E

Diura majuscula Within Known Range? Y Nearest Occurrence: 215.14 KM 46.89303°N 102.39457°E

Isoperla altaica Within Known Range? Y Nearest Occurrence: 254.63 KM 48.87748°N 106.12370°E

Isoperla eximia Within Known Range? N Nearest Occurrence: 404.85 KM 49.01829°N 107.54453°E

Isoperla mongolica Within Known Range? Y Nearest Occurrence: 263.23 KM 47.26999°N 101.80227°E

Isoperla potanini Within Known Range? N Nearest Occurrence: 263.23 KM 47.26999°N 101.80227°E

Skwala pusilla Within Known Range? N Nearest Occurrence: 1,733.81 KM 48.51277°N 88.51107°E

Family: Taeniopterygidae

Taenionema japonicum Within Known Range? Y Nearest Occurrence: 330.03 KM 47.28244°N 101.18793°E

**LOE Rating: Unlikely Total: 2**

Family: Capniidae

Mesocapnia altaica Within Known Range? N Nearest Occurrence: 1,690.19 KM 48.43684°N 88.90094°E

Family: Nemouridae

Nemurella pictetii Within Known Range? N Nearest Occurrence: 610.86 KM 51.07896°N 99.70857°E



Basin: Arctic Ocean Basin

Aimags: Bulgan

Soums: Gurvanbulag

Freshwater Ecoregion: Lake Baikal

Terrestrial Ecoregion: Mongolian-Manchurian Grassland

WQM Sites:

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Highly Likely Total: 8**

Family: Capniidae

Isocapnia guentheri Within Known Range? Y Nearest Occurrence: 218.52 KM 49.70678 °N 103.10288 °E

Family: Chloroperlidae

Alloperla joosti Within Known Range? Y Nearest Occurrence: 164.94 KM 49.21675 °N 103.10750 °E

Alloperla rostellata Within Known Range? N Nearest Occurrence: 218.52 KM 49.70678 °N 103.10288 °E

Haploperla lepnevae Within Known Range? Y Nearest Occurrence: 214.95 KM 49.48086 °N 104.30864 °E

Family: Perlidae

Agnetina brevipennis Within Known Range? Y Nearest Occurrence: 130.65 KM 47.73941 °N 102.23811 °E

Paragnetina flavotincta Within Known Range? N Nearest Occurrence: 180.94 KM 49.33339 °N 102.97786 °E

Family: Perlodidae

Isoperla kozlovi Within Known Range? Y Nearest Occurrence: 187.18 KM 47.26999 °N 101.80227 °E

Isoperla lunigera Within Known Range? N Nearest Occurrence: 196.14 KM 49.38617 °N 102.71667 °E

**LOE Rating: Likely Total: 14**

Family: Capniidae

Isocapnia kudia Within Known Range? N Nearest Occurrence: 568.51 KM 51.25356 °N 99.66687 °E

Isocapnia sibirica Within Known Range? Y Nearest Occurrence: 187.18 KM 47.26999 °N 101.80227 °E

Family: Chloroperlidae

Alloperla mediata Within Known Range? N Nearest Occurrence: 218.52 KM 49.70678 °N 103.10288 °E

Suwallia kerzhneri Within Known Range? Y Nearest Occurrence: 241.52 KM 47.59928 °N 101.24521 °E

Suwallia teleckojensis Within Known Range? Y Nearest Occurrence: 165.23 KM 49.21675 °N 103.10750 °E

Family: Nemouridae

Amphinemura borealis Within Known Range? Y Nearest Occurrence: 180.94 KM 49.33339 °N 102.97786 °E

Nemoura cinerea Within Known Range? Y Nearest Occurrence: 248.24 KM 49.68122 °N 104.56461 °E

Family: Perlidae

Agnetina extrema Within Known Range? Y Nearest Occurrence: 187.18 KM 47.26999 °N 101.80227 °E

Kamimuria exilis Within Known Range? N Nearest Occurrence: 574.27 KM 50.16278 °N 98.84212 °E

Family: Perlodidae

Arcynopteryx sajanensis Within Known Range? N Nearest Occurrence: 530.45 KM 51.61397 °N 100.59972 °E

Isoperla asiatica Within Known Range? Y Nearest Occurrence: 218.52 KM 49.70678 °N 103.10288 °E

Isoperla obscura Within Known Range? Y Nearest Occurrence: 196.14 KM 49.38617 °N 102.71667 °E

Pictetiella asiatica Within Known Range? N Nearest Occurrence: 538.04 KM 51.65822 °N 100.53000 °E

Family: Pteronarcyidae

Pteronarcys reticulata Within Known Range? Y Nearest Occurrence: 224.49 KM 49.63453 °N 102.64845 °E

**LOE Rating: Probable Total: 4**

Family: Leuctridae

Paraleuctra zapekinae Within Known Range? N Nearest Occurrence: 255.91 KM 49.71481 °N 104.64203 °E

Family: Nemouridae

Nemoura arctica Within Known Range? Y Nearest Occurrence: 187.52 KM 47.26999 °N 101.80227 °E

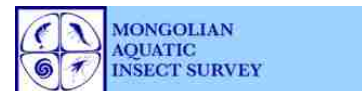
Family: Perlidae

Agnetina cocandica Within Known Range? Y Nearest Occurrence: 251.33 KM 49.16354 °N 105.18880 °E

Family: Perlodidae

Arcynopteryx compacta Within Known Range? Y Nearest Occurrence: 153.99 KM 46.88627 °N 102.34304 °E

Research funded by the National Science Foundation  
DEB-BSI #0206674: A Survey of the Aquatic Insects of the Selenge River Basin. P.I.'s: JKGelhaus, JCMorse, BHayford.  
DEB # 0743732: Aquatic Insects of the Altai and Hangai Mountain Drainages. P.I.'s: JKGelhaus, JCMorse, CRNelson.  
<http://clade.ansp.org/entomology/mongolia/index.html>



**Basin:** Arctic Ocean Basin

**Aimags:** Bulgan

**Soums:** Gurvanbulag

Freshwater Ecoregion: Lake Baikal

Terrestrial Ecoregion: Mongolian-Manchurian Grassland

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Possible Total: 5**

Family: Nemouridae

Amphinemura standfussi Within Known Range? N Nearest Occurrence: 180.94 KM 49.33339°N 102.97786°E

Family: Perlodidae

Arcynopteryx polaris Within Known Range? Y Nearest Occurrence: 200.28 KM 47.04409°N 101.76352°E

Isoperla potanini Within Known Range? N Nearest Occurrence: 187.52 KM 47.26999°N 101.80227°E

Kaszabia nigricauda Within Known Range? Y Nearest Occurrence: 204.56 KM 47.85250°N 105.25567°E

Megarcys ochracea Within Known Range? N Nearest Occurrence: 224.67 KM 49.77776°N 103.60860°E

**LOE Rating: Predicted Total: 12**

Family: Capniidae

Capnia khulsbagia Within Known Range? N Nearest Occurrence: 466.67 KM 50.98944°N 100.71944°E

Capnia nigra Within Known Range? N Nearest Occurrence: 452.43 KM 50.51003°N 100.40375°E

Mesocapnia variabilis Within Known Range? Y Nearest Occurrence: 392.43 KM 47.21768°N 99.92824°E

Family: Chloroperlidae

Alaskaperla longidentata Within Known Range? Y Nearest Occurrence: 216.68 KM 46.82177°N 101.70479°E

Alloperla deminuta Within Known Range? Y Nearest Occurrence: 187.18 KM 47.26999°N 101.80227°E

Family: Nemouridae

Nemoura sahlbergi Within Known Range? Y Nearest Occurrence: 219.42 KM 49.70184°N 103.80040°E

Family: Perlodidae

Diura bicaudata Within Known Range? N Nearest Occurrence: 391.73 KM 47.21768°N 99.92824°E

Diura majuscula Within Known Range? Y Nearest Occurrence: 149.11 KM 46.89303°N 102.39457°E

Isoperla altaica Within Known Range? Y Nearest Occurrence: 277.00 KM 47.11192°N 101.01048°E

Isoperla mongolica Within Known Range? Y Nearest Occurrence: 187.52 KM 47.26999°N 101.80227°E

Skwala pusilla Within Known Range? N Nearest Occurrence: 1,656.42 KM 48.51277°N 88.51107°E

Family: Taeniopterygidae

Taenionema japonicum Within Known Range? Y Nearest Occurrence: 253.34 KM 47.28244°N 101.18793°E

**LOE Rating: Unlikely Total: 4**

Family: Capniidae

Mesocapnia altaica Within Known Range? N Nearest Occurrence: 1,612.79 KM 48.43684°N 88.90094°E

Family: Leuctridae

Leuctra fusca Within Known Range? N Nearest Occurrence: 454.48 KM 49.08643°N 107.28952°E

Family: Nemouridae

Nemurella pictetii Within Known Range? N Nearest Occurrence: 552.03 KM 51.07896°N 99.70857°E

Family: Perlodidae

Isoperla eximia Within Known Range? N Nearest Occurrence: 479.10 KM 49.01829°N 107.54453°E

**Basin:** Arctic Ocean Basin  
**Aimags:** Bulgan  
**Soums:** Khangal

Freshwater Ecoregion: Lake Baikal  
 Terrestrial Ecoregion: Selenge-Orkhon Forest Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

<b>LOE Rating:</b>	<b>Highly Likely</b>	<b>Total:</b>	<b>8</b>
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<b>Family:</b> Capniidae			
Isocapnia guentheri	Within Known Range? Y	Nearest Occurrence:	99.88 KM 49.77776 °N 103.60860 °E
<b>Family:</b> Chloroperlidae			
Alloperla joosti	Within Known Range? N	Nearest Occurrence:	145.10 KM 49.21675 °N 103.10750 °E
Alloperla rostellata	Within Known Range? N	Nearest Occurrence:	99.88 KM 49.77776 °N 103.60860 °E
Haploperla lepnevae	Within Known Range? Y	Nearest Occurrence:	17.10 KM 49.48086 °N 104.30864 °E
<b>Family:</b> Perlidae			
Agnetina brevipennis	Within Known Range? Y	Nearest Occurrence:	17.10 KM 49.48086 °N 104.30864 °E
Paragnetina flavotincta	Within Known Range? Y	Nearest Occurrence:	17.10 KM 49.48086 °N 104.30864 °E
<b>Family:</b> Perlodidae			
Isoperla kozlovi	Within Known Range? Y	Nearest Occurrence:	17.10 KM 49.48086 °N 104.30864 °E
Isoperla lunigera	Within Known Range? Y	Nearest Occurrence:	17.10 KM 49.48086 °N 104.30864 °E

<b>LOE Rating:</b>	<b>Likely</b>	<b>Total:</b>	<b>9</b>
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<b>Family:</b> Capniidae			
Isocapnia sibirica	Within Known Range? N	Nearest Occurrence:	370.79 KM 47.26999 °N 101.80227 °E
<b>Family:</b> Chloroperlidae			
Alloperla mediata	Within Known Range? Y	Nearest Occurrence:	99.88 KM 49.77776 °N 103.60860 °E
Suwallia kerzhneri	Within Known Range? Y	Nearest Occurrence:	130.69 KM 50.35162 °N 105.04436 °E
Suwallia teleckojensis	Within Known Range? Y	Nearest Occurrence:	47.16 KM 49.71481 °N 104.64203 °E
<b>Family:</b> Leuctridae			
Paraleuctra zapekinae	Within Known Range? Y	Nearest Occurrence:	47.08 KM 49.71481 °N 104.64203 °E
<b>Family:</b> Nemouridae			
Amphinemura borealis	Within Known Range? Y	Nearest Occurrence:	130.89 KM 50.03638 °N 105.37392 °E
Nemoura cinerea	Within Known Range? Y	Nearest Occurrence:	39.54 KM 49.68122 °N 104.56461 °E
<b>Family:</b> Perlodidae			
Isoperla asiatica	Within Known Range? Y	Nearest Occurrence:	149.69 KM 49.70678 °N 103.10288 °E
Isoperla obscura	Within Known Range? Y	Nearest Occurrence:	17.10 KM 49.48086 °N 104.30864 °E



**Basin:** Arctic Ocean Basin  
**Aimags:** Bulgan  
**Soums:** Khangal

Freshwater Ecoregion: Lake Baikal  
 Terrestrial Ecoregion: Selenge-Orkhon Forest Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

<b>LOE Rating:</b>	<b>Probable</b>	<b>Total:</b>	<b>10</b>
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Family: Capniidae						
Isocapnia kudia	Within Known Range?	N	Nearest Occurrence:	566.46 KM	51.25356 °N	99.66687 °E
Family: Nemouridae						
Nemoura arctica	Within Known Range?	Y	Nearest Occurrence:	66.76 KM	49.65142 °N	103.88064 °E
Family: Perlidae						
Agnetina extrema	Within Known Range?	Y	Nearest Occurrence:	238.69 KM	48.83420 °N	106.49113 °E
Kamimuria exilis	Within Known Range?	N	Nearest Occurrence:	625.15 KM	50.16278 °N	98.84212 °E
Family: Perlodidae						
Arcynopteryx compacta	Within Known Range?	Y	Nearest Occurrence:	34.19 KM	49.62414 °N	104.24594 °E
Arcynopteryx polaris	Within Known Range?	Y	Nearest Occurrence:	77.28 KM	49.70184 °N	103.80040 °E
Arcynopteryx sajanensis	Within Known Range?	N	Nearest Occurrence:	491.85 KM	51.61397 °N	100.59972 °E
Megarcys ochracea	Within Known Range?	Y	Nearest Occurrence:	99.88 KM	49.77776 °N	103.60860 °E
Pictetiella asiatica	Within Known Range?	N	Nearest Occurrence:	500.12 KM	51.65822 °N	100.53000 °E
Family: Pteronarcyidae						
Pteronarcys reticulata	Within Known Range?	Y	Nearest Occurrence:	197.48 KM	49.63453 °N	102.64845 °E

<b>LOE Rating:</b>	<b>Possible</b>	<b>Total:</b>	<b>3</b>
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Family: Nemouridae						
Amphinemura standfussi	Within Known Range?	Y	Nearest Occurrence:	158.62 KM	49.33339 °N	102.97786 °E
Family: Perlidae						
Agnetina cocandica	Within Known Range?	Y	Nearest Occurrence:	89.74 KM	49.16354 °N	105.18880 °E
Family: Perlodidae						
Kaszabia nigricauda	Within Known Range?	Y	Nearest Occurrence:	192.24 KM	47.85250 °N	105.25567 °E



**Basin:** Arctic Ocean Basin  
**Aimags:** Bulgan  
**Soums:** Khangal

Freshwater Ecoregion: Lake Baikal  
 Terrestrial Ecoregion: Selenge-Orkhon Forest Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

<b>LOE Rating:</b>	<b>Predicted</b>	<b>Total:</b>	14
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<b>Family:</b> Capniidae			
Capnia khulsbagia	Within Known Range? N	Nearest Occurrence: 447.37 KM	50.98944 °N 100.71944 °E
Capnia nigra	Within Known Range? N	Nearest Occurrence: 440.85 KM	50.92452 °N 100.75528 °E
Mesocapnia variabilis	Within Known Range? Y	Nearest Occurrence: 403.83 KM	48.42080 °N 107.91406 °E
<b>Family:</b> Chloroperlidae			
Alaskaperla longidentata	Within Known Range? Y	Nearest Occurrence: 122.61 KM	49.95588 °N 105.33791 °E
Alloperla deminuta	Within Known Range? Y	Nearest Occurrence: 149.69 KM	49.70678 °N 103.10288 °E
<b>Family:</b> Leuctridae			
Leuctra fusca	Within Known Range? N	Nearest Occurrence: 321.46 KM	49.08643 °N 107.28952 °E
<b>Family:</b> Nemouridae			
Nemoura sahlbergi	Within Known Range? Y	Nearest Occurrence: 77.14 KM	49.70184 °N 103.80040 °E
<b>Family:</b> Perlodidae			
Diura bicaudata	Within Known Range? N	Nearest Occurrence: 551.14 KM	47.21768 °N 99.92824 °E
Diura majuscula	Within Known Range? Y	Nearest Occurrence: 354.17 KM	46.89303 °N 102.39457 °E
Isoperla altaica	Within Known Range? Y	Nearest Occurrence: 198.40 KM	48.87748 °N 106.12370 °E
Isoperla mongolica	Within Known Range? Y	Nearest Occurrence: 371.47 KM	47.26999 °N 101.80227 °E
Isoperla potanini	Within Known Range? N	Nearest Occurrence: 314.60 KM	50.62324 °N 101.87412 °E
Skwala pusilla	Within Known Range? N	Nearest Occurrence: 1,766.92 KM	48.51277 °N 88.51107 °E
<b>Family:</b> Taeniopterygidae			
Taenionema japonicum	Within Known Range? Y	Nearest Occurrence: 316.02 KM	49.05411 °N 107.23175 °E

<b>LOE Rating:</b>	<b>Unlikely</b>	<b>Total:</b>	3
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<b>Family:</b> Capniidae			
Mesocapnia altaica	Within Known Range? N	Nearest Occurrence: 1,724.19 KM	48.43684 °N 88.90094 °E
<b>Family:</b> Nemouridae			
Nemurella pictetii	Within Known Range? N	Nearest Occurrence: 555.22 KM	51.07896 °N 99.70857 °E
<b>Family:</b> Perlodidae			
Isoperla eximia	Within Known Range? N	Nearest Occurrence: 350.40 KM	49.01829 °N 107.54453 °E



**Basin:** Arctic Ocean Basin  
**Aimags:** Bulgan  
**Soums:** Khishig-ondor

**Freshwater Ecoregion:** Lake Baikal  
**Terrestrial Ecoregion:** Selenge-Orkhon Forest Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Highly Likely Total: 6**

<b>Family: Capniidae</b>						
Isocapnia guentheri	Within Known Range? Y	Nearest Occurrence:	172.31 KM	49.70678 °N	103.10288 °E	
<b>Family: Chloroperlidae</b>						
Alloperla joosti	Within Known Range? Y	Nearest Occurrence:	120.40 KM	49.21675 °N	103.10750 °E	
Alloperla rostellata	Within Known Range? N	Nearest Occurrence:	172.31 KM	49.70678 °N	103.10288 °E	
Haploperla lepnevae	Within Known Range? Y	Nearest Occurrence:	167.24 KM	49.48086 °N	104.30864 °E	
<b>Family: Perlidae</b>						
Agnetina brevipennis	Within Known Range? Y	Nearest Occurrence:	149.79 KM	47.73941 °N	102.23811 °E	
<b>Family: Perlodidae</b>						
Isoperla kozlovi	Within Known Range? Y	Nearest Occurrence:	157.36 KM	49.38617 °N	102.71667 °E	

**LOE Rating: Likely Total: 15**

<b>Family: Capniidae</b>						
Isocapnia kudia	Within Known Range? N	Nearest Occurrence:	543.83 KM	51.25356 °N	99.66687 °E	
Isocapnia sibirica	Within Known Range? Y	Nearest Occurrence:	215.63 KM	47.26999 °N	101.80227 °E	
<b>Family: Chloroperlidae</b>						
Alloperla mediata	Within Known Range? N	Nearest Occurrence:	172.31 KM	49.70678 °N	103.10288 °E	
Suwallia kerzhneri	Within Known Range? Y	Nearest Occurrence:	259.64 KM	47.59928 °N	101.24521 °E	
Suwallia teleckojensis	Within Known Range? Y	Nearest Occurrence:	120.61 KM	49.21675 °N	103.10750 °E	
<b>Family: Nemouridae</b>						
Amphinemura borealis	Within Known Range? Y	Nearest Occurrence:	137.98 KM	49.33339 °N	102.97786 °E	
Nemoura cinerea	Within Known Range? Y	Nearest Occurrence:	201.58 KM	49.68122 °N	104.56461 °E	
<b>Family: Perlidae</b>						
Agnetina extrema	Within Known Range? Y	Nearest Occurrence:	215.63 KM	47.26999 °N	101.80227 °E	
Kamimuria exilis	Within Known Range? N	Nearest Occurrence:	562.16 KM	50.16278 °N	98.84212 °E	
Paragnetina flavotincta	Within Known Range? N	Nearest Occurrence:	137.98 KM	49.33339 °N	102.97786 °E	
<b>Family: Perlodidae</b>						
Arcynopteryx sajanensis	Within Known Range? N	Nearest Occurrence:	497.81 KM	51.61397 °N	100.59972 °E	
Isoperla asiatica	Within Known Range? Y	Nearest Occurrence:	172.31 KM	49.70678 °N	103.10288 °E	
Isoperla lunigera	Within Known Range? Y	Nearest Occurrence:	157.36 KM	49.38617 °N	102.71667 °E	
Pictetiella asiatica	Within Known Range? N	Nearest Occurrence:	505.68 KM	51.65822 °N	100.53000 °E	
<b>Family: Pteronarcyidae</b>						
Pteronarcys reticulata	Within Known Range? Y	Nearest Occurrence:	184.72 KM	49.63453 °N	102.64845 °E	

**LOE Rating: Probable Total: 4**

<b>Family: Leuctridae</b>						
Paraleuctra zapekinae	Within Known Range? N	Nearest Occurrence:	209.68 KM	49.71481 °N	104.64203 °E	
<b>Family: Nemouridae</b>						
Nemoura arctica	Within Known Range? Y	Nearest Occurrence:	165.98 KM	49.65142 °N	103.88064 °E	
<b>Family: Perlodidae</b>						
Arcynopteryx polaris	Within Known Range? Y	Nearest Occurrence:	169.45 KM	49.70184 °N	103.80040 °E	
Isoperla obscura	Within Known Range? Y	Nearest Occurrence:	157.36 KM	49.38617 °N	102.71667 °E	



**Basin:** Arctic Ocean Basin  
**Aimags:** Bulgan  
**Soums:** Khishig-ondor

Freshwater Ecoregion: Lake Baikal  
 Terrestrial Ecoregion: Selenge-Orkhon Forest Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

<b>LOE Rating:</b>	<b>Possible</b>	<b>Total:</b>	<b>5</b>
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Family: Nemouridae						
Amphinemura standfussi	Within Known Range? N	Nearest Occurrence:	137.98 KM	49.33339°N	102.97786°E	
Family: Perlidae						
Agnetina cocandica	Within Known Range? Y	Nearest Occurrence:	215.44 KM	49.16354°N	105.18880°E	
Family: Perlodidae						
Arcynopteryx compacta	Within Known Range? Y	Nearest Occurrence:	175.04 KM	49.77776°N	103.60860°E	
Kaszabia nigricauda	Within Known Range? Y	Nearest Occurrence:	198.39 KM	47.85250°N	105.25567°E	
Megarcys ochracea	Within Known Range? N	Nearest Occurrence:	174.73 KM	49.77776°N	103.60860°E	

<b>LOE Rating:</b>	<b>Predicted</b>	<b>Total:</b>	<b>13</b>
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Family: Capniidae						
Capnia khulsbagia	Within Known Range? N	Nearest Occurrence:	436.93 KM	50.98944°N	100.71944°E	
Capnia nigra	Within Known Range? N	Nearest Occurrence:	428.67 KM	50.51003°N	100.40375°E	
Mesocapnia variabilis	Within Known Range? Y	Nearest Occurrence:	412.56 KM	47.21768°N	99.92824°E	
Family: Chloroperlidae						
Alaskaperla longidentata	Within Known Range? Y	Nearest Occurrence:	252.05 KM	46.82177°N	101.70479°E	
Alloperla deminuta	Within Known Range? Y	Nearest Occurrence:	172.31 KM	49.70678°N	103.10288°E	
Family: Nemouridae						
Nemoura sahlbergi	Within Known Range? Y	Nearest Occurrence:	169.14 KM	49.70184°N	103.80040°E	
Family: Perlodidae						
Diura bicaudata	Within Known Range? N	Nearest Occurrence:	411.82 KM	47.21768°N	99.92824°E	
Diura majuscula	Within Known Range? Y	Nearest Occurrence:	191.24 KM	46.89303°N	102.39457°E	
Isoperla altaica	Within Known Range? Y	Nearest Occurrence:	300.71 KM	48.87748°N	106.12370°E	
Isoperla mongolica	Within Known Range? Y	Nearest Occurrence:	216.02 KM	47.26999°N	101.80227°E	
Isoperla potanini	Within Known Range? N	Nearest Occurrence:	216.02 KM	47.26999°N	101.80227°E	
Skwala pusilla	Within Known Range? N	Nearest Occurrence:	1,664.55 KM	48.51277°N	88.51107°E	
Family: Taeniopterygidae						
Taenionema japonicum	Within Known Range? Y	Nearest Occurrence:	277.31 KM	47.28244°N	101.18793°E	

<b>LOE Rating:</b>	<b>Unlikely</b>	<b>Total:</b>	<b>4</b>
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Family: Capniidae						
Mesocapnia altaica	Within Known Range? N	Nearest Occurrence:	1,621.13 KM	48.43684°N	88.90094°E	
Family: Leuctridae						
Leuctra fusca	Within Known Range? N	Nearest Occurrence:	431.39 KM	49.08643°N	107.28952°E	
Family: Nemouridae						
Nemurella pictetii	Within Known Range? N	Nearest Occurrence:	528.30 KM	51.07896°N	99.70857°E	
Family: Perlodidae						
Isoperla eximia	Within Known Range? N	Nearest Occurrence:	457.46 KM	49.01829°N	107.54453°E	



**Basin:** Arctic Ocean Basin

**Aimag:** Bulgan

**Soum:** Khutag-ondor

Freshwater Ecoregion: Lake Baikal

Terrestrial Ecoregion: Selenge-Orkhon Forest Steppe

**WQM Sites:**

WQM Sites: # 159 (Selenge River @ N 49.3744° E 102.83898°)

**LOE Rating: Highly Likely Total: 7**

Family: Capniidae						
Isocapnia guentheri	Within Known Range? Y	Nearest Occurrence:	39.52 KM	49.70678 °N	103.10288 °E	
Family: Chloroperlidae						
Alloperla joosti	Within Known Range? Y	Nearest Occurrence:	27.13 KM	49.21675 °N	103.10750 °E	
Alloperla rostellata	Within Known Range? Y	Nearest Occurrence:	39.52 KM	49.70678 °N	103.10288 °E	
Haploperla lepnevae	Within Known Range? Y	Nearest Occurrence:	39.52 KM	49.70678 °N	103.10288 °E	
Family: Perlidae						
Paragnetina flavotincta	Within Known Range? Y	Nearest Occurrence:	7.92 KM	49.33339 °N	102.97786 °E	
Family: Perlodidae						
Isoperla kozlovi	Within Known Range? Y	Nearest Occurrence:	24.45 KM	49.38617 °N	102.71667 °E	
Isoperla lunigera	Within Known Range? Y	Nearest Occurrence:	24.45 KM	49.38617 °N	102.71667 °E	

**LOE Rating: Likely Total: 8**

Family: Chloroperlidae						
Alloperla mediata	Within Known Range? Y	Nearest Occurrence:	39.52 KM	49.70678 °N	103.10288 °E	
Suwallia teleckojensis	Within Known Range? Y	Nearest Occurrence:	27.18 KM	49.21675 °N	103.10750 °E	
Family: Nemouridae						
Amphinemura borealis	Within Known Range? Y	Nearest Occurrence:	7.92 KM	49.33339 °N	102.97786 °E	
Nemoura arctica	Within Known Range? Y	Nearest Occurrence:	39.59 KM	49.70678 °N	103.10288 °E	
Family: Perlidae						
Agnetina brevipennis	Within Known Range? Y	Nearest Occurrence:	72.79 KM	49.88884 °N	102.50909 °E	
Family: Perlodidae						
Arcynopteryx compacta	Within Known Range? Y	Nearest Occurrence:	86.14 KM	49.77776 °N	103.60860 °E	
Isoperla asiatica	Within Known Range? Y	Nearest Occurrence:	39.52 KM	49.70678 °N	103.10288 °E	
Isoperla obscura	Within Known Range? Y	Nearest Occurrence:	24.45 KM	49.38617 °N	102.71667 °E	

**LOE Rating: Probable Total: 10**

Family: Capniidae						
Isocapnia sibirica	Within Known Range? N	Nearest Occurrence:	267.08 KM	47.26999 °N	101.80227 °E	
Family: Chloroperlidae						
Alloperla deminuta	Within Known Range? Y	Nearest Occurrence:	39.52 KM	49.70678 °N	103.10288 °E	
Suwallia kerzhneri	Within Known Range? Y	Nearest Occurrence:	206.38 KM	50.60031 °N	101.52392 °E	
Family: Nemouridae						
Amphinemura standfussi	Within Known Range? Y	Nearest Occurrence:	7.92 KM	49.33339 °N	102.97786 °E	
Nemoura cinerea	Within Known Range? Y	Nearest Occurrence:	183.51 KM	49.68122 °N	104.56461 °E	
Family: Perlodidae						
Arcynopteryx polaris	Within Known Range? Y	Nearest Occurrence:	86.14 KM	49.77776 °N	103.60860 °E	
Arcynopteryx sajanensis	Within Known Range? N	Nearest Occurrence:	358.61 KM	51.61397 °N	100.59972 °E	
Isoperla potanini	Within Known Range? Y	Nearest Occurrence:	180.88 KM	50.62324 °N	101.87412 °E	
Pictetiella asiatica	Within Known Range? N	Nearest Occurrence:	366.97 KM	51.65822 °N	100.53000 °E	
Family: Pteronarcyidae						
Pteronarcys reticulata	Within Known Range? Y	Nearest Occurrence:	41.85 KM	49.63453 °N	102.64845 °E	



**Basin:** Arctic Ocean Basin  
**Aimag:** Bulgan  
**Soum:** Khutag-ondor

Freshwater Ecoregion: Lake Baikal  
 Terrestrial Ecoregion: Selenge-Orkhon Forest Steppe

**WQM Sites:**

WQM Sites: # 159 (Selenge River @ N 49.3744° E 102.83898°)

**LOE Rating: Possible Total: 6**

Family: Capniidae						
Isocapnia kudia	Within Known Range? N	Nearest Occurrence:	417.68 KM	51.25356°N	99.66687°E	
Family: Leuctridae						
Paraleuctra zapekinae	Within Known Range? N	Nearest Occurrence:	192.64 KM	49.71481°N	104.64203°E	
Family: Perlidae						
Agnentina cocandica	Within Known Range? Y	Nearest Occurrence:	251.69 KM	49.16354°N	105.18880°E	
Kamimuria exilis	Within Known Range? N	Nearest Occurrence:	463.34 KM	50.16278°N	98.84212°E	
Family: Perlodidae						
Isoperla altaica	Within Known Range? Y	Nearest Occurrence:	331.91 KM	47.11192°N	101.01048°E	
Megarcys ochracea	Within Known Range? Y	Nearest Occurrence:	85.99 KM	49.77776°N	103.60860°E	

**LOE Rating: Predicted Total: 12**

Family: Capniidae						
Capnia khulsbagia	Within Known Range? N	Nearest Occurrence:	303.37 KM	50.98944°N	100.71944°E	
Capnia nigra	Within Known Range? N	Nearest Occurrence:	295.95 KM	50.92452°N	100.75528°E	
Mesocapnia variabilis	Within Known Range? Y	Nearest Occurrence:	301.62 KM	50.96186°N	100.72506°E	
Family: Chloroperlidae						
Alaskaperla longidentata	Within Known Range? Y	Nearest Occurrence:	228.61 KM	50.51517°N	101.21073°E	
Family: Nemouridae						
Nemoura sahlbergi	Within Known Range? Y	Nearest Occurrence:	101.84 KM	49.70184°N	103.80040°E	
Family: Perlidae						
Agnentina extrema	Within Known Range? Y	Nearest Occurrence:	150.89 KM	50.32719°N	101.95058°E	
Family: Perlodidae						
Diura bicaudata	Within Known Range? N	Nearest Occurrence:	412.03 KM	47.21768°N	99.92824°E	
Diura majuscula	Within Known Range? Y	Nearest Occurrence:	284.34 KM	46.89303°N	102.39457°E	
Isoperla mongolica	Within Known Range? Y	Nearest Occurrence:	267.57 KM	47.26999°N	101.80227°E	
Kaszabia nigricauda	Within Known Range? Y	Nearest Occurrence:	150.89 KM	50.32719°N	101.95058°E	
Skwala pusilla	Within Known Range? N	Nearest Occurrence:	1,604.24 KM	48.51277°N	88.51107°E	
Family: Taeniopterygidae						
Taenionema japonicum	Within Known Range? Y	Nearest Occurrence:	304.71 KM	47.28244°N	101.18793°E	

**LOE Rating: Unlikely Total: 4**

Family: Capniidae						
Mesocapnia altaica	Within Known Range? N	Nearest Occurrence:	1,561.59 KM	48.43684°N	88.90094°E	
Family: Leuctridae						
Leuctra fusca	Within Known Range? N	Nearest Occurrence:	484.33 KM	49.08643°N	107.28952°E	
Family: Nemouridae						
Nemurella pictetii	Within Known Range? N	Nearest Occurrence:	404.33 KM	51.07896°N	99.70857°E	
Family: Perlodidae						
Isoperla eximia	Within Known Range? N	Nearest Occurrence:	513.13 KM	49.01829°N	107.54453°E	

**Basin:** Arctic Ocean Basin  
**Aimags:** Bulgan  
**Soums:** Mogod

Freshwater Ecoregion: Lake Baikal  
 Terrestrial Ecoregion: Selenge-Orkhon Forest Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

<b>LOE Rating:</b>	<b>Highly Likely</b>	<b>Total:</b>	<b>5</b>
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<b>Family:</b> Capniidae			
Isocapnia guentheri	Within Known Range? Y	Nearest Occurrence:	158.98 KM 49.70678°N 103.10288°E
<b>Family:</b> Chloroperlidae			
Alloperla joosti	Within Known Range? Y	Nearest Occurrence:	105.30 KM 49.21675°N 103.10750°E
Alloperla rostellata	Within Known Range? Y	Nearest Occurrence:	158.98 KM 49.70678°N 103.10288°E
Haploperla lepnevae	Within Known Range? Y	Nearest Occurrence:	158.98 KM 49.70678°N 103.10288°E
<b>Family:</b> Perlodidae			
Isoperla kozlovi	Within Known Range? Y	Nearest Occurrence:	124.44 KM 49.38617°N 102.71667°E

<b>LOE Rating:</b>	<b>Likely</b>	<b>Total:</b>	<b>16</b>
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<b>Family:</b> Capniidae			
Isocapnia kudia	Within Known Range? N	Nearest Occurrence:	489.51 KM 51.25356°N 99.66687°E
Isocapnia sibirica	Within Known Range? N	Nearest Occurrence:	168.29 KM 47.26999°N 101.80227°E
<b>Family:</b> Chloroperlidae			
Alloperla mediata	Within Known Range? N	Nearest Occurrence:	158.98 KM 49.70678°N 103.10288°E
Suwallia kerzhneri	Within Known Range? Y	Nearest Occurrence:	201.74 KM 47.59928°N 101.24521°E
Suwallia teleckojensis	Within Known Range? Y	Nearest Occurrence:	105.49 KM 49.21675°N 103.10750°E
<b>Family:</b> Nemouridae			
Amphinemura borealis	Within Known Range? Y	Nearest Occurrence:	116.48 KM 49.33339°N 102.97786°E
Nemoura cinerea	Within Known Range? Y	Nearest Occurrence:	238.75 KM 49.68122°N 104.56461°E
<b>Family:</b> Perlidae			
Agnetina brevipennis	Within Known Range? Y	Nearest Occurrence:	97.67 KM 47.73941°N 102.23811°E
Kamimuria exilis	Within Known Range? N	Nearest Occurrence:	500.05 KM 50.16278°N 98.84212°E
Paragnetina flavotincta	Within Known Range? N	Nearest Occurrence:	116.48 KM 49.33339°N 102.97786°E
<b>Family:</b> Perlodidae			
Arcynopteryx polaris	Within Known Range? Y	Nearest Occurrence:	182.40 KM 49.77776°N 103.60860°E
Arcynopteryx sajanensis	Within Known Range? N	Nearest Occurrence:	451.73 KM 51.61397°N 100.59972°E
Isoperla asiatica	Within Known Range? Y	Nearest Occurrence:	158.98 KM 49.70678°N 103.10288°E
Isoperla lunigera	Within Known Range? Y	Nearest Occurrence:	124.44 KM 49.38617°N 102.71667°E
Pictetiella asiatica	Within Known Range? N	Nearest Occurrence:	459.40 KM 51.65822°N 100.53000°E
<b>Family:</b> Pteronarcyidae			
Pteronarcys reticulata	Within Known Range? Y	Nearest Occurrence:	152.96 KM 49.63453°N 102.64845°E

<b>LOE Rating:</b>	<b>Probable</b>	<b>Total:</b>	<b>4</b>
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<b>Family:</b> Nemouridae			
Nemoura arctica	Within Known Range? Y	Nearest Occurrence:	159.27 KM 49.70678°N 103.10288°E
<b>Family:</b> Perlidae			
Agnetina extrema	Within Known Range? Y	Nearest Occurrence:	168.29 KM 47.26999°N 101.80227°E
<b>Family:</b> Perlodidae			
Arcynopteryx compacta	Within Known Range? Y	Nearest Occurrence:	168.63 KM 46.88627°N 102.34304°E
Isoperla obscura	Within Known Range? Y	Nearest Occurrence:	124.44 KM 49.38617°N 102.71667°E



**Basin:** Arctic Ocean Basin  
**Aimags:** Bulgan  
**Soums:** Mogod

**Freshwater Ecoregion:** Lake Baikal  
**Terrestrial Ecoregion:** Selenge-Orkhon Forest Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

<b>LOE Rating:</b>	<b>Possible</b>	<b>Total:</b>	<b>5</b>
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<b>Family:</b> Leuctridae						
Paraleuctra zapekinae	Within Known Range? N	Nearest Occurrence:	247.72 KM	49.71481°N	104.64203°E	
<b>Family:</b> Nemouridae						
Amphinemura standfussi	Within Known Range? Y	Nearest Occurrence:	116.48 KM	49.33339°N	102.97786°E	
<b>Family:</b> Perlodidae						
Isoperla potanini	Within Known Range? Y	Nearest Occurrence:	168.59 KM	47.26999°N	101.80227°E	
Kaszabia nigricauda	Within Known Range? Y	Nearest Occurrence:	201.74 KM	47.59928°N	101.24521°E	
Megarcys ochracea	Within Known Range? N	Nearest Occurrence:	182.07 KM	49.77776°N	103.60860°E	

<b>LOE Rating:</b>	<b>Predicted</b>	<b>Total:</b>	<b>13</b>
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<b>Family:</b> Capniidae						
Capnia khulsbagia	Within Known Range? N	Nearest Occurrence:	387.58 KM	50.98944°N	100.71944°E	
Capnia nigra	Within Known Range? N	Nearest Occurrence:	373.51 KM	50.51003°N	100.40375°E	
Mesocapnia variabilis	Within Known Range? Y	Nearest Occurrence:	354.10 KM	47.21768°N	99.92824°E	
<b>Family:</b> Chloroperlidae						
Alaskaperla longidentata	Within Known Range? Y	Nearest Occurrence:	211.73 KM	46.82177°N	101.70479°E	
Alloperla deminuta	Within Known Range? Y	Nearest Occurrence:	158.98 KM	49.70678°N	103.10288°E	
<b>Family:</b> Nemouridae						
Nemoura sahlbergi	Within Known Range? Y	Nearest Occurrence:	184.65 KM	49.70184°N	103.80040°E	
<b>Family:</b> Perlidae						
Agnetina cocandica	Within Known Range? Y	Nearest Occurrence:	269.68 KM	49.16354°N	105.18880°E	
<b>Family:</b> Perlodidae						
Diura bicaudata	Within Known Range? N	Nearest Occurrence:	353.46 KM	47.21768°N	99.92824°E	
Diura majuscula	Within Known Range? Y	Nearest Occurrence:	165.80 KM	46.89303°N	102.39457°E	
Isoperla altaica	Within Known Range? Y	Nearest Occurrence:	250.01 KM	47.11192°N	101.01048°E	
Isoperla mongolica	Within Known Range? Y	Nearest Occurrence:	168.59 KM	47.26999°N	101.80227°E	
Skwala pusilla	Within Known Range? N	Nearest Occurrence:	1,600.51 KM	48.51277°N	88.51107°E	
<b>Family:</b> Taeniopterygidae						
Taenionema japonicum	Within Known Range? Y	Nearest Occurrence:	223.35 KM	47.28244°N	101.18793°E	

<b>LOE Rating:</b>	<b>Unlikely</b>	<b>Total:</b>	<b>4</b>
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<b>Family:</b> Capniidae						
Mesocapnia altaica	Within Known Range? N	Nearest Occurrence:	1,557.13 KM	48.43684°N	88.90094°E	
<b>Family:</b> Leuctridae						
Leuctra fusca	Within Known Range? N	Nearest Occurrence:	492.20 KM	49.08643°N	107.28952°E	
<b>Family:</b> Nemouridae						
Nemurella pictetii	Within Known Range? N	Nearest Occurrence:	473.17 KM	51.07896°N	99.70857°E	
<b>Family:</b> Perlodidae						
Isoperla eximia	Within Known Range? N	Nearest Occurrence:	518.82 KM	49.01829°N	107.54453°E	



**Basin:** Arctic Ocean Basin  
**Aimags:** Bulgan  
**Soums:** Orkhon

Freshwater Ecoregion: Lake Baikal  
 Terrestrial Ecoregion: Selenge-Orkhon Forest Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Highly Likely Total: 6**

Family: Capniidae						
Isocapnia guentheri	Within Known Range? Y	Nearest Occurrence:	115.57 KM	49.77776 °N	103.60860 °E	
Family: Chloroperlidae						
Alloperla joosti	Within Known Range? Y	Nearest Occurrence:	87.62 KM	49.21675 °N	103.10750 °E	
Alloperla rostellata	Within Known Range? Y	Nearest Occurrence:	115.57 KM	49.77776 °N	103.60860 °E	
Haploperla lepnevae	Within Known Range? Y	Nearest Occurrence:	103.20 KM	49.48086 °N	104.30864 °E	
Family: Perlidae						
Agnetina brevipennis	Within Known Range? Y	Nearest Occurrence:	103.20 KM	49.48086 °N	104.30864 °E	
Family: Perlodidae						
Isoperla kozlovi	Within Known Range? Y	Nearest Occurrence:	103.20 KM	49.48086 °N	104.30864 °E	

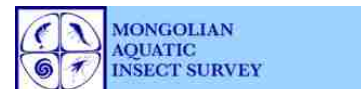
**LOE Rating: Likely Total: 13**

Family: Capniidae						
Isocapnia sibirica	Within Known Range? N	Nearest Occurrence:	270.35 KM	47.26999 °N	101.80227 °E	
Family: Chloroperlidae						
Alloperla mediata	Within Known Range? N	Nearest Occurrence:	115.57 KM	49.77776 °N	103.60860 °E	
Suwallia kerzhneri	Within Known Range? Y	Nearest Occurrence:	229.68 KM	50.35162 °N	105.04436 °E	
Suwallia teleckojensis	Within Known Range? Y	Nearest Occurrence:	87.78 KM	49.21675 °N	103.10750 °E	
Family: Nemouridae						
Amphinemura borealis	Within Known Range? Y	Nearest Occurrence:	106.91 KM	49.33339 °N	102.97786 °E	
Nemoura cinerea	Within Known Range? Y	Nearest Occurrence:	138.45 KM	49.68122 °N	104.56461 °E	
Family: Perlidae						
Paragnetina flavotincta	Within Known Range? Y	Nearest Occurrence:	103.20 KM	49.48086 °N	104.30864 °E	
Family: Perlodidae						
Arcynopteryx sajanensis	Within Known Range? N	Nearest Occurrence:	473.03 KM	51.61397 °N	100.59972 °E	
Isoperla asiatica	Within Known Range? Y	Nearest Occurrence:	128.08 KM	49.70678 °N	103.10288 °E	
Isoperla lunigera	Within Known Range? Y	Nearest Occurrence:	103.20 KM	49.48086 °N	104.30864 °E	
Isoperla obscura	Within Known Range? Y	Nearest Occurrence:	103.20 KM	49.48086 °N	104.30864 °E	
Pictetiella asiatica	Within Known Range? N	Nearest Occurrence:	481.21 KM	51.65822 °N	100.53000 °E	
Family: Pteronarcyidae						
Pteronarcys reticulata	Within Known Range? Y	Nearest Occurrence:	156.34 KM	49.63453 °N	102.64845 °E	

**LOE Rating: Probable Total: 6**

Family: Capniidae						
Isocapnia kudia	Within Known Range? N	Nearest Occurrence:	531.03 KM	51.25356 °N	99.66687 °E	
Family: Leuctridae						
Paraleuctra zapekinae	Within Known Range? N	Nearest Occurrence:	146.98 KM	49.71481 °N	104.64203 °E	
Family: Nemouridae						
Nemoura arctica	Within Known Range? Y	Nearest Occurrence:	102.00 KM	49.65142 °N	103.88064 °E	
Family: Perlidae						
Agnetina extrema	Within Known Range? Y	Nearest Occurrence:	265.17 KM	50.32719 °N	101.95058 °E	
Kamimuria exilis	Within Known Range? N	Nearest Occurrence:	567.05 KM	50.16278 °N	98.84212 °E	
Family: Perlodidae						
Arcynopteryx polaris	Within Known Range? Y	Nearest Occurrence:	106.61 KM	49.70184 °N	103.80040 °E	

Research funded by the National Science Foundation  
 DEB-BSI #0206674: A Survey of the Aquatic Insects of the Selenge River Basin. P.I.'s: JKGelhaus, JCMorse, BHayford.  
 DEB # 0743732: Aquatic Insects of the Altai and Hangai Mountain Drainages. P.I.'s: JKGelhaus, JCMorse, CRNelson.  
<http://clade.ansp.org/entomology/mongolia/index.html>



**Basin:** Arctic Ocean Basin  
**Aimags:** Bulgan  
**Soums:** Orkhon

Freshwater Ecoregion: Lake Baikal  
 Terrestrial Ecoregion: Selenge-Orkhon Forest Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

<b>LOE Rating:</b>	<b>Possible</b>	<b>Total:</b>	<b>5</b>
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Family: Nemouridae						
Amphinemura standfussi	Within Known Range? Y	Nearest Occurrence:	106.91 KM	49.33339°N	102.97786°E	
Family: Perlidae						
Agnentina cocandica	Within Known Range? Y	Nearest Occurrence:	167.65 KM	49.16354°N	105.18880°E	
Family: Perlodidae						
Arcynopteryx compacta	Within Known Range? Y	Nearest Occurrence:	112.77 KM	49.62414°N	104.24594°E	
Kaszabia nigricauda	Within Known Range? Y	Nearest Occurrence:	195.20 KM	47.85250°N	105.25567°E	
Megarcys ochracea	Within Known Range? Y	Nearest Occurrence:	115.57 KM	49.77776°N	103.60860°E	

<b>LOE Rating:</b>	<b>Predicted</b>	<b>Total:</b>	<b>14</b>
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Family: Capniidae						
Capnia khulsbagia	Within Known Range? N	Nearest Occurrence:	417.75 KM	50.98944°N	100.71944°E	
Capnia nigra	Within Known Range? N	Nearest Occurrence:	410.27 KM	50.92452°N	100.75528°E	
Mesocapnia variabilis	Within Known Range? Y	Nearest Occurrence:	416.18 KM	50.96186°N	100.72506°E	
Family: Chloroperlidae						
Alaskaperla longidentata	Within Known Range? Y	Nearest Occurrence:	222.51 KM	49.95588°N	105.33791°E	
Alloperla deminuta	Within Known Range? Y	Nearest Occurrence:	128.08 KM	49.70678°N	103.10288°E	
Family: Leuctridae						
Leuctra fusca	Within Known Range? N	Nearest Occurrence:	395.77 KM	49.08643°N	107.28952°E	
Family: Nemouridae						
Nemoura sahlbergi	Within Known Range? Y	Nearest Occurrence:	106.42 KM	49.70184°N	103.80040°E	
Family: Perlodidae						
Diura bicaudata	Within Known Range? N	Nearest Occurrence:	455.85 KM	47.21768°N	99.92824°E	
Diura majuscula	Within Known Range? Y	Nearest Occurrence:	254.57 KM	46.89303°N	102.39457°E	
Isoperla altaica	Within Known Range? Y	Nearest Occurrence:	265.43 KM	48.87748°N	106.12370°E	
Isoperla mongolica	Within Known Range? Y	Nearest Occurrence:	270.84 KM	47.26999°N	101.80227°E	
Isoperla potanini	Within Known Range? N	Nearest Occurrence:	270.84 KM	47.26999°N	101.80227°E	
Skwala pusilla	Within Known Range? N	Nearest Occurrence:	1,690.65 KM	48.51277°N	88.51107°E	
Family: Taeniopterygidae						
Taenionema japonicum	Within Known Range? Y	Nearest Occurrence:	327.13 KM	47.28244°N	101.18793°E	

<b>LOE Rating:</b>	<b>Unlikely</b>	<b>Total:</b>	<b>3</b>
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Family: Capniidae						
Mesocapnia altaica	Within Known Range? N	Nearest Occurrence:	1,647.54 KM	48.43684°N	88.90094°E	
Family: Nemouridae						
Nemurella pictetii	Within Known Range? N	Nearest Occurrence:	517.11 KM	51.07896°N	99.70857°E	
Family: Perlodidae						
Isoperla eximia	Within Known Range? N	Nearest Occurrence:	423.35 KM	49.01829°N	107.54453°E	



**Basin:** Arctic Ocean Basin  
**Aimags:** Bulgan  
**Soums:** Rashaant

Freshwater Ecoregion: Lake Baikal  
 Terrestrial Ecoregion: Mongolian-Manchurian Grassland

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Highly Likely Total: 6**

Family: Capniidae					
Isocapnia guentheri	Within Known Range? Y	Nearest Occurrence:	264.17 KM	49.77776 °N	103.60860 °E
Family: Chloroperlidae					
Alloperla joosti	Within Known Range? N	Nearest Occurrence:	217.79 KM	49.21675 °N	103.10750 °E
Alloperla rostellata	Within Known Range? N	Nearest Occurrence:	264.17 KM	49.77776 °N	103.60860 °E
Haploperla lepnevae	Within Known Range? Y	Nearest Occurrence:	234.33 KM	49.48086 °N	104.30864 °E
Family: Perlidae					
Agnetina brevipennis	Within Known Range? Y	Nearest Occurrence:	174.81 KM	46.89303 °N	102.39457 °E
Family: Perlodidae					
Isoperla kozlovi	Within Known Range? Y	Nearest Occurrence:	160.18 KM	47.85250 °N	105.25567 °E

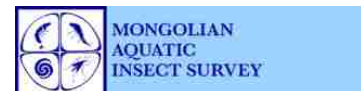
**LOE Rating: Likely Total: 16**

Family: Capniidae					
Isocapnia kudia	Within Known Range? N	Nearest Occurrence:	632.84 KM	51.25356 °N	99.66687 °E
Isocapnia sibirica	Within Known Range? Y	Nearest Occurrence:	231.28 KM	47.26999 °N	101.80227 °E
Family: Chloroperlidae					
Alloperla mediata	Within Known Range? N	Nearest Occurrence:	264.17 KM	49.77776 °N	103.60860 °E
Suwallia kerzhneri	Within Known Range? Y	Nearest Occurrence:	293.29 KM	47.59928 °N	101.24521 °E
Suwallia teleckojensis	Within Known Range? Y	Nearest Occurrence:	218.19 KM	49.21675 °N	103.10750 °E
Family: Nemouridae					
Amphinemura borealis	Within Known Range? Y	Nearest Occurrence:	224.24 KM	46.78742 °N	101.96021 °E
Nemoura cinerea	Within Known Range? Y	Nearest Occurrence:	262.90 KM	49.68122 °N	104.56461 °E
Family: Perlidae					
Agnetina extrema	Within Known Range? Y	Nearest Occurrence:	231.28 KM	47.26999 °N	101.80227 °E
Kamimuria exilis	Within Known Range? N	Nearest Occurrence:	638.29 KM	50.16278 °N	98.84212 °E
Paragnetina flavotincta	Within Known Range? N	Nearest Occurrence:	234.33 KM	49.48086 °N	104.30864 °E
Family: Perlodidae					
Arcynopteryx sajanensis	Within Known Range? N	Nearest Occurrence:	592.71 KM	51.61397 °N	100.59972 °E
Isoperla asiatica	Within Known Range? Y	Nearest Occurrence:	268.80 KM	49.70678 °N	103.10288 °E
Isoperla lunigera	Within Known Range? N	Nearest Occurrence:	234.33 KM	49.48086 °N	104.30864 °E
Isoperla obscura	Within Known Range? Y	Nearest Occurrence:	160.18 KM	47.85250 °N	105.25567 °E
Pictetiella asiatica	Within Known Range? N	Nearest Occurrence:	600.29 KM	51.65822 °N	100.53000 °E
Family: Pteronarcyidae					
Pteronarcys reticulata	Within Known Range? N	Nearest Occurrence:	281.95 KM	49.63453 °N	102.64845 °E

**LOE Rating: Probable Total: 4**

Family: Leuctridae					
Paraleuctra zapekinae	Within Known Range? N	Nearest Occurrence:	269.05 KM	49.71481 °N	104.64203 °E
Family: Nemouridae					
Nemoura arctica	Within Known Range? Y	Nearest Occurrence:	231.70 KM	47.26999 °N	101.80227 °E
Family: Perlidae					
Agnetina cocandica	Within Known Range? Y	Nearest Occurrence:	242.94 KM	49.16354 °N	105.18880 °E
Family: Perlodidae					
Arcynopteryx compacta	Within Known Range? Y	Nearest Occurrence:	180.79 KM	46.88627 °N	102.34304 °E

Research funded by the National Science Foundation  
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 DEB # 0743732: Aquatic Insects of the Altai and Hangai Mountain Drainages. P.I.'s: JKGelhaus, JCMorse, CRNelson.  
<http://clade.ansp.org/entomology/mongolia/index.html>



**Basin:** Arctic Ocean Basin  
**Aimags:** Bulgan  
**Soums:** Rashaant

**Freshwater Ecoregion:** Lake Baikal  
**Terrestrial Ecoregion:** Mongolian-Manchurian Grassland

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

<b>LOE Rating:</b>	<b>Possible</b>	<b>Total:</b>	<b>6</b>
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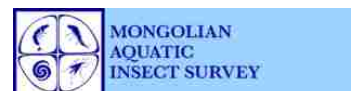
<b>Family:</b> Nemouridae			
Amphinemura standfussi	Within Known Range? N	Nearest Occurrence:	235.51 KM 49.33339°N 102.97786°E
<b>Family:</b> Perlodidae			
Arcynopteryx polaris	Within Known Range? Y	Nearest Occurrence:	239.02 KM 47.04409°N 101.76352°E
Diura bicaudata	Within Known Range? N	Nearest Occurrence:	439.29 KM 47.21768°N 99.92824°E
Isoperla potanini	Within Known Range? N	Nearest Occurrence:	231.70 KM 47.26999°N 101.80227°E
Kaszabia nigricauda	Within Known Range? Y	Nearest Occurrence:	160.18 KM 47.85250°N 105.25567°E
Megarcys ochracea	Within Known Range? N	Nearest Occurrence:	264.17 KM 49.77776°N 103.60860°E

<b>LOE Rating:</b>	<b>Predicted</b>	<b>Total:</b>	<b>13</b>
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<b>Family:</b> Capniidae			
Capnia khulsbagia	Within Known Range? N	Nearest Occurrence:	529.81 KM 50.98944°N 100.71944°E
Capnia nigra	Within Known Range? N	Nearest Occurrence:	516.83 KM 50.51003°N 100.40375°E
Mesocapnia variabilis	Within Known Range? Y	Nearest Occurrence:	440.08 KM 47.21768°N 99.92824°E
<b>Family:</b> Chloroperlidae			
Alaskaperla longidentata	Within Known Range? Y	Nearest Occurrence:	250.33 KM 46.82177°N 101.70479°E
Alloperla deminuta	Within Known Range? Y	Nearest Occurrence:	224.24 KM 46.78742°N 101.96021°E
<b>Family:</b> Leuctridae			
Leuctra fusca	Within Known Range? N	Nearest Occurrence:	421.46 KM 49.08643°N 107.28952°E
<b>Family:</b> Nemouridae			
Nemoura sahlbergi	Within Known Range? Y	Nearest Occurrence:	254.16 KM 49.70184°N 103.80040°E
<b>Family:</b> Perlodidae			
Diura majuscula	Within Known Range? Y	Nearest Occurrence:	175.13 KM 46.89303°N 102.39457°E
Isoperla altaica	Within Known Range? Y	Nearest Occurrence:	297.82 KM 48.87748°N 106.12370°E
Isoperla eximia	Within Known Range? N	Nearest Occurrence:	443.96 KM 49.01829°N 107.54453°E
Isoperla mongolica	Within Known Range? Y	Nearest Occurrence:	231.70 KM 47.26999°N 101.80227°E
Skwala pusilla	Within Known Range? N	Nearest Occurrence:	1,710.42 KM 48.51277°N 88.51107°E
<b>Family:</b> Taeniopterygidae			
Taenionema japonicum	Within Known Range? Y	Nearest Occurrence:	299.82 KM 47.28244°N 101.18793°E

<b>LOE Rating:</b>	<b>Unlikely</b>	<b>Total:</b>	<b>2</b>
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<b>Family:</b> Capniidae			
Mesocapnia altaica	Within Known Range? N	Nearest Occurrence:	1,666.66 KM 48.43684°N 88.90094°E
<b>Family:</b> Nemouridae			
Nemurella pictetii	Within Known Range? N	Nearest Occurrence:	616.47 KM 51.07896°N 99.70857°E



**Basin:** Arctic Ocean Basin  
**Aimags:** Bulgan  
**Soums:** Saikhan

**Freshwater Ecoregion:** Lake Baikal  
**Terrestrial Ecoregion:** Selenge-Orkhon Forest Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

<b>LOE Rating:</b>	<b>Highly Likely</b>	<b>Total:</b>	<b>5</b>
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<b>Family:</b> Capniidae			
Isocapnia guentheri	Within Known Range? Y	Nearest Occurrence:	132.04 KM 49.70678°N 103.10288°E
<b>Family:</b> Chloroperlidae			
Alloperla joosti	Within Known Range? Y	Nearest Occurrence:	88.50 KM 49.21675°N 103.10750°E
Alloperla rostellata	Within Known Range? Y	Nearest Occurrence:	132.04 KM 49.70678°N 103.10288°E
Haploperla lepnevae	Within Known Range? Y	Nearest Occurrence:	132.04 KM 49.70678°N 103.10288°E
<b>Family:</b> Perlodidae			
Isoperla kozlovi	Within Known Range? Y	Nearest Occurrence:	82.94 KM 49.38617°N 102.71667°E

<b>LOE Rating:</b>	<b>Likely</b>	<b>Total:</b>	<b>19</b>
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<b>Family:</b> Capniidae			
Isocapnia kudia	Within Known Range? N	Nearest Occurrence:	429.17 KM 51.25356°N 99.66687°E
Isocapnia sibirica	Within Known Range? N	Nearest Occurrence:	174.57 KM 47.26999°N 101.80227°E
<b>Family:</b> Chloroperlidae			
Alloperla mediata	Within Known Range? N	Nearest Occurrence:	132.04 KM 49.70678°N 103.10288°E
Suwallia kerzhneri	Within Known Range? Y	Nearest Occurrence:	185.50 KM 47.59928°N 101.24521°E
Suwallia teleckojensis	Within Known Range? Y	Nearest Occurrence:	88.66 KM 49.21675°N 103.10750°E
<b>Family:</b> Nemouridae			
Amphinemura borealis	Within Known Range? Y	Nearest Occurrence:	89.31 KM 49.33339°N 102.97786°E
Nemoura arctica	Within Known Range? Y	Nearest Occurrence:	132.27 KM 49.70678°N 103.10288°E
Nemoura cinerea	Within Known Range? Y	Nearest Occurrence:	225.49 KM 47.48567°N 100.87875°E
<b>Family:</b> Perlidae			
Agnetina brevipennis	Within Known Range? Y	Nearest Occurrence:	107.52 KM 47.73941°N 102.23811°E
Kamimuria exilis	Within Known Range? N	Nearest Occurrence:	443.35 KM 50.16278°N 98.84212°E
Paragnetina flavotincta	Within Known Range? Y	Nearest Occurrence:	86.02 KM 49.37440°N 102.83880°E
<b>Family:</b> Perlodidae			
Arcynopteryx compacta	Within Known Range? Y	Nearest Occurrence:	172.19 KM 49.77776°N 103.60860°E
Arcynopteryx polaris	Within Known Range? Y	Nearest Occurrence:	172.19 KM 49.77776°N 103.60860°E
Arcynopteryx sajanensis	Within Known Range? N	Nearest Occurrence:	392.61 KM 51.61397°N 100.59972°E
Isoperla asiatica	Within Known Range? Y	Nearest Occurrence:	132.04 KM 49.70678°N 103.10288°E
Isoperla lunigera	Within Known Range? Y	Nearest Occurrence:	82.94 KM 49.38617°N 102.71667°E
Isoperla obscura	Within Known Range? Y	Nearest Occurrence:	82.94 KM 49.38617°N 102.71667°E
Pictetiella asiatica	Within Known Range? N	Nearest Occurrence:	400.27 KM 51.65822°N 100.53000°E
<b>Family:</b> Pteronarcyidae			
Pteronarcys reticulata	Within Known Range? Y	Nearest Occurrence:	108.76 KM 49.63453°N 102.64845°E





**Basin:** Arctic Ocean Basin  
**Aimags:** Bulgan  
**Soums:** Saikhan

Freshwater Ecoregion: Lake Baikal  
 Terrestrial Ecoregion: Selenge-Orkhon Forest Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

<b>LOE Rating:</b> Possible	<b>Total:</b> 6
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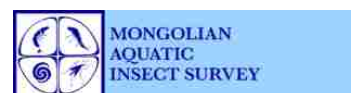
Family: Leuctridae					
Paraleuctra zapekinae	Within Known Range? N	Nearest Occurrence:	261.44 KM	49.71481°N	104.64203 °E
Family: Nemouridae					
Amphinemura standfussi	Within Known Range? Y	Nearest Occurrence:	89.31 KM	49.33339°N	102.97786 °E
Family: Perlidae					
Agnetina extrema	Within Known Range? Y	Nearest Occurrence:	174.57 KM	47.26999°N	101.80227 °E
Family: Perlodidae					
Diura bicaudata	Within Known Range? N	Nearest Occurrence:	330.80 KM	47.21768°N	99.92824 °E
Isoperla potanini	Within Known Range? Y	Nearest Occurrence:	174.89 KM	47.26999°N	101.80227 °E
Megarcys ochracea	Within Known Range? N	Nearest Occurrence:	171.89 KM	49.77776°N	103.60860 °E

<b>LOE Rating:</b> Predicted	<b>Total:</b> 13
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Family: Capniidae					
Capnia khulsbagia	Within Known Range? N	Nearest Occurrence:	327.75 KM	50.98944°N	100.71944 °E
Capnia nigra	Within Known Range? N	Nearest Occurrence:	313.21 KM	50.51003°N	100.40375 °E
Mesocapnia variabilis	Within Known Range? Y	Nearest Occurrence:	325.54 KM	50.96186°N	100.72506 °E
Family: Chloroperlidae					
Alaskaperla longidentata	Within Known Range? Y	Nearest Occurrence:	224.04 KM	46.82177°N	101.70479 °E
Alloperla deminuta	Within Known Range? Y	Nearest Occurrence:	132.04 KM	49.70678°N	103.10288 °E
Family: Nemouridae					
Nemoura sahlbergi	Within Known Range? Y	Nearest Occurrence:	156.62 KM	49.87761°N	101.82039 °E
Family: Perlidae					
Agnetina cocandica	Within Known Range? Y	Nearest Occurrence:	300.28 KM	49.16354°N	105.18880 °E
Family: Perlodidae					
Diura majuscula	Within Known Range? Y	Nearest Occurrence:	197.26 KM	46.89303°N	102.39457 °E
Isoperla altaica	Within Known Range? Y	Nearest Occurrence:	241.75 KM	47.11192°N	101.01048 °E
Isoperla mongolica	Within Known Range? Y	Nearest Occurrence:	174.89 KM	47.26999°N	101.80227 °E
Kaszabia nigricauda	Within Known Range? Y	Nearest Occurrence:	185.50 KM	47.59928°N	101.24521 °E
Skwala pusilla	Within Known Range? N	Nearest Occurrence:	1,556.80 KM	48.51277°N	88.51107 °E
Family: Taeniopterygidae					
Taenionema japonicum	Within Known Range? Y	Nearest Occurrence:	214.40 KM	47.28244°N	101.18793 °E

<b>LOE Rating:</b> Unlikely	<b>Total:</b> 4
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Family: Capniidae					
Mesocapnia altaica	Within Known Range? N	Nearest Occurrence:	1,513.64 KM	48.43684°N	88.90094 °E
Family: Leuctridae					
Leuctra fusca	Within Known Range? N	Nearest Occurrence:	529.80 KM	49.08643°N	107.28952 °E
Family: Nemouridae					
Nemurella pictetii	Within Known Range? N	Nearest Occurrence:	412.89 KM	51.07896°N	99.70857 °E
Family: Perlodidae					
Isoperla eximia	Within Known Range? N	Nearest Occurrence:	557.41 KM	49.01829°N	107.54453 °E



**Basin:** Arctic Ocean Basin  
**Aimags:** Bulgan  
**Soums:** Selenge

Freshwater Ecoregion: Lake Baikal  
 Terrestrial Ecoregion: Selenge-Orkhon Forest Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Highly Likely Total: 4**

Family: Chloroperlidae						
Haploperla lepnevae	Within Known Range? Y	Nearest Occurrence:	29.41 KM	49.48086 °N	104.30864 °E	
Family: Perlidae						
Agnetina brevipennis	Within Known Range? Y	Nearest Occurrence:	29.41 KM	49.48086 °N	104.30864 °E	
Paragnetina flavotincta	Within Known Range? Y	Nearest Occurrence:	29.41 KM	49.48086 °N	104.30864 °E	
Family: Perlodidae						
Isoperla kozlovi	Within Known Range? Y	Nearest Occurrence:	29.41 KM	49.48086 °N	104.30864 °E	

**LOE Rating: Likely Total: 12**

Family: Capniidae						
Isocapnia guentheri	Within Known Range? Y	Nearest Occurrence:	63.41 KM	49.77776 °N	103.60860 °E	
Family: Chloroperlidae						
Alloperla joosti	Within Known Range? Y	Nearest Occurrence:	119.10 KM	49.70678 °N	103.10288 °E	
Alloperla mediata	Within Known Range? Y	Nearest Occurrence:	63.41 KM	49.77776 °N	103.60860 °E	
Alloperla rostellata	Within Known Range? Y	Nearest Occurrence:	63.41 KM	49.77776 °N	103.60860 °E	
Suwallia kerzhneri	Within Known Range? Y	Nearest Occurrence:	119.85 KM	50.35162 °N	105.04436 °E	
Suwallia teleckojensis	Within Known Range? Y	Nearest Occurrence:	51.84 KM	49.71481 °N	104.64203 °E	
Family: Leuctridae						
Paraleuctra zapekinae	Within Known Range? Y	Nearest Occurrence:	51.75 KM	49.71481 °N	104.64203 °E	
Family: Nemouridae						
Nemoura arctica	Within Known Range? Y	Nearest Occurrence:	33.47 KM	49.65142 °N	103.88064 °E	
Nemoura cinerea	Within Known Range? Y	Nearest Occurrence:	43.27 KM	49.68122 °N	104.56461 °E	
Family: Perlodidae						
Arcynopteryx compacta	Within Known Range? Y	Nearest Occurrence:	12.34 KM	49.62414 °N	104.24594 °E	
Isoperla lunigera	Within Known Range? Y	Nearest Occurrence:	29.41 KM	49.48086 °N	104.30864 °E	
Isoperla obscura	Within Known Range? Y	Nearest Occurrence:	29.41 KM	49.48086 °N	104.30864 °E	

**LOE Rating: Probable Total: 8**

Family: Capniidae						
Isocapnia sibirica	Within Known Range? N	Nearest Occurrence:	377.86 KM	47.26999 °N	101.80227 °E	
Family: Nemouridae						
Amphinemura borealis	Within Known Range? Y	Nearest Occurrence:	137.83 KM	50.03638 °N	105.37392 °E	
Family: Perlodidae						
Arcynopteryx polaris	Within Known Range? Y	Nearest Occurrence:	41.76 KM	49.70184 °N	103.80040 °E	
Arcynopteryx sajanensis	Within Known Range? N	Nearest Occurrence:	450.50 KM	51.61397 °N	100.59972 °E	
Isoperla asiatica	Within Known Range? Y	Nearest Occurrence:	119.10 KM	49.70678 °N	103.10288 °E	
Megarcys ochracea	Within Known Range? Y	Nearest Occurrence:	63.41 KM	49.77776 °N	103.60860 °E	
Pictetiella asiatica	Within Known Range? N	Nearest Occurrence:	458.84 KM	51.65822 °N	100.53000 °E	
Family: Pteronarcyidae						
Pteronarcys reticulata	Within Known Range? Y	Nearest Occurrence:	169.75 KM	49.63453 °N	102.64845 °E	

**Basin:** Arctic Ocean Basin  
**Aimags:** Bulgan  
**Soums:** Selenge

Freshwater Ecoregion: Lake Baikal  
 Terrestrial Ecoregion: Selenge-Orkhon Forest Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

<b>LOE Rating:</b>	<b>Possible</b>	<b>Total:</b>	<b>5</b>
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Family: Capniidae						
Isocapnia kudia	Within Known Range? N	Nearest Occurrence:	529.00 KM	51.25356 °N	99.66687 °E	
Family: Nemouridae						
Amphinemura standfussi	Within Known Range? Y	Nearest Occurrence:	139.40 KM	49.33339 °N	102.97786 °E	
Family: Perlidae						
Agnentina cocandica	Within Known Range? Y	Nearest Occurrence:	128.00 KM	49.16354 °N	105.18880 °E	
Agnentina extrema	Within Known Range? Y	Nearest Occurrence:	256.32 KM	50.32719 °N	101.95058 °E	
Kamimuria exilis	Within Known Range? N	Nearest Occurrence:	595.24 KM	50.16278 °N	98.84212 °E	

<b>LOE Rating:</b>	<b>Predicted</b>	<b>Total:</b>	<b>14</b>
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Family: Capniidae						
Capnia khulsbagia	Within Known Range? N	Nearest Occurrence:	409.10 KM	50.98944 °N	100.71944 °E	
Capnia nigra	Within Known Range? N	Nearest Occurrence:	402.90 KM	50.92452 °N	100.75528 °E	
Mesocapnia variabilis	Within Known Range? Y	Nearest Occurrence:	406.95 KM	51.25881 °N	100.86000 °E	
Family: Chloroperlidae						
Alaskaperla longidentata	Within Known Range? Y	Nearest Occurrence:	131.84 KM	49.95588 °N	105.33791 °E	
Alloperla deminuta	Within Known Range? Y	Nearest Occurrence:	119.10 KM	49.70678 °N	103.10288 °E	
Family: Nemouridae						
Nemoura sahlbergi	Within Known Range? Y	Nearest Occurrence:	41.68 KM	49.70184 °N	103.80040 °E	
Family: Perlodidae						
Diura bicaudata	Within Known Range? N	Nearest Occurrence:	525.79 KM	51.39852 °N	99.75011 °E	
Diura majuscula	Within Known Range? Y	Nearest Occurrence:	370.64 KM	46.89303 °N	102.39457 °E	
Isoperla altaica	Within Known Range? Y	Nearest Occurrence:	235.56 KM	48.87748 °N	106.12370 °E	
Isoperla mongolica	Within Known Range? Y	Nearest Occurrence:	378.54 KM	47.26999 °N	101.80227 °E	
Isoperla potanini	Within Known Range? N	Nearest Occurrence:	275.35 KM	50.62324 °N	101.87412 °E	
Kaszabia nigricauda	Within Known Range? Y	Nearest Occurrence:	238.51 KM	47.85250 °N	105.25567 °E	
Skwala pusilla	Within Known Range? N	Nearest Occurrence:	1,743.86 KM	48.51277 °N	88.51107 °E	
Family: Taeniopterygidae						
Taenionema japonicum	Within Known Range? Y	Nearest Occurrence:	347.56 KM	49.05411 °N	107.23175 °E	

<b>LOE Rating:</b>	<b>Unlikely</b>	<b>Total:</b>	<b>4</b>
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Family: Capniidae						
Mesocapnia altaica	Within Known Range? N	Nearest Occurrence:	1,701.40 KM	48.43684 °N	88.90094 °E	
Family: Leuctridae						
Leuctra fusca	Within Known Range? N	Nearest Occurrence:	352.48 KM	49.08643 °N	107.28952 °E	
Family: Nemouridae						
Nemurella pictetii	Within Known Range? N	Nearest Occurrence:	518.62 KM	51.07896 °N	99.70857 °E	
Family: Perlodidae						
Isoperla eximia	Within Known Range? N	Nearest Occurrence:	381.73 KM	49.01829 °N	107.54453 °E	



**Basin:** Arctic Ocean Basin  
**Aimags:** Bulgan  
**Soums:** Teshig

**Freshwater Ecoregion:** Lake Baikal  
**Terrestrial Ecoregion:** Selenge-Orkhon Forest Steppe

**WQM Sites:**

WQM Sites: # 157 (Eren River @ N 50.15633° E 102.72332°) # 158 (Tavt River @ N 50.15277° E 102.4895°)

**LOE Rating: Highly Likely Total: 5**

Family: Capniidae						
Isocapnia guentheri	Within Known Range? Y	Nearest Occurrence:	32.73 KM	49.70678 °N	103.10288 °E	
Family: Chloroperlidae						
Alloperla rostellata	Within Known Range? Y	Nearest Occurrence:	32.73 KM	49.70678 °N	103.10288 °E	
Family: Nemouridae						
Nemoura arctica	Within Known Range? Y	Nearest Occurrence:	32.79 KM	49.70678 °N	103.10288 °E	
Family: Perlidae						
Agnentina brevipennis	Within Known Range? Y	Nearest Occurrence:	65.15 KM	49.88884 °N	102.50909 °E	
Family: Perlodidae						
Arcynopteryx polaris	Within Known Range? Y	Nearest Occurrence:	63.28 KM	49.77776 °N	103.60860 °E	

**LOE Rating: Likely Total: 11**

Family: Chloroperlidae						
Alloperla joosti	Within Known Range? Y	Nearest Occurrence:	32.73 KM	49.70678 °N	103.10288 °E	
Alloperla mediata	Within Known Range? Y	Nearest Occurrence:	32.73 KM	49.70678 °N	103.10288 °E	
Haploperla lepnevae	Within Known Range? Y	Nearest Occurrence:	32.73 KM	49.70678 °N	103.10288 °E	
Suwallia teleckojensis	Within Known Range? Y	Nearest Occurrence:	87.26 KM	49.21675 °N	103.10750 °E	
Family: Perlidae						
Paragnetina flavotincta	Within Known Range? Y	Nearest Occurrence:	65.15 KM	49.88884 °N	102.50909 °E	
Family: Perlodidae						
Arcynopteryx compacta	Within Known Range? Y	Nearest Occurrence:	63.28 KM	49.77776 °N	103.60860 °E	
Isoperla asiatica	Within Known Range? Y	Nearest Occurrence:	32.73 KM	49.70678 °N	103.10288 °E	
Isoperla kozlovi	Within Known Range? Y	Nearest Occurrence:	79.58 KM	49.38617 °N	102.71667 °E	
Isoperla lunigera	Within Known Range? Y	Nearest Occurrence:	65.15 KM	49.88884 °N	102.50909 °E	
Isoperla obscura	Within Known Range? Y	Nearest Occurrence:	65.15 KM	49.88884 °N	102.50909 °E	
Megarcys ochracea	Within Known Range? Y	Nearest Occurrence:	63.17 KM	49.77776 °N	103.60860 °E	

**LOE Rating: Probable Total: 8**

Family: Capniidae						
Isocapnia kudia	Within Known Range? N	Nearest Occurrence:	404.10 KM	51.25356 °N	99.66687 °E	
Isocapnia sibirica	Within Known Range? N	Nearest Occurrence:	334.94 KM	47.26999 °N	101.80227 °E	
Family: Chloroperlidae						
Suwallia kerzhneri	Within Known Range? Y	Nearest Occurrence:	185.63 KM	50.60031 °N	101.52392 °E	
Family: Nemouridae						
Amphinemura borealis	Within Known Range? Y	Nearest Occurrence:	75.07 KM	49.33339 °N	102.97786 °E	
Nemoura cinerea	Within Known Range? Y	Nearest Occurrence:	168.01 KM	49.68122 °N	104.56461 °E	
Family: Perlodidae						
Arcynopteryx sajanensis	Within Known Range? N	Nearest Occurrence:	329.48 KM	51.61397 °N	100.59972 °E	
Pictetiella asiatica	Within Known Range? N	Nearest Occurrence:	338.05 KM	51.65822 °N	100.53000 °E	
Family: Pteronarcyidae						
Pteronarcys reticulata	Within Known Range? Y	Nearest Occurrence:	63.30 KM	49.63453 °N	102.64845 °E	

**Basin:** Arctic Ocean Basin  
**Aimags:** Bulgan  
**Soums:** Teshig

**Freshwater Ecoregion:** Lake Baikal  
**Terrestrial Ecoregion:** Selenge-Orkhon Forest Steppe

**WQM Sites:**

WQM Sites: # 157 (Eren River @ N 50.15633° E 102.72332°) # 158 (Tavt River @ N 50.15277° E 102.4895°)

**LOE Rating: Possible Total: 7**

Family: Chloroperlidae						
Alloperla deminuta	Within Known Range? Y	Nearest Occurrence:	32.73 KM	49.70678°N	103.10288°E	
Family: Leuctridae						
Paraleuctra zapekinae	Within Known Range? N	Nearest Occurrence:	175.70 KM	49.71481°N	104.64203°E	
Family: Nemouridae						
Amphinemura standfussi	Within Known Range? Y	Nearest Occurrence:	75.07 KM	49.33339°N	102.97786°E	
Nemoura sahlbergi	Within Known Range? Y	Nearest Occurrence:	86.06 KM	49.70184°N	103.80040°E	
Family: Perlidae						
Agnentina extrema	Within Known Range? Y	Nearest Occurrence:	131.04 KM	50.32719°N	101.95058°E	
Kamimuria exilis	Within Known Range? N	Nearest Occurrence:	472.18 KM	50.16278°N	98.84212°E	
Family: Perlodidae						
Isoperla potanini	Within Known Range? N	Nearest Occurrence:	151.40 KM	50.62324°N	101.87412°E	

**LOE Rating: Predicted Total: 12**

Family: Capniidae						
Capnia khulsbagia	Within Known Range? N	Nearest Occurrence:	284.59 KM	50.98944°N	100.71944°E	
Capnia nigra	Within Known Range? N	Nearest Occurrence:	278.19 KM	50.92452°N	100.75528°E	
Mesocapnia variabilis	Within Known Range? Y	Nearest Occurrence:	283.36 KM	50.96186°N	100.72506°E	
Family: Chloroperlidae						
Alaskaperla longidentata	Within Known Range? Y	Nearest Occurrence:	215.75 KM	50.51517°N	101.21073°E	
Family: Perlidae						
Agnentina cocandica	Within Known Range? Y	Nearest Occurrence:	251.78 KM	49.16354°N	105.18880°E	
Family: Perlodidae						
Diura bicaudata	Within Known Range? N	Nearest Occurrence:	401.38 KM	51.39852°N	99.75011°E	
Diura majuscula	Within Known Range? Y	Nearest Occurrence:	296.89 KM	50.59636°N	100.48257°E	
Isoperla altaica	Within Known Range? Y	Nearest Occurrence:	338.66 KM	51.65822°N	100.53000°E	
Isoperla mongolica	Within Known Range? Y	Nearest Occurrence:	303.23 KM	50.48083°N	100.40083°E	
Kaszabia nigricauda	Within Known Range? Y	Nearest Occurrence:	131.04 KM	50.32719°N	101.95058°E	
Skwala pusilla	Within Known Range? N	Nearest Occurrence:	1,626.15 KM	48.51277°N	88.51107°E	
Family: Taeniopterygidae						
Taenionema japonicum	Within Known Range? Y	Nearest Occurrence:	338.66 KM	51.65822°N	100.53000°E	

**LOE Rating: Unlikely Total: 4**

Family: Capniidae						
Mesocapnia altaica	Within Known Range? N	Nearest Occurrence:	1,584.00 KM	48.43684°N	88.90094°E	
Family: Leuctridae						
Leuctra fusca	Within Known Range? N	Nearest Occurrence:	477.59 KM	49.08643°N	107.28952°E	
Family: Nemouridae						
Nemurella pictetii	Within Known Range? N	Nearest Occurrence:	393.44 KM	51.07896°N	99.70857°E	
Family: Perlodidae						
Isoperla eximia	Within Known Range? N	Nearest Occurrence:	506.86 KM	49.01829°N	107.54453°E	

**Basin:** Arctic Ocean Basin  
**Aimags:** Darkhan-uul  
**Soums:** Darkhan

Freshwater Ecoregion: Lake Baikal  
 Terrestrial Ecoregion: Daurian Forest Steppe

**WQM Sites:**

WQM Sites: # 49 (Haraa River @ N 49.3882° E 105.89693°)

<b>LOE Rating:</b>	<b>Highly Likely</b>	<b>Total:</b>	<b>1</b>
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Family: Perlidae

<i>Agnentina extrema</i>	Within Known Range? Y	Nearest Occurrence:	79.11 KM	49.46450°N	106.66871°E
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<b>LOE Rating:</b>	<b>Likely</b>	<b>Total:</b>	<b>18</b>
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Family: Capniidae

<i>Isocapnia guentheri</i>	Within Known Range? Y	Nearest Occurrence:	112.41 KM	49.08405°N	106.89521°E
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<i>Isocapnia sibirica</i>	Within Known Range? N	Nearest Occurrence:	258.64 KM	48.09549°N	107.84265°E
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Family: Chloroperlidae

<i>Alloperla deminuta</i>	Within Known Range? Y	Nearest Occurrence:	173.28 KM	49.73695°N	107.49285°E
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<i>Alloperla mediata</i>	Within Known Range? N	Nearest Occurrence:	262.90 KM	49.77776°N	103.60860°E
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<i>Alloperla rostellata</i>	Within Known Range? N	Nearest Occurrence:	262.90 KM	49.77776°N	103.60860°E
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<i>Haploperla lepnevae</i>	Within Known Range? Y	Nearest Occurrence:	67.60 KM	48.87748°N	106.12370°E
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<i>Suwallia kerzhneri</i>	Within Known Range? Y	Nearest Occurrence:	141.32 KM	50.35162°N	105.04436°E
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Family: Leuctridae

<i>Paraleuctra zapekinae</i>	Within Known Range? Y	Nearest Occurrence:	148.51 KM	49.71481°N	104.64203°E
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Family: Nemouridae

<i>Amphinemura borealis</i>	Within Known Range? Y	Nearest Occurrence:	90.70 KM	50.03638°N	105.37392°E
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<i>Nemoura cinerea</i>	Within Known Range? Y	Nearest Occurrence:	156.34 KM	49.68122°N	104.56461°E
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Family: Perlidae

<i>Agnentina brevipennis</i>	Within Known Range? Y	Nearest Occurrence:	86.73 KM	49.10740°N	106.65177°E
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<i>Agnentina cocandica</i>	Within Known Range? Y	Nearest Occurrence:	69.78 KM	50.06476°N	106.13388°E
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Family: Perlodidae

<i>Isoperla asiatica</i>	Within Known Range? Y	Nearest Occurrence:	67.60 KM	48.87748°N	106.12370°E
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<i>Isoperla kozlovi</i>	Within Known Range? Y	Nearest Occurrence:	67.60 KM	48.87748°N	106.12370°E
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<i>Isoperla lunigera</i>	Within Known Range? Y	Nearest Occurrence:	67.60 KM	48.87748°N	106.12370°E
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<i>Megarcys ochracea</i>	Within Known Range? Y	Nearest Occurrence:	122.19 KM	49.03282°N	106.96935°E
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Family: Pteronarcyidae

<i>Pteronarcys reticulata</i>	Within Known Range? Y	Nearest Occurrence:	153.80 KM	49.08643°N	107.28952°E
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Family: Taeniopterygidae

<i>Taenionema japonicum</i>	Within Known Range? Y	Nearest Occurrence:	148.97 KM	49.05411°N	107.23175°E
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<b>LOE Rating:</b>	<b>Probable</b>	<b>Total:</b>	<b>6</b>
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Family: Capniidae

<i>Isocapnia kudia</i>	Within Known Range? N	Nearest Occurrence:	725.84 KM	51.25356°N	99.66687°E
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Family: Perlidae

<i>Kamimuria exilis</i>	Within Known Range? N	Nearest Occurrence:	794.89 KM	50.16278°N	98.84212°E
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<i>Paragnetina flavotincta</i>	Within Known Range? Y	Nearest Occurrence:	69.66 KM	50.06476°N	106.13388°E
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Family: Perlodidae

<i>Arcynopteryx sajanensis</i>	Within Known Range? N	Nearest Occurrence:	641.86 KM	51.61397°N	100.59972°E
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<i>Isoperla obscura</i>	Within Known Range? Y	Nearest Occurrence:	59.14 KM	49.84014°N	106.33228°E
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<i>Pictetiella asiatica</i>	Within Known Range? N	Nearest Occurrence:	649.72 KM	51.65822°N	100.53000°E
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**Basin:** Arctic Ocean Basin  
**Aimags:** Darkhan-uul  
**Soums:** Darkhan

**Freshwater Ecoregion:** Lake Baikal  
**Terrestrial Ecoregion:** Daurian Forest Steppe

**WQM Sites:**

WQM Sites: # 49 (Haraa River @ N 49.3882° E 105.89693°)

<b>LOE Rating:</b>	<b>Possible</b>	<b>Total:</b>	<b>5</b>
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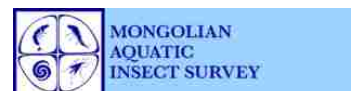
<b>Family:</b> Chloroperlidae			
Alaskaperla longidentata	Within Known Range? Y	Nearest Occurrence:	87.76 KM 49.95588°N 105.33791°E
Suwallia teleckojensis	Within Known Range? Y	Nearest Occurrence:	122.26 KM 48.99356°N 106.95023°E
<b>Family:</b> Nemouridae			
Amphinemura standfussi	Within Known Range? Y	Nearest Occurrence:	188.71 KM 49.73130°N 107.63484°E
<b>Family:</b> Perlodidae			
Isoperla altaica	Within Known Range? Y	Nearest Occurrence:	67.72 KM 48.87748°N 106.12370°E
Kaszabia nigricauda	Within Known Range? Y	Nearest Occurrence:	194.93 KM 47.85250°N 105.25567°E

<b>LOE Rating:</b>	<b>Predicted</b>	<b>Total:</b>	<b>14</b>
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<b>Family:</b> Capniidae			
Capnia nigra	Within Known Range? N	Nearest Occurrence:	599.65 KM 50.92452°N 100.75528°E
Mesocapnia variabilis	Within Known Range? Y	Nearest Occurrence:	246.65 KM 48.42080°N 107.91406°E
<b>Family:</b> Chloroperlidae			
Alloperla joosti	Within Known Range? N	Nearest Occurrence:	317.37 KM 49.21675°N 103.10750°E
<b>Family:</b> Leuctridae			
Leuctra fusca	Within Known Range? N	Nearest Occurrence:	153.80 KM 49.08643°N 107.28952°E
<b>Family:</b> Nemouridae			
Nemoura arctica	Within Known Range? Y	Nearest Occurrence:	216.33 KM 47.77758°N 106.92780°E
Nemoura sahlbergi	Within Known Range? Y	Nearest Occurrence:	240.74 KM 49.70184°N 103.80040°E
<b>Family:</b> Perlodidae			
Arcynopteryx compacta	Within Known Range? Y	Nearest Occurrence:	191.00 KM 49.62414°N 104.24594°E
Arcynopteryx polaris	Within Known Range? Y	Nearest Occurrence:	241.17 KM 49.70184°N 103.80040°E
Diura bicaudata	Within Known Range? N	Nearest Occurrence:	713.99 KM 47.21768°N 99.92824°E
Diura majuscula	Within Known Range? Y	Nearest Occurrence:	234.06 KM 47.99158°N 107.46116°E
Isoperla eximia	Within Known Range? N	Nearest Occurrence:	183.10 KM 49.01829°N 107.54453°E
Isoperla mongolica	Within Known Range? Y	Nearest Occurrence:	258.76 KM 48.09694°N 107.83988°E
Isoperla potanini	Within Known Range? N	Nearest Occurrence:	471.89 KM 50.62324°N 101.87412°E
Skwala pusilla	Within Known Range? N	Nearest Occurrence:	1,939.26 KM 48.51277°N 88.51107°E

<b>LOE Rating:</b>	<b>Unlikely</b>	<b>Total:</b>	<b>3</b>
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<b>Family:</b> Capniidae			
Capnia khulsbagia	Within Known Range? N	Nearest Occurrence:	605.45 KM 50.98944°N 100.71944°E
Mesocapnia altaica	Within Known Range? N	Nearest Occurrence:	1,896.54 KM 48.43684°N 88.90094°E
<b>Family:</b> Nemouridae			
Nemurella pictetii	Within Known Range? N	Nearest Occurrence:	716.29 KM 51.07896°N 99.70857°E



**Basin:** Arctic Ocean Basin  
**Aimags:** Darkhan-uul  
**Soums:** Khongor

Freshwater Ecoregion: Lake Baikal  
 Terrestrial Ecoregion: Daurian Forest Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

<b>LOE Rating:</b>	<b>Highly Likely</b>	<b>Total:</b>	<b>1</b>
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Family: Perlidae

<i>Agnetina extrema</i>	Within Known Range? Y	Nearest Occurrence:	37.47 KM	49.46450°N	106.66871°E
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<b>LOE Rating:</b>	<b>Likely</b>	<b>Total:</b>	<b>17</b>
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Family: Capniidae

<i>Isocapnia guentheri</i>	Within Known Range? Y	Nearest Occurrence:	68.64 KM	49.08405°N	106.89521°E
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<i>Isocapnia sibirica</i>	Within Known Range? N	Nearest Occurrence:	218.05 KM	48.09549°N	107.84265°E
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Family: Chloroperlidae

<i>Alloperla deminuta</i>	Within Known Range? Y	Nearest Occurrence:	129.54 KM	49.06472°N	107.47257°E
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<i>Alloperla rostellata</i>	Within Known Range? N	Nearest Occurrence:	307.19 KM	49.77776°N	103.60860°E
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<i>Haploperla lepnevae</i>	Within Known Range? Y	Nearest Occurrence:	59.69 KM	48.87748°N	106.12370°E
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<i>Suwallia kerzhneri</i>	Within Known Range? Y	Nearest Occurrence:	133.80 KM	49.73695°N	107.49285°E
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Family: Leuctridae

<i>Paraleuctra zapekinae</i>	Within Known Range? Y	Nearest Occurrence:	192.98 KM	49.71481°N	104.64203°E
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Family: Nemouridae

<i>Amphinemura borealis</i>	Within Known Range? Y	Nearest Occurrence:	109.33 KM	49.08643°N	107.28952°E
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<i>Nemoura cinerea</i>	Within Known Range? Y	Nearest Occurrence:	200.72 KM	49.68122°N	104.56461°E
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Family: Perlidae

<i>Agnetina brevipennis</i>	Within Known Range? Y	Nearest Occurrence:	44.59 KM	49.10740°N	106.65177°E
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<i>Agnetina cocandica</i>	Within Known Range? Y	Nearest Occurrence:	81.04 KM	50.06476°N	106.13388°E
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Family: Perlodidae

<i>Isoperla asiatica</i>	Within Known Range? Y	Nearest Occurrence:	59.69 KM	48.87748°N	106.12370°E
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<i>Isoperla kozlovi</i>	Within Known Range? Y	Nearest Occurrence:	59.69 KM	48.87748°N	106.12370°E
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<i>Isoperla lunigera</i>	Within Known Range? Y	Nearest Occurrence:	59.69 KM	48.87748°N	106.12370°E
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<i>Megarcys ochracea</i>	Within Known Range? Y	Nearest Occurrence:	78.58 KM	49.03282°N	106.96935°E
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Family: Pteronarcyidae

<i>Pteronarcys reticulata</i>	Within Known Range? Y	Nearest Occurrence:	109.33 KM	49.08643°N	107.28952°E
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Family: Taeniopterygidae

<i>Taenionema japonicum</i>	Within Known Range? Y	Nearest Occurrence:	104.52 KM	49.05411°N	107.23175°E
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<b>LOE Rating:</b>	<b>Probable</b>	<b>Total:</b>	<b>7</b>
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Family: Capniidae

<i>Isocapnia kudia</i>	Within Known Range? N	Nearest Occurrence:	770.32 KM	51.25356°N	99.66687°E
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Family: Chloroperlidae

<i>Alloperla mediata</i>	Within Known Range? N	Nearest Occurrence:	307.19 KM	49.77776°N	103.60860°E
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<i>Suwallia teleckojensis</i>	Within Known Range? Y	Nearest Occurrence:	78.71 KM	49.03282°N	106.96935°E
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Family: Perlidae

<i>Kamimuria exilis</i>	Within Known Range? N	Nearest Occurrence:	839.05 KM	50.16278°N	98.84212°E
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Family: Perlodidae

<i>Arcynopteryx sajanensis</i>	Within Known Range? N	Nearest Occurrence:	686.04 KM	51.61397°N	100.59972°E
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<i>Kaszabia nigricauda</i>	Within Known Range? Y	Nearest Occurrence:	207.14 KM	47.85250°N	105.25567°E
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<i>Pictetiella asiatica</i>	Within Known Range? N	Nearest Occurrence:	693.80 KM	51.65822°N	100.53000°E
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**Basin:** Arctic Ocean Basin  
**Aimags:** Darkhan-uul  
**Soums:** Khongor

Freshwater Ecoregion: Lake Baikal  
 Terrestrial Ecoregion: Daurian Forest Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Possible Total: 6**

Family: Chloroperlidae					
Alaskaperla longidentata	Within Known Range? Y	Nearest Occurrence:	129.52 KM	49.95588 °N	105.33791 °E
Family: Leuctridae					
Leuctra fusca	Within Known Range? Y	Nearest Occurrence:	109.33 KM	49.08643 °N	107.28952 °E
Family: Nemouridae					
Amphinemura standfussi	Within Known Range? Y	Nearest Occurrence:	148.71 KM	49.73130 °N	107.63484 °E
Family: Perlidae					
Paragnetina flavotincta	Within Known Range? Y	Nearest Occurrence:	80.90 KM	50.06476 °N	106.13388 °E
Family: Perlodidae					
Isoperla altaica	Within Known Range? Y	Nearest Occurrence:	59.80 KM	48.87748 °N	106.12370 °E
Isoperla obscura	Within Known Range? Y	Nearest Occurrence:	52.29 KM	49.72192 °N	106.65562 °E

**LOE Rating: Predicted Total: 13**

Family: Capniidae					
Capnia nigra	Within Known Range? N	Nearest Occurrence:	644.14 KM	50.92452 °N	100.75528 °E
Mesocapnia variabilis	Within Known Range? Y	Nearest Occurrence:	203.72 KM	48.42080 °N	107.91406 °E
Family: Chloroperlidae					
Alloperla joosti	Within Known Range? N	Nearest Occurrence:	359.80 KM	49.21675 °N	103.10750 °E
Family: Nemouridae					
Nemoura arctica	Within Known Range? Y	Nearest Occurrence:	188.27 KM	47.77758 °N	106.92780 °E
Nemoura sahlbergi	Within Known Range? Y	Nearest Occurrence:	200.54 KM	48.16668 °N	107.69548 °E
Family: Perlodidae					
Arcynopteryx compacta	Within Known Range? Y	Nearest Occurrence:	216.22 KM	47.84324 °N	107.55299 °E
Arcynopteryx polaris	Within Known Range? Y	Nearest Occurrence:	203.72 KM	48.42080 °N	107.91406 °E
Diura bicaudata	Within Known Range? N	Nearest Occurrence:	751.22 KM	47.21768 °N	99.92824 °E
Diura majuscula	Within Known Range? Y	Nearest Occurrence:	196.97 KM	47.99158 °N	107.46116 °E
Isoperla eximia	Within Known Range? N	Nearest Occurrence:	138.62 KM	49.01829 °N	107.54453 °E
Isoperla mongolica	Within Known Range? Y	Nearest Occurrence:	218.11 KM	48.09694 °N	107.83988 °E
Isoperla potanini	Within Known Range? N	Nearest Occurrence:	516.46 KM	50.62324 °N	101.87412 °E
Skwala pusilla	Within Known Range? N	Nearest Occurrence:	1,981.89 KM	48.51277 °N	88.51107 °E

**LOE Rating: Unlikely Total: 3**

Family: Capniidae					
Capnia khulsbagia	Within Known Range? N	Nearest Occurrence:	649.93 KM	50.98944 °N	100.71944 °E
Mesocapnia altaica	Within Known Range? N	Nearest Occurrence:	1,939.10 KM	48.43684 °N	88.90094 °E
Family: Nemouridae					
Nemurella pictetii	Within Known Range? N	Nearest Occurrence:	760.80 KM	51.07896 °N	99.70857 °E



**Basin:** Arctic Ocean Basin  
**Aimags:** Darkhan-uul  
**Soums:** Orkhon

Freshwater Ecoregion: Lake Baikal  
 Terrestrial Ecoregion: Daurian Forest Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

<b>LOE Rating:</b>	<b>Highly Likely</b>	<b>Total:</b>	<b>1</b>
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Family: Perlidae

<i>Agnetina extrema</i>	Within Known Range? Y	Nearest Occurrence:	74.56 KM	49.46450°N	106.66871°E
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<b>LOE Rating:</b>	<b>Likely</b>	<b>Total:</b>	<b>18</b>
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Family: Capniidae

<i>Isocapnia guentheri</i>	Within Known Range? Y	Nearest Occurrence:	116.99 KM	49.08405°N	106.89521°E
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<i>Isocapnia sibirica</i>	Within Known Range? N	Nearest Occurrence:	267.87 KM	48.09549°N	107.84265°E
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Family: Chloroperlidae

<i>Alloperla deminuta</i>	Within Known Range? Y	Nearest Occurrence:	161.39 KM	49.73695°N	107.49285°E
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<i>Alloperla rostellata</i>	Within Known Range? N	Nearest Occurrence:	269.96 KM	49.77776°N	103.60860°E
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<i>Haploperla lepnevae</i>	Within Known Range? Y	Nearest Occurrence:	87.86 KM	49.61985°N	106.82693°E
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<i>Suwallia kerzhneri</i>	Within Known Range? Y	Nearest Occurrence:	132.07 KM	50.35162°N	105.04436°E
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Family: Leuctridae

<i>Paraleuctra zapekinae</i>	Within Known Range? Y	Nearest Occurrence:	155.12 KM	49.71481°N	104.64203°E
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Family: Nemouridae

<i>Amphinemura borealis</i>	Within Known Range? Y	Nearest Occurrence:	82.80 KM	50.03638°N	105.37392°E
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<i>Nemoura cinerea</i>	Within Known Range? N	Nearest Occurrence:	163.71 KM	49.68122°N	104.56461°E
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Family: Perlidae

<i>Agnetina brevipennis</i>	Within Known Range? Y	Nearest Occurrence:	87.86 KM	49.61985°N	106.82693°E
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<i>Agnetina cocandica</i>	Within Known Range? Y	Nearest Occurrence:	41.97 KM	50.06476°N	106.13388°E
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Family: Perlodidae

<i>Isoperla asiatica</i>	Within Known Range? Y	Nearest Occurrence:	91.70 KM	48.87748°N	106.12370°E
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<i>Isoperla kozlovi</i>	Within Known Range? Y	Nearest Occurrence:	91.70 KM	48.87748°N	106.12370°E
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<i>Isoperla lunigera</i>	Within Known Range? Y	Nearest Occurrence:	87.86 KM	49.61985°N	106.82693°E
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<i>Isoperla obscura</i>	Within Known Range? Y	Nearest Occurrence:	36.08 KM	49.84014°N	106.33228°E
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<i>Megarcys ochracea</i>	Within Known Range? Y	Nearest Occurrence:	127.00 KM	49.03282°N	106.96935°E
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Family: Pteronarcyidae

<i>Pteronarcys reticulata</i>	Within Known Range? Y	Nearest Occurrence:	154.54 KM	49.08643°N	107.28952°E
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Family: Taeniopterygidae

<i>Taenionema japonicum</i>	Within Known Range? Y	Nearest Occurrence:	150.75 KM	49.05411°N	107.23175°E
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<b>LOE Rating:</b>	<b>Probable</b>	<b>Total:</b>	<b>7</b>
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Family: Capniidae

<i>Isocapnia kudia</i>	Within Known Range? N	Nearest Occurrence:	728.09 KM	51.25356°N	99.66687°E
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Family: Chloroperlidae

<i>Alloperla mediata</i>	Within Known Range? N	Nearest Occurrence:	269.96 KM	49.77776°N	103.60860°E
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Family: Perlidae

<i>Kamimuria exilis</i>	Within Known Range? N	Nearest Occurrence:	802.00 KM	50.16278°N	98.84212°E
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<i>Paragnetina flavotincta</i>	Within Known Range? Y	Nearest Occurrence:	41.90 KM	50.06476°N	106.13388°E
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Family: Perlodidae

<i>Arcynopteryx sajanensis</i>	Within Known Range? N	Nearest Occurrence:	641.27 KM	51.61397°N	100.59972°E
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<i>Kaszabia nigricauda</i>	Within Known Range? Y	Nearest Occurrence:	222.69 KM	47.85250°N	105.25567°E
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<i>Pictetiella asiatica</i>	Within Known Range? N	Nearest Occurrence:	649.05 KM	51.65822°N	100.53000°E
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**Basin:** Arctic Ocean Basin

**Aimag:** Darkhan-uul

**Soum:** Orkhon

Freshwater Ecoregion: Lake Baikal

Terrestrial Ecoregion: Daurian Forest Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Possible Total: 5**

Family: Chloroperlidae

Alaskaperla longidentata Within Known Range? Y Nearest Occurrence: 82.91 KM 49.95588°N 105.33791°E

Suwallia teleckojensis Within Known Range? Y Nearest Occurrence: 127.22 KM 49.03282°N 106.96935°E

Family: Leuctridae

Leuctra fusca Within Known Range? N Nearest Occurrence: 154.54 KM 49.08643°N 107.28952°E

Family: Nemouridae

Amphinemura standfussi Within Known Range? Y Nearest Occurrence: 177.13 KM 49.73130°N 107.63484°E

Family: Perlodidae

Isoperla altaica Within Known Range? Y Nearest Occurrence: 91.87 KM 48.87748°N 106.12370°E

**LOE Rating: Predicted Total: 13**

Family: Capniidae

Capnia nigra Within Known Range? N Nearest Occurrence: 602.10 KM 50.92452°N 100.75528°E

Mesocapnia variabilis Within Known Range? Y Nearest Occurrence: 252.32 KM 48.42080°N 107.91406°E

Family: Chloroperlidae

Alloperla joosti Within Known Range? N Nearest Occurrence: 325.95 KM 49.70678°N 103.10288°E

Family: Nemouridae

Nemoura arctica Within Known Range? Y Nearest Occurrence: 235.43 KM 47.77758°N 106.92780°E

Nemoura sahlbergi Within Known Range? Y Nearest Occurrence: 248.53 KM 49.70184°N 103.80040°E

Family: Perlodidae

Arcynopteryx compacta Within Known Range? Y Nearest Occurrence: 199.61 KM 49.62414°N 104.24594°E

Arcynopteryx polaris Within Known Range? Y Nearest Occurrence: 248.98 KM 49.70184°N 103.80040°E

Diura bicaudata Within Known Range? N Nearest Occurrence: 723.14 KM 51.39852°N 99.75011°E

Diura majuscula Within Known Range? Y Nearest Occurrence: 247.10 KM 47.99158°N 107.46116°E

Isoperla eximia Within Known Range? N Nearest Occurrence: 183.37 KM 49.01829°N 107.54453°E

Isoperla mongolica Within Known Range? N Nearest Occurrence: 268.02 KM 48.09694°N 107.83988°E

Isoperla potanini Within Known Range? N Nearest Occurrence: 474.44 KM 50.62324°N 101.87412°E

Skwala pusilla Within Known Range? N Nearest Occurrence: 1,950.10 KM 48.51277°N 88.51107°E

**LOE Rating: Unlikely Total: 3**

Family: Capniidae

Capnia khulsbagia Within Known Range? N Nearest Occurrence: 607.63 KM 50.98944°N 100.71944°E

Mesocapnia altaica Within Known Range? N Nearest Occurrence: 1,907.52 KM 48.43684°N 88.90094°E

Family: Nemouridae

Nemurella pictetii Within Known Range? N Nearest Occurrence: 719.22 KM 51.07896°N 99.70857°E

Basin: Arctic Ocean Basin

Aimags: Darkhan-uul

Soums: Sharyngol

Freshwater Ecoregion: Lake Baikal

Terrestrial Ecoregion: Trans-Baikal Conifer Forests

WQM Sites:

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Highly Likely Total: 1**

Family: Perlidae

*Agnentina extrema* Within Known Range? Y Nearest Occurrence: 33.25 KM 49.46450°N 106.66871°E

**LOE Rating: Likely Total: 17**

Family: Capniidae

*Isocapnia guentheri* Within Known Range? Y Nearest Occurrence: 50.22 KM 49.08405°N 106.89521°E

*Isocapnia sibirica* Within Known Range? N Nearest Occurrence: 198.33 KM 48.09549°N 107.84265°E

Family: Chloroperlidae

*Alloperla deminuta* Within Known Range? Y Nearest Occurrence: 112.92 KM 49.06472°N 107.47257°E

*Alloperla rostellata* Within Known Range? N Nearest Occurrence: 323.23 KM 49.77776°N 103.60860°E

*Haploperla lepnevae* Within Known Range? Y Nearest Occurrence: 55.68 KM 48.87748°N 106.12370°E

*Suwallia kerzhneri* Within Known Range? Y Nearest Occurrence: 126.18 KM 49.73695°N 107.49285°E

Family: Leuctridae

*Paraleuctra zapekinae* Within Known Range? Y Nearest Occurrence: 176.89 KM 47.99158°N 107.46116°E

Family: Nemouridae

*Amphinemura borealis* Within Known Range? Y Nearest Occurrence: 92.49 KM 49.08643°N 107.28952°E

*Nemoura cinerea* Within Known Range? Y Nearest Occurrence: 188.30 KM 47.96783°N 107.59278°E

Family: Perlidae

*Agnentina brevipennis* Within Known Range? Y Nearest Occurrence: 24.92 KM 49.10740°N 106.65177°E

*Agnentina cocandica* Within Known Range? Y Nearest Occurrence: 99.07 KM 50.06476°N 106.13388°E

Family: Perlodidae

*Isoperla asiatica* Within Known Range? Y Nearest Occurrence: 55.68 KM 48.87748°N 106.12370°E

*Isoperla kozlovi* Within Known Range? Y Nearest Occurrence: 55.68 KM 48.87748°N 106.12370°E

*Isoperla lunigera* Within Known Range? Y Nearest Occurrence: 55.68 KM 48.87748°N 106.12370°E

*Megarcys ochracea* Within Known Range? Y Nearest Occurrence: 59.95 KM 49.03282°N 106.96935°E

Family: Pteronarcyidae

*Pteronarcys reticulata* Within Known Range? Y Nearest Occurrence: 92.49 KM 49.08643°N 107.28952°E

Family: Taeniopterygidae

*Taenionema japonicum* Within Known Range? Y Nearest Occurrence: 87.14 KM 49.05411°N 107.23175°E

**LOE Rating: Probable Total: 6**

Family: Capniidae

*Isocapnia kudia* Within Known Range? N Nearest Occurrence: 787.59 KM 51.25356°N 99.66687°E

Family: Chloroperlidae

*Suwallia teleckojensis* Within Known Range? Y Nearest Occurrence: 59.97 KM 48.99356°N 106.95023°E

Family: Perlidae

*Kamimuria exilis* Within Known Range? N Nearest Occurrence: 854.46 KM 50.16278°N 98.84212°E

Family: Perlodidae

*Arcynopteryx sajanensis* Within Known Range? N Nearest Occurrence: 704.19 KM 51.61397°N 100.59972°E

*Kaszabia nigricauda* Within Known Range? Y Nearest Occurrence: 188.30 KM 47.96783°N 107.59278°E

*Pictetiella asiatica* Within Known Range? N Nearest Occurrence: 711.94 KM 51.65822°N 100.53000°E



Basin: Arctic Ocean Basin

Aimag: Darkhan-uul

Soum: Sharyngol

Freshwater Ecoregion: Lake Baikal

Terrestrial Ecoregion: Trans-Baikal Conifer Forests

WQM Sites:

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Possible Total: 5**

Family: Chloroperlidae

Alloperla mediata Within Known Range? N Nearest Occurrence: 323.23 KM 49.77776 °N 103.60860 °E

Family: Leuctridae

Leuctra fusca Within Known Range? Y Nearest Occurrence: 92.49 KM 49.08643 °N 107.28952 °E

Family: Nemouridae

Amphinemura standfussi Within Known Range? Y Nearest Occurrence: 140.28 KM 49.73130 °N 107.63484 °E

Family: Perlodidae

Isoperla altaica Within Known Range? Y Nearest Occurrence: 55.78 KM 48.87748 °N 106.12370 °E

Isoperla obscura Within Known Range? Y Nearest Occurrence: 57.31 KM 49.72192 °N 106.65562 °E

**LOE Rating: Predicted Total: 15**

Family: Capniidae

Capnia nigra Within Known Range? N Nearest Occurrence: 661.38 KM 50.92452 °N 100.75528 °E

Mesocapnia variabilis Within Known Range? Y Nearest Occurrence: 184.56 KM 48.42080 °N 107.91406 °E

Family: Chloroperlidae

Alaskaperla longidentata Within Known Range? Y Nearest Occurrence: 140.28 KM 49.73130 °N 107.63484 °E

Alloperla joosti Within Known Range? N Nearest Occurrence: 373.30 KM 49.21675 °N 103.10750 °E

Family: Nemouridae

Nemoura arctica Within Known Range? Y Nearest Occurrence: 170.38 KM 47.77758 °N 106.92780 °E

Nemoura sahlbergi Within Known Range? Y Nearest Occurrence: 180.78 KM 48.16668 °N 107.69548 °E

Family: Perlidae

Paragnetina flavotincta Within Known Range? Y Nearest Occurrence: 98.89 KM 50.06476 °N 106.13388 °E

Family: Perlodidae

Arcynopteryx compacta Within Known Range? Y Nearest Occurrence: 196.50 KM 47.84324 °N 107.55299 °E

Arcynopteryx polaris Within Known Range? Y Nearest Occurrence: 184.56 KM 48.42080 °N 107.91406 °E

Diura bicaudata Within Known Range? N Nearest Occurrence: 760.09 KM 47.21768 °N 99.92824 °E

Diura majuscula Within Known Range? Y Nearest Occurrence: 177.21 KM 47.99158 °N 107.46116 °E

Isoperla eximia Within Known Range? N Nearest Occurrence: 121.73 KM 49.01829 °N 107.54453 °E

Isoperla mongolica Within Known Range? Y Nearest Occurrence: 198.35 KM 48.09694 °N 107.83988 °E

Isoperla potanini Within Known Range? N Nearest Occurrence: 533.76 KM 50.62324 °N 101.87412 °E

Skwala pusilla Within Known Range? N Nearest Occurrence: 1,995.13 KM 48.51277 °N 88.51107 °E

**LOE Rating: Unlikely Total: 3**

Family: Capniidae

Capnia khulsbagia Within Known Range? N Nearest Occurrence: 667.25 KM 50.98944 °N 100.71944 °E

Mesocapnia altaica Within Known Range? N Nearest Occurrence: 1,952.26 KM 48.43684 °N 88.90094 °E

Family: Nemouridae

Nemurella pictetii Within Known Range? N Nearest Occurrence: 777.84 KM 51.07896 °N 99.70857 °E

**Basin:** Arctic Ocean Basin  
**Aimags:** Khovsgol  
**Soums:** Alag-erdene

**Freshwater Ecoregion:** Lake Baikal  
**Terrestrial Ecoregion:** Sayan Alpine Meadows And Tundra

**WQM Sites:**

WQM Sites: # 30 (Eg River @ N 50.41578° E 100.14942°) # 31  
 (Alagtsar River @ N 50.47032° E 100.40278°)

**LOE Rating: Highly Likely Total: 3**

Family: Chloroperlidae					
Alaskaperla longidentata	Within Known Range? Y	Nearest Occurrence:	43.97 KM	50.48083°N	100.40083 °E
Family: Nemouridae					
Nemoura arctica	Within Known Range? Y	Nearest Occurrence:	21.53 KM	50.42480°N	100.15007 °E
Family: Perlodidae					
Arcynopteryx polaris	Within Known Range? Y	Nearest Occurrence:	44.04 KM	50.48083°N	100.40083 °E

**LOE Rating: Likely Total: 15**

Family: Capniidae					
Capnia nigra	Within Known Range? Y	Nearest Occurrence:	46.24 KM	50.51003°N	100.40375 °E
Isocapnia guentheri	Within Known Range? Y	Nearest Occurrence:	133.57 KM	51.39852°N	99.75011 °E
Isocapnia kudia	Within Known Range? N	Nearest Occurrence:	121.41 KM	51.25356°N	99.66687 °E
Mesocapnia variabilis	Within Known Range? Y	Nearest Occurrence:	107.10 KM	50.96186°N	100.72506 °E
Family: Chloroperlidae					
Alloperla rostellata	Within Known Range? Y	Nearest Occurrence:	114.79 KM	50.61826°N	99.12094 °E
Haploperla lepnevae	Within Known Range? Y	Nearest Occurrence:	46.24 KM	50.51003°N	100.40375 °E
Suwallia kerzhneri	Within Known Range? Y	Nearest Occurrence:	99.18 KM	50.78320°N	100.79585 °E
Suwallia teleckojensis	Within Known Range? Y	Nearest Occurrence:	20.50 KM	50.41594°N	100.14716 °E
Family: Nemouridae					
Amphinemura standfussi	Within Known Range? Y	Nearest Occurrence:	99.01 KM	50.77500°N	100.80006 °E
Nemoura cinerea	Within Known Range? Y	Nearest Occurrence:	101.78 KM	51.07896°N	99.70857 °E
Nemoura sahlbergi	Within Known Range? Y	Nearest Occurrence:	98.47 KM	50.42996°N	99.21727 °E
Family: Perlodidae					
Arcynopteryx compacta	Within Known Range? Y	Nearest Occurrence:	20.50 KM	50.41594°N	100.14716 °E
Diura majuscula	Within Known Range? Y	Nearest Occurrence:	43.48 KM	50.47032°N	100.40235 °E
Isoperla asiatica	Within Known Range? Y	Nearest Occurrence:	20.47 KM	50.41594°N	100.14716 °E
Family: Taeniopterygidae					
Taenionema japonicum	Within Known Range? Y	Nearest Occurrence:	101.96 KM	51.07896°N	99.70857 °E

**LOE Rating: Probable Total: 7**

Family: Chloroperlidae					
Alloperla mediata	Within Known Range? Y	Nearest Occurrence:	114.79 KM	50.61826°N	99.12094 °E
Family: Perlidae					
Agnatina extrema	Within Known Range? N	Nearest Occurrence:	164.91 KM	50.54915°N	101.53806 °E
Kamimuria exilis	Within Known Range? N	Nearest Occurrence:	138.43 KM	50.16278°N	98.84212 °E
Family: Perlodidae					
Arcynopteryx sajanensis	Within Known Range? N	Nearest Occurrence:	162.90 KM	51.61397°N	100.59972 °E
Kaszabia nigricauda	Within Known Range? Y	Nearest Occurrence:	68.95 KM	49.62785°N	99.99523 °E
Megarcys ochracea	Within Known Range? Y	Nearest Occurrence:	156.01 KM	51.40978°N	99.30136 °E
Pictetiella asiatica	Within Known Range? N	Nearest Occurrence:	164.74 KM	51.65822°N	100.53000 °E



**Basin:** Arctic Ocean Basin  
**Aimags:** Khovsgol  
**Soums:** Alag-erdene

**Freshwater Ecoregion:** Lake Baikal  
**Terrestrial Ecoregion:** Sayan Alpine Meadows And Tundra

**WQM Sites:**

WQM Sites: # 30 (Eg River @ N 50.41578° E 100.14942°) # 31  
 (Alagtsar River @ N 50.47032° E 100.40278°)

**LOE Rating: Possible Total: 10**

Family: Capniidae						
Isocapnia sibirica	Within Known Range? N	Nearest Occurrence:	350.66 KM	47.28244°N	101.18793 °E	
Family: Chloroperlidae						
Alloperla joosti	Within Known Range? Y	Nearest Occurrence:	128.63 KM	50.51517°N	101.21073 °E	
Family: Nemouridae						
Amphinemura borealis	Within Known Range? Y	Nearest Occurrence:	97.63 KM	49.45317°N	100.47234 °E	
Family: Perlidae						
Agnetina brevipennis	Within Known Range? Y	Nearest Occurrence:	68.95 KM	49.62785°N	99.99523 °E	
Family: Perlodidae						
Isoperla kozlovi	Within Known Range? Y	Nearest Occurrence:	68.95 KM	49.62785°N	99.99523 °E	
Isoperla lunigera	Within Known Range? Y	Nearest Occurrence:	68.95 KM	49.62785°N	99.99523 °E	
Family: Pteronarcyidae						
Pteronarcys reticulata	Within Known Range? Y	Nearest Occurrence:	164.65 KM	50.60031°N	101.52392 °E	
Pteronarcys reticulata	Within Known Range? Y	Nearest Occurrence:	164.65 KM	50.60031°N	101.52392 °E	
Pteronarcys reticulata	Within Known Range? Y	Nearest Occurrence:	164.65 KM	50.60031°N	101.52392 °E	
Pteronarcys reticulata	Within Known Range? Y	Nearest Occurrence:	164.65 KM	50.60031°N	101.52392 °E	

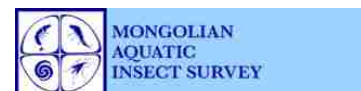
**LOE Rating: Predicted Total: 12**

Family: Capniidae						
Capnia khulsbagia	Within Known Range? N	Nearest Occurrence:	108.82 KM	50.98944°N	100.71944 °E	
Family: Chloroperlidae						
Alloperla deminuta	Within Known Range? Y	Nearest Occurrence:	164.65 KM	50.60031°N	101.52392 °E	
Family: Leuctridae						
Paraleuctra zapekinae	Within Known Range? N	Nearest Occurrence:	509.28 KM	49.71481°N	104.64203 °E	
Family: Nemouridae						
Nemurella pictetii	Within Known Range? N	Nearest Occurrence:	101.78 KM	51.07896°N	99.70857 °E	
Family: Perlidae						
Agnetina cocandica	Within Known Range? Y	Nearest Occurrence:	58.71 KM	49.76390°N	99.86185 °E	
Paragnetina flavotincta	Within Known Range? N	Nearest Occurrence:	111.16 KM	49.26170°N	99.88242 °E	
Family: Perlodidae						
Diura bicaudata	Within Known Range? Y	Nearest Occurrence:	133.57 KM	51.39852°N	99.75011 °E	
Isoperla altaica	Within Known Range? Y	Nearest Occurrence:	101.96 KM	51.07896°N	99.70857 °E	
Isoperla mongolica	Within Known Range? Y	Nearest Occurrence:	44.04 KM	50.48083°N	100.40083 °E	
Isoperla obscura	Within Known Range? Y	Nearest Occurrence:	163.80 KM	51.65045°N	100.52664 °E	
Isoperla potanini	Within Known Range? Y	Nearest Occurrence:	111.37 KM	49.26170°N	99.88242 °E	
Skwala pusilla	Within Known Range? N	Nearest Occurrence:	1,298.91 KM	48.51277°N	88.51107 °E	

**LOE Rating: Unlikely Total: 3**

Family: Capniidae						
Mesocapnia altaica	Within Known Range? N	Nearest Occurrence:	1,257.44 KM	48.43684°N	88.90094 °E	
Family: Leuctridae						
Leuctra fusca	Within Known Range? N	Nearest Occurrence:	810.00 KM	49.08643°N	107.28952 °E	
Family: Perlodidae						
Isoperla eximia	Within Known Range? N	Nearest Occurrence:	839.15 KM	49.01829°N	107.54453 °E	

Research funded by the National Science Foundation  
 DEB-BSI #0206674: A Survey of the Aquatic Insects of the Selenge River Basin. P.I.'s: JKGelhaus, JCMorse, BHayford.  
 DEB # 0743732: Aquatic Insects of the Altai and Hangai Mountain Drainages. P.I.'s: JKGelhaus, JCMorse, CRNelson.  
<http://clade.ansp.org/entomology/mongolia/index.html>



**Basin:** Arctic Ocean Basin

**Aimags:** Khovsgol

**Soums:** Arbulag

Freshwater Ecoregion: Lake Baikal

Terrestrial Ecoregion: Selenge-Orkhon Forest Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Highly Likely Total: 1**

Family: Perlodidae

Isoperla kozlovi Within Known Range? Y Nearest Occurrence: 44.60 KM 50.31066°N 99.32150 °E

**LOE Rating: Likely Total: 21**

Family: Capniidae

Capnia nigra Within Known Range? Y Nearest Occurrence: 83.64 KM 50.61826°N 99.12094 °E

Isocapnia guentheri Within Known Range? Y Nearest Occurrence: 169.42 KM 51.39852°N 99.75011 °E

Isocapnia kudia Within Known Range? N Nearest Occurrence: 151.69 KM 51.25356°N 99.66687 °E

Mesocapnia variabilis Within Known Range? Y Nearest Occurrence: 179.99 KM 48.36436°N 98.92737 °E

Family: Chloroperlidae

Alaskaperla longidentata Within Known Range? Y Nearest Occurrence: 46.79 KM 50.21920°N 99.09978 °E

Alloperla mediata Within Known Range? Y Nearest Occurrence: 83.64 KM 50.61826°N 99.12094 °E

Alloperla rostellata Within Known Range? Y Nearest Occurrence: 83.64 KM 50.61826°N 99.12094 °E

Suwallia kerzhneri Within Known Range? Y Nearest Occurrence: 183.27 KM 50.78320°N 100.79585 °E

Suwallia teleckojensis Within Known Range? Y Nearest Occurrence: 90.87 KM 49.26170°N 99.88242 °E

Family: Nemouridae

Amphinemura standfussi Within Known Range? Y Nearest Occurrence: 183.19 KM 50.77500°N 100.80006 °E

Nemoura arctica Within Known Range? Y Nearest Occurrence: 60.46 KM 50.42996°N 99.21727 °E

Nemoura cinerea Within Known Range? Y Nearest Occurrence: 99.82 KM 50.81265°N 99.33803 °E

Nemoura sahlbergi Within Known Range? Y Nearest Occurrence: 60.35 KM 50.42996°N 99.21727 °E

Family: Perlidae

Kamimuria exilis Within Known Range? Y Nearest Occurrence: 67.02 KM 50.16278°N 98.84212 °E

Family: Perlodidae

Arcynopteryx polaris Within Known Range? Y Nearest Occurrence: 128.67 KM 50.48083°N 100.40083 °E

Arcynopteryx sajanensis Within Known Range? N Nearest Occurrence: 231.83 KM 51.61397°N 100.59972 °E

Diura majuscula Within Known Range? Y Nearest Occurrence: 83.79 KM 50.61826°N 99.12094 °E

Kaszabia nigricauda Within Known Range? Y Nearest Occurrence: 50.94 KM 50.19916°N 99.03117 °E

Megarcys ochracea Within Known Range? N Nearest Occurrence: 166.22 KM 51.40978°N 99.30136 °E

Pictetiella asiatica Within Known Range? N Nearest Occurrence: 231.11 KM 51.65822°N 100.53000 °E

Family: Taeniopterygidae

Taenionema japonicum Within Known Range? Y Nearest Occurrence: 83.79 KM 50.61826°N 99.12094 °E

**LOE Rating: Probable Total: 1**

Family: Perlodidae

Arcynopteryx compacta Within Known Range? Y Nearest Occurrence: 83.79 KM 50.61826°N 99.12094 °E



**Basin:** Arctic Ocean Basin

**Aimags:** Khovsgol

**Soums:** Arbulag

Freshwater Ecoregion: Lake Baikal

Terrestrial Ecoregion: Selenge-Orkhon Forest Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Possible Total: 9**

Family: Capniidae						
Isocapnia sibirica	Within Known Range? N	Nearest Occurrence:	353.76 KM	47.28244 °N	101.18793 °E	
Family: Chloroperlidae						
Haploperla lepnevae	Within Known Range? Y	Nearest Occurrence:	90.71 KM	49.26170 °N	99.88242 °E	
Family: Nemouridae						
Amphinemura borealis	Within Known Range? Y	Nearest Occurrence:	119.59 KM	50.99171 °N	99.35400 °E	
Family: Perlidae						
Agnetina brevipennis	Within Known Range? Y	Nearest Occurrence:	66.90 KM	50.16278 °N	98.84212 °E	
Agnetina extrema	Within Known Range? N	Nearest Occurrence:	248.45 KM	50.54915 °N	101.53806 °E	
Family: Perlodidae						
Isoperla altaica	Within Known Range? Y	Nearest Occurrence:	100.00 KM	50.81265 °N	99.33803 °E	
Isoperla lunigera	Within Known Range? Y	Nearest Occurrence:	74.21 KM	49.62785 °N	99.99523 °E	
Isoperla potanini	Within Known Range? Y	Nearest Occurrence:	90.87 KM	49.26170 °N	99.88242 °E	
Family: Pteronarcyidae						
Pteronarcys reticulata	Within Known Range? Y	Nearest Occurrence:	177.38 KM	51.47065 °N	99.02617 °E	

**LOE Rating: Predicted Total: 12**

Family: Capniidae						
Capnia khulsbagia	Within Known Range? N	Nearest Occurrence:	189.61 KM	50.98944 °N	100.71944 °E	
Family: Chloroperlidae						
Alloperla deminuta	Within Known Range? Y	Nearest Occurrence:	177.38 KM	51.47065 °N	99.02617 °E	
Alloperla joosti	Within Known Range? Y	Nearest Occurrence:	193.42 KM	48.61518 °N	98.23096 °E	
Family: Leuctridae						
Paraleuctra zapekinae	Within Known Range? N	Nearest Occurrence:	583.23 KM	49.71481 °N	104.64203 °E	
Family: Nemouridae						
Nemurella pictetii	Within Known Range? N	Nearest Occurrence:	99.82 KM	50.81265 °N	99.33803 °E	
Family: Perlidae						
Agnetina cocandica	Within Known Range? Y	Nearest Occurrence:	54.93 KM	49.76390 °N	99.86185 °E	
Paragnetina flavotincta	Within Known Range? N	Nearest Occurrence:	90.71 KM	49.26170 °N	99.88242 °E	
Family: Perlodidae						
Diura bicaudata	Within Known Range? Y	Nearest Occurrence:	169.42 KM	51.39852 °N	99.75011 °E	
Isoperla asiatica	Within Known Range? Y	Nearest Occurrence:	100.64 KM	50.41594 °N	100.14716 °E	
Isoperla mongolica	Within Known Range? Y	Nearest Occurrence:	128.67 KM	50.48083 °N	100.40083 °E	
Isoperla obscura	Within Known Range? Y	Nearest Occurrence:	230.18 KM	51.65045 °N	100.52664 °E	
Skwala pusilla	Within Known Range? N	Nearest Occurrence:	1,217.72 KM	48.51277 °N	88.51107 °E	

**LOE Rating: Unlikely Total: 3**

Family: Capniidae						
Mesocapnia altaica	Within Known Range? N	Nearest Occurrence:	1,175.96 KM	48.43684 °N	88.90094 °E	
Family: Leuctridae						
Leuctra fusca	Within Known Range? N	Nearest Occurrence:	881.49 KM	49.08643 °N	107.28952 °E	
Family: Perlodidae						
Isoperla eximia	Within Known Range? N	Nearest Occurrence:	910.44 KM	49.01829 °N	107.54453 °E	

**Basin:** Arctic Ocean Basin  
**Aimags:** Khovsgol  
**Soums:** Bayanzurkh

Freshwater Ecoregion: Lake Baikal  
 Terrestrial Ecoregion: Selenge-Orkhon Forest Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

<b>LOE Rating:</b>	<b>Highly Likely</b>	<b>Total:</b>	<b>1</b>
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Family: Chloroperlidae

<i>Alaskaperla longidentata</i>	Within Known Range? Y	Nearest Occurrence:	28.97 KM	50.21340°N	98.96266°E
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<b>LOE Rating:</b>	<b>Likely</b>	<b>Total:</b>	<b>19</b>
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Family: Capniidae

<i>Capnia nigra</i>	Within Known Range? Y	Nearest Occurrence:	61.12 KM	50.61826°N	99.12094°E
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<i>Isocapnia guentheri</i>	Within Known Range? Y	Nearest Occurrence:	171.76 KM	51.39852°N	99.75011°E
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<i>Isocapnia kudia</i>	Within Known Range? N	Nearest Occurrence:	153.71 KM	51.25356°N	99.66687°E
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<i>Mesocapnia variabilis</i>	Within Known Range? Y	Nearest Occurrence:	211.91 KM	48.36436°N	98.92737°E
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Family: Chloroperlidae

<i>Alloperla mediata</i>	Within Known Range? Y	Nearest Occurrence:	61.12 KM	50.61826°N	99.12094°E
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<i>Alloperla rostellata</i>	Within Known Range? Y	Nearest Occurrence:	61.12 KM	50.61826°N	99.12094°E
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<i>Suwallia kerzhneri</i>	Within Known Range? Y	Nearest Occurrence:	189.70 KM	48.61518°N	98.23096°E
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<i>Suwallia teleckojensis</i>	Within Known Range? Y	Nearest Occurrence:	108.98 KM	50.99171°N	99.35400°E
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Family: Nemouridae

<i>Amphinemura standfussi</i>	Within Known Range? Y	Nearest Occurrence:	189.70 KM	48.61518°N	98.23096°E
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<i>Nemoura arctica</i>	Within Known Range? Y	Nearest Occurrence:	60.08 KM	50.42996°N	99.21727°E
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<i>Nemoura cinerea</i>	Within Known Range? Y	Nearest Occurrence:	93.46 KM	50.81265°N	99.33803°E
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Family: Perlidae

<i>Agnetina brevipennis</i>	Within Known Range? Y	Nearest Occurrence:	18.43 KM	50.16278°N	98.84212°E
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<i>Kamimuria exilis</i>	Within Known Range? Y	Nearest Occurrence:	18.47 KM	50.16278°N	98.84212°E
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Family: Perlodidae

<i>Arcynopteryx compacta</i>	Within Known Range? Y	Nearest Occurrence:	61.23 KM	50.61826°N	99.12094°E
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<i>Arcynopteryx polaris</i>	Within Known Range? Y	Nearest Occurrence:	144.84 KM	51.46205°N	99.19994°E
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<i>Diura majuscula</i>	Within Known Range? Y	Nearest Occurrence:	61.23 KM	50.61826°N	99.12094°E
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<i>Kaszabia nigricauda</i>	Within Known Range? Y	Nearest Occurrence:	36.73 KM	50.19916°N	99.03117°E
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<i>Megarcys ochracea</i>	Within Known Range? N	Nearest Occurrence:	144.05 KM	51.40978°N	99.30136°E
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Family: Taeniopterygidae

<i>Taenionema japonicum</i>	Within Known Range? Y	Nearest Occurrence:	61.23 KM	50.61826°N	99.12094°E
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<b>LOE Rating:</b>	<b>Probable</b>	<b>Total:</b>	<b>4</b>
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Family: Nemouridae

<i>Nemoura sahlbergi</i>	Within Known Range? Y	Nearest Occurrence:	59.98 KM	50.42996°N	99.21727°E
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Family: Perlodidae

<i>Arcynopteryx sajanensis</i>	Within Known Range? N	Nearest Occurrence:	259.12 KM	51.61397°N	100.59972°E
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<i>Isoperla altaica</i>	Within Known Range? Y	Nearest Occurrence:	93.63 KM	50.81265°N	99.33803°E
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<i>Pictetiella asiatica</i>	Within Known Range? N	Nearest Occurrence:	255.36 KM	51.65822°N	100.53000°E
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Basin: Arctic Ocean Basin

Aimags: Khovsgol

Soums: Bayanzurkh

Freshwater Ecoregion: Lake Baikal

Terrestrial Ecoregion: Selenge-Orkhon Forest Steppe

WQM Sites:

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Possible Total: 7**

Family: Capniidae						
Isocapnia sibirica	Within Known Range? N	Nearest Occurrence:	430.06 KM	47.28244 °N	101.18793 °E	
Family: Chloroperlidae						
Haploperla lepnevae	Within Known Range? Y	Nearest Occurrence:	171.10 KM	49.26170 °N	99.88242 °E	
Family: Nemouridae						
Amphinemura borealis	Within Known Range? Y	Nearest Occurrence:	108.79 KM	50.99171 °N	99.35400 °E	
Family: Perlodidae						
Diura bicaudata	Within Known Range? Y	Nearest Occurrence:	171.76 KM	51.39852 °N	99.75011 °E	
Isoperla kozlovi	Within Known Range? Y	Nearest Occurrence:	68.65 KM	50.31066 °N	99.32150 °E	
Isoperla lunigera	Within Known Range? Y	Nearest Occurrence:	115.70 KM	51.09845 °N	99.32051 °E	
Family: Pteronarcyidae						
Pteronarcys reticulata	Within Known Range? Y	Nearest Occurrence:	139.34 KM	51.47065 °N	99.02617 °E	

**LOE Rating: Predicted Total: 13**

Family: Capniidae						
Capnia khulsbagia	Within Known Range? N	Nearest Occurrence:	237.89 KM	50.98944 °N	100.71944 °E	
Family: Chloroperlidae						
Alloperla deminuta	Within Known Range? Y	Nearest Occurrence:	139.34 KM	51.47065 °N	99.02617 °E	
Alloperla joosti	Within Known Range? N	Nearest Occurrence:	189.70 KM	48.61518 °N	98.23096 °E	
Family: Leuctridae						
Paraleuctra zapekinae	Within Known Range? N	Nearest Occurrence:	661.71 KM	49.71481 °N	104.64203 °E	
Family: Nemouridae						
Nemurella pictetii	Within Known Range? Y	Nearest Occurrence:	93.46 KM	50.81265 °N	99.33803 °E	
Family: Perlidae						
Agnentina cocandica	Within Known Range? Y	Nearest Occurrence:	139.80 KM	49.76390 °N	99.86185 °E	
Agnentina extrema	Within Known Range? N	Nearest Occurrence:	316.10 KM	50.54915 °N	101.53806 °E	
Paragnetina flavotincta	Within Known Range? N	Nearest Occurrence:	171.10 KM	49.26170 °N	99.88242 °E	
Family: Perlodidae						
Isoperla asiatica	Within Known Range? N	Nearest Occurrence:	161.01 KM	50.41594 °N	100.14716 °E	
Isoperla mongolica	Within Known Range? Y	Nearest Occurrence:	190.17 KM	50.48083 °N	100.40083 °E	
Isoperla obscura	Within Known Range? Y	Nearest Occurrence:	254.54 KM	51.65045 °N	100.52664 °E	
Isoperla potanini	Within Known Range? Y	Nearest Occurrence:	171.41 KM	49.26170 °N	99.88242 °E	
Skwala pusilla	Within Known Range? N	Nearest Occurrence:	1,148.01 KM	48.51277 °N	88.51107 °E	

**LOE Rating: Unlikely Total: 3**

Family: Capniidae						
Mesocapnia altaica	Within Known Range? N	Nearest Occurrence:	1,106.89 KM	48.43684 °N	88.90094 °E	
Family: Leuctridae						
Leuctra fusca	Within Known Range? N	Nearest Occurrence:	961.66 KM	49.08643 °N	107.28952 °E	
Family: Perlodidae						
Isoperla eximia	Within Known Range? N	Nearest Occurrence:	990.73 KM	49.01829 °N	107.54453 °E	

**Basin:** Arctic Ocean Basin  
**Aimags:** Khovsgol  
**Soums:** Burentogtokh

Freshwater Ecoregion: Lake Baikal  
 Terrestrial Ecoregion: Selenge-Orkhon Forest Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Highly Likely Total: 5**

Family: Chloroperlidae						
Haploperla lepnevae	Within Known Range? Y	Nearest Occurrence:	40.95 KM	49.26170 °N	99.88242 °E	
Family: Perlidae						
Agnetina brevipennis	Within Known Range? Y	Nearest Occurrence:	40.95 KM	49.26170 °N	99.88242 °E	
Family: Perlodidae						
Isoperla kozlovi	Within Known Range? Y	Nearest Occurrence:	50.46 KM	49.62785 °N	99.99523 °E	
Isoperla lunigera	Within Known Range? Y	Nearest Occurrence:	50.46 KM	49.62785 °N	99.99523 °E	
Kaszabia nigricauda	Within Known Range? Y	Nearest Occurrence:	50.46 KM	49.62785 °N	99.99523 °E	

**LOE Rating: Likely Total: 15**

Family: Capniidae						
Isocapnia guentheri	Within Known Range? Y	Nearest Occurrence:	176.04 KM	48.61518 °N	98.23096 °E	
Isocapnia kudia	Within Known Range? N	Nearest Occurrence:	199.21 KM	51.25356 °N	99.66687 °E	
Mesocapnia variabilis	Within Known Range? Y	Nearest Occurrence:	141.51 KM	48.36436 °N	98.92737 °E	
Family: Chloroperlidae						
Alaskaperla longidentata	Within Known Range? Y	Nearest Occurrence:	99.12 KM	50.21920 °N	99.09978 °E	
Alloperla rostellata	Within Known Range? Y	Nearest Occurrence:	137.83 KM	50.61826 °N	99.12094 °E	
Suwallia kerzhneri	Within Known Range? Y	Nearest Occurrence:	176.04 KM	48.61518 °N	98.23096 °E	
Suwallia teleckojensis	Within Known Range? Y	Nearest Occurrence:	41.03 KM	49.26170 °N	99.88242 °E	
Family: Nemouridae						
Amphinemura borealis	Within Known Range? Y	Nearest Occurrence:	99.92 KM	49.45317 °N	100.47234 °E	
Nemoura arctica	Within Known Range? Y	Nearest Occurrence:	114.70 KM	50.42996 °N	99.21727 °E	
Nemoura cinerea	Within Known Range? Y	Nearest Occurrence:	152.22 KM	50.81265 °N	99.33803 °E	
Family: Perlidae						
Agnetina cocandica	Within Known Range? Y	Nearest Occurrence:	46.56 KM	49.76390 °N	99.86185 °E	
Kamimuria exilis	Within Known Range? N	Nearest Occurrence:	112.58 KM	50.16278 °N	98.84212 °E	
Family: Perlodidae						
Arcynopteryx polaris	Within Known Range? Y	Nearest Occurrence:	141.51 KM	48.36436 °N	98.92737 °E	
Arcynopteryx sajanensis	Within Known Range? N	Nearest Occurrence:	265.23 KM	51.61397 °N	100.59972 °E	
Family: Taeniopterygidae						
Taenionema japonicum	Within Known Range? Y	Nearest Occurrence:	138.08 KM	50.61826 °N	99.12094 °E	

**LOE Rating: Probable Total: 6**

Family: Capniidae						
Capnia nigra	Within Known Range? Y	Nearest Occurrence:	137.83 KM	50.61826 °N	99.12094 °E	
Isocapnia sibirica	Within Known Range? N	Nearest Occurrence:	301.10 KM	47.28244 °N	101.18793 °E	
Family: Nemouridae						
Amphinemura standfussi	Within Known Range? Y	Nearest Occurrence:	176.04 KM	48.61518 °N	98.23096 °E	
Family: Perlidae						
Agnetina extrema	Within Known Range? N	Nearest Occurrence:	243.59 KM	47.50949 °N	100.57510 °E	
Family: Perlodidae						
Diura majuscula	Within Known Range? Y	Nearest Occurrence:	138.08 KM	50.61826 °N	99.12094 °E	
Pictetiella asiatica	Within Known Range? N	Nearest Occurrence:	266.01 KM	51.65822 °N	100.53000 °E	

**Basin:** Arctic Ocean Basin  
**Aimags:** Khovsgol  
**Soums:** Burentogtokh

Freshwater Ecoregion: Lake Baikal  
 Terrestrial Ecoregion: Selenge-Orkhon Forest Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Possible Total: 7**

Family: Chloroperlidae						
Alloperla joosti	Within Known Range? Y	Nearest Occurrence:	176.04 KM	48.61518 °N	98.23096 °E	
Alloperla mediata	Within Known Range? N	Nearest Occurrence:	137.83 KM	50.61826 °N	99.12094 °E	
Family: Nemouridae						
Nemoura sahlbergi	Within Known Range? Y	Nearest Occurrence:	114.50 KM	50.42996 °N	99.21727 °E	
Family: Perlodidae						
Arcynopteryx compacta	Within Known Range? Y	Nearest Occurrence:	123.90 KM	50.41594 °N	100.14716 °E	
Isoperla potanini	Within Known Range? Y	Nearest Occurrence:	41.03 KM	49.26170 °N	99.88242 °E	
Megarcys ochracea	Within Known Range? N	Nearest Occurrence:	218.35 KM	51.40978 °N	99.30136 °E	
Family: Pteronarcyidae						
Pteronarcys reticulata	Within Known Range? Y	Nearest Occurrence:	201.70 KM	47.80440 °N	100.31810 °E	

**LOE Rating: Predicted Total: 11**

Family: Capniidae						
Capnia khulsbagia	Within Known Range? N	Nearest Occurrence:	212.09 KM	50.98944 °N	100.71944 °E	
Family: Chloroperlidae						
Alloperla deminuta	Within Known Range? Y	Nearest Occurrence:	201.70 KM	47.80440 °N	100.31810 °E	
Family: Leuctridae						
Paraleuctra zapekinae	Within Known Range? N	Nearest Occurrence:	563.45 KM	49.71481 °N	104.64203 °E	
Family: Nemouridae						
Nemurella pictetii	Within Known Range? N	Nearest Occurrence:	152.22 KM	50.81265 °N	99.33803 °E	
Family: Perlidae						
Paragnetina flavotincta	Within Known Range? Y	Nearest Occurrence:	40.95 KM	49.26170 °N	99.88242 °E	
Family: Perlodidae						
Diura bicaudata	Within Known Range? Y	Nearest Occurrence:	215.92 KM	51.39852 °N	99.75011 °E	
Isoperla altaica	Within Known Range? Y	Nearest Occurrence:	152.49 KM	50.81265 °N	99.33803 °E	
Isoperla asiatica	Within Known Range? Y	Nearest Occurrence:	123.69 KM	50.41594 °N	100.14716 °E	
Isoperla mongolica	Within Known Range? Y	Nearest Occurrence:	146.08 KM	50.48083 °N	100.40083 °E	
Isoperla obscura	Within Known Range? Y	Nearest Occurrence:	250.83 KM	50.60031 °N	101.52392 °E	
Skwala pusilla	Within Known Range? N	Nearest Occurrence:	1,232.30 KM	48.51277 °N	88.51107 °E	

**LOE Rating: Unlikely Total: 3**

Family: Capniidae						
Mesocapnia altaica	Within Known Range? N	Nearest Occurrence:	1,189.96 KM	48.43684 °N	88.90094 °E	
Family: Leuctridae						
Leuctra fusca	Within Known Range? N	Nearest Occurrence:	857.63 KM	49.08643 °N	107.28952 °E	
Family: Perlodidae						
Isoperla eximia	Within Known Range? N	Nearest Occurrence:	886.29 KM	49.01829 °N	107.54453 °E	

**Basin:** Arctic Ocean Basin  
**Aimags:** Khovsgol  
**Soums:** Chandmany-ondor

**Freshwater Ecoregion:** Lake Baikal  
**Terrestrial Ecoregion:** Sayan Montane Conifer Forests

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Highly Likely Total: 6**

<b>Family: Chloroperlidae</b>						
Alaskaperla longidentata	Within Known Range?	Y	Nearest Occurrence:	32.16 KM	50.78320°N	100.79585°E
Suwallia kerzhneri	Within Known Range?	Y	Nearest Occurrence:	32.16 KM	50.78320°N	100.79585°E
<b>Family: Nemouridae</b>						
Amphinemura standfussi	Within Known Range?	Y	Nearest Occurrence:	31.10 KM	50.77444°N	100.80067°E
Nemoura arctica	Within Known Range?	Y	Nearest Occurrence:	42.95 KM	50.59636°N	100.48257°E
Nemoura sahlbergi	Within Known Range?	Y	Nearest Occurrence:	32.16 KM	50.78320°N	100.79585°E
<b>Family: Perlodidae</b>						
Arcynopteryx polaris	Within Known Range?	Y	Nearest Occurrence:	32.22 KM	50.78320°N	100.79585°E

**LOE Rating: Likely Total: 14**

<b>Family: Capniidae</b>						
Capnia nigra	Within Known Range?	Y	Nearest Occurrence:	48.46 KM	50.92452°N	100.75528°E
Isocapnia guentheri	Within Known Range?	Y	Nearest Occurrence:	126.24 KM	51.57304°N	100.48000°E
Isocapnia kudia	Within Known Range?	N	Nearest Occurrence:	156.32 KM	51.25356°N	99.66687°E
Mesocapnia variabilis	Within Known Range?	Y	Nearest Occurrence:	53.41 KM	50.96186°N	100.72506°E
<b>Family: Chloroperlidae</b>						
Alloperla joosti	Within Known Range?	Y	Nearest Occurrence:	39.35 KM	50.51517°N	101.21073°E
Alloperla mediata	Within Known Range?	Y	Nearest Occurrence:	39.35 KM	50.51517°N	101.21073°E
Alloperla rostellata	Within Known Range?	Y	Nearest Occurrence:	39.35 KM	50.51517°N	101.21073°E
<b>Family: Nemouridae</b>						
Nemoura cinerea	Within Known Range?	Y	Nearest Occurrence:	142.72 KM	51.07896°N	99.70857°E
<b>Family: Perlidae</b>						
Agnetina extrema	Within Known Range?	Y	Nearest Occurrence:	75.85 KM	50.54915°N	101.53806°E
<b>Family: Perlodidae</b>						
Arcynopteryx sajanensis	Within Known Range?	N	Nearest Occurrence:	127.14 KM	51.61397°N	100.59972°E
Diura majuscula	Within Known Range?	Y	Nearest Occurrence:	42.95 KM	50.59636°N	100.48257°E
Kaszabia nigricauda	Within Known Range?	Y	Nearest Occurrence:	39.35 KM	50.51517°N	101.21073°E
Pictetiella asiatica	Within Known Range?	N	Nearest Occurrence:	133.59 KM	51.65822°N	100.53000°E
<b>Family: Taeniopterygidae</b>						
Taenionema japonicum	Within Known Range?	Y	Nearest Occurrence:	133.83 KM	51.65822°N	100.53000°E

**LOE Rating: Probable Total: 5**

<b>Family: Chloroperlidae</b>						
Haploperla lepnevae	Within Known Range?	Y	Nearest Occurrence:	50.27 KM	50.51003°N	100.40375°E
Suwallia teleckojensis	Within Known Range?	Y	Nearest Occurrence:	79.44 KM	50.41594°N	100.14716°E
<b>Family: Nemouridae</b>						
Amphinemura borealis	Within Known Range?	Y	Nearest Occurrence:	74.91 KM	50.60031°N	101.52392°E
<b>Family: Perlidae</b>						
Kamimuria exilis	Within Known Range?	N	Nearest Occurrence:	227.12 KM	50.16278°N	98.84212°E
<b>Family: Perlodidae</b>						
Megarcys ochracea	Within Known Range?	Y	Nearest Occurrence:	132.64 KM	51.64934°N	100.53020°E

**Basin:** Arctic Ocean Basin  
**Aimags:** Khovsgol  
**Soums:** Chandmany-ondor

**Freshwater Ecoregion:** Lake Baikal  
**Terrestrial Ecoregion:** Sayan Montane Conifer Forests

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Possible Total: 6**

Family: Capniidae						
Isocapnia sibirica	Within Known Range? N	Nearest Occurrence:	359.02 KM	47.28244 °N	101.18793 °E	
Family: Perlidae						
Agnetina brevipennis	Within Known Range? Y	Nearest Occurrence:	74.91 KM	50.60031 °N	101.52392 °E	
Family: Perlodidae						
Arcynopteryx compacta	Within Known Range? Y	Nearest Occurrence:	65.57 KM	50.97545 °N	100.50795 °E	
Isoperla kozlovi	Within Known Range? Y	Nearest Occurrence:	123.76 KM	49.45317 °N	100.47234 °E	
Isoperla lunigera	Within Known Range? Y	Nearest Occurrence:	74.91 KM	50.60031 °N	101.52392 °E	
Family: Pteronarcyidae						
Pteronarcys reticulata	Within Known Range? Y	Nearest Occurrence:	74.91 KM	50.60031 °N	101.52392 °E	

**LOE Rating: Predicted Total: 13**

Family: Capniidae						
Capnia khulsbagia	Within Known Range? Y	Nearest Occurrence:	56.43 KM	50.98944 °N	100.71944 °E	
Family: Chloroperlidae						
Alloperla deminuta	Within Known Range? Y	Nearest Occurrence:	74.91 KM	50.60031 °N	101.52392 °E	
Family: Leuctridae						
Paraleuctra zapekinae	Within Known Range? N	Nearest Occurrence:	429.13 KM	49.71481 °N	104.64203 °E	
Family: Nemouridae						
Nemurella pictetii	Within Known Range? N	Nearest Occurrence:	142.72 KM	51.07896 °N	99.70857 °E	
Family: Perlidae						
Agnetina cocandica	Within Known Range? Y	Nearest Occurrence:	136.30 KM	49.62785 °N	99.99523 °E	
Paragnetina flavotincta	Within Known Range? N	Nearest Occurrence:	124.77 KM	49.43131 °N	101.20535 °E	
Family: Perlodidae						
Diura bicaudata	Within Known Range? N	Nearest Occurrence:	158.22 KM	51.39852 °N	99.75011 °E	
Isoperla altaica	Within Known Range? Y	Nearest Occurrence:	133.83 KM	51.65822 °N	100.53000 °E	
Isoperla asiatica	Within Known Range? Y	Nearest Occurrence:	79.29 KM	50.41594 °N	100.14716 °E	
Isoperla mongolica	Within Known Range? Y	Nearest Occurrence:	50.72 KM	50.48083 °N	100.40083 °E	
Isoperla obscura	Within Known Range? Y	Nearest Occurrence:	74.91 KM	50.60031 °N	101.52392 °E	
Isoperla potanini	Within Known Range? Y	Nearest Occurrence:	74.72 KM	51.16368 °N	100.75216 °E	
Skwala pusilla	Within Known Range? N	Nearest Occurrence:	1,387.98 KM	48.51277 °N	88.51107 °E	

**LOE Rating: Unlikely Total: 3**

Family: Capniidae						
Mesocapnia altaica	Within Known Range? N	Nearest Occurrence:	1,346.68 KM	48.43684 °N	88.90094 °E	
Family: Leuctridae						
Leuctra fusca	Within Known Range? N	Nearest Occurrence:	731.09 KM	49.08643 °N	107.28952 °E	
Family: Perlodidae						
Isoperla eximia	Within Known Range? N	Nearest Occurrence:	760.37 KM	49.01829 °N	107.54453 °E	



Basin: Arctic Ocean Basin

Aimags: Khovsgol

Soums: Erdenebulgan

Freshwater Ecoregion: Lake Baikal

Terrestrial Ecoregion: Sayan Montane Conifer Forests

WQM Sites:

WQM Sites: # 35 (Eg River @ N 50.1074° E 101.58363°)

**LOE Rating: Highly Likely Total: 7**

Family: Chloroperlidae						
Alloperla mediata	Within Known Range? Y	Nearest Occurrence:	12.75 KM	50.30188°N	101.92869°E	
Family: Nemouridae						
Nemoura arctica	Within Known Range? Y	Nearest Occurrence:	37.65 KM	49.87761°N	101.82039°E	
Family: Perlidae						
Agnetina brevipennis	Within Known Range? Y	Nearest Occurrence:	12.75 KM	50.30188°N	101.92869°E	
Agnetina extrema	Within Known Range? Y	Nearest Occurrence:	16.47 KM	50.32719°N	101.95058°E	
Family: Perlodidae						
Arcynopteryx polaris	Within Known Range? Y	Nearest Occurrence:	36.41 KM	49.99851°N	101.60799°E	
Kaszabia nigricauda	Within Known Range? Y	Nearest Occurrence:	16.47 KM	50.32719°N	101.95058°E	
Family: Pteronarcyidae						
Pteronarcys reticulata	Within Known Range? Y	Nearest Occurrence:	12.75 KM	50.30188°N	101.92869°E	

**LOE Rating: Likely Total: 13**

Family: Capniidae						
Isocapnia guentheri	Within Known Range? Y	Nearest Occurrence:	149.63 KM	49.70678°N	103.10288°E	
Family: Chloroperlidae						
Alaskaperla longidentata	Within Known Range? Y	Nearest Occurrence:	78.84 KM	50.51517°N	101.21073°E	
Alloperla joosti	Within Known Range? Y	Nearest Occurrence:	45.43 KM	50.62324°N	101.87412°E	
Alloperla rostellata	Within Known Range? Y	Nearest Occurrence:	45.43 KM	50.62324°N	101.87412°E	
Haploperla lepnevae	Within Known Range? Y	Nearest Occurrence:	56.37 KM	50.60031°N	101.52392°E	
Suwallia kerzhneri	Within Known Range? Y	Nearest Occurrence:	56.37 KM	50.60031°N	101.52392°E	
Family: Nemouridae						
Amphinemura borealis	Within Known Range? Y	Nearest Occurrence:	45.43 KM	50.62324°N	101.87412°E	
Nemoura sahlbergi	Within Known Range? Y	Nearest Occurrence:	37.58 KM	49.87761°N	101.82039°E	
Family: Perlodidae						
Arcynopteryx sajanensis	Within Known Range? N	Nearest Occurrence:	208.99 KM	51.61397°N	100.59972°E	
Isoperla asiatica	Within Known Range? Y	Nearest Occurrence:	12.75 KM	50.30188°N	101.92869°E	
Megaracys ochracea	Within Known Range? Y	Nearest Occurrence:	200.69 KM	49.77776°N	103.60860°E	
Pictetiella asiatica	Within Known Range? N	Nearest Occurrence:	217.45 KM	51.65822°N	100.53000°E	
Family: Taeniopterygidae						
Taenionema japonicum	Within Known Range? Y	Nearest Occurrence:	217.84 KM	51.65822°N	100.53000°E	

**LOE Rating: Probable Total: 5**

Family: Capniidae						
Isocapnia kudia	Within Known Range? N	Nearest Occurrence:	268.79 KM	51.25356°N	99.66687°E	
Family: Nemouridae						
Nemoura cinerea	Within Known Range? Y	Nearest Occurrence:	256.77 KM	51.07896°N	99.70857°E	
Family: Perlidae						
Kamimuria exilis	Within Known Range? N	Nearest Occurrence:	334.99 KM	50.16278°N	98.84212°E	
Family: Perlodidae						
Diura majuscula	Within Known Range? Y	Nearest Occurrence:	158.32 KM	50.59636°N	100.48257°E	
Isoperla kozlovi	Within Known Range? Y	Nearest Occurrence:	132.74 KM	49.38617°N	102.71667°E	



**Basin:** Arctic Ocean Basin  
**Aimags:** Khovsgol  
**Soums:** Erdenebulgan

**Freshwater Ecoregion:** Lake Baikal  
**Terrestrial Ecoregion:** Sayan Montane Conifer Forests

**WQM Sites:**

WQM Sites: # 35 (Eg River @ N 50.1074° E 101.58363°)

<b>LOE Rating:</b>	<b>Possible</b>	<b>Total:</b>	9
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<b>Family:</b> Capniidae			
Capnia nigra	Within Known Range? N	Nearest Occurrence:	145.22 KM 50.92452°N 100.75528°E
Isocapnia sibirica	Within Known Range? N	Nearest Occurrence:	326.89 KM 47.26999°N 101.80227°E
Mesocapnia variabilis	Within Known Range? Y	Nearest Occurrence:	150.57 KM 50.96186°N 100.72506°E
<b>Family:</b> Chloroperlidae			
Alloperla deminuta	Within Known Range? Y	Nearest Occurrence:	45.43 KM 50.62324°N 101.87412°E
Suwallia teleckojensis	Within Known Range? Y	Nearest Occurrence:	178.14 KM 49.21675°N 103.10750°E
<b>Family:</b> Leuctridae			
Paraleuctra zapekinae	Within Known Range? N	Nearest Occurrence:	314.39 KM 49.71481°N 104.64203°E
<b>Family:</b> Nemouridae			
Amphinemura standfussi	Within Known Range? Y	Nearest Occurrence:	132.43 KM 50.77444°N 100.80067°E
<b>Family:</b> Perlodidae			
Arcynopteryx compacta	Within Known Range? Y	Nearest Occurrence:	171.96 KM 50.97545°N 100.50795°E
Isoperla lunigera	Within Known Range? Y	Nearest Occurrence:	56.37 KM 50.60031°N 101.52392°E

<b>LOE Rating:</b>	<b>Predicted</b>	<b>Total:</b>	10
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<b>Family:</b> Capniidae			
Capnia khulsbagia	Within Known Range? N	Nearest Occurrence:	152.53 KM 50.98944°N 100.71944°E
<b>Family:</b> Nemouridae			
Nemurella pictetii	Within Known Range? N	Nearest Occurrence:	256.77 KM 51.07896°N 99.70857°E
<b>Family:</b> Perlidae			
Agnetina cocandica	Within Known Range? Y	Nearest Occurrence:	216.76 KM 49.62785°N 99.99523°E
Paragnetina flavotincta	Within Known Range? Y	Nearest Occurrence:	81.19 KM 49.88884°N 102.50909°E
<b>Family:</b> Perlodidae			
Diura bicaudata	Within Known Range? N	Nearest Occurrence:	267.99 KM 51.39852°N 99.75011°E
Isoperla altaica	Within Known Range? Y	Nearest Occurrence:	217.84 KM 51.65822°N 100.53000°E
Isoperla mongolica	Within Known Range? Y	Nearest Occurrence:	164.30 KM 50.48083°N 100.40083°E
Isoperla obscura	Within Known Range? Y	Nearest Occurrence:	56.37 KM 50.60031°N 101.52392°E
Isoperla potanini	Within Known Range? Y	Nearest Occurrence:	45.51 KM 50.62324°N 101.87412°E
Skwala pusilla	Within Known Range? N	Nearest Occurrence:	1,493.08 KM 48.51277°N 88.51107°E

<b>LOE Rating:</b>	<b>Unlikely</b>	<b>Total:</b>	3
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<b>Family:</b> Capniidae			
Mesocapnia altaica	Within Known Range? N	Nearest Occurrence:	1,451.28 KM 48.43684°N 88.90094°E
<b>Family:</b> Leuctridae			
Leuctra fusca	Within Known Range? N	Nearest Occurrence:	616.18 KM 49.08643°N 107.28952°E
<b>Family:</b> Perlodidae			
Isoperla eximia	Within Known Range? N	Nearest Occurrence:	645.44 KM 49.01829°N 107.54453°E



Basin: Arctic Ocean Basin

Aimags: Khovsgol

Soums: Galt

Freshwater Ecoregion: Lake Baikal

Terrestrial Ecoregion: Selenge-Orkhon Forest Steppe

WQM Sites:

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Highly Likely Total: 6**

Family: Capniidae

Isocapnia guentheri Within Known Range? Y Nearest Occurrence: 169.53 KM 47.48567°N 100.87875°E

Family: Chloroperlidae

Alloperla rostellata Within Known Range? Y Nearest Occurrence: 133.15 KM 48.36436°N 98.92737°E

Suwallia kerzhneri Within Known Range? Y Nearest Occurrence: 169.53 KM 47.48567°N 100.87875°E

Suwallia teleckojensis Within Known Range? Y Nearest Occurrence: 57.75 KM 49.26170°N 99.88242°E

Family: Nemouridae

Nemoura arctica Within Known Range? Y Nearest Occurrence: 184.09 KM 50.42480°N 100.15007°E

Family: Perlodidae

Kaszabia nigricauda Within Known Range? Y Nearest Occurrence: 95.23 KM 49.62785°N 99.99523°E

**LOE Rating: Likely Total: 17**

Family: Capniidae

Isocapnia kudia Within Known Range? N Nearest Occurrence: 278.80 KM 51.25356°N 99.66687°E

Isocapnia sibirica Within Known Range? N Nearest Occurrence: 207.70 KM 47.28244°N 101.18793°E

Mesocapnia variabilis Within Known Range? Y Nearest Occurrence: 133.39 KM 48.36436°N 98.92737°E

Family: Chloroperlidae

Alaskaperla longidentata Within Known Range? Y Nearest Occurrence: 151.90 KM 47.42580°N 100.30130°E

Alloperla joosti Within Known Range? Y Nearest Occurrence: 111.29 KM 47.80440°N 100.31810°E

Haploperla lepnevae Within Known Range? Y Nearest Occurrence: 57.65 KM 49.26170°N 99.88242°E

Family: Nemouridae

Amphinemura borealis Within Known Range? Y Nearest Occurrence: 72.76 KM 48.12661°N 99.94128°E

Nemoura cinerea Within Known Range? Y Nearest Occurrence: 169.53 KM 47.48567°N 100.87875°E

Family: Perlidae

Agnetina brevipennis Within Known Range? Y Nearest Occurrence: 57.65 KM 49.26170°N 99.88242°E

Agnetina extrema Within Known Range? Y Nearest Occurrence: 151.55 KM 47.50949°N 100.57510°E

Kamimuria exilis Within Known Range? N Nearest Occurrence: 205.23 KM 50.16278°N 98.84212°E

Family: Perlodidae

Arcynopteryx polaris Within Known Range? Y Nearest Occurrence: 133.39 KM 48.36436°N 98.92737°E

Arcynopteryx sajanensis Within Known Range? N Nearest Occurrence: 321.76 KM 51.61397°N 100.59972°E

Diura majuscula Within Known Range? Y Nearest Occurrence: 152.18 KM 47.42580°N 100.30130°E

Isoperla kozlovi Within Known Range? Y Nearest Occurrence: 88.64 KM 49.45317°N 100.47234°E

Pictetiella asiatica Within Known Range? N Nearest Occurrence: 324.67 KM 51.65822°N 100.53000°E

Family: Taeniopterygidae

Taenionema japonicum Within Known Range? Y Nearest Occurrence: 208.08 KM 47.28244°N 101.18793°E

**LOE Rating: Probable Total: 2**

Family: Capniidae

Capnia nigra Within Known Range? N Nearest Occurrence: 196.75 KM 50.51003°N 100.40375°E

Family: Pteronarcyidae

Pteronarcys reticulata Within Known Range? Y Nearest Occurrence: 111.29 KM 47.80440°N 100.31810°E

**Basin:** Arctic Ocean Basin  
**Aimags:** Khovsgol  
**Soums:** Galt

Freshwater Ecoregion: Lake Baikal  
 Terrestrial Ecoregion: Selenge-Orkhon Forest Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Possible Total: 6**

Family: Chloroperlidae						
Alloperla mediata	Within Known Range? N	Nearest Occurrence:	229.69 KM	50.61826 °N	99.12094 °E	
Family: Nemouridae						
Amphinemura standfussi	Within Known Range? Y	Nearest Occurrence:	203.27 KM	48.61518 °N	98.23096 °E	
Family: Perlodidae						
Arcynopteryx compacta	Within Known Range? Y	Nearest Occurrence:	183.09 KM	50.41594 °N	100.14716 °E	
Isoperla lunigera	Within Known Range? N	Nearest Occurrence:	88.64 KM	49.45317 °N	100.47234 °E	
Isoperla potanini	Within Known Range? Y	Nearest Occurrence:	57.75 KM	49.26170 °N	99.88242 °E	
Megarcys ochracea	Within Known Range? N	Nearest Occurrence:	304.52 KM	51.40978 °N	99.30136 °E	

**LOE Rating: Predicted Total: 13**

Family: Capniidae						
Capnia khulsbagia	Within Known Range? N	Nearest Occurrence:	256.93 KM	50.98944 °N	100.71944 °E	
Family: Chloroperlidae						
Alloperla deminuta	Within Known Range? Y	Nearest Occurrence:	111.29 KM	47.80440 °N	100.31810 °E	
Family: Leuctridae						
Paraleuctra zapekinae	Within Known Range? N	Nearest Occurrence:	519.75 KM	49.71481 °N	104.64203 °E	
Family: Nemouridae						
Nemoura sahlbergi	Within Known Range? Y	Nearest Occurrence:	151.90 KM	47.42580 °N	100.30130 °E	
Nemurella pictetii	Within Known Range? N	Nearest Occurrence:	240.10 KM	50.81265 °N	99.33803 °E	
Family: Perlidae						
Agnetina cocandica	Within Known Range? Y	Nearest Occurrence:	95.40 KM	49.62785 °N	99.99523 °E	
Paragnetina flavotincta	Within Known Range? Y	Nearest Occurrence:	57.65 KM	49.26170 °N	99.88242 °E	
Family: Perlodidae						
Diura bicaudata	Within Known Range? Y	Nearest Occurrence:	173.11 KM	47.21768 °N	99.92824 °E	
Isoperla altaica	Within Known Range? Y	Nearest Occurrence:	212.97 KM	47.11192 °N	101.01048 °E	
Isoperla asiatica	Within Known Range? Y	Nearest Occurrence:	111.29 KM	47.80440 °N	100.31810 °E	
Isoperla mongolica	Within Known Range? Y	Nearest Occurrence:	193.86 KM	50.48083 °N	100.40083 °E	
Isoperla obscura	Within Known Range? Y	Nearest Occurrence:	260.29 KM	50.60031 °N	101.52392 °E	
Skwala pusilla	Within Known Range? N	Nearest Occurrence:	1,281.75 KM	48.51277 °N	88.51107 °E	

**LOE Rating: Unlikely Total: 3**

Family: Capniidae						
Mesocapnia altaica	Within Known Range? N	Nearest Occurrence:	1,238.71 KM	48.43684 °N	88.90094 °E	
Family: Leuctridae						
Leuctra fusca	Within Known Range? N	Nearest Occurrence:	803.74 KM	49.08643 °N	107.28952 °E	
Family: Perlodidae						
Isoperla eximia	Within Known Range? N	Nearest Occurrence:	831.74 KM	49.01829 °N	107.54453 °E	

**Basin:** Arctic Ocean Basin  
**Aimags:** Khovsgol  
**Soums:** Ikh-uul

Freshwater Ecoregion: Lake Baikal  
 Terrestrial Ecoregion: Selenge-Orkhon Forest Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

<b>LOE Rating:</b>	<b>Highly Likely</b>	<b>Total:</b>	<b>1</b>
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Family: Perlidae

<i>Aagnetina brevipennis</i>	Within Known Range? Y	Nearest Occurrence:	47.24 KM	49.74376 °N	101.10348 °E
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<b>LOE Rating:</b>	<b>Likely</b>	<b>Total:</b>	<b>21</b>
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Family: Capniidae

<i>Isocapnia guentheri</i>	Within Known Range? Y	Nearest Occurrence:	181.17 KM	49.70678 °N	103.10288 °E
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<i>Isocapnia kudia</i>	Within Known Range? N	Nearest Occurrence:	276.57 KM	51.25356 °N	99.66687 °E
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<i>Isocapnia sibirica</i>	Within Known Range? N	Nearest Occurrence:	253.04 KM	47.28244 °N	101.18793 °E
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Family: Chloroperlidae

<i>Alaskaperla longidentata</i>	Within Known Range? Y	Nearest Occurrence:	111.90 KM	50.51517 °N	101.21073 °E
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<i>Alloperla joosti</i>	Within Known Range? Y	Nearest Occurrence:	111.90 KM	50.51517 °N	101.21073 °E
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<i>Alloperla mediata</i>	Within Known Range? Y	Nearest Occurrence:	97.88 KM	50.30188 °N	101.92869 °E
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<i>Alloperla rostellata</i>	Within Known Range? Y	Nearest Occurrence:	111.90 KM	50.51517 °N	101.21073 °E
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<i>Haploperla lepnevae</i>	Within Known Range? Y	Nearest Occurrence:	112.18 KM	49.45317 °N	100.47234 °E
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<i>Suwallia kerzhneri</i>	Within Known Range? Y	Nearest Occurrence:	117.42 KM	50.60031 °N	101.52392 °E
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Family: Nemouridae

<i>Amphinemura borealis</i>	Within Known Range? Y	Nearest Occurrence:	112.18 KM	49.45317 °N	100.47234 °E
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<i>Nemoura arctica</i>	Within Known Range? Y	Nearest Occurrence:	53.12 KM	49.87761 °N	101.82039 °E
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<i>Nemoura cinerea</i>	Within Known Range? Y	Nearest Occurrence:	237.93 KM	47.48567 °N	100.87875 °E
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Family: Perlidae

<i>Aagnetina extrema</i>	Within Known Range? Y	Nearest Occurrence:	101.53 KM	50.32719 °N	101.95058 °E
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<i>Kamimuria exilis</i>	Within Known Range? N	Nearest Occurrence:	301.20 KM	50.16278 °N	98.84212 °E
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<i>Paragnetina flavotincta</i>	Within Known Range? Y	Nearest Occurrence:	19.15 KM	49.44641 °N	101.33625 °E
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Family: Perlodidae

<i>Arcynopteryx polaris</i>	Within Known Range? Y	Nearest Occurrence:	52.59 KM	49.99851 °N	101.60799 °E
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<i>Arcynopteryx sajanensis</i>	Within Known Range? N	Nearest Occurrence:	250.13 KM	51.61397 °N	100.59972 °E
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<i>Isoperla kozlovi</i>	Within Known Range? Y	Nearest Occurrence:	78.27 KM	49.26765 °N	100.82998 °E
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<i>Kaszabia nigricauda</i>	Within Known Range? Y	Nearest Occurrence:	101.53 KM	50.32719 °N	101.95058 °E
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<i>Pictetiella asiatica</i>	Within Known Range? N	Nearest Occurrence:	257.29 KM	51.65822 °N	100.53000 °E
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Family: Taeniopterygidae

<i>Taenionema japonicum</i>	Within Known Range? Y	Nearest Occurrence:	253.51 KM	47.28244 °N	101.18793 °E
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<b>LOE Rating:</b>	<b>Probable</b>	<b>Total:</b>	<b>4</b>
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Family: Capniidae

<i>Mesocapnia variabilis</i>	Within Known Range? Y	Nearest Occurrence:	178.61 KM	50.96186 °N	100.72506 °E
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Family: Nemouridae

<i>Nemoura sahlbergi</i>	Within Known Range? Y	Nearest Occurrence:	53.03 KM	49.87761 °N	101.82039 °E
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Family: Perlodidae

<i>Diura majuscula</i>	Within Known Range? Y	Nearest Occurrence:	157.97 KM	50.47032 °N	100.40235 °E
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Family: Pteronarcyidae

<i>Pteronarcys reticulata</i>	Within Known Range? Y	Nearest Occurrence:	97.88 KM	50.30188 °N	101.92869 °E
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**Basin:** Arctic Ocean Basin  
**Aimags:** Khovsgol  
**Soums:** Ikh-uul

Freshwater Ecoregion: Lake Baikal  
 Terrestrial Ecoregion: Selenge-Orkhon Forest Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

<b>LOE Rating:</b>	<b>Possible</b>	<b>Total:</b>	<b>8</b>
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Family: Capniidae						
<i>Capnia nigra</i>	Within Known Range?	N	Nearest Occurrence:	160.49 KM	50.51003 °N	100.40375 °E
Family: Chloroperlidae						
<i>Alloperla deminuta</i>	Within Known Range?	Y	Nearest Occurrence:	117.42 KM	50.60031 °N	101.52392 °E
<i>Suwallia teleckojensis</i>	Within Known Range?	Y	Nearest Occurrence:	177.04 KM	50.41594 °N	100.14716 °E
Family: Leuctridae						
<i>Paraleuctra zapekinae</i>	Within Known Range?	N	Nearest Occurrence:	351.62 KM	49.71481 °N	104.64203 °E
Family: Nemouridae						
<i>Amphinemura standfussi</i>	Within Known Range?	Y	Nearest Occurrence:	156.01 KM	50.77444 °N	100.80067 °E
Family: Perlodidae						
<i>Arcynopteryx compacta</i>	Within Known Range?	Y	Nearest Occurrence:	177.04 KM	50.41594 °N	100.14716 °E
<i>Isoperla lunigera</i>	Within Known Range?	Y	Nearest Occurrence:	112.18 KM	49.45317 °N	100.47234 °E
<i>Megarcys ochracea</i>	Within Known Range?	N	Nearest Occurrence:	237.82 KM	49.77776 °N	103.60860 °E

<b>LOE Rating:</b>	<b>Predicted</b>	<b>Total:</b>	<b>10</b>
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Family: Capniidae						
<i>Capnia khulsbagia</i>	Within Known Range?	N	Nearest Occurrence:	181.30 KM	50.98944 °N	100.71944 °E
Family: Nemouridae						
<i>Nemurella pictetii</i>	Within Known Range?	N	Nearest Occurrence:	260.13 KM	51.07896 °N	99.70857 °E
Family: Perlidae						
<i>Agnetina cocandica</i>	Within Known Range?	Y	Nearest Occurrence:	165.26 KM	49.62785 °N	99.99523 °E
Family: Perlodidae						
<i>Diura bicaudata</i>	Within Known Range?	N	Nearest Occurrence:	281.47 KM	51.39852 °N	99.75011 °E
<i>Isoperla altaica</i>	Within Known Range?	Y	Nearest Occurrence:	257.75 KM	51.65822 °N	100.53000 °E
<i>Isoperla asiatica</i>	Within Known Range?	Y	Nearest Occurrence:	97.88 KM	50.30188 °N	101.92869 °E
<i>Isoperla mongolica</i>	Within Known Range?	Y	Nearest Occurrence:	158.86 KM	50.48083 °N	100.40083 °E
<i>Isoperla obscura</i>	Within Known Range?	Y	Nearest Occurrence:	117.42 KM	50.60031 °N	101.52392 °E
<i>Isoperla potanini</i>	Within Known Range?	Y	Nearest Occurrence:	78.42 KM	49.26765 °N	100.82998 °E
<i>Skwala pusilla</i>	Within Known Range?	N	Nearest Occurrence:	1,443.97 KM	48.51277 °N	88.51107 °E

<b>LOE Rating:</b>	<b>Unlikely</b>	<b>Total:</b>	<b>3</b>
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Family: Capniidae						
<i>Mesocapnia altaica</i>	Within Known Range?	N	Nearest Occurrence:	1,401.55 KM	48.43684 °N	88.90094 °E
Family: Leuctridae						
<i>Leuctra fusca</i>	Within Known Range?	N	Nearest Occurrence:	646.96 KM	49.08643 °N	107.28952 °E
Family: Perlodidae						
<i>Isoperla eximia</i>	Within Known Range?	N	Nearest Occurrence:	675.80 KM	49.01829 °N	107.54453 °E



**Basin:** Arctic Ocean Basin  
**Aimags:** Khovsgol  
**Soums:** Jargalant

Freshwater Ecoregion: Lake Baikal  
 Terrestrial Ecoregion: Selenge-Orkhon Forest Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

<b>LOE Rating:</b>	<b>Highly Likely</b>	<b>Total:</b>	<b>7</b>
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<b>Family: Capniidae</b>			
Isocapnia guentheri	Within Known Range? Y	Nearest Occurrence:	129.06 KM 48.61518°N 98.23096 °E
<b>Family: Chloroperlidae</b>			
Alloperla rostellata	Within Known Range? Y	Nearest Occurrence:	55.62 KM 48.36436°N 98.92737 °E
Suwallia kerzhneri	Within Known Range? Y	Nearest Occurrence:	129.06 KM 48.61518°N 98.23096 °E
Suwallia teleckojensis	Within Known Range? Y	Nearest Occurrence:	55.72 KM 48.36436°N 98.92737 °E
<b>Family: Nemouridae</b>			
Nemoura arctica	Within Known Range? Y	Nearest Occurrence:	209.73 KM 50.42996°N 99.21727 °E
Nemoura cinerea	Within Known Range? Y	Nearest Occurrence:	203.09 KM 47.48567°N 100.87875 °E
<b>Family: Perlodidae</b>			
Arcynopteryx polaris	Within Known Range? Y	Nearest Occurrence:	55.72 KM 48.36436°N 98.92737 °E

<b>LOE Rating:</b>	<b>Likely</b>	<b>Total:</b>	<b>15</b>
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<b>Family: Capniidae</b>			
Capnia nigra	Within Known Range? Y	Nearest Occurrence:	211.48 KM 48.06257°N 97.55064 °E
Isocapnia kudia	Within Known Range? N	Nearest Occurrence:	301.42 KM 51.25356°N 99.66687 °E
Isocapnia sibirica	Within Known Range? N	Nearest Occurrence:	244.13 KM 47.28244°N 101.18793 °E
Mesocapnia variabilis	Within Known Range? Y	Nearest Occurrence:	55.72 KM 48.36436°N 98.92737 °E
<b>Family: Chloroperlidae</b>			
Alaskaperla longidentata	Within Known Range? Y	Nearest Occurrence:	156.34 KM 47.29702°N 100.03136 °E
Haploperla lepnevae	Within Known Range? Y	Nearest Occurrence:	95.76 KM 49.26170°N 99.88242 °E
<b>Family: Nemouridae</b>			
Amphinemura borealis	Within Known Range? Y	Nearest Occurrence:	77.12 KM 48.12661°N 99.94128 °E
<b>Family: Perlidae</b>			
Agnetina brevipennis	Within Known Range? Y	Nearest Occurrence:	77.12 KM 48.12661°N 99.94128 °E
Agnetina extrema	Within Known Range? N	Nearest Occurrence:	175.04 KM 47.50949°N 100.57510 °E
Kamimuria exilis	Within Known Range? N	Nearest Occurrence:	189.27 KM 50.16278°N 98.84212 °E
<b>Family: Perlodidae</b>			
Arcynopteryx sajanensis	Within Known Range? N	Nearest Occurrence:	366.02 KM 51.61397°N 100.59972 °E
Diura majuscula	Within Known Range? Y	Nearest Occurrence:	160.96 KM 47.42580°N 100.30130 °E
Kaszabia nigricauda	Within Known Range? Y	Nearest Occurrence:	84.23 KM 48.71968°N 98.65184 °E
Pictetiella asiatica	Within Known Range? N	Nearest Occurrence:	367.20 KM 51.65822°N 100.53000 °E
<b>Family: Taeniopterygidae</b>			
Taenionema japonicum	Within Known Range? Y	Nearest Occurrence:	231.74 KM 50.61826°N 99.12094 °E



**Basin:** Arctic Ocean Basin  
**Aimags:** Khovsgol  
**Soums:** Jargalant

Freshwater Ecoregion: Lake Baikal  
 Terrestrial Ecoregion: Selenge-Orkhon Forest Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Probable Total: 5**

Family: Chloroperlidae					
Alloperla joosti	Within Known Range? Y	Nearest Occurrence:	129.06 KM	48.61518°N	98.23096°E
Family: Nemouridae					
Amphinemura standfussi	Within Known Range? Y	Nearest Occurrence:	129.06 KM	48.61518°N	98.23096°E
Family: Perlodidae					
Isoperla kozlovi	Within Known Range? Y	Nearest Occurrence:	132.12 KM	47.80440°N	100.31810°E
Isoperla potanini	Within Known Range? Y	Nearest Occurrence:	95.93 KM	49.26170°N	99.88242°E
Family: Pteronarcyidae					
Pteronarcys reticulata	Within Known Range? Y	Nearest Occurrence:	132.12 KM	47.80440°N	100.31810°E

**LOE Rating: Possible Total: 5**

Family: Chloroperlidae					
Alloperla mediata	Within Known Range? N	Nearest Occurrence:	231.32 KM	50.61826°N	99.12094°E
Family: Perlodidae					
Arcynopteryx compacta	Within Known Range? Y	Nearest Occurrence:	223.64 KM	50.41594°N	100.14716°E
Diura bicaudata	Within Known Range? Y	Nearest Occurrence:	159.62 KM	47.21768°N	99.92824°E
Isoperla lunigera	Within Known Range? N	Nearest Occurrence:	136.91 KM	49.62785°N	99.99523°E
Megarcys ochracea	Within Known Range? N	Nearest Occurrence:	317.37 KM	51.40978°N	99.30136°E

**LOE Rating: Predicted Total: 12**

Family: Capniidae					
Capnia khulsbagia	Within Known Range? N	Nearest Occurrence:	308.08 KM	50.98944°N	100.71944°E
Family: Chloroperlidae					
Alloperla deminuta	Within Known Range? Y	Nearest Occurrence:	132.12 KM	47.80440°N	100.31810°E
Family: Leuctridae					
Paraleuctra zapekinae	Within Known Range? N	Nearest Occurrence:	596.88 KM	49.71481°N	104.64203°E
Family: Nemouridae					
Nemoura sahlbergi	Within Known Range? Y	Nearest Occurrence:	160.67 KM	47.42580°N	100.30130°E
Nemurella pictetii	Within Known Range? N	Nearest Occurrence:	251.00 KM	50.81265°N	99.33803°E
Family: Perlidae					
Agnentina cocandica	Within Known Range? Y	Nearest Occurrence:	137.16 KM	49.62785°N	99.99523°E
Paragnetina flavotincta	Within Known Range? N	Nearest Occurrence:	95.76 KM	49.26170°N	99.88242°E
Family: Perlodidae					
Isoperla altaica	Within Known Range? Y	Nearest Occurrence:	240.91 KM	47.11192°N	101.01048°E
Isoperla asiatica	Within Known Range? Y	Nearest Occurrence:	132.12 KM	47.80440°N	100.31810°E
Isoperla mongolica	Within Known Range? Y	Nearest Occurrence:	211.86 KM	48.06257°N	97.55064°E
Isoperla obscura	Within Known Range? Y	Nearest Occurrence:	328.17 KM	50.60031°N	101.52392°E
Skwala pusilla	Within Known Range? N	Nearest Occurrence:	1,207.79 KM	48.51277°N	88.51107°E

**Basin:** Arctic Ocean Basin

**Aimag:** Khovsgol

**Soum:** Jargalant

Freshwater Ecoregion: Lake Baikal

Terrestrial Ecoregion: Selenge-Orkhon Forest Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

<b>LOE Rating:</b>	<b>Unlikely</b>	<b>Total:</b>	<b>3</b>
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Family: Capniidae

Mesocapnia altaica

Within Known Range? N Nearest Occurrence: 1,164.57 KM 48.43684 °N 88.90094 °E

Family: Leuctridae

Leuctra fusca

Within Known Range? N Nearest Occurrence: 878.63 KM 49.08643 °N 107.28952 °E

Family: Perlodidae

Isoperla eximia

Within Known Range? N Nearest Occurrence: 906.42 KM 49.01829 °N 107.54453 °E



Basin: Arctic Ocean Basin

Aimag: Khovsgol

Soum: Khankh

Freshwater Ecoregion: Lake Baikal

Terrestrial Ecoregion: Sayan Montane Conifer Forests

WQM Sites:

WQM Sites: # 130 (Dalbay River @ N 51.02437° E 100.75133°) # 131 (Turag River @ N 51.29103° E 100.81415°) # 132 (Shagnuul River @ N 51.25668° E 100.85145°) # 133 (Noyon River @ N 51.21013° E 100.78005°) # 134 (Sevsuul River @ N 51.16093° E 100.7595°)

**LOE Rating: Highly Likely Total: 2**

Family: Chloroperlidae

Alaskaperla longidentata Within Known Range? Y Nearest Occurrence: 21.28 KM 51.20985°N 100.77822 °E

Family: Nemouridae

Nemoura arctica Within Known Range? Y Nearest Occurrence: 20.00 KM 51.21575°N 100.76732 °E

**LOE Rating: Likely Total: 15**

Family: Capniidae

Capnia nigra Within Known Range? Y Nearest Occurrence: 40.37 KM 50.92452°N 100.75528 °E

Isocapnia guentheri Within Known Range? Y Nearest Occurrence: 38.03 KM 51.57304°N 100.48000 °E

Mesocapnia variabilis Within Known Range? Y Nearest Occurrence: 29.05 KM 51.25580°N 100.85171 °E

Family: Chloroperlidae

Alloperla mediata Within Known Range? Y Nearest Occurrence: 45.95 KM 51.65822°N 100.53000 °E

Suwallia kerzhneri Within Known Range? Y Nearest Occurrence: 56.47 KM 50.78320°N 100.79585 °E

Family: Nemouridae

Amphinemura standfussi Within Known Range? Y Nearest Occurrence: 20.27 KM 51.16368°N 100.75216 °E

Nemoura cinerea Within Known Range? Y Nearest Occurrence: 99.69 KM 51.07896°N 99.70857 °E

Nemoura sahlbergi Within Known Range? Y Nearest Occurrence: 20.82 KM 51.16116°N 100.75636 °E

Family: Perlodidae

Arcynopteryx compacta Within Known Range? Y Nearest Occurrence: 30.16 KM 51.51348°N 100.64923 °E

Arcynopteryx polaris Within Known Range? Y Nearest Occurrence: 20.31 KM 51.16368°N 100.75216 °E

Arcynopteryx sajanensis Within Known Range? Y Nearest Occurrence: 40.63 KM 51.61397°N 100.59972 °E

Diura majuscula Within Known Range? Y Nearest Occurrence: 45.05 KM 51.64934°N 100.53020 °E

Megarcys ochracea Within Known Range? Y Nearest Occurrence: 44.97 KM 51.64934°N 100.53020 °E

Pictetiella asiatica Within Known Range? Y Nearest Occurrence: 45.95 KM 51.65822°N 100.53000 °E

Family: Taeniopterygidae

Taenionema japonicum Within Known Range? Y Nearest Occurrence: 46.03 KM 51.65822°N 100.53000 °E

**LOE Rating: Probable Total: 7**

Family: Capniidae

Capnia khulsbagia Within Known Range? Y Nearest Occurrence: 20.82 KM 51.16116°N 100.75636 °E

Isocapnia kudia Within Known Range? Y Nearest Occurrence: 102.52 KM 51.25356°N 99.66687 °E

Family: Chloroperlidae

Alloperla rostellata Within Known Range? Y Nearest Occurrence: 106.63 KM 50.51517°N 101.21073 °E

Haploperla lepnevae Within Known Range? Y Nearest Occurrence: 20.82 KM 51.16116°N 100.75636 °E

Suwallia teleckojensis Within Known Range? Y Nearest Occurrence: 46.03 KM 51.65822°N 100.53000 °E

Family: Perlidae

Kamimuria exilis Within Known Range? N Nearest Occurrence: 228.87 KM 50.16278°N 98.84212 °E

Family: Pteronarcyidae

Pteronarcys reticulata Within Known Range? Y Nearest Occurrence: 126.15 KM 50.60031°N 101.52392 °E



**Basin:** Arctic Ocean Basin  
**Aimags:** Khovsgol  
**Soums:** Khankh

**Freshwater Ecoregion:** Lake Baikal  
**Terrestrial Ecoregion:** Sayan Montane Conifer Forests

**WQM Sites:**

WQM Sites: # 130 (Dalbay River @ N 51.02437° E 100.75133°) # 131 (Turag River @ N 51.29103° E 100.81415°) # 132 (Shagnuul River @ N 51.25668° E 100.85145°) # 133 (Noyon River @ N 51.21013° E 100.78005°) # 134 (Sevsuul River @ N 51.16093° E 100.7595°)

<b>LOE Rating:</b> Possible	<b>Total:</b> 6
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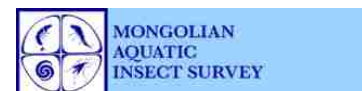
<b>Family:</b> Capniidae					
Isocapnia sibirica	Within Known Range? N	Nearest Occurrence:	445.22 KM	47.28244°N	101.18793 °E
<b>Family:</b> Perlidae					
Agnentina extrema	Within Known Range? N	Nearest Occurrence:	130.74 KM	50.54915°N	101.53806 °E
<b>Family:</b> Perlodidae					
Diura bicaudata	Within Known Range? Y	Nearest Occurrence:	94.75 KM	51.39852°N	99.75011 °E
Isoperla altaica	Within Known Range? Y	Nearest Occurrence:	46.03 KM	51.65822°N	100.53000 °E
Isoperla potanini	Within Known Range? Y	Nearest Occurrence:	20.31 KM	51.16368°N	100.75216 °E
Kaszabia nigricauda	Within Known Range? N	Nearest Occurrence:	106.63 KM	50.51517°N	101.21073 °E

<b>LOE Rating:</b> Predicted	<b>Total:</b> 14
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<b>Family:</b> Chloroperlidae					
Alloperla deminuta	Within Known Range? Y	Nearest Occurrence:	126.15 KM	50.60031°N	101.52392 °E
Alloperla joosti	Within Known Range? N	Nearest Occurrence:	106.63 KM	50.51517°N	101.21073 °E
<b>Family:</b> Leuctridae					
Paraleuctra zapekinae	Within Known Range? N	Nearest Occurrence:	480.87 KM	49.71481°N	104.64203 °E
<b>Family:</b> Nemouridae					
Amphinemura borealis	Within Known Range? Y	Nearest Occurrence:	126.15 KM	50.60031°N	101.52392 °E
Nemurella pictetii	Within Known Range? Y	Nearest Occurrence:	99.69 KM	51.07896°N	99.70857 °E
<b>Family:</b> Perlidae					
Agnentina brevipennis	Within Known Range? N	Nearest Occurrence:	126.15 KM	50.60031°N	101.52392 °E
Agnentina cocandica	Within Known Range? N	Nearest Occurrence:	183.92 KM	49.76390°N	99.86185 °E
Paragnetina flavotincta	Within Known Range? N	Nearest Occurrence:	212.96 KM	49.43131°N	101.20535 °E
<b>Family:</b> Perlodidae					
Isoperla asiatica	Within Known Range? N	Nearest Occurrence:	104.72 KM	50.41594°N	100.14716 °E
Isoperla kozlovi	Within Known Range? Y	Nearest Occurrence:	45.15 KM	51.65045°N	100.52664 °E
Isoperla lunigera	Within Known Range? Y	Nearest Occurrence:	45.15 KM	51.65045°N	100.52664 °E
Isoperla mongolica	Within Known Range? N	Nearest Occurrence:	87.96 KM	50.48083°N	100.40083 °E
Isoperla obscura	Within Known Range? Y	Nearest Occurrence:	45.15 KM	51.65045°N	100.52664 °E
Skwala pusilla	Within Known Range? N	Nearest Occurrence:	1,374.78 KM	48.51277°N	88.51107 °E

<b>LOE Rating:</b> Unlikely	<b>Total:</b> 3
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<b>Family:</b> Capniidae					
Mesocapnia altaica	Within Known Range? N	Nearest Occurrence:	1,334.55 KM	48.43684°N	88.90094 °E
<b>Family:</b> Leuctridae					
Leuctra fusca	Within Known Range? N	Nearest Occurrence:	781.37 KM	49.08643°N	107.28952 °E
<b>Family:</b> Perlodidae					
Isoperla eximia	Within Known Range? N	Nearest Occurrence:	810.63 KM	49.01829°N	107.54453 °E



**Basin:** Arctic Ocean Basin  
**Aimags:** Khovsgol  
**Soums:** Rashaant

Freshwater Ecoregion: Lake Baikal  
 Terrestrial Ecoregion: Selenge-Orkhon Forest Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Highly Likely Total: 2**

Family: Perlidae					
Agnetina brevipennis	Within Known Range? Y	Nearest Occurrence:	48.68 KM	49.26765 °N	100.82998 °E
Family: Perlodidae					
Isoperla kozlovi	Within Known Range? Y	Nearest Occurrence:	48.68 KM	49.26765 °N	100.82998 °E

**LOE Rating: Likely Total: 20**

Family: Capniidae					
Isocapnia guentheri	Within Known Range? Y	Nearest Occurrence:	190.33 KM	47.50523 °N	100.93208 °E
Isocapnia kudia	Within Known Range? N	Nearest Occurrence:	289.63 KM	51.25356 °N	99.66687 °E
Isocapnia sibirica	Within Known Range? N	Nearest Occurrence:	211.68 KM	47.28244 °N	101.18793 °E
Family: Chloroperlidae					
Alaskaperla longidentata	Within Known Range? Y	Nearest Occurrence:	147.42 KM	50.51517 °N	101.21073 °E
Alloperla joosti	Within Known Range? Y	Nearest Occurrence:	147.42 KM	50.51517 °N	101.21073 °E
Alloperla rostellata	Within Known Range? Y	Nearest Occurrence:	147.42 KM	50.51517 °N	101.21073 °E
Haploperla lepnevae	Within Known Range? Y	Nearest Occurrence:	92.38 KM	49.45317 °N	100.47234 °E
Suwallia kerzhneri	Within Known Range? Y	Nearest Occurrence:	159.45 KM	50.60031 °N	101.52392 °E
Family: Nemouridae					
Amphinemura borealis	Within Known Range? Y	Nearest Occurrence:	92.38 KM	49.45317 °N	100.47234 °E
Nemoura arctica	Within Known Range? Y	Nearest Occurrence:	98.72 KM	49.87761 °N	101.82039 °E
Nemoura cinerea	Within Known Range? Y	Nearest Occurrence:	193.67 KM	47.48567 °N	100.87875 °E
Family: Perlidae					
Agnetina extrema	Within Known Range? Y	Nearest Occurrence:	147.80 KM	50.32719 °N	101.95058 °E
Kamimuria exilis	Within Known Range? N	Nearest Occurrence:	290.03 KM	50.16278 °N	98.84212 °E
Paragnetina flavotincta	Within Known Range? Y	Nearest Occurrence:	27.71 KM	49.43131 °N	101.20535 °E
Family: Perlodidae					
Arcynopteryx polaris	Within Known Range? Y	Nearest Occurrence:	98.02 KM	49.99851 °N	101.60799 °E
Arcynopteryx sajanensis	Within Known Range? N	Nearest Occurrence:	279.61 KM	51.61397 °N	100.59972 °E
Isoperla potanini	Within Known Range? Y	Nearest Occurrence:	48.77 KM	49.26765 °N	100.82998 °E
Kaszabia nigricauda	Within Known Range? Y	Nearest Occurrence:	147.42 KM	50.51517 °N	101.21073 °E
Pictetiella asiatica	Within Known Range? N	Nearest Occurrence:	285.95 KM	51.65822 °N	100.53000 °E
Family: Taeniopterygidae					
Taenionema japonicum	Within Known Range? Y	Nearest Occurrence:	212.06 KM	47.28244 °N	101.18793 °E

**LOE Rating: Probable Total: 4**

Family: Chloroperlidae					
Alloperla mediata	Within Known Range? N	Nearest Occurrence:	144.14 KM	50.30188 °N	101.92869 °E
Suwallia teleckojensis	Within Known Range? Y	Nearest Occurrence:	153.55 KM	49.26170 °N	99.88242 °E
Family: Perlodidae					
Diura majuscula	Within Known Range? Y	Nearest Occurrence:	171.62 KM	50.47032 °N	100.40235 °E
Family: Pteronarcyidae					
Pteronarcys reticulata	Within Known Range? Y	Nearest Occurrence:	144.14 KM	50.30188 °N	101.92869 °E

Research funded by the National Science Foundation  
 DEB-BSI #0206674: A Survey of the Aquatic Insects of the Selenge River Basin. P.I.'s: JKGelhaus, JCMorse, BHayford.  
 DEB # 0743732: Aquatic Insects of the Altai and Hangai Mountain Drainages. P.I.'s: JKGelhaus, JCMorse, CRNelson.  
<http://clade.ansp.org/entomology/mongolia/index.html>



**Basin:** Arctic Ocean Basin  
**Aimags:** Khovsgol  
**Soums:** Rashaant

Freshwater Ecoregion: Lake Baikal  
 Terrestrial Ecoregion: Selenge-Orkhon Forest Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Possible Total: 7**

Family: Capniidae					
Capnia nigra	Within Known Range? N	Nearest Occurrence:	174.91 KM	50.51003 °N	100.40375 °E
Mesocapnia variabilis	Within Known Range? Y	Nearest Occurrence:	206.06 KM	50.96186 °N	100.72506 °E
Family: Nemouridae					
Amphinemura standfussi	Within Known Range? Y	Nearest Occurrence:	183.36 KM	50.77444 °N	100.80067 °E
Nemoura sahlbergi	Within Known Range? Y	Nearest Occurrence:	98.55 KM	49.87761 °N	101.82039 °E
Family: Perlodidae					
Arcynopteryx compacta	Within Known Range? Y	Nearest Occurrence:	184.37 KM	50.41594 °N	100.14716 °E
Isoperla lunigera	Within Known Range? Y	Nearest Occurrence:	92.38 KM	49.45317 °N	100.47234 °E
Megarcys ochracea	Within Known Range? N	Nearest Occurrence:	268.66 KM	49.77776 °N	103.60860 °E

**LOE Rating: Predicted Total: 11**

Family: Capniidae					
Capnia khulsbagia	Within Known Range? N	Nearest Occurrence:	208.81 KM	50.98944 °N	100.71944 °E
Family: Chloroperlidae					
Alloperla deminuta	Within Known Range? Y	Nearest Occurrence:	159.45 KM	50.60031 °N	101.52392 °E
Family: Leuctridae					
Paraleuctra zapekinae	Within Known Range? N	Nearest Occurrence:	379.80 KM	49.71481 °N	104.64203 °E
Family: Nemouridae					
Nemurella pictetii	Within Known Range? N	Nearest Occurrence:	271.58 KM	51.07896 °N	99.70857 °E
Family: Perlidae					
Agnatina cocandica	Within Known Range? Y	Nearest Occurrence:	149.04 KM	49.62785 °N	99.99523 °E
Family: Perlodidae					
Diura bicaudata	Within Known Range? N	Nearest Occurrence:	264.06 KM	47.21768 °N	99.92824 °E
Isoperla altaica	Within Known Range? Y	Nearest Occurrence:	232.55 KM	47.11192 °N	101.01048 °E
Isoperla asiatica	Within Known Range? Y	Nearest Occurrence:	144.14 KM	50.30188 °N	101.92869 °E
Isoperla mongolica	Within Known Range? Y	Nearest Occurrence:	172.69 KM	50.48083 °N	100.40083 °E
Isoperla obscura	Within Known Range? Y	Nearest Occurrence:	158.86 KM	49.88884 °N	102.50909 °E
Skwala pusilla	Within Known Range? N	Nearest Occurrence:	1,417.25 KM	48.51277 °N	88.51107 °E

**LOE Rating: Unlikely Total: 3**

Family: Capniidae					
Mesocapnia altaica	Within Known Range? N	Nearest Occurrence:	1,374.52 KM	48.43684 °N	88.90094 °E
Family: Leuctridae					
Leuctra fusca	Within Known Range? N	Nearest Occurrence:	669.24 KM	49.08643 °N	107.28952 °E
Family: Perlodidae					
Isoperla eximia	Within Known Range? N	Nearest Occurrence:	697.70 KM	49.01829 °N	107.54453 °E

Basin: Arctic Ocean Basin

Aimags: Khovsgol

Soums: RENCHINKHUMBE

Freshwater Ecoregion: Yenisei

Terrestrial Ecoregion: Sayan Montane Conifer Forests

WQM Sites:

WQM Sites: # 12 (Shishged Usur River @ N 51.43542° E 99.2017°)  
# 13 (Tengis River @ N 51.47065° E 99.0262°) # 14 (Tengis River  
@ N 51.48513° E 99.06127°) # 15 (Hogorgo River @ N 51.40978°  
E 99.30157°) # 16 (Ulaan nuur River @ N 51.40527° E 99.27228°)

**LOE Rating: Highly Likely Total: 3**

Family: Nemouridae

Nemoura arctica Within Known Range? Y Nearest Occurrence: 9.61 KM 51.25356°N 99.66687 °E

Family: Perlodidae

Arcynopteryx compacta Within Known Range? Y Nearest Occurrence: 12.24 KM 51.07896°N 99.70857 °E

Family: Taeniopterygidae

Taenionema japonicum Within Known Range? Y Nearest Occurrence: 9.61 KM 51.25356°N 99.66687 °E

**LOE Rating: Likely Total: 13**

Family: Capniidae

Capnia nigra Within Known Range? Y Nearest Occurrence: 12.12 KM 51.08026°N 99.70559 °E

Isocapnia guentheri Within Known Range? Y Nearest Occurrence: 23.55 KM 51.39852°N 99.75011 °E

Isocapnia kudia Within Known Range? Y Nearest Occurrence: 9.59 KM 51.25356°N 99.66687 °E

Family: Chloroperlidae

Alaskaperla longidentata Within Known Range? Y Nearest Occurrence: 45.79 KM 51.09845°N 99.32051 °E

Alloperla mediata Within Known Range? Y Nearest Occurrence: 9.59 KM 51.25356°N 99.66687 °E

Suwallia kerzhneri Within Known Range? N Nearest Occurrence: 127.27 KM 50.78320°N 100.79585 °E

Suwallia teleckojensis Within Known Range? Y Nearest Occurrence: 12.15 KM 51.08026°N 99.70559 °E

Family: Nemouridae

Amphinemura standfussi Within Known Range? Y Nearest Occurrence: 114.01 KM 50.96186°N 100.72506 °E

Nemoura cinerea Within Known Range? Y Nearest Occurrence: 12.12 KM 51.08026°N 99.70559 °E

Family: Perlodidae

Arcynopteryx polaris Within Known Range? Y Nearest Occurrence: 65.68 KM 51.46205°N 99.19994 °E

Diura majuscula Within Known Range? Y Nearest Occurrence: 45.88 KM 51.09845°N 99.32051 °E

Isoperla altaica Within Known Range? Y Nearest Occurrence: 12.15 KM 51.08026°N 99.70559 °E

Megarcys ochracea Within Known Range? Y Nearest Occurrence: 52.89 KM 51.40978°N 99.30136 °E

**LOE Rating: Probable Total: 7**

Family: Capniidae

Mesocapnia variabilis Within Known Range? Y Nearest Occurrence: 108.37 KM 51.61397°N 100.59972 °E

Family: Chloroperlidae

Alloperla rostellata Within Known Range? Y Nearest Occurrence: 92.02 KM 50.61826°N 99.12094 °E

Family: Nemouridae

Nemoura sahlbergi Within Known Range? Y Nearest Occurrence: 101.16 KM 50.42996°N 99.21727 °E

Family: Perlidae

Kamimuria exilis Within Known Range? N Nearest Occurrence: 150.33 KM 50.16278°N 98.84212 °E

Family: Perlodidae

Arcynopteryx sajanensis Within Known Range? N Nearest Occurrence: 108.37 KM 51.61397°N 100.59972 °E

Diura bicaudata Within Known Range? Y Nearest Occurrence: 23.55 KM 51.39852°N 99.75011 °E

Pictetiella asiatica Within Known Range? Y Nearest Occurrence: 103.66 KM 51.65822°N 100.53000 °E

**Basin:** Arctic Ocean Basin  
**Aimags:** Khovsgol  
**Soums:** Renchinkhumbé

**Freshwater Ecoregion:** Yenisei

**Terrestrial Ecoregion:** Sayan Montane Conifer Forests

**WQM Sites:**

WQM Sites: # 12 (Shishged Usur River @ N 51.43542° E 99.2017°)  
 # 13 (Tengis River @ N 51.47065° E 99.0262°) # 14 (Tengis River  
 @ N 51.48513° E 99.06127°) # 15 (Hogorgo River @ N 51.40978°  
 E 99.30157°) # 16 (Ulaan nuur River @ N 51.40527° E 99.27228°)

<b>LOE Rating:</b>	<b>Possible</b>	<b>Total:</b>	10
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<b>Family: Capniidae</b>			
Isocapnia sibirica	Within Known Range? N	Nearest Occurrence:	463.01 KM 47.28244°N 101.18793 °E
<b>Family: Chloroperlidae</b>			
Alloperla deminuta	Within Known Range? Y	Nearest Occurrence:	80.56 KM 51.48513°N 99.06095 °E
Haploperla lepnevae	Within Known Range? Y	Nearest Occurrence:	102.90 KM 51.65045°N 100.52664 °E
<b>Family: Nemouridae</b>			
Amphinemura borealis	Within Known Range? Y	Nearest Occurrence:	46.41 KM 50.99171°N 99.35400 °E
Nemurella pictetii	Within Known Range? Y	Nearest Occurrence:	12.12 KM 51.08026°N 99.70559 °E
<b>Family: Perlidae</b>			
Agnentina extrema	Within Known Range? N	Nearest Occurrence:	213.57 KM 50.54915°N 101.53806 °E
<b>Family: Perlodidae</b>			
Isoperla kozlovi	Within Known Range? Y	Nearest Occurrence:	45.79 KM 51.09845°N 99.32051 °E
Isoperla lunigera	Within Known Range? Y	Nearest Occurrence:	45.79 KM 51.09845°N 99.32051 °E
Kaszabia nigricauda	Within Known Range? N	Nearest Occurrence:	133.97 KM 50.19916°N 99.03117 °E
<b>Family: Pteronarcyidae</b>			
Pteronarcys reticulata	Within Known Range? Y	Nearest Occurrence:	83.48 KM 51.47065°N 99.02617 °E

<b>LOE Rating:</b>	<b>Predicted</b>	<b>Total:</b>	11
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<b>Family: Capniidae</b>			
Capnia khulsbagia	Within Known Range? Y	Nearest Occurrence:	109.91 KM 51.51689°N 100.65717 °E
<b>Family: Chloroperlidae</b>			
Alloperla joosti	Within Known Range? N	Nearest Occurrence:	181.23 KM 50.51517°N 101.21073 °E
<b>Family: Leuctridae</b>			
Paraleuctra zapekinae	Within Known Range? N	Nearest Occurrence:	569.96 KM 49.71481°N 104.64203 °E
<b>Family: Perlidae</b>			
Agnentina brevipennis	Within Known Range? N	Nearest Occurrence:	150.05 KM 50.16278°N 98.84212 °E
Agnentina cocandica	Within Known Range? N	Nearest Occurrence:	159.12 KM 49.76390°N 99.86185 °E
Paragnetina flavotincta	Within Known Range? N	Nearest Occurrence:	214.56 KM 49.26170°N 99.88242 °E
<b>Family: Perlodidae</b>			
Isoperla asiatica	Within Known Range? N	Nearest Occurrence:	97.78 KM 50.41594°N 100.14716 °E
Isoperla mongolica	Within Known Range? N	Nearest Occurrence:	108.92 KM 50.48083°N 100.40083 °E
Isoperla obscura	Within Known Range? Y	Nearest Occurrence:	102.90 KM 51.65045°N 100.52664 °E
Isoperla potanini	Within Known Range? Y	Nearest Occurrence:	114.45 KM 51.16368°N 100.75216 °E
Skwala pusilla	Within Known Range? N	Nearest Occurrence:	1,279.48 KM 48.51277°N 88.51107 °E

<b>LOE Rating:</b>	<b>Unlikely</b>	<b>Total:</b>	3
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<b>Family: Capniidae</b>			
Mesocapnia altaica	Within Known Range? N	Nearest Occurrence:	1,239.47 KM 48.43684°N 88.90094 °E
<b>Family: Leuctridae</b>			
Leuctra fusca	Within Known Range? N	Nearest Occurrence:	871.66 KM 49.08643°N 107.28952 °E
<b>Family: Perlodidae</b>			
Isoperla eximia	Within Known Range? N	Nearest Occurrence:	900.96 KM 49.01829°N 107.54453 °E



**Basin:** Arctic Ocean Basin  
**Aimags:** Khovsgol  
**Soums:** Shine-ider

Freshwater Ecoregion: Lake Baikal  
 Terrestrial Ecoregion: Selenge-Orkhon Forest Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

<b>LOE Rating:</b>	<b>Highly Likely</b>	<b>Total:</b>	<b>9</b>
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<b>Family: Capniidae</b>			
Isocapnia guentheri	Within Known Range? Y	Nearest Occurrence: 150.26 KM	48.61518 °N 98.23096 °E
Mesocapnia variabilis	Within Known Range? Y	Nearest Occurrence: 99.82 KM	48.36436 °N 98.92737 °E
<b>Family: Chloroperlidae</b>			
Alaskaperla longidentata	Within Known Range? Y	Nearest Occurrence: 138.50 KM	50.21920 °N 99.09978 °E
Alloperla rostellata	Within Known Range? Y	Nearest Occurrence: 99.64 KM	48.36436 °N 98.92737 °E
Suwallia kerzhneri	Within Known Range? Y	Nearest Occurrence: 150.26 KM	48.61518 °N 98.23096 °E
Suwallia teleckojensis	Within Known Range? Y	Nearest Occurrence: 47.53 KM	49.26170 °N 99.88242 °E
<b>Family: Nemouridae</b>			
Nemoura arctica	Within Known Range? Y	Nearest Occurrence: 157.79 KM	50.42996 °N 99.21727 °E
Nemoura cinerea	Within Known Range? Y	Nearest Occurrence: 197.45 KM	50.81265 °N 99.33803 °E
<b>Family: Perlodidae</b>			
Arcynopteryx polaris	Within Known Range? Y	Nearest Occurrence: 99.82 KM	48.36436 °N 98.92737 °E

<b>LOE Rating:</b>	<b>Likely</b>	<b>Total:</b>	<b>12</b>
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<b>Family: Capniidae</b>			
Capnia nigra	Within Known Range? Y	Nearest Occurrence: 180.29 KM	50.61826 °N 99.12094 °E
Isocapnia kudia	Within Known Range? N	Nearest Occurrence: 245.99 KM	51.25356 °N 99.66687 °E
Isocapnia sibirica	Within Known Range? N	Nearest Occurrence: 269.52 KM	47.28244 °N 101.18793 °E
<b>Family: Chloroperlidae</b>			
Haploperla lepnevae	Within Known Range? Y	Nearest Occurrence: 47.45 KM	49.26170 °N 99.88242 °E
<b>Family: Nemouridae</b>			
Amphinemura standfussi	Within Known Range? Y	Nearest Occurrence: 150.26 KM	48.61518 °N 98.23096 °E
<b>Family: Perlidae</b>			
Agnetina extrema	Within Known Range? N	Nearest Occurrence: 206.88 KM	47.50949 °N 100.57510 °E
Kamimuria exilis	Within Known Range? N	Nearest Occurrence: 145.33 KM	50.16278 °N 98.84212 °E
<b>Family: Perlodidae</b>			
Arcynopteryx sajanensis	Within Known Range? N	Nearest Occurrence: 310.32 KM	51.61397 °N 100.59972 °E
Diura majuscula	Within Known Range? Y	Nearest Occurrence: 180.61 KM	50.61826 °N 99.12094 °E
Kaszabia nigricauda	Within Known Range? Y	Nearest Occurrence: 84.00 KM	49.62785 °N 99.99523 °E
Pictetiella asiatica	Within Known Range? N	Nearest Occurrence: 311.41 KM	51.65822 °N 100.53000 °E
<b>Family: Taeniopterygidae</b>			
Taenionema japonicum	Within Known Range? Y	Nearest Occurrence: 180.61 KM	50.61826 °N 99.12094 °E



**Basin:** Arctic Ocean Basin  
**Aimags:** Khovsgol  
**Soums:** Shine-ider

Freshwater Ecoregion: Lake Baikal  
 Terrestrial Ecoregion: Selenge-Orkhon Forest Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Probable Total: 7**

Family: Chloroperlidae						
Alloperla joosti	Within Known Range? Y	Nearest Occurrence:	150.26 KM	48.61518 °N	98.23096 °E	
Family: Nemouridae						
Amphinemura borealis	Within Known Range? Y	Nearest Occurrence:	112.13 KM	48.12661 °N	99.94128 °E	
Family: Perlidae						
Agnetina brevipennis	Within Known Range? Y	Nearest Occurrence:	47.45 KM	49.26170 °N	99.88242 °E	
Family: Perlodidae						
Arcynopteryx compacta	Within Known Range? Y	Nearest Occurrence:	168.10 KM	50.41594 °N	100.14716 °E	
Isoperla kozlovi	Within Known Range? Y	Nearest Occurrence:	84.00 KM	49.62785 °N	99.99523 °E	
Isoperla potanini	Within Known Range? Y	Nearest Occurrence:	47.53 KM	49.26170 °N	99.88242 °E	
Megarcys ochracea	Within Known Range? N	Nearest Occurrence:	263.82 KM	51.40978 °N	99.30136 °E	

**LOE Rating: Possible Total: 4**

Family: Chloroperlidae						
Alloperla mediata	Within Known Range? N	Nearest Occurrence:	180.29 KM	50.61826 °N	99.12094 °E	
Family: Nemouridae						
Nemoura sahlbergi	Within Known Range? Y	Nearest Occurrence:	157.51 KM	50.42996 °N	99.21727 °E	
Family: Perlodidae						
Isoperla lunigera	Within Known Range? Y	Nearest Occurrence:	84.00 KM	49.62785 °N	99.99523 °E	
Family: Pteronarcyidae						
Pteronarcys reticulata	Within Known Range? Y	Nearest Occurrence:	163.80 KM	47.80440 °N	100.31810 °E	

**LOE Rating: Predicted Total: 12**

Family: Capniidae						
Capnia khulsbagia	Within Known Range? N	Nearest Occurrence:	254.09 KM	50.98944 °N	100.71944 °E	
Family: Chloroperlidae						
Alloperla deminuta	Within Known Range? Y	Nearest Occurrence:	163.80 KM	47.80440 °N	100.31810 °E	
Family: Leuctridae						
Paraleuctra zapekinae	Within Known Range? N	Nearest Occurrence:	573.93 KM	49.71481 °N	104.64203 °E	
Family: Nemouridae						
Nemurella pictetii	Within Known Range? N	Nearest Occurrence:	197.45 KM	50.81265 °N	99.33803 °E	
Family: Perlidae						
Agnetina cocandica	Within Known Range? Y	Nearest Occurrence:	84.16 KM	49.62785 °N	99.99523 °E	
Paragnetina flavotincta	Within Known Range? Y	Nearest Occurrence:	47.45 KM	49.26170 °N	99.88242 °E	
Family: Perlodidae						
Diura bicaudata	Within Known Range? Y	Nearest Occurrence:	207.69 KM	47.21768 °N	99.92824 °E	
Isoperla altaica	Within Known Range? Y	Nearest Occurrence:	197.81 KM	50.81265 °N	99.33803 °E	
Isoperla asiatica	Within Known Range? Y	Nearest Occurrence:	163.80 KM	47.80440 °N	100.31810 °E	
Isoperla mongolica	Within Known Range? Y	Nearest Occurrence:	187.81 KM	50.48083 °N	100.40083 °E	
Isoperla obscura	Within Known Range? Y	Nearest Occurrence:	282.14 KM	50.60031 °N	101.52392 °E	
Skwala pusilla	Within Known Range? N	Nearest Occurrence:	1,222.89 KM	48.51277 °N	88.51107 °E	





**Basin:** Arctic Ocean Basin

**Aimag:** Khovsgol

**Soum:** Shine-ider

Freshwater Ecoregion: Lake Baikal

Terrestrial Ecoregion: Selenge-Orkhon Forest Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

<b>LOE Rating:</b>	<b>Unlikely</b>	<b>Total:</b>	<b>3</b>
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Family: Capniidae

Mesocapnia altaica

Within Known Range? N Nearest Occurrence: 1,180.12 KM 48.43684 °N 88.90094 °E

Family: Leuctridae

Leuctra fusca

Within Known Range? N Nearest Occurrence: 862.95 KM 49.08643 °N 107.28952 °E

Family: Perlodidae

Isoperla eximia

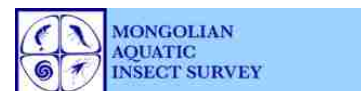
Within Known Range? N Nearest Occurrence: 891.24 KM 49.01829 °N 107.54453 °E

Research funded by the National Science Foundation

DEB-BSI #0206674: A Survey of the Aquatic Insects of the Selenge River Basin. P.I.'s: JKGelhaus, JCMorse, BHayford.

DEB # 0743732: Aquatic Insects of the Altai and Hangai Mountain Drainages. P.I.'s: JKGelhaus, JCMorse, CRNelson.

<http://clade.ansp.org/entomology/mongolia/index.html>



**Basin:** Arctic Ocean Basin  
**Aimags:** Khovsgol  
**Soums:** Tarialan

Freshwater Ecoregion: Lake Baikal  
 Terrestrial Ecoregion: Selenge-Orkhon Forest Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Highly Likely Total: 4**

Family: Nemouridae					
Nemoura arctica	Within Known Range? Y	Nearest Occurrence:	38.01 KM	49.87761°N	101.82039°E
Nemoura sahlbergi	Within Known Range? Y	Nearest Occurrence:	37.94 KM	49.87761°N	101.82039°E
Family: Perlidae					
Agnetina brevipennis	Within Known Range? Y	Nearest Occurrence:	37.94 KM	49.87761°N	101.82039°E
Family: Pteronarcyidae					
Pteronarcys reticulata	Within Known Range? Y	Nearest Occurrence:	61.65 KM	49.63453°N	102.64845°E

**LOE Rating: Likely Total: 17**

Family: Capniidae					
Isocapnia guentheri	Within Known Range? Y	Nearest Occurrence:	112.00 KM	49.70678°N	103.10288°E
Isocapnia kudia	Within Known Range? N	Nearest Occurrence:	321.52 KM	51.25356°N	99.66687°E
Isocapnia sibirica	Within Known Range? N	Nearest Occurrence:	268.73 KM	47.26999°N	101.80227°E
Family: Chloroperlidae					
Alaskaperla longidentata	Within Known Range? Y	Nearest Occurrence:	135.48 KM	50.51517°N	101.21073°E
Alloperla joosti	Within Known Range? Y	Nearest Occurrence:	108.24 KM	50.62324°N	101.87412°E
Alloperla mediata	Within Known Range? Y	Nearest Occurrence:	72.15 KM	50.30188°N	101.92869°E
Alloperla rostellata	Within Known Range? Y	Nearest Occurrence:	108.24 KM	50.62324°N	101.87412°E
Haploperla lepnevae	Within Known Range? Y	Nearest Occurrence:	112.00 KM	49.70678°N	103.10288°E
Suwallia kerzhneri	Within Known Range? Y	Nearest Occurrence:	120.82 KM	50.60031°N	101.52392°E
Family: Nemouridae					
Amphinemura borealis	Within Known Range? Y	Nearest Occurrence:	105.07 KM	49.33339°N	102.97786°E
Family: Perlidae					
Agnetina extrema	Within Known Range? Y	Nearest Occurrence:	74.32 KM	50.32719°N	101.95058°E
Family: Perlodidae					
Arcynopteryx polaris	Within Known Range? Y	Nearest Occurrence:	65.07 KM	49.99851°N	101.60799°E
Arcynopteryx sajanensis	Within Known Range? N	Nearest Occurrence:	272.39 KM	51.61397°N	100.59972°E
Isoperla kozlovi	Within Known Range? Y	Nearest Occurrence:	76.07 KM	49.38617°N	102.71667°E
Kaszabia nigricauda	Within Known Range? Y	Nearest Occurrence:	74.32 KM	50.32719°N	101.95058°E
Pictetiella asiatica	Within Known Range? N	Nearest Occurrence:	280.53 KM	51.65822°N	100.53000°E
Family: Taeniopterygidae					
Taenionema japonicum	Within Known Range? Y	Nearest Occurrence:	281.04 KM	51.65822°N	100.53000°E

**LOE Rating: Probable Total: 5**

Family: Chloroperlidae					
Suwallia teleckojensis	Within Known Range? Y	Nearest Occurrence:	123.56 KM	49.21675°N	103.10750°E
Family: Nemouridae					
Nemoura cinerea	Within Known Range? Y	Nearest Occurrence:	274.19 KM	49.68122°N	104.56461°E
Family: Perlidae					
Kamimuria exilis	Within Known Range? N	Nearest Occurrence:	365.73 KM	50.16278°N	98.84212°E
Family: Perlodidae					
Arcynopteryx compacta	Within Known Range? Y	Nearest Occurrence:	168.77 KM	49.77776°N	103.60860°E
Megaracys ochracea	Within Known Range? Y	Nearest Occurrence:	168.47 KM	49.77776°N	103.60860°E

Research funded by the National Science Foundation  
 DEB-BSI #0206674: A Survey of the Aquatic Insects of the Selenge River Basin. P.I.'s: JKGelhaus, JCMorse, BHayford.  
 DEB # 0743732: Aquatic Insects of the Altai and Hangai Mountain Drainages. P.I.'s: JKGelhaus, JCMorse, CRNelson.  
<http://clade.ansp.org/entomology/mongolia/index.html>



**Basin:** Arctic Ocean Basin  
**Aimags:** Khovsgol  
**Soums:** Tarialan

**Freshwater Ecoregion:** Lake Baikal  
**Terrestrial Ecoregion:** Selenge-Orkhon Forest Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

<b>LOE Rating:</b>	<b>Possible</b>	<b>Total:</b>	<b>7</b>
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<b>Family:</b> Capniidae						
<i>Capnia nigra</i>	Within Known Range?	N	Nearest Occurrence:	203.43 KM	50.92452°N	100.75528°E
<b>Family:</b> Chloroperlidae						
<i>Alloperla deminuta</i>	Within Known Range?	Y	Nearest Occurrence:	108.24 KM	50.62324°N	101.87412°E
<b>Family:</b> Leuctridae						
<i>Paraleuctra zapekinae</i>	Within Known Range?	N	Nearest Occurrence:	282.82 KM	49.71481°N	104.64203°E
<b>Family:</b> Nemouridae						
<i>Amphinemura standfussi</i>	Within Known Range?	Y	Nearest Occurrence:	105.07 KM	49.33339°N	102.97786°E
<b>Family:</b> Perlodidae						
<i>Diura majuscula</i>	Within Known Range?	Y	Nearest Occurrence:	206.55 KM	50.59636°N	100.48257°E
<i>Isoperla asiatica</i>	Within Known Range?	Y	Nearest Occurrence:	51.87 KM	49.88884°N	102.50909°E
<i>Isoperla lunigera</i>	Within Known Range?	Y	Nearest Occurrence:	51.87 KM	49.88884°N	102.50909°E

<b>LOE Rating:</b>	<b>Predicted</b>	<b>Total:</b>	<b>11</b>
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<b>Family:</b> Capniidae						
<i>Capnia khulsbagia</i>	Within Known Range?	N	Nearest Occurrence:	211.27 KM	50.98944°N	100.71944°E
<i>Mesocapnia variabilis</i>	Within Known Range?	Y	Nearest Occurrence:	209.09 KM	50.96186°N	100.72506°E
<b>Family:</b> Nemouridae						
<i>Nemurella pictetii</i>	Within Known Range?	N	Nearest Occurrence:	307.37 KM	51.07896°N	99.70857°E
<b>Family:</b> Perlidae						
<i>Agnetina cocandica</i>	Within Known Range?	Y	Nearest Occurrence:	233.49 KM	49.62785°N	99.99523°E
<i>Paragnetina flavotincta</i>	Within Known Range?	Y	Nearest Occurrence:	51.87 KM	49.88884°N	102.50909°E
<b>Family:</b> Perlodidae						
<i>Diura bicaudata</i>	Within Known Range?	N	Nearest Occurrence:	323.09 KM	51.39852°N	99.75011°E
<i>Isoperla altaica</i>	Within Known Range?	Y	Nearest Occurrence:	281.04 KM	51.65822°N	100.53000°E
<i>Isoperla mongolica</i>	Within Known Range?	Y	Nearest Occurrence:	208.64 KM	50.48083°N	100.40083°E
<i>Isoperla obscura</i>	Within Known Range?	Y	Nearest Occurrence:	51.87 KM	49.88884°N	102.50909°E
<i>Isoperla potanini</i>	Within Known Range?	Y	Nearest Occurrence:	108.43 KM	50.62324°N	101.87412°E
<i>Skwala pusilla</i>	Within Known Range?	N	Nearest Occurrence:	1,513.25 KM	48.51277°N	88.51107°E

<b>LOE Rating:</b>	<b>Unlikely</b>	<b>Total:</b>	<b>3</b>
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<b>Family:</b> Capniidae						
<i>Mesocapnia altaica</i>	Within Known Range?	N	Nearest Occurrence:	1,470.89 KM	48.43684°N	88.90094°E
<b>Family:</b> Leuctridae						
<i>Leuctra fusca</i>	Within Known Range?	N	Nearest Occurrence:	580.32 KM	49.08643°N	107.28952°E
<b>Family:</b> Perlodidae						
<i>Isoperla eximia</i>	Within Known Range?	N	Nearest Occurrence:	609.32 KM	49.01829°N	107.54453°E



**Basin:** Arctic Ocean Basin  
**Aimags:** Khovsgol  
**Soums:** Tomorbulag

**Freshwater Ecoregion:** Lake Baikal  
**Terrestrial Ecoregion:** Selenge-Orkhon Forest Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Highly Likely Total: 4**

<b>Family: Chloroperlidae</b>						
Haploperla lepnevae	Within Known Range? Y	Nearest Occurrence:	35.38 KM	49.26170°N	99.88242°E	
Suwallia teleckoensis	Within Known Range? Y	Nearest Occurrence:	35.45 KM	49.26170°N	99.88242°E	
<b>Family: Perlidae</b>						
Agnetina brevipennis	Within Known Range? Y	Nearest Occurrence:	35.38 KM	49.26170°N	99.88242°E	
<b>Family: Perlodidae</b>						
Isoperla potanini	Within Known Range? Y	Nearest Occurrence:	35.45 KM	49.26170°N	99.88242°E	

**LOE Rating: Likely Total: 19**

<b>Family: Capniidae</b>						
Isocapnia guentheri	Within Known Range? Y	Nearest Occurrence:	212.61 KM	47.48567°N	100.87875°E	
Isocapnia kudia	Within Known Range? N	Nearest Occurrence:	227.25 KM	51.25356°N	99.66687°E	
Isocapnia sibirica	Within Known Range? N	Nearest Occurrence:	247.03 KM	47.28244°N	101.18793°E	
Mesocapnia variabilis	Within Known Range? Y	Nearest Occurrence:	174.23 KM	48.36436°N	98.92737°E	
<b>Family: Chloroperlidae</b>						
Alaskaperla longidentata	Within Known Range? Y	Nearest Occurrence:	135.45 KM	50.48083°N	100.40083°E	
Alloperla joosti	Within Known Range? Y	Nearest Occurrence:	163.98 KM	47.80440°N	100.31810°E	
Alloperla rostellata	Within Known Range? Y	Nearest Occurrence:	173.91 KM	48.36436°N	98.92737°E	
Suwallia kerzhneri	Within Known Range? Y	Nearest Occurrence:	179.75 KM	50.78320°N	100.79585°E	
<b>Family: Nemouridae</b>						
Amphinemura borealis	Within Known Range? Y	Nearest Occurrence:	35.92 KM	49.45317°N	100.47234°E	
Nemoura arctica	Within Known Range? Y	Nearest Occurrence:	127.75 KM	50.42480°N	100.15007°E	
Nemoura cinerea	Within Known Range? Y	Nearest Occurrence:	195.51 KM	50.81265°N	99.33803°E	
<b>Family: Perlidae</b>						
Agnetina extrema	Within Known Range? Y	Nearest Occurrence:	200.55 KM	47.50949°N	100.57510°E	
Kamimuria exilis	Within Known Range? N	Nearest Occurrence:	180.36 KM	50.16278°N	98.84212°E	
<b>Family: Perlodidae</b>						
Arcynopteryx polaris	Within Known Range? Y	Nearest Occurrence:	135.69 KM	50.48083°N	100.40083°E	
Arcynopteryx sajanensis	Within Known Range? N	Nearest Occurrence:	263.61 KM	51.61397°N	100.59972°E	
Isoperla kozlovi	Within Known Range? Y	Nearest Occurrence:	35.92 KM	49.45317°N	100.47234°E	
Kaszabia nigricauda	Within Known Range? Y	Nearest Occurrence:	45.13 KM	49.62785°N	99.99523°E	
Pictetiella asiatica	Within Known Range? N	Nearest Occurrence:	266.82 KM	51.65822°N	100.53000°E	
<b>Family: Taeniopterygidae</b>						
Taenionema japonicum	Within Known Range? Y	Nearest Occurrence:	191.47 KM	50.61826°N	99.12094°E	

**LOE Rating: Probable Total: 1**

<b>Family: Perlodidae</b>						
Diura majuscula	Within Known Range? Y	Nearest Occurrence:	134.56 KM	50.47032°N	100.40235°E	



**Basin:** Arctic Ocean Basin  
**Aimag:** Khovsgol  
**Soum:** Tomorbulag

**Freshwater Ecoregion:** Lake Baikal  
**Terrestrial Ecoregion:** Selenge-Orkhon Forest Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Possible Total: 8**

Family: Capniidae						
<i>Capnia nigra</i>	Within Known Range? Y	Nearest Occurrence:	138.70 KM	50.51003°N	100.40375°E	
Family: Chloroperlidae						
<i>Alloperla mediata</i>	Within Known Range? N	Nearest Occurrence:	177.35 KM	50.51517°N	101.21073°E	
Family: Nemouridae						
<i>Amphinemura standfussi</i>	Within Known Range? Y	Nearest Occurrence:	179.05 KM	50.77444°N	100.80067°E	
Family: Perlidae						
<i>Paragnetina flavotincta</i>	Within Known Range? Y	Nearest Occurrence:	35.38 KM	49.26170°N	99.88242°E	
Family: Perlodidae						
<i>Arcynopteryx compacta</i>	Within Known Range? Y	Nearest Occurrence:	126.78 KM	50.41594°N	100.14716°E	
<i>Isoperla lunigera</i>	Within Known Range? Y	Nearest Occurrence:	35.92 KM	49.45317°N	100.47234°E	
<i>Megarcys ochracea</i>	Within Known Range? N	Nearest Occurrence:	256.92 KM	51.40978°N	99.30136°E	
Family: Pteronarcyidae						
<i>Pteronarcys reticulata</i>	Within Known Range? Y	Nearest Occurrence:	163.98 KM	47.80440°N	100.31810°E	

**LOE Rating: Predicted Total: 12**

Family: Capniidae						
<i>Capnia khulsbagia</i>	Within Known Range? N	Nearest Occurrence:	198.60 KM	50.98944°N	100.71944°E	
Family: Chloroperlidae						
<i>Alloperla deminuta</i>	Within Known Range? Y	Nearest Occurrence:	163.98 KM	47.80440°N	100.31810°E	
Family: Leuctridae						
<i>Paraleuctra zapekinae</i>	Within Known Range? N	Nearest Occurrence:	495.36 KM	49.71481°N	104.64203°E	
Family: Nemouridae						
<i>Nemoura sahlbergi</i>	Within Known Range? Y	Nearest Occurrence:	168.21 KM	50.42996°N	99.21727°E	
<i>Nemurella pictetii</i>	Within Known Range? N	Nearest Occurrence:	195.51 KM	50.81265°N	99.33803°E	
Family: Perlidae						
<i>Aagnetina cocandica</i>	Within Known Range? Y	Nearest Occurrence:	45.21 KM	49.62785°N	99.99523°E	
Family: Perlodidae						
<i>Diura bicaudata</i>	Within Known Range? Y	Nearest Occurrence:	230.59 KM	47.21768°N	99.92824°E	
<i>Isoperla altaica</i>	Within Known Range? Y	Nearest Occurrence:	195.86 KM	50.81265°N	99.33803°E	
<i>Isoperla asiatica</i>	Within Known Range? Y	Nearest Occurrence:	126.56 KM	50.41594°N	100.14716°E	
<i>Isoperla mongolica</i>	Within Known Range? Y	Nearest Occurrence:	135.69 KM	50.48083°N	100.40083°E	
<i>Isoperla obscura</i>	Within Known Range? Y	Nearest Occurrence:	207.71 KM	50.60031°N	101.52392°E	
<i>Skwala pusilla</i>	Within Known Range? N	Nearest Occurrence:	1,300.33 KM	48.51277°N	88.51107°E	

**LOE Rating: Unlikely Total: 3**

Family: Capniidae						
<i>Mesocapnia altaica</i>	Within Known Range? N	Nearest Occurrence:	1,257.75 KM	48.43684°N	88.90094°E	
Family: Leuctridae						
<i>Leuctra fusca</i>	Within Known Range? N	Nearest Occurrence:	787.13 KM	49.08643°N	107.28952°E	
Family: Perlodidae						
<i>Isoperla eximia</i>	Within Known Range? N	Nearest Occurrence:	815.66 KM	49.01829°N	107.54453°E	

**Basin:** Arctic Ocean Basin  
**Aimags:** Khovsgol  
**Soums:** Tosontsengel

Freshwater Ecoregion: Lake Baikal  
 Terrestrial Ecoregion: Selenge-Orkhon Forest Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

<b>LOE Rating:</b>	<b>Highly Likely</b>	<b>Total:</b>	<b>1</b>
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Family: Perlidae

Paragnetina flavotincta	Within Known Range? Y	Nearest Occurrence:	28.66 KM	49.26765 °N	100.82998 °E
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<b>LOE Rating:</b>	<b>Likely</b>	<b>Total:</b>	<b>21</b>
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Family: Capniidae

Isocapnia guentheri	Within Known Range? Y	Nearest Occurrence:	223.76 KM	47.50523 °N	100.93208 °E
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Isocapnia kudia	Within Known Range? N	Nearest Occurrence:	234.96 KM	51.25356 °N	99.66687 °E
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Isocapnia sibirica	Within Known Range? N	Nearest Occurrence:	250.73 KM	47.28244 °N	101.18793 °E
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Family: Chloroperlidae

Alaskaperla longidentata	Within Known Range? Y	Nearest Occurrence:	116.28 KM	50.51517 °N	101.21073 °E
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Alloperla joosti	Within Known Range? Y	Nearest Occurrence:	116.28 KM	50.51517 °N	101.21073 °E
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Alloperla mediata	Within Known Range? Y	Nearest Occurrence:	116.28 KM	50.51517 °N	101.21073 °E
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Alloperla rostellata	Within Known Range? Y	Nearest Occurrence:	116.28 KM	50.51517 °N	101.21073 °E
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Haploperla lepnevae	Within Known Range? Y	Nearest Occurrence:	46.10 KM	49.45317 °N	100.47234 °E
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Suwallia kerzhneri	Within Known Range? Y	Nearest Occurrence:	139.43 KM	50.60031 °N	101.52392 °E
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Family: Nemouridae

Amphinemura borealis	Within Known Range? Y	Nearest Occurrence:	46.10 KM	49.45317 °N	100.47234 °E
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Nemoura arctica	Within Known Range? Y	Nearest Occurrence:	111.63 KM	49.87761 °N	101.82039 °E
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Nemoura cinerea	Within Known Range? Y	Nearest Occurrence:	216.55 KM	51.07896 °N	99.70857 °E
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Family: Perlidae

Agnetina brevipennis	Within Known Range? Y	Nearest Occurrence:	28.66 KM	49.26765 °N	100.82998 °E
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Agnetina extrema	Within Known Range? Y	Nearest Occurrence:	135.42 KM	50.54915 °N	101.53806 °E
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Kamimuria exilis	Within Known Range? N	Nearest Occurrence:	237.83 KM	50.16278 °N	98.84212 °E
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Family: Perlodidae

Arcynopteryx polaris	Within Known Range? Y	Nearest Occurrence:	96.64 KM	49.99851 °N	101.60799 °E
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Arcynopteryx sajanensis	Within Known Range? N	Nearest Occurrence:	234.90 KM	51.61397 °N	100.59972 °E
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Isoperla kozlovi	Within Known Range? Y	Nearest Occurrence:	28.66 KM	49.26765 °N	100.82998 °E
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Kaszabia nigricauda	Within Known Range? Y	Nearest Occurrence:	99.17 KM	49.62785 °N	99.99523 °E
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Pictetiella asiatica	Within Known Range? N	Nearest Occurrence:	240.49 KM	51.65822 °N	100.53000 °E
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Family: Taeniopterygidae

Taenionema japonicum	Within Known Range? Y	Nearest Occurrence:	216.94 KM	51.07896 °N	99.70857 °E
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**Basin:** Arctic Ocean Basin  
**Aimags:** Khovsgol  
**Soums:** Tosontsengel

Freshwater Ecoregion: Lake Baikal  
 Terrestrial Ecoregion: Selenge-Orkhon Forest Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Probable Total: 7**

Family: Capniidae						
Mesocapnia variabilis	Within Known Range? Y	Nearest Occurrence:	161.22 KM	50.96186°N	100.72506°E	
Family: Chloroperlidae						
Suwallia teleckojensis	Within Known Range? Y	Nearest Occurrence:	114.84 KM	49.26170°N	99.88242°E	
Family: Nemouridae						
Amphinemura standfussi	Within Known Range? Y	Nearest Occurrence:	139.48 KM	50.77444°N	100.80067°E	
Nemoura sahlbergi	Within Known Range? Y	Nearest Occurrence:	111.43 KM	49.87761°N	101.82039°E	
Family: Perlodidae						
Diura majuscula	Within Known Range? Y	Nearest Occurrence:	118.33 KM	50.47032°N	100.40235°E	
Isoperla lunigera	Within Known Range? Y	Nearest Occurrence:	46.10 KM	49.45317°N	100.47234°E	
Family: Pteronarcyidae						
Pteronarcys reticulata	Within Known Range? Y	Nearest Occurrence:	139.43 KM	50.60031°N	101.52392°E	

**LOE Rating: Possible Total: 5**

Family: Capniidae						
Capnia nigra	Within Known Range? N	Nearest Occurrence:	122.00 KM	50.51003°N	100.40375°E	
Family: Leuctridae						
Paraleuctra zapekinae	Within Known Range? N	Nearest Occurrence:	417.90 KM	49.71481°N	104.64203°E	
Family: Perlodidae						
Arcynopteryx compacta	Within Known Range? Y	Nearest Occurrence:	128.82 KM	50.41594°N	100.14716°E	
Isoperla asiatica	Within Known Range? Y	Nearest Occurrence:	128.59 KM	50.41594°N	100.14716°E	
Megarcys ochracea	Within Known Range? N	Nearest Occurrence:	239.51 KM	51.64934°N	100.53020°E	

**LOE Rating: Predicted Total: 10**

Family: Capniidae						
Capnia khulsbagia	Within Known Range? N	Nearest Occurrence:	164.05 KM	50.98944°N	100.71944°E	
Family: Chloroperlidae						
Alloperla deminuta	Within Known Range? Y	Nearest Occurrence:	139.43 KM	50.60031°N	101.52392°E	
Family: Nemouridae						
Nemurella pictetii	Within Known Range? N	Nearest Occurrence:	216.55 KM	51.07896°N	99.70857°E	
Family: Perlidae						
Agnetina cocandica	Within Known Range? Y	Nearest Occurrence:	99.35 KM	49.62785°N	99.99523°E	
Family: Perlodidae						
Diura bicaudata	Within Known Range? N	Nearest Occurrence:	243.41 KM	51.39852°N	99.75011°E	
Isoperla altaica	Within Known Range? Y	Nearest Occurrence:	216.94 KM	51.07896°N	99.70857°E	
Isoperla mongolica	Within Known Range? Y	Nearest Occurrence:	119.45 KM	50.48083°N	100.40083°E	
Isoperla obscura	Within Known Range? Y	Nearest Occurrence:	139.43 KM	50.60031°N	101.52392°E	
Isoperla potanini	Within Known Range? Y	Nearest Occurrence:	28.72 KM	49.26765°N	100.82998°E	
Skwala pusilla	Within Known Range? N	Nearest Occurrence:	1,377.74 KM	48.51277°N	88.51107°E	

**Basin:** Arctic Ocean Basin

**Aimag:** Khovsgol

**Soum:** Tosontsengel

Freshwater Ecoregion: Lake Baikal

Terrestrial Ecoregion: Selenge-Orkhon Forest Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

<b>LOE Rating:</b>	<b>Unlikely</b>	<b>Total:</b>	<b>3</b>
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Family: Capniidae

Mesocapnia altaica

Within Known Range? N Nearest Occurrence: 1,335.35 KM 48.43684 °N 88.90094 °E

Family: Leuctridae

Leuctra fusca

Within Known Range? N Nearest Occurrence: 712.84 KM 49.08643 °N 107.28952 °E

Family: Perlodidae

Isoperla eximia

Within Known Range? N Nearest Occurrence: 741.62 KM 49.01829 °N 107.54453 °E



Basin: Arctic Ocean Basin

Aimags: Khovsgol

Soums: Tsagaannuur

Freshwater Ecoregion: Yenisei

Terrestrial Ecoregion: Sayan Montane Conifer Forests

WQM Sites:

WQM Sites: # 17 (Harmai River @ N 51.33607° E 99.35403°)

**LOE Rating: Highly Likely Total: 6**

Family: Capniidae						
<i>Capnia nigra</i>	Within Known Range? Y	Nearest Occurrence:	87.11 KM	51.39852°N	99.75011°E	
Family: Nemouridae						
<i>Nemoura arctica</i>	Within Known Range? Y	Nearest Occurrence:	31.38 KM	51.46205°N	99.19994°E	
<i>Nemoura cinerea</i>	Within Known Range? N	Nearest Occurrence:	84.72 KM	50.99171°N	99.35400°E	
Family: Perlodidae						
<i>Arcynopteryx compacta</i>	Within Known Range? Y	Nearest Occurrence:	22.87 KM	51.47065°N	99.02617°E	
<i>Megarcys ochracea</i>	Within Known Range? Y	Nearest Occurrence:	31.32 KM	51.46205°N	99.19994°E	
Family: Taeniopterygidae						
<i>Taenionema japonicum</i>	Within Known Range? Y	Nearest Occurrence:	72.61 KM	51.09845°N	99.32051°E	

**LOE Rating: Likely Total: 14**

Family: Capniidae						
<i>Isocapnia guentheri</i>	Within Known Range? Y	Nearest Occurrence:	87.11 KM	51.39852°N	99.75011°E	
<i>Isocapnia kudia</i>	Within Known Range? Y	Nearest Occurrence:	86.13 KM	51.25356°N	99.66687°E	
<i>Mesocapnia variabilis</i>	Within Known Range? N	Nearest Occurrence:	176.23 KM	51.61397°N	100.59972°E	
Family: Chloroperlidae						
<i>Alloperla mediata</i>	Within Known Range? Y	Nearest Occurrence:	86.13 KM	51.25356°N	99.66687°E	
<i>Alloperla rostellata</i>	Within Known Range? N	Nearest Occurrence:	118.00 KM	50.61826°N	99.12094°E	
<i>Suwallia kerzhneri</i>	Within Known Range? N	Nearest Occurrence:	221.02 KM	50.78320°N	100.79585°E	
<i>Suwallia teleckojensis</i>	Within Known Range? Y	Nearest Occurrence:	84.88 KM	50.99171°N	99.35400°E	
Family: Nemouridae						
<i>Amphinemura standfussi</i>	Within Known Range? N	Nearest Occurrence:	200.92 KM	51.16368°N	100.75216°E	
Family: Perlidae						
<i>Kamimuria exilis</i>	Within Known Range? N	Nearest Occurrence:	169.39 KM	50.16278°N	98.84212°E	
Family: Perlodidae						
<i>Arcynopteryx polaris</i>	Within Known Range? Y	Nearest Occurrence:	31.38 KM	51.46205°N	99.19994°E	
<i>Arcynopteryx sajanensis</i>	Within Known Range? N	Nearest Occurrence:	176.23 KM	51.61397°N	100.59972°E	
<i>Diura majuscula</i>	Within Known Range? Y	Nearest Occurrence:	21.81 KM	51.48513°N	99.06095°E	
<i>Isoperla altaica</i>	Within Known Range? Y	Nearest Occurrence:	84.88 KM	50.99171°N	99.35400°E	
<i>Pictetiella asiatica</i>	Within Known Range? N	Nearest Occurrence:	168.05 KM	51.65822°N	100.53000°E	

**LOE Rating: Probable Total: 4**

Family: Chloroperlidae						
<i>Alaskaperla longidentata</i>	Within Known Range? Y	Nearest Occurrence:	72.48 KM	51.09845°N	99.32051°E	
Family: Nemouridae						
<i>Nemoura sahlbergi</i>	Within Known Range? N	Nearest Occurrence:	140.11 KM	50.42996°N	99.21727°E	
Family: Perlodidae						
<i>Diura bicaudata</i>	Within Known Range? Y	Nearest Occurrence:	87.11 KM	51.39852°N	99.75011°E	
Family: Pteronarcyidae						
<i>Pteronarcys reticulata</i>	Within Known Range? Y	Nearest Occurrence:	22.83 KM	51.47065°N	99.02617°E	

Basin: Arctic Ocean Basin

Aimags: Khovsgol

Soums: Tsagaannuur

Freshwater Ecoregion: Yenisei

Terrestrial Ecoregion: Sayan Montane Conifer Forests

WQM Sites:

WQM Sites: # 17 (Harmai River @ N 51.33607° E 99.35403°)

**LOE Rating: Possible Total: 9**

Family: Capniidae						
Isocapnia sibirica	Within Known Range? N	Nearest Occurrence:	544.03 KM	47.28244°N	101.18793°E	
Family: Chloroperlidae						
Alloperla deminuta	Within Known Range? Y	Nearest Occurrence:	21.78 KM	51.48513°N	99.06095°E	
Haploperla lepnevae	Within Known Range? Y	Nearest Occurrence:	167.69 KM	51.65045°N	100.52664°E	
Family: Leuctridae						
Paraleuctra zapekinae	Within Known Range? N	Nearest Occurrence:	661.34 KM	49.71481°N	104.64203°E	
Family: Nemouridae						
Amphinemura borealis	Within Known Range? Y	Nearest Occurrence:	84.72 KM	50.99171°N	99.35400°E	
Family: Perlidae						
Agnetina extrema	Within Known Range? N	Nearest Occurrence:	306.61 KM	50.54915°N	101.53806°E	
Family: Perlodidae						
Isoperla kozlovi	Within Known Range? N	Nearest Occurrence:	72.48 KM	51.09845°N	99.32051°E	
Isoperla lunigera	Within Known Range? Y	Nearest Occurrence:	72.48 KM	51.09845°N	99.32051°E	
Kaszabia nigricauda	Within Known Range? N	Nearest Occurrence:	163.95 KM	50.19916°N	99.03117°E	

**LOE Rating: Predicted Total: 11**

Family: Capniidae						
Capnia khulsbagia	Within Known Range? N	Nearest Occurrence:	183.01 KM	51.51689°N	100.65717°E	
Family: Chloroperlidae						
Alloperla joosti	Within Known Range? N	Nearest Occurrence:	275.59 KM	50.51517°N	101.21073°E	
Family: Nemouridae						
Nemurella pictetii	Within Known Range? N	Nearest Occurrence:	101.15 KM	51.08026°N	99.70559°E	
Family: Perlidae						
Agnetina brevipennis	Within Known Range? N	Nearest Occurrence:	169.09 KM	50.16278°N	98.84212°E	
Agnetina cocandica	Within Known Range? N	Nearest Occurrence:	232.51 KM	49.76390°N	99.86185°E	
Paragnetina flavotincta	Within Known Range? N	Nearest Occurrence:	284.73 KM	49.26170°N	99.88242°E	
Family: Perlodidae						
Isoperla asiatica	Within Known Range? N	Nearest Occurrence:	187.96 KM	50.41594°N	100.14716°E	
Isoperla mongolica	Within Known Range? N	Nearest Occurrence:	203.41 KM	50.48083°N	100.40083°E	
Isoperla obscura	Within Known Range? Y	Nearest Occurrence:	167.69 KM	51.65045°N	100.52664°E	
Isoperla potanini	Within Known Range? N	Nearest Occurrence:	201.28 KM	51.16368°N	100.75216°E	
Skwala pusilla	Within Known Range? N	Nearest Occurrence:	1,217.78 KM	48.51277°N	88.51107°E	

**LOE Rating: Unlikely Total: 3**

Family: Capniidae						
Mesocapnia altaica	Within Known Range? N	Nearest Occurrence:	1,178.95 KM	48.43684°N	88.90094°E	
Family: Leuctridae						
Leuctra fusca	Within Known Range? N	Nearest Occurrence:	962.29 KM	49.08643°N	107.28952°E	
Family: Perlodidae						
Isoperla eximia	Within Known Range? N	Nearest Occurrence:	991.56 KM	49.01829°N	107.54453°E	

Basin: Arctic Ocean Basin

Aimags: Khovsgol

Soums: Tsagaan-uul

Freshwater Ecoregion: Lake Baikal

Terrestrial Ecoregion: Selenge-Orkhon Forest Steppe

WQM Sites:

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Highly Likely Total: 7**

Family: Capniidae						
Capnia nigra	Within Known Range? Y	Nearest Occurrence:	130.68 KM	50.61826 °N	99.12094 °E	
Family: Chloroperlidae						
Alloperla rostellata	Within Known Range? Y	Nearest Occurrence:	130.68 KM	50.61826 °N	99.12094 °E	
Suwallia kerzhneri	Within Known Range? Y	Nearest Occurrence:	113.74 KM	48.61518 °N	98.23096 °E	
Family: Nemouridae						
Amphinemura standfussi	Within Known Range? Y	Nearest Occurrence:	113.74 KM	48.61518 °N	98.23096 °E	
Nemoura arctica	Within Known Range? Y	Nearest Occurrence:	119.43 KM	50.42996 °N	99.21727 °E	
Nemoura cinerea	Within Known Range? Y	Nearest Occurrence:	161.59 KM	50.81265 °N	99.33803 °E	
Family: Taeniopterygidae						
Taenionema japonicum	Within Known Range? Y	Nearest Occurrence:	130.91 KM	50.61826 °N	99.12094 °E	

**LOE Rating: Likely Total: 13**

Family: Capniidae						
Isocapnia guentheri	Within Known Range? Y	Nearest Occurrence:	113.74 KM	48.61518 °N	98.23096 °E	
Isocapnia kudia	Within Known Range? N	Nearest Occurrence:	222.55 KM	51.25356 °N	99.66687 °E	
Mesocapnia variabilis	Within Known Range? Y	Nearest Occurrence:	142.58 KM	48.36436 °N	98.92737 °E	
Family: Chloroperlidae						
Alaskaperla longidentata	Within Known Range? Y	Nearest Occurrence:	83.12 KM	50.21340 °N	98.96266 °E	
Alloperla mediata	Within Known Range? N	Nearest Occurrence:	130.68 KM	50.61826 °N	99.12094 °E	
Suwallia teleckojensis	Within Known Range? Y	Nearest Occurrence:	142.58 KM	48.36436 °N	98.92737 °E	
Family: Perlidae						
Kamimuria exilis	Within Known Range? Y	Nearest Occurrence:	71.62 KM	50.16278 °N	98.84212 °E	
Family: Perlodidae						
Arcynopteryx compacta	Within Known Range? Y	Nearest Occurrence:	130.91 KM	50.61826 °N	99.12094 °E	
Arcynopteryx polaris	Within Known Range? Y	Nearest Occurrence:	142.58 KM	48.36436 °N	98.92737 °E	
Arcynopteryx sajanensis	Within Known Range? N	Nearest Occurrence:	320.47 KM	51.61397 °N	100.59972 °E	
Diura majuscula	Within Known Range? Y	Nearest Occurrence:	130.91 KM	50.61826 °N	99.12094 °E	
Megarcys ochracea	Within Known Range? N	Nearest Occurrence:	218.65 KM	51.40978 °N	99.30136 °E	
Pictetiella asiatica	Within Known Range? N	Nearest Occurrence:	317.96 KM	51.65822 °N	100.53000 °E	

**LOE Rating: Probable Total: 4**

Family: Capniidae						
Isocapnia sibirica	Within Known Range? N	Nearest Occurrence:	389.09 KM	47.28244 °N	101.18793 °E	
Family: Nemouridae						
Nemoura sahlbergi	Within Known Range? Y	Nearest Occurrence:	119.22 KM	50.42996 °N	99.21727 °E	
Family: Perlodidae						
Isoperla altaica	Within Known Range? Y	Nearest Occurrence:	161.89 KM	50.81265 °N	99.33803 °E	
Kaszabia nigricauda	Within Known Range? Y	Nearest Occurrence:	86.31 KM	50.19916 °N	99.03117 °E	

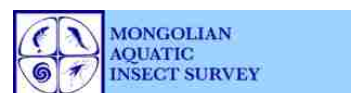
**Basin:** Arctic Ocean Basin  
**Aimags:** Khovsgol  
**Soums:** Tsagaan-uul

**Freshwater Ecoregion:** Lake Baikal  
**Terrestrial Ecoregion:** Selenge-Orkhon Forest Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

LOE Rating:	Possible	Total:				
<b>Family: Chloroperlidae</b>						
	Haploperla lepnevae	Within Known Range? Y	Nearest Occurrence:	152.44 KM	49.26170°N	99.88242°E
<b>Family: Nemouridae</b>						
	Amphinemura borealis	Within Known Range? Y	Nearest Occurrence:	113.74 KM	48.61518°N	98.23096°E
<b>Family: Perlidae</b>						
	Agnetina brevipennis	Within Known Range? Y	Nearest Occurrence:	71.49 KM	50.16278°N	98.84212°E
	Agnetina extrema	Within Known Range? N	Nearest Occurrence:	322.33 KM	47.50949°N	100.57510°E
<b>Family: Perlodidae</b>						
	Diura bicaudata	Within Known Range? Y	Nearest Occurrence:	241.06 KM	51.39852°N	99.75011°E
	Isoperla kozlovi	Within Known Range? Y	Nearest Occurrence:	117.34 KM	50.31066°N	99.32150°E
	Isoperla lunigera	Within Known Range? N	Nearest Occurrence:	160.62 KM	49.62785°N	99.99523°E
	Isoperla potanini	Within Known Range? Y	Nearest Occurrence:	129.37 KM	48.62624°N	97.89617°E
<b>Family: Pteronarcyidae</b>						
	Pteronarcys reticulata	Within Known Range? N	Nearest Occurrence:	215.44 KM	51.47065°N	99.02617°E
LOE Rating:	Predicted	Total:				
<b>Family: Capniidae</b>						
	Capnia khulsbagia	Within Known Range? N	Nearest Occurrence:	286.72 KM	50.98944°N	100.71944°E
<b>Family: Chloroperlidae</b>						
	Alloperla deminuta	Within Known Range? N	Nearest Occurrence:	215.44 KM	51.47065°N	99.02617°E
	Alloperla joosti	Within Known Range? Y	Nearest Occurrence:	113.74 KM	48.61518°N	98.23096°E
<b>Family: Leuctridae</b>						
	Paraleuctra zapekinae	Within Known Range? N	Nearest Occurrence:	676.50 KM	49.71481°N	104.64203°E
<b>Family: Nemouridae</b>						
	Nemurella pictetii	Within Known Range? N	Nearest Occurrence:	161.59 KM	50.81265°N	99.33803°E
<b>Family: Perlidae</b>						
	Agnetina cocandica	Within Known Range? Y	Nearest Occurrence:	147.30 KM	49.76390°N	99.86185°E
	Paragnetina flavotincta	Within Known Range? N	Nearest Occurrence:	152.44 KM	49.26170°N	99.88242°E
<b>Family: Perlodidae</b>						
	Isoperla asiatica	Within Known Range? Y	Nearest Occurrence:	199.75 KM	50.41594°N	100.14716°E
	Isoperla mongolica	Within Known Range? Y	Nearest Occurrence:	195.77 KM	48.24995°N	97.40627°E
	Isoperla obscura	Within Known Range? Y	Nearest Occurrence:	317.08 KM	51.65045°N	100.52664°E
	Skwala pusilla	Within Known Range? N	Nearest Occurrence:	1,120.57 KM	48.51277°N	88.51107°E
LOE Rating:	Unlikely	Total:				
<b>Family: Capniidae</b>						
	Mesocapnia altaica	Within Known Range? N	Nearest Occurrence:	1,078.52 KM	48.43684°N	88.90094°E
<b>Family: Leuctridae</b>						
	Leuctra fusca	Within Known Range? N	Nearest Occurrence:	971.83 KM	49.08643°N	107.28952°E
<b>Family: Perlodidae</b>						
	Isoperla eximia	Within Known Range? N	Nearest Occurrence:	1,000.55 KM	49.01829°N	107.54453°E



**Basin:** Arctic Ocean Basin

**Aimag:** Khovsgol

**Soum:** Tsagaan-uur

**Freshwater Ecoregion:** Lake Baikal

**Terrestrial Ecoregion:** Sayan Montane Conifer Forests

**WQM Sites:**

WQM Sites: # 32 (Halhan River @ N 50.50925° E 101.20778°) # 33 (Uur River @ N 50.5551° E 101.5511°) # 34 (Uilgan River @ N 50.52595° E 101.77062°) # 129 (Deerhi River @ N 50.45018° E 101.87942°)

**LOE Rating: Highly Likely Total: 4**

**Family:** Chloroperlidae

Alloperla joosti	Within Known Range? Y	Nearest Occurrence:	38.31 KM	50.60031°N	101.52392 °E
Alloperla mediata	Within Known Range? Y	Nearest Occurrence:	38.31 KM	50.60031°N	101.52392 °E
Alloperla rostellata	Within Known Range? Y	Nearest Occurrence:	42.41 KM	50.62324°N	101.87412 °E

**Family:** Nemouridae

Nemoura arctica	Within Known Range? Y	Nearest Occurrence:	94.35 KM	51.25881°N	100.86000 °E
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**LOE Rating: Likely Total: 13**

**Family:** Capniidae

Isocapnia guentheri	Within Known Range? Y	Nearest Occurrence:	147.49 KM	51.57304°N	100.48000 °E
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**Family:** Chloroperlidae

Alaskaperla longidentata	Within Known Range? Y	Nearest Occurrence:	65.91 KM	50.51517°N	101.21073 °E
Alloperla deminuta	Within Known Range? Y	Nearest Occurrence:	38.31 KM	50.60031°N	101.52392 °E
Haploperla lepnevae	Within Known Range? Y	Nearest Occurrence:	38.31 KM	50.60031°N	101.52392 °E
Suwallia kerzhneri	Within Known Range? Y	Nearest Occurrence:	38.31 KM	50.60031°N	101.52392 °E

**Family:** Nemouridae

Amphinemura borealis	Within Known Range? Y	Nearest Occurrence:	38.31 KM	50.60031°N	101.52392 °E
Nemoura cinerea	Within Known Range? Y	Nearest Occurrence:	215.08 KM	51.07896°N	99.70857 °E

**Family:** Perlidae

Agnetina extrema	Within Known Range? Y	Nearest Occurrence:	43.26 KM	50.54915°N	101.53806 °E
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**Family:** Perlodidae

Arcynopteryx polaris	Within Known Range? Y	Nearest Occurrence:	95.21 KM	50.78320°N	100.79585 °E
Kaszabia nigricauda	Within Known Range? Y	Nearest Occurrence:	42.41 KM	50.62324°N	101.87412 °E
Megarcys ochracea	Within Known Range? Y	Nearest Occurrence:	147.10 KM	51.64934°N	100.53020 °E

**Family:** Pteronarcyidae

Pteronarcys reticulata	Within Known Range? Y	Nearest Occurrence:	38.31 KM	50.60031°N	101.52392 °E
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**Family:** Taeniopterygidae

Taenionema japonicum	Within Known Range? Y	Nearest Occurrence:	147.93 KM	51.65822°N	100.53000 °E
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**LOE Rating: Probable Total: 9**

**Family:** Capniidae

Capnia nigra	Within Known Range? Y	Nearest Occurrence:	98.22 KM	50.92452°N	100.75528 °E
Isocapnia kudia	Within Known Range? N	Nearest Occurrence:	222.04 KM	51.25356°N	99.66687 °E
Mesocapnia variabilis	Within Known Range? Y	Nearest Occurrence:	94.35 KM	51.25881°N	100.86000 °E

**Family:** Nemouridae

Amphinemura standfussi	Within Known Range? Y	Nearest Occurrence:	94.18 KM	51.25881°N	100.86000 °E
Nemoura sahlbergi	Within Known Range? Y	Nearest Occurrence:	94.18 KM	51.25881°N	100.86000 °E

**Family:** Perlidae

Agnetina brevipennis	Within Known Range? Y	Nearest Occurrence:	38.31 KM	50.60031°N	101.52392 °E
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**Family:** Perlodidae

Arcynopteryx sajanensis	Within Known Range? N	Nearest Occurrence:	138.75 KM	51.61397°N	100.59972 °E
Diura majuscula	Within Known Range? Y	Nearest Occurrence:	133.83 KM	50.59636°N	100.48257 °E
Pictetiella asiatica	Within Known Range? N	Nearest Occurrence:	147.66 KM	51.65822°N	100.53000 °E

Basin: Arctic Ocean Basin

Aimags: Khovsgol

Soums: Tsagaan-uur

Freshwater Ecoregion: Lake Baikal

Terrestrial Ecoregion: Sayan Montane Conifer Forests

WQM Sites:

WQM Sites: # 32 (Halhan River @ N 50.50925° E 101.20778°) # 33 (Uur River @ N 50.5551° E 101.5511°) # 34 (Uilgan River @ N 50.52595° E 101.77062°) # 129 (Deerhi River @ N 50.45018° E 101.87942°)

**LOE Rating: Possible Total: 8**

Family: Capniidae						
Isocapnia sibirica	Within Known Range? N	Nearest Occurrence:	406.14 KM	47.26999°N	101.80227°E	
Family: Chloroperlidae						
Suwallia teleckojensis	Within Known Range? Y	Nearest Occurrence:	147.93 KM	51.65822°N	100.53000°E	
Family: Leuctridae						
Paraleuctra zapekinae	Within Known Range? N	Nearest Occurrence:	359.28 KM	49.71481°N	104.64203°E	
Family: Perlidae						
Kamimuria exilis	Within Known Range? N	Nearest Occurrence:	322.49 KM	50.16278°N	98.84212°E	
Family: Perlodidae						
Arcynopteryx compacta	Within Known Range? Y	Nearest Occurrence:	126.03 KM	50.97545°N	100.50795°E	
Isoperla asiatica	Within Known Range? Y	Nearest Occurrence:	42.41 KM	50.62324°N	101.87412°E	
Isoperla lunigera	Within Known Range? Y	Nearest Occurrence:	38.31 KM	50.60031°N	101.52392°E	
Isoperla potanini	Within Known Range? Y	Nearest Occurrence:	42.49 KM	50.62324°N	101.87412°E	

**LOE Rating: Predicted Total: 10**

Family: Capniidae						
Capnia khulsbagia	Within Known Range? Y	Nearest Occurrence:	101.53 KM	51.16116°N	100.75636°E	
Family: Nemouridae						
Nemurella pictetii	Within Known Range? N	Nearest Occurrence:	215.08 KM	51.07896°N	99.70857°E	
Family: Perlidae						
Agnentina cocandica	Within Known Range? N	Nearest Occurrence:	232.97 KM	49.62785°N	99.99523°E	
Paragnetina flavotincta	Within Known Range? N	Nearest Occurrence:	150.13 KM	49.88884°N	102.50909°E	
Family: Perlodidae						
Diura bicaudata	Within Known Range? N	Nearest Occurrence:	216.27 KM	51.39852°N	99.75011°E	
Isoperla altaica	Within Known Range? Y	Nearest Occurrence:	147.93 KM	51.65822°N	100.53000°E	
Isoperla kozlovi	Within Known Range? Y	Nearest Occurrence:	147.50 KM	51.65045°N	100.52664°E	
Isoperla mongolica	Within Known Range? N	Nearest Occurrence:	146.41 KM	50.48083°N	100.40083°E	
Isoperla obscura	Within Known Range? Y	Nearest Occurrence:	38.31 KM	50.60031°N	101.52392°E	
Skwala pusilla	Within Known Range? N	Nearest Occurrence:	1,481.73 KM	48.51277°N	88.51107°E	

**LOE Rating: Unlikely Total: 3**

Family: Capniidae						
Mesocapnia altaica	Within Known Range? N	Nearest Occurrence:	1,440.78 KM	48.43684°N	88.90094°E	
Family: Leuctridae						
Leuctra fusca	Within Known Range? N	Nearest Occurrence:	659.46 KM	49.08643°N	107.28952°E	
Family: Perlodidae						
Isoperla eximia	Within Known Range? N	Nearest Occurrence:	688.72 KM	49.01829°N	107.54453°E	

**Basin:** Arctic Ocean Basin  
**Aimags:** Khovsgol  
**Soums:** Tunel

Freshwater Ecoregion: Lake Baikal  
 Terrestrial Ecoregion: Selenge-Orkhon Forest Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

<b>LOE Rating:</b>	<b>Highly Likely</b>	<b>Total:</b>	<b>7</b>
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<b>Family:</b> Chloroperlidae			
Alaskaperla longidentata	Within Known Range? Y	Nearest Occurrence:	77.60 KM 50.48083°N 100.40083°E
Alloperla rostellata	Within Known Range? Y	Nearest Occurrence:	97.87 KM 50.51517°N 101.21073°E
Suwallia kerzhneri	Within Known Range? Y	Nearest Occurrence:	106.95 KM 50.78320°N 100.79585°E
<b>Family:</b> Nemouridae			
Nemoura arctica	Within Known Range? Y	Nearest Occurrence:	80.66 KM 50.51003°N 100.40375°E
<b>Family:</b> Perlidae			
Agnetina extrema	Within Known Range? Y	Nearest Occurrence:	126.35 KM 50.54915°N 101.53806°E
<b>Family:</b> Perlodidae			
Arcynopteryx polaris	Within Known Range? Y	Nearest Occurrence:	77.74 KM 50.48083°N 100.40083°E
Kaszabia nigricauda	Within Known Range? Y	Nearest Occurrence:	76.68 KM 49.62785°N 99.99523°E

<b>LOE Rating:</b>	<b>Likely</b>	<b>Total:</b>	<b>20</b>
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<b>Family:</b> Capniidae			
Capnia nigra	Within Known Range? Y	Nearest Occurrence:	80.52 KM 50.51003°N 100.40375°E
Isocapnia guentheri	Within Known Range? Y	Nearest Occurrence:	194.47 KM 51.57304°N 100.48000°E
Isocapnia kudia	Within Known Range? N	Nearest Occurrence:	192.42 KM 51.25356°N 99.66687°E
Isocapnia sibirica	Within Known Range? N	Nearest Occurrence:	288.87 KM 47.28244°N 101.18793°E
Mesocapnia variabilis	Within Known Range? Y	Nearest Occurrence:	126.11 KM 50.96186°N 100.72506°E
<b>Family:</b> Chloroperlidae			
Alloperla joosti	Within Known Range? Y	Nearest Occurrence:	97.87 KM 50.51517°N 101.21073°E
Alloperla mediata	Within Known Range? Y	Nearest Occurrence:	97.87 KM 50.51517°N 101.21073°E
Haploperla lepnevae	Within Known Range? Y	Nearest Occurrence:	46.51 KM 49.45317°N 100.47234°E
Suwallia teleckojensis	Within Known Range? Y	Nearest Occurrence:	86.30 KM 50.41594°N 100.14716°E
<b>Family:</b> Nemouridae			
Amphinemura borealis	Within Known Range? Y	Nearest Occurrence:	46.51 KM 49.45317°N 100.47234°E
Amphinemura standfussi	Within Known Range? Y	Nearest Occurrence:	106.07 KM 50.77444°N 100.80067°E
Nemoura cinerea	Within Known Range? Y	Nearest Occurrence:	174.01 KM 51.07896°N 99.70857°E
Nemoura sahlbergi	Within Known Range? Y	Nearest Occurrence:	106.95 KM 50.78320°N 100.79585°E
<b>Family:</b> Perlidae			
Agnetina brevipennis	Within Known Range? Y	Nearest Occurrence:	46.51 KM 49.45317°N 100.47234°E
Kamimuria exilis	Within Known Range? N	Nearest Occurrence:	205.06 KM 50.16278°N 98.84212°E
<b>Family:</b> Perlodidae			
Arcynopteryx sajanensis	Within Known Range? N	Nearest Occurrence:	198.49 KM 51.61397°N 100.59972°E
Diura majuscula	Within Known Range? Y	Nearest Occurrence:	76.59 KM 50.47032°N 100.40235°E
Isoperla kozlovi	Within Known Range? Y	Nearest Occurrence:	46.51 KM 49.45317°N 100.47234°E
Pictetiella asiatica	Within Known Range? N	Nearest Occurrence:	203.43 KM 51.65822°N 100.53000°E
<b>Family:</b> Taeniopterygidae			
Taenionema japonicum	Within Known Range? Y	Nearest Occurrence:	174.32 KM 51.07896°N 99.70857°E



**Basin:** Arctic Ocean Basin  
**Aimag:** Khovsgol  
**Soum:** Tunel

Freshwater Ecoregion: Lake Baikal  
 Terrestrial Ecoregion: Selenge-Orkhon Forest Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

<b>LOE Rating:</b>	<b>Possible</b>	<b>Total:</b>	<b>6</b>
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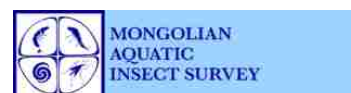
Family: Leuctridae			
Paraleuctra zapekinae	Within Known Range? N	Nearest Occurrence: 442.65 KM	49.71481°N 104.64203 °E
Family: Perlodidae			
Arcynopteryx compacta	Within Known Range? Y	Nearest Occurrence: 86.30 KM	50.41594°N 100.14716 °E
Isoperla asiatica	Within Known Range? Y	Nearest Occurrence: 86.14 KM	50.41594°N 100.14716 °E
Isoperla lunigera	Within Known Range? Y	Nearest Occurrence: 46.51 KM	49.45317°N 100.47234 °E
Megarcys ochracea	Within Known Range? N	Nearest Occurrence: 202.44 KM	51.64934°N 100.53020 °E
Family: Pteronarcyidae			
Pteronarcys reticulata	Within Known Range? Y	Nearest Occurrence: 128.83 KM	50.60031°N 101.52392 °E

<b>LOE Rating:</b>	<b>Predicted</b>	<b>Total:</b>	<b>11</b>
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Family: Capniidae			
Capnia khulsbagia	Within Known Range? N	Nearest Occurrence: 128.90 KM	50.98944°N 100.71944 °E
Family: Chloroperlidae			
Alloperla deminuta	Within Known Range? Y	Nearest Occurrence: 128.83 KM	50.60031°N 101.52392 °E
Family: Nemouridae			
Nemurella pictetii	Within Known Range? N	Nearest Occurrence: 174.01 KM	51.07896°N 99.70857 °E
Family: Perlidae			
Agnetina cocandica	Within Known Range? Y	Nearest Occurrence: 76.82 KM	49.62785°N 99.99523 °E
Paragnetina flavotincta	Within Known Range? Y	Nearest Occurrence: 65.33 KM	49.26765°N 100.82998 °E
Family: Perlodidae			
Diura bicaudata	Within Known Range? Y	Nearest Occurrence: 201.06 KM	51.39852°N 99.75011 °E
Isoperla altaica	Within Known Range? Y	Nearest Occurrence: 174.32 KM	51.07896°N 99.70857 °E
Isoperla mongolica	Within Known Range? Y	Nearest Occurrence: 77.74 KM	50.48083°N 100.40083 °E
Isoperla obscura	Within Known Range? Y	Nearest Occurrence: 128.83 KM	50.60031°N 101.52392 °E
Isoperla potanini	Within Known Range? Y	Nearest Occurrence: 65.45 KM	49.26765°N 100.82998 °E
Skwala pusilla	Within Known Range? N	Nearest Occurrence: 1,355.98 KM	48.51277°N 88.51107 °E

<b>LOE Rating:</b>	<b>Unlikely</b>	<b>Total:</b>	<b>3</b>
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Family: Capniidae			
Mesocapnia altaica	Within Known Range? N	Nearest Occurrence: 1,313.93 KM	48.43684°N 88.90094 °E
Family: Leuctridae			
Leuctra fusca	Within Known Range? N	Nearest Occurrence: 740.95 KM	49.08643°N 107.28952 °E
Family: Perlodidae			
Isoperla eximia	Within Known Range? N	Nearest Occurrence: 769.93 KM	49.01829°N 107.54453 °E





Basin: Arctic Ocean Basin

Aimags: Khovsgol

Soums: Ulaan-uul

Freshwater Ecoregion: Yenisei

Terrestrial Ecoregion: Sayan Alpine Meadows And Tundra

WQM Sites:

WQM Sites: # 27 (Bahtag River @ N 50.79042° E 99.20032°) # 28 (Guna River @ N 50.78138° E 99.18703°) # 29 (Beltes River @ N 50.38683° E 99.31393°)

**LOE Rating: Highly Likely Total: 7**

Family: Capniidae						
<i>Capnia nigra</i>	Within Known Range? Y	Nearest Occurrence:	52.92 KM	50.61826°N	99.12094 °E	
Family: Chloroperlidae						
<i>Alloperla rostellata</i>	Within Known Range? Y	Nearest Occurrence:	52.92 KM	50.61826°N	99.12094 °E	
Family: Nemouridae						
<i>Nemoura arctica</i>	Within Known Range? Y	Nearest Occurrence:	70.40 KM	50.99171°N	99.35400 °E	
<i>Nemoura cinerea</i>	Within Known Range? Y	Nearest Occurrence:	68.13 KM	50.81265°N	99.33803 °E	
Family: Perlodidae						
<i>Arcynopteryx compacta</i>	Within Known Range? Y	Nearest Occurrence:	53.01 KM	50.61826°N	99.12094 °E	
<i>Diura majuscula</i>	Within Known Range? Y	Nearest Occurrence:	53.01 KM	50.61826°N	99.12094 °E	
Family: Taeniopterygidae						
<i>Taenionema japonicum</i>	Within Known Range? Y	Nearest Occurrence:	53.01 KM	50.61826°N	99.12094 °E	

**LOE Rating: Likely Total: 10**

Family: Capniidae						
<i>Isocapnia guentheri</i>	Within Known Range? Y	Nearest Occurrence:	126.62 KM	51.39852°N	99.75011 °E	
<i>Isocapnia kudia</i>	Within Known Range? Y	Nearest Occurrence:	111.65 KM	51.25356°N	99.66687 °E	
Family: Chloroperlidae						
<i>Alloperla mediata</i>	Within Known Range? Y	Nearest Occurrence:	52.92 KM	50.61826°N	99.12094 °E	
<i>Suwallia kerzhneri</i>	Within Known Range? N	Nearest Occurrence:	229.72 KM	50.78320°N	100.79585 °E	
<i>Suwallia teleckojensis</i>	Within Known Range? Y	Nearest Occurrence:	70.40 KM	50.99171°N	99.35400 °E	
Family: Nemouridae						
<i>Nemoura sahlbergi</i>	Within Known Range? Y	Nearest Occurrence:	74.44 KM	50.42996°N	99.21727 °E	
Family: Perlidae						
<i>Kamimuria exilis</i>	Within Known Range? Y	Nearest Occurrence:	81.81 KM	50.16278°N	98.84212 °E	
Family: Perlodidae						
<i>Arcynopteryx polaris</i>	Within Known Range? Y	Nearest Occurrence:	82.40 KM	51.46205°N	99.19994 °E	
<i>Isoperla altaica</i>	Within Known Range? Y	Nearest Occurrence:	68.25 KM	50.81265°N	99.33803 °E	
<i>Megarcys ochracea</i>	Within Known Range? Y	Nearest Occurrence:	82.26 KM	51.46205°N	99.19994 °E	

**LOE Rating: Probable Total: 5**

Family: Capniidae						
<i>Mesocapnia variabilis</i>	Within Known Range? Y	Nearest Occurrence:	222.09 KM	50.96186°N	100.72506 °E	
Family: Chloroperlidae						
<i>Alaskaperla longidentata</i>	Within Known Range? Y	Nearest Occurrence:	69.62 KM	51.09845°N	99.32051 °E	
Family: Nemouridae						
<i>Amphinemura standfussi</i>	Within Known Range? N	Nearest Occurrence:	221.70 KM	50.96186°N	100.72506 °E	
Family: Perlodidae						
<i>Arcynopteryx sajanensis</i>	Within Known Range? N	Nearest Occurrence:	223.05 KM	51.61397°N	100.59972 °E	
<i>Pictetiella asiatica</i>	Within Known Range? N	Nearest Occurrence:	217.34 KM	51.65822°N	100.53000 °E	

Basin: Arctic Ocean Basin

Aimags: Khovsgol

Soums: Ulaan-uul

Freshwater Ecoregion: Yenisei

Terrestrial Ecoregion: Sayan Alpine Meadows And Tundra

WQM Sites:

WQM Sites: # 27 (Bahtag River @ N 50.79042° E 99.20032°) # 28 (Guna River @ N 50.78138° E 99.18703°) # 29 (Beltes River @ N 50.38683° E 99.31393°)

**LOE Rating: Possible Total: 9**

Family: Capniidae						
Isocapnia sibirica	Within Known Range? N	Nearest Occurrence:	484.59 KM	47.28244°N	101.18793°E	
Family: Chloroperlidae						
Haploperla lepnevae	Within Known Range? Y	Nearest Occurrence:	190.61 KM	50.51003°N	100.40375°E	
Family: Nemouridae						
Amphinemura borealis	Within Known Range? Y	Nearest Occurrence:	70.28 KM	50.99171°N	99.35400°E	
Nemurella pictetii	Within Known Range? Y	Nearest Occurrence:	68.13 KM	50.81265°N	99.33803°E	
Family: Perlodidae						
Diura bicaudata	Within Known Range? Y	Nearest Occurrence:	126.62 KM	51.39852°N	99.75011°E	
Isoperla kozlovi	Within Known Range? Y	Nearest Occurrence:	69.62 KM	51.09845°N	99.32051°E	
Isoperla lunigera	Within Known Range? Y	Nearest Occurrence:	69.62 KM	51.09845°N	99.32051°E	
Kaszabia nigricauda	Within Known Range? N	Nearest Occurrence:	83.67 KM	50.19916°N	99.03117°E	
Family: Pteronarcyidae						
Pteronarcys reticulata	Within Known Range? Y	Nearest Occurrence:	72.42 KM	51.47065°N	99.02617°E	

**LOE Rating: Predicted Total: 13**

Family: Capniidae						
Capnia khulsbagia	Within Known Range? N	Nearest Occurrence:	221.21 KM	50.98944°N	100.71944°E	
Family: Chloroperlidae						
Alloperla deminuta	Within Known Range? Y	Nearest Occurrence:	72.42 KM	51.47065°N	99.02617°E	
Alloperla joosti	Within Known Range? N	Nearest Occurrence:	258.46 KM	48.61518°N	98.23096°E	
Family: Leuctridae						
Paraleuctra zapekinae	Within Known Range? N	Nearest Occurrence:	669.17 KM	49.71481°N	104.64203°E	
Family: Perlidae						
Agnetina brevipennis	Within Known Range? Y	Nearest Occurrence:	81.67 KM	50.16278°N	98.84212°E	
Agnetina cocandica	Within Known Range? N	Nearest Occurrence:	177.60 KM	49.76390°N	99.86185°E	
Agnetina extrema	Within Known Range? N	Nearest Occurrence:	314.08 KM	50.54915°N	101.53806°E	
Paragnetina flavotincta	Within Known Range? N	Nearest Occurrence:	221.47 KM	49.26170°N	99.88242°E	
Family: Perlodidae						
Isoperla asiatica	Within Known Range? N	Nearest Occurrence:	165.96 KM	50.41594°N	100.14716°E	
Isoperla mongolica	Within Known Range? Y	Nearest Occurrence:	191.37 KM	50.48083°N	100.40083°E	
Isoperla obscura	Within Known Range? Y	Nearest Occurrence:	216.66 KM	51.65045°N	100.52664°E	
Isoperla potanini	Within Known Range? Y	Nearest Occurrence:	221.86 KM	49.26170°N	99.88242°E	
Skwala pusilla	Within Known Range? N	Nearest Occurrence:	1,164.48 KM	48.51277°N	88.51107°E	

**LOE Rating: Unlikely Total: 3**

Family: Capniidae						
Mesocapnia altaica	Within Known Range? N	Nearest Occurrence:	1,124.39 KM	48.43684°N	88.90094°E	
Family: Leuctridae						
Leuctra fusca	Within Known Range? N	Nearest Occurrence:	971.06 KM	49.08643°N	107.28952°E	
Family: Perlodidae						
Isoperla eximia	Within Known Range? N	Nearest Occurrence:	1,000.32 KM	49.01829°N	107.54453°E	

Basin: Arctic Ocean Basin

Aimags: Orkhon

Soums: Bayan-ondor

Freshwater Ecoregion: Lake Baikal

Terrestrial Ecoregion: Selenge-Orkhon Forest Steppe

WQM Sites:

WQM Sites: # 51 (Hangal River @ N 49.0747° E 104.1956°) # 52 (Hangal River @ N 49.02897° E 104.09368°)

**LOE Rating: Highly Likely Total: 6**

Family: Capniidae					
Isocapnia guentheri	Within Known Range? Y	Nearest Occurrence:	97.91 KM	49.77776°N	103.60860°E
Family: Chloroperlidae					
Alloperla joosti	Within Known Range? Y	Nearest Occurrence:	112.84 KM	49.21675°N	103.10750°E
Alloperla rostellata	Within Known Range? N	Nearest Occurrence:	97.91 KM	49.77776°N	103.60860°E
Haploperla lepnevae	Within Known Range? Y	Nearest Occurrence:	52.38 KM	49.48086°N	104.30864°E
Suwallia kerzhneri	Within Known Range? Y	Nearest Occurrence:	177.58 KM	50.35162°N	105.04436°E
Family: Perlodidae					
Isoperla kozlovi	Within Known Range? Y	Nearest Occurrence:	52.38 KM	49.48086°N	104.30864°E

**LOE Rating: Likely Total: 15**

Family: Capniidae					
Isocapnia kudia	Within Known Range? N	Nearest Occurrence:	550.45 KM	51.25356°N	99.66687°E
Isocapnia sibirica	Within Known Range? N	Nearest Occurrence:	323.74 KM	47.26999°N	101.80227°E
Family: Chloroperlidae					
Alloperla mediata	Within Known Range? N	Nearest Occurrence:	97.91 KM	49.77776°N	103.60860°E
Family: Leuctridae					
Paraleuctra zapekinae	Within Known Range? Y	Nearest Occurrence:	94.25 KM	49.71481°N	104.64203°E
Family: Nemouridae					
Amphinemura borealis	Within Known Range? Y	Nearest Occurrence:	129.55 KM	49.33339°N	102.97786°E
Nemoura cinerea	Within Known Range? Y	Nearest Occurrence:	86.07 KM	49.68122°N	104.56461°E
Family: Perlidae					
Agnetina brevipennis	Within Known Range? Y	Nearest Occurrence:	52.38 KM	49.48086°N	104.30864°E
Agnetina extrema	Within Known Range? Y	Nearest Occurrence:	265.34 KM	48.83420°N	106.49113°E
Kamimuria exilis	Within Known Range? N	Nearest Occurrence:	598.74 KM	50.16278°N	98.84212°E
Family: Perlodidae					
Arcynopteryx sajanensis	Within Known Range? N	Nearest Occurrence:	483.28 KM	51.61397°N	100.59972°E
Isoperla asiatica	Within Known Range? Y	Nearest Occurrence:	133.37 KM	49.70678°N	103.10288°E
Isoperla lunigera	Within Known Range? Y	Nearest Occurrence:	52.38 KM	49.48086°N	104.30864°E
Kaszabia nigricauda	Within Known Range? Y	Nearest Occurrence:	184.11 KM	47.85250°N	105.25567°E
Pictetiella asiatica	Within Known Range? N	Nearest Occurrence:	491.56 KM	51.65822°N	100.53000°E
Family: Pteronarcyidae					
Pteronarcys reticulata	Within Known Range? Y	Nearest Occurrence:	174.69 KM	49.63453°N	102.64845°E

**LOE Rating: Probable Total: 4**

Family: Chloroperlidae					
Suwallia teleckojensis	Within Known Range? Y	Nearest Occurrence:	94.41 KM	49.71481°N	104.64203°E
Family: Perlidae					
Agnetina cocandica	Within Known Range? Y	Nearest Occurrence:	120.51 KM	49.16354°N	105.18880°E
Paragnetina flavotincta	Within Known Range? Y	Nearest Occurrence:	52.38 KM	49.48086°N	104.30864°E
Family: Perlodidae					
Megarcys ochracea	Within Known Range? Y	Nearest Occurrence:	97.91 KM	49.77776°N	103.60860°E

**Basin:** Arctic Ocean Basin

**Aimags:** Orkhon

**Soums:** Bayan-ondor

Freshwater Ecoregion: Lake Baikal

Terrestrial Ecoregion: Selenge-Orkhon Forest Steppe

**WQM Sites:**

WQM Sites: # 51 (Hangal River @ N 49.0747° E 104.1956°) # 52 (Hangal River @ N 49.02897° E 104.09368°)

**LOE Rating: Possible Total: 4**

Family: Nemouridae

Amphinemura standfussi Within Known Range? Y Nearest Occurrence: 129.55 KM 49.33339°N 102.97786 °E

Family: Perlodidae

Arcynopteryx polaris Within Known Range? Y Nearest Occurrence: 80.02 KM 49.70184°N 103.80040 °E

Diura bicaudata Within Known Range? N Nearest Occurrence: 506.96 KM 47.21768°N 99.92824 °E

Isoperla obscura Within Known Range? Y Nearest Occurrence: 52.38 KM 49.48086°N 104.30864 °E

**LOE Rating: Predicted Total: 16**

Family: Capniidae

Capnia khulsbagia Within Known Range? N Nearest Occurrence: 433.50 KM 50.98944°N 100.71944 °E

Capnia nigra Within Known Range? N Nearest Occurrence: 426.49 KM 50.92452°N 100.75528 °E

Mesocapnia variabilis Within Known Range? Y Nearest Occurrence: 428.72 KM 48.42080°N 107.91406 °E

Family: Chloroperlidae

Alaskaperla longidentata Within Known Range? Y Nearest Occurrence: 169.15 KM 49.95588°N 105.33791 °E

Alloperla deminuta Within Known Range? Y Nearest Occurrence: 133.37 KM 49.70678°N 103.10288 °E

Family: Leuctridae

Leuctra fusca Within Known Range? N Nearest Occurrence: 352.87 KM 49.08643°N 107.28952 °E

Family: Nemouridae

Nemoura arctica Within Known Range? Y Nearest Occurrence: 71.34 KM 49.65142°N 103.88064 °E

Nemoura sahlbergi Within Known Range? Y Nearest Occurrence: 79.88 KM 49.70184°N 103.80040 °E

Family: Perlodidae

Arcynopteryx compacta Within Known Range? Y Nearest Occurrence: 65.31 KM 49.62414°N 104.24594 °E

Diura majuscula Within Known Range? Y Nearest Occurrence: 306.73 KM 46.89303°N 102.39457 °E

Isoperla altaica Within Known Range? Y Nearest Occurrence: 224.69 KM 48.87748°N 106.12370 °E

Isoperla eximia Within Known Range? N Nearest Occurrence: 381.17 KM 49.01829°N 107.54453 °E

Isoperla mongolica Within Known Range? Y Nearest Occurrence: 324.33 KM 47.26999°N 101.80227 °E

Isoperla potanini Within Known Range? N Nearest Occurrence: 303.91 KM 50.62324°N 101.87412 °E

Skwala pusilla Within Known Range? N Nearest Occurrence: 1,732.60 KM 48.51277°N 88.51107 °E

Family: Taeniopterygidae

Taenionema japonicum Within Known Range? Y Nearest Occurrence: 347.06 KM 49.05411°N 107.23175 °E

**LOE Rating: Unlikely Total: 2**

Family: Capniidae

Mesocapnia altaica Within Known Range? N Nearest Occurrence: 1,689.67 KM 48.43684°N 88.90094 °E

Family: Nemouridae

Nemurella pictetii Within Known Range? N Nearest Occurrence: 537.92 KM 51.07896°N 99.70857 °E

**Basin:** Arctic Ocean Basin  
**Aimags:** Orkhon  
**Soums:** Jargalant

Freshwater Ecoregion: Lake Baikal  
 Terrestrial Ecoregion: Selenge-Orkhon Forest Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Highly Likely Total: 6**

Family: Capniidae						
	Isocapnia guentheri	Within Known Range? Y	Nearest Occurrence:	120.19 KM	49.77776 °N	103.60860 °E
Family: Chloroperlidae						
	Alloperla joosti	Within Known Range? N	Nearest Occurrence:	144.35 KM	49.21675 °N	103.10750 °E
	Alloperla rostellata	Within Known Range? N	Nearest Occurrence:	120.19 KM	49.77776 °N	103.60860 °E
	Haploperla lepnevae	Within Known Range? Y	Nearest Occurrence:	50.59 KM	49.48086 °N	104.30864 °E
	Suwallia kerzhneri	Within Known Range? Y	Nearest Occurrence:	163.12 KM	50.35162 °N	105.04436 °E
Family: Perlodidae						
	Isoperla kozlovi	Within Known Range? Y	Nearest Occurrence:	50.59 KM	49.48086 °N	104.30864 °E

**LOE Rating: Likely Total: 15**

Family: Capniidae						
	Isocapnia kudia	Within Known Range? N	Nearest Occurrence:	579.80 KM	51.25356 °N	99.66687 °E
	Isocapnia sibirica	Within Known Range? N	Nearest Occurrence:	348.04 KM	47.26999 °N	101.80227 °E
Family: Chloroperlidae						
	Alloperla mediata	Within Known Range? N	Nearest Occurrence:	120.19 KM	49.77776 °N	103.60860 °E
Family: Leuctridae						
	Paraleuctra zapekinae	Within Known Range? Y	Nearest Occurrence:	80.46 KM	49.71481 °N	104.64203 °E
Family: Nemouridae						
	Amphinemura borealis	Within Known Range? Y	Nearest Occurrence:	155.58 KM	50.03638 °N	105.37392 °E
	Nemoura cinerea	Within Known Range? Y	Nearest Occurrence:	74.34 KM	49.68122 °N	104.56461 °E
Family: Perlidae						
	Agnetina brevipennis	Within Known Range? Y	Nearest Occurrence:	50.59 KM	49.48086 °N	104.30864 °E
	Agnetina extrema	Within Known Range? Y	Nearest Occurrence:	233.72 KM	48.83420 °N	106.49113 °E
	Kamimuria exilis	Within Known Range? N	Nearest Occurrence:	630.12 KM	50.16278 °N	98.84212 °E
Family: Perlodidae						
	Arcynopteryx sajanensis	Within Known Range? N	Nearest Occurrence:	510.35 KM	51.61397 °N	100.59972 °E
	Isoperla asiatica	Within Known Range? Y	Nearest Occurrence:	161.73 KM	49.70678 °N	103.10288 °E
	Isoperla lunigera	Within Known Range? Y	Nearest Occurrence:	50.59 KM	49.48086 °N	104.30864 °E
	Kaszabia nigricauda	Within Known Range? Y	Nearest Occurrence:	162.20 KM	47.85250 °N	105.25567 °E
	Pictetiella asiatica	Within Known Range? N	Nearest Occurrence:	518.59 KM	51.65822 °N	100.53000 °E
Family: Pteronarcyidae						
	Pteronarcys reticulata	Within Known Range? Y	Nearest Occurrence:	205.02 KM	49.63453 °N	102.64845 °E

**LOE Rating: Probable Total: 4**

Family: Chloroperlidae						
	Suwallia teleckojensis	Within Known Range? Y	Nearest Occurrence:	80.61 KM	49.71481 °N	104.64203 °E
Family: Perlidae						
	Agnetina cocandica	Within Known Range? Y	Nearest Occurrence:	89.46 KM	49.16354 °N	105.18880 °E
	Paragnetina flavotincta	Within Known Range? Y	Nearest Occurrence:	50.59 KM	49.48086 °N	104.30864 °E
Family: Perlodidae						
	Megaracys ochracea	Within Known Range? Y	Nearest Occurrence:	120.19 KM	49.77776 °N	103.60860 °E

**Basin:** Arctic Ocean Basin  
**Aimags:** Orkhon  
**Soums:** Jargalant

Freshwater Ecoregion: Lake Baikal  
 Terrestrial Ecoregion: Selenge-Orkhon Forest Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

<b>LOE Rating:</b>	<b>Possible</b>	<b>Total:</b>	<b>1</b>
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Family: Perlodidae

Isoperla obscura      Within Known Range? Y      Nearest Occurrence: 50.59 KM      49.48086 °N      104.30864 °E

<b>LOE Rating:</b>	<b>Predicted</b>	<b>Total:</b>	<b>19</b>
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Family: Capniidae

Capnia khulsbagia      Within Known Range? N      Nearest Occurrence: 462.16 KM      50.98944 °N      100.71944 °E

Capnia nigra      Within Known Range? N      Nearest Occurrence: 455.28 KM      50.92452 °N      100.75528 °E

Mesocapnia variabilis      Within Known Range? Y      Nearest Occurrence: 397.21 KM      48.42080 °N      107.91406 °E

Family: Chloroperlidae

Alaskaperla longidentata      Within Known Range? Y      Nearest Occurrence: 146.43 KM      49.95588 °N      105.33791 °E

Alloperla deminuta      Within Known Range? Y      Nearest Occurrence: 161.73 KM      49.70678 °N      103.10288 °E

Family: Leuctridae

Leuctra fusca      Within Known Range? N      Nearest Occurrence: 321.35 KM      49.08643 °N      107.28952 °E

Family: Nemouridae

Amphinemura standfussi      Within Known Range? Y      Nearest Occurrence: 160.78 KM      49.33339 °N      102.97786 °E

Nemoura arctica      Within Known Range? Y      Nearest Occurrence: 89.41 KM      49.65142 °N      103.88064 °E

Nemoura sahlbergi      Within Known Range? Y      Nearest Occurrence: 99.30 KM      49.70184 °N      103.80040 °E

Family: Perlodidae

Arcynopteryx compacta      Within Known Range? Y      Nearest Occurrence: 67.75 KM      49.62414 °N      104.24594 °E

Arcynopteryx polaris      Within Known Range? Y      Nearest Occurrence: 99.48 KM      49.70184 °N      103.80040 °E

Diura bicaudata      Within Known Range? N      Nearest Occurrence: 535.20 KM      47.21768 °N      99.92824 °E

Diura majuscula      Within Known Range? Y      Nearest Occurrence: 325.77 KM      46.89303 °N      102.39457 °E

Isoperla altaica      Within Known Range? Y      Nearest Occurrence: 193.02 KM      48.87748 °N      106.12370 °E

Isoperla eximia      Within Known Range? N      Nearest Occurrence: 349.61 KM      49.01829 °N      107.54453 °E

Isoperla mongolica      Within Known Range? Y      Nearest Occurrence: 348.67 KM      47.26999 °N      101.80227 °E

Isoperla potanini      Within Known Range? N      Nearest Occurrence: 331.41 KM      50.62324 °N      101.87412 °E

Skwala pusilla      Within Known Range? N      Nearest Occurrence: 1,764.06 KM      48.51277 °N      88.51107 °E

Family: Taeniopterygidae

Taenionema japonicum      Within Known Range? Y      Nearest Occurrence: 315.46 KM      49.05411 °N      107.23175 °E

<b>LOE Rating:</b>	<b>Unlikely</b>	<b>Total:</b>	<b>2</b>
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Family: Capniidae

Mesocapnia altaica      Within Known Range? N      Nearest Occurrence: 1,721.11 KM      48.43684 °N      88.90094 °E

Family: Nemouridae

Nemurella pictetii      Within Known Range? N      Nearest Occurrence: 567.58 KM      51.07896 °N      99.70857 °E



**Basin:** Arctic Ocean Basin  
**Aimags:** Ovorkhangai  
**Soums:** Bat-olzii

**Freshwater Ecoregion:** Lake Baikal  
**Terrestrial Ecoregion:** Selenge-Orkhon Forest Steppe

**WQM Sites:**

WQM Sites: # 68 (tasgaan River @ N 46.84315° E 102.23895°) # 69 (Ulaan nuu River @ N 46.77422° E 101.95118°) # 70 (Orhon River @ N 46.82177° E 101.7052°)

<b>LOE Rating:</b>	<b>Highly Likely</b>	<b>Total:</b>	1
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Family: Nemouridae

Amphinemura borealis	Within Known Range? Y	Nearest Occurrence:	0.92 KM	46.78742°N	101.96021°E
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<b>LOE Rating:</b>	<b>Likely</b>	<b>Total:</b>	12
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Family: Capniidae

Isocapnia guentheri	Within Known Range? Y	Nearest Occurrence:	138.33 KM	47.50523°N	100.93208°E
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Isocapnia sibirica	Within Known Range? Y	Nearest Occurrence:	55.88 KM	47.26999°N	101.80227°E
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Family: Chloroperlidae

Alloperla deminuta	Within Known Range? Y	Nearest Occurrence:	0.92 KM	46.78742°N	101.96021°E
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Alloperla joosti	Within Known Range? Y	Nearest Occurrence:	0.92 KM	46.78742°N	101.96021°E
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Alloperla rostellata	Within Known Range? Y	Nearest Occurrence:	110.49 KM	47.11192°N	101.01048°E
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Suwallia kerzhneri	Within Known Range? N	Nearest Occurrence:	119.33 KM	47.59928°N	101.24521°E
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Suwallia teleckojensis	Within Known Range? Y	Nearest Occurrence:	0.91 KM	46.78742°N	101.96021°E
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Family: Perlidae

Agnetina brevipennis	Within Known Range? Y	Nearest Occurrence:	0.92 KM	46.78742°N	101.96021°E
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Agnetina extrema	Within Known Range? Y	Nearest Occurrence:	55.88 KM	47.26999°N	101.80227°E
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Family: Perlodidae

Arcynopteryx compacta	Within Known Range? Y	Nearest Occurrence:	44.77 KM	46.88627°N	102.34304°E
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Diura majuscula	Within Known Range? Y	Nearest Occurrence:	50.52 KM	46.89303°N	102.39457°E
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Isoperla potanini	Within Known Range? Y	Nearest Occurrence:	9.84 KM	46.73093°N	101.88583°E
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<b>LOE Rating:</b>	<b>Probable</b>	<b>Total:</b>	9
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Family: Capniidae

Isocapnia kudia	Within Known Range? N	Nearest Occurrence:	556.68 KM	51.25356°N	99.66687°E
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Family: Chloroperlidae

Alaskaperla longidentata	Within Known Range? Y	Nearest Occurrence:	27.70 KM	46.82177°N	101.70479°E
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Family: Nemouridae

Nemoura cinerea	Within Known Range? N	Nearest Occurrence:	142.02 KM	47.48567°N	100.87875°E
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Family: Perlidae

Kamimuria exilis	Within Known Range? N	Nearest Occurrence:	510.22 KM	50.16278°N	98.84212°E
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Family: Perlodidae

Arcynopteryx polaris	Within Known Range? Y	Nearest Occurrence:	35.25 KM	47.04409°N	101.76352°E
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Arcynopteryx sajanensis	Within Known Range? N	Nearest Occurrence:	557.18 KM	51.61397°N	100.59972°E
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Diura bicaudata	Within Known Range? N	Nearest Occurrence:	229.63 KM	47.21768°N	99.92824°E
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Isoperla kozlovi	Within Known Range? Y	Nearest Occurrence:	55.88 KM	47.26999°N	101.80227°E
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Pictetiella asiatica	Within Known Range? N	Nearest Occurrence:	563.03 KM	51.65822°N	100.53000°E
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**Basin:** Arctic Ocean Basin  
**Aimags:** Ovorkhangai  
**Soums:** Bat-olzii

**Freshwater Ecoregion:** Lake Baikal  
**Terrestrial Ecoregion:** Selenge-Orkhon Forest Steppe

**WQM Sites:**

WQM Sites: # 68 (tasgaan River @ N 46.84315° E 102.23895°) # 69 (Ulaan nuu River @ N 46.77422° E 101.95118°) # 70 (Orhon River @ N 46.82177° E 101.7052°)

**LOE Rating: Possible Total: 5**

Family: Chloroperlidae						
Haploperla lepnevae	Within Known Range?	N	Nearest Occurrence:	338.25 KM	49.45317°N	100.47234 °E
Family: Nemouridae						
Nemoura arctica	Within Known Range?	Y	Nearest Occurrence:	55.98 KM	47.26999°N	101.80227 °E
Family: Perlodidae						
Kaszabia nigricauda	Within Known Range?	N	Nearest Occurrence:	119.33 KM	47.59928°N	101.24521 °E
Family: Pteronarcyidae						
Pteronarcys reticulata	Within Known Range?	N	Nearest Occurrence:	213.53 KM	47.80440°N	100.31810 °E
Family: Taeniopterygidae						
Taenionema japonicum	Within Known Range?	Y	Nearest Occurrence:	101.14 KM	47.28244°N	101.18793 °E

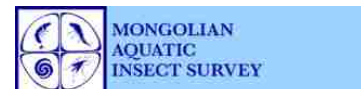
**LOE Rating: Predicted Total: 15**

Family: Capniidae						
Capnia nigra	Within Known Range?	N	Nearest Occurrence:	447.33 KM	50.51003°N	100.40375 °E
Mesocapnia variabilis	Within Known Range?	N	Nearest Occurrence:	230.05 KM	47.21768°N	99.92824 °E
Family: Chloroperlidae						
Alloperla mediata	Within Known Range?	N	Nearest Occurrence:	348.11 KM	49.70678°N	103.10288 °E
Family: Leuctridae						
Paraleuctra zapekinae	Within Known Range?	N	Nearest Occurrence:	441.12 KM	49.71481°N	104.64203 °E
Family: Nemouridae						
Amphinemura standfussi	Within Known Range?	N	Nearest Occurrence:	304.47 KM	49.33339°N	102.97786 °E
Nemoura sahlbergi	Within Known Range?	N	Nearest Occurrence:	196.39 KM	47.42580°N	100.30130 °E
Family: Perlidae						
Agnetina cocandica	Within Known Range?	N	Nearest Occurrence:	383.39 KM	49.62785°N	99.99523 °E
Paragnetina flavotincta	Within Known Range?	N	Nearest Occurrence:	301.98 KM	49.26765°N	100.82998 °E
Family: Perlodidae						
Isoperla altaica	Within Known Range?	Y	Nearest Occurrence:	110.70 KM	47.11192°N	101.01048 °E
Isoperla asiatica	Within Known Range?	N	Nearest Occurrence:	213.53 KM	47.80440°N	100.31810 °E
Isoperla lunigera	Within Known Range?	N	Nearest Occurrence:	300.47 KM	49.38617°N	102.71667 °E
Isoperla mongolica	Within Known Range?	Y	Nearest Occurrence:	55.98 KM	47.26999°N	101.80227 °E
Isoperla obscura	Within Known Range?	N	Nearest Occurrence:	300.47 KM	49.38617°N	102.71667 °E
Megarcys ochracea	Within Known Range?	N	Nearest Occurrence:	379.26 KM	49.77776°N	103.60860 °E
Skwala pusilla	Within Known Range?	N	Nearest Occurrence:	1,504.18 KM	48.51277°N	88.51107 °E

**LOE Rating: Unlikely Total: 5**

Family: Capniidae						
Capnia khulsbagia	Within Known Range?	N	Nearest Occurrence:	485.87 KM	50.98944°N	100.71944 °E
Mesocapnia altaica	Within Known Range?	N	Nearest Occurrence:	1,460.19 KM	48.43684°N	88.90094 °E
Family: Leuctridae						
Leuctra fusca	Within Known Range?	N	Nearest Occurrence:	644.98 KM	49.08643°N	107.28952 °E
Family: Nemouridae						
Nemurella pictetii	Within Known Range?	N	Nearest Occurrence:	532.57 KM	50.81265°N	99.33803 °E
Family: Perlodidae						
Isoperla eximia	Within Known Range?	N	Nearest Occurrence:	668.24 KM	49.01829°N	107.54453 °E

Research funded by the National Science Foundation  
 DEB-BSI #0206674: A Survey of the Aquatic Insects of the Selenge River Basin. P.I.'s: JKGelhaus, JCMorse, BHayford.  
 DEB # 0743732: Aquatic Insects of the Altai and Hangai Mountain Drainages. P.I.'s: JKGelhaus, JCMorse, CRNelson.  
<http://clade.ansp.org/entomology/mongolia/index.html>





**Basin:** Arctic Ocean Basin  
**Aimag:** Ovorkhangai  
**Soum:** Bayan-ondor

**Freshwater Ecoregion:** Western Mongolia  
**Terrestrial Ecoregion:** Mongolian-Manchurian Grassland

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

<b>LOE Rating:</b>	<b>Highly Likely</b>	<b>Total:</b>	<b>4</b>
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<b>Family:</b> Capniidae						
<i>Isocapnia sibirica</i>	Within Known Range?	N	Nearest Occurrence:	283.23 KM	47.26999°N	101.80227°E
<b>Family:</b> Chloroperlidae						
<i>Alloperla joosti</i>	Within Known Range?	N	Nearest Occurrence:	254.45 KM	46.78742°N	101.96021°E
<b>Family:</b> Nemouridae						
<i>Amphinemura borealis</i>	Within Known Range?	Y	Nearest Occurrence:	254.45 KM	46.78742°N	101.96021°E
<b>Family:</b> Perlidae						
<i>Agnetina brevipennis</i>	Within Known Range?	N	Nearest Occurrence:	208.86 KM	46.89303°N	102.39457°E

<b>LOE Rating:</b>	<b>Likely</b>	<b>Total:</b>	<b>16</b>
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<b>Family:</b> Capniidae						
<i>Isocapnia guentheri</i>	Within Known Range?	N	Nearest Occurrence:	342.23 KM	47.88349°N	106.98829°E
<i>Isocapnia kudia</i>	Within Known Range?	N	Nearest Occurrence:	731.92 KM	51.25356°N	99.66687°E
<b>Family:</b> Chloroperlidae						
<i>Alloperla rostellata</i>	Within Known Range?	N	Nearest Occurrence:	364.27 KM	47.11192°N	101.01048°E
<i>Haploperla lepnevae</i>	Within Known Range?	N	Nearest Occurrence:	331.24 KM	49.48086°N	104.30864°E
<i>Suwallia kerzhneri</i>	Within Known Range?	N	Nearest Occurrence:	353.59 KM	47.59928°N	101.24521°E
<i>Suwallia teleckojensis</i>	Within Known Range?	N	Nearest Occurrence:	254.91 KM	46.78742°N	101.96021°E
<b>Family:</b> Nemouridae						
<i>Nemoura cinerea</i>	Within Known Range?	N	Nearest Occurrence:	355.28 KM	49.68122°N	104.56461°E
<b>Family:</b> Perlidae						
<i>Agnetina extrema</i>	Within Known Range?	N	Nearest Occurrence:	283.23 KM	47.26999°N	101.80227°E
<i>Kamimuria exilis</i>	Within Known Range?	N	Nearest Occurrence:	725.00 KM	50.16278°N	98.84212°E
<b>Family:</b> Perlodidae						
<i>Arcynopteryx compacta</i>	Within Known Range?	N	Nearest Occurrence:	214.69 KM	46.88627°N	102.34304°E
<i>Arcynopteryx sajanensis</i>	Within Known Range?	N	Nearest Occurrence:	697.87 KM	51.61397°N	100.59972°E
<i>Diura bicaudata</i>	Within Known Range?	N	Nearest Occurrence:	484.59 KM	47.21768°N	99.92824°E
<i>Diura majuscula</i>	Within Known Range?	Y	Nearest Occurrence:	209.23 KM	46.89303°N	102.39457°E
<i>Isoperla potanini</i>	Within Known Range?	N	Nearest Occurrence:	262.42 KM	46.73093°N	101.88583°E
<i>Pictetiella asiatica</i>	Within Known Range?	N	Nearest Occurrence:	705.11 KM	51.65822°N	100.53000°E
<b>Family:</b> Pteronarcyidae						
<i>Pteronarcys reticulata</i>	Within Known Range?	N	Nearest Occurrence:	390.16 KM	49.63453°N	102.64845°E

<b>LOE Rating:</b>	<b>Probable</b>	<b>Total:</b>	<b>3</b>
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<b>Family:</b> Perlidae						
<i>Agnetina cocandica</i>	Within Known Range?	N	Nearest Occurrence:	314.89 KM	49.16354°N	105.18880°E
<b>Family:</b> Perlodidae						
<i>Isoperla kozlovi</i>	Within Known Range?	N	Nearest Occurrence:	188.35 KM	47.85250°N	105.25567°E
<i>Kaszabia nigricauda</i>	Within Known Range?	N	Nearest Occurrence:	188.35 KM	47.85250°N	105.25567°E



**Basin:** Arctic Ocean Basin  
**Aimags:** Ovorkhangai  
**Soums:** Bayan-ondor

**Freshwater Ecoregion:** Western Mongolia  
**Terrestrial Ecoregion:** Mongolian-Manchurian Grassland

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

<b>LOE Rating:</b>	<b>Possible</b>	<b>Total:</b>	<b>4</b>
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<b>Family:</b> Chloroperlidae						
Alloperla deminuta	Within Known Range?	Y	Nearest Occurrence:	254.45 KM	46.78742 °N	101.96021 °E
<b>Family:</b> Leuctridae						
Paraleuctra zapekinae	Within Known Range?	N	Nearest Occurrence:	359.97 KM	49.71481 °N	104.64203 °E
<b>Family:</b> Perlodidae						
Arcynopteryx polaris	Within Known Range?	N	Nearest Occurrence:	281.37 KM	47.04409 °N	101.76352 °E
Isoperla asiatica	Within Known Range?	N	Nearest Occurrence:	337.31 KM	48.87748 °N	106.12370 °E

<b>LOE Rating:</b>	<b>Predicted</b>	<b>Total:</b>	<b>17</b>
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<b>Family:</b> Capniidae						
Capnia nigra	Within Known Range?	N	Nearest Occurrence:	615.74 KM	50.51003 °N	100.40375 °E
Mesocapnia variabilis	Within Known Range?	N	Nearest Occurrence:	461.72 KM	48.42080 °N	107.91406 °E
<b>Family:</b> Chloroperlidae						
Alaskaperla longidentata	Within Known Range?	N	Nearest Occurrence:	283.05 KM	46.82177 °N	101.70479 °E
Alloperla mediata	Within Known Range?	N	Nearest Occurrence:	370.66 KM	49.77776 °N	103.60860 °E
<b>Family:</b> Leuctridae						
Leuctra fusca	Within Known Range?	N	Nearest Occurrence:	444.52 KM	49.08643 °N	107.28952 °E
<b>Family:</b> Nemouridae						
Amphinemura standfussi	Within Known Range?	N	Nearest Occurrence:	344.28 KM	49.33339 °N	102.97786 °E
Nemoura arctica	Within Known Range?	N	Nearest Occurrence:	283.74 KM	47.26999 °N	101.80227 °E
Nemoura sahlbergi	Within Known Range?	N	Nearest Occurrence:	358.91 KM	49.70184 °N	103.80040 °E
<b>Family:</b> Perlidae						
Paragnetina flavotincta	Within Known Range?	N	Nearest Occurrence:	314.32 KM	49.16354 °N	105.18880 °E
<b>Family:</b> Perlodidae						
Isoperla altaica	Within Known Range?	N	Nearest Occurrence:	337.91 KM	48.87748 °N	106.12370 °E
Isoperla eximia	Within Known Range?	N	Nearest Occurrence:	461.85 KM	49.01829 °N	107.54453 °E
Isoperla lunigera	Within Known Range?	N	Nearest Occurrence:	331.24 KM	49.48086 °N	104.30864 °E
Isoperla mongolica	Within Known Range?	N	Nearest Occurrence:	283.74 KM	47.26999 °N	101.80227 °E
Isoperla obscura	Within Known Range?	N	Nearest Occurrence:	188.35 KM	47.85250 °N	105.25567 °E
Megarcys ochracea	Within Known Range?	N	Nearest Occurrence:	370.66 KM	49.77776 °N	103.60860 °E
Skwala pusilla	Within Known Range?	N	Nearest Occurrence:	1,759.54 KM	48.51277 °N	88.51107 °E
<b>Family:</b> Taeniopterygidae						
Taenionema japonicum	Within Known Range?	N	Nearest Occurrence:	349.80 KM	47.28244 °N	101.18793 °E

<b>LOE Rating:</b>	<b>Unlikely</b>	<b>Total:</b>	<b>3</b>
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<b>Family:</b> Capniidae						
Capnia khulsbagia	Within Known Range?	N	Nearest Occurrence:	633.09 KM	50.98944 °N	100.71944 °E
Mesocapnia altaica	Within Known Range?	N	Nearest Occurrence:	1,715.54 KM	48.43684 °N	88.90094 °E
<b>Family:</b> Nemouridae						
Nemurella pictetii	Within Known Range?	N	Nearest Occurrence:	714.81 KM	51.07896 °N	99.70857 °E



**Basin:** Arctic Ocean Basin  
**Aimags:** Ovorkhangai  
**Soums:** **Burd**

Freshwater Ecoregion: Lake Baikal  
 Terrestrial Ecoregion: Selenge-Orkhon Forest Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

<b>LOE Rating:</b>	<b>Highly Likely</b>	<b>Total:</b>	<b>4</b>
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<b>Family:</b> Chloroperlidae			
Alloperla joosti	Within Known Range? N	Nearest Occurrence:	213.00 KM 46.78742°N 101.96021°E
Alloperla rostellata	Within Known Range? N	Nearest Occurrence:	303.49 KM 49.77776°N 103.60860°E
<b>Family:</b> Nemouridae			
Amphinemura borealis	Within Known Range? Y	Nearest Occurrence:	213.00 KM 46.78742°N 101.96021°E
<b>Family:</b> Perlidae			
Agnentina brevipennis	Within Known Range? Y	Nearest Occurrence:	163.69 KM 46.89303°N 102.39457°E

<b>LOE Rating:</b>	<b>Likely</b>	<b>Total:</b>	<b>16</b>
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<b>Family:</b> Capniidae			
Isocapnia guentheri	Within Known Range? Y	Nearest Occurrence:	303.49 KM 49.77776°N 103.60860°E
Isocapnia kudia	Within Known Range? N	Nearest Occurrence:	658.67 KM 51.25356°N 99.66687°E
Isocapnia sibirica	Within Known Range? Y	Nearest Occurrence:	229.69 KM 47.26999°N 101.80227°E
<b>Family:</b> Chloroperlidae			
Haploperla lepnevae	Within Known Range? N	Nearest Occurrence:	273.81 KM 49.48086°N 104.30864°E
Suwallia kerzhneri	Within Known Range? Y	Nearest Occurrence:	296.50 KM 47.59928°N 101.24521°E
Suwallia teleckojensis	Within Known Range? Y	Nearest Occurrence:	213.38 KM 46.78742°N 101.96021°E
<b>Family:</b> Nemouridae			
Nemoura cinerea	Within Known Range? N	Nearest Occurrence:	301.79 KM 49.68122°N 104.56461°E
<b>Family:</b> Perlidae			
Agnentina extrema	Within Known Range? Y	Nearest Occurrence:	229.69 KM 47.26999°N 101.80227°E
Kamimuria exilis	Within Known Range? N	Nearest Occurrence:	656.36 KM 50.16278°N 98.84212°E
<b>Family:</b> Perlodidae			
Arcynopteryx compacta	Within Known Range? Y	Nearest Occurrence:	169.77 KM 46.88627°N 102.34304°E
Arcynopteryx sajanensis	Within Known Range? N	Nearest Occurrence:	623.26 KM 51.61397°N 100.59972°E
Diura majuscula	Within Known Range? Y	Nearest Occurrence:	163.99 KM 46.89303°N 102.39457°E
Isoperla kozlovi	Within Known Range? Y	Nearest Occurrence:	178.38 KM 47.85250°N 105.25567°E
Isoperla potanini	Within Known Range? N	Nearest Occurrence:	222.51 KM 46.73093°N 101.88583°E
Pictetiella asiatica	Within Known Range? N	Nearest Occurrence:	630.64 KM 51.65822°N 100.53000°E
<b>Family:</b> Pteronarcyidae			
Pteronarcys reticulata	Within Known Range? N	Nearest Occurrence:	316.33 KM 49.63453°N 102.64845°E

<b>LOE Rating:</b>	<b>Probable</b>	<b>Total:</b>	<b>3</b>
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<b>Family:</b> Perlidae			
Agnentina cocandica	Within Known Range? N	Nearest Occurrence:	277.11 KM 49.16354°N 105.18880°E
<b>Family:</b> Perlodidae			
Diura bicaudata	Within Known Range? N	Nearest Occurrence:	436.84 KM 47.21768°N 99.92824°E
Kaszabia nigricauda	Within Known Range? Y	Nearest Occurrence:	178.38 KM 47.85250°N 105.25567°E



**Basin:** Arctic Ocean Basin  
**Aimags:** Ovorkhangai  
**Soums:** **Burd**

Freshwater Ecoregion: Lake Baikal  
 Terrestrial Ecoregion: Selenge-Orkhon Forest Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

<b>LOE Rating:</b>	<b>Possible</b>	<b>Total:</b>	<b>4</b>
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Family: Chloroperlidae						
Alloperla deminuta	Within Known Range? Y	Nearest Occurrence:	213.00 KM	46.78742 °N	101.96021 °E	
Family: Leuctridae						
Paraleuctra zapekinae	Within Known Range? N	Nearest Occurrence:	307.70 KM	49.71481 °N	104.64203 °E	
Family: Perlodidae						
Arcynopteryx polaris	Within Known Range? Y	Nearest Occurrence:	233.17 KM	47.04409 °N	101.76352 °E	
Isoperla asiatica	Within Known Range? N	Nearest Occurrence:	306.10 KM	49.70678 °N	103.10288 °E	

<b>LOE Rating:</b>	<b>Predicted</b>	<b>Total:</b>	<b>17</b>
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Family: Capniidae						
Capnia nigra	Within Known Range? N	Nearest Occurrence:	542.47 KM	50.51003 °N	100.40375 °E	
Mesocapnia variabilis	Within Known Range? N	Nearest Occurrence:	437.62 KM	47.21768 °N	99.92824 °E	
Family: Chloroperlidae						
Alaskaperla longidentata	Within Known Range? Y	Nearest Occurrence:	240.67 KM	46.82177 °N	101.70479 °E	
Alloperla mediata	Within Known Range? N	Nearest Occurrence:	303.49 KM	49.77776 °N	103.60860 °E	
Family: Leuctridae						
Leuctra fusca	Within Known Range? N	Nearest Occurrence:	442.40 KM	49.08643 °N	107.28952 °E	
Family: Nemouridae						
Amphinemura standfussi	Within Known Range? N	Nearest Occurrence:	271.19 KM	49.33339 °N	102.97786 °E	
Nemoura arctica	Within Known Range? Y	Nearest Occurrence:	230.10 KM	47.26999 °N	101.80227 °E	
Nemoura sahlbergi	Within Known Range? N	Nearest Occurrence:	293.85 KM	49.70184 °N	103.80040 °E	
Family: Perlidae						
Paragnetina flavotincta	Within Known Range? N	Nearest Occurrence:	271.19 KM	49.33339 °N	102.97786 °E	
Family: Perlodidae						
Isoperla altaica	Within Known Range? Y	Nearest Occurrence:	316.97 KM	47.11192 °N	101.01048 °E	
Isoperla eximia	Within Known Range? N	Nearest Occurrence:	463.38 KM	49.01829 °N	107.54453 °E	
Isoperla lunigera	Within Known Range? N	Nearest Occurrence:	273.81 KM	49.48086 °N	104.30864 °E	
Isoperla mongolica	Within Known Range? Y	Nearest Occurrence:	230.10 KM	47.26999 °N	101.80227 °E	
Isoperla obscura	Within Known Range? N	Nearest Occurrence:	178.38 KM	47.85250 °N	105.25567 °E	
Megarcys ochracea	Within Known Range? N	Nearest Occurrence:	303.49 KM	49.77776 °N	103.60860 °E	
Skwala pusilla	Within Known Range? N	Nearest Occurrence:	1,711.44 KM	48.51277 °N	88.51107 °E	
Family: Taeniopterygidae						
Taenionema japonicum	Within Known Range? N	Nearest Occurrence:	298.25 KM	47.28244 °N	101.18793 °E	

<b>LOE Rating:</b>	<b>Unlikely</b>	<b>Total:</b>	<b>3</b>
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Family: Capniidae						
Capnia khulsbagia	Within Known Range? N	Nearest Occurrence:	558.80 KM	50.98944 °N	100.71944 °E	
Mesocapnia altaica	Within Known Range? N	Nearest Occurrence:	1,667.56 KM	48.43684 °N	88.90094 °E	
Family: Nemouridae						
Nemurella pictetii	Within Known Range? N	Nearest Occurrence:	641.77 KM	51.07896 °N	99.70857 °E	



**Basin:** Arctic Ocean Basin  
**Aimags:** Ovorkhangai  
**Soums:** Kharkhorin

Freshwater Ecoregion: Lake Baikal  
 Terrestrial Ecoregion: Selenge-Orkhon Forest Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Highly Likely Total: 4**

Family: Chloroperlidae					
Alloperla joosti	Within Known Range? Y	Nearest Occurrence:	120.98 KM	46.78742 °N	101.96021 °E
Alloperla rostollata	Within Known Range? N	Nearest Occurrence:	220.37 KM	47.11192 °N	101.01048 °E
Family: Nemouridae					
Amphinemura borealis	Within Known Range? Y	Nearest Occurrence:	120.98 KM	46.78742 °N	101.96021 °E
Family: Perlidae					
Agnentina brevipennis	Within Known Range? Y	Nearest Occurrence:	71.63 KM	46.89303 °N	102.39457 °E

**LOE Rating: Likely Total: 16**

Family: Capniidae					
Isocapnia guentheri	Within Known Range? Y	Nearest Occurrence:	232.87 KM	47.50523 °N	100.93208 °E
Isocapnia kudia	Within Known Range? N	Nearest Occurrence:	588.46 KM	51.25356 °N	99.66687 °E
Isocapnia sibirica	Within Known Range? Y	Nearest Occurrence:	133.42 KM	47.26999 °N	101.80227 °E
Family: Chloroperlidae					
Haploperla lepnevae	Within Known Range? N	Nearest Occurrence:	286.55 KM	49.70678 °N	103.10288 °E
Suwallia kerzhneri	Within Known Range? Y	Nearest Occurrence:	201.24 KM	47.59928 °N	101.24521 °E
Suwallia teleckojensis	Within Known Range? Y	Nearest Occurrence:	121.20 KM	46.78742 °N	101.96021 °E
Family: Nemouridae					
Nemoura cinerea	Within Known Range? Y	Nearest Occurrence:	238.33 KM	47.48567 °N	100.87875 °E
Family: Perlidae					
Agnentina extrema	Within Known Range? Y	Nearest Occurrence:	133.42 KM	47.26999 °N	101.80227 °E
Kamimuria exilis	Within Known Range? N	Nearest Occurrence:	572.06 KM	50.16278 °N	98.84212 °E
Family: Perlodidae					
Arcynopteryx compacta	Within Known Range? Y	Nearest Occurrence:	77.38 KM	46.88627 °N	102.34304 °E
Arcynopteryx sajanensis	Within Known Range? N	Nearest Occurrence:	565.58 KM	51.61397 °N	100.59972 °E
Diura majuscula	Within Known Range? Y	Nearest Occurrence:	71.76 KM	46.89303 °N	102.39457 °E
Isoperla kozlovi	Within Known Range? Y	Nearest Occurrence:	133.42 KM	47.26999 °N	101.80227 °E
Isoperla potanini	Within Known Range? N	Nearest Occurrence:	131.06 KM	46.73093 °N	101.88583 °E
Pictetiella asiatica	Within Known Range? N	Nearest Occurrence:	572.56 KM	51.65822 °N	100.53000 °E
Family: Pteronarcyidae					
Pteronarcys reticulata	Within Known Range? N	Nearest Occurrence:	280.94 KM	49.63453 °N	102.64845 °E

**LOE Rating: Probable Total: 2**

Family: Perlodidae					
Diura bicaudata	Within Known Range? N	Nearest Occurrence:	340.64 KM	47.21768 °N	99.92824 °E
Kasziabia nigricauda	Within Known Range? Y	Nearest Occurrence:	201.24 KM	47.59928 °N	101.24521 °E



**Basin:** Arctic Ocean Basin  
**Aimags:** Ovorkhangai  
**Soums:** Kharkhorin

Freshwater Ecoregion: Lake Baikal  
 Terrestrial Ecoregion: Selenge-Orkhon Forest Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

<b>LOE Rating:</b> Possible	<b>Total:</b> 5
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Family: Chloroperlidae					
Alloperla deminuta	Within Known Range? Y	Nearest Occurrence:	120.98 KM	46.78742 °N	101.96021 °E
Family: Perlidae					
Agnatina cocandica	Within Known Range? N	Nearest Occurrence:	332.76 KM	49.16354 °N	105.18880 °E
Family: Perlodidae					
Arcynopteryx polaris	Within Known Range? Y	Nearest Occurrence:	137.34 KM	47.04409 °N	101.76352 °E
Isoperla asiatica	Within Known Range? Y	Nearest Occurrence:	286.55 KM	49.70678 °N	103.10288 °E
Isoperla lunigera	Within Known Range? N	Nearest Occurrence:	252.62 KM	49.38617 °N	102.71667 °E

<b>LOE Rating:</b> Predicted	<b>Total:</b> 15
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Family: Capniidae					
Capnia nigra	Within Known Range? N	Nearest Occurrence:	473.02 KM	50.51003 °N	100.40375 °E
Mesocapnia variabilis	Within Known Range? Y	Nearest Occurrence:	341.25 KM	47.21768 °N	99.92824 °E
Family: Chloroperlidae					
Alaskaperla longidentata	Within Known Range? Y	Nearest Occurrence:	147.26 KM	46.82177 °N	101.70479 °E
Alloperla mediata	Within Known Range? N	Nearest Occurrence:	286.55 KM	49.70678 °N	103.10288 °E
Family: Leuctridae					
Paraleuctra zapekinae	Within Known Range? N	Nearest Occurrence:	340.40 KM	49.71481 °N	104.64203 °E
Family: Nemouridae					
Amphinemura standfussi	Within Known Range? N	Nearest Occurrence:	244.86 KM	49.33339 °N	102.97786 °E
Nemoura arctica	Within Known Range? Y	Nearest Occurrence:	133.66 KM	47.26999 °N	101.80227 °E
Nemoura sahlbergi	Within Known Range? Y	Nearest Occurrence:	299.38 KM	49.70184 °N	103.80040 °E
Family: Perlidae					
Paragnetina flavotincta	Within Known Range? N	Nearest Occurrence:	244.86 KM	49.33339 °N	102.97786 °E
Family: Perlodidae					
Isoperla altaica	Within Known Range? Y	Nearest Occurrence:	220.77 KM	47.11192 °N	101.01048 °E
Isoperla mongolica	Within Known Range? Y	Nearest Occurrence:	133.66 KM	47.26999 °N	101.80227 °E
Isoperla obscura	Within Known Range? N	Nearest Occurrence:	252.62 KM	49.38617 °N	102.71667 °E
Megarcys ochracea	Within Known Range? N	Nearest Occurrence:	301.94 KM	49.77776 °N	103.60860 °E
Skwala pusilla	Within Known Range? N	Nearest Occurrence:	1,615.14 KM	48.51277 °N	88.51107 °E
Family: Taeniopterygidae					
Taenionema japonicum	Within Known Range? Y	Nearest Occurrence:	201.77 KM	47.28244 °N	101.18793 °E

<b>LOE Rating:</b> Unlikely	<b>Total:</b> 5
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Family: Capniidae					
Capnia khulsbagia	Within Known Range? N	Nearest Occurrence:	497.60 KM	50.98944 °N	100.71944 °E
Mesocapnia altaica	Within Known Range? N	Nearest Occurrence:	1,571.26 KM	48.43684 °N	88.90094 °E
Family: Leuctridae					
Leuctra fusca	Within Known Range? N	Nearest Occurrence:	523.87 KM	49.08643 °N	107.28952 °E
Family: Nemouridae					
Nemurella pictetii	Within Known Range? N	Nearest Occurrence:	570.54 KM	51.07896 °N	99.70857 °E
Family: Perlodidae					
Isoperla eximia	Within Known Range? N	Nearest Occurrence:	546.80 KM	49.01829 °N	107.54453 °E



**Basin:** Arctic Ocean Basin  
**Aimag:** Ovorkhangai  
**Soum:** Khujirt

Freshwater Ecoregion: Lake Baikal  
 Terrestrial Ecoregion: Selenge-Orkhon Forest Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Highly Likely Total: 3**

Family: Chloroperlidae						
Alloperla joosti	Within Known Range? Y	Nearest Occurrence:	94.45 KM	46.78742 °N	101.96021 °E	
Family: Nemouridae						
Amphinemura borealis	Within Known Range? Y	Nearest Occurrence:	94.45 KM	46.78742 °N	101.96021 °E	
Family: Perlidae						
Agnentina brevipennis	Within Known Range? Y	Nearest Occurrence:	46.25 KM	46.89303 °N	102.39457 °E	

**LOE Rating: Likely Total: 17**

Family: Capniidae						
Isocapnia guentheri	Within Known Range? Y	Nearest Occurrence:	220.70 KM	47.50523 °N	100.93208 °E	
Isocapnia kudia	Within Known Range? N	Nearest Occurrence:	600.57 KM	51.25356 °N	99.66687 °E	
Isocapnia sibirica	Within Known Range? Y	Nearest Occurrence:	121.12 KM	47.26999 °N	101.80227 °E	
Family: Chloroperlidae						
Alloperla deminuta	Within Known Range? Y	Nearest Occurrence:	94.45 KM	46.78742 °N	101.96021 °E	
Alloperla rostellata	Within Known Range? N	Nearest Occurrence:	201.75 KM	47.11192 °N	101.01048 °E	
Suwallia kerzhneri	Within Known Range? N	Nearest Occurrence:	192.52 KM	47.59928 °N	101.24521 °E	
Suwallia teleckojensis	Within Known Range? Y	Nearest Occurrence:	94.63 KM	46.78742 °N	101.96021 °E	
Family: Nemouridae						
Nemoura cinerea	Within Known Range? N	Nearest Occurrence:	225.61 KM	47.48567 °N	100.87875 °E	
Family: Perlidae						
Agnentina extrema	Within Known Range? Y	Nearest Occurrence:	121.12 KM	47.26999 °N	101.80227 °E	
Kamimuria exilis	Within Known Range? N	Nearest Occurrence:	574.78 KM	50.16278 °N	98.84212 °E	
Family: Perlodidae						
Arcynopteryx compacta	Within Known Range? Y	Nearest Occurrence:	51.98 KM	46.88627 °N	102.34304 °E	
Arcynopteryx sajanensis	Within Known Range? N	Nearest Occurrence:	584.05 KM	51.61397 °N	100.59972 °E	
Diura bicaudata	Within Known Range? N	Nearest Occurrence:	322.37 KM	47.21768 °N	99.92824 °E	
Diura majuscula	Within Known Range? Y	Nearest Occurrence:	46.34 KM	46.89303 °N	102.39457 °E	
Isoperla kozlovi	Within Known Range? Y	Nearest Occurrence:	121.12 KM	47.26999 °N	101.80227 °E	
Isoperla potanini	Within Known Range? Y	Nearest Occurrence:	103.49 KM	46.73093 °N	101.88583 °E	
Pictetiella asiatica	Within Known Range? N	Nearest Occurrence:	590.74 KM	51.65822 °N	100.53000 °E	

**LOE Rating: Probable Total: 3**

Family: Chloroperlidae						
Haploperla lepnevae	Within Known Range? N	Nearest Occurrence:	318.90 KM	49.70678 °N	103.10288 °E	
Family: Perlodidae						
Kaszabia nigricauda	Within Known Range? N	Nearest Occurrence:	192.52 KM	47.59928 °N	101.24521 °E	
Family: Pteronarcyidae						
Pteronarcys reticulata	Within Known Range? N	Nearest Occurrence:	296.13 KM	47.80440 °N	100.31810 °E	

**Basin:** Arctic Ocean Basin  
**Aimag:** Ovorkhangai  
**Soum:** Khujirt

Freshwater Ecoregion: Lake Baikal  
 Terrestrial Ecoregion: Selenge-Orkhon Forest Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

<b>LOE Rating:</b>	<b>Possible</b>	<b>Total:</b>	<b>3</b>
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Family: Leuctridae						
Paraleuctra zapekinae	Within Known Range? N	Nearest Occurrence:	377.63 KM	49.71481°N	104.64203°E	
Family: Nemouridae						
Nemoura arctica	Within Known Range? Y	Nearest Occurrence:	121.34 KM	47.26999°N	101.80227°E	
Family: Perlodidae						
Arcynopteryx polaris	Within Known Range? Y	Nearest Occurrence:	118.26 KM	47.04409°N	101.76352°E	

<b>LOE Rating:</b>	<b>Predicted</b>	<b>Total:</b>	<b>16</b>
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Family: Capniidae						
Capnia nigra	Within Known Range? N	Nearest Occurrence:	486.24 KM	50.51003°N	100.40375°E	
Mesocapnia variabilis	Within Known Range? N	Nearest Occurrence:	322.95 KM	47.21768°N	99.92824°E	
Family: Chloroperlidae						
Alaskaperla longidentata	Within Known Range? Y	Nearest Occurrence:	122.60 KM	46.82177°N	101.70479°E	
Alloperla mediata	Within Known Range? N	Nearest Occurrence:	318.90 KM	49.70678°N	103.10288°E	
Family: Nemouridae						
Amphinemura standfussi	Within Known Range? N	Nearest Occurrence:	276.42 KM	49.33339°N	102.97786°E	
Nemoura sahlbergi	Within Known Range? N	Nearest Occurrence:	285.62 KM	47.42580°N	100.30130°E	
Family: Perlidae						
Agnetina cocandica	Within Known Range? N	Nearest Occurrence:	369.16 KM	49.16354°N	105.18880°E	
Paragnetina flavotincta	Within Known Range? N	Nearest Occurrence:	276.42 KM	49.33339°N	102.97786°E	
Family: Perlodidae						
Isoperla altaica	Within Known Range? Y	Nearest Occurrence:	202.12 KM	47.11192°N	101.01048°E	
Isoperla asiatica	Within Known Range? N	Nearest Occurrence:	296.13 KM	47.80440°N	100.31810°E	
Isoperla lunigera	Within Known Range? N	Nearest Occurrence:	281.83 KM	49.38617°N	102.71667°E	
Isoperla mongolica	Within Known Range? Y	Nearest Occurrence:	121.34 KM	47.26999°N	101.80227°E	
Isoperla obscura	Within Known Range? N	Nearest Occurrence:	281.83 KM	49.38617°N	102.71667°E	
Megarcys ochracea	Within Known Range? N	Nearest Occurrence:	337.01 KM	49.77776°N	103.60860°E	
Skwala pusilla	Within Known Range? N	Nearest Occurrence:	1,597.77 KM	48.51277°N	88.51107°E	
Family: Taeniopterygidae						
Taenionema japonicum	Within Known Range? N	Nearest Occurrence:	186.59 KM	47.28244°N	101.18793°E	

<b>LOE Rating:</b>	<b>Unlikely</b>	<b>Total:</b>	<b>5</b>
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Family: Capniidae						
Capnia khulsbagia	Within Known Range? N	Nearest Occurrence:	514.81 KM	50.98944°N	100.71944°E	
Mesocapnia altaica	Within Known Range? N	Nearest Occurrence:	1,553.82 KM	48.43684°N	88.90094°E	
Family: Leuctridae						
Leuctra fusca	Within Known Range? N	Nearest Occurrence:	555.91 KM	49.08643°N	107.28952°E	
Family: Nemouridae						
Nemurella pictetii	Within Known Range? N	Nearest Occurrence:	582.15 KM	51.07896°N	99.70857°E	
Family: Perlodidae						
Isoperla eximia	Within Known Range? N	Nearest Occurrence:	578.19 KM	49.01829°N	107.54453°E	





**Basin:** Arctic Ocean Basin  
**Aimags:** Ovorkhangai  
**Soums:** Olziit

Freshwater Ecoregion: Western Mongolia  
 Terrestrial Ecoregion: Selenge-Orkhon Forest Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Highly Likely Total: 3**

Family: Chloroperlidae					
Alloperla joosti	Within Known Range? N	Nearest Occurrence:	163.79 KM	46.78742 °N	101.96021 °E
Family: Nemouridae					
Amphinemura borealis	Within Known Range? Y	Nearest Occurrence:	163.79 KM	46.78742 °N	101.96021 °E
Family: Perlidae					
Agnentina brevipennis	Within Known Range? Y	Nearest Occurrence:	120.96 KM	46.89303 °N	102.39457 °E

**LOE Rating: Likely Total: 15**

Family: Capniidae					
Isocapnia guentheri	Within Known Range? N	Nearest Occurrence:	296.95 KM	47.50523 °N	100.93208 °E
Isocapnia kudia	Within Known Range? N	Nearest Occurrence:	672.75 KM	51.25356 °N	99.66687 °E
Isocapnia sibirica	Within Known Range? N	Nearest Occurrence:	198.13 KM	47.26999 °N	101.80227 °E
Family: Chloroperlidae					
Alloperla rostellata	Within Known Range? N	Nearest Occurrence:	274.71 KM	47.11192 °N	101.01048 °E
Suwallia kerzhneri	Within Known Range? N	Nearest Occurrence:	269.80 KM	47.59928 °N	101.24521 °E
Suwallia teleckojensis	Within Known Range? N	Nearest Occurrence:	164.08 KM	46.78742 °N	101.96021 °E
Family: Nemouridae					
Nemoura cinerea	Within Known Range? N	Nearest Occurrence:	301.61 KM	47.48567 °N	100.87875 °E
Family: Perlidae					
Agnentina extrema	Within Known Range? N	Nearest Occurrence:	198.13 KM	47.26999 °N	101.80227 °E
Kamimuria exilis	Within Known Range? N	Nearest Occurrence:	651.80 KM	50.16278 °N	98.84212 °E
Family: Perlodidae					
Arcynopteryx compacta	Within Known Range? Y	Nearest Occurrence:	126.24 KM	46.88627 °N	102.34304 °E
Arcynopteryx sajanensis	Within Known Range? N	Nearest Occurrence:	650.31 KM	51.61397 °N	100.59972 °E
Diura bicaudata	Within Known Range? N	Nearest Occurrence:	394.34 KM	47.21768 °N	99.92824 °E
Diura majuscula	Within Known Range? Y	Nearest Occurrence:	121.18 KM	46.89303 °N	102.39457 °E
Isoperla potanini	Within Known Range? N	Nearest Occurrence:	171.05 KM	46.73093 °N	101.88583 °E
Pictetiella asiatica	Within Known Range? N	Nearest Occurrence:	657.18 KM	51.65822 °N	100.53000 °E

**LOE Rating: Probable Total: 5**

Family: Chloroperlidae					
Alloperla deminuta	Within Known Range? Y	Nearest Occurrence:	163.79 KM	46.78742 °N	101.96021 °E
Haploperla lepnevae	Within Known Range? N	Nearest Occurrence:	347.71 KM	49.48086 °N	104.30864 °E
Family: Perlodidae					
Isoperla kozlovi	Within Known Range? N	Nearest Occurrence:	198.13 KM	47.26999 °N	101.80227 °E
Kaszabia nigricauda	Within Known Range? N	Nearest Occurrence:	255.73 KM	47.85250 °N	105.25567 °E
Family: Pteronarcyidae					
Pteronarcys reticulata	Within Known Range? N	Nearest Occurrence:	359.84 KM	49.63453 °N	102.64845 °E

**Basin:** Arctic Ocean Basin  
**Aimags:** Ovorkhangai  
**Soums:** Olziit

Freshwater Ecoregion: Western Mongolia  
 Terrestrial Ecoregion: Selenge-Orkhon Forest Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

<b>LOE Rating:</b>	<b>Possible</b>	<b>Total:</b>	<b>3</b>
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Family: Leuctridae						
Paraleuctra zapekinae	Within Known Range?	N	Nearest Occurrence:	384.27 KM	49.71481°N	104.64203 °E
Family: Perlidae						
Agnestina cocandica	Within Known Range?	N	Nearest Occurrence:	358.22 KM	49.16354°N	105.18880 °E
Family: Perlodidae						
Arcynopteryx polaris	Within Known Range?	N	Nearest Occurrence:	192.82 KM	47.04409°N	101.76352 °E

<b>LOE Rating:</b>	<b>Predicted</b>	<b>Total:</b>	<b>17</b>
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Family: Capniidae						
Capnia nigra	Within Known Range?	N	Nearest Occurrence:	557.50 KM	50.51003°N	100.40375 °E
Mesocapnia variabilis	Within Known Range?	N	Nearest Occurrence:	395.05 KM	47.21768°N	99.92824 °E
Family: Chloroperlidae						
Alaskaperla longidentata	Within Known Range?	Y	Nearest Occurrence:	192.33 KM	46.82177°N	101.70479 °E
Alloperla mediata	Within Known Range?	N	Nearest Occurrence:	359.52 KM	49.70678°N	103.10288 °E
Family: Leuctridae						
Leuctra fusca	Within Known Range?	N	Nearest Occurrence:	519.24 KM	49.08643°N	107.28952 °E
Family: Nemouridae						
Amphinemura standfussi	Within Known Range?	N	Nearest Occurrence:	320.03 KM	49.33339°N	102.97786 °E
Nemoura arctica	Within Known Range?	N	Nearest Occurrence:	198.48 KM	47.26999°N	101.80227 °E
Nemoura sahlbergi	Within Known Range?	N	Nearest Occurrence:	359.96 KM	47.42580°N	100.30130 °E
Family: Perlidae						
Paragnetina flavotincta	Within Known Range?	N	Nearest Occurrence:	320.03 KM	49.33339°N	102.97786 °E
Family: Perlodidae						
Isoperla altaica	Within Known Range?	N	Nearest Occurrence:	275.20 KM	47.11192°N	101.01048 °E
Isoperla asiatica	Within Known Range?	N	Nearest Occurrence:	359.52 KM	49.70678°N	103.10288 °E
Isoperla lunigera	Within Known Range?	N	Nearest Occurrence:	331.27 KM	49.38617°N	102.71667 °E
Isoperla mongolica	Within Known Range?	N	Nearest Occurrence:	198.48 KM	47.26999°N	101.80227 °E
Isoperla obscura	Within Known Range?	N	Nearest Occurrence:	255.73 KM	47.85250°N	105.25567 °E
Megarcys ochracea	Within Known Range?	N	Nearest Occurrence:	366.54 KM	49.77776°N	103.60860 °E
Skwala pusilla	Within Known Range?	N	Nearest Occurrence:	1,668.39 KM	48.51277°N	88.51107 °E
Family: Taeniopterygidae						
Taenionema japonicum	Within Known Range?	N	Nearest Occurrence:	261.99 KM	47.28244°N	101.18793 °E

<b>LOE Rating:</b>	<b>Unlikely</b>	<b>Total:</b>	<b>4</b>
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Family: Capniidae						
Capnia khulsbagia	Within Known Range?	N	Nearest Occurrence:	582.34 KM	50.98944°N	100.71944 °E
Mesocapnia altaica	Within Known Range?	N	Nearest Occurrence:	1,624.38 KM	48.43684°N	88.90094 °E
Family: Nemouridae						
Nemurella pictetii	Within Known Range?	N	Nearest Occurrence:	654.69 KM	51.07896°N	99.70857 °E
Family: Perlodidae						
Isoperla eximia	Within Known Range?	N	Nearest Occurrence:	538.99 KM	49.01829°N	107.54453 °E



**Basin:** Arctic Ocean Basin  
**Aimags:** Ovorkhangai  
**Soums:** Zuil

**Freshwater Ecoregion:** Western Mongolia  
**Terrestrial Ecoregion:** Selenge-Orkhon Forest Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Highly Likely Total: 3**

Family: Chloroperlidae					
Alloperla joosti	Within Known Range? N	Nearest Occurrence:	195.15 KM	46.78742 °N	101.96021 °E
Family: Nemouridae					
Amphinemura borealis	Within Known Range? Y	Nearest Occurrence:	195.15 KM	46.78742 °N	101.96021 °E
Family: Perlidae					
Agnentina brevipennis	Within Known Range? N	Nearest Occurrence:	149.44 KM	46.89303 °N	102.39457 °E

**LOE Rating: Likely Total: 16**

Family: Capniidae					
Isocapnia guentheri	Within Known Range? N	Nearest Occurrence:	324.19 KM	47.50523 °N	100.93208 °E
Isocapnia kudia	Within Known Range? N	Nearest Occurrence:	684.36 KM	51.25356 °N	99.66687 °E
Isocapnia sibirica	Within Known Range? N	Nearest Occurrence:	224.33 KM	47.26999 °N	101.80227 °E
Family: Chloroperlidae					
Alloperla rostellata	Within Known Range? N	Nearest Occurrence:	304.83 KM	47.11192 °N	101.01048 °E
Suwallia kerzhneri	Within Known Range? N	Nearest Occurrence:	295.13 KM	47.59928 °N	101.24521 °E
Suwallia teleckojensis	Within Known Range? N	Nearest Occurrence:	195.50 KM	46.78742 °N	101.96021 °E
Family: Nemouridae					
Nemoura cinerea	Within Known Range? N	Nearest Occurrence:	329.17 KM	47.48567 °N	100.87875 °E
Family: Perlidae					
Agnentina extrema	Within Known Range? N	Nearest Occurrence:	224.33 KM	47.26999 °N	101.80227 °E
Kamimuria exilis	Within Known Range? N	Nearest Occurrence:	670.81 KM	50.16278 °N	98.84212 °E
Family: Perlodidae					
Arcynopteryx compacta	Within Known Range? Y	Nearest Occurrence:	155.15 KM	46.88627 °N	102.34304 °E
Arcynopteryx sajanensis	Within Known Range? N	Nearest Occurrence:	656.26 KM	51.61397 °N	100.59972 °E
Diura bicaudata	Within Known Range? N	Nearest Occurrence:	425.17 KM	47.21768 °N	99.92824 °E
Diura majuscula	Within Known Range? Y	Nearest Occurrence:	149.71 KM	46.89303 °N	102.39457 °E
Isoperla potanini	Within Known Range? N	Nearest Occurrence:	203.17 KM	46.73093 °N	101.88583 °E
Pictetiella asiatica	Within Known Range? N	Nearest Occurrence:	663.35 KM	51.65822 °N	100.53000 °E
Family: Pteronarcyidae					
Pteronarcys reticulata	Within Known Range? N	Nearest Occurrence:	357.07 KM	49.63453 °N	102.64845 °E

**LOE Rating: Probable Total: 4**

Family: Chloroperlidae					
Alloperla deminuta	Within Known Range? Y	Nearest Occurrence:	195.15 KM	46.78742 °N	101.96021 °E
Haploperla lepnevae	Within Known Range? N	Nearest Occurrence:	326.95 KM	49.48086 °N	104.30864 °E
Family: Perlodidae					
Isoperla kozlovi	Within Known Range? N	Nearest Occurrence:	221.19 KM	47.85250 °N	105.25567 °E
Kaszabia nigricauda	Within Known Range? N	Nearest Occurrence:	221.19 KM	47.85250 °N	105.25567 °E



**Basin:** Arctic Ocean Basin  
**Aimags:** Ovorkhangai  
**Soums:** Zuil

**Freshwater Ecoregion:** Western Mongolia  
**Terrestrial Ecoregion:** Selenge-Orkhon Forest Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

<b>LOE Rating:</b>	<b>Possible</b>	<b>Total:</b>	<b>3</b>
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<b>Family:</b> Leuctridae			
Paraleuctra zapekinae	Within Known Range? N	Nearest Occurrence:	361.25 KM 49.71481°N 104.64203 °E
<b>Family:</b> Perlidae			
Agnentina cocandica	Within Known Range? N	Nearest Occurrence:	329.47 KM 49.16354°N 105.18880 °E
<b>Family:</b> Perlodidae			
Arcynopteryx polaris	Within Known Range? N	Nearest Occurrence:	221.87 KM 47.04409°N 101.76352 °E

<b>LOE Rating:</b>	<b>Predicted</b>	<b>Total:</b>	<b>18</b>
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<b>Family:</b> Capniidae			
Capnia nigra	Within Known Range? N	Nearest Occurrence:	568.47 KM 50.51003°N 100.40375 °E
Mesocapnia variabilis	Within Known Range? N	Nearest Occurrence:	425.94 KM 47.21768°N 99.92824 °E
<b>Family:</b> Chloroperlidae			
Alaskaperla longidentata	Within Known Range? Y	Nearest Occurrence:	223.75 KM 46.82177°N 101.70479 °E
Alloperla mediata	Within Known Range? N	Nearest Occurrence:	351.64 KM 49.70678°N 103.10288 °E
<b>Family:</b> Leuctridae			
Leuctra fusca	Within Known Range? N	Nearest Occurrence:	484.13 KM 49.08643°N 107.28952 °E
<b>Family:</b> Nemouridae			
Amphinemura standfussi	Within Known Range? N	Nearest Occurrence:	314.34 KM 49.33339°N 102.97786 °E
Nemoura arctica	Within Known Range? N	Nearest Occurrence:	224.74 KM 47.26999°N 101.80227 °E
Nemoura sahlbergi	Within Known Range? N	Nearest Occurrence:	344.77 KM 49.70184°N 103.80040 °E
<b>Family:</b> Perlidae			
Paragnetina flavotincta	Within Known Range? N	Nearest Occurrence:	314.34 KM 49.33339°N 102.97786 °E
<b>Family:</b> Perlodidae			
Isoperla altaica	Within Known Range? N	Nearest Occurrence:	305.38 KM 47.11192°N 101.01048 °E
Isoperla asiatica	Within Known Range? N	Nearest Occurrence:	351.64 KM 49.70678°N 103.10288 °E
Isoperla eximia	Within Known Range? N	Nearest Occurrence:	503.56 KM 49.01829°N 107.54453 °E
Isoperla lunigera	Within Known Range? N	Nearest Occurrence:	326.95 KM 49.48086°N 104.30864 °E
Isoperla mongolica	Within Known Range? N	Nearest Occurrence:	224.74 KM 47.26999°N 101.80227 °E
Isoperla obscura	Within Known Range? N	Nearest Occurrence:	221.19 KM 47.85250°N 105.25567 °E
Megarcys ochracea	Within Known Range? N	Nearest Occurrence:	353.21 KM 49.77776°N 103.60860 °E
Skwala pusilla	Within Known Range? N	Nearest Occurrence:	1,700.21 KM 48.51277°N 88.51107 °E
<b>Family:</b> Taeniopterygidae			
Taenionema japonicum	Within Known Range? N	Nearest Occurrence:	290.41 KM 47.28244°N 101.18793 °E

<b>LOE Rating:</b>	<b>Unlikely</b>	<b>Total:</b>	<b>3</b>
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<b>Family:</b> Capniidae			
Capnia khulsbagia	Within Known Range? N	Nearest Occurrence:	589.69 KM 50.98944°N 100.71944 °E
Mesocapnia altaica	Within Known Range? N	Nearest Occurrence:	1,656.22 KM 48.43684°N 88.90094 °E
<b>Family:</b> Nemouridae			
Nemurella pictetii	Within Known Range? N	Nearest Occurrence:	666.75 KM 51.07896°N 99.70857 °E



**Basin:** Arctic Ocean Basin

**Aimag:** Selenge

**Soum:** Altanbulag

Freshwater Ecoregion: Lake Baikal

Terrestrial Ecoregion: Daurian Forest Steppe

**WQM Sites:**

WQM Sites: # 43 (Selenge River @ N 50.3118° E 106.13397°)

**LOE Rating: Highly Likely Total: 8**

Family: Capniidae						
Isocapnia guentheri	Within Known Range? N	Nearest Occurrence:	113.94 KM	49.08405°N	106.89521°E	
Family: Chloroperlidae						
Haploperla lepnevae	Within Known Range? Y	Nearest Occurrence:	54.01 KM	49.61985°N	106.82693°E	
Suwallia kerzhneri	Within Known Range? Y	Nearest Occurrence:	92.05 KM	49.73695°N	107.49285°E	
Family: Nemouridae						
Amphinemura borealis	Within Known Range? Y	Nearest Occurrence:	106.68 KM	49.73130°N	107.63484°E	
Family: Perlidae						
Agnentina brevipennis	Within Known Range? Y	Nearest Occurrence:	54.01 KM	49.61985°N	106.82693°E	
Agnentina extrema	Within Known Range? Y	Nearest Occurrence:	71.06 KM	49.46450°N	106.66871°E	
Family: Perlodidae						
Isoperla asiatica	Within Known Range? N	Nearest Occurrence:	149.15 KM	49.01829°N	107.54453°E	
Isoperla obscura	Within Known Range? Y	Nearest Occurrence:	43.16 KM	49.72192°N	106.65562°E	

**LOE Rating: Likely Total: 13**

Family: Capniidae						
Isocapnia sibirica	Within Known Range? N	Nearest Occurrence:	253.54 KM	48.09549°N	107.84265°E	
Family: Chloroperlidae						
Alloperla deminuta	Within Known Range? Y	Nearest Occurrence:	92.05 KM	49.73695°N	107.49285°E	
Suwallia teleckojensis	Within Known Range? N	Nearest Occurrence:	121.20 KM	49.03282°N	106.96935°E	
Family: Leuctridae						
Leuctra fusca	Within Known Range? Y	Nearest Occurrence:	94.60 KM	49.75393°N	107.52609°E	
Paraleuctra zapekinae	Within Known Range? N	Nearest Occurrence:	237.55 KM	49.71481°N	104.64203°E	
Family: Nemouridae						
Nemoura cinerea	Within Known Range? N	Nearest Occurrence:	246.69 KM	49.68122°N	104.56461°E	
Family: Perlidae						
Agnentina cocandica	Within Known Range? Y	Nearest Occurrence:	68.31 KM	50.06476°N	106.13388°E	
Paragnentina flavotincta	Within Known Range? Y	Nearest Occurrence:	68.19 KM	50.06476°N	106.13388°E	
Family: Perlodidae						
Isoperla kozlovi	Within Known Range? Y	Nearest Occurrence:	128.54 KM	49.08636°N	107.30750°E	
Isoperla lunigera	Within Known Range? Y	Nearest Occurrence:	54.01 KM	49.61985°N	106.82693°E	
Megarcys ochracea	Within Known Range? N	Nearest Occurrence:	120.98 KM	49.03282°N	106.96935°E	
Family: Pteronarcyidae						
Pteronarcys reticulata	Within Known Range? N	Nearest Occurrence:	127.58 KM	49.08643°N	107.28952°E	
Family: Taeniopterygidae						
Taenionema japonicum	Within Known Range? N	Nearest Occurrence:	128.16 KM	49.05411°N	107.23175°E	

Basin: Arctic Ocean Basin

Aimags: Selenge

Soums: Altanbulag

Freshwater Ecoregion: Lake Baikal

Terrestrial Ecoregion: Daurian Forest Steppe

WQM Sites:

WQM Sites: # 43 (Selenge River @ N 50.3118° E 106.13397°)

**LOE Rating: Probable Total: 4**

Family: Capniidae					
Isocapnia kudia	Within Known Range? N	Nearest Occurrence:	796.28 KM	51.25356°N	99.66687°E
Family: Chloroperlidae					
Alloperla rostellata	Within Known Range? N	Nearest Occurrence:	350.22 KM	49.77776°N	103.60860°E
Family: Perlodidae					
Arcynopteryx sajanensis	Within Known Range? N	Nearest Occurrence:	704.03 KM	51.61397°N	100.59972°E
Pictetiella asiatica	Within Known Range? N	Nearest Occurrence:	711.46 KM	51.65822°N	100.53000°E

**LOE Rating: Possible Total: 7**

Family: Chloroperlidae					
Alaskaperla longidentata	Within Known Range? Y	Nearest Occurrence:	106.68 KM	49.73130°N	107.63484°E
Alloperla mediata	Within Known Range? N	Nearest Occurrence:	350.22 KM	49.77776°N	103.60860°E
Family: Nemouridae					
Amphinemura standfussi	Within Known Range? Y	Nearest Occurrence:	106.68 KM	49.73130°N	107.63484°E
Family: Perlidae					
Kamimuria exilis	Within Known Range? N	Nearest Occurrence:	879.07 KM	50.16278°N	98.84212°E
Family: Perlodidae					
Diura bicaudata	Within Known Range? N	Nearest Occurrence:	789.94 KM	51.39852°N	99.75011°E
Isoperla altaica	Within Known Range? N	Nearest Occurrence:	152.59 KM	48.87748°N	106.12370°E
Kaszabia nigricauda	Within Known Range? N	Nearest Occurrence:	241.28 KM	48.25861°N	107.90251°E

**LOE Rating: Predicted Total: 12**

Family: Capniidae					
Capnia nigra	Within Known Range? N	Nearest Occurrence:	671.37 KM	50.92452°N	100.75528°E
Mesocapnia variabilis	Within Known Range? N	Nearest Occurrence:	227.37 KM	48.42080°N	107.91406°E
Family: Chloroperlidae					
Alloperla joosti	Within Known Range? N	Nearest Occurrence:	406.87 KM	49.70678°N	103.10288°E
Family: Nemouridae					
Nemoura arctica	Within Known Range? Y	Nearest Occurrence:	241.71 KM	48.25861°N	107.90251°E
Nemoura sahlbergi	Within Known Range? N	Nearest Occurrence:	239.01 KM	48.16668°N	107.69548°E
Family: Perlodidae					
Arcynopteryx compacta	Within Known Range? N	Nearest Occurrence:	266.45 KM	47.84324°N	107.55299°E
Arcynopteryx polaris	Within Known Range? N	Nearest Occurrence:	227.37 KM	48.42080°N	107.91406°E
Diura majuscula	Within Known Range? N	Nearest Occurrence:	247.52 KM	47.99158°N	107.46116°E
Isoperla eximia	Within Known Range? N	Nearest Occurrence:	149.15 KM	49.01829°N	107.54453°E
Isoperla mongolica	Within Known Range? N	Nearest Occurrence:	253.71 KM	48.09694°N	107.83988°E
Isoperla potanini	Within Known Range? N	Nearest Occurrence:	545.00 KM	50.62324°N	101.87412°E
Skwala pusilla	Within Known Range? N	Nearest Occurrence:	2,031.86 KM	48.51277°N	88.51107°E

**LOE Rating: Unlikely Total: 3**

Family: Capniidae					
Capnia khulsbagia	Within Known Range? N	Nearest Occurrence:	675.34 KM	51.16116°N	100.75636°E
Mesocapnia altaica	Within Known Range? N	Nearest Occurrence:	1,989.52 KM	48.43684°N	88.90094°E
Family: Nemouridae					
Nemurella pictetii	Within Known Range? N	Nearest Occurrence:	788.81 KM	51.07896°N	99.70857°E

Research funded by the National Science Foundation  
DEB-BSI #0206674: A Survey of the Aquatic Insects of the Selenge River Basin. P.I.'s: JKGelhaus, JCMorse, BHayford.  
DEB # 0743732: Aquatic Insects of the Altai and Hangai Mountain Drainages. P.I.'s: JKGelhaus, JCMorse, CRNelson.  
<http://clade.ansp.org/entomology/mongolia/index.html>



**Basin:** Arctic Ocean Basin  
**Aimags:** Selenge  
**Soums:** Baruunburen

Freshwater Ecoregion: Lake Baikal  
 Terrestrial Ecoregion: Selenge-Orkhon Forest Steppe

**WQM Sites:**

WQM Sites: # 53 (Burgaltai River @ N 49.16008° E 104.81063°)

<b>LOE Rating:</b>	<b>Highly Likely</b>	<b>Total:</b>	<b>11</b>
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Family: Capniidae						
Isocapnia guentheri	Within Known Range? Y	Nearest Occurrence:	147.10 KM	49.77776 °N	103.60860 °E	
Family: Chloroperlidae						
Alloperla rostellata	Within Known Range? N	Nearest Occurrence:	147.10 KM	49.77776 °N	103.60860 °E	
Haploperla lepnevae	Within Known Range? Y	Nearest Occurrence:	62.71 KM	49.48086 °N	104.30864 °E	
Suwallia kerzhneri	Within Known Range? Y	Nearest Occurrence:	122.01 KM	50.35162 °N	105.04436 °E	
Family: Leuctridae						
Paraleuctra zapekinae	Within Known Range? Y	Nearest Occurrence:	53.49 KM	49.71481 °N	104.64203 °E	
Family: Nemouridae						
Amphinemura borealis	Within Known Range? Y	Nearest Occurrence:	103.82 KM	50.03638 °N	105.37392 °E	
Family: Perlidae						
Agnatina brevipennis	Within Known Range? Y	Nearest Occurrence:	62.71 KM	49.48086 °N	104.30864 °E	
Agnatina extrema	Within Known Range? Y	Nearest Occurrence:	190.29 KM	48.83420 °N	106.49113 °E	
Family: Perlodidae						
Isoperla kozlovi	Within Known Range? Y	Nearest Occurrence:	54.30 KM	49.68122 °N	104.56461 °E	
Isoperla lunigera	Within Known Range? Y	Nearest Occurrence:	62.71 KM	49.48086 °N	104.30864 °E	
Isoperla obscura	Within Known Range? Y	Nearest Occurrence:	62.71 KM	49.48086 °N	104.30864 °E	

<b>LOE Rating:</b>	<b>Likely</b>	<b>Total:</b>	<b>8</b>
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Family: Capniidae						
Isocapnia sibirica	Within Known Range? N	Nearest Occurrence:	358.63 KM	48.09549 °N	107.84265 °E	
Family: Chloroperlidae						
Suwallia teleckojensis	Within Known Range? Y	Nearest Occurrence:	53.58 KM	49.71481 °N	104.64203 °E	
Family: Nemouridae						
Nemoura cinerea	Within Known Range? Y	Nearest Occurrence:	54.30 KM	49.68122 °N	104.56461 °E	
Family: Perlidae						
Agnatina cocandica	Within Known Range? Y	Nearest Occurrence:	41.29 KM	49.16354 °N	105.18880 °E	
Paragnetina flavotincta	Within Known Range? Y	Nearest Occurrence:	41.22 KM	49.16354 °N	105.18880 °E	
Family: Perlodidae						
Isoperla asiatica	Within Known Range? Y	Nearest Occurrence:	149.75 KM	48.87748 °N	106.12370 °E	
Megarcys ochracea	Within Known Range? Y	Nearest Occurrence:	147.10 KM	49.77776 °N	103.60860 °E	
Family: Pteronarcyidae						
Pteronarcys reticulata	Within Known Range? Y	Nearest Occurrence:	245.88 KM	49.63453 °N	102.64845 °E	



**Basin:** Arctic Ocean Basin  
**Aimags:** Selenge  
**Soums:** Baruunburen

Freshwater Ecoregion: Lake Baikal  
 Terrestrial Ecoregion: Selenge-Orkhon Forest Steppe

**WQM Sites:**

WQM Sites: # 53 (Burgaltai River @ N 49.16008° E 104.81063°)

**LOE Rating: Probable Total: 6**

Family: Capniidae						
Isocapnia kudia	Within Known Range? N	Nearest Occurrence:	614.23 KM	51.25356°N	99.66687°E	
Family: Chloroperlidae						
Alloperla deminuta	Within Known Range? Y	Nearest Occurrence:	198.09 KM	49.70678°N	103.10288°E	
Alloperla mediata	Within Known Range? N	Nearest Occurrence:	147.10 KM	49.77776°N	103.60860°E	
Family: Perlidae						
Kamimuria exilis	Within Known Range? N	Nearest Occurrence:	673.60 KM	50.16278°N	98.84212°E	
Family: Perlodidae						
Arcynopteryx sajanensis	Within Known Range? N	Nearest Occurrence:	538.02 KM	51.61397°N	100.59972°E	
Pictetiella asiatica	Within Known Range? N	Nearest Occurrence:	546.20 KM	51.65822°N	100.53000°E	

**LOE Rating: Possible Total: 5**

Family: Chloroperlidae						
Alloperla joosti	Within Known Range? N	Nearest Occurrence:	191.73 KM	49.21675°N	103.10750°E	
Family: Nemouridae						
Amphinemura standfussi	Within Known Range? Y	Nearest Occurrence:	206.13 KM	49.33339°N	102.97786°E	
Family: Perlodidae						
Isoperla altaica	Within Known Range? Y	Nearest Occurrence:	150.01 KM	48.87748°N	106.12370°E	
Kaszabia nigricauda	Within Known Range? Y	Nearest Occurrence:	164.46 KM	47.85250°N	105.25567°E	
Family: Taeniopterygidae						
Taenionema japonicum	Within Known Range? Y	Nearest Occurrence:	267.75 KM	49.05411°N	107.23175°E	

**LOE Rating: Predicted Total: 14**

Family: Capniidae						
Capnia nigra	Within Known Range? N	Nearest Occurrence:	488.44 KM	50.92452°N	100.75528°E	
Mesocapnia variabilis	Within Known Range? Y	Nearest Occurrence:	355.38 KM	48.42080°N	107.91406°E	
Family: Chloroperlidae						
Alaskaperla longidentata	Within Known Range? Y	Nearest Occurrence:	94.23 KM	49.95588°N	105.33791°E	
Family: Leuctridae						
Leuctra fusca	Within Known Range? N	Nearest Occurrence:	273.36 KM	49.08643°N	107.28952°E	
Family: Nemouridae						
Nemoura arctica	Within Known Range? Y	Nearest Occurrence:	114.06 KM	49.65142°N	103.88064°E	
Nemoura sahlbergi	Within Known Range? Y	Nearest Occurrence:	124.21 KM	49.70184°N	103.80040°E	
Family: Perlodidae						
Arcynopteryx compacta	Within Known Range? Y	Nearest Occurrence:	76.16 KM	49.62414°N	104.24594°E	
Arcynopteryx polaris	Within Known Range? Y	Nearest Occurrence:	124.43 KM	49.70184°N	103.80040°E	
Diura bicaudata	Within Known Range? N	Nearest Occurrence:	590.38 KM	47.21768°N	99.92824°E	
Diura majuscula	Within Known Range? Y	Nearest Occurrence:	325.04 KM	47.99158°N	107.46116°E	
Isoperla eximia	Within Known Range? N	Nearest Occurrence:	302.21 KM	49.01829°N	107.54453°E	
Isoperla mongolica	Within Known Range? Y	Nearest Occurrence:	358.93 KM	48.09694°N	107.83988°E	
Isoperla potanini	Within Known Range? N	Nearest Occurrence:	361.77 KM	50.62324°N	101.87412°E	
Skwala pusilla	Within Known Range? N	Nearest Occurrence:	1,813.79 KM	48.51277°N	88.51107°E	



**Basin:** Arctic Ocean Basin

**Aimag:** Selenge

**Soum:** Baruunburen

Freshwater Ecoregion: Lake Baikal

Terrestrial Ecoregion: Selenge-Orkhon Forest Steppe

**WQM Sites:**

WQM Sites: # 53 (Burgaltai River @ N 49.16008° E 104.81063°)

<b>LOE Rating:</b>	<b>Unlikely</b>	<b>Total:</b>	<b>3</b>
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Family: Capniidae

Capnia khulsbagia

Within Known Range? N Nearest Occurrence: 494.86 KM 50.98944°N 100.71944 °E

Mesocapnia altaica

Within Known Range? N Nearest Occurrence: 1,770.99 KM 48.43684°N 88.90094 °E

Family: Nemouridae

Nemurella pictetii

Within Known Range? N Nearest Occurrence: 603.20 KM 51.07896°N 99.70857 °E

**Basin:** Arctic Ocean Basin

**Aimags:** Selenge

**Soums:** Bayangol

Freshwater Ecoregion: Lake Baikal

Terrestrial Ecoregion: Daurian Forest Steppe

**WQM Sites:**

WQM Sites: # 4 (Haraa River @ N 48.87883° E 106.22603°) # 5  
(Haraa River @ N 48.88708° E 106.09897°)

**LOE Rating: Highly Likely Total: 4**

Family: Chloroperlidae

Haploperla lepnevae

Within Known Range? Y Nearest Occurrence: 16.14 KM 48.87748°N 106.12370 °E

Family: Perlodidae

Isoperla asiatica

Within Known Range? Y Nearest Occurrence: 16.14 KM 48.87748°N 106.12370 °E

Isoperla kozlovi

Within Known Range? Y Nearest Occurrence: 16.14 KM 48.87748°N 106.12370 °E

Isoperla lunigera

Within Known Range? Y Nearest Occurrence: 16.14 KM 48.87748°N 106.12370 °E

**LOE Rating: Likely Total: 13**

Family: Capniidae

Isocapnia guentheri

Within Known Range? Y Nearest Occurrence: 77.00 KM 49.08405°N 106.89521 °E

Isocapnia sibirica

Within Known Range? N Nearest Occurrence: 207.29 KM 48.09549°N 107.84265 °E

Family: Chloroperlidae

Alloperla deminuta

Within Known Range? Y Nearest Occurrence: 140.68 KM 49.06472°N 107.47257 °E

Alloperla rostellata

Within Known Range? N Nearest Occurrence: 301.17 KM 49.77776°N 103.60860 °E

Suwallia kerzhneri

Within Known Range? Y Nearest Occurrence: 164.69 KM 49.73695°N 107.49285 °E

Family: Leuctridae

Paraleuctra zapekinae

Within Known Range? Y Nearest Occurrence: 178.40 KM 47.99158°N 107.46116 °E

Family: Nemouridae

Amphinemura borealis

Within Known Range? Y Nearest Occurrence: 120.57 KM 49.08643°N 107.28952 °E

Family: Perlidae

Agnetina brevipennis

Within Known Range? Y Nearest Occurrence: 50.88 KM 49.10740°N 106.65177 °E

Agnetina cocandica

Within Known Range? Y Nearest Occurrence: 114.74 KM 49.16354°N 105.18880 °E

Agnetina extrema

Within Known Range? Y Nearest Occurrence: 36.33 KM 48.83420°N 106.49113 °E

Family: Perlodidae

Isoperla altaica

Within Known Range? Y Nearest Occurrence: 16.17 KM 48.87748°N 106.12370 °E

Megarcys ochracea

Within Known Range? Y Nearest Occurrence: 84.71 KM 49.03282°N 106.96935 °E

Family: Pteronarcyidae

Pteronarcys reticulata

Within Known Range? Y Nearest Occurrence: 120.57 KM 49.08643°N 107.28952 °E

**LOE Rating: Probable Total: 6**

Family: Chloroperlidae

Suwallia teleckojensis

Within Known Range? Y Nearest Occurrence: 82.65 KM 48.99356°N 106.95023 °E

Family: Nemouridae

Nemoura cinerea

Within Known Range? Y Nearest Occurrence: 191.58 KM 47.96783°N 107.59278 °E

Family: Perlidae

Paragnetina flavotincta

Within Known Range? Y Nearest Occurrence: 114.53 KM 49.16354°N 105.18880 °E

Family: Perlodidae

Arcynopteryx sajanensis

Within Known Range? N Nearest Occurrence: 688.11 KM 51.61397°N 100.59972 °E

Isoperla obscura

Within Known Range? Y Nearest Occurrence: 94.66 KM 49.84014°N 106.33228 °E

Family: Taeniopterygidae

Taenionema japonicum

Within Known Range? Y Nearest Occurrence: 114.13 KM 49.05411°N 107.23175 °E

Basin: Arctic Ocean Basin

Aimags: Selenge

Soums: Bayangol

Freshwater Ecoregion: Lake Baikal

Terrestrial Ecoregion: Daurian Forest Steppe

WQM Sites:

WQM Sites: # 4 (Haraa River @ N 48.87883° E 106.22603°) # 5 (Haraa River @ N 48.88708° E 106.09897°)

**LOE Rating: Possible Total: 7**

Family: Capniidae					
Isocapnia kudia	Within Known Range? N	Nearest Occurrence:	767.97 KM	51.25356°N	99.66687°E
Family: Chloroperlidae					
Alaskaperla longidentata	Within Known Range? Y	Nearest Occurrence:	143.68 KM	49.95588°N	105.33791°E
Alloperla mediata	Within Known Range? N	Nearest Occurrence:	301.17 KM	49.77776°N	103.60860°E
Family: Nemouridae					
Amphinemura standfussi	Within Known Range? Y	Nearest Occurrence:	178.24 KM	49.73130°N	107.63484°E
Family: Perlidae					
Kamimuria exilis	Within Known Range? N	Nearest Occurrence:	829.18 KM	50.16278°N	98.84212°E
Family: Perlodidae					
Kaszabia nigricauda	Within Known Range? Y	Nearest Occurrence:	165.17 KM	47.85250°N	105.25567°E
Pictetiella asiatica	Within Known Range? N	Nearest Occurrence:	695.97 KM	51.65822°N	100.53000°E

**LOE Rating: Predicted Total: 14**

Family: Capniidae					
Capnia nigra	Within Known Range? N	Nearest Occurrence:	641.87 KM	50.92452°N	100.75528°E
Mesocapnia variabilis	Within Known Range? Y	Nearest Occurrence:	200.33 KM	48.42080°N	107.91406°E
Family: Chloroperlidae					
Alloperla joosti	Within Known Range? N	Nearest Occurrence:	344.91 KM	49.21675°N	103.10750°E
Family: Leuctridae					
Leuctra fusca	Within Known Range? N	Nearest Occurrence:	120.57 KM	49.08643°N	107.28952°E
Family: Nemouridae					
Nemoura arctica	Within Known Range? Y	Nearest Occurrence:	157.48 KM	47.77758°N	106.92780°E
Nemoura sahlbergi	Within Known Range? Y	Nearest Occurrence:	189.17 KM	48.16668°N	107.69548°E
Family: Perlodidae					
Arcynopteryx compacta	Within Known Range? Y	Nearest Occurrence:	197.11 KM	47.84324°N	107.55299°E
Arcynopteryx polaris	Within Known Range? Y	Nearest Occurrence:	200.33 KM	48.42080°N	107.91406°E
Diura bicaudata	Within Known Range? N	Nearest Occurrence:	724.38 KM	47.21768°N	99.92824°E
Diura majuscula	Within Known Range? Y	Nearest Occurrence:	178.72 KM	47.99158°N	107.46116°E
Isoperla eximia	Within Known Range? N	Nearest Occurrence:	148.48 KM	49.01829°N	107.54453°E
Isoperla mongolica	Within Known Range? Y	Nearest Occurrence:	207.31 KM	48.09694°N	107.83988°E
Isoperla potanini	Within Known Range? N	Nearest Occurrence:	514.65 KM	50.62324°N	101.87412°E
Skwala pusilla	Within Known Range? N	Nearest Occurrence:	1,964.98 KM	48.51277°N	88.51107°E

**LOE Rating: Unlikely Total: 3**

Family: Capniidae					
Capnia khulsbagia	Within Known Range? N	Nearest Occurrence:	648.04 KM	50.98944°N	100.71944°E
Mesocapnia altaica	Within Known Range? N	Nearest Occurrence:	1,921.98 KM	48.43684°N	88.90094°E
Family: Nemouridae					
Nemurella pictetii	Within Known Range? N	Nearest Occurrence:	757.45 KM	51.07896°N	99.70857°E

Basin: Arctic Ocean Basin

Aimags: Selenge

Soums: Javkhlant

Freshwater Ecoregion: Lake Baikal

Terrestrial Ecoregion: Daurian Forest Steppe

WQM Sites:

WQM Sites: # 48 (Shariin gol River @ N 49.73932° E 106.15783°)

**LOE Rating: Highly Likely Total: 1**

Family: Perlodidae

Isoperla obscura Within Known Range? Y Nearest Occurrence: 12.18 KM 49.84014°N 106.33228 °E

**LOE Rating: Likely Total: 17**

Family: Capniidae

Isocapnia guentheri Within Known Range? Y Nearest Occurrence: 93.10 KM 49.08405°N 106.89521 °E

Isocapnia sibirica Within Known Range? N Nearest Occurrence: 244.88 KM 48.09549°N 107.84265 °E

Family: Chloroperlidae

Alloperla deminuta Within Known Range? Y Nearest Occurrence: 124.85 KM 49.73695°N 107.49285 °E

Haploperla lepnevae Within Known Range? Y Nearest Occurrence: 52.55 KM 49.61985°N 106.82693 °E

Suwallia kerzhneri Within Known Range? Y Nearest Occurrence: 124.85 KM 49.73695°N 107.49285 °E

Family: Leuctridae

Paraleuctra zapekinae Within Known Range? Y Nearest Occurrence: 191.61 KM 49.71481°N 104.64203 °E

Family: Nemouridae

Amphinemura borealis Within Known Range? Y Nearest Occurrence: 115.27 KM 50.03638°N 105.37392 °E

Family: Perlidae

Agnetina brevipennis Within Known Range? Y Nearest Occurrence: 52.55 KM 49.61985°N 106.82693 °E

Agnetina cocandica Within Known Range? Y Nearest Occurrence: 44.84 KM 50.06476°N 106.13388 °E

Agnetina extrema Within Known Range? Y Nearest Occurrence: 45.00 KM 49.46450°N 106.66871 °E

Paragnetina flavotincta Within Known Range? Y Nearest Occurrence: 44.77 KM 50.06476°N 106.13388 °E

Family: Perlodidae

Isoperla asiatica Within Known Range? Y Nearest Occurrence: 99.13 KM 48.87748°N 106.12370 °E

Isoperla kozlovi Within Known Range? Y Nearest Occurrence: 99.13 KM 48.87748°N 106.12370 °E

Isoperla lunigera Within Known Range? Y Nearest Occurrence: 52.55 KM 49.61985°N 106.82693 °E

Megarcys ochracea Within Known Range? Y Nearest Occurrence: 102.73 KM 49.03282°N 106.96935 °E

Family: Pteronarcyidae

Pteronarcys reticulata Within Known Range? Y Nearest Occurrence: 125.17 KM 49.08643°N 107.28952 °E

Family: Taeniopterygidae

Taenionema japonicum Within Known Range? Y Nearest Occurrence: 122.40 KM 49.05411°N 107.23175 °E

**LOE Rating: Probable Total: 6**

Family: Chloroperlidae

Alloperla rostellata Within Known Range? N Nearest Occurrence: 306.34 KM 49.77776°N 103.60860 °E

Suwallia teleckojensis Within Known Range? Y Nearest Occurrence: 102.92 KM 49.03282°N 106.96935 °E

Family: Leuctridae

Leuctra fusca Within Known Range? N Nearest Occurrence: 125.17 KM 49.08643°N 107.28952 °E

Family: Nemouridae

Nemoura cinerea Within Known Range? N Nearest Occurrence: 200.28 KM 49.68122°N 104.56461 °E

Family: Perlodidae

Arcynopteryx sajanensis Within Known Range? N Nearest Occurrence: 674.57 KM 51.61397°N 100.59972 °E

Pictetiella asiatica Within Known Range? N Nearest Occurrence: 682.24 KM 51.65822°N 100.53000 °E

**Basin:** Arctic Ocean Basin  
**Aimags:** Selenge  
**Soums:** Javkhlant

Freshwater Ecoregion: Lake Baikal  
 Terrestrial Ecoregion: Daurian Forest Steppe

**WQM Sites:**

WQM Sites: # 48 (Shariin gol River @ N 49.73932° E 106.15783°)

**LOE Rating: Possible Total: 7**

Family: Capniidae					
Isocapnia kudia	Within Known Range? N	Nearest Occurrence:	762.66 KM	51.25356°N	99.66687°E
Family: Chloroperlidae					
Alaskaperla longidentata	Within Known Range? Y	Nearest Occurrence:	116.92 KM	49.95588°N	105.33791°E
Alloperla mediata	Within Known Range? N	Nearest Occurrence:	306.34 KM	49.77776°N	103.60860°E
Family: Nemouridae					
Amphinemura standfussi	Within Known Range? Y	Nearest Occurrence:	140.61 KM	49.73130°N	107.63484°E
Family: Perlidae					
Kamimuria exilis	Within Known Range? N	Nearest Occurrence:	838.23 KM	50.16278°N	98.84212°E
Family: Perlodidae					
Isoperla altaica	Within Known Range? Y	Nearest Occurrence:	99.31 KM	48.87748°N	106.12370°E
Kaszabia nigricauda	Within Known Range? N	Nearest Occurrence:	236.47 KM	48.25861°N	107.90251°E

**LOE Rating: Predicted Total: 13**

Family: Capniidae					
Capnia nigra	Within Known Range? N	Nearest Occurrence:	636.83 KM	50.92452°N	100.75528°E
Mesocapnia variabilis	Within Known Range? Y	Nearest Occurrence:	225.74 KM	48.42080°N	107.91406°E
Family: Chloroperlidae					
Alloperla joosti	Within Known Range? N	Nearest Occurrence:	362.45 KM	49.70678°N	103.10288°E
Family: Nemouridae					
Nemoura arctica	Within Known Range? Y	Nearest Occurrence:	226.55 KM	47.77758°N	106.92780°E
Nemoura sahlbergi	Within Known Range? Y	Nearest Occurrence:	228.19 KM	48.16668°N	107.69548°E
Family: Perlodidae					
Arcynopteryx compacta	Within Known Range? N	Nearest Occurrence:	236.32 KM	49.62414°N	104.24594°E
Arcynopteryx polaris	Within Known Range? Y	Nearest Occurrence:	225.74 KM	48.42080°N	107.91406°E
Diura bicaudata	Within Known Range? N	Nearest Occurrence:	757.41 KM	51.39852°N	99.75011°E
Diura majuscula	Within Known Range? N	Nearest Occurrence:	228.96 KM	47.99158°N	107.46116°E
Isoperla eximia	Within Known Range? N	Nearest Occurrence:	152.99 KM	49.01829°N	107.54453°E
Isoperla mongolica	Within Known Range? N	Nearest Occurrence:	245.00 KM	48.09694°N	107.83988°E
Isoperla potanini	Within Known Range? N	Nearest Occurrence:	509.37 KM	50.62324°N	101.87412°E
Skwala pusilla	Within Known Range? N	Nearest Occurrence:	1,986.78 KM	48.51277°N	88.51107°E

**LOE Rating: Unlikely Total: 3**

Family: Capniidae					
Capnia khulsbagia	Within Known Range? N	Nearest Occurrence:	642.24 KM	50.98944°N	100.71944°E
Mesocapnia altaica	Within Known Range? N	Nearest Occurrence:	1,944.21 KM	48.43684°N	88.90094°E
Family: Nemouridae					
Nemurella pictetii	Within Known Range? N	Nearest Occurrence:	754.08 KM	51.07896°N	99.70857°E

**Basin:** Arctic Ocean Basin  
**Aimags:** Selenge  
**Soums:** Khuder

Freshwater Ecoregion: Lake Baikal  
 Terrestrial Ecoregion: Trans-Baikal Conifer Forests

**WQM Sites:**

WQM Sites: # 162 (Huder River @ N 49.75372° E 107.5264°)

<b>LOE Rating:</b>	<b>Highly Likely</b>	<b>Total:</b>	<b>4</b>
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Family: Chloroperlidae			
Alloperla deminuta	Within Known Range? Y	Nearest Occurrence:	3.48 KM 49.73130°N 107.63484 °E
Suwallia kerzhneri	Within Known Range? Y	Nearest Occurrence:	12.30 KM 49.73695°N 107.49285 °E
Family: Nemouridae			
Amphinemura borealis	Within Known Range? Y	Nearest Occurrence:	3.48 KM 49.73130°N 107.63484 °E
Family: Perlidae			
Agnentina brevipennis	Within Known Range? Y	Nearest Occurrence:	12.99 KM 49.73720°N 107.48668 °E

<b>LOE Rating:</b>	<b>Likely</b>	<b>Total:</b>	<b>17</b>
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Family: Capniidae			
Isocapnia guentheri	Within Known Range? N	Nearest Occurrence:	106.45 KM 49.08405°N 106.89521 °E
Isocapnia sibirica	Within Known Range? N	Nearest Occurrence:	183.43 KM 48.09549°N 107.84265 °E
Family: Chloroperlidae			
Alaskaperla longidentata	Within Known Range? Y	Nearest Occurrence:	3.48 KM 49.73130°N 107.63484 °E
Haploperla lepnevae	Within Known Range? Y	Nearest Occurrence:	78.70 KM 49.08636°N 107.30750 °E
Suwallia teleckojensis	Within Known Range? N	Nearest Occurrence:	104.85 KM 49.03282°N 106.96935 °E
Family: Leuctridae			
Leuctra fusca	Within Known Range? Y	Nearest Occurrence:	8.97 KM 49.75393°N 107.52609 °E
Paraleuctra zapekinae	Within Known Range? N	Nearest Occurrence:	178.94 KM 48.14846°N 107.91267 °E
Family: Nemouridae			
Amphinemura standfussi	Within Known Range? Y	Nearest Occurrence:	3.48 KM 49.73130°N 107.63484 °E
Nemoura cinerea	Within Known Range? N	Nearest Occurrence:	195.67 KM 47.96783°N 107.59278 °E
Family: Perlidae			
Agnentina extrema	Within Known Range? Y	Nearest Occurrence:	48.62 KM 49.43488°N 107.28036 °E
Family: Perlodidae			
Isoperla asiatica	Within Known Range? Y	Nearest Occurrence:	79.34 KM 49.01829°N 107.54453 °E
Isoperla kozlovi	Within Known Range? Y	Nearest Occurrence:	78.70 KM 49.08636°N 107.30750 °E
Isoperla lunigera	Within Known Range? Y	Nearest Occurrence:	78.70 KM 49.08636°N 107.30750 °E
Isoperla obscura	Within Known Range? Y	Nearest Occurrence:	105.22 KM 49.72192°N 106.65562 °E
Megarcys ochracea	Within Known Range? N	Nearest Occurrence:	104.66 KM 49.03282°N 106.96935 °E
Family: Pteronarcyidae			
Pteronarcys reticulata	Within Known Range? Y	Nearest Occurrence:	78.70 KM 49.08636°N 107.30750 °E
Family: Taeniopterygidae			
Taenionema japonicum	Within Known Range? N	Nearest Occurrence:	85.84 KM 49.05411°N 107.23175 °E

<b>LOE Rating:</b>	<b>Probable</b>	<b>Total:</b>	<b>3</b>
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Family: Chloroperlidae			
Alloperla rostellata	Within Known Range? N	Nearest Occurrence:	443.46 KM 49.77776°N 103.60860 °E
Family: Perlidae			
Agnentina cocandica	Within Known Range? N	Nearest Occurrence:	167.59 KM 50.06476°N 106.13388 °E
Paragnetina flavotincta	Within Known Range? N	Nearest Occurrence:	167.29 KM 50.06476°N 106.13388 °E



**Basin:** Arctic Ocean Basin  
**Aimags:** Selenge  
**Soums:** Khuder

Freshwater Ecoregion: Lake Baikal  
 Terrestrial Ecoregion: Trans-Baikal Conifer Forests

**WQM Sites:**

WQM Sites: # 162 (Huder River @ N 49.75372° E 107.5264°)

**LOE Rating: Possible Total: 8**

Family: Capniidae						
Isocapnia kudia	Within Known Range?	N	Nearest Occurrence:	897.04 KM	51.25356°N	99.66687°E
Family: Chloroperlidae						
Alloperla mediata	Within Known Range?	N	Nearest Occurrence:	443.46 KM	49.77776°N	103.60860°E
Family: Perlidae						
Kamimuria exilis	Within Known Range?	N	Nearest Occurrence:	975.45 KM	50.16278°N	98.84212°E
Family: Perlodidae						
Arcynopteryx sajanensis	Within Known Range?	N	Nearest Occurrence:	806.49 KM	51.61397°N	100.59972°E
Diura bicaudata	Within Known Range?	N	Nearest Occurrence:	891.17 KM	51.39852°N	99.75011°E
Isoperla altaica	Within Known Range?	N	Nearest Occurrence:	128.32 KM	48.60182°N	107.84335°E
Kaszabia nigricauda	Within Known Range?	N	Nearest Occurrence:	166.73 KM	48.25861°N	107.90251°E
Pictetiella asiatica	Within Known Range?	N	Nearest Occurrence:	813.79 KM	51.65822°N	100.53000°E

**LOE Rating: Predicted Total: 12**

Family: Capniidae						
Capnia nigra	Within Known Range?	N	Nearest Occurrence:	771.62 KM	50.92452°N	100.75528°E
Mesocapnia variabilis	Within Known Range?	N	Nearest Occurrence:	149.69 KM	48.42080°N	107.91406°E
Family: Chloroperlidae						
Alloperla joosti	Within Known Range?	N	Nearest Occurrence:	499.57 KM	49.70678°N	103.10288°E
Family: Nemouridae						
Nemoura arctica	Within Known Range?	N	Nearest Occurrence:	167.03 KM	48.25861°N	107.90251°E
Nemoura sahlbergi	Within Known Range?	N	Nearest Occurrence:	171.20 KM	48.21780°N	107.90392°E
Family: Perlodidae						
Arcynopteryx compacta	Within Known Range?	N	Nearest Occurrence:	209.95 KM	47.84324°N	107.55299°E
Arcynopteryx polaris	Within Known Range?	N	Nearest Occurrence:	149.69 KM	48.42080°N	107.91406°E
Diura majuscula	Within Known Range?	N	Nearest Occurrence:	181.10 KM	48.13287°N	107.91890°E
Isoperla eximia	Within Known Range?	Y	Nearest Occurrence:	79.34 KM	49.01829°N	107.54453°E
Isoperla mongolica	Within Known Range?	N	Nearest Occurrence:	183.56 KM	48.09694°N	107.83988°E
Isoperla potanini	Within Known Range?	N	Nearest Occurrence:	644.79 KM	50.62324°N	101.87412°E
Skwala pusilla	Within Known Range?	N	Nearest Occurrence:	2,123.57 KM	48.51277°N	88.51107°E

**LOE Rating: Unlikely Total: 3**

Family: Capniidae						
Capnia khulsbagia	Within Known Range?	N	Nearest Occurrence:	776.44 KM	51.16116°N	100.75636°E
Mesocapnia altaica	Within Known Range?	N	Nearest Occurrence:	2,080.94 KM	48.43684°N	88.90094°E
Family: Nemouridae						
Nemurella pictetii	Within Known Range?	N	Nearest Occurrence:	889.02 KM	51.07896°N	99.70857°E

**Basin:** Arctic Ocean Basin  
**Aimags:** Selenge  
**Soums:** Khushaat

Freshwater Ecoregion: Lake Baikal  
 Terrestrial Ecoregion: Selenge-Orkhon Forest Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Highly Likely Total: 9**

Family: Chloroperlidae					
Haploperla lepnevae	Within Known Range? Y	Nearest Occurrence:	120.22 KM	48.87748°N	106.12370 °E
Suwallia kerzhneri	Within Known Range? Y	Nearest Occurrence:	83.17 KM	50.35162°N	105.04436 °E
Family: Leuctridae					
Paraleuctra zapekinae	Within Known Range? Y	Nearest Occurrence:	87.43 KM	49.71481°N	104.64203 °E
Family: Nemouridae					
Amphinemura borealis	Within Known Range? Y	Nearest Occurrence:	36.86 KM	50.03638°N	105.37392 °E
Family: Perlidae					
Agnetina brevipennis	Within Known Range? Y	Nearest Occurrence:	126.98 KM	49.48086°N	104.30864 °E
Agnetina extrema	Within Known Range? Y	Nearest Occurrence:	140.19 KM	49.46450°N	106.66871 °E
Family: Perlodidae					
Isoperla kozlovi	Within Known Range? Y	Nearest Occurrence:	96.07 KM	49.68122°N	104.56461 °E
Isoperla lunigera	Within Known Range? Y	Nearest Occurrence:	120.22 KM	48.87748°N	106.12370 °E
Isoperla obscura	Within Known Range? Y	Nearest Occurrence:	58.67 KM	50.10277°N	105.78217 °E

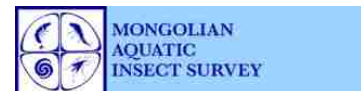
**LOE Rating: Likely Total: 10**

Family: Capniidae					
Isocapnia guentheri	Within Known Range? Y	Nearest Occurrence:	176.85 KM	49.08405°N	106.89521 °E
Isocapnia sibirica	Within Known Range? N	Nearest Occurrence:	322.20 KM	48.09549°N	107.84265 °E
Family: Chloroperlidae					
Alloperla deminuta	Within Known Range? Y	Nearest Occurrence:	229.03 KM	49.73695°N	107.49285 °E
Alloperla rostellata	Within Known Range? N	Nearest Occurrence:	202.28 KM	49.77776°N	103.60860 °E
Family: Nemouridae					
Nemoura cinerea	Within Known Range? Y	Nearest Occurrence:	96.07 KM	49.68122°N	104.56461 °E
Family: Perlidae					
Agnetina cocandica	Within Known Range? Y	Nearest Occurrence:	58.77 KM	50.10277°N	105.78217 °E
Paragnetina flavotincta	Within Known Range? Y	Nearest Occurrence:	29.24 KM	49.95588°N	105.33791 °E
Family: Perlodidae					
Isoperla asiatica	Within Known Range? Y	Nearest Occurrence:	120.22 KM	48.87748°N	106.12370 °E
Megarcys ochracea	Within Known Range? Y	Nearest Occurrence:	186.66 KM	49.03282°N	106.96935 °E
Family: Pteronarcyidae					
Pteronarcys reticulata	Within Known Range? Y	Nearest Occurrence:	217.70 KM	49.08643°N	107.28952 °E

**LOE Rating: Probable Total: 6**

Family: Capniidae					
Isocapnia kudia	Within Known Range? N	Nearest Occurrence:	662.25 KM	51.25356°N	99.66687 °E
Family: Chloroperlidae					
Alloperla mediata	Within Known Range? N	Nearest Occurrence:	202.28 KM	49.77776°N	103.60860 °E
Suwallia teleckojensis	Within Known Range? Y	Nearest Occurrence:	87.59 KM	49.71481°N	104.64203 °E
Family: Perlodidae					
Arcynopteryx sajanensis	Within Known Range? N	Nearest Occurrence:	577.36 KM	51.61397°N	100.59972 °E
Pictetiella asiatica	Within Known Range? N	Nearest Occurrence:	585.32 KM	51.65822°N	100.53000 °E
Family: Taeniopterygidae					
Taenionema japonicum	Within Known Range? Y	Nearest Occurrence:	213.21 KM	49.05411°N	107.23175 °E

Research funded by the National Science Foundation  
 DEB-BSI #0206674: A Survey of the Aquatic Insects of the Selenge River Basin. P.I.'s: JKGelhaus, JCMorse, BHayford.  
 DEB # 0743732: Aquatic Insects of the Altai and Hangai Mountain Drainages. P.I.'s: JKGelhaus, JCMorse, CRNelson.  
<http://clade.ansp.org/entomology/mongolia/index.html>





**Basin:** Arctic Ocean Basin  
**Aimag:** Selenge  
**Soum:** Khushaat

Freshwater Ecoregion: Lake Baikal  
 Terrestrial Ecoregion: Selenge-Orkhon Forest Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Possible Total: 5**

Family: Chloroperlidae					
Alaskaperla longidentata	Within Known Range? Y	Nearest Occurrence:	29.24 KM	49.95588 °N	105.33791 °E
Family: Nemouridae					
Amphinemura standfussi	Within Known Range? Y	Nearest Occurrence:	244.79 KM	49.73130 °N	107.63484 °E
Family: Perlidae					
Kamimuria exilis	Within Known Range? N	Nearest Occurrence:	734.27 KM	50.16278 °N	98.84212 °E
Family: Perlodidae					
Isoperla altaica	Within Known Range? Y	Nearest Occurrence:	120.44 KM	48.87748 °N	106.12370 °E
Kaszabia nigricauda	Within Known Range? Y	Nearest Occurrence:	206.97 KM	47.85250 °N	105.25567 °E

**LOE Rating: Predicted Total: 14**

Family: Capniidae					
Capnia nigra	Within Known Range? N	Nearest Occurrence:	536.11 KM	50.92452 °N	100.75528 °E
Mesocapnia variabilis	Within Known Range? Y	Nearest Occurrence:	311.19 KM	48.42080 °N	107.91406 °E
Family: Chloroperlidae					
Alloperla joosti	Within Known Range? N	Nearest Occurrence:	258.27 KM	49.70678 °N	103.10288 °E
Family: Leuctridae					
Leuctra fusca	Within Known Range? N	Nearest Occurrence:	217.70 KM	49.08643 °N	107.28952 °E
Family: Nemouridae					
Nemoura arctica	Within Known Range? Y	Nearest Occurrence:	172.37 KM	49.65142 °N	103.88064 °E
Nemoura sahlbergi	Within Known Range? Y	Nearest Occurrence:	180.85 KM	49.70184 °N	103.80040 °E
Family: Perlodidae					
Arcynopteryx compacta	Within Known Range? Y	Nearest Occurrence:	131.97 KM	49.62414 °N	104.24594 °E
Arcynopteryx polaris	Within Known Range? Y	Nearest Occurrence:	181.18 KM	49.70184 °N	103.80040 °E
Diura bicaudata	Within Known Range? N	Nearest Occurrence:	657.73 KM	51.39852 °N	99.75011 °E
Diura majuscula	Within Known Range? Y	Nearest Occurrence:	295.81 KM	47.99158 °N	107.46116 °E
Isoperla eximia	Within Known Range? N	Nearest Occurrence:	246.95 KM	49.01829 °N	107.54453 °E
Isoperla mongolica	Within Known Range? N	Nearest Occurrence:	322.44 KM	48.09694 °N	107.83988 °E
Isoperla potanini	Within Known Range? N	Nearest Occurrence:	408.24 KM	50.62324 °N	101.87412 °E
Skwala pusilla	Within Known Range? N	Nearest Occurrence:	1,882.65 KM	48.51277 °N	88.51107 °E

**LOE Rating: Unlikely Total: 3**

Family: Capniidae					
Capnia khulsbagia	Within Known Range? N	Nearest Occurrence:	541.81 KM	50.98944 °N	100.71944 °E
Mesocapnia altaica	Within Known Range? N	Nearest Occurrence:	1,840.11 KM	48.43684 °N	88.90094 °E
Family: Nemouridae					
Nemurella pictetii	Within Known Range? N	Nearest Occurrence:	652.99 KM	51.07896 °N	99.70857 °E

**Basin:** Arctic Ocean Basin  
**Aimags:** Selenge  
**Soums:** Mandal

Freshwater Ecoregion: Lake Baikal  
 Terrestrial Ecoregion: Trans-Baikal Conifer Forests

**WQM Sites:**

WQM Sites: # 3 (Boroo River @ N 48.77665° E 106.28363°)

**LOE Rating: Highly Likely Total: 3**

Family: Chloroperlidae						
Suwallia teleckojensis	Within Known Range? Y	Nearest Occurrence:	18.88 KM	48.99356°N	106.95023 °E	
Family: Perlidae						
Agnetina brevipennis	Within Known Range? Y	Nearest Occurrence:	46.37 KM	49.08636°N	107.30750 °E	
Agnetina extrema	Within Known Range? Y	Nearest Occurrence:	42.24 KM	48.50028°N	106.78434 °E	

**LOE Rating: Likely Total: 14**

Family: Capniidae						
Isocapnia guentheri	Within Known Range? Y	Nearest Occurrence:	30.12 KM	49.08405°N	106.89521 °E	
Isocapnia sibirica	Within Known Range? N	Nearest Occurrence:	125.47 KM	48.09549°N	107.84265 °E	
Family: Chloroperlidae						
Alloperla deminuta	Within Known Range? Y	Nearest Occurrence:	60.69 KM	49.06472°N	107.47257 °E	
Haploperla lepnevae	Within Known Range? Y	Nearest Occurrence:	46.37 KM	49.08636°N	107.30750 °E	
Suwallia kerzhneri	Within Known Range? Y	Nearest Occurrence:	100.21 KM	48.12416°N	107.54780 °E	
Family: Leuctridae						
Paraleuctra zapekinae	Within Known Range? Y	Nearest Occurrence:	106.93 KM	47.99158°N	107.46116 °E	
Family: Nemouridae						
Amphinemura borealis	Within Known Range? Y	Nearest Occurrence:	44.83 KM	49.08643°N	107.28952 °E	
Nemoura cinerea	Within Known Range? Y	Nearest Occurrence:	117.06 KM	47.96783°N	107.59278 °E	
Family: Perlodidae						
Isoperla asiatica	Within Known Range? Y	Nearest Occurrence:	66.14 KM	49.01829°N	107.54453 °E	
Isoperla kozlovi	Within Known Range? Y	Nearest Occurrence:	46.37 KM	49.08636°N	107.30750 °E	
Isoperla lunigera	Within Known Range? Y	Nearest Occurrence:	46.37 KM	49.08636°N	107.30750 °E	
Megarcys ochracea	Within Known Range? Y	Nearest Occurrence:	22.94 KM	49.03282°N	106.96935 °E	
Family: Pteronarcyidae						
Pteronarcys reticulata	Within Known Range? Y	Nearest Occurrence:	44.83 KM	49.08643°N	107.28952 °E	
Family: Taeniopterygidae						
Taenionema japonicum	Within Known Range? Y	Nearest Occurrence:	37.70 KM	49.05411°N	107.23175 °E	

**LOE Rating: Probable Total: 7**

Family: Chloroperlidae						
Alloperla rostellata	Within Known Range? N	Nearest Occurrence:	388.88 KM	49.77776°N	103.60860 °E	
Family: Perlidae						
Agnetina cocandica	Within Known Range? Y	Nearest Occurrence:	166.80 KM	50.06476°N	106.13388 °E	
Family: Perlodidae						
Arcynopteryx sajanensis	Within Known Range? N	Nearest Occurrence:	774.29 KM	51.61397°N	100.59972 °E	
Isoperla altaica	Within Known Range? Y	Nearest Occurrence:	95.44 KM	48.87748°N	106.12370 °E	
Isoperla obscura	Within Known Range? Y	Nearest Occurrence:	105.74 KM	49.72192°N	106.65562 °E	
Kaszabia nigricauda	Within Known Range? Y	Nearest Occurrence:	117.06 KM	47.96783°N	107.59278 °E	
Pictetiella asiatica	Within Known Range? N	Nearest Occurrence:	781.96 KM	51.65822°N	100.53000 °E	

**Basin:** Arctic Ocean Basin  
**Aimag:** Selenge  
**Soum:** Mandal

Freshwater Ecoregion: Lake Baikal  
 Terrestrial Ecoregion: Trans-Baikal Conifer Forests

**WQM Sites:**

WQM Sites: # 3 (Boroo River @ N 48.77665° E 106.28363°)

**LOE Rating: Possible Total: 6**

Family: Capniidae						
Isocapnia kudia	Within Known Range? N	Nearest Occurrence:	855.34 KM	51.25356°N	99.66687°E	
Family: Chloroperlidae						
Alaskaperla longidentata	Within Known Range? Y	Nearest Occurrence:	100.21 KM	48.12416°N	107.54780°E	
Family: Leuctridae						
Leuctra fusca	Within Known Range? Y	Nearest Occurrence:	44.83 KM	49.08643°N	107.28952°E	
Family: Perlidae						
Kamimuria exilis	Within Known Range? N	Nearest Occurrence:	917.11 KM	50.16278°N	98.84212°E	
Paragnetina flavotincta	Within Known Range? N	Nearest Occurrence:	166.50 KM	50.06476°N	106.13388°E	
Family: Perlodidae						
Diura bicaudata	Within Known Range? N	Nearest Occurrence:	802.90 KM	47.21768°N	99.92824°E	

**LOE Rating: Predicted Total: 14**

Family: Capniidae						
Capnia nigra	Within Known Range? N	Nearest Occurrence:	729.18 KM	50.92452°N	100.75528°E	
Mesocapnia variabilis	Within Known Range? Y	Nearest Occurrence:	113.19 KM	48.42080°N	107.91406°E	
Family: Chloroperlidae						
Alloperla joosti	Within Known Range? N	Nearest Occurrence:	432.07 KM	49.21675°N	103.10750°E	
Alloperla mediata	Within Known Range? N	Nearest Occurrence:	388.88 KM	49.77776°N	103.60860°E	
Family: Nemouridae						
Amphinemura standfussi	Within Known Range? N	Nearest Occurrence:	123.96 KM	49.73130°N	107.63484°E	
Nemoura arctica	Within Known Range? Y	Nearest Occurrence:	116.78 KM	47.77758°N	106.92780°E	
Nemoura sahlbergi	Within Known Range? Y	Nearest Occurrence:	107.99 KM	48.16668°N	107.69548°E	
Family: Perlodidae						
Arcynopteryx compacta	Within Known Range? Y	Nearest Occurrence:	126.52 KM	47.84324°N	107.55299°E	
Arcynopteryx polaris	Within Known Range? Y	Nearest Occurrence:	113.19 KM	48.42080°N	107.91406°E	
Diura majuscula	Within Known Range? Y	Nearest Occurrence:	107.13 KM	47.99158°N	107.46116°E	
Isoperla eximia	Within Known Range? Y	Nearest Occurrence:	66.14 KM	49.01829°N	107.54453°E	
Isoperla mongolica	Within Known Range? Y	Nearest Occurrence:	125.35 KM	48.09694°N	107.83988°E	
Isoperla potanini	Within Known Range? N	Nearest Occurrence:	601.27 KM	47.26999°N	101.80227°E	
Skwala pusilla	Within Known Range? N	Nearest Occurrence:	2,050.39 KM	48.51277°N	88.51107°E	

**LOE Rating: Unlikely Total: 3**

Family: Capniidae						
Capnia khulsbagia	Within Known Range? N	Nearest Occurrence:	735.27 KM	50.98944°N	100.71944°E	
Mesocapnia altaica	Within Known Range? N	Nearest Occurrence:	2,007.29 KM	48.43684°N	88.90094°E	
Family: Nemouridae						
Nemurella pictetii	Within Known Range? N	Nearest Occurrence:	845.01 KM	51.07896°N	99.70857°E	

**Basin:** Arctic Ocean Basin

**Aimags:** Selenge

**Soums:** Orhkon

Freshwater Ecoregion: Lake Baikal

Terrestrial Ecoregion: Daurian Forest Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Highly Likely Total: 9**

Family: Chloroperlidae

Haploperla lepnevae

Within Known Range? Y Nearest Occurrence: 70.11 KM 48.87748°N 106.12370°E

Suwallia kerzhneri

Within Known Range? Y Nearest Occurrence: 157.53 KM 50.35162°N 105.04436°E

Family: Leuctridae

Paraleuctra zapekinae

Within Known Range? Y Nearest Occurrence: 123.79 KM 49.71481°N 104.64203°E

Family: Nemouridae

Amphinemura borealis

Within Known Range? Y Nearest Occurrence: 114.91 KM 50.03638°N 105.37392°E

Family: Perlidae

Agnetina brevipennis

Within Known Range? Y Nearest Occurrence: 127.64 KM 49.10740°N 106.65177°E

Agnetina cocandica

Within Known Range? Y Nearest Occurrence: 39.21 KM 49.16354°N 105.18880°E

Agnetina extrema

Within Known Range? Y Nearest Occurrence: 111.06 KM 48.83420°N 106.49113°E

Family: Perlodidae

Isoperla kozlovi

Within Known Range? Y Nearest Occurrence: 70.11 KM 48.87748°N 106.12370°E

Isoperla lunigera

Within Known Range? Y Nearest Occurrence: 70.11 KM 48.87748°N 106.12370°E

**LOE Rating: Likely Total: 9**

Family: Capniidae

Isocapnia guentheri

Within Known Range? Y Nearest Occurrence: 154.42 KM 49.08405°N 106.89521°E

Isocapnia sibirica

Within Known Range? N Nearest Occurrence: 278.50 KM 48.09549°N 107.84265°E

Family: Chloroperlidae

Alloperla rostellata

Within Known Range? N Nearest Occurrence: 227.22 KM 49.77776°N 103.60860°E

Family: Nemouridae

Nemoura cinerea

Within Known Range? Y Nearest Occurrence: 128.36 KM 49.68122°N 104.56461°E

Family: Perlidae

Paragnetina flavotincta

Within Known Range? Y Nearest Occurrence: 39.14 KM 49.16354°N 105.18880°E

Family: Perlodidae

Isoperla asiatica

Within Known Range? Y Nearest Occurrence: 70.11 KM 48.87748°N 106.12370°E

Isoperla obscura

Within Known Range? Y Nearest Occurrence: 125.15 KM 50.10277°N 105.78217°E

Megarcys ochracea

Within Known Range? Y Nearest Occurrence: 162.45 KM 49.03282°N 106.96935°E

Family: Pteronarcyidae

Pteronarcys reticulata

Within Known Range? Y Nearest Occurrence: 198.15 KM 49.08643°N 107.28952°E

**LOE Rating: Probable Total: 7**

Family: Capniidae

Isocapnia kudia

Within Known Range? N Nearest Occurrence: 694.36 KM 51.25356°N 99.66687°E

Family: Chloroperlidae

Alloperla deminuta

Within Known Range? Y Nearest Occurrence: 218.37 KM 49.06472°N 107.47257°E

Alloperla mediata

Within Known Range? N Nearest Occurrence: 227.22 KM 49.77776°N 103.60860°E

Suwallia teleckojensis

Within Known Range? Y Nearest Occurrence: 124.02 KM 49.71481°N 104.64203°E

Family: Perlodidae

Arcynopteryx sajanensis

Within Known Range? N Nearest Occurrence: 617.68 KM 51.61397°N 100.59972°E

Pictetiella asiatica

Within Known Range? N Nearest Occurrence: 625.71 KM 51.65822°N 100.53000°E

Family: Taeniopterygidae

Taenionema japonicum

Within Known Range? Y Nearest Occurrence: 191.96 KM 49.05411°N 107.23175°E

Research funded by the National Science Foundation

DEB-BSI #0206674: A Survey of the Aquatic Insects of the Selenge River Basin. P.I.'s: JKGelhaus, JCMorse, BHayford.

DEB # 0743732: Aquatic Insects of the Altai and Hangai Mountain Drainages. P.I.'s: JKGelhaus, JCMorse, CRNelson.

<http://clade.ansp.org/entomology/mongolia/index.html>



**Basin:** Arctic Ocean Basin

**Aimag:** Selenge

**Soum:** Orhkon

Freshwater Ecoregion: Lake Baikal

Terrestrial Ecoregion: Daurian Forest Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Possible Total: 5**

Family: Chloroperlidae

Alaskaperla longidentata Within Known Range? Y Nearest Occurrence: 106.68 KM 49.95588°N 105.33791°E

Family: Nemouridae

Amphinemura standfussi Within Known Range? Y Nearest Occurrence: 249.50 KM 49.73130°N 107.63484°E

Family: Perlidae

Kamimuria exilis Within Known Range? N Nearest Occurrence: 752.04 KM 50.16278°N 98.84212°E

Family: Perlodidae

Isoperla altaica Within Known Range? Y Nearest Occurrence: 70.24 KM 48.87748°N 106.12370°E

Kaszabia nigricauda Within Known Range? Y Nearest Occurrence: 131.41 KM 47.85250°N 105.25567°E

**LOE Rating: Predicted Total: 14**

Family: Capniidae

Capnia nigra Within Known Range? N Nearest Occurrence: 568.56 KM 50.92452°N 100.75528°E

Mesocapnia variabilis Within Known Range? Y Nearest Occurrence: 275.66 KM 48.42080°N 107.91406°E

Family: Chloroperlidae

Alloperla joosti Within Known Range? N Nearest Occurrence: 267.23 KM 49.21675°N 103.10750°E

Family: Leuctridae

Leuctra fusca Within Known Range? N Nearest Occurrence: 198.15 KM 49.08643°N 107.28952°E

Family: Nemouridae

Nemoura arctica Within Known Range? Y Nearest Occurrence: 194.33 KM 49.65142°N 103.88064°E

Nemoura sahlbergi Within Known Range? Y Nearest Occurrence: 204.32 KM 49.70184°N 103.80040°E

Family: Perlodidae

Arcynopteryx compacta Within Known Range? Y Nearest Occurrence: 155.90 KM 49.62414°N 104.24594°E

Arcynopteryx polaris Within Known Range? Y Nearest Occurrence: 204.69 KM 49.70184°N 103.80040°E

Diura bicaudata Within Known Range? N Nearest Occurrence: 650.30 KM 47.21768°N 99.92824°E

Diura majuscula Within Known Range? Y Nearest Occurrence: 245.12 KM 47.99158°N 107.46116°E

Isoperla eximia Within Known Range? N Nearest Occurrence: 226.27 KM 49.01829°N 107.54453°E

Isoperla mongolica Within Known Range? Y Nearest Occurrence: 278.66 KM 48.09694°N 107.83988°E

Isoperla potanini Within Known Range? N Nearest Occurrence: 441.94 KM 50.62324°N 101.87412°E

Skwala pusilla Within Known Range? N Nearest Occurrence: 1,887.25 KM 48.51277°N 88.51107°E

**LOE Rating: Unlikely Total: 3**

Family: Capniidae

Capnia khulsbagia Within Known Range? N Nearest Occurrence: 574.97 KM 50.98944°N 100.71944°E

Mesocapnia altaica Within Known Range? N Nearest Occurrence: 1,844.26 KM 48.43684°N 88.90094°E

Family: Nemouridae

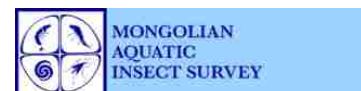
Nemurella pictetii Within Known Range? N Nearest Occurrence: 683.29 KM 51.07896°N 99.70857°E

Research funded by the National Science Foundation

DEB-BSI #0206674: A Survey of the Aquatic Insects of the Selenge River Basin. P.I.'s: JKGelhaus, JCMorse, BHayford.

DEB # 0743732: Aquatic Insects of the Altai and Hangai Mountain Drainages. P.I.'s: JKGelhaus, JCMorse, CRNelson.

<http://clade.ansp.org/entomology/mongolia/index.html>



**Basin:** Arctic Ocean Basin

**Aimags:** Selenge

**Soums:** Orkhontuul

Freshwater Ecoregion: Lake Baikal

Terrestrial Ecoregion: Daurian Forest Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Highly Likely Total: 11**

Family: Chloroperlidae

Alloperla rostellata	Within Known Range? N	Nearest Occurrence: 191.23 KM	49.77776 °N	103.60860 °E
Haploperla lepnevae	Within Known Range? Y	Nearest Occurrence: 110.18 KM	49.48086 °N	104.30864 °E
Suwallia kerzhneri	Within Known Range? Y	Nearest Occurrence: 173.90 KM	50.35162 °N	105.04436 °E

Family: Nemouridae

Amphinemura borealis	Within Known Range? Y	Nearest Occurrence: 144.43 KM	50.03638 °N	105.37392 °E
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Family: Perlidae

Agnetina brevipennis	Within Known Range? Y	Nearest Occurrence: 110.18 KM	49.48086 °N	104.30864 °E
Agnetina cocandica	Within Known Range? Y	Nearest Occurrence: 46.22 KM	49.16354 °N	105.18880 °E
Agnetina extrema	Within Known Range? Y	Nearest Occurrence: 163.75 KM	48.83420 °N	106.49113 °E
Paragnetina flavotincta	Within Known Range? Y	Nearest Occurrence: 46.14 KM	49.16354 °N	105.18880 °E

Family: Perlodidae

Isoperla kozlovi	Within Known Range? Y	Nearest Occurrence: 106.87 KM	47.85250 °N	105.25567 °E
Isoperla lunigera	Within Known Range? Y	Nearest Occurrence: 110.18 KM	49.48086 °N	104.30864 °E
Isoperla obscura	Within Known Range? Y	Nearest Occurrence: 106.87 KM	47.85250 °N	105.25567 °E

**LOE Rating: Likely Total: 6**

Family: Capniidae

Isocapnia guentheri	Within Known Range? Y	Nearest Occurrence: 191.23 KM	49.77776 °N	103.60860 °E
Isocapnia sibirica	Within Known Range? N	Nearest Occurrence: 322.89 KM	48.09549 °N	107.84265 °E

Family: Leuctridae

Paraleuctra zapekinae	Within Known Range? Y	Nearest Occurrence: 111.26 KM	49.71481 °N	104.64203 °E
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Family: Nemouridae

Nemoura cinerea	Within Known Range? Y	Nearest Occurrence: 111.40 KM	49.68122 °N	104.56461 °E
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Family: Perlodidae

Isoperla asiatica	Within Known Range? Y	Nearest Occurrence: 123.30 KM	48.87748 °N	106.12370 °E
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Family: Pteronarcyidae

Pteronarcys reticulata	Within Known Range? Y	Nearest Occurrence: 254.49 KM	49.08643 °N	107.28952 °E
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**LOE Rating: Probable Total: 9**

Family: Capniidae

Isocapnia kudia	Within Known Range? N	Nearest Occurrence: 653.99 KM	51.25356 °N	99.66687 °E
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Family: Chloroperlidae

Alloperla deminuta	Within Known Range? Y	Nearest Occurrence: 235.78 KM	49.70678 °N	103.10288 °E
Alloperla mediata	Within Known Range? N	Nearest Occurrence: 191.23 KM	49.77776 °N	103.60860 °E
Suwallia teleckojensis	Within Known Range? Y	Nearest Occurrence: 111.46 KM	49.71481 °N	104.64203 °E

Family: Perlidae

Kamimuria exilis	Within Known Range? N	Nearest Occurrence: 703.49 KM	50.16278 °N	98.84212 °E
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Family: Perlodidae

Arcynopteryx sajanensis	Within Known Range? N	Nearest Occurrence: 583.26 KM	51.61397 °N	100.59972 °E
Kaszabia nigricauda	Within Known Range? Y	Nearest Occurrence: 106.87 KM	47.85250 °N	105.25567 °E
Megarcys ochracea	Within Known Range? Y	Nearest Occurrence: 191.23 KM	49.77776 °N	103.60860 °E
Pictetiella asiatica	Within Known Range? N	Nearest Occurrence: 591.38 KM	51.65822 °N	100.53000 °E



Basin: Arctic Ocean Basin

Aimag: Selenge

Soum: Orkhontuul

Freshwater Ecoregion: Lake Baikal

Terrestrial Ecoregion: Daurian Forest Steppe

WQM Sites:

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Possible Total: 4**

Family: Chloroperlidae					
Alloperla joosti	Within Known Range? N	Nearest Occurrence:	217.27 KM	49.21675 °N	103.10750 °E
Family: Nemouridae					
Amphinemura standfussi	Within Known Range? Y	Nearest Occurrence:	234.35 KM	49.33339 °N	102.97786 °E
Family: Perlodidae					
Isoperla altaica	Within Known Range? Y	Nearest Occurrence:	123.53 KM	48.87748 °N	106.12370 °E
Family: Taeniopterygidae					
Taenionema japonicum	Within Known Range? Y	Nearest Occurrence:	248.12 KM	49.05411 °N	107.23175 °E

**LOE Rating: Predicted Total: 14**

Family: Capniidae					
Capnia nigra	Within Known Range? N	Nearest Occurrence:	529.28 KM	50.92452 °N	100.75528 °E
Mesocapnia variabilis	Within Known Range? Y	Nearest Occurrence:	324.73 KM	48.42080 °N	107.91406 °E
Family: Chloroperlidae					
Alaskaperla longidentata	Within Known Range? Y	Nearest Occurrence:	134.75 KM	49.95588 °N	105.33791 °E
Family: Leuctridae					
Leuctra fusca	Within Known Range? N	Nearest Occurrence:	254.49 KM	49.08643 °N	107.28952 °E
Family: Nemouridae					
Nemoura arctica	Within Known Range? Y	Nearest Occurrence:	158.86 KM	49.65142 °N	103.88064 °E
Nemoura sahlbergi	Within Known Range? Y	Nearest Occurrence:	169.06 KM	49.70184 °N	103.80040 °E
Family: Perlodidae					
Arcynopteryx compacta	Within Known Range? Y	Nearest Occurrence:	126.69 KM	49.62414 °N	104.24594 °E
Arcynopteryx polaris	Within Known Range? Y	Nearest Occurrence:	169.36 KM	49.70184 °N	103.80040 °E
Diura bicaudata	Within Known Range? N	Nearest Occurrence:	591.01 KM	47.21768 °N	99.92824 °E
Diura majuscula	Within Known Range? Y	Nearest Occurrence:	285.79 KM	47.99158 °N	107.46116 °E
Isoperla eximia	Within Known Range? N	Nearest Occurrence:	281.78 KM	49.01829 °N	107.54453 °E
Isoperla mongolica	Within Known Range? Y	Nearest Occurrence:	323.13 KM	48.09694 °N	107.83988 °E
Isoperla potanini	Within Known Range? N	Nearest Occurrence:	395.16 KM	47.26999 °N	101.80227 °E
Skwala pusilla	Within Known Range? N	Nearest Occurrence:	1,832.37 KM	48.51277 °N	88.51107 °E

**LOE Rating: Unlikely Total: 3**

Family: Capniidae					
Capnia khulsbagia	Within Known Range? N	Nearest Occurrence:	536.09 KM	50.98944 °N	100.71944 °E
Mesocapnia altaica	Within Known Range? N	Nearest Occurrence:	1,789.27 KM	48.43684 °N	88.90094 °E
Family: Nemouridae					
Nemurella pictetii	Within Known Range? N	Nearest Occurrence:	641.86 KM	51.07896 °N	99.70857 °E

Basin: Arctic Ocean Basin

Aimags: Selenge

Soums: Saikhan

Freshwater Ecoregion: Lake Baikal

Terrestrial Ecoregion: Daurian Forest Steppe

WQM Sites:

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Highly Likely Total: 11**

Family: Chloroperlidae

Haploperla lepnevae

Within Known Range? Y Nearest Occurrence: 64.85 KM 48.87748°N 106.12370°E

Suwallia kerzhneri

Within Known Range? Y Nearest Occurrence: 138.53 KM 50.35162°N 105.04436°E

Family: Leuctridae

Paraleuctra zapekinae

Within Known Range? Y Nearest Occurrence: 128.80 KM 49.71481°N 104.64203°E

Family: Nemouridae

Amphinemura borealis

Within Known Range? Y Nearest Occurrence: 89.93 KM 50.03638°N 105.37392°E

Family: Perlidae

Agnetina brevipennis

Within Known Range? Y Nearest Occurrence: 104.84 KM 49.10740°N 106.65177°E

Agnetina cocandica

Within Known Range? Y Nearest Occurrence: 62.16 KM 49.16354°N 105.18880°E

Agnetina extrema

Within Known Range? Y Nearest Occurrence: 99.63 KM 48.83420°N 106.49113°E

Family: Perlodidae

Isoperla asiatica

Within Known Range? Y Nearest Occurrence: 64.85 KM 48.87748°N 106.12370°E

Isoperla kozlovi

Within Known Range? Y Nearest Occurrence: 64.85 KM 48.87748°N 106.12370°E

Isoperla lunigera

Within Known Range? Y Nearest Occurrence: 64.85 KM 48.87748°N 106.12370°E

Family: Pteronarcyidae

Pteronarcys reticulata

Within Known Range? Y Nearest Occurrence: 174.98 KM 49.08643°N 107.28952°E

**LOE Rating: Likely Total: 7**

Family: Capniidae

Isocapnia guentheri

Within Known Range? Y Nearest Occurrence: 131.84 KM 49.08405°N 106.89521°E

Isocapnia sibirica

Within Known Range? N Nearest Occurrence: 270.50 KM 48.09549°N 107.84265°E

Family: Chloroperlidae

Alloperla rostellata

Within Known Range? N Nearest Occurrence: 241.05 KM 49.77776°N 103.60860°E

Family: Nemouridae

Nemoura cinerea

Within Known Range? Y Nearest Occurrence: 135.70 KM 49.68122°N 104.56461°E

Family: Perlidae

Paragnetina flavotincta

Within Known Range? Y Nearest Occurrence: 62.05 KM 49.16354°N 105.18880°E

Family: Perlodidae

Isoperla obscura

Within Known Range? Y Nearest Occurrence: 88.41 KM 50.10277°N 105.78217°E

Megarcys ochracea

Within Known Range? Y Nearest Occurrence: 141.05 KM 49.03282°N 106.96935°E

**LOE Rating: Probable Total: 7**

Family: Capniidae

Isocapnia kudia

Within Known Range? N Nearest Occurrence: 706.68 KM 51.25356°N 99.66687°E

Family: Chloroperlidae

Alloperla deminuta

Within Known Range? Y Nearest Occurrence: 195.43 KM 49.06472°N 107.47257°E

Alloperla mediata

Within Known Range? N Nearest Occurrence: 241.05 KM 49.77776°N 103.60860°E

Suwallia teleckojensis

Within Known Range? Y Nearest Occurrence: 129.04 KM 49.71481°N 104.64203°E

Family: Perlodidae

Arcynopteryx sajanensis

Within Known Range? N Nearest Occurrence: 625.34 KM 51.61397°N 100.59972°E

Pictetiella asiatica

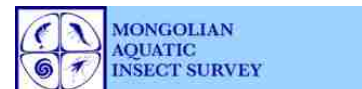
Within Known Range? N Nearest Occurrence: 633.29 KM 51.65822°N 100.53000°E

Family: Taeniopterygidae

Taenionema japonicum

Within Known Range? Y Nearest Occurrence: 169.50 KM 49.05411°N 107.23175°E

Research funded by the National Science Foundation  
DEB-BSI #0206674: A Survey of the Aquatic Insects of the Selenge River Basin. P.I.'s: JKGelhaus, JCMorse, BHayford.  
DEB # 0743732: Aquatic Insects of the Altai and Hangai Mountain Drainages. P.I.'s: JKGelhaus, JCMorse, CRNelson.  
<http://clade.ansp.org/entomology/mongolia/index.html>





**Basin:** Arctic Ocean Basin

**Aimag:** Selenge

**Soum:** Saikhan

Freshwater Ecoregion: Lake Baikal

Terrestrial Ecoregion: Daurian Forest Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Possible Total: 5**

Family: Chloroperlidae					
Alaskaperla longidentata	Within Known Range? Y	Nearest Occurrence:	83.98 KM	49.95588 °N	105.33791 °E
Family: Nemouridae					
Amphinemura standfussi	Within Known Range? Y	Nearest Occurrence:	216.72 KM	49.73130 °N	107.63484 °E
Family: Perlidae					
Kamimuria exilis	Within Known Range? N	Nearest Occurrence:	771.68 KM	50.16278 °N	98.84212 °E
Family: Perlodidae					
Isoperla altaica	Within Known Range? Y	Nearest Occurrence:	64.97 KM	48.87748 °N	106.12370 °E
Kaszabia nigricauda	Within Known Range? Y	Nearest Occurrence:	169.89 KM	47.85250 °N	105.25567 °E

**LOE Rating: Predicted Total: 14**

Family: Capniidae					
Capnia nigra	Within Known Range? N	Nearest Occurrence:	580.49 KM	50.92452 °N	100.75528 °E
Mesocapnia variabilis	Within Known Range? Y	Nearest Occurrence:	262.27 KM	48.42080 °N	107.91406 °E
Family: Chloroperlidae					
Alloperla joosti	Within Known Range? N	Nearest Occurrence:	291.14 KM	49.21675 °N	103.10750 °E
Family: Leuctridae					
Leuctra fusca	Within Known Range? N	Nearest Occurrence:	174.98 KM	49.08643 °N	107.28952 °E
Family: Nemouridae					
Nemoura arctica	Within Known Range? Y	Nearest Occurrence:	209.03 KM	49.65142 °N	103.88064 °E
Nemoura sahlbergi	Within Known Range? Y	Nearest Occurrence:	218.47 KM	49.70184 °N	103.80040 °E
Family: Perlodidae					
Arcynopteryx compacta	Within Known Range? Y	Nearest Occurrence:	168.60 KM	49.62414 °N	104.24594 °E
Arcynopteryx polaris	Within Known Range? Y	Nearest Occurrence:	218.86 KM	49.70184 °N	103.80040 °E
Diura bicaudata	Within Known Range? N	Nearest Occurrence:	684.40 KM	47.21768 °N	99.92824 °E
Diura majuscula	Within Known Range? Y	Nearest Occurrence:	241.95 KM	47.99158 °N	107.46116 °E
Isoperla eximia	Within Known Range? N	Nearest Occurrence:	204.10 KM	49.01829 °N	107.54453 °E
Isoperla mongolica	Within Known Range? Y	Nearest Occurrence:	270.64 KM	48.09694 °N	107.83988 °E
Isoperla potanini	Within Known Range? N	Nearest Occurrence:	452.90 KM	50.62324 °N	101.87412 °E
Skwala pusilla	Within Known Range? N	Nearest Occurrence:	1,913.21 KM	48.51277 °N	88.51107 °E

**LOE Rating: Unlikely Total: 3**

Family: Capniidae					
Capnia khulsbagia	Within Known Range? N	Nearest Occurrence:	586.53 KM	50.98944 °N	100.71944 °E
Mesocapnia altaica	Within Known Range? N	Nearest Occurrence:	1,870.40 KM	48.43684 °N	88.90094 °E
Family: Nemouridae					
Nemurella pictetii	Within Known Range? N	Nearest Occurrence:	696.56 KM	51.07896 °N	99.70857 °E

**Basin:** Arctic Ocean Basin  
**Aimags:** Selenge  
**Soums:** Sant

Freshwater Ecoregion: Lake Baikal  
 Terrestrial Ecoregion: Selenge-Orkhon Forest Steppe

**WQM Sites:**

WQM Sites: # 50 (Orhon River @ N 49.12882° E 105.34592°)

**LOE Rating: Highly Likely Total: 2**

Family: Perlidae

Agnetina cocandica Within Known Range? Y Nearest Occurrence: 31.87 KM 49.16354°N 105.18880°E

Paragnetina flavotincta Within Known Range? Y Nearest Occurrence: 31.81 KM 49.16354°N 105.18880°E

**LOE Rating: Likely Total: 15**

Family: Capniidae

Isocapnia guentheri Within Known Range? Y Nearest Occurrence: 174.21 KM 49.08405°N 106.89521°E

Family: Chloroperlidae

Alloperla rostellata Within Known Range? N Nearest Occurrence: 198.66 KM 49.77776°N 103.60860°E

Haploperla lepnevae Within Known Range? Y Nearest Occurrence: 102.71 KM 48.87748°N 106.12370°E

Suwallia kerzhneri Within Known Range? Y Nearest Occurrence: 111.65 KM 50.35162°N 105.04436°E

Family: Leuctridae

Paraleuctra zapekinae Within Known Range? Y Nearest Occurrence: 86.91 KM 49.71481°N 104.64203°E

Family: Nemouridae

Amphinemura borealis Within Known Range? Y Nearest Occurrence: 71.15 KM 50.03638°N 105.37392°E

Nemoura cinerea Within Known Range? Y Nearest Occurrence: 93.50 KM 49.68122°N 104.56461°E

Family: Perlidae

Agnetina brevipennis Within Known Range? Y Nearest Occurrence: 116.75 KM 49.48086°N 104.30864°E

Agnetina extrema Within Known Range? Y Nearest Occurrence: 140.47 KM 48.83420°N 106.49113°E

Family: Perlodidae

Isoperla asiatica Within Known Range? Y Nearest Occurrence: 102.71 KM 48.87748°N 106.12370°E

Isoperla kozlovi Within Known Range? Y Nearest Occurrence: 93.50 KM 49.68122°N 104.56461°E

Isoperla lunigera Within Known Range? Y Nearest Occurrence: 102.71 KM 48.87748°N 106.12370°E

Isoperla obscura Within Known Range? Y Nearest Occurrence: 91.59 KM 50.10277°N 105.78217°E

Megarcys ochracea Within Known Range? Y Nearest Occurrence: 183.44 KM 49.03282°N 106.96935°E

Family: Pteronarcyidae

Pteronarcys reticulata Within Known Range? Y Nearest Occurrence: 217.24 KM 49.08643°N 107.28952°E

**LOE Rating: Probable Total: 7**

Family: Capniidae

Isocapnia sibirica Within Known Range? N Nearest Occurrence: 311.37 KM 48.09549°N 107.84265°E

Family: Chloroperlidae

Alloperla deminuta Within Known Range? Y Nearest Occurrence: 237.68 KM 49.06472°N 107.47257°E

Alloperla mediata Within Known Range? N Nearest Occurrence: 198.66 KM 49.77776°N 103.60860°E

Suwallia teleckojensis Within Known Range? Y Nearest Occurrence: 87.07 KM 49.71481°N 104.64203°E

Family: Perlodidae

Arcynopteryx sajanensis Within Known Range? N Nearest Occurrence: 583.70 KM 51.61397°N 100.59972°E

Pictetiella asiatica Within Known Range? N Nearest Occurrence: 591.74 KM 51.65822°N 100.53000°E

Family: Taeniopterygidae

Taenionema japonicum Within Known Range? Y Nearest Occurrence: 211.90 KM 49.05411°N 107.23175°E



**Basin:** Arctic Ocean Basin  
**Aimags:** Selenge  
**Soums:** Sant

Freshwater Ecoregion: Lake Baikal  
 Terrestrial Ecoregion: Selenge-Orkhon Forest Steppe

**WQM Sites:**

WQM Sites: # 50 (Orhon River @ N 49.12882° E 105.34592°)

**LOE Rating: Possible Total: 6**

Family: Capniidae						
Isocapnia kudia	Within Known Range?	N	Nearest Occurrence:	664.42 KM	51.25356°N	99.66687°E
Family: Chloroperlidae						
Alaskaperla longidentata	Within Known Range?	Y	Nearest Occurrence:	62.23 KM	49.95588°N	105.33791°E
Family: Nemouridae						
Amphinemura standfussi	Within Known Range?	Y	Nearest Occurrence:	255.57 KM	49.73130°N	107.63484°E
Family: Perlidae						
Kamimuria exilis	Within Known Range?	N	Nearest Occurrence:	729.46 KM	50.16278°N	98.84212°E
Family: Perlodidae						
Isoperla altaica	Within Known Range?	Y	Nearest Occurrence:	102.90 KM	48.87748°N	106.12370°E
Kaszabia nigricauda	Within Known Range?	Y	Nearest Occurrence:	171.65 KM	47.85250°N	105.25567°E

**LOE Rating: Predicted Total: 14**

Family: Capniidae						
Capnia nigra	Within Known Range?	N	Nearest Occurrence:	538.25 KM	50.92452°N	100.75528°E
Mesocapnia variabilis	Within Known Range?	Y	Nearest Occurrence:	304.30 KM	48.42080°N	107.91406°E
Family: Chloroperlidae						
Alloperla joosti	Within Known Range?	N	Nearest Occurrence:	250.48 KM	49.21675°N	103.10750°E
Family: Leuctridae						
Leuctra fusca	Within Known Range?	N	Nearest Occurrence:	217.24 KM	49.08643°N	107.28952°E
Family: Nemouridae						
Nemoura arctica	Within Known Range?	Y	Nearest Occurrence:	166.62 KM	49.65142°N	103.88064°E
Nemoura sahlbergi	Within Known Range?	Y	Nearest Occurrence:	176.10 KM	49.70184°N	103.80040°E
Family: Perlodidae						
Arcynopteryx compacta	Within Known Range?	Y	Nearest Occurrence:	126.14 KM	49.62414°N	104.24594°E
Arcynopteryx polaris	Within Known Range?	Y	Nearest Occurrence:	176.41 KM	49.70184°N	103.80040°E
Diura bicaudata	Within Known Range?	N	Nearest Occurrence:	649.28 KM	47.21768°N	99.92824°E
Diura majuscula	Within Known Range?	Y	Nearest Occurrence:	281.29 KM	47.99158°N	107.46116°E
Isoperla eximia	Within Known Range?	N	Nearest Occurrence:	246.40 KM	49.01829°N	107.54453°E
Isoperla mongolica	Within Known Range?	Y	Nearest Occurrence:	311.58 KM	48.09694°N	107.83988°E
Isoperla potanini	Within Known Range?	N	Nearest Occurrence:	410.65 KM	50.62324°N	101.87412°E
Skwala pusilla	Within Known Range?	N	Nearest Occurrence:	1,872.46 KM	48.51277°N	88.51107°E

**LOE Rating: Unlikely Total: 3**

Family: Capniidae						
Capnia khulsbagia	Within Known Range?	N	Nearest Occurrence:	544.32 KM	50.98944°N	100.71944°E
Mesocapnia altaica	Within Known Range?	N	Nearest Occurrence:	1,829.72 KM	48.43684°N	88.90094°E
Family: Nemouridae						
Nemurella pictetii	Within Known Range?	N	Nearest Occurrence:	654.23 KM	51.07896°N	99.70857°E

**Basin:** Arctic Ocean Basin  
**Aimags:** Selenge  
**Soums:** Shaamar

Freshwater Ecoregion: Lake Baikal  
 Terrestrial Ecoregion: Daurian Forest Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Highly Likely Total: 3**

Family: Perlidae					
	Agnetina cocandica	Within Known Range? Y	Nearest Occurrence:	12.90 KM	50.06476°N 106.13388°E
	Paragnetina flavotincta	Within Known Range? Y	Nearest Occurrence:	12.88 KM	50.06476°N 106.13388°E
Family: Perlodidae					
	Isoperla obscura	Within Known Range? Y	Nearest Occurrence:	12.88 KM	50.06476°N 106.13388°E

**LOE Rating: Likely Total: 13**

Family: Capniidae					
	Isocapnia guentheri	Within Known Range? Y	Nearest Occurrence:	129.14 KM	49.08405°N 106.89521°E
Family: Chloroperlidae					
	Haploperla lepnevae	Within Known Range? Y	Nearest Occurrence:	80.06 KM	49.61985°N 106.82693°E
	Suwallia kerzhneri	Within Known Range? Y	Nearest Occurrence:	137.81 KM	50.35162°N 105.04436°E
Family: Leuctridae					
	Paraleuctra zapekinae	Within Known Range? N	Nearest Occurrence:	182.26 KM	49.71481°N 104.64203°E
Family: Nemouridae					
	Amphinemura borealis	Within Known Range? Y	Nearest Occurrence:	97.16 KM	50.03638°N 105.37392°E
Family: Perlidae					
	Agnetina brevipennis	Within Known Range? Y	Nearest Occurrence:	80.06 KM	49.61985°N 106.82693°E
	Agnetina extrema	Within Known Range? Y	Nearest Occurrence:	80.10 KM	49.46450°N 106.66871°E
Family: Perlodidae					
	Isoperla asiatica	Within Known Range? Y	Nearest Occurrence:	131.07 KM	48.87748°N 106.12370°E
	Isoperla kozlovi	Within Known Range? Y	Nearest Occurrence:	131.07 KM	48.87748°N 106.12370°E
	Isoperla lunigera	Within Known Range? Y	Nearest Occurrence:	80.06 KM	49.61985°N 106.82693°E
	Megarcys ochracea	Within Known Range? Y	Nearest Occurrence:	138.49 KM	49.03282°N 106.96935°E
Family: Pteronarcyidae					
	Pteronarcys reticulata	Within Known Range? Y	Nearest Occurrence:	157.52 KM	49.08643°N 107.28952°E
Family: Taeniopterygidae					
	Taenionema japonicum	Within Known Range? Y	Nearest Occurrence:	155.70 KM	49.05411°N 107.23175°E

**LOE Rating: Probable Total: 8**

Family: Capniidae					
	Isocapnia sibirica	Within Known Range? N	Nearest Occurrence:	280.06 KM	48.09549°N 107.84265°E
Family: Chloroperlidae					
	Alloperla deminuta	Within Known Range? Y	Nearest Occurrence:	142.40 KM	49.73695°N 107.49285°E
	Alloperla mediata	Within Known Range? N	Nearest Occurrence:	294.67 KM	49.77776°N 103.60860°E
	Alloperla rostellata	Within Known Range? N	Nearest Occurrence:	294.67 KM	49.77776°N 103.60860°E
	Suwallia teleckojensis	Within Known Range? N	Nearest Occurrence:	138.74 KM	49.03282°N 106.96935°E
Family: Nemouridae					
	Nemoura cinerea	Within Known Range? N	Nearest Occurrence:	191.45 KM	49.68122°N 104.56461°E
Family: Perlodidae					
	Arcynopteryx sajanensis	Within Known Range? N	Nearest Occurrence:	651.80 KM	51.61397°N 100.59972°E
	Pictetiella asiatica	Within Known Range? N	Nearest Occurrence:	659.40 KM	51.65822°N 100.53000°E



**Basin:** Arctic Ocean Basin

**Aimags:** Selenge

**Soums:** Shaamar

Freshwater Ecoregion: Lake Baikal

Terrestrial Ecoregion: Daurian Forest Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Possible Total: 8**

Family: Capniidae						
Isocapnia kudia	Within Known Range? N	Nearest Occurrence:	742.71 KM	51.25356°N	99.66687°E	
Family: Chloroperlidae						
Alaskaperla longidentata	Within Known Range? Y	Nearest Occurrence:	101.70 KM	49.95588°N	105.33791°E	
Family: Leuctridae						
Leuctra fusca	Within Known Range? N	Nearest Occurrence:	145.54 KM	49.75393°N	107.52609°E	
Family: Nemouridae						
Amphinemura standfussi	Within Known Range? Y	Nearest Occurrence:	157.87 KM	49.73130°N	107.63484°E	
Family: Perlidae						
Kamimuria exilis	Within Known Range? N	Nearest Occurrence:	823.75 KM	50.16278°N	98.84212°E	
Family: Perlodidae						
Diura bicaudata	Within Known Range? N	Nearest Occurrence:	736.72 KM	51.39852°N	99.75011°E	
Isoperla altaica	Within Known Range? Y	Nearest Occurrence:	131.31 KM	48.87748°N	106.12370°E	
Kaszabia nigricauda	Within Known Range? N	Nearest Occurrence:	267.85 KM	47.85250°N	105.25567°E	

**LOE Rating: Predicted Total: 13**

Family: Capniidae						
Capnia khulsbagia	Within Known Range? N	Nearest Occurrence:	622.01 KM	51.16116°N	100.75636°E	
Capnia nigra	Within Known Range? N	Nearest Occurrence:	617.47 KM	50.92452°N	100.75528°E	
Mesocapnia variabilis	Within Known Range? N	Nearest Occurrence:	259.16 KM	48.42080°N	107.91406°E	
Family: Chloroperlidae						
Alloperla joosti	Within Known Range? N	Nearest Occurrence:	351.33 KM	49.70678°N	103.10288°E	
Family: Nemouridae						
Nemoura arctica	Within Known Range? Y	Nearest Occurrence:	263.89 KM	47.77758°N	106.92780°E	
Nemoura sahlbergi	Within Known Range? N	Nearest Occurrence:	263.72 KM	48.16668°N	107.69548°E	
Family: Perlodidae						
Arcynopteryx compacta	Within Known Range? N	Nearest Occurrence:	227.77 KM	49.62414°N	104.24594°E	
Arcynopteryx polaris	Within Known Range? N	Nearest Occurrence:	259.16 KM	48.42080°N	107.91406°E	
Diura majuscula	Within Known Range? N	Nearest Occurrence:	265.78 KM	47.99158°N	107.46116°E	
Isoperla eximia	Within Known Range? N	Nearest Occurrence:	183.93 KM	49.01829°N	107.54453°E	
Isoperla mongolica	Within Known Range? N	Nearest Occurrence:	280.24 KM	48.09694°N	107.83988°E	
Isoperla potanini	Within Known Range? N	Nearest Occurrence:	490.64 KM	50.62324°N	101.87412°E	
Skwala pusilla	Within Known Range? N	Nearest Occurrence:	1,976.32 KM	48.51277°N	88.51107°E	

**LOE Rating: Unlikely Total: 2**

Family: Capniidae						
Mesocapnia altaica	Within Known Range? N	Nearest Occurrence:	1,933.97 KM	48.43684°N	88.90094°E	
Family: Nemouridae						
Nemurella pictetii	Within Known Range? N	Nearest Occurrence:	734.90 KM	51.07896°N	99.70857°E	

Basin: Arctic Ocean Basin

Aimags: Selenge

Soums: Tsagaannuur

Freshwater Ecoregion: Lake Baikal

Terrestrial Ecoregion: Selenge-Orkhon Forest Steppe

WQM Sites:

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Highly Likely Total: 3**

Family: Nemouridae

Amphinemura borealis Within Known Range? Y Nearest Occurrence: 15.63 KM 50.03638°N 105.37392°E

Family: Perlidae

Paragnetina flavotincta Within Known Range? Y Nearest Occurrence: 13.84 KM 49.95588°N 105.33791°E

Family: Perlodidae

Isoperla obscura Within Known Range? Y Nearest Occurrence: 61.51 KM 50.10277°N 105.78217°E

**LOE Rating: Likely Total: 15**

Family: Capniidae

Isocapnia guentheri Within Known Range? Y Nearest Occurrence: 182.44 KM 49.77776°N 103.60860°E

Family: Chloroperlidae

Alaskaperla longidentata Within Known Range? Y Nearest Occurrence: 13.84 KM 49.95588°N 105.33791°E

Alloperla rostellata Within Known Range? N Nearest Occurrence: 182.44 KM 49.77776°N 103.60860°E

Haploperla lepnevae Within Known Range? Y Nearest Occurrence: 119.08 KM 49.48086°N 104.30864°E

Suwallia kerzhneri Within Known Range? Y Nearest Occurrence: 41.97 KM 50.35162°N 105.04436°E

Family: Leuctridae

Paraleuctra zapekinae Within Known Range? Y Nearest Occurrence: 74.11 KM 49.71481°N 104.64203°E

Family: Nemouridae

Nemoura cinerea Within Known Range? Y Nearest Occurrence: 83.45 KM 49.68122°N 104.56461°E

Family: Perlidae

Agnetina brevipennis Within Known Range? Y Nearest Occurrence: 119.08 KM 49.48086°N 104.30864°E

Agnetina cocandica Within Known Range? Y Nearest Occurrence: 61.62 KM 50.10277°N 105.78217°E

Agnetina extrema Within Known Range? Y Nearest Occurrence: 170.99 KM 49.46450°N 106.66871°E

Family: Perlodidae

Isoperla asiatica Within Known Range? Y Nearest Occurrence: 161.14 KM 48.87748°N 106.12370°E

Isoperla kozlovi Within Known Range? Y Nearest Occurrence: 83.45 KM 49.68122°N 104.56461°E

Isoperla lunigera Within Known Range? Y Nearest Occurrence: 119.08 KM 49.48086°N 104.30864°E

Megarcys ochracea Within Known Range? Y Nearest Occurrence: 182.44 KM 49.77776°N 103.60860°E

Family: Pteronarcyidae

Pteronarcys reticulata Within Known Range? Y Nearest Occurrence: 250.83 KM 49.08643°N 107.28952°E

**LOE Rating: Probable Total: 7**

Family: Capniidae

Isocapnia sibirica Within Known Range? N Nearest Occurrence: 360.15 KM 48.09549°N 107.84265°E

Family: Chloroperlidae

Alloperla deminuta Within Known Range? Y Nearest Occurrence: 239.12 KM 49.70678°N 103.10288°E

Alloperla mediata Within Known Range? N Nearest Occurrence: 182.44 KM 49.77776°N 103.60860°E

Suwallia teleckojensis Within Known Range? Y Nearest Occurrence: 74.24 KM 49.71481°N 104.64203°E

Family: Perlodidae

Arcynopteryx sajanensis Within Known Range? N Nearest Occurrence: 544.77 KM 51.61397°N 100.59972°E

Pictetiella asiatica Within Known Range? N Nearest Occurrence: 552.71 KM 51.65822°N 100.53000°E

Family: Taeniopterygidae

Taenionema japonicum Within Known Range? Y Nearest Occurrence: 247.00 KM 49.05411°N 107.23175°E

**Basin:** Arctic Ocean Basin

**Aimags:** Selenge

**Soums:** Tsagaannuur

Freshwater Ecoregion: Lake Baikal

Terrestrial Ecoregion: Selenge-Orkhon Forest Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Possible Total: 6**

Family: Capniidae						
Isocapnia kudia	Within Known Range? N	Nearest Occurrence:	632.79 KM	51.25356 °N	99.66687 °E	
Family: Nemouridae						
Amphinemura standfussi	Within Known Range? Y	Nearest Occurrence:	261.87 KM	49.33339 °N	102.97786 °E	
Family: Perlidae						
Kamimuria exilis	Within Known Range? N	Nearest Occurrence:	710.90 KM	50.16278 °N	98.84212 °E	
Family: Perlodidae						
Diura bicaudata	Within Known Range? N	Nearest Occurrence:	627.49 KM	51.39852 °N	99.75011 °E	
Isoperla altaica	Within Known Range? Y	Nearest Occurrence:	161.43 KM	48.87748 °N	106.12370 °E	
Kaszbacia nigricauda	Within Known Range? Y	Nearest Occurrence:	241.08 KM	47.85250 °N	105.25567 °E	

**LOE Rating: Predicted Total: 13**

Family: Capniidae						
Capnia nigra	Within Known Range? N	Nearest Occurrence:	507.04 KM	50.92452 °N	100.75528 °E	
Mesocapnia variabilis	Within Known Range? Y	Nearest Occurrence:	347.33 KM	48.42080 °N	107.91406 °E	
Family: Chloroperlidae						
Alloperla joosti	Within Known Range? N	Nearest Occurrence:	239.12 KM	49.70678 °N	103.10288 °E	
Family: Leuctridae						
Leuctra fusca	Within Known Range? N	Nearest Occurrence:	250.83 KM	49.08643 °N	107.28952 °E	
Family: Nemouridae						
Nemoura arctica	Within Known Range? Y	Nearest Occurrence:	156.06 KM	49.65142 °N	103.88064 °E	
Nemoura sahlbergi	Within Known Range? Y	Nearest Occurrence:	163.06 KM	49.70184 °N	103.80040 °E	
Family: Perlodidae						
Arcynopteryx compacta	Within Known Range? Y	Nearest Occurrence:	118.50 KM	49.62414 °N	104.24594 °E	
Arcynopteryx polaris	Within Known Range? Y	Nearest Occurrence:	163.36 KM	49.70184 °N	103.80040 °E	
Diura majuscula	Within Known Range? Y	Nearest Occurrence:	335.33 KM	47.99158 °N	107.46116 °E	
Isoperla eximia	Within Known Range? N	Nearest Occurrence:	279.76 KM	49.01829 °N	107.54453 °E	
Isoperla mongolica	Within Known Range? N	Nearest Occurrence:	360.45 KM	48.09694 °N	107.83988 °E	
Isoperla potanini	Within Known Range? N	Nearest Occurrence:	379.47 KM	50.62324 °N	101.87412 °E	
Skwala pusilla	Within Known Range? N	Nearest Occurrence:	1,863.77 KM	48.51277 °N	88.51107 °E	

**LOE Rating: Unlikely Total: 3**

Family: Capniidae						
Capnia khulsbagia	Within Known Range? N	Nearest Occurrence:	512.40 KM	50.98944 °N	100.71944 °E	
Mesocapnia altaica	Within Known Range? N	Nearest Occurrence:	1,821.47 KM	48.43684 °N	88.90094 °E	
Family: Nemouridae						
Nemurella pictetii	Within Known Range? N	Nearest Occurrence:	624.35 KM	51.07896 °N	99.70857 °E	

Basin: Arctic Ocean Basin

Aimags: Selenge

Soums: Tushig

Freshwater Ecoregion: Lake Baikal

Terrestrial Ecoregion: Selenge-Orkhon Forest Steppe

WQM Sites:

WQM Sites: # 161 (Zelter River @ N 50.35083° E 105.03888°)

**LOE Rating: Highly Likely Total: 2**

Family: Chloroperlidae

Suwallia kerzhneri

Within Known Range? Y Nearest Occurrence: 17.63 KM 50.35162°N 105.04436°E

Family: Perlidae

Paragnetina flavotincta

Within Known Range? Y Nearest Occurrence: 17.63 KM 50.35162°N 105.04436°E

**LOE Rating: Likely Total: 14**

Family: Capniidae

Isocapnia guentheri

Within Known Range? Y Nearest Occurrence: 184.54 KM 49.77776°N 103.60860°E

Family: Chloroperlidae

Alloperla rostellata

Within Known Range? N Nearest Occurrence: 184.54 KM 49.77776°N 103.60860°E

Haploperla lepnevae

Within Known Range? Y Nearest Occurrence: 132.79 KM 49.48086°N 104.30864°E

Family: Leuctridae

Paraleuctra zapekinae

Within Known Range? Y Nearest Occurrence: 88.16 KM 49.71481°N 104.64203°E

Family: Nemouridae

Amphinemura borealis

Within Known Range? Y Nearest Occurrence: 34.68 KM 50.03638°N 105.37392°E

Family: Perlidae

Agnetina brevipennis

Within Known Range? Y Nearest Occurrence: 132.79 KM 49.48086°N 104.30864°E

Agnetina cocandica

Within Known Range? Y Nearest Occurrence: 68.98 KM 50.10277°N 105.78217°E

Agnetina extrema

Within Known Range? Y Nearest Occurrence: 187.90 KM 49.46450°N 106.66871°E

Family: Perlodidae

Isoperla asiatica

Within Known Range? Y Nearest Occurrence: 187.85 KM 48.87748°N 106.12370°E

Isoperla kozlovi

Within Known Range? Y Nearest Occurrence: 96.86 KM 49.68122°N 104.56461°E

Isoperla lunigera

Within Known Range? Y Nearest Occurrence: 132.79 KM 49.48086°N 104.30864°E

Isoperla obscura

Within Known Range? Y Nearest Occurrence: 68.86 KM 50.10277°N 105.78217°E

Megarcys ochracea

Within Known Range? Y Nearest Occurrence: 184.54 KM 49.77776°N 103.60860°E

Family: Pteronarcyidae

Pteronarcys reticulata

Within Known Range? Y Nearest Occurrence: 268.54 KM 49.08643°N 107.28952°E

**LOE Rating: Probable Total: 9**

Family: Capniidae

Isocapnia kudia

Within Known Range? N Nearest Occurrence: 622.39 KM 51.25356°N 99.66687°E

Isocapnia sibirica

Within Known Range? N Nearest Occurrence: 382.05 KM 48.09549°N 107.84265°E

Family: Chloroperlidae

Alloperla deminuta

Within Known Range? Y Nearest Occurrence: 240.57 KM 49.70678°N 103.10288°E

Alloperla mediata

Within Known Range? N Nearest Occurrence: 184.54 KM 49.77776°N 103.60860°E

Suwallia teleckojensis

Within Known Range? Y Nearest Occurrence: 88.33 KM 49.71481°N 104.64203°E

Family: Nemouridae

Nemoura cinerea

Within Known Range? N Nearest Occurrence: 96.86 KM 49.68122°N 104.56461°E

Family: Perlodidae

Arcynopteryx sajanensis

Within Known Range? N Nearest Occurrence: 531.33 KM 51.61397°N 100.59972°E

Pictetiella asiatica

Within Known Range? N Nearest Occurrence: 539.17 KM 51.65822°N 100.53000°E

Family: Taeniopterygidae

Taenionema japonicum

Within Known Range? Y Nearest Occurrence: 265.31 KM 49.05411°N 107.23175°E



**Basin:** Arctic Ocean Basin  
**Aimag:** Selenge  
**Soum:** Tushig

Freshwater Ecoregion: Lake Baikal  
 Terrestrial Ecoregion: Selenge-Orkhon Forest Steppe

**WQM Sites:**

WQM Sites: # 161 (Zelter River @ N 50.35083° E 105.03888°)

<b>LOE Rating:</b>	<b>Possible</b>	<b>Total:</b>	<b>5</b>
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Family: Chloroperlidae					
Alloperla joosti	Within Known Range? N	Nearest Occurrence:	240.57 KM	49.70678 °N	103.10288 °E
Family: Nemouridae					
Amphinemura standfussi	Within Known Range? Y	Nearest Occurrence:	267.54 KM	49.33339 °N	102.97786 °E
Family: Perlidae					
Kamimuria exilis	Within Known Range? N	Nearest Occurrence:	706.09 KM	50.16278 °N	98.84212 °E
Family: Perlodidae					
Diura bicaudata	Within Known Range? N	Nearest Occurrence:	616.30 KM	51.39852 °N	99.75011 °E
Isoperla altaica	Within Known Range? Y	Nearest Occurrence:	188.19 KM	48.87748 °N	106.12370 °E

<b>LOE Rating:</b>	<b>Predicted</b>	<b>Total:</b>	<b>15</b>
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Family: Capniidae					
Capnia khulsbagia	Within Known Range? N	Nearest Occurrence:	501.61 KM	51.16116 °N	100.75636 °E
Capnia nigra	Within Known Range? N	Nearest Occurrence:	497.33 KM	50.92452 °N	100.75528 °E
Mesocapnia variabilis	Within Known Range? Y	Nearest Occurrence:	367.28 KM	48.42080 °N	107.91406 °E
Family: Chloroperlidae					
Alaskaperla longidentata	Within Known Range? Y	Nearest Occurrence:	40.46 KM	49.95588 °N	105.33791 °E
Family: Leuctridae					
Leuctra fusca	Within Known Range? N	Nearest Occurrence:	265.98 KM	49.75393 °N	107.52609 °E
Family: Nemouridae					
Nemoura arctica	Within Known Range? Y	Nearest Occurrence:	162.02 KM	49.65142 °N	103.88064 °E
Nemoura sahlbergi	Within Known Range? Y	Nearest Occurrence:	167.51 KM	49.70184 °N	103.80040 °E
Family: Perlodidae					
Arcynopteryx compacta	Within Known Range? N	Nearest Occurrence:	128.47 KM	49.62414 °N	104.24594 °E
Arcynopteryx polaris	Within Known Range? Y	Nearest Occurrence:	167.82 KM	49.70184 °N	103.80040 °E
Diura majuscula	Within Known Range? N	Nearest Occurrence:	359.22 KM	47.99158 °N	107.46116 °E
Isoperla eximia	Within Known Range? N	Nearest Occurrence:	296.95 KM	49.01829 °N	107.54453 °E
Isoperla mongolica	Within Known Range? N	Nearest Occurrence:	382.40 KM	48.09694 °N	107.83988 °E
Isoperla potanini	Within Known Range? N	Nearest Occurrence:	370.65 KM	50.62324 °N	101.87412 °E
Kaszabia nigricauda	Within Known Range? N	Nearest Occurrence:	270.58 KM	47.85250 °N	105.25567 °E
Skwala pusilla	Within Known Range? N	Nearest Occurrence:	1,861.89 KM	48.51277 °N	88.51107 °E

<b>LOE Rating:</b>	<b>Unlikely</b>	<b>Total:</b>	<b>2</b>
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Family: Capniidae					
Mesocapnia altaica	Within Known Range? N	Nearest Occurrence:	1,819.79 KM	48.43684 °N	88.90094 °E
Family: Nemouridae					
Nemurella pictetii	Within Known Range? N	Nearest Occurrence:	614.77 KM	51.07896 °N	99.70857 °E



**Basin:** Arctic Ocean Basin  
**Aimag:** Selenge  
**Soum:** Yeroo

**Freshwater Ecoregion:** Lake Baikal  
**Terrestrial Ecoregion:** Trans-Baikal Conifer Forests

**WQM Sites:**

WQM Sites: # 45 (Eroo River @ N 49.7212° E 106.65553°) # 46  
 (Bugant River @ N 49.43268° E 107.28335°) # 47 (Bayan gol River  
 @ N 49.61137° E 106.91127°)

<b>LOE Rating:</b>	<b>Highly Likely</b>	<b>Total:</b>	<b>4</b>
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Family: Chloroperlidae						
Haploperla lepnevae	Within Known Range? Y	Nearest Occurrence:	37.30 KM	49.08636°N	107.30750°E	
Family: Nemouridae						
Amphinemura borealis	Within Known Range? Y	Nearest Occurrence:	37.30 KM	49.08636°N	107.30750°E	
Family: Perlidae						
Agnatina brevipennis	Within Known Range? Y	Nearest Occurrence:	37.01 KM	49.09064°N	107.30481°E	
Agnatina extrema	Within Known Range? Y	Nearest Occurrence:	19.83 KM	49.43488°N	107.28036°E	

<b>LOE Rating:</b>	<b>Likely</b>	<b>Total:</b>	<b>13</b>
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Family: Capniidae						
Isocapnia guentheri	Within Known Range? Y	Nearest Occurrence:	70.59 KM	49.08405°N	106.89521°E	
Family: Chloroperlidae						
Alloperla deminuta	Within Known Range? Y	Nearest Occurrence:	36.09 KM	49.06472°N	107.47257°E	
Suwallia kerzhneri	Within Known Range? Y	Nearest Occurrence:	38.85 KM	49.73695°N	107.49285°E	
Suwallia teleckojensis	Within Known Range? Y	Nearest Occurrence:	66.82 KM	49.03282°N	106.96935°E	
Family: Leuctridae						
Leuctra fusca	Within Known Range? Y	Nearest Occurrence:	38.20 KM	49.08643°N	107.28952°E	
Paraleuctra zapekinae	Within Known Range? N	Nearest Occurrence:	146.87 KM	48.14846°N	107.91267°E	
Family: Perlodidae						
Isoperla asiatica	Within Known Range? Y	Nearest Occurrence:	42.41 KM	49.01829°N	107.54453°E	
Isoperla kozlovi	Within Known Range? Y	Nearest Occurrence:	37.30 KM	49.08636°N	107.30750°E	
Isoperla lunigera	Within Known Range? Y	Nearest Occurrence:	37.30 KM	49.08636°N	107.30750°E	
Isoperla obscura	Within Known Range? Y	Nearest Occurrence:	95.92 KM	49.72192°N	106.65562°E	
Megarcys ochracea	Within Known Range? Y	Nearest Occurrence:	66.70 KM	49.03282°N	106.96935°E	
Family: Pteronarcyidae						
Pteronarcys reticulata	Within Known Range? Y	Nearest Occurrence:	37.30 KM	49.08636°N	107.30750°E	
Family: Taeniopterygidae						
Taenionema japonicum	Within Known Range? Y	Nearest Occurrence:	44.66 KM	49.05411°N	107.23175°E	

<b>LOE Rating:</b>	<b>Probable</b>	<b>Total:</b>	<b>6</b>
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Family: Capniidae						
Isocapnia sibirica	Within Known Range? N	Nearest Occurrence:	149.97 KM	48.09549°N	107.84265°E	
Family: Chloroperlidae						
Alloperla rostellata	Within Known Range? N	Nearest Occurrence:	428.91 KM	49.77776°N	103.60860°E	
Family: Nemouridae						
Nemoura cinerea	Within Known Range? N	Nearest Occurrence:	158.54 KM	47.96783°N	107.59278°E	
Family: Perlidae						
Agnatina cocandica	Within Known Range? Y	Nearest Occurrence:	164.81 KM	50.06476°N	106.13388°E	
Family: Perlodidae						
Isoperla altaica	Within Known Range? Y	Nearest Occurrence:	97.72 KM	48.60182°N	107.84335°E	
Kaszabia nigricauda	Within Known Range? N	Nearest Occurrence:	135.05 KM	48.25861°N	107.90251°E	



**Basin:** Arctic Ocean Basin  
**Aimags:** Selenge  
**Soums:** Yeroo

**Freshwater Ecoregion:** Lake Baikal  
**Terrestrial Ecoregion:** Trans-Baikal Conifer Forests

**WQM Sites:**

WQM Sites: # 45 (Eroo River @ N 49.7212° E 106.65553°) # 46 (Bugant River @ N 49.43268° E 107.28335°) # 47 (Bayan gol River @ N 49.61137° E 106.91127°)

<b>LOE Rating:</b>	<b>Possible</b>	<b>Total:</b>	<b>9</b>
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<b>Family:</b> Capniidae						
	Isocapnia kudia	Within Known Range? N	Nearest Occurrence:	888.70 KM	51.25356°N	99.66687°E
<b>Family:</b> Chloroperlidae						
	Alaskaperla longidentata	Within Known Range? Y	Nearest Occurrence:	43.00 KM	49.73130°N	107.63484°E
	Alloperla mediata	Within Known Range? N	Nearest Occurrence:	428.91 KM	49.77776°N	103.60860°E
<b>Family:</b> Nemouridae						
	Amphinemura standfussi	Within Known Range? Y	Nearest Occurrence:	43.00 KM	49.73130°N	107.63484°E
<b>Family:</b> Perlidae						
	Kamimuria exilis	Within Known Range? N	Nearest Occurrence:	961.40 KM	50.16278°N	98.84212°E
	Paragnetina flavotincta	Within Known Range? N	Nearest Occurrence:	164.52 KM	50.06476°N	106.13388°E
<b>Family:</b> Perlodidae						
	Arcynopteryx sajanensis	Within Known Range? N	Nearest Occurrence:	801.25 KM	51.61397°N	100.59972°E
	Diura bicaudata	Within Known Range? N	Nearest Occurrence:	869.35 KM	47.21768°N	99.92824°E
	Pictetiella asiatica	Within Known Range? N	Nearest Occurrence:	808.69 KM	51.65822°N	100.53000°E

<b>LOE Rating:</b>	<b>Predicted</b>	<b>Total:</b>	<b>12</b>
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<b>Family:</b> Capniidae						
	Capnia nigra	Within Known Range? N	Nearest Occurrence:	762.74 KM	50.92452°N	100.75528°E
	Mesocapnia variabilis	Within Known Range? Y	Nearest Occurrence:	119.27 KM	48.42080°N	107.91406°E
<b>Family:</b> Chloroperlidae						
	Alloperla joosti	Within Known Range? N	Nearest Occurrence:	482.74 KM	49.21675°N	103.10750°E
<b>Family:</b> Nemouridae						
	Nemoura arctica	Within Known Range? Y	Nearest Occurrence:	135.29 KM	48.25861°N	107.90251°E
	Nemoura sahlbergi	Within Known Range? N	Nearest Occurrence:	138.34 KM	48.16668°N	107.69548°E
<b>Family:</b> Perlodidae						
	Arcynopteryx compacta	Within Known Range? N	Nearest Occurrence:	172.27 KM	47.84324°N	107.55299°E
	Arcynopteryx polaris	Within Known Range? Y	Nearest Occurrence:	119.27 KM	48.42080°N	107.91406°E
	Diura majuscula	Within Known Range? N	Nearest Occurrence:	149.00 KM	48.13287°N	107.91890°E
	Isoperla eximia	Within Known Range? Y	Nearest Occurrence:	42.41 KM	49.01829°N	107.54453°E
	Isoperla mongolica	Within Known Range? N	Nearest Occurrence:	150.00 KM	48.09694°N	107.83988°E
	Isoperla potanini	Within Known Range? N	Nearest Occurrence:	635.38 KM	50.62324°N	101.87412°E
	Skwala pusilla	Within Known Range? N	Nearest Occurrence:	2,104.82 KM	48.51277°N	88.51107°E

<b>LOE Rating:</b>	<b>Unlikely</b>	<b>Total:</b>	<b>3</b>
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<b>Family:</b> Capniidae						
	Capnia khulsbagia	Within Known Range? N	Nearest Occurrence:	768.25 KM	50.98944°N	100.71944°E
	Mesocapnia altaica	Within Known Range? N	Nearest Occurrence:	2,062.00 KM	48.43684°N	88.90094°E
<b>Family:</b> Nemouridae						
	Nemurella pictetii	Within Known Range? N	Nearest Occurrence:	879.87 KM	51.07896°N	99.70857°E



**Basin:** Arctic Ocean Basin  
**Aimags:** Selenge  
**Soums:** Zuunburen

Freshwater Ecoregion: Lake Baikal  
 Terrestrial Ecoregion: Selenge-Orkhon Forest Steppe

**WQM Sites:**

WQM Sites: # 44 (Orhon River @ N 50.24048° E 106.17328°)

**LOE Rating: Highly Likely Total: 11**

Family: Chloroperlidae					
Haploperla lepnevae	Within Known Range? Y	Nearest Occurrence:	105.73 KM	49.61985°N	106.82693°E
Suwallia kerzhneri	Within Known Range? Y	Nearest Occurrence:	108.26 KM	50.35162°N	105.04436°E
Family: Leuctridae					
Paraleuctra zapekinae	Within Known Range? Y	Nearest Occurrence:	145.95 KM	49.71481°N	104.64203°E
Family: Nemouridae					
Amphinemura borealis	Within Known Range? Y	Nearest Occurrence:	62.94 KM	50.03638°N	105.37392°E
Family: Perlidae					
Agnetina brevipennis	Within Known Range? Y	Nearest Occurrence:	105.73 KM	49.61985°N	106.82693°E
Agnetina cocandica	Within Known Range? Y	Nearest Occurrence:	23.71 KM	50.10277°N	105.78217°E
Agnetina extrema	Within Known Range? Y	Nearest Occurrence:	97.91 KM	49.46450°N	106.66871°E
Paragnetina flavotincta	Within Known Range? Y	Nearest Occurrence:	23.67 KM	50.10277°N	105.78217°E
Family: Perlodidae					
Isoperla lunigera	Within Known Range? Y	Nearest Occurrence:	105.73 KM	49.61985°N	106.82693°E
Isoperla obscura	Within Known Range? Y	Nearest Occurrence:	23.67 KM	50.10277°N	105.78217°E
Family: Pteronarcyidae					
Pteronarcys reticulata	Within Known Range? Y	Nearest Occurrence:	178.55 KM	49.08643°N	107.28952°E

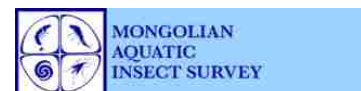
**LOE Rating: Likely Total: 7**

Family: Capniidae					
Isocapnia guentheri	Within Known Range? Y	Nearest Occurrence:	143.83 KM	49.08405°N	106.89521°E
Isocapnia sibirica	Within Known Range? N	Nearest Occurrence:	295.63 KM	48.09549°N	107.84265°E
Family: Chloroperlidae					
Alloperla deminuta	Within Known Range? Y	Nearest Occurrence:	174.60 KM	49.73695°N	107.49285°E
Alloperla rostellata	Within Known Range? N	Nearest Occurrence:	258.96 KM	49.77776°N	103.60860°E
Family: Perlodidae					
Isoperla asiatica	Within Known Range? Y	Nearest Occurrence:	121.32 KM	48.87748°N	106.12370°E
Isoperla kozlovi	Within Known Range? Y	Nearest Occurrence:	121.32 KM	48.87748°N	106.12370°E
Megarcys ochracea	Within Known Range? Y	Nearest Occurrence:	153.75 KM	49.03282°N	106.96935°E

**LOE Rating: Probable Total: 7**

Family: Capniidae					
Isocapnia kudia	Within Known Range? N	Nearest Occurrence:	710.55 KM	51.25356°N	99.66687°E
Family: Chloroperlidae					
Alloperla mediata	Within Known Range? N	Nearest Occurrence:	258.96 KM	49.77776°N	103.60860°E
Suwallia teleckojensis	Within Known Range? Y	Nearest Occurrence:	146.21 KM	49.71481°N	104.64203°E
Family: Nemouridae					
Nemoura cinerea	Within Known Range? N	Nearest Occurrence:	155.09 KM	49.68122°N	104.56461°E
Family: Perlodidae					
Arcynopteryx sajanensis	Within Known Range? N	Nearest Occurrence:	621.33 KM	51.61397°N	100.59972°E
Pictetiella asiatica	Within Known Range? N	Nearest Occurrence:	629.07 KM	51.65822°N	100.53000°E
Family: Taeniopterygidae					
Taenionema japonicum	Within Known Range? Y	Nearest Occurrence:	175.52 KM	49.05411°N	107.23175°E

Research funded by the National Science Foundation  
 DEB-BSI #0206674: A Survey of the Aquatic Insects of the Selenge River Basin. P.I.'s: JKGelhaus, JCMorse, BHayford.  
 DEB # 0743732: Aquatic Insects of the Altai and Hangai Mountain Drainages. P.I.'s: JKGelhaus, JCMorse, CRNelson.  
<http://clade.ansp.org/entomology/mongolia/index.html>



**Basin:** Arctic Ocean Basin

**Aimag:** Selenge

**Soum:** Zuunburen

Freshwater Ecoregion: Lake Baikal

Terrestrial Ecoregion: Selenge-Orkhon Forest Steppe

**WQM Sites:**

WQM Sites: # 44 (Orhon River @ N 50.24048° E 106.17328°)

**LOE Rating: Possible Total: 6**

Family: Chloroperlidae					
Alaskaperla longidentata	Within Known Range? Y	Nearest Occurrence:	66.27 KM	49.95588°N	105.33791°E
Family: Leuctridae					
Leuctra fusca	Within Known Range? N	Nearest Occurrence:	178.01 KM	49.75393°N	107.52609°E
Family: Nemouridae					
Amphinemura standfussi	Within Known Range? Y	Nearest Occurrence:	190.30 KM	49.73130°N	107.63484°E
Family: Perlidae					
Kamimuria exilis	Within Known Range? N	Nearest Occurrence:	789.06 KM	50.16278°N	98.84212°E
Family: Perlodidae					
Isoperla altaica	Within Known Range? Y	Nearest Occurrence:	121.54 KM	48.87748°N	106.12370°E
Kaszabia nigricauda	Within Known Range? N	Nearest Occurrence:	245.15 KM	47.85250°N	105.25567°E

**LOE Rating: Predicted Total: 13**

Family: Capniidae					
Capnia nigra	Within Known Range? N	Nearest Occurrence:	584.95 KM	50.92452°N	100.75528°E
Mesocapnia variabilis	Within Known Range? Y	Nearest Occurrence:	278.39 KM	48.42080°N	107.91406°E
Family: Chloroperlidae					
Alloperla joosti	Within Known Range? N	Nearest Occurrence:	315.56 KM	49.70678°N	103.10288°E
Family: Nemouridae					
Nemoura arctica	Within Known Range? Y	Nearest Occurrence:	230.90 KM	49.65142°N	103.88064°E
Nemoura sahlbergi	Within Known Range? Y	Nearest Occurrence:	238.58 KM	49.70184°N	103.80040°E
Family: Perlodidae					
Arcynopteryx compacta	Within Known Range? N	Nearest Occurrence:	191.37 KM	49.62414°N	104.24594°E
Arcynopteryx polaris	Within Known Range? Y	Nearest Occurrence:	239.01 KM	49.70184°N	103.80040°E
Diura bicaudata	Within Known Range? N	Nearest Occurrence:	704.99 KM	51.39852°N	99.75011°E
Diura majuscula	Within Known Range? N	Nearest Occurrence:	276.45 KM	47.99158°N	107.46116°E
Isoperla eximia	Within Known Range? N	Nearest Occurrence:	206.66 KM	49.01829°N	107.54453°E
Isoperla mongolica	Within Known Range? N	Nearest Occurrence:	295.83 KM	48.09694°N	107.83988°E
Isoperla potanini	Within Known Range? N	Nearest Occurrence:	457.66 KM	50.62324°N	101.87412°E
Skwala pusilla	Within Known Range? N	Nearest Occurrence:	1,940.66 KM	48.51277°N	88.51107°E

**LOE Rating: Unlikely Total: 3**

Family: Capniidae					
Capnia khulsbagia	Within Known Range? N	Nearest Occurrence:	590.22 KM	50.98944°N	100.71944°E
Mesocapnia altaica	Within Known Range? N	Nearest Occurrence:	1,898.26 KM	48.43684°N	88.90094°E
Family: Nemouridae					
Nemurella pictetii	Within Known Range? N	Nearest Occurrence:	702.32 KM	51.07896°N	99.70857°E

Basin: Arctic Ocean Basin

Aimags: Tov

Soums: Altanbulag

Freshwater Ecoregion: Lake Baikal

Terrestrial Ecoregion: Daurian Forest Steppe

WQM Sites:

WQM Sites: # 166 (Tuul River @ N 47.69282° E 106.3246°)

**LOE Rating: Highly Likely Total: 8**

Family: Capniidae					
Isocapnia guentheri	Within Known Range? Y	Nearest Occurrence:	104.17 KM	47.88349°N	106.98829°E
Isocapnia sibirica	Within Known Range? Y	Nearest Occurrence:	200.60 KM	48.09549°N	107.84265°E
Family: Chloroperlidae					
Alloperla deminuta	Within Known Range? Y	Nearest Occurrence:	137.58 KM	47.82258°N	107.33613°E
Suwallia kerzhneri	Within Known Range? Y	Nearest Occurrence:	171.70 KM	48.12416°N	107.54780°E
Family: Leuctridae					
Paraleuctra zapekinae	Within Known Range? N	Nearest Occurrence:	156.96 KM	47.99158°N	107.46116°E
Family: Perlidae					
Agnetina extrema	Within Known Range? Y	Nearest Occurrence:	135.24 KM	48.50028°N	106.78434°E
Family: Perlodidae					
Isoperla kozlovi	Within Known Range? Y	Nearest Occurrence:	108.55 KM	47.85250°N	105.25567°E
Kaszabia nigricauda	Within Known Range? Y	Nearest Occurrence:	108.55 KM	47.85250°N	105.25567°E

**LOE Rating: Likely Total: 14**

Family: Capniidae					
Isocapnia kudia	Within Known Range? N	Nearest Occurrence:	833.91 KM	51.25356°N	99.66687°E
Family: Chloroperlidae					
Alaskaperla longidentata	Within Known Range? Y	Nearest Occurrence:	171.70 KM	48.12416°N	107.54780°E
Alloperla rostellata	Within Known Range? N	Nearest Occurrence:	381.93 KM	49.77776°N	103.60860°E
Haploperla lepnevae	Within Known Range? Y	Nearest Occurrence:	137.58 KM	47.82258°N	107.33613°E
Suwallia teleckojensis	Within Known Range? Y	Nearest Occurrence:	135.49 KM	48.50028°N	106.78434°E
Family: Nemouridae					
Amphinemura borealis	Within Known Range? Y	Nearest Occurrence:	137.58 KM	47.82258°N	107.33613°E
Nemoura arctica	Within Known Range? Y	Nearest Occurrence:	93.34 KM	47.77758°N	106.92780°E
Nemoura cinerea	Within Known Range? Y	Nearest Occurrence:	169.69 KM	47.96783°N	107.59278°E
Family: Perlodidae					
Arcynopteryx sajanensis	Within Known Range? N	Nearest Occurrence:	771.05 KM	51.61397°N	100.59972°E
Diura majuscula	Within Known Range? Y	Nearest Occurrence:	157.24 KM	47.99158°N	107.46116°E
Isoperla asiatica	Within Known Range? Y	Nearest Occurrence:	139.45 KM	47.82110°N	107.35422°E
Isoperla lunigera	Within Known Range? Y	Nearest Occurrence:	139.45 KM	47.82110°N	107.35422°E
Pictetiella asiatica	Within Known Range? N	Nearest Occurrence:	778.80 KM	51.65822°N	100.53000°E
Family: Pteronarcyidae					
Pteronarcys reticulata	Within Known Range? N	Nearest Occurrence:	220.42 KM	49.08643°N	107.28952°E

**LOE Rating: Probable Total: 4**

Family: Perlidae					
Agnetina brevipennis	Within Known Range? N	Nearest Occurrence:	191.19 KM	49.10740°N	106.65177°E
Agnetina cocandica	Within Known Range? N	Nearest Occurrence:	217.63 KM	49.16354°N	105.18880°E
Kamimuria exilis	Within Known Range? N	Nearest Occurrence:	866.57 KM	50.16278°N	98.84212°E
Family: Perlodidae					
Megarcys ochracea	Within Known Range? N	Nearest Occurrence:	156.96 KM	47.99158°N	107.46116°E

Basin: Arctic Ocean Basin

Aimags: Tov

Soums: Altanbulag

Freshwater Ecoregion: Lake Baikal

Terrestrial Ecoregion: Daurian Forest Steppe

WQM Sites:

WQM Sites: # 166 (Tuul River @ N 47.69282° E 106.3246°)

**LOE Rating: Possible Total: 5**

Family: Chloroperlidae

Alloperla joosti

Within Known Range? N Nearest Occurrence: 390.11 KM 49.21675°N 103.10750°E

Family: Perlodidae

Diura bicaudata

Within Known Range? N Nearest Occurrence: 691.26 KM 47.21768°N 99.92824°E

Isoperla altaica

Within Known Range? N Nearest Occurrence: 157.72 KM 48.87748°N 106.12370°E

Isoperla obscura

Within Known Range? N Nearest Occurrence: 108.55 KM 47.85250°N 105.25567°E

Family: Taeniopterygidae

Taenionema japonicum

Within Known Range? N Nearest Occurrence: 214.22 KM 49.05411°N 107.23175°E

**LOE Rating: Predicted Total: 13**

Family: Capniidae

Capnia nigra

Within Known Range? N Nearest Occurrence: 711.81 KM 50.92452°N 100.75528°E

Mesocapnia variabilis

Within Known Range? Y Nearest Occurrence: 223.30 KM 48.42080°N 107.91406°E

Family: Chloroperlidae

Alloperla mediata

Within Known Range? N Nearest Occurrence: 381.93 KM 49.77776°N 103.60860°E

Family: Leuctridae

Leuctra fusca

Within Known Range? N Nearest Occurrence: 220.42 KM 49.08643°N 107.28952°E

Family: Nemouridae

Amphinemura standfussi

Within Known Range? N Nearest Occurrence: 301.20 KM 49.73130°N 107.63484°E

Nemoura sahlbergi

Within Known Range? N Nearest Occurrence: 188.55 KM 48.16668°N 107.69548°E

Family: Perlidae

Paragnetina flavotincta

Within Known Range? N Nearest Occurrence: 217.24 KM 49.16354°N 105.18880°E

Family: Perlodidae

Arcynopteryx compacta

Within Known Range? Y Nearest Occurrence: 161.63 KM 47.84324°N 107.55299°E

Arcynopteryx polaris

Within Known Range? Y Nearest Occurrence: 223.30 KM 48.42080°N 107.91406°E

Isoperla eximia

Within Known Range? N Nearest Occurrence: 226.64 KM 48.60182°N 107.84335°E

Isoperla mongolica

Within Known Range? Y Nearest Occurrence: 200.73 KM 48.09694°N 107.83988°E

Isoperla potanini

Within Known Range? N Nearest Occurrence: 481.17 KM 46.73093°N 101.88583°E

Skwala pusilla

Within Known Range? N Nearest Occurrence: 1,961.53 KM 48.51277°N 88.51107°E

**LOE Rating: Unlikely Total: 3**

Family: Capniidae

Capnia khulsbagia

Within Known Range? N Nearest Occurrence: 719.06 KM 50.98944°N 100.71944°E

Mesocapnia altaica

Within Known Range? N Nearest Occurrence: 1,917.84 KM 48.43684°N 88.90094°E

Family: Nemouridae

Nemurella pictetii

Within Known Range? N Nearest Occurrence: 820.26 KM 51.07896°N 99.70857°E

Basin: Arctic Ocean Basin

Aimags: Tov

Soums: Argalant

Freshwater Ecoregion: Lake Baikal

Terrestrial Ecoregion: Mongolian-Manchurian Grassland

WQM Sites:

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Highly Likely Total: 9**

Family: Capniidae

Isocapnia guentheri

Within Known Range? Y Nearest Occurrence: 99.79 KM 47.88349°N 106.98829 °E

Isocapnia sibirica

Within Known Range? Y Nearest Occurrence: 196.03 KM 48.09549°N 107.84265 °E

Family: Chloroperlidae

Alloperla deminuta

Within Known Range? Y Nearest Occurrence: 138.57 KM 47.82258°N 107.33613 °E

Suwallia kerzhneri

Within Known Range? Y Nearest Occurrence: 164.07 KM 48.12416°N 107.54780 °E

Suwallia teleckojensis

Within Known Range? Y Nearest Occurrence: 103.27 KM 48.50028°N 106.78434 °E

Family: Leuctridae

Paraleuctra zapekinae

Within Known Range? Y Nearest Occurrence: 152.75 KM 47.99158°N 107.46116 °E

Family: Perlidae

Agnetina extrema

Within Known Range? Y Nearest Occurrence: 103.08 KM 48.50028°N 106.78434 °E

Family: Perlodidae

Isoperla kozlovi

Within Known Range? Y Nearest Occurrence: 92.60 KM 47.85250°N 105.25567 °E

Kaszabia nigricauda

Within Known Range? Y Nearest Occurrence: 92.60 KM 47.85250°N 105.25567 °E

**LOE Rating: Likely Total: 13**

Family: Capniidae

Isocapnia kudia

Within Known Range? N Nearest Occurrence: 805.02 KM 51.25356°N 99.66687 °E

Family: Chloroperlidae

Alaskaperla longidentata

Within Known Range? Y Nearest Occurrence: 164.07 KM 48.12416°N 107.54780 °E

Alloperla rostellata

Within Known Range? N Nearest Occurrence: 346.39 KM 49.77776°N 103.60860 °E

Haploperla lepnevae

Within Known Range? Y Nearest Occurrence: 110.30 KM 48.87748°N 106.12370 °E

Family: Nemouridae

Amphinemura borealis

Within Known Range? Y Nearest Occurrence: 138.57 KM 47.82258°N 107.33613 °E

Nemoura arctica

Within Known Range? Y Nearest Occurrence: 94.00 KM 47.77758°N 106.92780 °E

Nemoura cinerea

Within Known Range? Y Nearest Occurrence: 167.15 KM 47.96783°N 107.59278 °E

Family: Perlodidae

Arcynopteryx sajanensis

Within Known Range? N Nearest Occurrence: 737.99 KM 51.61397°N 100.59972 °E

Diura majuscula

Within Known Range? Y Nearest Occurrence: 153.02 KM 47.99158°N 107.46116 °E

Isoperla asiatica

Within Known Range? Y Nearest Occurrence: 110.30 KM 48.87748°N 106.12370 °E

Isoperla lunigera

Within Known Range? Y Nearest Occurrence: 110.30 KM 48.87748°N 106.12370 °E

Pictetiella asiatica

Within Known Range? N Nearest Occurrence: 745.82 KM 51.65822°N 100.53000 °E

Family: Pteronarcyidae

Pteronarcys reticulata

Within Known Range? N Nearest Occurrence: 188.55 KM 49.08643°N 107.28952 °E

**LOE Rating: Probable Total: 5**

Family: Perlidae

Agnetina brevipennis

Within Known Range? Y Nearest Occurrence: 149.42 KM 49.10740°N 106.65177 °E

Agnetina cocandica

Within Known Range? Y Nearest Occurrence: 173.95 KM 49.16354°N 105.18880 °E

Kamimuria exilis

Within Known Range? N Nearest Occurrence: 844.77 KM 50.16278°N 98.84212 °E

Family: Perlodidae

Megarcys ochracea

Within Known Range? Y Nearest Occurrence: 152.75 KM 47.99158°N 107.46116 °E

Family: Taeniopterygidae

Taenionema japonicum

Within Known Range? N Nearest Occurrence: 181.82 KM 49.05411°N 107.23175 °E

Research funded by the National Science Foundation  
DEB-BSI #0206674: A Survey of the Aquatic Insects of the Selenge River Basin. P.I.'s: JKGelhaus, JCMorse, BHayford.  
DEB # 0743732: Aquatic Insects of the Altai and Hangai Mountain Drainages. P.I.'s: JKGelhaus, JCMorse, CRNelson.  
<http://clade.ansp.org/entomology/mongolia/index.html>





Basin: Arctic Ocean Basin

Aimag: Tov

Soum: Argalant

Freshwater Ecoregion: Lake Baikal

Terrestrial Ecoregion: Mongolian-Manchurian Grassland

WQM Sites:

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Possible Total: 4**

Family: Chloroperlidae

Alloperla joosti Within Known Range? N Nearest Occurrence: 362.51 KM 49.21675°N 103.10750°E

Family: Perlodidae

Diura bicaudata Within Known Range? N Nearest Occurrence: 687.86 KM 47.21768°N 99.92824°E

Isoperla altaica Within Known Range? Y Nearest Occurrence: 110.50 KM 48.87748°N 106.12370°E

Isoperla obscura Within Known Range? Y Nearest Occurrence: 92.60 KM 47.85250°N 105.25567°E

**LOE Rating: Predicted Total: 13**

Family: Capniidae

Capnia nigra Within Known Range? N Nearest Occurrence: 681.48 KM 50.92452°N 100.75528°E

Mesocapnia variabilis Within Known Range? Y Nearest Occurrence: 211.50 KM 48.42080°N 107.91406°E

Family: Chloroperlidae

Alloperla mediata Within Known Range? N Nearest Occurrence: 346.39 KM 49.77776°N 103.60860°E

Family: Leuctridae

Leuctra fusca Within Known Range? N Nearest Occurrence: 188.55 KM 49.08643°N 107.28952°E

Family: Nemouridae

Amphinemura standfussi Within Known Range? N Nearest Occurrence: 267.32 KM 49.73130°N 107.63484°E

Nemoura sahlbergi Within Known Range? Y Nearest Occurrence: 181.02 KM 48.16668°N 107.69548°E

Family: Perlidae

Paragnetina flavotincta Within Known Range? N Nearest Occurrence: 173.64 KM 49.16354°N 105.18880°E

Family: Perlodidae

Arcynopteryx compacta Within Known Range? Y Nearest Occurrence: 162.83 KM 47.84324°N 107.55299°E

Arcynopteryx polaris Within Known Range? Y Nearest Occurrence: 211.50 KM 48.42080°N 107.91406°E

Isoperla eximia Within Known Range? N Nearest Occurrence: 204.78 KM 49.01829°N 107.54453°E

Isoperla mongolica Within Known Range? Y Nearest Occurrence: 196.10 KM 48.09694°N 107.83988°E

Isoperla potanini Within Known Range? N Nearest Occurrence: 481.58 KM 47.26999°N 101.80227°E

Skwala pusilla Within Known Range? N Nearest Occurrence: 1,952.42 KM 48.51277°N 88.51107°E

**LOE Rating: Unlikely Total: 3**

Family: Capniidae

Capnia khulsbagia Within Known Range? N Nearest Occurrence: 688.52 KM 50.98944°N 100.71944°E

Mesocapnia altaica Within Known Range? N Nearest Occurrence: 1,908.89 KM 48.43684°N 88.90094°E

Family: Nemouridae

Nemurella pictetii Within Known Range? N Nearest Occurrence: 792.06 KM 51.07896°N 99.70857°E

Basin: Arctic Ocean Basin

Aimag: Tov

Soum: Batsumber

Freshwater Ecoregion: Lake Baikal

Terrestrial Ecoregion: Daurian Forest Steppe

WQM Sites:

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Highly Likely Total: 2**

Family: Chloroperlidae

*Suwallia teleckojensis*

Within Known Range? Y Nearest Occurrence: 14.47 KM 48.50028°N 106.78434 °E

Family: Perlidae

*Agnentina extrema*

Within Known Range? Y Nearest Occurrence: 14.44 KM 48.50028°N 106.78434 °E

**LOE Rating: Likely Total: 13**

Family: Capniidae

*Isocapnia guentheri*

Within Known Range? Y Nearest Occurrence: 59.85 KM 47.88349°N 106.98829 °E

*Isocapnia sibirica*

Within Known Range? Y Nearest Occurrence: 112.51 KM 48.09549°N 107.84265 °E

Family: Chloroperlidae

*Alaskaperla longidentata*

Within Known Range? Y Nearest Occurrence: 80.75 KM 48.12416°N 107.54780 °E

*Alloperla deminuta*

Within Known Range? Y Nearest Occurrence: 79.63 KM 47.99158°N 107.46116 °E

*Alloperla rostellata*

Within Known Range? N Nearest Occurrence: 393.47 KM 49.77776°N 103.60860 °E

*Haploperla lepnevae*

Within Known Range? Y Nearest Occurrence: 82.72 KM 47.82258°N 107.33613 °E

*Suwallia kerzhneri*

Within Known Range? Y Nearest Occurrence: 80.75 KM 48.12416°N 107.54780 °E

Family: Leuctridae

*Paraleuctra zapekinae*

Within Known Range? Y Nearest Occurrence: 79.63 KM 47.99158°N 107.46116 °E

Family: Nemouridae

*Amphinemura borealis*

Within Known Range? Y Nearest Occurrence: 82.72 KM 47.82258°N 107.33613 °E

*Nemoura cinerea*

Within Known Range? Y Nearest Occurrence: 93.24 KM 47.96783°N 107.59278 °E

Family: Perlodidae

*Diura majuscula*

Within Known Range? Y Nearest Occurrence: 79.77 KM 47.99158°N 107.46116 °E

*Isoperla kozlovi*

Within Known Range? Y Nearest Occurrence: 88.69 KM 49.08636°N 107.30750 °E

*Kaszabia nigricauda*

Within Known Range? Y Nearest Occurrence: 93.24 KM 47.96783°N 107.59278 °E

**LOE Rating: Probable Total: 10**

Family: Capniidae

*Isocapnia kudia*

Within Known Range? N Nearest Occurrence: 860.52 KM 51.25356°N 99.66687 °E

Family: Nemouridae

*Nemoura arctica*

Within Known Range? Y Nearest Occurrence: 70.71 KM 47.77758°N 106.92780 °E

Family: Perlidae

*Agnentina brevipennis*

Within Known Range? Y Nearest Occurrence: 81.27 KM 49.10740°N 106.65177 °E

Family: Perlodidae

*Arcynopteryx sajanensis*

Within Known Range? N Nearest Occurrence: 783.88 KM 51.61397°N 100.59972 °E

*Isoperla asiatica*

Within Known Range? Y Nearest Occurrence: 84.10 KM 47.82110°N 107.35422 °E

*Isoperla lunigera*

Within Known Range? Y Nearest Occurrence: 84.10 KM 47.82110°N 107.35422 °E

*Megarcys ochracea*

Within Known Range? Y Nearest Occurrence: 69.67 KM 49.03282°N 106.96935 °E

*Pictetiella asiatica*

Within Known Range? N Nearest Occurrence: 791.59 KM 51.65822°N 100.53000 °E

Family: Pteronarcyidae

*Pteronarcys reticulata*

Within Known Range? Y Nearest Occurrence: 87.65 KM 49.08643°N 107.28952 °E

Family: Taeniopterygidae

*Taenionema japonicum*

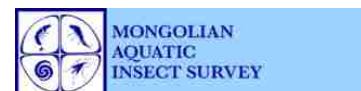
Within Known Range? Y Nearest Occurrence: 81.47 KM 49.05411°N 107.23175 °E

Research funded by the National Science Foundation

DEB-BSI #0206674: A Survey of the Aquatic Insects of the Selenge River Basin. P.I.'s: JKGelhaus, JCMorse, BHayford.

DEB # 0743732: Aquatic Insects of the Altai and Hangai Mountain Drainages. P.I.'s: JKGelhaus, JCMorse, CRNelson.

<http://clade.ansp.org/entomology/mongolia/index.html>



**Basin:** Arctic Ocean Basin

**Aimag:** Tov

**Soum:** Batsumber

Freshwater Ecoregion: Lake Baikal

Terrestrial Ecoregion: Daurian Forest Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Possible Total: 4**

Family: Perlidae

*Agnatina cocandica* Within Known Range? Y Nearest Occurrence: 201.67 KM 50.06476°N 106.13388°E

*Kamimuria exilis* Within Known Range? N Nearest Occurrence: 914.74 KM 50.16278°N 98.84212°E

Family: Perlodidae

*Arcynopteryx polaris* Within Known Range? Y Nearest Occurrence: 115.03 KM 48.42080°N 107.91406°E

*Isoperla altaica* Within Known Range? Y Nearest Occurrence: 98.74 KM 48.87748°N 106.12370°E

**LOE Rating: Predicted Total: 15**

Family: Capniidae

*Capnia nigra* Within Known Range? N Nearest Occurrence: 734.80 KM 50.92452°N 100.75528°E

*Mesocapnia variabilis* Within Known Range? Y Nearest Occurrence: 115.03 KM 48.42080°N 107.91406°E

Family: Chloroperlidae

*Alloperla joosti* Within Known Range? N Nearest Occurrence: 428.13 KM 49.21675°N 103.10750°E

*Alloperla mediata* Within Known Range? N Nearest Occurrence: 393.47 KM 49.77776°N 103.60860°E

Family: Leuctridae

*Leuctra fusca* Within Known Range? Y Nearest Occurrence: 87.65 KM 49.08643°N 107.28952°E

Family: Nemouridae

*Amphinemura standfussi* Within Known Range? N Nearest Occurrence: 168.78 KM 49.73130°N 107.63484°E

*Nemoura sahlbergi* Within Known Range? Y Nearest Occurrence: 94.56 KM 48.16668°N 107.69548°E

Family: Perlidae

*Paragnetina flavotincta* Within Known Range? N Nearest Occurrence: 201.31 KM 50.06476°N 106.13388°E

Family: Perlodidae

*Arcynopteryx compacta* Within Known Range? Y Nearest Occurrence: 97.99 KM 47.84324°N 107.55299°E

*Diura bicaudata* Within Known Range? N Nearest Occurrence: 782.89 KM 47.21768°N 99.92824°E

*Isoperla eximia* Within Known Range? Y Nearest Occurrence: 99.92 KM 49.01829°N 107.54453°E

*Isoperla mongolica* Within Known Range? Y Nearest Occurrence: 112.37 KM 48.09694°N 107.83988°E

*Isoperla obscura* Within Known Range? N Nearest Occurrence: 147.55 KM 49.72192°N 106.65562°E

*Isoperla potanini* Within Known Range? N Nearest Occurrence: 578.70 KM 47.26999°N 101.80227°E

*Skwala pusilla* Within Known Range? N Nearest Occurrence: 2,038.93 KM 48.51277°N 88.51107°E

**LOE Rating: Unlikely Total: 3**

Family: Capniidae

*Capnia khulsbagia* Within Known Range? N Nearest Occurrence: 741.23 KM 50.98944°N 100.71944°E

*Mesocapnia altaica* Within Known Range? N Nearest Occurrence: 1,995.63 KM 48.43684°N 88.90094°E

Family: Nemouridae

*Nemurella pictetii* Within Known Range? N Nearest Occurrence: 849.26 KM 51.07896°N 99.70857°E

**Basin:** Arctic Ocean Basin  
**Aimag:** Tov  
**Soum:** Bayanchandmanv

Freshwater Ecoregion: Lake Baikal  
 Terrestrial Ecoregion: Daurian Forest Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Highly Likely Total: 9**

Family: Capniidae					
Isocapnia guentheri	Within Known Range? Y	Nearest Occurrence:	88.05 KM	47.88349°N	106.98829°E
Isocapnia sibirica	Within Known Range? Y	Nearest Occurrence:	175.51 KM	48.09549°N	107.84265°E
Family: Chloroperlidae					
Alloperla deminuta	Within Known Range? Y	Nearest Occurrence:	126.39 KM	47.82258°N	107.33613°E
Suwallia kerzhneri	Within Known Range? Y	Nearest Occurrence:	142.64 KM	48.12416°N	107.54780°E
Suwallia teleckojensis	Within Known Range? Y	Nearest Occurrence:	66.06 KM	48.50028°N	106.78434°E
Family: Leuctridae					
Paraleuctra zapekinae	Within Known Range? Y	Nearest Occurrence:	134.91 KM	47.99158°N	107.46116°E
Family: Perlidae					
Agnetina extrema	Within Known Range? Y	Nearest Occurrence:	65.94 KM	48.50028°N	106.78434°E
Family: Perlodidae					
Isoperla kozlovi	Within Known Range? Y	Nearest Occurrence:	75.68 KM	48.87748°N	106.12370°E
Kaszabia nigricauda	Within Known Range? Y	Nearest Occurrence:	118.95 KM	47.85250°N	105.25567°E

**LOE Rating: Likely Total: 12**

Family: Chloroperlidae					
Alaskaperla longidentata	Within Known Range? Y	Nearest Occurrence:	142.64 KM	48.12416°N	107.54780°E
Alloperla rostellata	Within Known Range? N	Nearest Occurrence:	342.41 KM	49.77776°N	103.60860°E
Haploperla lepnevae	Within Known Range? Y	Nearest Occurrence:	75.68 KM	48.87748°N	106.12370°E
Family: Nemouridae					
Amphinemura borealis	Within Known Range? Y	Nearest Occurrence:	126.39 KM	47.82258°N	107.33613°E
Nemoura cinerea	Within Known Range? Y	Nearest Occurrence:	149.75 KM	47.96783°N	107.59278°E
Family: Perlodidae					
Arcynopteryx sajanensis	Within Known Range? N	Nearest Occurrence:	734.98 KM	51.61397°N	100.59972°E
Diura majuscula	Within Known Range? Y	Nearest Occurrence:	135.15 KM	47.99158°N	107.46116°E
Isoperla asiatica	Within Known Range? Y	Nearest Occurrence:	75.68 KM	48.87748°N	106.12370°E
Isoperla lunigera	Within Known Range? Y	Nearest Occurrence:	75.68 KM	48.87748°N	106.12370°E
Megarcys ochracea	Within Known Range? Y	Nearest Occurrence:	120.13 KM	49.03282°N	106.96935°E
Pictetiella asiatica	Within Known Range? N	Nearest Occurrence:	742.82 KM	51.65822°N	100.53000°E
Family: Pteronarcyidae					
Pteronarcys reticulata	Within Known Range? Y	Nearest Occurrence:	149.55 KM	49.08643°N	107.28952°E

**LOE Rating: Probable Total: 5**

Family: Capniidae					
Isocapnia kudia	Within Known Range? N	Nearest Occurrence:	806.59 KM	51.25356°N	99.66687°E
Family: Nemouridae					
Nemoura arctica	Within Known Range? Y	Nearest Occurrence:	87.98 KM	47.77758°N	106.92780°E
Family: Perlidae					
Agnetina brevipennis	Within Known Range? Y	Nearest Occurrence:	108.38 KM	49.10740°N	106.65177°E
Kamimuria exilis	Within Known Range? N	Nearest Occurrence:	853.57 KM	50.16278°N	98.84212°E
Family: Taeniopterygidae					
Taenionema japonicum	Within Known Range? Y	Nearest Occurrence:	142.61 KM	49.05411°N	107.23175°E

Research funded by the National Science Foundation  
 DEB-BSI #0206674: A Survey of the Aquatic Insects of the Selenge River Basin. P.I.'s: JKGelhaus, JCMorse, BHayford.  
 DEB # 0743732: Aquatic Insects of the Altai and Hangai Mountain Drainages. P.I.'s: JKGelhaus, JCMorse, CRNelson.  
<http://clade.ansp.org/entomology/mongolia/index.html>



Basin: Arctic Ocean Basin

Aimag: Tov

Soum: Bayanchandmanv

Freshwater Ecoregion: Lake Baikal

Terrestrial Ecoregion: Daurian Forest Steppe

WQM Sites:

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Possible Total: 4**

Family: Perlidae

Agnentina cocandica Within Known Range? Y Nearest Occurrence: 159.90 KM 49.16354°N 105.18880°E

Family: Perlodidae

Arcynopteryx compacta Within Known Range? Y Nearest Occurrence: 148.86 KM 47.84324°N 107.55299°E

Diura bicaudata Within Known Range? N Nearest Occurrence: 712.04 KM 47.21768°N 99.92824°E

Isoperla altaica Within Known Range? Y Nearest Occurrence: 75.82 KM 48.87748°N 106.12370°E

**LOE Rating: Predicted Total: 14**

Family: Capniidae

Capnia nigra Within Known Range? N Nearest Occurrence: 681.81 KM 50.92452°N 100.75528°E

Mesocapnia variabilis Within Known Range? Y Nearest Occurrence: 184.78 KM 48.42080°N 107.91406°E

Family: Chloroperlidae

Alloperla joosti Within Known Range? N Nearest Occurrence: 367.92 KM 49.21675°N 103.10750°E

Alloperla mediata Within Known Range? N Nearest Occurrence: 342.41 KM 49.77776°N 103.60860°E

Family: Leuctridae

Leuctra fusca Within Known Range? N Nearest Occurrence: 149.55 KM 49.08643°N 107.28952°E

Family: Nemouridae

Amphinemura standfussi Within Known Range? N Nearest Occurrence: 227.13 KM 49.73130°N 107.63484°E

Nemoura sahlbergi Within Known Range? Y Nearest Occurrence: 158.78 KM 48.16668°N 107.69548°E

Family: Perlidae

Paragnetina flavotincta Within Known Range? N Nearest Occurrence: 159.61 KM 49.16354°N 105.18880°E

Family: Perlodidae

Arcynopteryx polaris Within Known Range? Y Nearest Occurrence: 184.78 KM 48.42080°N 107.91406°E

Isoperla eximia Within Known Range? N Nearest Occurrence: 167.89 KM 49.01829°N 107.54453°E

Isoperla mongolica Within Known Range? Y Nearest Occurrence: 175.51 KM 48.09694°N 107.83988°E

Isoperla obscura Within Known Range? Y Nearest Occurrence: 118.95 KM 47.85250°N 105.25567°E

Isoperla potanini Within Known Range? N Nearest Occurrence: 507.23 KM 47.26999°N 101.80227°E

Skwala pusilla Within Known Range? N Nearest Occurrence: 1,971.05 KM 48.51277°N 88.51107°E

**LOE Rating: Unlikely Total: 3**

Family: Capniidae

Capnia khulsbagia Within Known Range? N Nearest Occurrence: 688.58 KM 50.98944°N 100.71944°E

Mesocapnia altaica Within Known Range? N Nearest Occurrence: 1,927.65 KM 48.43684°N 88.90094°E

Family: Nemouridae

Nemurella pictetii Within Known Range? N Nearest Occurrence: 794.43 KM 51.07896°N 99.70857°E

Basin: Arctic Ocean Basin

Aimags: Tov

Soums: Bayankhangai

Freshwater Ecoregion: Lake Baikal

Terrestrial Ecoregion: Mongolian-Manchurian Grassland

WQM Sites:

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Highly Likely Total: 8**

Family: Capniidae

Isocapnia guentheri

Within Known Range? Y Nearest Occurrence: 152.97 KM 47.88349°N 106.98829 °E

Isocapnia sibirica

Within Known Range? Y Nearest Occurrence: 249.51 KM 48.09549°N 107.84265 °E

Family: Chloroperlidae

Alloperla rostellata

Within Known Range? N Nearest Occurrence: 310.81 KM 49.77776°N 103.60860 °E

Suwallia kerzhneri

Within Known Range? Y Nearest Occurrence: 217.54 KM 48.12416°N 107.54780 °E

Family: Leuctridae

Paraleuctra zapekinae

Within Known Range? N Nearest Occurrence: 206.17 KM 47.99158°N 107.46116 °E

Family: Perlidae

Agnetina extrema

Within Known Range? Y Nearest Occurrence: 148.92 KM 48.83420°N 106.49113 °E

Family: Perlodidae

Isoperla kozlovi

Within Known Range? Y Nearest Occurrence: 39.66 KM 47.85250°N 105.25567 °E

Kaszabia nigricauda

Within Known Range? Y Nearest Occurrence: 39.66 KM 47.85250°N 105.25567 °E

**LOE Rating: Likely Total: 15**

Family: Capniidae

Isocapnia kudia

Within Known Range? N Nearest Occurrence: 761.96 KM 51.25356°N 99.66687 °E

Family: Chloroperlidae

Alaskaperla longidentata

Within Known Range? Y Nearest Occurrence: 217.54 KM 48.12416°N 107.54780 °E

Alloperla deminuta

Within Known Range? Y Nearest Occurrence: 191.42 KM 47.82258°N 107.33613 °E

Haploperla lepnevae

Within Known Range? Y Nearest Occurrence: 130.31 KM 48.87748°N 106.12370 °E

Suwallia teleckojensis

Within Known Range? Y Nearest Occurrence: 150.70 KM 48.50028°N 106.78434 °E

Family: Nemouridae

Amphinemura borealis

Within Known Range? Y Nearest Occurrence: 191.42 KM 47.82258°N 107.33613 °E

Nemoura cinerea

Within Known Range? Y Nearest Occurrence: 220.51 KM 47.96783°N 107.59278 °E

Family: Perlidae

Agnetina brevipennis

Within Known Range? Y Nearest Occurrence: 183.62 KM 49.10740°N 106.65177 °E

Agnetina cocandica

Within Known Range? Y Nearest Occurrence: 156.51 KM 49.16354°N 105.18880 °E

Kamimuria exilis

Within Known Range? N Nearest Occurrence: 796.53 KM 50.16278°N 98.84212 °E

Family: Perlodidae

Arcynopteryx sajanensis

Within Known Range? N Nearest Occurrence: 698.92 KM 51.61397°N 100.59972 °E

Isoperla asiatica

Within Known Range? Y Nearest Occurrence: 130.31 KM 48.87748°N 106.12370 °E

Isoperla lunigera

Within Known Range? Y Nearest Occurrence: 130.31 KM 48.87748°N 106.12370 °E

Pictetiella asiatica

Within Known Range? N Nearest Occurrence: 706.80 KM 51.65822°N 100.53000 °E

Family: Pteronarcyidae

Pteronarcys reticulata

Within Known Range? N Nearest Occurrence: 233.27 KM 49.08643°N 107.28952 °E

**LOE Rating: Probable Total: 2**

Family: Chloroperlidae

Alloperla joosti

Within Known Range? N Nearest Occurrence: 318.21 KM 49.21675°N 103.10750 °E

Family: Perlodidae

Isoperla obscura

Within Known Range? Y Nearest Occurrence: 39.66 KM 47.85250°N 105.25567 °E

Research funded by the National Science Foundation

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<http://clade.ansp.org/entomology/mongolia/index.html>



Basin: Arctic Ocean Basin

Aimags: Tov

Soums: Bayankhangai

Freshwater Ecoregion: Lake Baikal

Terrestrial Ecoregion: Mongolian-Manchurian Grassland

WQM Sites:

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Possible Total: 6**

Family: Chloroperlidae						
Alloperla mediata	Within Known Range? N	Nearest Occurrence:	310.81 KM	49.77776 °N	103.60860 °E	
Family: Nemouridae						
Nemoura arctica	Within Known Range? Y	Nearest Occurrence:	146.44 KM	47.77758 °N	106.92780 °E	
Family: Perlodidae						
Diura majuscula	Within Known Range? Y	Nearest Occurrence:	206.54 KM	47.99158 °N	107.46116 °E	
Isoperla altaica	Within Known Range? Y	Nearest Occurrence:	130.55 KM	48.87748 °N	106.12370 °E	
Megarcys ochracea	Within Known Range? N	Nearest Occurrence:	202.00 KM	49.03282 °N	106.96935 °E	
Family: Taeniopterygidae						
Taenionema japonicum	Within Known Range? Y	Nearest Occurrence:	226.40 KM	49.05411 °N	107.23175 °E	

**LOE Rating: Predicted Total: 13**

Family: Capniidae						
Capnia nigra	Within Known Range? N	Nearest Occurrence:	639.72 KM	50.92452 °N	100.75528 °E	
Mesocapnia variabilis	Within Known Range? Y	Nearest Occurrence:	264.58 KM	48.42080 °N	107.91406 °E	
Family: Leuctridae						
Leuctra fusca	Within Known Range? N	Nearest Occurrence:	233.27 KM	49.08643 °N	107.28952 °E	
Family: Nemouridae						
Amphinemura standfussi	Within Known Range? N	Nearest Occurrence:	308.86 KM	49.73130 °N	107.63484 °E	
Nemoura sahlbergi	Within Known Range? Y	Nearest Occurrence:	234.47 KM	48.16668 °N	107.69548 °E	
Family: Perlidae						
Paragnetina flavotincta	Within Known Range? N	Nearest Occurrence:	156.23 KM	49.16354 °N	105.18880 °E	
Family: Perlodidae						
Arcynopteryx compacta	Within Known Range? Y	Nearest Occurrence:	215.90 KM	47.84324 °N	107.55299 °E	
Arcynopteryx polaris	Within Known Range? Y	Nearest Occurrence:	264.58 KM	48.42080 °N	107.91406 °E	
Diura bicaudata	Within Known Range? N	Nearest Occurrence:	634.40 KM	47.21768 °N	99.92824 °E	
Isoperla eximia	Within Known Range? N	Nearest Occurrence:	252.38 KM	49.01829 °N	107.54453 °E	
Isoperla mongolica	Within Known Range? Y	Nearest Occurrence:	249.68 KM	48.09694 °N	107.83988 °E	
Isoperla potanini	Within Known Range? N	Nearest Occurrence:	428.01 KM	47.26999 °N	101.80227 °E	
Skwala pusilla	Within Known Range? N	Nearest Occurrence:	1,899.71 KM	48.51277 °N	88.51107 °E	

**LOE Rating: Unlikely Total: 3**

Family: Capniidae						
Capnia khulsbagia	Within Known Range? N	Nearest Occurrence:	646.97 KM	50.98944 °N	100.71944 °E	
Mesocapnia altaica	Within Known Range? N	Nearest Occurrence:	1,856.14 KM	48.43684 °N	88.90094 °E	
Family: Nemouridae						
Nemurella pictetii	Within Known Range? N	Nearest Occurrence:	748.40 KM	51.07896 °N	99.70857 °E	

Basin: Arctic Ocean Basin

Aimags: Tov

Soums: Bayan-onjuul

Freshwater Ecoregion: Lake Baikal

Terrestrial Ecoregion: Mongolian-Manchurian Grassland

WQM Sites:

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Highly Likely Total: 8**

Family: Capniidae

Isocapnia guentheri

Within Known Range? N Nearest Occurrence: 149.43 KM 47.88349°N 106.98829 °E

Isocapnia sibirica

Within Known Range? N Nearest Occurrence: 238.39 KM 48.09549°N 107.84265 °E

Family: Chloroperlidae

Alloperla rostellata

Within Known Range? N Nearest Occurrence: 415.83 KM 49.77776°N 103.60860 °E

Suwallia kerzhneri

Within Known Range? N Nearest Occurrence: 213.64 KM 48.12416°N 107.54780 °E

Family: Leuctridae

Paraleuctra zapekinae

Within Known Range? N Nearest Occurrence: 197.03 KM 47.99158°N 107.46116 °E

Family: Perlidae

Agnetina extrema

Within Known Range? N Nearest Occurrence: 193.10 KM 48.50028°N 106.78434 °E

Family: Perlodidae

Isoperla kozlovi

Within Known Range? N Nearest Occurrence: 134.59 KM 47.85250°N 105.25567 °E

Kaszabia nigricauda

Within Known Range? N Nearest Occurrence: 134.59 KM 47.85250°N 105.25567 °E

**LOE Rating: Likely Total: 15**

Family: Capniidae

Isocapnia kudia

Within Known Range? N Nearest Occurrence: 854.98 KM 51.25356°N 99.66687 °E

Family: Chloroperlidae

Alaskaperla longidentata

Within Known Range? N Nearest Occurrence: 213.64 KM 48.12416°N 107.54780 °E

Alloperla deminuta

Within Known Range? Y Nearest Occurrence: 174.81 KM 47.82258°N 107.33613 °E

Haploperla lepnevae

Within Known Range? N Nearest Occurrence: 174.81 KM 47.82258°N 107.33613 °E

Suwallia teleckojensis

Within Known Range? N Nearest Occurrence: 193.45 KM 48.50028°N 106.78434 °E

Family: Nemouridae

Amphinemura borealis

Within Known Range? Y Nearest Occurrence: 174.81 KM 47.82258°N 107.33613 °E

Nemoura cinerea

Within Known Range? N Nearest Occurrence: 207.44 KM 47.96783°N 107.59278 °E

Family: Perlidae

Agnetina cocandica

Within Known Range? N Nearest Occurrence: 266.02 KM 49.16354°N 105.18880 °E

Kamimuria exilis

Within Known Range? N Nearest Occurrence: 877.53 KM 50.16278°N 98.84212 °E

Family: Perlodidae

Arcynopteryx sajanensis

Within Known Range? N Nearest Occurrence: 798.45 KM 51.61397°N 100.59972 °E

Diura majuscula

Within Known Range? Y Nearest Occurrence: 197.39 KM 47.99158°N 107.46116 °E

Isoperla asiatica

Within Known Range? N Nearest Occurrence: 176.38 KM 47.82110°N 107.35422 °E

Isoperla lunigera

Within Known Range? N Nearest Occurrence: 176.38 KM 47.82110°N 107.35422 °E

Pictetiella asiatica

Within Known Range? N Nearest Occurrence: 806.08 KM 51.65822°N 100.53000 °E

Family: Pteronarcyidae

Pteronarcys reticulata

Within Known Range? N Nearest Occurrence: 276.84 KM 49.08643°N 107.28952 °E

**LOE Rating: Probable Total: 3**

Family: Chloroperlidae

Alloperla joosti

Within Known Range? N Nearest Occurrence: 412.93 KM 49.21675°N 103.10750 °E

Family: Nemouridae

Nemoura arctica

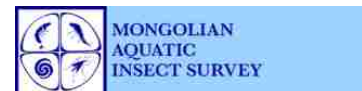
Within Known Range? N Nearest Occurrence: 136.65 KM 47.77758°N 106.92780 °E

Family: Perlidae

Agnetina brevipennis

Within Known Range? N Nearest Occurrence: 251.27 KM 49.10740°N 106.65177 °E

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<http://clade.ansp.org/entomology/mongolia/index.html>





Basin: Arctic Ocean Basin

Aimag: Tov

Soum: Bayan-onjuul

Freshwater Ecoregion: Lake Baikal

Terrestrial Ecoregion: Mongolian-Manchurian Grassland

WQM Sites:

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Possible Total: 4**

Family: Perlodidae

Diura bicaudata Within Known Range? N Nearest Occurrence: 679.18 KM 47.21768°N 99.92824 °E

Isoperla obscura Within Known Range? N Nearest Occurrence: 134.59 KM 47.85250°N 105.25567 °E

Megarcys ochracea Within Known Range? N Nearest Occurrence: 197.03 KM 47.99158°N 107.46116 °E

Family: Taeniopterygidae

Taenionema japonicum Within Known Range? N Nearest Occurrence: 271.04 KM 49.05411°N 107.23175 °E

**LOE Rating: Predicted Total: 14**

Family: Capniidae

Capnia nigra Within Known Range? N Nearest Occurrence: 735.47 KM 50.92452°N 100.75528 °E

Mesocapnia variabilis Within Known Range? N Nearest Occurrence: 266.43 KM 48.42080°N 107.91406 °E

Family: Chloroperlidae

Alloperla mediata Within Known Range? N Nearest Occurrence: 415.83 KM 49.77776°N 103.60860 °E

Family: Leuctridae

Leuctra fusca Within Known Range? N Nearest Occurrence: 276.84 KM 49.08643°N 107.28952 °E

Family: Nemouridae

Amphinemura standfussi Within Known Range? N Nearest Occurrence: 358.01 KM 49.73130°N 107.63484 °E

Nemoura sahlbergi Within Known Range? N Nearest Occurrence: 229.50 KM 48.16668°N 107.69548 °E

Family: Perlidae

Paragnetina flavotincta Within Known Range? N Nearest Occurrence: 265.54 KM 49.16354°N 105.18880 °E

Family: Perlodidae

Arcynopteryx compacta Within Known Range? N Nearest Occurrence: 196.63 KM 47.84324°N 107.55299 °E

Arcynopteryx polaris Within Known Range? N Nearest Occurrence: 266.43 KM 48.42080°N 107.91406 °E

Isoperla altaica Within Known Range? N Nearest Occurrence: 216.99 KM 48.87748°N 106.12370 °E

Isoperla eximia Within Known Range? N Nearest Occurrence: 273.11 KM 48.60182°N 107.84335 °E

Isoperla mongolica Within Known Range? N Nearest Occurrence: 238.65 KM 48.09694°N 107.83988 °E

Isoperla potanini Within Known Range? N Nearest Occurrence: 462.47 KM 46.73093°N 101.88583 °E

Skwala pusilla Within Known Range? N Nearest Occurrence: 1,953.66 KM 48.51277°N 88.51107 °E

**LOE Rating: Unlikely Total: 3**

Family: Capniidae

Capnia khulsbagia Within Known Range? N Nearest Occurrence: 743.00 KM 50.98944°N 100.71944 °E

Mesocapnia altaica Within Known Range? N Nearest Occurrence: 1,909.80 KM 48.43684°N 88.90094 °E

Family: Nemouridae

Nemurella pictetii Within Known Range? N Nearest Occurrence: 840.38 KM 51.07896°N 99.70857 °E

**Basin:** Arctic Ocean Basin

**Aimag:** Tov

**Soum:** Bayantsogt

Freshwater Ecoregion: Lake Baikal

Terrestrial Ecoregion: Daurian Forest Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Highly Likely Total: 9**

Family: Capniidae

Isocapnia guentheri

Within Known Range? Y Nearest Occurrence: 114.05 KM 47.88349°N 106.98829°E

Isocapnia sibirica

Within Known Range? Y Nearest Occurrence: 206.50 KM 48.09549°N 107.84265°E

Family: Chloroperlidae

Alloperla deminuta

Within Known Range? Y Nearest Occurrence: 153.23 KM 47.82258°N 107.33613°E

Suwallia kerzhneri

Within Known Range? Y Nearest Occurrence: 173.80 KM 48.12416°N 107.54780°E

Suwallia teleckojensis

Within Known Range? Y Nearest Occurrence: 100.05 KM 48.50028°N 106.78434°E

Family: Leuctridae

Paraleuctra zapekinae

Within Known Range? Y Nearest Occurrence: 164.53 KM 47.99158°N 107.46116°E

Family: Perlidae

Agnetina extrema

Within Known Range? Y Nearest Occurrence: 99.83 KM 48.83420°N 106.49113°E

Family: Perlodidae

Isoperla kozlovi

Within Known Range? Y Nearest Occurrence: 84.95 KM 47.85250°N 105.25567°E

Kaszabia nigricauda

Within Known Range? Y Nearest Occurrence: 84.95 KM 47.85250°N 105.25567°E

**LOE Rating: Likely Total: 11**

Family: Chloroperlidae

Alaskaperla longidentata

Within Known Range? Y Nearest Occurrence: 173.80 KM 48.12416°N 107.54780°E

Alloperla rostellata

Within Known Range? N Nearest Occurrence: 323.13 KM 49.77776°N 103.60860°E

Haploperla lepnevae

Within Known Range? Y Nearest Occurrence: 88.53 KM 48.87748°N 106.12370°E

Family: Nemouridae

Amphinemura borealis

Within Known Range? Y Nearest Occurrence: 153.23 KM 47.82258°N 107.33613°E

Nemoura cinerea

Within Known Range? Y Nearest Occurrence: 179.30 KM 47.96783°N 107.59278°E

Family: Perlodidae

Arcynopteryx sajanensis

Within Known Range? N Nearest Occurrence: 715.26 KM 51.61397°N 100.59972°E

Isoperla asiatica

Within Known Range? Y Nearest Occurrence: 88.53 KM 48.87748°N 106.12370°E

Isoperla lunigera

Within Known Range? Y Nearest Occurrence: 88.53 KM 48.87748°N 106.12370°E

Megarcys ochracea

Within Known Range? Y Nearest Occurrence: 151.31 KM 49.03282°N 106.96935°E

Pictetiella asiatica

Within Known Range? N Nearest Occurrence: 723.14 KM 51.65822°N 100.53000°E

Family: Pteronarcyidae

Pteronarcys reticulata

Within Known Range? N Nearest Occurrence: 182.27 KM 49.08643°N 107.28952°E

Basin: Arctic Ocean Basin

Aimags: Tov

Soums: Bayantsogt

Freshwater Ecoregion: Lake Baikal

Terrestrial Ecoregion: Daurian Forest Steppe

WQM Sites:

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Probable Total: 7**

Family: Capniidae						
Isocapnia kudia	Within Known Range? N	Nearest Occurrence:	783.92 KM	51.25356 °N	99.66687 °E	
Family: Nemouridae						
Nemoura arctica	Within Known Range? Y	Nearest Occurrence:	110.82 KM	47.77758 °N	106.92780 °E	
Family: Perlidae						
Agnatina brevipennis	Within Known Range? Y	Nearest Occurrence:	134.95 KM	49.10740 °N	106.65177 °E	
Agnatina cocandica	Within Known Range? Y	Nearest Occurrence:	148.22 KM	49.16354 °N	105.18880 °E	
Kamimuria exilis	Within Known Range? N	Nearest Occurrence:	826.69 KM	50.16278 °N	98.84212 °E	
Family: Perlodidae						
Diura majuscula	Within Known Range? Y	Nearest Occurrence:	164.83 KM	47.99158 °N	107.46116 °E	
Family: Taeniopterygidae						
Taenionema japonicum	Within Known Range? Y	Nearest Occurrence:	175.32 KM	49.05411 °N	107.23175 °E	

**LOE Rating: Possible Total: 5**

Family: Chloroperlidae						
Alloperla joosti	Within Known Range? N	Nearest Occurrence:	342.64 KM	49.21675 °N	103.10750 °E	
Alloperla mediata	Within Known Range? N	Nearest Occurrence:	323.13 KM	49.77776 °N	103.60860 °E	
Family: Perlodidae						
Diura bicaudata	Within Known Range? N	Nearest Occurrence:	678.98 KM	47.21768 °N	99.92824 °E	
Isoperla altaica	Within Known Range? Y	Nearest Occurrence:	88.69 KM	48.87748 °N	106.12370 °E	
Isoperla obscura	Within Known Range? Y	Nearest Occurrence:	84.95 KM	47.85250 °N	105.25567 °E	

**LOE Rating: Predicted Total: 12**

Family: Capniidae						
Capnia nigra	Within Known Range? N	Nearest Occurrence:	659.89 KM	50.92452 °N	100.75528 °E	
Mesocapnia variabilis	Within Known Range? Y	Nearest Occurrence:	217.89 KM	48.42080 °N	107.91406 °E	
Family: Leuctridae						
Leuctra fusca	Within Known Range? N	Nearest Occurrence:	182.27 KM	49.08643 °N	107.28952 °E	
Family: Nemouridae						
Amphinemura standfussi	Within Known Range? N	Nearest Occurrence:	258.33 KM	49.73130 °N	107.63484 °E	
Nemoura sahlbergi	Within Known Range? Y	Nearest Occurrence:	190.34 KM	48.16668 °N	107.69548 °E	
Family: Perlidae						
Paragnetina flavotincta	Within Known Range? N	Nearest Occurrence:	147.96 KM	49.16354 °N	105.18880 °E	
Family: Perlodidae						
Arcynopteryx compacta	Within Known Range? Y	Nearest Occurrence:	176.84 KM	47.84324 °N	107.55299 °E	
Arcynopteryx polaris	Within Known Range? Y	Nearest Occurrence:	217.89 KM	48.42080 °N	107.91406 °E	
Isoperla eximia	Within Known Range? N	Nearest Occurrence:	201.56 KM	49.01829 °N	107.54453 °E	
Isoperla mongolica	Within Known Range? Y	Nearest Occurrence:	206.56 KM	48.09694 °N	107.83988 °E	
Isoperla potanini	Within Known Range? N	Nearest Occurrence:	473.74 KM	47.26999 °N	101.80227 °E	
Skwala pusilla	Within Known Range? N	Nearest Occurrence:	1,939.87 KM	48.51277 °N	88.51107 °E	

**Basin:** Arctic Ocean Basin

**Aimag:** Tov

**Soum:** Bayantsogt

Freshwater Ecoregion: Lake Baikal

Terrestrial Ecoregion: Daurian Forest Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

<b>LOE Rating:</b>	<b>Unlikely</b>	<b>Total:</b>	<b>3</b>
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Family: Capniidae

Capnia khulsbagia

Within Known Range? N Nearest Occurrence: 666.83 KM 50.98944 °N 100.71944 °E

Mesocapnia altaica

Within Known Range? N Nearest Occurrence: 1,896.42 KM 48.43684 °N 88.90094 °E

Family: Nemouridae

Nemurella pictetii

Within Known Range? N Nearest Occurrence: 771.26 KM 51.07896 °N 99.70857 °E

Basin: Arctic Ocean Basin

Aimag: Tov

Soum: **Bornuur**

Freshwater Ecoregion: Lake Baikal

Terrestrial Ecoregion: Daurian Forest Steppe

WQM Sites:

WQM Sites: # 1 (Boroo River @ N 48.4661° E 106.2696°) # 2  
(Boroo River @ N 48.62257° E 106.27627°) # 6 (Boroo River @ N  
48.40082° E 106.18962°)

<b>LOE Rating:</b>	<b>Highly Likely</b>	<b>Total:</b>	<b>10</b>
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Family: Capniidae

Isocapnia guentheri

Within Known Range? Y Nearest Occurrence: 96.69 KM 49.08405°N 106.89521°E

Isocapnia sibirica

Within Known Range? Y Nearest Occurrence: 180.94 KM 48.09549°N 107.84265°E

Family: Chloroperlidae

Alloperla deminuta

Within Known Range? Y Nearest Occurrence: 140.38 KM 47.82258°N 107.33613°E

Haploperla lepnevae

Within Known Range? Y Nearest Occurrence: 45.87 KM 48.87748°N 106.12370°E

Suwallia kerzhneri

Within Known Range? Y Nearest Occurrence: 148.48 KM 48.12416°N 107.54780°E

Suwallia teleckojensis

Within Known Range? Y Nearest Occurrence: 58.28 KM 48.50028°N 106.78434°E

Family: Leuctridae

Paraleuctra zapekinae

Within Known Range? Y Nearest Occurrence: 144.21 KM 47.99158°N 107.46116°E

Family: Perlidae

Agnatina extrema

Within Known Range? Y Nearest Occurrence: 46.22 KM 48.83420°N 106.49113°E

Family: Perlodidae

Isoperla kozlovi

Within Known Range? Y Nearest Occurrence: 45.87 KM 48.87748°N 106.12370°E

Kaszabia nigricauda

Within Known Range? Y Nearest Occurrence: 131.93 KM 47.85250°N 105.25567°E

<b>LOE Rating:</b>	<b>Likely</b>	<b>Total:</b>	<b>9</b>
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Family: Chloroperlidae

Alaskaperla longidentata

Within Known Range? Y Nearest Occurrence: 148.48 KM 48.12416°N 107.54780°E

Alloperla rostellata

Within Known Range? N Nearest Occurrence: 327.34 KM 49.77776°N 103.60860°E

Family: Nemouridae

Amphinemura borealis

Within Known Range? Y Nearest Occurrence: 132.17 KM 49.08643°N 107.28952°E

Nemoura cinerea

Within Known Range? Y Nearest Occurrence: 158.75 KM 47.96783°N 107.59278°E

Family: Perlidae

Agnatina brevipennis

Within Known Range? Y Nearest Occurrence: 81.37 KM 49.10740°N 106.65177°E

Family: Perlodidae

Arcynopteryx sajanensis

Within Known Range? N Nearest Occurrence: 719.09 KM 51.61397°N 100.59972°E

Isoperla asiatica

Within Known Range? Y Nearest Occurrence: 45.87 KM 48.87748°N 106.12370°E

Isoperla lunigera

Within Known Range? Y Nearest Occurrence: 45.87 KM 48.87748°N 106.12370°E

Family: Pteronarcyidae

Pteronarcys reticulata

Within Known Range? Y Nearest Occurrence: 132.17 KM 49.08643°N 107.28952°E

Basin: Arctic Ocean Basin

Aimag: Tov

Soum: **Bornuur**

Freshwater Ecoregion: Lake Baikal

Terrestrial Ecoregion: Daurian Forest Steppe

WQM Sites:

WQM Sites: # 1 (Boroo River @ N 48.4661° E 106.2696°) # 2 (Boroo River @ N 48.62257° E 106.27627°) # 6 (Boroo River @ N 48.40082° E 106.18962°)

**LOE Rating: Probable Total: 8**

Family: Capniidae

Isocapnia kudia Within Known Range? N Nearest Occurrence: 793.67 KM 51.25356°N 99.66687 °E

Family: Perlidae

Agnetina cocandica Within Known Range? Y Nearest Occurrence: 140.89 KM 49.16354°N 105.18880 °E

Kamimuria exilis Within Known Range? N Nearest Occurrence: 845.69 KM 50.16278°N 98.84212 °E

Family: Perlodidae

Diura majuscula Within Known Range? Y Nearest Occurrence: 144.47 KM 47.99158°N 107.46116 °E

Isoperla altaica Within Known Range? Y Nearest Occurrence: 45.95 KM 48.87748°N 106.12370 °E

Megarcys ochracea Within Known Range? Y Nearest Occurrence: 99.28 KM 49.03282°N 106.96935 °E

Pictetiella asiatica Within Known Range? N Nearest Occurrence: 726.95 KM 51.65822°N 100.53000 °E

Family: Taeniopterygidae

Taenionema japonicum Within Known Range? Y Nearest Occurrence: 125.05 KM 49.05411°N 107.23175 °E

**LOE Rating: Possible Total: 1**

Family: Nemouridae

Nemoura arctica Within Known Range? Y Nearest Occurrence: 108.35 KM 47.77758°N 106.92780 °E

**LOE Rating: Predicted Total: 16**

Family: Capniidae

Capnia nigra Within Known Range? N Nearest Occurrence: 668.27 KM 50.92452°N 100.75528 °E

Mesocapnia variabilis Within Known Range? Y Nearest Occurrence: 184.04 KM 48.42080°N 107.91406 °E

Family: Chloroperlidae

Alloperla joosti Within Known Range? N Nearest Occurrence: 359.21 KM 49.21675°N 103.10750 °E

Alloperla mediata Within Known Range? N Nearest Occurrence: 327.34 KM 49.77776°N 103.60860 °E

Family: Leuctridae

Leuctra fusca Within Known Range? N Nearest Occurrence: 132.17 KM 49.08643°N 107.28952 °E

Family: Nemouridae

Amphinemura standfussi Within Known Range? N Nearest Occurrence: 205.76 KM 49.73130°N 107.63484 °E

Nemoura sahlbergi Within Known Range? Y Nearest Occurrence: 163.23 KM 48.16668°N 107.69548 °E

Family: Perlidae

Paragnetina flavotincta Within Known Range? N Nearest Occurrence: 140.64 KM 49.16354°N 105.18880 °E

Family: Perlodidae

Arcynopteryx compacta Within Known Range? Y Nearest Occurrence: 160.60 KM 47.84324°N 107.55299 °E

Arcynopteryx polaris Within Known Range? Y Nearest Occurrence: 184.04 KM 48.42080°N 107.91406 °E

Diura bicaudata Within Known Range? N Nearest Occurrence: 716.86 KM 47.21768°N 99.92824 °E

Isoperla eximia Within Known Range? N Nearest Occurrence: 154.23 KM 49.01829°N 107.54453 °E

Isoperla mongolica Within Known Range? Y Nearest Occurrence: 180.93 KM 48.09694°N 107.83988 °E

Isoperla obscura Within Known Range? Y Nearest Occurrence: 131.93 KM 47.85250°N 105.25567 °E

Isoperla potanini Within Known Range? N Nearest Occurrence: 513.90 KM 47.26999°N 101.80227 °E

Skwala pusilla Within Known Range? N Nearest Occurrence: 1,970.18 KM 48.51277°N 88.51107 °E



**Basin:** Arctic Ocean Basin

**Aimag:** Tov

**Soum:** Bornauur

Freshwater Ecoregion: Lake Baikal

Terrestrial Ecoregion: Daurian Forest Steppe

**WQM Sites:**

WQM Sites: # 1 (Boroo River @ N 48.4661° E 106.2696°) # 2  
(Boroo River @ N 48.62257° E 106.27627°) # 6 (Boroo River @ N  
48.40082° E 106.18962°)

<b>LOE Rating:</b> Unlikely	<b>Total:</b> 3
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Family: Capniidae

Capnia khulsbagia

Within Known Range? N Nearest Occurrence: 674.84 KM 50.98944 °N 100.71944 °E

Mesocapnia altaica

Within Known Range? N Nearest Occurrence: 1,926.91 KM 48.43684 °N 88.90094 °E

Family: Nemouridae

Nemurella pictetii

Within Known Range? N Nearest Occurrence: 782.07 KM 51.07896 °N 99.70857 °E

Basin: Arctic Ocean Basin

Aimags: Tov

Soums: Delgerkhaan

Freshwater Ecoregion: Lake Baikal

Terrestrial Ecoregion: Selenge-Orkhon Forest Steppe

WQM Sites:

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Highly Likely Total: 8**

Family: Capniidae

Isocapnia guentheri

Within Known Range? N Nearest Occurrence: 294.54 KM 47.88349°N 106.98829°E

Isocapnia sibirica

Within Known Range? N Nearest Occurrence: 318.34 KM 47.26999°N 101.80227°E

Family: Chloroperlidae

Alloperla rostellata

Within Known Range? N Nearest Occurrence: 359.30 KM 49.77776°N 103.60860°E

Suwallia kerzhneri

Within Known Range? N Nearest Occurrence: 362.06 KM 48.12416°N 107.54780°E

Suwallia teleckojensis

Within Known Range? N Nearest Occurrence: 295.16 KM 46.78742°N 101.96021°E

Family: Perlidae

Agnetina extrema

Within Known Range? N Nearest Occurrence: 313.04 KM 48.50028°N 106.78434°E

Family: Perlodidae

Isoperla kozlovi

Within Known Range? N Nearest Occurrence: 146.41 KM 47.85250°N 105.25567°E

Kaszabia nigricauda

Within Known Range? N Nearest Occurrence: 146.41 KM 47.85250°N 105.25567°E

**LOE Rating: Likely Total: 14**

Family: Capniidae

Isocapnia kudia

Within Known Range? N Nearest Occurrence: 746.22 KM 51.25356°N 99.66687°E

Family: Chloroperlidae

Alaskaperla longidentata

Within Known Range? N Nearest Occurrence: 323.10 KM 46.82177°N 101.70479°E

Alloperla deminuta

Within Known Range? Y Nearest Occurrence: 294.62 KM 46.78742°N 101.96021°E

Alloperla joosti

Within Known Range? N Nearest Occurrence: 294.62 KM 46.78742°N 101.96021°E

Haploperla lepnevae

Within Known Range? N Nearest Occurrence: 294.11 KM 48.87748°N 106.12370°E

Family: Leuctridae

Paraleuctra zapekinae

Within Known Range? N Nearest Occurrence: 334.59 KM 49.71481°N 104.64203°E

Family: Nemouridae

Amphinemura borealis

Within Known Range? Y Nearest Occurrence: 294.62 KM 46.78742°N 101.96021°E

Nemoura cinerea

Within Known Range? N Nearest Occurrence: 330.89 KM 49.68122°N 104.56461°E

Family: Perlidae

Agnetina brevipennis

Within Known Range? N Nearest Occurrence: 247.18 KM 46.89303°N 102.39457°E

Kamimuria exilis

Within Known Range? N Nearest Occurrence: 748.36 KM 50.16278°N 98.84212°E

Family: Perlodidae

Arcynopteryx sajanensis

Within Known Range? N Nearest Occurrence: 705.47 KM 51.61397°N 100.59972°E

Diura majuscula

Within Known Range? Y Nearest Occurrence: 247.62 KM 46.89303°N 102.39457°E

Pictetiella asiatica

Within Known Range? N Nearest Occurrence: 712.91 KM 51.65822°N 100.53000°E

Family: Pteronarcyidae

Pteronarcys reticulata

Within Known Range? N Nearest Occurrence: 391.94 KM 49.63453°N 102.64845°E

**LOE Rating: Probable Total: 4**

Family: Nemouridae

Nemoura arctica

Within Known Range? N Nearest Occurrence: 283.90 KM 47.77758°N 106.92780°E

Family: Perlidae

Agnetina cocandica

Within Known Range? N Nearest Occurrence: 281.26 KM 49.16354°N 105.18880°E

Family: Perlodidae

Isoperla asiatica

Within Known Range? N Nearest Occurrence: 294.11 KM 48.87748°N 106.12370°E

Isoperla lunigera

Within Known Range? N Nearest Occurrence: 294.11 KM 48.87748°N 106.12370°E

Research funded by the National Science Foundation

DEB-BSI #0206674: A Survey of the Aquatic Insects of the Selenge River Basin. P.I.'s: JKGelhaus, JCMorse, BHayford.

DEB # 0743732: Aquatic Insects of the Altai and Hangai Mountain Drainages. P.I.'s: JKGelhaus, JCMorse, CRNelson.

<http://clade.ansp.org/entomology/mongolia/index.html>





**Basin:** Arctic Ocean Basin

**Aimag:** Tov

**Soum:** Delgerkhaan

Freshwater Ecoregion: Lake Baikal

Terrestrial Ecoregion: Selenge-Orkhon Forest Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Possible Total: 3**

Family: Perlodidae

Diura bicaudata Within Known Range? N Nearest Occurrence: 523.17 KM 47.21768°N 99.92824°E

Isoperla obscura Within Known Range? N Nearest Occurrence: 146.41 KM 47.85250°N 105.25567°E

Megarcys ochracea Within Known Range? N Nearest Occurrence: 347.10 KM 47.99158°N 107.46116°E

**LOE Rating: Predicted Total: 15**

Family: Capniidae

Capnia nigra Within Known Range? N Nearest Occurrence: 630.16 KM 50.51003°N 100.40375°E

Mesocapnia variabilis Within Known Range? N Nearest Occurrence: 413.92 KM 48.42080°N 107.91406°E

Family: Chloroperlidae

Alloperla mediata Within Known Range? N Nearest Occurrence: 359.30 KM 49.77776°N 103.60860°E

Family: Leuctridae

Leuctra fusca Within Known Range? N Nearest Occurrence: 397.99 KM 49.08643°N 107.28952°E

Family: Nemouridae

Amphinemura standfussi Within Known Range? N Nearest Occurrence: 344.02 KM 49.33339°N 102.97786°E

Nemoura sahlbergi Within Known Range? N Nearest Occurrence: 345.13 KM 49.70184°N 103.80040°E

Family: Perlidae

Paragnetina flavotincta Within Known Range? N Nearest Occurrence: 280.76 KM 49.16354°N 105.18880°E

Family: Perlodidae

Arcynopteryx compacta Within Known Range? Y Nearest Occurrence: 253.27 KM 46.88627°N 102.34304°E

Arcynopteryx polaris Within Known Range? N Nearest Occurrence: 319.16 KM 47.04409°N 101.76352°E

Isoperla altaica Within Known Range? N Nearest Occurrence: 294.64 KM 48.87748°N 106.12370°E

Isoperla eximia Within Known Range? N Nearest Occurrence: 414.81 KM 49.01829°N 107.54453°E

Isoperla mongolica Within Known Range? N Nearest Occurrence: 318.91 KM 47.26999°N 101.80227°E

Isoperla potanini Within Known Range? N Nearest Occurrence: 303.29 KM 46.73093°N 101.88583°E

Skwala pusilla Within Known Range? N Nearest Occurrence: 1,798.61 KM 48.51277°N 88.51107°E

Family: Taeniopterygidae

Taenionema japonicum Within Known Range? N Nearest Occurrence: 386.33 KM 47.28244°N 101.18793°E

**LOE Rating: Unlikely Total: 3**

Family: Capniidae

Capnia khulsbagia Within Known Range? N Nearest Occurrence: 642.98 KM 50.98944°N 100.71944°E

Mesocapnia altaica Within Known Range? N Nearest Occurrence: 1,754.66 KM 48.43684°N 88.90094°E

Family: Nemouridae

Nemurella pictetii Within Known Range? N Nearest Occurrence: 729.77 KM 51.07896°N 99.70857°E

**Basin:** Arctic Ocean Basin  
**Aimags:** Tov  
**Soums:** Erdene

**Freshwater Ecoregion:** Lake Baikal  
**Terrestrial Ecoregion:** Trans-Baikal Conifer Forests

**WQM Sites:**

WQM Sites: # 163 (Tuul River @ N 48.0384° E 107.73928°) # 164 (Terelj River @ N 48.00125° E 107.45262°)

**LOE Rating: Highly Likely Total: 4**

Family: Chloroperlidae					
Alaskaperla longidentata	Within Known Range? Y	Nearest Occurrence:	15.00 KM	48.25861°N	107.90251 °E
Alloperla deminuta	Within Known Range? Y	Nearest Occurrence:	17.46 KM	48.21780°N	107.90392 °E
Family: Leuctridae					
Paraleuctra zapekinae	Within Known Range? Y	Nearest Occurrence:	23.56 KM	48.14846°N	107.91267 °E
Family: Perlodidae					
Kaszabia nigricauda	Within Known Range? Y	Nearest Occurrence:	15.00 KM	48.25861°N	107.90251 °E

**LOE Rating: Likely Total: 10**

Family: Capniidae					
Isocapnia guentheri	Within Known Range? Y	Nearest Occurrence:	15.88 KM	48.24734°N	107.90589 °E
Isocapnia sibirica	Within Known Range? Y	Nearest Occurrence:	25.19 KM	48.09549°N	107.84265 °E
Family: Chloroperlidae					
Suwallia kerzhneri	Within Known Range? Y	Nearest Occurrence:	33.15 KM	48.12416°N	107.54780 °E
Suwallia teleckojensis	Within Known Range? Y	Nearest Occurrence:	18.77 KM	48.16668°N	107.69548 °E
Family: Nemouridae					
Nemoura arctica	Within Known Range? Y	Nearest Occurrence:	15.03 KM	48.25861°N	107.90251 °E
Nemoura cinerea	Within Known Range? Y	Nearest Occurrence:	43.56 KM	47.96783°N	107.59278 °E
Family: Perlidae					
Agnetina extrema	Within Known Range? Y	Nearest Occurrence:	25.28 KM	48.09671°N	107.84928 °E
Family: Perlodidae					
Diura majuscula	Within Known Range? Y	Nearest Occurrence:	25.24 KM	48.09549°N	107.84265 °E
Isoperla kozlovi	Within Known Range? Y	Nearest Occurrence:	15.00 KM	48.25861°N	107.90251 °E
Megarcys ochracea	Within Known Range? Y	Nearest Occurrence:	49.34 KM	47.97108°N	107.49534 °E

**LOE Rating: Probable Total: 9**

Family: Capniidae					
Mesocapnia variabilis	Within Known Range? Y	Nearest Occurrence:	19.20 KM	48.42080°N	107.91406 °E
Family: Chloroperlidae					
Alloperla rostellata	Within Known Range? N	Nearest Occurrence:	490.62 KM	49.77776°N	103.60860 °E
Haploperla lepnevae	Within Known Range? Y	Nearest Occurrence:	73.37 KM	47.82258°N	107.33613 °E
Family: Nemouridae					
Amphinemura borealis	Within Known Range? Y	Nearest Occurrence:	73.37 KM	47.82258°N	107.33613 °E
Family: Perlodidae					
Arcynopteryx polaris	Within Known Range? Y	Nearest Occurrence:	19.20 KM	48.42080°N	107.91406 °E
Isoperla altaica	Within Known Range? Y	Nearest Occurrence:	32.87 KM	48.60182°N	107.84335 °E
Isoperla asiatica	Within Known Range? Y	Nearest Occurrence:	43.56 KM	47.96783°N	107.59278 °E
Isoperla lunigera	Within Known Range? Y	Nearest Occurrence:	25.19 KM	48.09549°N	107.84265 °E
Family: Taeniopterygidae					
Taenionema japonicum	Within Known Range? N	Nearest Occurrence:	102.41 KM	49.05411°N	107.23175 °E



Basin: Arctic Ocean Basin

Aimags: Tov

Soums: Erdene

Freshwater Ecoregion: Lake Baikal

Terrestrial Ecoregion: Trans-Baikal Conifer Forests

WQM Sites:

WQM Sites: # 163 (Tuul River @ N 48.0384° E 107.73928°) # 164 (Terej River @ N 48.00125° E 107.45262°)

**LOE Rating: Possible Total: 7**

Family: Capniidae					
Isocapnia kudia	Within Known Range? N	Nearest Occurrence:	957.76 KM	51.25356°N	99.66687°E
Family: Nemouridae					
Nemoura sahlbergi	Within Known Range? Y	Nearest Occurrence:	17.46 KM	48.21780°N	107.90392°E
Family: Perlidae					
Agnentina brevipennis	Within Known Range? N	Nearest Occurrence:	100.50 KM	49.08636°N	107.30750°E
Kamimuria exilis	Within Known Range? N	Nearest Occurrence:	1,014.83 KM	50.16278°N	98.84212°E
Family: Perlodidae					
Arcynopteryx sajanensis	Within Known Range? N	Nearest Occurrence:	878.66 KM	51.61397°N	100.59972°E
Pictetiella asiatica	Within Known Range? N	Nearest Occurrence:	886.16 KM	51.65822°N	100.53000°E
Family: Pteronarcyidae					
Pteronarcys reticulata	Within Known Range? N	Nearest Occurrence:	100.50 KM	49.08636°N	107.30750°E

**LOE Rating: Predicted Total: 14**

Family: Capniidae					
Capnia nigra	Within Known Range? N	Nearest Occurrence:	831.76 KM	50.92452°N	100.75528°E
Family: Chloroperlidae					
Alloperla joosti	Within Known Range? N	Nearest Occurrence:	528.14 KM	49.21675°N	103.10750°E
Alloperla mediata	Within Known Range? N	Nearest Occurrence:	490.62 KM	49.77776°N	103.60860°E
Family: Leuctridae					
Leuctra fusca	Within Known Range? N	Nearest Occurrence:	101.56 KM	49.08643°N	107.28952°E
Family: Nemouridae					
Amphinemura standfussi	Within Known Range? N	Nearest Occurrence:	158.21 KM	49.73130°N	107.63484°E
Family: Perlidae					
Agnentina cocandica	Within Known Range? Y	Nearest Occurrence:	267.20 KM	50.06476°N	106.13388°E
Paragnetina flavotincta	Within Known Range? N	Nearest Occurrence:	266.72 KM	50.06476°N	106.13388°E
Family: Perlodidae					
Arcynopteryx compacta	Within Known Range? Y	Nearest Occurrence:	58.00 KM	47.84324°N	107.55299°E
Diura bicaudata	Within Known Range? N	Nearest Occurrence:	879.87 KM	47.21768°N	99.92824°E
Isoperla eximia	Within Known Range? Y	Nearest Occurrence:	32.81 KM	48.60182°N	107.84335°E
Isoperla mongolica	Within Known Range? Y	Nearest Occurrence:	25.00 KM	48.09694°N	107.83988°E
Isoperla obscura	Within Known Range? N	Nearest Occurrence:	199.98 KM	49.72192°N	106.65562°E
Isoperla potanini	Within Known Range? N	Nearest Occurrence:	674.66 KM	47.26999°N	101.80227°E
Skwala pusilla	Within Known Range? N	Nearest Occurrence:	2,138.85 KM	48.51277°N	88.51107°E

**LOE Rating: Unlikely Total: 3**

Family: Capniidae					
Capnia khulsbagia	Within Known Range? N	Nearest Occurrence:	838.02 KM	50.98944°N	100.71944°E
Mesocapnia altaica	Within Known Range? N	Nearest Occurrence:	2,095.50 KM	48.43684°N	88.90094°E
Family: Nemouridae					
Nemurella pictetii	Within Known Range? N	Nearest Occurrence:	946.95 KM	51.07896°N	99.70857°E

Basin: Arctic Ocean Basin

Aimag: Tov

Soum: Erdenesant

Freshwater Ecoregion: Lake Baikal

Terrestrial Ecoregion: Mongolian-Manchurian Grassland

WQM Sites:

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Highly Likely Total: 8**

Family: Capniidae

Isocapnia guentheri

Within Known Range? Y Nearest Occurrence: 286.06 KM 47.88349°N 106.98829°E

Isocapnia sibirica

Within Known Range? Y Nearest Occurrence: 297.83 KM 47.26999°N 101.80227°E

Family: Chloroperlidae

Alloperla joosti

Within Known Range? N Nearest Occurrence: 264.80 KM 49.21675°N 103.10750°E

Alloperla rostellata

Within Known Range? N Nearest Occurrence: 294.95 KM 49.77776°N 103.60860°E

Suwallia kerzhneri

Within Known Range? Y Nearest Occurrence: 347.71 KM 50.35162°N 105.04436°E

Family: Perlidae

Agnetina extrema

Within Known Range? Y Nearest Occurrence: 282.37 KM 48.83420°N 106.49113°E

Family: Perlodidae

Isoperla kozlovi

Within Known Range? Y Nearest Occurrence: 107.23 KM 47.85250°N 105.25567°E

Kaszabia nigricauda

Within Known Range? Y Nearest Occurrence: 107.23 KM 47.85250°N 105.25567°E

**LOE Rating: Likely Total: 15**

Family: Capniidae

Isocapnia kudia

Within Known Range? N Nearest Occurrence: 694.01 KM 51.25356°N 99.66687°E

Family: Chloroperlidae

Alloperla deminuta

Within Known Range? Y Nearest Occurrence: 285.36 KM 46.78742°N 101.96021°E

Haploperla lepnevae

Within Known Range? Y Nearest Occurrence: 246.26 KM 49.48086°N 104.30864°E

Suwallia teleckojensis

Within Known Range? Y Nearest Occurrence: 265.27 KM 49.21675°N 103.10750°E

Family: Leuctridae

Paraleuctra zapekinae

Within Known Range? N Nearest Occurrence: 272.00 KM 49.71481°N 104.64203°E

Family: Nemouridae

Amphinemura borealis

Within Known Range? Y Nearest Occurrence: 283.71 KM 49.33339°N 102.97786°E

Nemoura cinerea

Within Known Range? Y Nearest Occurrence: 267.86 KM 49.68122°N 104.56461°E

Family: Perlidae

Agnetina brevipennis

Within Known Range? Y Nearest Occurrence: 235.82 KM 46.89303°N 102.39457°E

Agnetina cocandica

Within Known Range? N Nearest Occurrence: 224.68 KM 49.16354°N 105.18880°E

Kamimuria exilis

Within Known Range? N Nearest Occurrence: 705.21 KM 50.16278°N 98.84212°E

Family: Perlodidae

Arcynopteryx sajanensis

Within Known Range? N Nearest Occurrence: 648.15 KM 51.61397°N 100.59972°E

Diura majuscula

Within Known Range? Y Nearest Occurrence: 236.24 KM 46.89303°N 102.39457°E

Isoperla lunigera

Within Known Range? N Nearest Occurrence: 246.26 KM 49.48086°N 104.30864°E

Pictetiella asiatica

Within Known Range? N Nearest Occurrence: 655.81 KM 51.65822°N 100.53000°E

Family: Pteronarcyidae

Pteronarcys reticulata

Within Known Range? N Nearest Occurrence: 332.41 KM 49.63453°N 102.64845°E

**LOE Rating: Probable Total: 2**

Family: Chloroperlidae

Alaskaperla longidentata

Within Known Range? Y Nearest Occurrence: 312.62 KM 46.82177°N 101.70479°E

Family: Perlodidae

Isoperla asiatica

Within Known Range? Y Nearest Occurrence: 254.81 KM 48.87748°N 106.12370°E

Research funded by the National Science Foundation

DEB-BSI #0206674: A Survey of the Aquatic Insects of the Selenge River Basin. P.I.'s: JKGelhaus, JCMorse, BHayford.

DEB # 0743732: Aquatic Insects of the Altai and Hangai Mountain Drainages. P.I.'s: JKGelhaus, JCMorse, CRNelson.

<http://clade.ansp.org/entomology/mongolia/index.html>



Basin: Arctic Ocean Basin

Aimag: Tov

Soum: Erdenesant

Freshwater Ecoregion: Lake Baikal

Terrestrial Ecoregion: Mongolian-Manchurian Grassland

WQM Sites:

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Possible Total: 4**

Family: Nemouridae

Nemoura arctica

Within Known Range? Y Nearest Occurrence: 273.29 KM 49.65142°N 103.88064°E

Family: Perlodidae

Diura bicaudata

Within Known Range? N Nearest Occurrence: 505.88 KM 47.21768°N 99.92824°E

Isoperla obscura

Within Known Range? Y Nearest Occurrence: 107.23 KM 47.85250°N 105.25567°E

Megarcys ochracea

Within Known Range? N Nearest Occurrence: 294.95 KM 49.77776°N 103.60860°E

**LOE Rating: Predicted Total: 15**

Family: Capniidae

Capnia nigra

Within Known Range? N Nearest Occurrence: 578.50 KM 50.51003°N 100.40375°E

Mesocapnia variabilis

Within Known Range? Y Nearest Occurrence: 402.19 KM 48.42080°N 107.91406°E

Family: Chloroperlidae

Alloperla mediata

Within Known Range? N Nearest Occurrence: 294.95 KM 49.77776°N 103.60860°E

Family: Leuctridae

Leuctra fusca

Within Known Range? N Nearest Occurrence: 370.89 KM 49.08643°N 107.28952°E

Family: Nemouridae

Amphinemura standfussi

Within Known Range? N Nearest Occurrence: 283.71 KM 49.33339°N 102.97786°E

Nemoura sahlbergi

Within Known Range? N Nearest Occurrence: 280.50 KM 49.70184°N 103.80040°E

Family: Perlidae

Paragnetina flavotincta

Within Known Range? N Nearest Occurrence: 224.28 KM 49.16354°N 105.18880°E

Family: Perlodidae

Arcynopteryx compacta

Within Known Range? Y Nearest Occurrence: 242.01 KM 46.88627°N 102.34304°E

Arcynopteryx polaris

Within Known Range? Y Nearest Occurrence: 281.01 KM 49.70184°N 103.80040°E

Isoperla altaica

Within Known Range? Y Nearest Occurrence: 255.27 KM 48.87748°N 106.12370°E

Isoperla eximia

Within Known Range? N Nearest Occurrence: 391.14 KM 49.01829°N 107.54453°E

Isoperla mongolica

Within Known Range? Y Nearest Occurrence: 298.37 KM 47.26999°N 101.80227°E

Isoperla potanini

Within Known Range? N Nearest Occurrence: 295.21 KM 46.73093°N 101.88583°E

Skwala pusilla

Within Known Range? N Nearest Occurrence: 1,778.52 KM 48.51277°N 88.51107°E

Family: Taeniopterygidae

Taenionema japonicum

Within Known Range? N Nearest Occurrence: 364.21 KM 49.05411°N 107.23175°E

**LOE Rating: Unlikely Total: 3**

Family: Capniidae

Capnia khulsbagia

Within Known Range? N Nearest Occurrence: 587.58 KM 50.98944°N 100.71944°E

Mesocapnia altaica

Within Known Range? N Nearest Occurrence: 1,734.73 KM 48.43684°N 88.90094°E

Family: Nemouridae

Nemurella pictetii

Within Known Range? N Nearest Occurrence: 678.20 KM 51.07896°N 99.70857°E

Basin: Arctic Ocean Basin

Aimags: Tov

Soums: Jargalant

Freshwater Ecoregion: Lake Baikal

Terrestrial Ecoregion: Daurian Forest Steppe

WQM Sites:

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Highly Likely Total: 11**

Family: Capniidae

Isocapnia guentheri

Within Known Range? Y Nearest Occurrence: 133.36 KM 49.08405°N 106.89521°E

Isocapnia sibirica

Within Known Range? N Nearest Occurrence: 232.31 KM 48.09549°N 107.84265°E

Family: Chloroperlidae

Alloperla deminuta

Within Known Range? Y Nearest Occurrence: 189.38 KM 47.82258°N 107.33613°E

Alloperla rostellata

Within Known Range? N Nearest Occurrence: 277.94 KM 49.77776°N 103.60860°E

Haploperla lepnevae

Within Known Range? Y Nearest Occurrence: 48.54 KM 48.87748°N 106.12370°E

Suwallia kerzhneri

Within Known Range? Y Nearest Occurrence: 199.78 KM 48.12416°N 107.54780°E

Suwallia teleckojensis

Within Known Range? Y Nearest Occurrence: 109.13 KM 48.50028°N 106.78434°E

Family: Leuctridae

Paraleuctra zapekinae

Within Known Range? Y Nearest Occurrence: 180.66 KM 49.71481°N 104.64203°E

Family: Perlidae

Agnetina extrema

Within Known Range? Y Nearest Occurrence: 81.24 KM 48.83420°N 106.49113°E

Family: Perlodidae

Isoperla kozlovi

Within Known Range? Y Nearest Occurrence: 48.54 KM 48.87748°N 106.12370°E

Kaszabia nigricauda

Within Known Range? Y Nearest Occurrence: 100.99 KM 47.85250°N 105.25567°E

**LOE Rating: Likely Total: 10**

Family: Chloroperlidae

Alaskaperla longidentata

Within Known Range? Y Nearest Occurrence: 161.62 KM 49.95588°N 105.33791°E

Family: Nemouridae

Amphinemura borealis

Within Known Range? Y Nearest Occurrence: 168.93 KM 50.03638°N 105.37392°E

Nemoura cinerea

Within Known Range? Y Nearest Occurrence: 184.41 KM 49.68122°N 104.56461°E

Family: Perlidae

Agnetina brevipennis

Within Known Range? Y Nearest Occurrence: 110.82 KM 49.10740°N 106.65177°E

Agnetina cocandica

Within Known Range? Y Nearest Occurrence: 94.67 KM 49.16354°N 105.18880°E

Family: Perlodidae

Arcynopteryx sajanensis

Within Known Range? N Nearest Occurrence: 670.23 KM 51.61397°N 100.59972°E

Isoperla asiatica

Within Known Range? Y Nearest Occurrence: 48.54 KM 48.87748°N 106.12370°E

Isoperla lunigera

Within Known Range? Y Nearest Occurrence: 48.54 KM 48.87748°N 106.12370°E

Pictetiella asiatica

Within Known Range? N Nearest Occurrence: 678.18 KM 51.65822°N 100.53000°E

Family: Pteronarcyidae

Pteronarcys reticulata

Within Known Range? Y Nearest Occurrence: 174.11 KM 49.08643°N 107.28952°E

**LOE Rating: Probable Total: 3**

Family: Capniidae

Isocapnia kudia

Within Known Range? N Nearest Occurrence: 743.38 KM 51.25356°N 99.66687°E

Family: Perlidae

Kamimuria exilis

Within Known Range? N Nearest Occurrence: 794.20 KM 50.16278°N 98.84212°E

Family: Perlodidae

Megaracys ochracea

Within Known Range? Y Nearest Occurrence: 138.69 KM 49.03282°N 106.96935°E

Research funded by the National Science Foundation

DEB-BSI #0206674: A Survey of the Aquatic Insects of the Selenge River Basin. P.I.'s: JKGelhaus, JCMorse, BHayford.

DEB # 0743732: Aquatic Insects of the Altai and Hangai Mountain Drainages. P.I.'s: JKGelhaus, JCMorse, CRNelson.

<http://clade.ansp.org/entomology/mongolia/index.html>



Basin: Arctic Ocean Basin

Aimags: Tov

Soums: Jargalant

Freshwater Ecoregion: Lake Baikal

Terrestrial Ecoregion: Daurian Forest Steppe

WQM Sites:

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Possible Total: 7**

Family: Chloroperlidae

Alloperla joosti Within Known Range? N Nearest Occurrence: 307.83 KM 49.21675°N 103.10750°E

Alloperla mediata Within Known Range? N Nearest Occurrence: 277.94 KM 49.77776°N 103.60860°E

Family: Nemouridae

Nemoura arctica Within Known Range? Y Nearest Occurrence: 153.19 KM 47.77758°N 106.92780°E

Family: Perlodidae

Diura majuscula Within Known Range? Y Nearest Occurrence: 195.24 KM 47.99158°N 107.46116°E

Isoperla altaica Within Known Range? Y Nearest Occurrence: 48.63 KM 48.87748°N 106.12370°E

Isoperla obscura Within Known Range? Y Nearest Occurrence: 100.99 KM 47.85250°N 105.25567°E

Family: Taeniopterygidae

Taenionema japonicum Within Known Range? Y Nearest Occurrence: 167.19 KM 49.05411°N 107.23175°E

**LOE Rating: Predicted Total: 13**

Family: Capniidae

Capnia nigra Within Known Range? N Nearest Occurrence: 618.22 KM 50.92452°N 100.75528°E

Mesocapnia variabilis Within Known Range? Y Nearest Occurrence: 235.07 KM 48.42080°N 107.91406°E

Family: Leuctridae

Leuctra fusca Within Known Range? N Nearest Occurrence: 174.11 KM 49.08643°N 107.28952°E

Family: Nemouridae

Amphinemura standfussi Within Known Range? N Nearest Occurrence: 240.06 KM 49.73130°N 107.63484°E

Nemoura sahlbergi Within Known Range? Y Nearest Occurrence: 214.63 KM 48.16668°N 107.69548°E

Family: Perlidae

Paragnetina flavotincta Within Known Range? Y Nearest Occurrence: 94.50 KM 49.16354°N 105.18880°E

Family: Perlodidae

Arcynopteryx compacta Within Known Range? Y Nearest Occurrence: 208.92 KM 49.62414°N 104.24594°E

Arcynopteryx polaris Within Known Range? Y Nearest Occurrence: 235.07 KM 48.42080°N 107.91406°E

Diura bicaudata Within Known Range? N Nearest Occurrence: 669.65 KM 47.21768°N 99.92824°E

Isoperla eximia Within Known Range? N Nearest Occurrence: 199.10 KM 49.01829°N 107.54453°E

Isoperla mongolica Within Known Range? Y Nearest Occurrence: 232.39 KM 48.09694°N 107.83988°E

Isoperla potanini Within Known Range? N Nearest Occurrence: 468.33 KM 47.26999°N 101.80227°E

Skwala pusilla Within Known Range? N Nearest Occurrence: 1,919.74 KM 48.51277°N 88.51107°E

**LOE Rating: Unlikely Total: 3**

Family: Capniidae

Capnia khulsbagia Within Known Range? N Nearest Occurrence: 624.88 KM 50.98944°N 100.71944°E

Mesocapnia altaica Within Known Range? N Nearest Occurrence: 1,876.52 KM 48.43684°N 88.90094°E

Family: Nemouridae

Nemurella pictetii Within Known Range? N Nearest Occurrence: 731.57 KM 51.07896°N 99.70857°E

**Basin:** Arctic Ocean Basin  
**Aimag:** Tov  
**Soum:** Lun

Freshwater Ecoregion: Lake Baikal  
 Terrestrial Ecoregion: Mongolian-Manchurian Grassland

**WQM Sites:**

WQM Sites: # 102 (Tuul River @ N 47.85763° E 105.20663°)

<b>LOE Rating:</b>	<b>Highly Likely</b>	<b>Total:</b>	<b>3</b>
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Family: Perlodidae

Isoperla kozlovi	Within Known Range? Y	Nearest Occurrence:	13.11 KM	47.85250°N	105.25567°E
Isoperla obscura	Within Known Range? Y	Nearest Occurrence:	13.11 KM	47.85250°N	105.25567°E
Kaszabia nigricauda	Within Known Range? Y	Nearest Occurrence:	13.11 KM	47.85250°N	105.25567°E

<b>LOE Rating:</b>	<b>Likely</b>	<b>Total:</b>	<b>19</b>
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Family: Capniidae

Isocapnia guentheri	Within Known Range? Y	Nearest Occurrence:	202.43 KM	47.88349°N	106.98829°E
Isocapnia sibirica	Within Known Range? Y	Nearest Occurrence:	299.04 KM	48.09549°N	107.84265°E

Family: Chloroperlidae

Alloperla deminuta	Within Known Range? Y	Nearest Occurrence:	240.73 KM	47.82258°N	107.33613°E
Alloperla joosti	Within Known Range? N	Nearest Occurrence:	279.24 KM	49.21675°N	103.10750°E
Alloperla rostellata	Within Known Range? N	Nearest Occurrence:	281.88 KM	49.77776°N	103.60860°E
Haploperla lepnevae	Within Known Range? Y	Nearest Occurrence:	162.09 KM	48.87748°N	106.12370°E
Suwallia kerzhneri	Within Known Range? Y	Nearest Occurrence:	267.02 KM	48.12416°N	107.54780°E
Suwallia teleckojensis	Within Known Range? Y	Nearest Occurrence:	197.08 KM	48.50028°N	106.78434°E

Family: Leuctridae

Paraleuctra zapekinae	Within Known Range? N	Nearest Occurrence:	223.26 KM	49.71481°N	104.64203°E
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Family: Nemouridae

Amphinemura borealis	Within Known Range? Y	Nearest Occurrence:	240.73 KM	47.82258°N	107.33613°E
Nemoura cinerea	Within Known Range? Y	Nearest Occurrence:	222.10 KM	49.68122°N	104.56461°E

Family: Perlidae

Agnetina brevipennis	Within Known Range? Y	Nearest Occurrence:	212.17 KM	49.48086°N	104.30864°E
Agnetina cocandica	Within Known Range? Y	Nearest Occurrence:	154.60 KM	49.16354°N	105.18880°E
Agnetina extrema	Within Known Range? Y	Nearest Occurrence:	188.24 KM	48.83420°N	106.49113°E

Family: Perlodidae

Arcynopteryx sajanensis	Within Known Range? N	Nearest Occurrence:	663.65 KM	51.61397°N	100.59972°E
Isoperla asiatica	Within Known Range? Y	Nearest Occurrence:	162.09 KM	48.87748°N	106.12370°E
Isoperla lunigera	Within Known Range? Y	Nearest Occurrence:	162.09 KM	48.87748°N	106.12370°E
Pictetiella asiatica	Within Known Range? N	Nearest Occurrence:	671.55 KM	51.65822°N	100.53000°E

Family: Pteronarcyidae

Pteronarcys reticulata	Within Known Range? N	Nearest Occurrence:	276.94 KM	49.08643°N	107.28952°E
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<b>LOE Rating:</b>	<b>Probable</b>	<b>Total:</b>	<b>3</b>
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Family: Capniidae

Isocapnia kudia	Within Known Range? N	Nearest Occurrence:	722.55 KM	51.25356°N	99.66687°E
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Family: Chloroperlidae

Alaskaperla longidentata	Within Known Range? Y	Nearest Occurrence:	242.98 KM	49.95588°N	105.33791°E
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Family: Perlidae

Kamimuria exilis	Within Known Range? N	Nearest Occurrence:	751.94 KM	50.16278°N	98.84212°E
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**Basin:** Arctic Ocean Basin  
**Aimags:** Tov  
**Soums:** Lun

**Freshwater Ecoregion:** Lake Baikal  
**Terrestrial Ecoregion:** Mongolian-Manchurian Grassland

**WQM Sites:**

WQM Sites: # 102 (Tuul River @ N 47.85763° E 105.20663°)

**LOE Rating: Possible Total: 5**

Family: Chloroperlidae					
Alloperla mediata	Within Known Range? N	Nearest Occurrence:	281.88 KM	49.77776°N	103.60860°E
Family: Nemouridae					
Nemoura arctica	Within Known Range? Y	Nearest Occurrence:	195.70 KM	47.77758°N	106.92780°E
Family: Perlodidae					
Diura majuscula	Within Known Range? Y	Nearest Occurrence:	256.16 KM	47.99158°N	107.46116°E
Isoperla altaica	Within Known Range? Y	Nearest Occurrence:	162.38 KM	48.87748°N	106.12370°E
Megarcys ochracea	Within Known Range? N	Nearest Occurrence:	243.98 KM	49.03282°N	106.96935°E

**LOE Rating: Predicted Total: 14**

Family: Capniidae					
Capnia nigra	Within Known Range? N	Nearest Occurrence:	601.87 KM	50.92452°N	100.75528°E
Mesocapnia variabilis	Within Known Range? Y	Nearest Occurrence:	313.74 KM	48.42080°N	107.91406°E
Family: Leuctridae					
Leuctra fusca	Within Known Range? N	Nearest Occurrence:	276.94 KM	49.08643°N	107.28952°E
Family: Nemouridae					
Amphinemura standfussi	Within Known Range? N	Nearest Occurrence:	298.46 KM	49.33339°N	102.97786°E
Nemoura sahlbergi	Within Known Range? Y	Nearest Occurrence:	262.41 KM	49.70184°N	103.80040°E
Family: Perlidae					
Paragnetina flavotincta	Within Known Range? N	Nearest Occurrence:	154.32 KM	49.16354°N	105.18880°E
Family: Perlodidae					
Arcynopteryx compacta	Within Known Range? Y	Nearest Occurrence:	229.92 KM	49.62414°N	104.24594°E
Arcynopteryx polaris	Within Known Range? Y	Nearest Occurrence:	262.89 KM	49.70184°N	103.80040°E
Diura bicaudata	Within Known Range? N	Nearest Occurrence:	584.87 KM	47.21768°N	99.92824°E
Isoperla eximia	Within Known Range? N	Nearest Occurrence:	297.80 KM	49.01829°N	107.54453°E
Isoperla mongolica	Within Known Range? Y	Nearest Occurrence:	299.29 KM	48.09694°N	107.83988°E
Isoperla potanini	Within Known Range? N	Nearest Occurrence:	378.43 KM	47.26999°N	101.80227°E
Skwala pusilla	Within Known Range? N	Nearest Occurrence:	1,850.73 KM	48.51277°N	88.51107°E
Family: Taeniopterygidae					
Taenionema japonicum	Within Known Range? Y	Nearest Occurrence:	270.09 KM	49.05411°N	107.23175°E

**LOE Rating: Unlikely Total: 3**

Family: Capniidae					
Capnia khulsbagia	Within Known Range? N	Nearest Occurrence:	609.31 KM	50.98944°N	100.71944°E
Mesocapnia altaica	Within Known Range? N	Nearest Occurrence:	1,807.14 KM	48.43684°N	88.90094°E
Family: Nemouridae					
Nemurella pictetii	Within Known Range? N	Nearest Occurrence:	708.41 KM	51.07896°N	99.70857°E



Basin: Arctic Ocean Basin

Aimags: Tov

Soums: Ondorshireet

Freshwater Ecoregion: Lake Baikal

Terrestrial Ecoregion: Mongolian-Manchurian Grassland

WQM Sites:

WQM Sites: # 167 (Tuul River @ N 47.45565° E 105.05998°)

**LOE Rating: Highly Likely Total: 7**

Family: Capniidae

Isocapnia guentheri

Within Known Range? Y Nearest Occurrence: 222.49 KM 47.88349°N 106.98829 °E

Isocapnia sibirica

Within Known Range? Y Nearest Occurrence: 320.19 KM 48.09549°N 107.84265 °E

Family: Chloroperlidae

Alloperla rostellata

Within Known Range? N Nearest Occurrence: 304.59 KM 49.77776°N 103.60860 °E

Suwallia kerzhneri

Within Known Range? Y Nearest Occurrence: 289.26 KM 48.12416°N 107.54780 °E

Family: Perlidae

Agnetina extrema

Within Known Range? Y Nearest Occurrence: 224.27 KM 48.83420°N 106.49113 °E

Family: Perlodidae

Isoperla kozlovi

Within Known Range? Y Nearest Occurrence: 52.56 KM 47.85250°N 105.25567 °E

Kaszabia nigricauda

Within Known Range? Y Nearest Occurrence: 52.56 KM 47.85250°N 105.25567 °E

**LOE Rating: Likely Total: 16**

Family: Capniidae

Isocapnia kudia

Within Known Range? N Nearest Occurrence: 731.33 KM 51.25356°N 99.66687 °E

Family: Chloroperlidae

Alloperla deminuta

Within Known Range? Y Nearest Occurrence: 259.05 KM 47.82258°N 107.33613 °E

Alloperla joosti

Within Known Range? N Nearest Occurrence: 291.46 KM 49.21675°N 103.10750 °E

Haploperla lepnevae

Within Known Range? Y Nearest Occurrence: 200.73 KM 48.87748°N 106.12370 °E

Suwallia teleckojensis

Within Known Range? Y Nearest Occurrence: 227.84 KM 48.50028°N 106.78434 °E

Family: Leuctridae

Paraleuctra zapekinae

Within Known Range? N Nearest Occurrence: 256.94 KM 49.71481°N 104.64203 °E

Family: Nemouridae

Amphinemura borealis

Within Known Range? Y Nearest Occurrence: 259.05 KM 47.82258°N 107.33613 °E

Nemoura cinerea

Within Known Range? Y Nearest Occurrence: 254.89 KM 49.68122°N 104.56461 °E

Family: Perlidae

Agnetina brevipennis

Within Known Range? Y Nearest Occurrence: 241.12 KM 49.48086°N 104.30864 °E

Agnetina cocandica

Within Known Range? N Nearest Occurrence: 193.13 KM 49.16354°N 105.18880 °E

Kamimuria exilis

Within Known Range? N Nearest Occurrence: 752.55 KM 50.16278°N 98.84212 °E

Family: Perlodidae

Arcynopteryx sajanensis

Within Known Range? N Nearest Occurrence: 677.74 KM 51.61397°N 100.59972 °E

Isoperla asiatica

Within Known Range? Y Nearest Occurrence: 200.73 KM 48.87748°N 106.12370 °E

Isoperla lunigera

Within Known Range? N Nearest Occurrence: 200.73 KM 48.87748°N 106.12370 °E

Pictetiella asiatica

Within Known Range? N Nearest Occurrence: 685.53 KM 51.65822°N 100.53000 °E

Family: Pteronarcyidae

Pteronarcys reticulata

Within Known Range? N Nearest Occurrence: 310.30 KM 49.08643°N 107.28952 °E

**LOE Rating: Probable Total: 2**

Family: Chloroperlidae

Alaskaperla longidentata

Within Known Range? Y Nearest Occurrence: 281.98 KM 49.95588°N 105.33791 °E

Family: Perlodidae

Isoperla obscura

Within Known Range? Y Nearest Occurrence: 52.56 KM 47.85250°N 105.25567 °E

Research funded by the National Science Foundation

DEB-BSI #0206674: A Survey of the Aquatic Insects of the Selenge River Basin. P.I.'s: JKGelhaus, JCMorse, BHayford.

DEB # 0743732: Aquatic Insects of the Altai and Hangai Mountain Drainages. P.I.'s: JKGelhaus, JCMorse, CRNelson.

<http://clade.ansp.org/entomology/mongolia/index.html>



Basin: Arctic Ocean Basin

Aimags: Tov

Soums: Ondorshireet

Freshwater Ecoregion: Lake Baikal

Terrestrial Ecoregion: Mongolian-Manchurian Grassland

WQM Sites:

WQM Sites: # 167 (Tuul River @ N 47.45565° E 105.05998°)

**LOE Rating: Possible Total: 4**

Family: Chloroperlidae

Alloperla mediata Within Known Range? N Nearest Occurrence: 304.59 KM 49.77776°N 103.60860°E

Family: Nemouridae

Nemoura arctica Within Known Range? Y Nearest Occurrence: 213.93 KM 47.77758°N 106.92780°E

Family: Perlodidae

Diura majuscula Within Known Range? Y Nearest Occurrence: 276.83 KM 47.99158°N 107.46116°E

Megarcys ochracea Within Known Range? N Nearest Occurrence: 276.34 KM 47.99158°N 107.46116°E

**LOE Rating: Predicted Total: 15**

Family: Capniidae

Capnia nigra Within Known Range? N Nearest Occurrence: 613.04 KM 50.92452°N 100.75528°E

Mesocapnia variabilis Within Known Range? Y Nearest Occurrence: 338.45 KM 48.42080°N 107.91406°E

Family: Leuctridae

Leuctra fusca Within Known Range? N Nearest Occurrence: 310.30 KM 49.08643°N 107.28952°E

Family: Nemouridae

Amphinemura standfussi Within Known Range? N Nearest Occurrence: 310.82 KM 49.33339°N 102.97786°E

Nemoura sahlbergi Within Known Range? Y Nearest Occurrence: 286.65 KM 49.70184°N 103.80040°E

Family: Perlidae

Paragnetina flavotincta Within Known Range? N Nearest Occurrence: 192.78 KM 49.16354°N 105.18880°E

Family: Perlodidae

Arcynopteryx compacta Within Known Range? Y Nearest Occurrence: 258.91 KM 49.62414°N 104.24594°E

Arcynopteryx polaris Within Known Range? Y Nearest Occurrence: 287.17 KM 49.70184°N 103.80040°E

Diura bicaudata Within Known Range? N Nearest Occurrence: 567.35 KM 47.21768°N 99.92824°E

Isoperla altaica Within Known Range? Y Nearest Occurrence: 201.09 KM 48.87748°N 106.12370°E

Isoperla eximia Within Known Range? N Nearest Occurrence: 329.45 KM 49.01829°N 107.54453°E

Isoperla mongolica Within Known Range? Y Nearest Occurrence: 320.51 KM 48.09694°N 107.83988°E

Isoperla potanini Within Known Range? N Nearest Occurrence: 358.80 KM 46.73093°N 101.88583°E

Skwala pusilla Within Known Range? N Nearest Occurrence: 1,838.06 KM 48.51277°N 88.51107°E

Family: Taeniopterygidae

Taenionema japonicum Within Known Range? N Nearest Occurrence: 303.56 KM 49.05411°N 107.23175°E

**LOE Rating: Unlikely Total: 3**

Family: Capniidae

Capnia khulsbagia Within Known Range? N Nearest Occurrence: 620.69 KM 50.98944°N 100.71944°E

Mesocapnia altaica Within Known Range? N Nearest Occurrence: 1,794.34 KM 48.43684°N 88.90094°E

Family: Nemouridae

Nemurella pictetii Within Known Range? N Nearest Occurrence: 716.44 KM 51.07896°N 99.70857°E

Basin: Arctic Ocean Basin

Aimags: Tov

Soums: Sumner

Freshwater Ecoregion: Lake Baikal

Terrestrial Ecoregion: Daurian Forest Steppe

WQM Sites:

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Highly Likely Total: 10**

Family: Capniidae

Isocapnia guentheri

Within Known Range? Y Nearest Occurrence: 114.67 KM 49.08405°N 106.89521°E

Isocapnia sibirica

Within Known Range? N Nearest Occurrence: 230.39 KM 48.09549°N 107.84265°E

Family: Chloroperlidae

Alloperla rostellata

Within Known Range? N Nearest Occurrence: 275.44 KM 49.77776°N 103.60860°E

Haploperla lepnevae

Within Known Range? Y Nearest Occurrence: 26.02 KM 48.87748°N 106.12370°E

Suwallia kerzhneri

Within Known Range? Y Nearest Occurrence: 194.76 KM 50.35162°N 105.04436°E

Family: Leuctridae

Paraleuctra zapekinae

Within Known Range? Y Nearest Occurrence: 171.20 KM 49.71481°N 104.64203°E

Family: Perlidae

Agnetina extrema

Within Known Range? Y Nearest Occurrence: 65.98 KM 48.83420°N 106.49113°E

Family: Perlodidae

Isoperla kozlovi

Within Known Range? Y Nearest Occurrence: 26.02 KM 48.87748°N 106.12370°E

Isoperla lunigera

Within Known Range? Y Nearest Occurrence: 26.02 KM 48.87748°N 106.12370°E

Kaszabia nigricauda

Within Known Range? Y Nearest Occurrence: 128.66 KM 47.85250°N 105.25567°E

**LOE Rating: Likely Total: 12**

Family: Chloroperlidae

Alaskaperla longidentata

Within Known Range? Y Nearest Occurrence: 140.72 KM 49.95588°N 105.33791°E

Alloperla deminuta

Within Known Range? Y Nearest Occurrence: 177.02 KM 49.06472°N 107.47257°E

Suwallia teleckojensis

Within Known Range? Y Nearest Occurrence: 104.81 KM 48.50028°N 106.78434°E

Family: Nemouridae

Amphinemura borealis

Within Known Range? Y Nearest Occurrence: 147.17 KM 50.03638°N 105.37392°E

Nemoura cinerea

Within Known Range? Y Nearest Occurrence: 176.21 KM 49.68122°N 104.56461°E

Family: Perlidae

Agnetina brevipennis

Within Known Range? Y Nearest Occurrence: 89.73 KM 49.10740°N 106.65177°E

Agnetina cocandica

Within Known Range? Y Nearest Occurrence: 87.62 KM 49.16354°N 105.18880°E

Family: Perlodidae

Arcynopteryx sajanensis

Within Known Range? N Nearest Occurrence: 666.06 KM 51.61397°N 100.59972°E

Isoperla asiatica

Within Known Range? Y Nearest Occurrence: 26.02 KM 48.87748°N 106.12370°E

Megarcys ochracea

Within Known Range? Y Nearest Occurrence: 121.40 KM 49.03282°N 106.96935°E

Pictetiella asiatica

Within Known Range? N Nearest Occurrence: 674.00 KM 51.65822°N 100.53000°E

Family: Pteronarcyidae

Pteronarcys reticulata

Within Known Range? Y Nearest Occurrence: 157.42 KM 49.08643°N 107.28952°E

**LOE Rating: Probable Total: 2**

Family: Capniidae

Isocapnia kudia

Within Known Range? N Nearest Occurrence: 742.50 KM 51.25356°N 99.66687°E

Family: Perlidae

Kamimuria exilis

Within Known Range? N Nearest Occurrence: 798.62 KM 50.16278°N 98.84212°E

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<http://clade.ansp.org/entomology/mongolia/index.html>



Basin: Arctic Ocean Basin

Aimags: Tov

Soums: Sumber

Freshwater Ecoregion: Lake Baikal

Terrestrial Ecoregion: Daurian Forest Steppe

WQM Sites:

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Possible Total: 6**

Family: Chloroperlidae					
Alloperla mediata	Within Known Range? N	Nearest Occurrence:	275.44 KM	49.77776 °N	103.60860 °E
Family: Nemouridae					
Nemoura arctica	Within Known Range? Y	Nearest Occurrence:	162.87 KM	47.77758 °N	106.92780 °E
Family: Perlodidae					
Diura majuscula	Within Known Range? Y	Nearest Occurrence:	196.73 KM	47.99158 °N	107.46116 °E
Isoperla altaica	Within Known Range? Y	Nearest Occurrence:	26.07 KM	48.87748 °N	106.12370 °E
Isoperla obscura	Within Known Range? Y	Nearest Occurrence:	123.31 KM	49.84014 °N	106.33228 °E
Family: Taeniopterygidae					
Taenionema japonicum	Within Known Range? Y	Nearest Occurrence:	150.73 KM	49.05411 °N	107.23175 °E

**LOE Rating: Predicted Total: 14**

Family: Capniidae					
Capnia nigra	Within Known Range? N	Nearest Occurrence:	616.76 KM	50.92452 °N	100.75528 °E
Mesocapnia variabilis	Within Known Range? Y	Nearest Occurrence:	228.61 KM	48.42080 °N	107.91406 °E
Family: Chloroperlidae					
Alloperla joosti	Within Known Range? N	Nearest Occurrence:	312.78 KM	49.21675 °N	103.10750 °E
Family: Leuctridae					
Leuctra fusca	Within Known Range? N	Nearest Occurrence:	157.42 KM	49.08643 °N	107.28952 °E
Family: Nemouridae					
Amphinemura standfussi	Within Known Range? Y	Nearest Occurrence:	217.92 KM	49.73130 °N	107.63484 °E
Nemoura sahlbergi	Within Known Range? Y	Nearest Occurrence:	212.33 KM	48.16668 °N	107.69548 °E
Family: Perlidae					
Paragnetina flavotincta	Within Known Range? Y	Nearest Occurrence:	87.46 KM	49.16354 °N	105.18880 °E
Family: Perlodidae					
Arcynopteryx compacta	Within Known Range? Y	Nearest Occurrence:	204.30 KM	49.62414 °N	104.24594 °E
Arcynopteryx polaris	Within Known Range? Y	Nearest Occurrence:	228.61 KM	48.42080 °N	107.91406 °E
Diura bicaudata	Within Known Range? N	Nearest Occurrence:	685.93 KM	47.21768 °N	99.92824 °E
Isoperla eximia	Within Known Range? N	Nearest Occurrence:	184.23 KM	49.01829 °N	107.54453 °E
Isoperla mongolica	Within Known Range? Y	Nearest Occurrence:	230.46 KM	48.09694 °N	107.83988 °E
Isoperla potanini	Within Known Range? N	Nearest Occurrence:	486.78 KM	47.26999 °N	101.80227 °E
Skwala pusilla	Within Known Range? N	Nearest Occurrence:	1,930.13 KM	48.51277 °N	88.51107 °E

**LOE Rating: Unlikely Total: 3**

Family: Capniidae					
Capnia khulsbagia	Within Known Range? N	Nearest Occurrence:	623.20 KM	50.98944 °N	100.71944 °E
Mesocapnia altaica	Within Known Range? N	Nearest Occurrence:	1,887.03 KM	48.43684 °N	88.90094 °E
Family: Nemouridae					
Nemurella pictetii	Within Known Range? N	Nearest Occurrence:	731.32 KM	51.07896 °N	99.70857 °E

**Basin:** Arctic Ocean Basin  
**Aimags:** Tov  
**Soums:** Tseel

Freshwater Ecoregion: Lake Baikal  
 Terrestrial Ecoregion: Daurian Forest Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Highly Likely Total: 9**

<b>Family: Capniidae</b>					
Isocapnia guentheri	Within Known Range? Y	Nearest Occurrence:	192.73 KM	49.08405 °N	106.89521 °E
Isocapnia sibirica	Within Known Range? Y	Nearest Occurrence:	285.90 KM	48.09549 °N	107.84265 °E
<b>Family: Chloroperlidae</b>					
Alloperla rostellata	Within Known Range? N	Nearest Occurrence:	239.31 KM	49.77776 °N	103.60860 °E
Haploperla lepnevae	Within Known Range? Y	Nearest Occurrence:	105.39 KM	48.87748 °N	106.12370 °E
Suwallia kerzhneri	Within Known Range? Y	Nearest Occurrence:	215.43 KM	50.35162 °N	105.04436 °E
<b>Family: Leuctridae</b>					
Paraleuctra zapekinae	Within Known Range? Y	Nearest Occurrence:	160.02 KM	49.71481 °N	104.64203 °E
<b>Family: Perlidae</b>					
Agnetina extrema	Within Known Range? Y	Nearest Occurrence:	140.98 KM	48.83420 °N	106.49113 °E
<b>Family: Perlodidae</b>					
Isoperla kozlovi	Within Known Range? Y	Nearest Occurrence:	63.78 KM	47.85250 °N	105.25567 °E
Kaszabia nigricauda	Within Known Range? Y	Nearest Occurrence:	63.78 KM	47.85250 °N	105.25567 °E

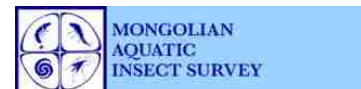
**LOE Rating: Likely Total: 13**

<b>Family: Capniidae</b>					
Isocapnia kudia	Within Known Range? N	Nearest Occurrence:	698.46 KM	51.25356 °N	99.66687 °E
<b>Family: Chloroperlidae</b>					
Alaskaperla longidentata	Within Known Range? Y	Nearest Occurrence:	169.88 KM	49.95588 °N	105.33791 °E
Alloperla deminuta	Within Known Range? Y	Nearest Occurrence:	236.97 KM	47.82258 °N	107.33613 °E
Suwallia teleckojensis	Within Known Range? Y	Nearest Occurrence:	160.31 KM	49.71481 °N	104.64203 °E
<b>Family: Nemouridae</b>					
Amphinemura borealis	Within Known Range? Y	Nearest Occurrence:	178.98 KM	50.03638 °N	105.37392 °E
Nemoura cinerea	Within Known Range? Y	Nearest Occurrence:	160.81 KM	49.68122 °N	104.56461 °E
<b>Family: Perlidae</b>					
Agnetina brevipennis	Within Known Range? Y	Nearest Occurrence:	159.78 KM	49.48086 °N	104.30864 °E
Agnetina cocandica	Within Known Range? Y	Nearest Occurrence:	82.74 KM	49.16354 °N	105.18880 °E
<b>Family: Perlodidae</b>					
Arcynopteryx sajanensis	Within Known Range? N	Nearest Occurrence:	630.47 KM	51.61397 °N	100.59972 °E
Isoperla asiatica	Within Known Range? Y	Nearest Occurrence:	105.39 KM	48.87748 °N	106.12370 °E
Isoperla lunigera	Within Known Range? Y	Nearest Occurrence:	105.39 KM	48.87748 °N	106.12370 °E
Pictetiella asiatica	Within Known Range? N	Nearest Occurrence:	638.49 KM	51.65822 °N	100.53000 °E
<b>Family: Pteronarcyidae</b>					
Pteronarcys reticulata	Within Known Range? Y	Nearest Occurrence:	233.91 KM	49.08643 °N	107.28952 °E

**LOE Rating: Probable Total: 4**

<b>Family: Chloroperlidae</b>					
Alloperla joosti	Within Known Range? N	Nearest Occurrence:	257.49 KM	49.21675 °N	103.10750 °E
<b>Family: Perlidae</b>					
Kamimuria exilis	Within Known Range? N	Nearest Occurrence:	742.38 KM	50.16278 °N	98.84212 °E
<b>Family: Perlodidae</b>					
Isoperla obscura	Within Known Range? Y	Nearest Occurrence:	63.78 KM	47.85250 °N	105.25567 °E
Megarcys ochracea	Within Known Range? Y	Nearest Occurrence:	198.37 KM	49.03282 °N	106.96935 °E

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<http://clade.ansp.org/entomology/mongolia/index.html>



**Basin:** Arctic Ocean Basin  
**Aimag:** Tov  
**Soum:** Tseel

Freshwater Ecoregion: Lake Baikal  
 Terrestrial Ecoregion: Daurian Forest Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Possible Total: 5**

Family: Chloroperlidae					
Alloperla mediata	Within Known Range? N	Nearest Occurrence:	239.31 KM	49.77776 °N	103.60860 °E
Family: Nemouridae					
Nemoura arctica	Within Known Range? Y	Nearest Occurrence:	196.06 KM	47.77758 °N	106.92780 °E
Family: Perlodidae					
Diura majuscula	Within Known Range? Y	Nearest Occurrence:	246.40 KM	47.99158 °N	107.46116 °E
Isoperla altaica	Within Known Range? Y	Nearest Occurrence:	105.58 KM	48.87748 °N	106.12370 °E
Family: Taeniopterygidae					
Taenionema japonicum	Within Known Range? Y	Nearest Occurrence:	227.11 KM	49.05411 °N	107.23175 °E

**LOE Rating: Predicted Total: 13**

Family: Capniidae					
Capnia nigra	Within Known Range? N	Nearest Occurrence:	574.53 KM	50.92452 °N	100.75528 °E
Mesocapnia variabilis	Within Known Range? Y	Nearest Occurrence:	291.98 KM	48.42080 °N	107.91406 °E
Family: Leuctridae					
Leuctra fusca	Within Known Range? N	Nearest Occurrence:	233.91 KM	49.08643 °N	107.28952 °E
Family: Nemouridae					
Amphinemura standfussi	Within Known Range? N	Nearest Occurrence:	275.52 KM	49.33339 °N	102.97786 °E
Nemoura sahlbergi	Within Known Range? Y	Nearest Occurrence:	217.55 KM	49.70184 °N	103.80040 °E
Family: Perlidae					
Paragnetina flavotincta	Within Known Range? N	Nearest Occurrence:	82.59 KM	49.16354 °N	105.18880 °E
Family: Perlodidae					
Arcynopteryx compacta	Within Known Range? Y	Nearest Occurrence:	176.58 KM	49.62414 °N	104.24594 °E
Arcynopteryx polaris	Within Known Range? Y	Nearest Occurrence:	217.94 KM	49.70184 °N	103.80040 °E
Diura bicaudata	Within Known Range? N	Nearest Occurrence:	609.91 KM	47.21768 °N	99.92824 °E
Isoperla eximia	Within Known Range? N	Nearest Occurrence:	258.92 KM	49.01829 °N	107.54453 °E
Isoperla mongolica	Within Known Range? Y	Nearest Occurrence:	286.08 KM	48.09694 °N	107.83988 °E
Isoperla potanini	Within Known Range? N	Nearest Occurrence:	408.42 KM	47.26999 °N	101.80227 °E
Skwala pusilla	Within Known Range? N	Nearest Occurrence:	1,862.30 KM	48.51277 °N	88.51107 °E

**LOE Rating: Unlikely Total: 3**

Family: Capniidae					
Capnia khulsbagia	Within Known Range? N	Nearest Occurrence:	581.51 KM	50.98944 °N	100.71944 °E
Mesocapnia altaica	Within Known Range? N	Nearest Occurrence:	1,819.00 KM	48.43684 °N	88.90094 °E
Family: Nemouridae					
Nemurella pictetii	Within Known Range? N	Nearest Occurrence:	685.79 KM	51.07896 °N	99.70857 °E

Basin: Arctic Ocean Basin

Aimags: Tov

Soums: Ugtaaltsaidam

Freshwater Ecoregion: Lake Baikal

Terrestrial Ecoregion: Daurian Forest Steppe

WQM Sites:

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Highly Likely Total: 8**

Family: Capniidae

Isocapnia guentheri

Within Known Range? Y Nearest Occurrence: 177.95 KM 47.88349°N 106.98829 °E

Isocapnia sibirica

Within Known Range? Y Nearest Occurrence: 269.86 KM 48.09549°N 107.84265 °E

Family: Chloroperlidae

Alloperla rostellata

Within Known Range? N Nearest Occurrence: 267.44 KM 49.77776°N 103.60860 °E

Suwallia kerzhneri

Within Known Range? Y Nearest Occurrence: 237.05 KM 48.12416°N 107.54780 °E

Family: Leuctridae

Paraleuctra zapekinae

Within Known Range? N Nearest Occurrence: 190.54 KM 49.71481°N 104.64203 °E

Family: Perlidae

Agnetina extrema

Within Known Range? Y Nearest Occurrence: 139.92 KM 48.83420°N 106.49113 °E

Family: Perlodidae

Isoperla kozlovi

Within Known Range? Y Nearest Occurrence: 40.44 KM 47.85250°N 105.25567 °E

Kaszabia nigricauda

Within Known Range? Y Nearest Occurrence: 40.44 KM 47.85250°N 105.25567 °E

**LOE Rating: Likely Total: 14**

Family: Capniidae

Isocapnia kudia

Within Known Range? N Nearest Occurrence: 723.27 KM 51.25356°N 99.66687 °E

Family: Chloroperlidae

Alaskaperla longidentata

Within Known Range? Y Nearest Occurrence: 197.18 KM 49.95588°N 105.33791 °E

Alloperla deminuta

Within Known Range? Y Nearest Occurrence: 217.15 KM 47.82258°N 107.33613 °E

Haploperla lepnevae

Within Known Range? Y Nearest Occurrence: 110.45 KM 48.87748°N 106.12370 °E

Suwallia teleckojensis

Within Known Range? Y Nearest Occurrence: 156.57 KM 48.50028°N 106.78434 °E

Family: Nemouridae

Amphinemura borealis

Within Known Range? Y Nearest Occurrence: 205.98 KM 50.03638°N 105.37392 °E

Nemoura cinerea

Within Known Range? Y Nearest Occurrence: 191.30 KM 49.68122°N 104.56461 °E

Family: Perlidae

Agnetina brevipennis

Within Known Range? Y Nearest Occurrence: 171.70 KM 49.10740°N 106.65177 °E

Agnetina cocandica

Within Known Range? Y Nearest Occurrence: 112.06 KM 49.16354°N 105.18880 °E

Family: Perlodidae

Arcynopteryx sajanensis

Within Known Range? N Nearest Occurrence: 657.42 KM 51.61397°N 100.59972 °E

Isoperla asiatica

Within Known Range? Y Nearest Occurrence: 110.45 KM 48.87748°N 106.12370 °E

Isoperla lunigera

Within Known Range? Y Nearest Occurrence: 110.45 KM 48.87748°N 106.12370 °E

Pictetiella asiatica

Within Known Range? N Nearest Occurrence: 665.39 KM 51.65822°N 100.53000 °E

Family: Pteronarcyidae

Pteronarcys reticulata

Within Known Range? Y Nearest Occurrence: 231.27 KM 49.08643°N 107.28952 °E

**LOE Rating: Probable Total: 3**

Family: Perlidae

Kamimuria exilis

Within Known Range? N Nearest Occurrence: 763.18 KM 50.16278°N 98.84212 °E

Family: Perlodidae

Isoperla obscura

Within Known Range? Y Nearest Occurrence: 40.44 KM 47.85250°N 105.25567 °E

Megaracys ochracea

Within Known Range? Y Nearest Occurrence: 196.94 KM 49.03282°N 106.96935 °E

Research funded by the National Science Foundation

DEB-BSI #0206674: A Survey of the Aquatic Insects of the Selenge River Basin. P.I.'s: JKGelhaus, JCMorse, BHayford.

DEB # 0743732: Aquatic Insects of the Altai and Hangai Mountain Drainages. P.I.'s: JKGelhaus, JCMorse, CRNelson.

<http://clade.ansp.org/entomology/mongolia/index.html>





Basin: Arctic Ocean Basin

Aimags: Tov

Soums: Ugtaaltsaidam

Freshwater Ecoregion: Lake Baikal

Terrestrial Ecoregion: Daurian Forest Steppe

WQM Sites:

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Possible Total: 6**

Family: Chloroperlidae

Alloperla joosti Within Known Range? N Nearest Occurrence: 280.54 KM 49.21675 °N 103.10750 °E

Alloperla mediata Within Known Range? N Nearest Occurrence: 267.44 KM 49.77776 °N 103.60860 °E

Family: Nemouridae

Nemoura arctica Within Known Range? Y Nearest Occurrence: 174.32 KM 47.77758 °N 106.92780 °E

Family: Perlodidae

Diura majuscula Within Known Range? Y Nearest Occurrence: 228.73 KM 47.99158 °N 107.46116 °E

Isoperla altaica Within Known Range? Y Nearest Occurrence: 110.65 KM 48.87748 °N 106.12370 °E

Family: Taeniopterygidae

Taenionema japonicum Within Known Range? Y Nearest Occurrence: 224.34 KM 49.05411 °N 107.23175 °E

**LOE Rating: Predicted Total: 13**

Family: Capniidae

Capnia nigra Within Known Range? N Nearest Occurrence: 600.02 KM 50.92452 °N 100.75528 °E

Mesocapnia variabilis Within Known Range? Y Nearest Occurrence: 279.40 KM 48.42080 °N 107.91406 °E

Family: Leuctridae

Leuctra fusca Within Known Range? N Nearest Occurrence: 231.27 KM 49.08643 °N 107.28952 °E

Family: Nemouridae

Amphinemura standfussi Within Known Range? N Nearest Occurrence: 299.03 KM 49.33339 °N 102.97786 °E

Nemoura sahlbergi Within Known Range? Y Nearest Occurrence: 246.04 KM 49.70184 °N 103.80040 °E

Family: Perlidae

Paragnetina flavotincta Within Known Range? N Nearest Occurrence: 111.85 KM 49.16354 °N 105.18880 °E

Family: Perlodidae

Arcynopteryx compacta Within Known Range? Y Nearest Occurrence: 206.38 KM 49.62414 °N 104.24594 °E

Arcynopteryx polaris Within Known Range? Y Nearest Occurrence: 246.48 KM 49.70184 °N 103.80040 °E

Diura bicaudata Within Known Range? N Nearest Occurrence: 618.13 KM 47.21768 °N 99.92824 °E

Isoperla eximia Within Known Range? N Nearest Occurrence: 254.20 KM 49.01829 °N 107.54453 °E

Isoperla mongolica Within Known Range? Y Nearest Occurrence: 270.03 KM 48.09694 °N 107.83988 °E

Isoperla potanini Within Known Range? N Nearest Occurrence: 414.10 KM 47.26999 °N 101.80227 °E

Skwala pusilla Within Known Range? N Nearest Occurrence: 1,876.47 KM 48.51277 °N 88.51107 °E

**LOE Rating: Unlikely Total: 3**

Family: Capniidae

Capnia khulsbagia Within Known Range? N Nearest Occurrence: 607.12 KM 50.98944 °N 100.71944 °E

Mesocapnia altaica Within Known Range? N Nearest Occurrence: 1,833.06 KM 48.43684 °N 88.90094 °E

Family: Nemouridae

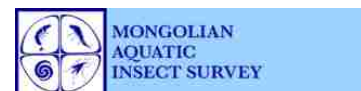
Nemurella pictetii Within Known Range? N Nearest Occurrence: 710.21 KM 51.07896 °N 99.70857 °E

Research funded by the National Science Foundation

DEB-BSI #0206674: A Survey of the Aquatic Insects of the Selenge River Basin. P.I.'s: JKGelhaus, JCMorse, BHayford.

DEB # 0743732: Aquatic Insects of the Altai and Hangai Mountain Drainages. P.I.'s: JKGelhaus, JCMorse, CRNelson.

<http://clade.ansp.org/entomology/mongolia/index.html>



Basin: Arctic Ocean Basin

Aimags: Tov

Soums: Zaamar

Freshwater Ecoregion: Lake Baikal

Terrestrial Ecoregion: Daurian Forest Steppe

WQM Sites:

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Highly Likely Total: 8**

Family: Capniidae

Isocapnia guentheri

Within Known Range? Y Nearest Occurrence: 209.45 KM 49.77776°N 103.60860°E

Isocapnia sibirica

Within Known Range? Y Nearest Occurrence: 340.69 KM 47.26999°N 101.80227°E

Family: Chloroperlidae

Alloperla rostellata

Within Known Range? N Nearest Occurrence: 209.45 KM 49.77776°N 103.60860°E

Suwallia kerzhneri

Within Known Range? Y Nearest Occurrence: 236.51 KM 50.35162°N 105.04436°E

Family: Leuctridae

Paraleuctra zapekinae

Within Known Range? N Nearest Occurrence: 163.12 KM 49.71481°N 104.64203°E

Family: Perlidae

Agnetina extrema

Within Known Range? Y Nearest Occurrence: 207.97 KM 48.83420°N 106.49113°E

Family: Perlodidae

Isoperla kozlovi

Within Known Range? Y Nearest Occurrence: 74.56 KM 47.85250°N 105.25567°E

Kaszabia nigricauda

Within Known Range? Y Nearest Occurrence: 74.56 KM 47.85250°N 105.25567°E

**LOE Rating: Likely Total: 16**

Family: Capniidae

Isocapnia kudia

Within Known Range? N Nearest Occurrence: 651.91 KM 51.25356°N 99.66687°E

Family: Chloroperlidae

Alaskaperla longidentata

Within Known Range? Y Nearest Occurrence: 202.01 KM 49.95588°N 105.33791°E

Alloperla deminuta

Within Known Range? Y Nearest Occurrence: 241.16 KM 49.70678°N 103.10288°E

Alloperla joosti

Within Known Range? N Nearest Occurrence: 208.10 KM 49.21675°N 103.10750°E

Haploperla lepnevae

Within Known Range? Y Nearest Occurrence: 144.09 KM 49.48086°N 104.30864°E

Suwallia teleckojensis

Within Known Range? Y Nearest Occurrence: 163.41 KM 49.71481°N 104.64203°E

Family: Nemouridae

Amphinemura borealis

Within Known Range? Y Nearest Occurrence: 211.78 KM 50.03638°N 105.37392°E

Nemoura cinerea

Within Known Range? Y Nearest Occurrence: 160.04 KM 49.68122°N 104.56461°E

Family: Perlidae

Agnetina brevipennis

Within Known Range? Y Nearest Occurrence: 144.09 KM 49.48086°N 104.30864°E

Agnetina cocandica

Within Known Range? Y Nearest Occurrence: 114.89 KM 49.16354°N 105.18880°E

Kamimuria exilis

Within Known Range? N Nearest Occurrence: 686.61 KM 50.16278°N 98.84212°E

Family: Perlodidae

Arcynopteryx sajanensis

Within Known Range? N Nearest Occurrence: 591.01 KM 51.61397°N 100.59972°E

Isoperla asiatica

Within Known Range? Y Nearest Occurrence: 171.62 KM 48.87748°N 106.12370°E

Isoperla lunigera

Within Known Range? Y Nearest Occurrence: 144.09 KM 49.48086°N 104.30864°E

Pictetiella asiatica

Within Known Range? N Nearest Occurrence: 599.04 KM 51.65822°N 100.53000°E

Family: Pteronarcyidae

Pteronarcys reticulata

Within Known Range? Y Nearest Occurrence: 276.02 KM 49.63453°N 102.64845°E

Basin: Arctic Ocean Basin

Aimag: Tov

Soum: Zaamar

Freshwater Ecoregion: Lake Baikal

Terrestrial Ecoregion: Daurian Forest Steppe

WQM Sites:

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Possible Total: 5**

Family: Chloroperlidae					
Alloperla mediata	Within Known Range? N	Nearest Occurrence:	209.45 KM	49.77776 °N	103.60860 °E
Family: Nemouridae					
Nemoura arctica	Within Known Range? Y	Nearest Occurrence:	181.48 KM	49.65142 °N	103.88064 °E
Family: Perlodidae					
Diura majuscula	Within Known Range? Y	Nearest Occurrence:	298.45 KM	46.89303 °N	102.39457 °E
Isoperla obscura	Within Known Range? Y	Nearest Occurrence:	74.56 KM	47.85250 °N	105.25567 °E
Megarcys ochracea	Within Known Range? N	Nearest Occurrence:	209.45 KM	49.77776 °N	103.60860 °E

**LOE Rating: Predicted Total: 15**

Family: Capniidae					
Capnia nigra	Within Known Range? N	Nearest Occurrence:	530.30 KM	50.92452 °N	100.75528 °E
Mesocapnia variabilis	Within Known Range? Y	Nearest Occurrence:	356.60 KM	48.42080 °N	107.91406 °E
Family: Leuctridae					
Leuctra fusca	Within Known Range? N	Nearest Occurrence:	300.90 KM	49.08643 °N	107.28952 °E
Family: Nemouridae					
Amphinemura standfussi	Within Known Range? N	Nearest Occurrence:	227.14 KM	49.33339 °N	102.97786 °E
Nemoura sahlbergi	Within Known Range? Y	Nearest Occurrence:	190.57 KM	49.70184 °N	103.80040 °E
Family: Perlidae					
Paragnetina flavotincta	Within Known Range? N	Nearest Occurrence:	114.68 KM	49.16354 °N	105.18880 °E
Family: Perlodidae					
Arcynopteryx compacta	Within Known Range? Y	Nearest Occurrence:	161.67 KM	49.62414 °N	104.24594 °E
Arcynopteryx polaris	Within Known Range? Y	Nearest Occurrence:	190.91 KM	49.70184 °N	103.80040 °E
Diura bicaudata	Within Known Range? N	Nearest Occurrence:	543.14 KM	47.21768 °N	99.92824 °E
Isoperla altaica	Within Known Range? Y	Nearest Occurrence:	171.93 KM	48.87748 °N	106.12370 °E
Isoperla eximia	Within Known Range? N	Nearest Occurrence:	325.87 KM	49.01829 °N	107.54453 °E
Isoperla mongolica	Within Known Range? Y	Nearest Occurrence:	341.31 KM	47.26999 °N	101.80227 °E
Isoperla potanini	Within Known Range? N	Nearest Occurrence:	341.31 KM	47.26999 °N	101.80227 °E
Skwala pusilla	Within Known Range? N	Nearest Occurrence:	1,798.54 KM	48.51277 °N	88.51107 °E
Family: Taeniopterygidae					
Taenionema japonicum	Within Known Range? Y	Nearest Occurrence:	294.23 KM	49.05411 °N	107.23175 °E

**LOE Rating: Unlikely Total: 3**

Family: Capniidae					
Capnia khulsbagia	Within Known Range? N	Nearest Occurrence:	537.65 KM	50.98944 °N	100.71944 °E
Mesocapnia altaica	Within Known Range? N	Nearest Occurrence:	1,755.15 KM	48.43684 °N	88.90094 °E
Family: Nemouridae					
Nemurella pictetii	Within Known Range? N	Nearest Occurrence:	638.17 KM	51.07896 °N	99.70857 °E

**Basin:** Arctic Ocean Basin  
**Aimags:** Ulaanbaatar  
**Soums:** Ulaanbaatar

**Freshwater Ecoregion:** Lake Baikal  
**Terrestrial Ecoregion:** Daurian Forest Steppe

**WQM Sites:**

WQM Sites: # 7 (Tuul River @ N 47.84303° E 107.55333°) # 8 (Tuul River @ N 47.81008° E 107.39908°)

**LOE Rating: Highly Likely Total: 5**

Family: Capniidae						
Isocapnia guentheri	Within Known Range? Y	Nearest Occurrence:	7.11 KM	47.88349°N	106.98829 °E	
Family: Chloroperlidae						
Alloperla deminuta	Within Known Range? Y	Nearest Occurrence:	41.44 KM	47.82258°N	107.33613 °E	
Haploperla lepnevae	Within Known Range? Y	Nearest Occurrence:	41.44 KM	47.82258°N	107.33613 °E	
Family: Leuctridae						
Paraleuctra zapekinae	Within Known Range? Y	Nearest Occurrence:	53.16 KM	47.99158°N	107.46116 °E	
Family: Nemouridae						
Amphinemura borealis	Within Known Range? Y	Nearest Occurrence:	41.44 KM	47.82258°N	107.33613 °E	

**LOE Rating: Likely Total: 9**

Family: Capniidae						
Isocapnia sibirica	Within Known Range? Y	Nearest Occurrence:	96.68 KM	48.09549°N	107.84265 °E	
Family: Chloroperlidae						
Suwallia kerzhneri	Within Known Range? Y	Nearest Occurrence:	65.55 KM	48.12416°N	107.54780 °E	
Family: Nemouridae						
Nemoura arctica	Within Known Range? Y	Nearest Occurrence:	19.91 KM	47.77758°N	106.92780 °E	
Family: Perlidae						
Agnestina extrema	Within Known Range? Y	Nearest Occurrence:	65.26 KM	48.50028°N	106.78434 °E	
Family: Perlodidae						
Arcynopteryx compacta	Within Known Range? Y	Nearest Occurrence:	64.28 KM	47.84324°N	107.55299 °E	
Isoperla asiatica	Within Known Range? Y	Nearest Occurrence:	43.39 KM	47.82110°N	107.35422 °E	
Isoperla lunigera	Within Known Range? Y	Nearest Occurrence:	43.39 KM	47.82110°N	107.35422 °E	
Kaszabia nigricauda	Within Known Range? Y	Nearest Occurrence:	67.58 KM	47.96783°N	107.59278 °E	
Megarcys ochracea	Within Known Range? Y	Nearest Occurrence:	53.16 KM	47.99158°N	107.46116 °E	

**LOE Rating: Probable Total: 9**

Family: Capniidae						
Isocapnia kudia	Within Known Range? N	Nearest Occurrence:	891.29 KM	51.25356°N	99.66687 °E	
Family: Chloroperlidae						
Alloperla rostellata	Within Known Range? N	Nearest Occurrence:	426.24 KM	49.77776°N	103.60860 °E	
Suwallia teleckojensis	Within Known Range? Y	Nearest Occurrence:	54.74 KM	48.43755°N	107.03066 °E	
Family: Nemouridae						
Nemoura cinerea	Within Known Range? Y	Nearest Occurrence:	67.58 KM	47.96783°N	107.59278 °E	
Family: Perlodidae						
Arcynopteryx sajanensis	Within Known Range? N	Nearest Occurrence:	818.71 KM	51.61397°N	100.59972 °E	
Diura majuscula	Within Known Range? Y	Nearest Occurrence:	53.24 KM	47.99158°N	107.46116 °E	
Pictetiella asiatica	Within Known Range? N	Nearest Occurrence:	826.40 KM	51.65822°N	100.53000 °E	
Family: Pteronarcyidae						
Pteronarcys reticulata	Within Known Range? N	Nearest Occurrence:	130.89 KM	49.08643°N	107.28952 °E	
Family: Taeniopterygidae						
Taenionema japonicum	Within Known Range? N	Nearest Occurrence:	126.10 KM	49.05411°N	107.23175 °E	

**Basin:** Arctic Ocean Basin  
**Aimags:** Ulaanbaatar  
**Soums:** Ulaanbaatar

**Freshwater Ecoregion:** Lake Baikal  
**Terrestrial Ecoregion:** Daurian Forest Steppe

**WQM Sites:**

WQM Sites: # 7 (Tuul River @ N 47.84303° E 107.5533°) # 8 (Tuul River @ N 47.81008° E 107.39908°)

**LOE Rating: Possible Total: 7**

<b>Family: Chloroperlidae</b>						
Alaskaperla longidentata	Within Known Range? Y	Nearest Occurrence:	65.55 KM	48.12416°N	107.54780°E	
<b>Family: Perlidae</b>						
Agnetina brevipennis	Within Known Range? N	Nearest Occurrence:	131.41 KM	49.08636°N	107.30750°E	
Kamimuria exilis	Within Known Range? N	Nearest Occurrence:	938.33 KM	50.16278°N	98.84212°E	
<b>Family: Perlodidae</b>						
Arcynopteryx polaris	Within Known Range? Y	Nearest Occurrence:	116.01 KM	48.42080°N	107.91406°E	
Diura bicaudata	Within Known Range? N	Nearest Occurrence:	787.40 KM	47.21768°N	99.92824°E	
Isoperla altaica	Within Known Range? Y	Nearest Occurrence:	120.08 KM	48.60182°N	107.84335°E	
Isoperla kozlovi	Within Known Range? Y	Nearest Occurrence:	105.76 KM	48.13287°N	107.91890°E	

**LOE Rating: Predicted Total: 14**

<b>Family: Capniidae</b>						
Capnia nigra	Within Known Range? N	Nearest Occurrence:	766.33 KM	50.92452°N	100.75528°E	
Mesocapnia variabilis	Within Known Range? Y	Nearest Occurrence:	116.01 KM	48.42080°N	107.91406°E	
<b>Family: Chloroperlidae</b>						
Alloperla joosti	Within Known Range? N	Nearest Occurrence:	452.80 KM	49.21675°N	103.10750°E	
Alloperla mediata	Within Known Range? N	Nearest Occurrence:	426.24 KM	49.77776°N	103.60860°E	
<b>Family: Leuctridae</b>						
Leuctra fusca	Within Known Range? N	Nearest Occurrence:	130.89 KM	49.08643°N	107.28952°E	
<b>Family: Nemouridae</b>						
Amphinemura standfussi	Within Known Range? N	Nearest Occurrence:	210.77 KM	49.73130°N	107.63484°E	
Nemoura sahlbergi	Within Known Range? Y	Nearest Occurrence:	82.61 KM	48.16668°N	107.69548°E	
<b>Family: Perlidae</b>						
Agnetina cocandica	Within Known Range? Y	Nearest Occurrence:	241.15 KM	49.16354°N	105.18880°E	
Paragnetina flavotincta	Within Known Range? N	Nearest Occurrence:	240.71 KM	49.16354°N	105.18880°E	
<b>Family: Perlodidae</b>						
Isoperla eximia	Within Known Range? N	Nearest Occurrence:	119.87 KM	48.60182°N	107.84335°E	
Isoperla mongolica	Within Known Range? Y	Nearest Occurrence:	96.57 KM	48.09694°N	107.83988°E	
Isoperla obscura	Within Known Range? N	Nearest Occurrence:	192.17 KM	47.85250°N	105.25567°E	
Isoperla potanini	Within Known Range? N	Nearest Occurrence:	581.15 KM	47.26999°N	101.80227°E	
Skwala pusilla	Within Known Range? N	Nearest Occurrence:	2,051.49 KM	48.51277°N	88.51107°E	

**LOE Rating: Unlikely Total: 3**

<b>Family: Capniidae</b>						
Capnia khulsbagia	Within Known Range? N	Nearest Occurrence:	773.04 KM	50.98944°N	100.71944°E	
Mesocapnia altaica	Within Known Range? N	Nearest Occurrence:	2,007.99 KM	48.43684°N	88.90094°E	
<b>Family: Nemouridae</b>						
Nemurella pictetii	Within Known Range? N	Nearest Occurrence:	879.23 KM	51.07896°N	99.70857°E	



**Basin:** Arctic Ocean Basin  
**Aimags:** Zavkhan  
**Soums:** Ider

**Freshwater Ecoregion:** Lake Baikal  
**Terrestrial Ecoregion:** Khangai Mountains Alpine Meadow

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Highly Likely Total: 3**

<b>Family: Chloroperlidae</b>						
Suwallia kerzhneri	Within Known Range? Y	Nearest Occurrence:	13.50 KM	48.06257°N	97.55064°E	
Suwallia teleckojensis	Within Known Range? Y	Nearest Occurrence:	10.14 KM	48.13246°N	97.48425°E	
<b>Family: Perlodidae</b>						
Isoperla potanini	Within Known Range? Y	Nearest Occurrence:	13.52 KM	48.06257°N	97.55064°E	

**LOE Rating: Likely Total: 11**

<b>Family: Capniidae</b>						
Capnia nigra	Within Known Range? Y	Nearest Occurrence:	13.50 KM	48.06257°N	97.55064°E	
Isocapnia guentheri	Within Known Range? Y	Nearest Occurrence:	88.58 KM	48.61518°N	98.23096°E	
<b>Family: Chloroperlidae</b>						
Alaskaperla longidentata	Within Known Range? Y	Nearest Occurrence:	38.42 KM	48.15779°N	97.21441°E	
Alloperla joosti	Within Known Range? Y	Nearest Occurrence:	18.53 KM	48.24995°N	97.40627°E	
Alloperla rostellata	Within Known Range? N	Nearest Occurrence:	153.14 KM	48.36436°N	98.92737°E	
<b>Family: Nemouridae</b>						
Amphinemura borealis	Within Known Range? Y	Nearest Occurrence:	13.79 KM	48.05989°N	97.55073°E	
Amphinemura standfussi	Within Known Range? Y	Nearest Occurrence:	13.50 KM	48.06257°N	97.55064°E	
Nemoura cinerea	Within Known Range? Y	Nearest Occurrence:	13.50 KM	48.06257°N	97.55064°E	
<b>Family: Perlidae</b>						
Kamimuria exilis	Within Known Range? N	Nearest Occurrence:	262.23 KM	50.16278°N	98.84212°E	
<b>Family: Perlodidae</b>						
Diura majuscula	Within Known Range? Y	Nearest Occurrence:	13.52 KM	48.06257°N	97.55064°E	
Isoperla asiatica	Within Known Range? Y	Nearest Occurrence:	13.50 KM	48.06257°N	97.55064°E	

**LOE Rating: Probable Total: 8**

<b>Family: Capniidae</b>						
Isocapnia kudia	Within Known Range? N	Nearest Occurrence:	413.30 KM	51.25356°N	99.66687°E	
Isocapnia sibirica	Within Known Range? N	Nearest Occurrence:	414.99 KM	47.28244°N	101.18793°E	
<b>Family: Perlodidae</b>						
Arcynopteryx polaris	Within Known Range? Y	Nearest Occurrence:	153.42 KM	48.36436°N	98.92737°E	
Arcynopteryx sajanensis	Within Known Range? N	Nearest Occurrence:	509.68 KM	51.61397°N	100.59972°E	
Diura bicaudata	Within Known Range? Y	Nearest Occurrence:	283.95 KM	47.21768°N	99.92824°E	
Isoperla mongolica	Within Known Range? Y	Nearest Occurrence:	13.52 KM	48.06257°N	97.55064°E	
Pictetiella asiatica	Within Known Range? N	Nearest Occurrence:	507.39 KM	51.65822°N	100.53000°E	
<b>Family: Taeniopterygidae</b>						
Taenionema japonicum	Within Known Range? Y	Nearest Occurrence:	321.60 KM	50.61826°N	99.12094°E	



**Basin:** Arctic Ocean Basin  
**Aimags:** Zavkhan  
**Soums:** Ider

**Freshwater Ecoregion:** Lake Baikal  
**Terrestrial Ecoregion:** Khangai Mountains Alpine Meadow

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

<b>LOE Rating:</b>	<b>Possible</b>	<b>Total:</b>	<b>11</b>
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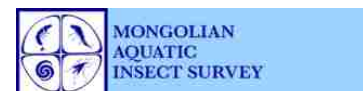
<b>Family:</b> Capniidae			
Mesocapnia variabilis	Within Known Range? Y	Nearest Occurrence:	153.42 KM 48.36436°N 98.92737°E
<b>Family:</b> Chloroperlidae			
Haploperla lepnevae	Within Known Range? Y	Nearest Occurrence:	284.24 KM 49.26170°N 99.88242°E
<b>Family:</b> Nemouridae			
Nemoura arctica	Within Known Range? Y	Nearest Occurrence:	310.42 KM 50.42996°N 99.21727°E
<b>Family:</b> Perlidae			
Agnetina brevipennis	Within Known Range? Y	Nearest Occurrence:	135.05 KM 48.71968°N 98.65184°E
Agnetina extrema	Within Known Range? N	Nearest Occurrence:	342.99 KM 47.50949°N 100.57510°E
<b>Family:</b> Perlodidae			
Arcynopteryx compacta	Within Known Range? Y	Nearest Occurrence:	321.60 KM 50.61826°N 99.12094°E
Isoperla altaica	Within Known Range? Y	Nearest Occurrence:	352.93 KM 50.81265°N 99.33803°E
Kaszabia nigricauda	Within Known Range? N	Nearest Occurrence:	135.05 KM 48.71968°N 98.65184°E
Megarcys ochracea	Within Known Range? N	Nearest Occurrence:	406.89 KM 51.46205°N 99.19994°E
Skwala pusilla	Within Known Range? N	Nearest Occurrence:	1,005.05 KM 48.51277°N 88.51107°E
<b>Family:</b> Pteronarcyidae			
Pteronarcys reticulata	Within Known Range? N	Nearest Occurrence:	309.08 KM 47.80440°N 100.31810°E

<b>LOE Rating:</b>	<b>Predicted</b>	<b>Total:</b>	<b>10</b>
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<b>Family:</b> Chloroperlidae			
Alloperla deminuta	Within Known Range? N	Nearest Occurrence:	309.08 KM 47.80440°N 100.31810°E
Alloperla mediata	Within Known Range? N	Nearest Occurrence:	321.02 KM 50.61826°N 99.12094°E
<b>Family:</b> Leuctridae			
Paraleuctra zapekinae	Within Known Range? N	Nearest Occurrence:	804.31 KM 49.71481°N 104.64203°E
<b>Family:</b> Nemouridae			
Nemoura sahlbergi	Within Known Range? N	Nearest Occurrence:	309.87 KM 50.42996°N 99.21727°E
Nemurella pictetii	Within Known Range? N	Nearest Occurrence:	352.30 KM 50.81265°N 99.33803°E
<b>Family:</b> Perlidae			
Agnetina cocandica	Within Known Range? Y	Nearest Occurrence:	310.50 KM 49.76390°N 99.86185°E
Paragnetina flavotincta	Within Known Range? N	Nearest Occurrence:	284.24 KM 49.26170°N 99.88242°E
<b>Family:</b> Perlodidae			
Isoperla kozlovi	Within Known Range? Y	Nearest Occurrence:	306.56 KM 50.31066°N 99.32150°E
Isoperla lunigera	Within Known Range? N	Nearest Occurrence:	314.30 KM 49.62785°N 99.99523°E
Isoperla obscura	Within Known Range? Y	Nearest Occurrence:	506.49 KM 51.65045°N 100.52664°E

<b>LOE Rating:</b>	<b>Unlikely</b>	<b>Total:</b>	<b>4</b>
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<b>Family:</b> Capniidae			
Capnia khulsbagia	Within Known Range? N	Nearest Occurrence:	469.05 KM 50.98944°N 100.71944°E
Mesocapnia altaica	Within Known Range? N	Nearest Occurrence:	961.52 KM 48.43684°N 88.90094°E
<b>Family:</b> Leuctridae			
Leuctra fusca	Within Known Range? N	Nearest Occurrence:	1,084.66 KM 49.08643°N 107.28952°E
<b>Family:</b> Perlodidae			
Isoperla eximia	Within Known Range? N	Nearest Occurrence:	1,112.20 KM 49.01829°N 107.54453°E



**Basin:** Arctic Ocean Basin  
**Aimag:** Zavkhan  
**Soum:** Ikh-uul

**Freshwater Ecoregion:** Lake Baikal  
**Terrestrial Ecoregion:** Selenge-Orkhon Forest Steppe

**WQM Sites:**

WQM Sites: # 154 (Zart River @ N 48.70497° E 98.78955°)

**LOE Rating: Highly Likely Total: 2**

Family: Chloroperlidae

Alloperla rostellata Within Known Range? Y Nearest Occurrence: 35.91 KM 48.36436°N 98.92737 °E

Suwallia teleckoensis Within Known Range? Y Nearest Occurrence: 35.98 KM 48.36436°N 98.92737 °E

**LOE Rating: Likely Total: 9**

Family: Capniidae

Isocapnia guentheri Within Known Range? Y Nearest Occurrence: 67.09 KM 48.61518°N 98.23096 °E

Mesocapnia variabilis Within Known Range? Y Nearest Occurrence: 35.98 KM 48.36436°N 98.92737 °E

Family: Chloroperlidae

Suwallia kerzhneri Within Known Range? Y Nearest Occurrence: 67.09 KM 48.61518°N 98.23096 °E

Family: Nemouridae

Amphinemura standfussi Within Known Range? Y Nearest Occurrence: 67.09 KM 48.61518°N 98.23096 °E

Nemoura cinerea Within Known Range? Y Nearest Occurrence: 157.63 KM 48.06257°N 97.55064 °E

Family: Perlidae

Agnetina brevipennis Within Known Range? Y Nearest Occurrence: 20.70 KM 48.71968°N 98.65184 °E

Family: Perlodidae

Arcynopteryx polaris Within Known Range? Y Nearest Occurrence: 35.98 KM 48.36436°N 98.92737 °E

Isoperla potanini Within Known Range? Y Nearest Occurrence: 104.26 KM 48.62624°N 97.89617 °E

Kaszabia nigricauda Within Known Range? Y Nearest Occurrence: 20.70 KM 48.71968°N 98.65184 °E

**LOE Rating: Probable Total: 12**

Family: Capniidae

Capnia nigra Within Known Range? Y Nearest Occurrence: 157.63 KM 48.06257°N 97.55064 °E

Isocapnia kudia Within Known Range? N Nearest Occurrence: 300.97 KM 51.25356°N 99.66687 °E

Isocapnia sibirica Within Known Range? N Nearest Occurrence: 303.65 KM 47.28244°N 101.18793 °E

Family: Chloroperlidae

Alaskaperla longidentata Within Known Range? Y Nearest Occurrence: 104.07 KM 48.62624°N 97.89617 °E

Alloperla joosti Within Known Range? Y Nearest Occurrence: 67.09 KM 48.61518°N 98.23096 °E

Family: Nemouridae

Amphinemura borealis Within Known Range? Y Nearest Occurrence: 67.09 KM 48.61518°N 98.23096 °E

Family: Perlidae

Kamimuria exilis Within Known Range? N Nearest Occurrence: 165.58 KM 50.16278°N 98.84212 °E

Family: Perlodidae

Arcynopteryx sajanensis Within Known Range? N Nearest Occurrence: 381.46 KM 51.61397°N 100.59972 °E

Diura bicaudata Within Known Range? Y Nearest Occurrence: 202.27 KM 47.21768°N 99.92824 °E

Diura majuscula Within Known Range? Y Nearest Occurrence: 157.92 KM 48.06257°N 97.55064 °E

Pictetiella asiatica Within Known Range? N Nearest Occurrence: 381.12 KM 51.65822°N 100.53000 °E

Family: Taeniopterygidae

Taenionema japonicum Within Known Range? Y Nearest Occurrence: 218.59 KM 50.61826°N 99.12094 °E





**Basin:** Arctic Ocean Basin  
**Aimags:** Zavkhan  
**Soums:** Ikh-uul

Freshwater Ecoregion: Lake Baikal  
 Terrestrial Ecoregion: Selenge-Orkhon Forest Steppe

**WQM Sites:**

WQM Sites: # 154 (Zart River @ N 48.70497° E 98.78955°)

LOE Rating:	Possible	Total:	11
Family:	Chloroperlidae		
	Haploperla lepnevae	Within Known Range? Y	Nearest Occurrence: 133.57 KM 49.26170°N 99.88242°E
Family:	Leuctridae		
	Paraleuctra zapekinae	Within Known Range? N	Nearest Occurrence: 655.13 KM 49.71481°N 104.64203°E
Family:	Nemouridae		
	Nemoura arctica	Within Known Range? Y	Nearest Occurrence: 199.92 KM 50.42996°N 99.21727°E
Family:	Perlidae		
	Agnentina extrema	Within Known Range? N	Nearest Occurrence: 232.62 KM 47.50949°N 100.57510°E
Family:	Perlodidae		
	Arcynopteryx compacta	Within Known Range? Y	Nearest Occurrence: 218.59 KM 50.61826°N 99.12094°E
	Isoperla altaica	Within Known Range? Y	Nearest Occurrence: 244.40 KM 50.81265°N 99.33803°E
	Isoperla asiatica	Within Known Range? Y	Nearest Occurrence: 157.63 KM 48.06257°N 97.55064°E
	Isoperla kozlovi	Within Known Range? Y	Nearest Occurrence: 166.96 KM 49.62785°N 99.99523°E
	Isoperla lunigera	Within Known Range? N	Nearest Occurrence: 166.96 KM 49.62785°N 99.99523°E
	Megarcys ochracea	Within Known Range? N	Nearest Occurrence: 308.13 KM 51.40978°N 99.30136°E
Family:	Pteronarcyidae		
	Pteronarcys reticulata	Within Known Range? N	Nearest Occurrence: 191.06 KM 47.80440°N 100.31810°E
LOE Rating:	Predicted	Total:	9
Family:	Chloroperlidae		
	Alloperla deminuta	Within Known Range? N	Nearest Occurrence: 191.06 KM 47.80440°N 100.31810°E
	Alloperla mediata	Within Known Range? N	Nearest Occurrence: 218.21 KM 50.61826°N 99.12094°E
Family:	Nemouridae		
	Nemoura sahlbergi	Within Known Range? N	Nearest Occurrence: 199.57 KM 50.42996°N 99.21727°E
	Nemurella pictetii	Within Known Range? N	Nearest Occurrence: 243.97 KM 50.81265°N 99.33803°E
Family:	Perlidae		
	Agnentina cocandica	Within Known Range? Y	Nearest Occurrence: 166.72 KM 49.76390°N 99.86185°E
	Paragnetina flavotincta	Within Known Range? N	Nearest Occurrence: 133.57 KM 49.26170°N 99.88242°E
Family:	Perlodidae		
	Isoperla mongolica	Within Known Range? Y	Nearest Occurrence: 157.92 KM 48.06257°N 97.55064°E
	Isoperla obscura	Within Known Range? Y	Nearest Occurrence: 367.40 KM 50.60031°N 101.52392°E
	Skwala pusilla	Within Known Range? N	Nearest Occurrence: 1,145.82 KM 48.51277°N 88.51107°E
LOE Rating:	Unlikely	Total:	4
Family:	Capniidae		
	Capnia khulsbagia	Within Known Range? N	Nearest Occurrence: 331.58 KM 50.98944°N 100.71944°E
	Mesocapnia altaica	Within Known Range? N	Nearest Occurrence: 1,102.72 KM 48.43684°N 88.90094°E
Family:	Leuctridae		
	Leuctra fusca	Within Known Range? N	Nearest Occurrence: 939.84 KM 49.08643°N 107.28952°E
Family:	Perlodidae		
	Isoperla eximia	Within Known Range? N	Nearest Occurrence: 967.79 KM 49.01829°N 107.54453°E



**Basin:** Arctic Ocean Basin  
**Aimags:** Zavkhan  
**Soums:** Telmen

Freshwater Ecoregion: Lake Baikal  
 Terrestrial Ecoregion: Selenge-Orkhon Forest Steppe

**WQM Sites:**

WQM Sites: # 151 (Ider River @ N 48.627° E 97.61323°)

**LOE Rating: Highly Likely Total: 6**

<b>Family: Capniidae</b>						
Isocapnia guentheri	Within Known Range?	Y	Nearest Occurrence:	74.53 KM	48.61518°N	98.23096°E
<b>Family: Chloroperlidae</b>						
Suwallia kerzhneri	Within Known Range?	Y	Nearest Occurrence:	62.91 KM	48.24995°N	97.40627°E
Suwallia teleckojensis	Within Known Range?	Y	Nearest Occurrence:	59.08 KM	48.34410°N	97.87312°E
<b>Family: Nemouridae</b>						
Amphinemura standfussi	Within Known Range?	Y	Nearest Occurrence:	39.23 KM	48.62624°N	97.89617°E
Nemoura cinerea	Within Known Range?	Y	Nearest Occurrence:	80.68 KM	48.06257°N	97.55064°E
<b>Family: Perlodidae</b>						
Isoperla potanini	Within Known Range?	Y	Nearest Occurrence:	39.30 KM	48.62624°N	97.89617°E

**LOE Rating: Likely Total: 13**

<b>Family: Capniidae</b>						
Capnia nigra	Within Known Range?	Y	Nearest Occurrence:	80.68 KM	48.06257°N	97.55064°E
Isocapnia kudia	Within Known Range?	N	Nearest Occurrence:	358.33 KM	51.25356°N	99.66687°E
Isocapnia sibirica	Within Known Range?	N	Nearest Occurrence:	433.75 KM	47.28244°N	101.18793°E
<b>Family: Chloroperlidae</b>						
Alaskaperla longidentata	Within Known Range?	Y	Nearest Occurrence:	39.23 KM	48.62624°N	97.89617°E
Alloperla rostellata	Within Known Range?	N	Nearest Occurrence:	156.56 KM	48.36436°N	98.92737°E
<b>Family: Nemouridae</b>						
Amphinemura borealis	Within Known Range?	Y	Nearest Occurrence:	74.53 KM	48.61518°N	98.23096°E
<b>Family: Perlidae</b>						
Kamimuria exilis	Within Known Range?	N	Nearest Occurrence:	207.29 KM	50.16278°N	98.84212°E
<b>Family: Perlodidae</b>						
Arcynopteryx compacta	Within Known Range?	Y	Nearest Occurrence:	265.82 KM	50.61826°N	99.12094°E
Arcynopteryx sajanensis	Within Known Range?	N	Nearest Occurrence:	459.66 KM	51.61397°N	100.59972°E
Diura bicaudata	Within Known Range?	Y	Nearest Occurrence:	313.40 KM	47.21768°N	99.92824°E
Diura majuscula	Within Known Range?	Y	Nearest Occurrence:	80.83 KM	48.06257°N	97.55064°E
Pictetiella asiatica	Within Known Range?	N	Nearest Occurrence:	456.63 KM	51.65822°N	100.53000°E
<b>Family: Taeniopterygidae</b>						
Taenionema japonicum	Within Known Range?	Y	Nearest Occurrence:	265.82 KM	50.61826°N	99.12094°E

**LOE Rating: Probable Total: 5**

<b>Family: Chloroperlidae</b>						
Alloperla joosti	Within Known Range?	Y	Nearest Occurrence:	62.91 KM	48.24995°N	97.40627°E
<b>Family: Perlodidae</b>						
Arcynopteryx polaris	Within Known Range?	Y	Nearest Occurrence:	156.84 KM	48.36436°N	98.92737°E
Isoperla altaica	Within Known Range?	Y	Nearest Occurrence:	297.94 KM	50.81265°N	99.33803°E
Isoperla asiatica	Within Known Range?	Y	Nearest Occurrence:	80.68 KM	48.06257°N	97.55064°E
Megarcys ochracea	Within Known Range?	N	Nearest Occurrence:	346.84 KM	51.46205°N	99.19994°E

**Basin:** Arctic Ocean Basin  
**Aimags:** Zavkhan  
**Soums:** Telmen

Freshwater Ecoregion: Lake Baikal  
 Terrestrial Ecoregion: Selenge-Orkhon Forest Steppe

**WQM Sites:**

WQM Sites: # 151 (Ider River @ N 48.627° E 97.61323°)

<b>LOE Rating:</b>	<b>Possible</b>	<b>Total:</b>	<b>5</b>
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Family: Capniidae						
Mesocapnia variabilis	Within Known Range? Y	Nearest Occurrence:	156.84 KM	48.36436°N	98.92737°E	
Family: Chloroperlidae						
Haploperla lepnevae	Within Known Range? Y	Nearest Occurrence:	260.66 KM	49.26170°N	99.88242°E	
Family: Perlidae						
Agnetina brevipennis	Within Known Range? Y	Nearest Occurrence:	118.97 KM	48.71968°N	98.65184°E	
Family: Perlodidae						
Kaszabia nigricauda	Within Known Range? Y	Nearest Occurrence:	118.97 KM	48.71968°N	98.65184°E	
Family: Pteronarcyidae						
Pteronarcys reticulata	Within Known Range? N	Nearest Occurrence:	322.73 KM	47.80440°N	100.31810°E	

<b>LOE Rating:</b>	<b>Predicted</b>	<b>Total:</b>	<b>14</b>
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Family: Chloroperlidae						
Alloperla deminuta	Within Known Range? N	Nearest Occurrence:	322.73 KM	47.80440°N	100.31810°E	
Alloperla mediata	Within Known Range? N	Nearest Occurrence:	265.35 KM	50.61826°N	99.12094°E	
Family: Leuctridae						
Paraleuctra zapekinae	Within Known Range? N	Nearest Occurrence:	790.35 KM	49.71481°N	104.64203°E	
Family: Nemouridae						
Nemoura arctica	Within Known Range? Y	Nearest Occurrence:	257.61 KM	50.42996°N	99.21727°E	
Nemoura sahlbergi	Within Known Range? N	Nearest Occurrence:	257.15 KM	50.42996°N	99.21727°E	
Nemurella pictetii	Within Known Range? N	Nearest Occurrence:	297.41 KM	50.81265°N	99.33803°E	
Family: Perlidae						
Agnetina cocandica	Within Known Range? Y	Nearest Occurrence:	275.70 KM	49.76390°N	99.86185°E	
Agnetina extrema	Within Known Range? N	Nearest Occurrence:	361.28 KM	47.50949°N	100.57510°E	
Paragnetina flavotincta	Within Known Range? N	Nearest Occurrence:	260.66 KM	49.26170°N	99.88242°E	
Family: Perlodidae						
Isoperla kozlovi	Within Known Range? Y	Nearest Occurrence:	256.53 KM	50.31066°N	99.32150°E	
Isoperla lunigera	Within Known Range? N	Nearest Occurrence:	283.57 KM	49.62785°N	99.99523°E	
Isoperla mongolica	Within Known Range? Y	Nearest Occurrence:	63.03 KM	48.24995°N	97.40627°E	
Isoperla obscura	Within Known Range? Y	Nearest Occurrence:	455.76 KM	51.65045°N	100.52664°E	
Skwala pusilla	Within Known Range? N	Nearest Occurrence:	1,007.37 KM	48.51277°N	88.51107°E	

<b>LOE Rating:</b>	<b>Unlikely</b>	<b>Total:</b>	<b>4</b>
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Family: Capniidae						
Capnia khulsbagia	Within Known Range? N	Nearest Occurrence:	425.36 KM	50.98944°N	100.71944°E	
Mesocapnia altaica	Within Known Range? N	Nearest Occurrence:	964.42 KM	48.43684°N	88.90094°E	
Family: Leuctridae						
Leuctra fusca	Within Known Range? N	Nearest Occurrence:	1,078.01 KM	49.08643°N	107.28952°E	
Family: Perlodidae						
Isoperla eximia	Within Known Range? N	Nearest Occurrence:	1,106.10 KM	49.01829°N	107.54453°E	



**Basin:** Arctic Ocean Basin  
**Aimags:** Zavkhan  
**Soums:** Tosontsengel

**Freshwater Ecoregion:** Lake Baikal  
**Terrestrial Ecoregion:** Selenge-Orkhon Forest Steppe

**WQM Sites:**

WQM Sites: # 153 (Hojuul River @ N 48.72918° E 98.26207°)

**LOE Rating: Highly Likely Total: 4**

<b>Family: Chloroperlidae</b>						
Suwallia kerzhneri	Within Known Range? Y	Nearest Occurrence:	7.45 KM	48.61518°N	98.23096 °E	
Suwallia teleckojensis	Within Known Range? Y	Nearest Occurrence:	46.37 KM	48.34410°N	97.87312 °E	
<b>Family: Nemouridae</b>						
Amphinemura standfussi	Within Known Range? Y	Nearest Occurrence:	7.45 KM	48.61518°N	98.23096 °E	
<b>Family: Perlodidae</b>						
Isoperla potanini	Within Known Range? Y	Nearest Occurrence:	38.84 KM	48.62624°N	97.89617 °E	

**LOE Rating: Likely Total: 10**

<b>Family: Capniidae</b>						
Capnia nigra	Within Known Range? Y	Nearest Occurrence:	93.29 KM	48.06257°N	97.55064 °E	
Isocapnia guentheri	Within Known Range? Y	Nearest Occurrence:	7.45 KM	48.61518°N	98.23096 °E	
Isocapnia kudia	Within Known Range? N	Nearest Occurrence:	339.67 KM	51.25356°N	99.66687 °E	
<b>Family: Chloroperlidae</b>						
Alaskaperla longidentata	Within Known Range? Y	Nearest Occurrence:	38.76 KM	48.62624°N	97.89617 °E	
Alloperla joosti	Within Known Range? Y	Nearest Occurrence:	7.45 KM	48.61518°N	98.23096 °E	
Alloperla rostellata	Within Known Range? Y	Nearest Occurrence:	79.35 KM	48.36436°N	98.92737 °E	
<b>Family: Nemouridae</b>						
Amphinemura borealis	Within Known Range? Y	Nearest Occurrence:	7.45 KM	48.61518°N	98.23096 °E	
Nemoura cinerea	Within Known Range? Y	Nearest Occurrence:	93.29 KM	48.06257°N	97.55064 °E	
<b>Family: Perlidae</b>						
Kamimuria exilis	Within Known Range? N	Nearest Occurrence:	191.74 KM	50.16278°N	98.84212 °E	
<b>Family: Perlodidae</b>						
Diura majuscula	Within Known Range? Y	Nearest Occurrence:	93.47 KM	48.06257°N	97.55064 °E	

**LOE Rating: Probable Total: 8**

<b>Family: Capniidae</b>						
Isocapnia sibirica	Within Known Range? N	Nearest Occurrence:	356.46 KM	47.28244°N	101.18793 °E	
Mesocapnia variabilis	Within Known Range? Y	Nearest Occurrence:	79.49 KM	48.36436°N	98.92737 °E	
<b>Family: Perlodidae</b>						
Arcynopteryx compacta	Within Known Range? Y	Nearest Occurrence:	250.30 KM	50.61826°N	99.12094 °E	
Arcynopteryx polaris	Within Known Range? Y	Nearest Occurrence:	79.49 KM	48.36436°N	98.92737 °E	
Arcynopteryx sajanensis	Within Known Range? N	Nearest Occurrence:	430.42 KM	51.61397°N	100.59972 °E	
Diura bicaudata	Within Known Range? Y	Nearest Occurrence:	238.90 KM	47.21768°N	99.92824 °E	
Pictetiella asiatica	Within Known Range? N	Nearest Occurrence:	428.92 KM	51.65822°N	100.53000 °E	
<b>Family: Taeniopterygidae</b>						
Taenionema japonicum	Within Known Range? Y	Nearest Occurrence:	250.30 KM	50.61826°N	99.12094 °E	

Basin: Arctic Ocean Basin

Aimag: Zavkhan

Soum: Tosontsengel

Freshwater Ecoregion: Lake Baikal

Terrestrial Ecoregion: Selenge-Orkhon Forest Steppe

WQM Sites:

WQM Sites: # 153 (Hojuul River @ N 48.72918° E 98.26207°)

**LOE Rating: Possible Total: 8**

Family: Chloroperlidae					
Haploperla lepnevae	Within Known Range? Y	Nearest Occurrence:	199.11 KM	49.26170°N	99.88242°E
Family: Perlidae					
Agnetina brevipennis	Within Known Range? Y	Nearest Occurrence:	49.87 KM	48.71968°N	98.65184°E
Agnetina extrema	Within Known Range? N	Nearest Occurrence:	284.03 KM	47.50949°N	100.57510°E
Family: Perlodidae					
Isoperla altaica	Within Known Range? Y	Nearest Occurrence:	280.00 KM	50.81265°N	99.33803°E
Isoperla asiatica	Within Known Range? Y	Nearest Occurrence:	93.29 KM	48.06257°N	97.55064°E
Kaszabia nigricauda	Within Known Range? Y	Nearest Occurrence:	49.87 KM	48.71968°N	98.65184°E
Megarcys ochracea	Within Known Range? N	Nearest Occurrence:	338.90 KM	51.40978°N	99.30136°E
Family: Pteronarcyidae					
Pteronarcys reticulata	Within Known Range? N	Nearest Occurrence:	245.36 KM	47.80440°N	100.31810°E

**LOE Rating: Predicted Total: 13**

Family: Chloroperlidae					
Alloperla deminuta	Within Known Range? N	Nearest Occurrence:	245.36 KM	47.80440°N	100.31810°E
Alloperla mediata	Within Known Range? N	Nearest Occurrence:	249.86 KM	50.61826°N	99.12094°E
Family: Leuctridae					
Paraleuctra zapekinae	Within Known Range? N	Nearest Occurrence:	722.70 KM	49.71481°N	104.64203°E
Family: Nemouridae					
Nemoura arctica	Within Known Range? Y	Nearest Occurrence:	235.95 KM	50.42996°N	99.21727°E
Nemoura sahlbergi	Within Known Range? N	Nearest Occurrence:	235.53 KM	50.42996°N	99.21727°E
Nemurella pictetii	Within Known Range? N	Nearest Occurrence:	279.50 KM	50.81265°N	99.33803°E
Family: Perlidae					
Agnetina cocandica	Within Known Range? Y	Nearest Occurrence:	225.68 KM	49.76390°N	99.86185°E
Paragnetina flavotincta	Within Known Range? N	Nearest Occurrence:	199.11 KM	49.26170°N	99.88242°E
Family: Perlodidae					
Isoperla kozlovi	Within Known Range? Y	Nearest Occurrence:	229.06 KM	49.62785°N	99.99523°E
Isoperla lunigera	Within Known Range? N	Nearest Occurrence:	229.06 KM	49.62785°N	99.99523°E
Isoperla mongolica	Within Known Range? Y	Nearest Occurrence:	93.47 KM	48.06257°N	97.55064°E
Isoperla obscura	Within Known Range? Y	Nearest Occurrence:	428.00 KM	51.65045°N	100.52664°E
Skwala pusilla	Within Known Range? N	Nearest Occurrence:	1,079.54 KM	48.51277°N	88.51107°E

**LOE Rating: Unlikely Total: 4**

Family: Capniidae					
Capnia khulsbagia	Within Known Range? N	Nearest Occurrence:	386.49 KM	50.98944°N	100.71944°E
Mesocapnia altaica	Within Known Range? N	Nearest Occurrence:	1,036.33 KM	48.43684°N	88.90094°E
Family: Leuctridae					
Leuctra fusca	Within Known Range? N	Nearest Occurrence:	1,006.65 KM	49.08643°N	107.28952°E
Family: Perlodidae					
Isoperla eximia	Within Known Range? N	Nearest Occurrence:	1,034.50 KM	49.01829°N	107.54453°E

**Basin:** Internal Drainage Basin  
**Aimags:** Bayankhongor  
**Soums:** Baatsagaan

**Freshwater Ecoregion:** Western Mongolia  
**Terrestrial Ecoregion:** Gobi Lakes Valley Desert Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Highly Likely Total: 5**

Family: Capniidae					
Isocapnia guentheri	Within Known Range? N	Nearest Occurrence:	257.38 KM	47.48567°N	100.87875°E
Isocapnia sibirica	Within Known Range? N	Nearest Occurrence:	263.14 KM	47.28244°N	101.18793°E
Family: Chloroperlidae					
Alloperla rostellata	Within Known Range? N	Nearest Occurrence:	235.83 KM	47.11192°N	101.01048°E
Family: Perlidae					
Kamimuria exilis	Within Known Range? N	Nearest Occurrence:	509.04 KM	50.16278°N	98.84212°E
Family: Perlodidae					
Arcynopteryx polaris	Within Known Range? N	Nearest Occurrence:	182.09 KM	47.21260°N	99.91083°E

**LOE Rating: Likely Total: 12**

Family: Capniidae					
Isocapnia kudia	Within Known Range? N	Nearest Occurrence:	624.44 KM	51.25356°N	99.66687°E
Mesocapnia variabilis	Within Known Range? N	Nearest Occurrence:	182.09 KM	47.21260°N	99.91083°E
Family: Chloroperlidae					
Alloperla joosti	Within Known Range? N	Nearest Occurrence:	218.77 KM	47.42580°N	100.30130°E
Haploperla lepnevae	Within Known Range? N	Nearest Occurrence:	405.41 KM	49.26170°N	99.88242°E
Family: Nemouridae					
Nemoura cinerea	Within Known Range? N	Nearest Occurrence:	257.38 KM	47.48567°N	100.87875°E
Family: Perlidae					
Agnetina brevipennis	Within Known Range? N	Nearest Occurrence:	281.58 KM	48.12661°N	99.94128°E
Agnetina cocandica	Within Known Range? N	Nearest Occurrence:	448.04 KM	49.62785°N	99.99523°E
Agnetina extrema	Within Known Range? N	Nearest Occurrence:	240.97 KM	47.50949°N	100.57510°E
Family: Perlodidae					
Arcynopteryx sajanensis	Within Known Range? N	Nearest Occurrence:	676.73 KM	51.61397°N	100.59972°E
Diura bicaudata	Within Known Range? N	Nearest Occurrence:	182.82 KM	47.21768°N	99.92824°E
Pictetiella asiatica	Within Known Range? N	Nearest Occurrence:	678.98 KM	51.65822°N	100.53000°E
Family: Pteronarcyidae					
Pteronarcys reticulata	Within Known Range? N	Nearest Occurrence:	258.29 KM	47.80440°N	100.31810°E

**LOE Rating: Probable Total: 4**

Family: Chloroperlidae					
Suwallia kerzhneri	Within Known Range? N	Nearest Occurrence:	257.38 KM	47.48567°N	100.87875°E
Suwallia teleckojensis	Within Known Range? N	Nearest Occurrence:	194.91 KM	47.29702°N	100.03136°E
Family: Nemouridae					
Amphinemura borealis	Within Known Range? N	Nearest Occurrence:	218.77 KM	47.42580°N	100.30130°E
Family: Perlodidae					
Isoperla asiatica	Within Known Range? N	Nearest Occurrence:	258.29 KM	47.80440°N	100.31810°E



**Basin:** Internal Drainage Basin  
**Aimags:** Bayankhongor  
**Soums:** Baatsagaan

**Freshwater Ecoregion:** Western Mongolia  
**Terrestrial Ecoregion:** Gobi Lakes Valley Desert Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Possible Total: 5**

**Family:** Perlodidae

Diura majuscula	Within Known Range? N	Nearest Occurrence: 219.16 KM	47.42580 °N	100.30130 °E
Isoperla kozlovi	Within Known Range? N	Nearest Occurrence: 257.38 KM	47.48567 °N	100.87875 °E
Isoperla potanini	Within Known Range? N	Nearest Occurrence: 219.16 KM	47.42580 °N	100.30130 °E
Kaszabia nigricauda	Within Known Range? N	Nearest Occurrence: 257.38 KM	47.48567 °N	100.87875 °E
Skwala pusilla	Within Known Range? N	Nearest Occurrence: 1,259.66 KM	48.51277 °N	88.51107 °E

**LOE Rating: Predicted Total: 16**

**Family:** Capniidae

Capnia nigra	Within Known Range? N	Nearest Occurrence: 345.07 KM	48.06257 °N	97.55064 °E
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**Family:** Chloroperlidae

Alaskaperla longidentata	Within Known Range? N	Nearest Occurrence: 194.56 KM	47.29702 °N	100.03136 °E
Alloperla deminuta	Within Known Range? N	Nearest Occurrence: 235.83 KM	47.11192 °N	101.01048 °E
Alloperla mediata	Within Known Range? N	Nearest Occurrence: 555.10 KM	50.61826 °N	99.12094 °E

**Family:** Leuctridae

Paraleuctra zapekinae	Within Known Range? N	Nearest Occurrence: 729.99 KM	49.71481 °N	104.64203 °E
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**Family:** Nemouridae

Amphinemura standfussi	Within Known Range? N	Nearest Occurrence: 344.83 KM	48.05989 °N	97.55073 °E
Nemoura arctica	Within Known Range? N	Nearest Occurrence: 315.42 KM	47.26999 °N	101.80227 °E
Nemoura sahlbergi	Within Known Range? N	Nearest Occurrence: 218.77 KM	47.42580 °N	100.30130 °E

**Family:** Perlidae

Paragnetina flavotincta	Within Known Range? N	Nearest Occurrence: 405.41 KM	49.26170 °N	99.88242 °E
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**Family:** Perlodidae

Arcynopteryx compacta	Within Known Range? N	Nearest Occurrence: 236.24 KM	47.11192 °N	101.01048 °E
Isoperla altaica	Within Known Range? N	Nearest Occurrence: 236.24 KM	47.11192 °N	101.01048 °E
Isoperla lunigera	Within Known Range? N	Nearest Occurrence: 438.14 KM	49.45317 °N	100.47234 °E
Isoperla mongolica	Within Known Range? N	Nearest Occurrence: 236.24 KM	47.11192 °N	101.01048 °E
Isoperla obscura	Within Known Range? N	Nearest Occurrence: 549.77 KM	49.38617 °N	102.71667 °E
Megarcys ochracea	Within Known Range? N	Nearest Occurrence: 641.80 KM	51.40978 °N	99.30136 °E

**Family:** Taeniopterygidae

Taenionema japonicum	Within Known Range? N	Nearest Occurrence: 236.24 KM	47.11192 °N	101.01048 °E
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**LOE Rating: Unlikely Total: 5**

**Family:** Capniidae

Capnia khulsbagia	Within Known Range? N	Nearest Occurrence: 610.33 KM	50.98944 °N	100.71944 °E
Mesocapnia altaica	Within Known Range? N	Nearest Occurrence: 1,215.67 KM	48.43684 °N	88.90094 °E

**Family:** Leuctridae

Leuctra fusca	Within Known Range? N	Nearest Occurrence: 947.19 KM	49.08643 °N	107.28952 °E
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**Family:** Nemouridae

Nemurella pictetii	Within Known Range? N	Nearest Occurrence: 575.42 KM	50.81265 °N	99.33803 °E
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**Family:** Perlodidae

Isoperla eximia	Within Known Range? N	Nearest Occurrence: 970.18 KM	49.01829 °N	107.54453 °E
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**Basin:** Internal Drainage Basin  
**Aimag:** Bayankhongor  
**Soum:** Bayanbulag

**Freshwater Ecoregion:** Western Mongolia  
**Terrestrial Ecoregion:** Selenge-Orkhon Forest Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Highly Likely Total: 8**

<b>Family: Capniidae</b>					
Isocapnia guentheri	Within Known Range?	N	Nearest Occurrence:	195.69 KM	48.61518°N 98.23096°E
Isocapnia sibirica	Within Known Range?	N	Nearest Occurrence:	347.03 KM	47.28244°N 101.18793°E
Mesocapnia variabilis	Within Known Range?	Y	Nearest Occurrence:	191.64 KM	48.36436°N 98.92737°E
<b>Family: Chloroperlidae</b>					
Alloperla joosti	Within Known Range?	N	Nearest Occurrence:	172.18 KM	48.24995°N 97.40627°E
Alloperla rostellata	Within Known Range?	N	Nearest Occurrence:	191.30 KM	48.36436°N 98.92737°E
<b>Family: Nemouridae</b>					
Nemoura cinerea	Within Known Range?	N	Nearest Occurrence:	146.54 KM	48.06257°N 97.55064°E
<b>Family: Perlidae</b>					
Kamimuria exilis	Within Known Range?	N	Nearest Occurrence:	376.90 KM	50.16278°N 98.84212°E
<b>Family: Perlodidae</b>					
Arcynopteryx polaris	Within Known Range?	Y	Nearest Occurrence:	191.64 KM	48.36436°N 98.92737°E

**LOE Rating: Likely Total: 6**

<b>Family: Capniidae</b>					
Capnia nigra	Within Known Range?	N	Nearest Occurrence:	146.54 KM	48.06257°N 97.55064°E
Isocapnia kudia	Within Known Range?	N	Nearest Occurrence:	518.35 KM	51.25356°N 99.66687°E
<b>Family: Chloroperlidae</b>					
Suwallia kerzhneri	Within Known Range?	N	Nearest Occurrence:	146.26 KM	48.05989°N 97.55073°E
<b>Family: Perlodidae</b>					
Arcynopteryx sajanensis	Within Known Range?	N	Nearest Occurrence:	597.98 KM	51.61397°N 100.59972°E
Diura bicaudata	Within Known Range?	Y	Nearest Occurrence:	207.87 KM	47.21768°N 99.92824°E
Pictetiella asiatica	Within Known Range?	N	Nearest Occurrence:	597.70 KM	51.65822°N 100.53000°E

**LOE Rating: Probable Total: 8**

<b>Family: Chloroperlidae</b>					
Suwallia teleckojensis	Within Known Range?	Y	Nearest Occurrence:	146.53 KM	48.05989°N 97.55073°E
<b>Family: Nemouridae</b>					
Amphinemura borealis	Within Known Range?	Y	Nearest Occurrence:	146.26 KM	48.05989°N 97.55073°E
Amphinemura standfussi	Within Known Range?	N	Nearest Occurrence:	146.26 KM	48.05989°N 97.55073°E
<b>Family: Perlidae</b>					
Agnetina brevipennis	Within Known Range?	Y	Nearest Occurrence:	215.86 KM	48.71968°N 98.65184°E
Agnetina extrema	Within Known Range?	N	Nearest Occurrence:	285.12 KM	47.50949°N 100.57510°E
<b>Family: Perlodidae</b>					
Diura majuscula	Within Known Range?	Y	Nearest Occurrence:	146.80 KM	48.06257°N 97.55064°E
Isoperla potanini	Within Known Range?	Y	Nearest Occurrence:	146.80 KM	48.06257°N 97.55064°E
<b>Family: Pteronarcyidae</b>					
Pteronarcys reticulata	Within Known Range?	N	Nearest Occurrence:	268.66 KM	47.80440°N 100.31810°E



**Basin:** Internal Drainage Basin  
**Aimags:** Bayankhongor  
**Soums:** Bayanbulag

**Freshwater Ecoregion:** Western Mongolia  
**Terrestrial Ecoregion:** Selenge-Orkhon Forest Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Possible Total: 7**

<b>Family: Chloroperlidae</b>					
Alaskaperla longidentata	Within Known Range?	N	Nearest Occurrence:	166.73 KM	48.34410°N 97.87312°E
Haploperla lepnevae	Within Known Range?	N	Nearest Occurrence:	332.81 KM	49.26170°N 99.88242°E
<b>Family: Perlidae</b>					
Agnetina cocandica	Within Known Range?	Y	Nearest Occurrence:	373.82 KM	49.62785°N 99.99523°E
<b>Family: Perlodidae</b>					
Isoperla asiatica	Within Known Range?	N	Nearest Occurrence:	146.26 KM	48.05989°N 97.55073°E
Isoperla kozlovi	Within Known Range?	N	Nearest Occurrence:	268.66 KM	47.80440°N 100.31810°E
Skwala pusilla	Within Known Range?	N	Nearest Occurrence:	1,079.07 KM	48.51277°N 88.51107°E
<b>Family: Taeniopterygidae</b>					
Taenionema japonicum	Within Known Range?	Y	Nearest Occurrence:	325.93 KM	47.11192°N 101.01048°E

**LOE Rating: Predicted Total: 13**

<b>Family: Chloroperlidae</b>					
Alloperla deminuta	Within Known Range?	N	Nearest Occurrence:	268.66 KM	47.80440°N 100.31810°E
Alloperla mediata	Within Known Range?	N	Nearest Occurrence:	432.80 KM	50.61826°N 99.12094°E
<b>Family: Nemouridae</b>					
Nemoura arctica	Within Known Range?	Y	Nearest Occurrence:	415.29 KM	47.26999°N 101.80227°E
Nemoura sahlbergi	Within Known Range?	N	Nearest Occurrence:	253.37 KM	47.42580°N 100.30130°E
Nemurella pictetii	Within Known Range?	N	Nearest Occurrence:	460.31 KM	50.81265°N 99.33803°E
<b>Family: Perlidae</b>					
Paragnetina flavotincta	Within Known Range?	N	Nearest Occurrence:	332.81 KM	49.26170°N 99.88242°E
<b>Family: Perlodidae</b>					
Arcynopteryx compacta	Within Known Range?	Y	Nearest Occurrence:	325.93 KM	47.11192°N 101.01048°E
Isoperla altaica	Within Known Range?	Y	Nearest Occurrence:	325.93 KM	47.11192°N 101.01048°E
Isoperla lunigera	Within Known Range?	N	Nearest Occurrence:	373.15 KM	49.62785°N 99.99523°E
Isoperla mongolica	Within Known Range?	Y	Nearest Occurrence:	146.80 KM	48.06257°N 97.55064°E
Isoperla obscura	Within Known Range?	N	Nearest Occurrence:	563.75 KM	50.60031°N 101.52392°E
Kaszabia nigricauda	Within Known Range?	N	Nearest Occurrence:	215.86 KM	48.71968°N 98.65184°E
Megarcys ochracea	Within Known Range?	N	Nearest Occurrence:	522.84 KM	51.40978°N 99.30136°E

**LOE Rating: Unlikely Total: 5**

<b>Family: Capniidae</b>					
Capnia khulsbagia	Within Known Range?	N	Nearest Occurrence:	543.58 KM	50.98944°N 100.71944°E
Mesocapnia altaica	Within Known Range?	N	Nearest Occurrence:	1,034.99 KM	48.43684°N 88.90094°E
<b>Family: Leuctridae</b>					
Leuctra fusca	Within Known Range?	N	Nearest Occurrence:	1,050.63 KM	49.08643°N 107.28952°E
Paraleuctra zapekinae	Within Known Range?	N	Nearest Occurrence:	793.36 KM	49.71481°N 104.64203°E
<b>Family: Perlodidae</b>					
Isoperla eximia	Within Known Range?	N	Nearest Occurrence:	1,076.45 KM	49.01829°N 107.54453°E

**Basin:** Internal Drainage Basin  
**Aimags:** Bayankhongor  
**Soums:** Bayangovi

**Freshwater Ecoregion:** Western Mongolia  
**Terrestrial Ecoregion:** Gobi Lakes Valley Desert Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Highly Likely Total: 6**

<b>Family: Capniidae</b>					
Isocapnia guentheri	Within Known Range? N	Nearest Occurrence:	325.50 KM	47.48567°N	100.87875 °E
Isocapnia sibirica	Within Known Range? N	Nearest Occurrence:	316.05 KM	47.28244°N	101.18793 °E
<b>Family: Chloroperlidae</b>					
Alloperla rostellata	Within Known Range? N	Nearest Occurrence:	291.01 KM	47.11192°N	101.01048 °E
<b>Family: Perlidae</b>					
Kamimuria exilis	Within Known Range? N	Nearest Occurrence:	624.93 KM	50.16278°N	98.84212 °E
<b>Family: Perlodidae</b>					
Arcynopteryx polaris	Within Known Range? N	Nearest Occurrence:	276.17 KM	47.00226°N	100.91051 °E
Diura bicaudata	Within Known Range? N	Nearest Occurrence:	282.70 KM	47.21768°N	99.92824 °E

**LOE Rating: Likely Total: 10**

<b>Family: Capniidae</b>					
Isocapnia kudia	Within Known Range? N	Nearest Occurrence:	731.59 KM	51.25356°N	99.66687 °E
Mesocapnia variabilis	Within Known Range? N	Nearest Occurrence:	282.74 KM	47.21260°N	99.91083 °E
<b>Family: Chloroperlidae</b>					
Alloperla joosti	Within Known Range? N	Nearest Occurrence:	291.01 KM	47.11192°N	101.01048 °E
Suwallia teleckojensis	Within Known Range? N	Nearest Occurrence:	291.53 KM	47.11192°N	101.01048 °E
<b>Family: Nemouridae</b>					
Amphinemura borealis	Within Known Range? N	Nearest Occurrence:	306.27 KM	46.73093°N	101.88583 °E
Nemoura cinerea	Within Known Range? N	Nearest Occurrence:	325.50 KM	47.48567°N	100.87875 °E
<b>Family: Perlidae</b>					
Agnetina brevipennis	Within Known Range? N	Nearest Occurrence:	316.46 KM	46.78742°N	101.96021 °E
Agnetina extrema	Within Known Range? N	Nearest Occurrence:	316.05 KM	47.28244°N	101.18793 °E
<b>Family: Perlodidae</b>					
Arcynopteryx sajanensis	Within Known Range? N	Nearest Occurrence:	774.21 KM	51.61397°N	100.59972 °E
Pictetiella asiatica	Within Known Range? N	Nearest Occurrence:	777.14 KM	51.65822°N	100.53000 °E

**LOE Rating: Probable Total: 6**

<b>Family: Chloroperlidae</b>					
Haploperla lepnevae	Within Known Range? N	Nearest Occurrence:	509.60 KM	49.26170°N	99.88242 °E
Suwallia kerzhneri	Within Known Range? N	Nearest Occurrence:	325.50 KM	47.48567°N	100.87875 °E
<b>Family: Perlidae</b>					
Agnetina cocandica	Within Known Range? N	Nearest Occurrence:	550.94 KM	49.62785°N	99.99523 °E
<b>Family: Perlodidae</b>					
Diura majuscula	Within Known Range? N	Nearest Occurrence:	291.53 KM	47.11192°N	101.01048 °E
Isoperla potanini	Within Known Range? N	Nearest Occurrence:	306.82 KM	46.73093°N	101.88583 °E
<b>Family: Pteronarcyidae</b>					
Pteronarcys reticulata	Within Known Range? N	Nearest Occurrence:	348.81 KM	47.80440°N	100.31810 °E

**Basin:** Internal Drainage Basin  
**Aimags:** Bayankhongor  
**Soums:** Bayangovi

**Freshwater Ecoregion:** Western Mongolia  
**Terrestrial Ecoregion:** Gobi Lakes Valley Desert Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

<b>LOE Rating:</b> Possible	<b>Total:</b> 6
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**Family:** Perlodidae

Arcynopteryx compacta	Within Known Range? N	Nearest Occurrence: 291.53 KM	47.11192 °N	101.01048 °E
Isoperla asiatica	Within Known Range? N	Nearest Occurrence: 348.81 KM	47.80440 °N	100.31810 °E
Isoperla kozlovi	Within Known Range? N	Nearest Occurrence: 316.05 KM	47.28244 °N	101.18793 °E
Kaszabia nigricauda	Within Known Range? N	Nearest Occurrence: 325.50 KM	47.48567 °N	100.87875 °E
Skwala pusilla	Within Known Range? N	Nearest Occurrence: 1,349.55 KM	48.51277 °N	88.51107 °E

**Family:** Taeniopterygidae

Taenionema japonicum	Within Known Range? N	Nearest Occurrence: 291.53 KM	47.11192 °N	101.01048 °E
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<b>LOE Rating:</b> Predicted	<b>Total:</b> 14
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**Family:** Capniidae

Capnia nigra	Within Known Range? N	Nearest Occurrence: 467.22 KM	48.06257 °N	97.55064 °E
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**Family:** Chloroperlidae

Alaskaperla longidentata	Within Known Range? N	Nearest Occurrence: 291.20 KM	47.29702 °N	100.03136 °E
Alloperla deminuta	Within Known Range? N	Nearest Occurrence: 291.01 KM	47.11192 °N	101.01048 °E
Alloperla mediata	Within Known Range? N	Nearest Occurrence: 653.58 KM	49.70678 °N	103.10288 °E

**Family:** Leuctridae

Paraleuctra zapekinae	Within Known Range? N	Nearest Occurrence: 757.13 KM	49.71481 °N	104.64203 °E
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**Family:** Nemouridae

Amphinemura standfussi	Within Known Range? N	Nearest Occurrence: 466.98 KM	48.05989 °N	97.55073 °E
Nemoura arctica	Within Known Range? N	Nearest Occurrence: 348.49 KM	47.26999 °N	101.80227 °E
Nemoura sahlbergi	Within Known Range? N	Nearest Occurrence: 306.79 KM	47.42580 °N	100.30130 °E

**Family:** Perlidae

Paragnetina flavotincta	Within Known Range? N	Nearest Occurrence: 509.60 KM	49.26170 °N	99.88242 °E
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**Family:** Perlodidae

Isoperla altaica	Within Known Range? N	Nearest Occurrence: 291.53 KM	47.11192 °N	101.01048 °E
Isoperla lunigera	Within Known Range? N	Nearest Occurrence: 532.62 KM	49.45317 °N	100.47234 °E
Isoperla mongolica	Within Known Range? N	Nearest Occurrence: 291.53 KM	47.11192 °N	101.01048 °E
Isoperla obscura	Within Known Range? N	Nearest Occurrence: 601.19 KM	49.38617 °N	102.71667 °E
Megarcys ochracea	Within Known Range? N	Nearest Occurrence: 690.85 KM	49.77776 °N	103.60860 °E

<b>LOE Rating:</b> Unlikely	<b>Total:</b> 5
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**Family:** Capniidae

Capnia khulsbagia	Within Known Range? N	Nearest Occurrence: 705.02 KM	50.98944 °N	100.71944 °E
Mesocapnia altaica	Within Known Range? N	Nearest Occurrence: 1,305.84 KM	48.43684 °N	88.90094 °E

**Family:** Leuctridae

Leuctra fusca	Within Known Range? N	Nearest Occurrence: 941.37 KM	49.08643 °N	107.28952 °E
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**Family:** Nemouridae

Nemurella pictetii	Within Known Range? N	Nearest Occurrence: 685.96 KM	50.81265 °N	99.33803 °E
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**Family:** Perlodidae

Isoperla eximia	Within Known Range? N	Nearest Occurrence: 961.85 KM	49.01829 °N	107.54453 °E
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**Basin:** Internal Drainage Basin  
**Aimags:** Bayankhongor  
**Soums:** Bayanlig

**Freshwater Ecoregion:** Western Mongolia  
**Terrestrial Ecoregion:** Gobi Lakes Valley Desert Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Highly Likely Total: 4**

<b>Family: Capniidae</b>					
Isocapnia guentheri	Within Known Range? N	Nearest Occurrence:	351.83 KM	47.48567°N	100.87875°E
Isocapnia sibirica	Within Known Range? N	Nearest Occurrence:	330.56 KM	47.28244°N	101.18793°E
<b>Family: Chloroperlidae</b>					
Alloperla rostellata	Within Known Range? N	Nearest Occurrence:	310.46 KM	47.11192°N	101.01048°E
<b>Family: Perlodidae</b>					
Arcynopteryx polaris	Within Known Range? N	Nearest Occurrence:	298.67 KM	47.00226°N	100.91051°E

**LOE Rating: Likely Total: 12**

<b>Family: Capniidae</b>					
Isocapnia kudia	Within Known Range? N	Nearest Occurrence:	782.52 KM	51.25356°N	99.66687°E
Mesocapnia variabilis	Within Known Range? N	Nearest Occurrence:	341.00 KM	47.21768°N	99.92824°E
<b>Family: Chloroperlidae</b>					
Alloperla joosti	Within Known Range? N	Nearest Occurrence:	297.54 KM	46.78742°N	101.96021°E
<b>Family: Nemouridae</b>					
Amphinemura borealis	Within Known Range? N	Nearest Occurrence:	288.61 KM	46.73093°N	101.88583°E
Nemoura cinerea	Within Known Range? N	Nearest Occurrence:	351.83 KM	47.48567°N	100.87875°E
<b>Family: Perlidae</b>					
Agnentina brevipennis	Within Known Range? N	Nearest Occurrence:	297.54 KM	46.78742°N	101.96021°E
Agnentina extrema	Within Known Range? N	Nearest Occurrence:	330.56 KM	47.28244°N	101.18793°E
Kamimuria exilis	Within Known Range? N	Nearest Occurrence:	690.01 KM	50.16278°N	98.84212°E
<b>Family: Perlodidae</b>					
Arcynopteryx sajanensis	Within Known Range? N	Nearest Occurrence:	812.28 KM	51.61397°N	100.59972°E
Diura bicaudata	Within Known Range? N	Nearest Occurrence:	340.39 KM	47.21768°N	99.92824°E
Pictetiella asiatica	Within Known Range? N	Nearest Occurrence:	816.10 KM	51.65822°N	100.53000°E
<b>Family: Pteronarcyidae</b>					
Pteronarcys reticulata	Within Known Range? N	Nearest Occurrence:	392.92 KM	47.80440°N	100.31810°E

**LOE Rating: Probable Total: 3**

<b>Family: Chloroperlidae</b>					
Haploperla lepnevae	Within Known Range? N	Nearest Occurrence:	560.92 KM	49.26170°N	99.88242°E
Suwallia kerzhneri	Within Known Range? N	Nearest Occurrence:	351.83 KM	47.48567°N	100.87875°E
Suwallia teleckojensis	Within Known Range? N	Nearest Occurrence:	298.07 KM	46.78742°N	101.96021°E



**Basin:** Internal Drainage Basin  
**Aimags:** Bayankhongor  
**Soums:** Bayanlig

**Freshwater Ecoregion:** Western Mongolia  
**Terrestrial Ecoregion:** Gobi Lakes Valley Desert Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

<b>LOE Rating:</b>	<b>Possible</b>	<b>Total:</b>	<b>11</b>
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<b>Family:</b> Chloroperlidae			
Alaskaperla longidentata	Within Known Range? N	Nearest Occurrence:	291.38 KM 46.82177°N 101.70479°E
<b>Family:</b> Nemouridae			
Nemoura arctica	Within Known Range? N	Nearest Occurrence:	342.73 KM 47.26999°N 101.80227°E
<b>Family:</b> Perlidae			
Agnentina cocandica	Within Known Range? N	Nearest Occurrence:	599.55 KM 49.62785°N 99.99523°E
<b>Family:</b> Perlodidae			
Arcynopteryx compacta	Within Known Range? N	Nearest Occurrence:	311.02 KM 47.11192°N 101.01048°E
Diura majuscula	Within Known Range? N	Nearest Occurrence:	311.02 KM 47.11192°N 101.01048°E
Isoperla asiatica	Within Known Range? N	Nearest Occurrence:	392.92 KM 47.80440°N 100.31810°E
Isoperla kozlovi	Within Known Range? N	Nearest Occurrence:	330.56 KM 47.28244°N 101.18793°E
Isoperla potanini	Within Known Range? N	Nearest Occurrence:	289.12 KM 46.73093°N 101.88583°E
Kaszabia nigricauda	Within Known Range? N	Nearest Occurrence:	351.83 KM 47.48567°N 100.87875°E
Skwala pusilla	Within Known Range? N	Nearest Occurrence:	1,454.17 KM 48.51277°N 88.51107°E
<b>Family:</b> Taeniopterygidae			
Taenionema japonicum	Within Known Range? N	Nearest Occurrence:	311.02 KM 47.11192°N 101.01048°E

<b>LOE Rating:</b>	<b>Predicted</b>	<b>Total:</b>	<b>12</b>
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<b>Family:</b> Capniidae			
Capnia nigra	Within Known Range? N	Nearest Occurrence:	559.38 KM 48.06257°N 97.55064°E
<b>Family:</b> Chloroperlidae			
Alloperla deminuta	Within Known Range? N	Nearest Occurrence:	297.54 KM 46.78742°N 101.96021°E
Alloperla mediata	Within Known Range? N	Nearest Occurrence:	645.48 KM 49.70678°N 103.10288°E
<b>Family:</b> Leuctridae			
Paraleuctra zapekinae	Within Known Range? N	Nearest Occurrence:	727.76 KM 49.71481°N 104.64203°E
<b>Family:</b> Nemouridae			
Amphinemura standfussi	Within Known Range? N	Nearest Occurrence:	559.15 KM 48.05989°N 97.55073°E
Nemoura sahlbergi	Within Known Range? N	Nearest Occurrence:	351.94 KM 47.42580°N 100.30130°E
<b>Family:</b> Perlidae			
Paragnetina flavotincta	Within Known Range? N	Nearest Occurrence:	549.69 KM 49.26765°N 100.82998°E
<b>Family:</b> Perlodidae			
Isoperla altaica	Within Known Range? N	Nearest Occurrence:	311.02 KM 47.11192°N 101.01048°E
Isoperla lunigera	Within Known Range? N	Nearest Occurrence:	572.36 KM 49.45317°N 100.47234°E
Isoperla mongolica	Within Known Range? N	Nearest Occurrence:	311.02 KM 47.11192°N 101.01048°E
Isoperla obscura	Within Known Range? N	Nearest Occurrence:	596.99 KM 49.38617°N 102.71667°E
Megarcys ochracea	Within Known Range? N	Nearest Occurrence:	675.62 KM 49.77776°N 103.60860°E



**Basin:** Internal Drainage Basin

**Aimag:** Bayankhongor

**Soum:** Bayanlig

Freshwater Ecoregion: Western Mongolia

Terrestrial Ecoregion: Gobi Lakes Valley Desert Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

<b>LOE Rating:</b> Unlikely	<b>Total:</b> 5
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Family: Capniidae

Capnia khulsbagia

Within Known Range? N Nearest Occurrence: 741.05 KM 50.98944 °N 100.71944 °E

Mesocapnia altaica

Within Known Range? N Nearest Occurrence: 1,410.49 KM 48.43684 °N 88.90094 °E

Family: Leuctridae

Leuctra fusca

Within Known Range? N Nearest Occurrence: 883.17 KM 49.08643 °N 107.28952 °E

Family: Nemouridae

Nemurella pictetii

Within Known Range? N Nearest Occurrence: 742.20 KM 50.81265 °N 99.33803 °E

Family: Perlodidae

Isoperla eximia

Within Known Range? N Nearest Occurrence: 901.59 KM 49.01829 °N 107.54453 °E

Research funded by the National Science Foundation

DEB-BSI #0206674: A Survey of the Aquatic Insects of the Selenge River Basin. P.I.'s: JKGelhaus, JCMorse, BHayford.

DEB # 0743732: Aquatic Insects of the Altai and Hangai Mountain Drainages. P.I.'s: JKGelhaus, JCMorse, CRNelson.

<http://clade.ansp.org/entomology/mongolia/index.html>



**Basin:** Internal Drainage Basin  
**Aimags:** Bayankhongor  
**Soums:** Bayan-ondor

Freshwater Ecoregion: Dzungaria  
 Terrestrial Ecoregion: Alashan Plateau Semi-Desert

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Highly Likely Total: 5**

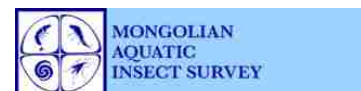
Family: Capniidae					
Isocapnia guentheri	Within Known Range? N	Nearest Occurrence:	494.84 KM	47.48567°N	100.87875°E
Isocapnia sibirica	Within Known Range? N	Nearest Occurrence:	497.07 KM	47.28244°N	101.18793°E
Family: Chloroperlidae					
Alloperla rostellata	Within Known Range? N	Nearest Occurrence:	469.99 KM	47.11192°N	101.01048°E
Family: Perlidae					
Kamimuria exilis	Within Known Range? N	Nearest Occurrence:	710.24 KM	50.16278°N	98.84212°E
Family: Perlodidae					
Arcynopteryx polaris	Within Known Range? N	Nearest Occurrence:	416.59 KM	47.21260°N	99.91083°E

**LOE Rating: Likely Total: 9**

Family: Capniidae					
Isocapnia kudia	Within Known Range? N	Nearest Occurrence:	840.39 KM	51.25356°N	99.66687°E
Mesocapnia variabilis	Within Known Range? N	Nearest Occurrence:	416.59 KM	47.21260°N	99.91083°E
Family: Chloroperlidae					
Alloperla joosti	Within Known Range? N	Nearest Occurrence:	456.12 KM	47.42580°N	100.30130°E
Family: Nemouridae					
Nemoura cinerea	Within Known Range? N	Nearest Occurrence:	482.91 KM	48.06257°N	97.55064°E
Family: Perlidae					
Agnetina brevipennis	Within Known Range? N	Nearest Occurrence:	511.29 KM	48.12661°N	99.94128°E
Family: Perlodidae					
Arcynopteryx sajanensis	Within Known Range? N	Nearest Occurrence:	904.05 KM	51.61397°N	100.59972°E
Diura bicaudata	Within Known Range? N	Nearest Occurrence:	417.15 KM	47.21768°N	99.92824°E
Pictetiella asiatica	Within Known Range? N	Nearest Occurrence:	905.08 KM	51.65822°N	100.53000°E
Family: Pteronarcyidae					
Pteronarcys reticulata	Within Known Range? N	Nearest Occurrence:	494.48 KM	47.80440°N	100.31810°E

**LOE Rating: Probable Total: 7**

Family: Chloroperlidae					
Haploperla lepnevae	Within Known Range? N	Nearest Occurrence:	629.53 KM	49.26170°N	99.88242°E
Suwallia kerzhneri	Within Known Range? N	Nearest Occurrence:	482.61 KM	48.05989°N	97.55073°E
Suwallia teleckojensis	Within Known Range? N	Nearest Occurrence:	430.72 KM	47.29702°N	100.03136°E
Family: Nemouridae					
Amphinemura borealis	Within Known Range? N	Nearest Occurrence:	456.12 KM	47.42580°N	100.30130°E
Family: Perlidae					
Agnetina cocandica	Within Known Range? N	Nearest Occurrence:	673.25 KM	49.62785°N	99.99523°E
Agnetina extrema	Within Known Range? N	Nearest Occurrence:	479.06 KM	47.50949°N	100.57510°E
Family: Perlodidae					
Skwala pusilla	Within Known Range? N	Nearest Occurrence:	1,214.54 KM	48.51277°N	88.51107°E



**Basin:** Internal Drainage Basin  
**Aimags:** Bayankhongor  
**Soums:** Bayan-ondor

**Freshwater Ecoregion:** Dzungaria  
**Terrestrial Ecoregion:** Alashan Plateau Semi-Desert

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Possible Total: 5**

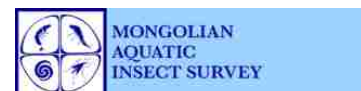
<b>Family: Chloroperlidae</b>						
Alaskaperla longidentata	Within Known Range?	N	Nearest Occurrence:	429.94 KM	47.29702 °N	100.03136 °E
<b>Family: Perlodidae</b>						
Diura majuscula	Within Known Range?	N	Nearest Occurrence:	456.94 KM	47.42580 °N	100.30130 °E
Isoperla asiatica	Within Known Range?	N	Nearest Occurrence:	482.61 KM	48.05989 °N	97.55073 °E
Isoperla kozlovi	Within Known Range?	N	Nearest Occurrence:	494.48 KM	47.80440 °N	100.31810 °E
Isoperla potanini	Within Known Range?	N	Nearest Occurrence:	456.94 KM	47.42580 °N	100.30130 °E

**LOE Rating: Predicted Total: 15**

<b>Family: Capniidae</b>						
Capnia nigra	Within Known Range?	N	Nearest Occurrence:	482.91 KM	48.06257 °N	97.55064 °E
<b>Family: Chloroperlidae</b>						
Alloperla deminuta	Within Known Range?	N	Nearest Occurrence:	469.99 KM	47.11192 °N	101.01048 °E
Alloperla mediata	Within Known Range?	N	Nearest Occurrence:	762.11 KM	50.61826 °N	99.12094 °E
<b>Family: Nemouridae</b>						
Amphinemura standfussi	Within Known Range?	N	Nearest Occurrence:	482.61 KM	48.05989 °N	97.55073 °E
Nemoura arctica	Within Known Range?	N	Nearest Occurrence:	542.39 KM	47.26999 °N	101.80227 °E
Nemoura sahlbergi	Within Known Range?	N	Nearest Occurrence:	456.12 KM	47.42580 °N	100.30130 °E
<b>Family: Perlidae</b>						
Paragnetina flavotincta	Within Known Range?	N	Nearest Occurrence:	629.53 KM	49.26170 °N	99.88242 °E
<b>Family: Perlodidae</b>						
Arcynopteryx compacta	Within Known Range?	N	Nearest Occurrence:	470.83 KM	47.11192 °N	101.01048 °E
Isoperla altaica	Within Known Range?	N	Nearest Occurrence:	470.83 KM	47.11192 °N	101.01048 °E
Isoperla lunigera	Within Known Range?	N	Nearest Occurrence:	669.82 KM	49.45317 °N	100.47234 °E
Isoperla mongolica	Within Known Range?	N	Nearest Occurrence:	470.83 KM	47.11192 °N	101.01048 °E
Isoperla obscura	Within Known Range?	N	Nearest Occurrence:	785.51 KM	49.38617 °N	102.71667 °E
Kaszabia nigricauda	Within Known Range?	N	Nearest Occurrence:	494.48 KM	47.80440 °N	100.31810 °E
Megarcys ochracea	Within Known Range?	N	Nearest Occurrence:	851.67 KM	51.40978 °N	99.30136 °E
<b>Family: Taeniopterygidae</b>						
Taenionema japonicum	Within Known Range?	N	Nearest Occurrence:	470.83 KM	47.11192 °N	101.01048 °E

**LOE Rating: Unlikely Total: 6**

<b>Family: Capniidae</b>						
Capnia khulsbagia	Within Known Range?	N	Nearest Occurrence:	839.95 KM	50.98944 °N	100.71944 °E
Mesocapnia altaica	Within Known Range?	N	Nearest Occurrence:	1,171.91 KM	48.43684 °N	88.90094 °E
<b>Family: Leuctridae</b>						
Leuctra fusca	Within Known Range?	N	Nearest Occurrence:	1,150.16 KM	49.08643 °N	107.28952 °E
Paraleuctra zapekinae	Within Known Range?	N	Nearest Occurrence:	956.54 KM	49.71481 °N	104.64203 °E
<b>Family: Nemouridae</b>						
Nemurella pictetii	Within Known Range?	N	Nearest Occurrence:	786.45 KM	50.81265 °N	99.33803 °E
<b>Family: Perlodidae</b>						
Isoperla eximia	Within Known Range?	N	Nearest Occurrence:	1,170.82 KM	49.01829 °N	107.54453 °E





**Basin:** Internal Drainage Basin  
**Aimags:** Bayankhongor  
**Soums:** Bayan-ovoo

**Freshwater Ecoregion:** Western Mongolia  
**Terrestrial Ecoregion:** Gobi Lakes Valley Desert Steppe

**WQM Sites:**

WQM Sites: # 78 (Tuin River @ N 46.22275° E 100.74062°) # 81  
 (Nariin River @ N 46.00223° E 100.34625°)

**LOE Rating: Highly Likely Total: 5**

Family: Capniidae					
Isocapnia guentheri	Within Known Range? N	Nearest Occurrence:	159.28 KM	47.48567°N	100.87875 °E
Isocapnia sibirica	Within Known Range? N	Nearest Occurrence:	156.93 KM	47.28244°N	101.18793 °E
Family: Chloroperlidae					
Alloperla rostellata	Within Known Range? N	Nearest Occurrence:	129.99 KM	47.11192°N	101.01048 °E
Family: Perlodidae					
Arcynopteryx polaris	Within Known Range? N	Nearest Occurrence:	113.84 KM	47.00226°N	100.91051 °E
Diura bicaudata	Within Known Range? N	Nearest Occurrence:	125.37 KM	47.21768°N	99.92824 °E

**LOE Rating: Likely Total: 10**

Family: Capniidae					
Isocapnia kudia	Within Known Range? N	Nearest Occurrence:	570.01 KM	51.25356°N	99.66687 °E
Mesocapnia variabilis	Within Known Range? N	Nearest Occurrence:	125.59 KM	47.21768°N	99.92824 °E
Family: Chloroperlidae					
Alloperla joosti	Within Known Range? N	Nearest Occurrence:	129.99 KM	47.11192°N	101.01048 °E
Suwallia kerzhneri	Within Known Range? N	Nearest Occurrence:	159.28 KM	47.48567°N	100.87875 °E
Suwallia teleckojensis	Within Known Range? Y	Nearest Occurrence:	130.21 KM	47.11192°N	101.01048 °E
Family: Nemouridae					
Nemoura cinerea	Within Known Range? N	Nearest Occurrence:	159.28 KM	47.48567°N	100.87875 °E
Family: Perlidae					
Agnetina extrema	Within Known Range? N	Nearest Occurrence:	152.20 KM	47.50949°N	100.57510 °E
Kamimuria exilis	Within Known Range? N	Nearest Occurrence:	474.65 KM	50.16278°N	98.84212 °E
Family: Perlodidae					
Arcynopteryx sajanensis	Within Known Range? N	Nearest Occurrence:	607.12 KM	51.61397°N	100.59972 °E
Pictetiella asiatica	Within Known Range? N	Nearest Occurrence:	610.61 KM	51.65822°N	100.53000 °E

**LOE Rating: Probable Total: 7**

Family: Chloroperlidae					
Haploperla lepnevae	Within Known Range? N	Nearest Occurrence:	347.70 KM	49.26170°N	99.88242 °E
Family: Nemouridae					
Amphinemura borealis	Within Known Range? Y	Nearest Occurrence:	140.42 KM	47.42580°N	100.30130 °E
Family: Perlidae					
Agnetina brevipennis	Within Known Range? Y	Nearest Occurrence:	194.16 KM	46.78742°N	101.96021 °E
Agnetina cocandica	Within Known Range? N	Nearest Occurrence:	387.27 KM	49.62785°N	99.99523 °E
Family: Perlodidae					
Diura majuscula	Within Known Range? Y	Nearest Occurrence:	130.21 KM	47.11192°N	101.01048 °E
Isoperla potanini	Within Known Range? Y	Nearest Occurrence:	140.67 KM	47.42580°N	100.30130 °E
Family: Pteronarcyidae					
Pteronarcys reticulata	Within Known Range? N	Nearest Occurrence:	182.42 KM	47.80440°N	100.31810 °E



**Basin:** Internal Drainage Basin  
**Aimags:** Bayankhongor  
**Soums:** Bayan-ovoo

**Freshwater Ecoregion:** Western Mongolia  
**Terrestrial Ecoregion:** Gobi Lakes Valley Desert Steppe

**WQM Sites:**

WQM Sites: # 78 (Tuin River @ N 46.22275° E 100.74062°) # 81 (Nariin River @ N 46.00223° E 100.34625°)

<b>LOE Rating:</b>	<b>Possible</b>	<b>Total:</b>	<b>7</b>
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<b>Family:</b> Chloroperlidae			
Alaskaperla longidentata	Within Known Range? N	Nearest Occurrence:	130.30 KM 47.29702°N 100.03136°E
<b>Family:</b> Perlodidae			
Arcynopteryx compacta	Within Known Range? Y	Nearest Occurrence:	130.21 KM 47.11192°N 101.01048°E
Isoperla asiatica	Within Known Range? N	Nearest Occurrence:	182.42 KM 47.80440°N 100.31810°E
Isoperla kozlovi	Within Known Range? N	Nearest Occurrence:	156.93 KM 47.28244°N 101.18793°E
Kaszabia nigricauda	Within Known Range? N	Nearest Occurrence:	159.28 KM 47.48567°N 100.87875°E
Skwala pusilla	Within Known Range? N	Nearest Occurrence:	1,337.30 KM 48.51277°N 88.51107°E
<b>Family:</b> Taeniopterygidae			
Taenionema japonicum	Within Known Range? N	Nearest Occurrence:	130.21 KM 47.11192°N 101.01048°E

<b>LOE Rating:</b>	<b>Predicted</b>	<b>Total:</b>	<b>13</b>
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<b>Family:</b> Capniidae			
Capnia nigra	Within Known Range? N	Nearest Occurrence:	373.54 KM 48.06257°N 97.55064°E
<b>Family:</b> Chloroperlidae			
Alloperla deminuta	Within Known Range? N	Nearest Occurrence:	129.99 KM 47.11192°N 101.01048°E
Alloperla mediata	Within Known Range? N	Nearest Occurrence:	492.82 KM 50.30188°N 101.92869°E
<b>Family:</b> Leuctridae			
Paraleuctra zapekinae	Within Known Range? N	Nearest Occurrence:	620.50 KM 49.71481°N 104.64203°E
<b>Family:</b> Nemouridae			
Amphinemura standfussi	Within Known Range? N	Nearest Occurrence:	358.25 KM 48.61518°N 98.23096°E
Nemoura arctica	Within Known Range? N	Nearest Occurrence:	205.22 KM 47.26999°N 101.80227°E
Nemoura sahlbergi	Within Known Range? N	Nearest Occurrence:	140.42 KM 47.42580°N 100.30130°E
<b>Family:</b> Perlidae			
Paragnetina flavotincta	Within Known Range? N	Nearest Occurrence:	347.70 KM 49.26170°N 99.88242°E
<b>Family:</b> Perlodidae			
Isoperla altaica	Within Known Range? N	Nearest Occurrence:	130.21 KM 47.11192°N 101.01048°E
Isoperla lunigera	Within Known Range? N	Nearest Occurrence:	365.79 KM 49.45317°N 100.47234°E
Isoperla mongolica	Within Known Range? N	Nearest Occurrence:	130.21 KM 47.11192°N 101.01048°E
Isoperla obscura	Within Known Range? N	Nearest Occurrence:	445.55 KM 49.38617°N 102.71667°E
Megarcys ochracea	Within Known Range? N	Nearest Occurrence:	542.08 KM 49.77776°N 103.60860°E

<b>LOE Rating:</b>	<b>Unlikely</b>	<b>Total:</b>	<b>5</b>
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<b>Family:</b> Capniidae			
Capnia khulsbagia	Within Known Range? N	Nearest Occurrence:	537.73 KM 50.98944°N 100.71944°E
Mesocapnia altaica	Within Known Range? N	Nearest Occurrence:	1,293.21 KM 48.43684°N 88.90094°E
<b>Family:</b> Leuctridae			
Leuctra fusca	Within Known Range? N	Nearest Occurrence:	838.28 KM 49.08643°N 107.28952°E
<b>Family:</b> Nemouridae			
Nemurella pictetii	Within Known Range? N	Nearest Occurrence:	527.88 KM 50.81265°N 99.33803°E
<b>Family:</b> Perlodidae			
Isoperla eximia	Within Known Range? N	Nearest Occurrence:	861.64 KM 49.01829°N 107.54453°E



**Basin:** Internal Drainage Basin  
**Aimags:** Bayankhongor  
**Soums:** Bayantsagaan

**Freshwater Ecoregion:** Dzungaria  
**Terrestrial Ecoregion:** Gobi Lakes Valley Desert Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Highly Likely Total: 5**

Family: Capniidae					
Isocapnia guentheri	Within Known Range? N	Nearest Occurrence:	333.97 KM	47.48567°N	100.87875°E
Isocapnia sibirica	Within Known Range? N	Nearest Occurrence:	341.74 KM	47.28244°N	101.18793°E
Family: Chloroperlidae					
Alloperla rostellata	Within Known Range? N	Nearest Occurrence:	314.43 KM	47.11192°N	101.01048°E
Family: Perlidae					
Kamimuria exilis	Within Known Range? N	Nearest Occurrence:	551.11 KM	50.16278°N	98.84212°E
Family: Perlodidae					
Arcynopteryx polaris	Within Known Range? N	Nearest Occurrence:	249.04 KM	47.21260°N	99.91083°E

**LOE Rating: Likely Total: 10**

Family: Capniidae					
Isocapnia kudia	Within Known Range? N	Nearest Occurrence:	676.33 KM	51.25356°N	99.66687°E
Mesocapnia variabilis	Within Known Range? N	Nearest Occurrence:	249.04 KM	47.21260°N	99.91083°E
Family: Chloroperlidae					
Alloperla joosti	Within Known Range? N	Nearest Occurrence:	290.46 KM	47.42580°N	100.30130°E
Suwallia kerzhneri	Within Known Range? N	Nearest Occurrence:	333.97 KM	47.48567°N	100.87875°E
Suwallia teleckojensis	Within Known Range? N	Nearest Occurrence:	263.53 KM	47.29702°N	100.03136°E
Family: Nemouridae					
Nemoura cinerea	Within Known Range? N	Nearest Occurrence:	333.97 KM	47.48567°N	100.87875°E
Family: Perlidae					
Agnetina brevipennis	Within Known Range? N	Nearest Occurrence:	343.54 KM	48.12661°N	99.94128°E
Family: Perlodidae					
Arcynopteryx sajanensis	Within Known Range? N	Nearest Occurrence:	736.68 KM	51.61397°N	100.59972°E
Diura bicaudata	Within Known Range? N	Nearest Occurrence:	249.96 KM	47.21768°N	99.92824°E
Pictetiella asiatica	Within Known Range? N	Nearest Occurrence:	738.19 KM	51.65822°N	100.53000°E

**LOE Rating: Probable Total: 6**

Family: Chloroperlidae					
Haploperla lepnevae	Within Known Range? N	Nearest Occurrence:	462.71 KM	49.26170°N	99.88242°E
Family: Nemouridae					
Amphinemura borealis	Within Known Range? N	Nearest Occurrence:	290.46 KM	47.42580°N	100.30130°E
Family: Perlidae					
Agnetina cocandica	Within Known Range? N	Nearest Occurrence:	506.06 KM	49.62785°N	99.99523°E
Agnetina extrema	Within Known Range? N	Nearest Occurrence:	315.14 KM	47.50949°N	100.57510°E
Family: Perlodidae					
Isoperla potanini	Within Known Range? N	Nearest Occurrence:	290.98 KM	47.42580°N	100.30130°E
Family: Pteronarcyidae					
Pteronarcys reticulata	Within Known Range? N	Nearest Occurrence:	327.73 KM	47.80440°N	100.31810°E



**Basin:** Internal Drainage Basin  
**Aimags:** Bayankhongor  
**Soums:** Bayantsagaan

**Freshwater Ecoregion:** Dzungaria  
**Terrestrial Ecoregion:** Gobi Lakes Valley Desert Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

<b>LOE Rating:</b>	<b>Possible</b>	<b>Total:</b>	<b>4</b>
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**Family:** Perlodidae

Diura majuscula	Within Known Range? N	Nearest Occurrence:	290.98 KM	47.42580 °N	100.30130 °E
Isoperla asiatica	Within Known Range? N	Nearest Occurrence:	327.73 KM	47.80440 °N	100.31810 °E
Isoperla kozlovi	Within Known Range? N	Nearest Occurrence:	327.73 KM	47.80440 °N	100.31810 °E
Skwala pusilla	Within Known Range? N	Nearest Occurrence:	1,211.58 KM	48.51277 °N	88.51107 °E

<b>LOE Rating:</b>	<b>Predicted</b>	<b>Total:</b>	<b>16</b>
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**Family:** Capniidae

Capnia nigra	Within Known Range? N	Nearest Occurrence:	351.20 KM	48.06257 °N	97.55064 °E
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**Family:** Chloroperlidae

Alaskaperla longidentata	Within Known Range? N	Nearest Occurrence:	263.06 KM	47.29702 °N	100.03136 °E
Alloperla deminuta	Within Known Range? N	Nearest Occurrence:	314.43 KM	47.11192 °N	101.01048 °E
Alloperla mediata	Within Known Range? N	Nearest Occurrence:	601.06 KM	50.61826 °N	99.12094 °E

**Family:** Nemouridae

Amphinemura standfussi	Within Known Range? N	Nearest Occurrence:	350.92 KM	48.05989 °N	97.55073 °E
Nemoura arctica	Within Known Range? N	Nearest Occurrence:	394.70 KM	47.26999 °N	101.80227 °E
Nemoura sahlbergi	Within Known Range? N	Nearest Occurrence:	290.46 KM	47.42580 °N	100.30130 °E

**Family:** Perlidae

Paragnetina flavotincta	Within Known Range? N	Nearest Occurrence:	462.71 KM	49.26170 °N	99.88242 °E
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**Family:** Perlodidae

Arcynopteryx compacta	Within Known Range? N	Nearest Occurrence:	315.00 KM	47.11192 °N	101.01048 °E
Isoperla altaica	Within Known Range? N	Nearest Occurrence:	315.00 KM	47.11192 °N	101.01048 °E
Isoperla lunigera	Within Known Range? N	Nearest Occurrence:	502.05 KM	49.45317 °N	100.47234 °E
Isoperla mongolica	Within Known Range? N	Nearest Occurrence:	315.00 KM	47.11192 °N	101.01048 °E
Isoperla obscura	Within Known Range? N	Nearest Occurrence:	627.19 KM	49.38617 °N	102.71667 °E
Kaszabia nigricauda	Within Known Range? N	Nearest Occurrence:	327.73 KM	47.80440 °N	100.31810 °E
Megarcys ochracea	Within Known Range? N	Nearest Occurrence:	689.82 KM	51.40978 °N	99.30136 °E

**Family:** Taeniopterygidae

Taenionema japonicum	Within Known Range? N	Nearest Occurrence:	315.00 KM	47.11192 °N	101.01048 °E
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<b>LOE Rating:</b>	<b>Unlikely</b>	<b>Total:</b>	<b>6</b>
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**Family:** Capniidae

Capnia khulsbagia	Within Known Range? N	Nearest Occurrence:	672.39 KM	50.98944 °N	100.71944 °E
Mesocapnia altaica	Within Known Range? N	Nearest Occurrence:	1,167.79 KM	48.43684 °N	88.90094 °E

**Family:** Leuctridae

Leuctra fusca	Within Known Range? N	Nearest Occurrence:	1,024.59 KM	49.08643 °N	107.28952 °E
Paraleuctra zapekinae	Within Known Range? N	Nearest Occurrence:	809.10 KM	49.71481 °N	104.64203 °E

**Family:** Nemouridae

Nemurella pictetii	Within Known Range? N	Nearest Occurrence:	623.98 KM	50.81265 °N	99.33803 °E
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**Family:** Perlodidae

Isoperla eximia	Within Known Range? N	Nearest Occurrence:	1,047.27 KM	49.01829 °N	107.54453 °E
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**Basin:** Internal Drainage Basin  
**Aimags:** Bayankhongor  
**Soums:** Bogd

**Freshwater Ecoregion:** Western Mongolia  
**Terrestrial Ecoregion:** Gobi Lakes Valley Desert Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Highly Likely Total: 4**

Family: Capniidae					
Isocapnia guentheri	Within Known Range? N	Nearest Occurrence:	261.82 KM	47.48567°N	100.87875°E
Isocapnia sibirica	Within Known Range? N	Nearest Occurrence:	242.15 KM	47.28244°N	101.18793°E
Family: Chloroperlidae					
Alloperla rostellata	Within Known Range? N	Nearest Occurrence:	221.02 KM	47.11192°N	101.01048°E
Family: Perlodidae					
Arcynopteryx polaris	Within Known Range? N	Nearest Occurrence:	208.62 KM	47.00226°N	100.91051°E

**LOE Rating: Likely Total: 13**

Family: Capniidae					
Isocapnia kudia	Within Known Range? N	Nearest Occurrence:	692.61 KM	51.25356°N	99.66687°E
Mesocapnia variabilis	Within Known Range? N	Nearest Occurrence:	254.09 KM	47.21768°N	99.92824°E
Family: Chloroperlidae					
Alloperla joosti	Within Known Range? N	Nearest Occurrence:	221.02 KM	47.11192°N	101.01048°E
Suwallia kerzhneri	Within Known Range? N	Nearest Occurrence:	261.82 KM	47.48567°N	100.87875°E
Family: Nemouridae					
Amphinemura borealis	Within Known Range? N	Nearest Occurrence:	211.89 KM	46.73093°N	101.88583°E
Nemoura cinerea	Within Known Range? N	Nearest Occurrence:	261.82 KM	47.48567°N	100.87875°E
Family: Perlidae					
Agnetina brevipennis	Within Known Range? N	Nearest Occurrence:	221.66 KM	46.78742°N	101.96021°E
Agnetina extrema	Within Known Range? N	Nearest Occurrence:	242.15 KM	47.28244°N	101.18793°E
Kamimuria exilis	Within Known Range? N	Nearest Occurrence:	602.86 KM	50.16278°N	98.84212°E
Family: Perlodidae					
Arcynopteryx sajanensis	Within Known Range? N	Nearest Occurrence:	721.87 KM	51.61397°N	100.59972°E
Diura bicaudata	Within Known Range? N	Nearest Occurrence:	253.63 KM	47.21768°N	99.92824°E
Pictetiella asiatica	Within Known Range? N	Nearest Occurrence:	725.82 KM	51.65822°N	100.53000°E
Family: Pteronarcyidae					
Pteronarcys reticulata	Within Known Range? N	Nearest Occurrence:	303.00 KM	47.80440°N	100.31810°E

**LOE Rating: Probable Total: 4**

Family: Chloroperlidae					
Haploperla lepnevae	Within Known Range? N	Nearest Occurrence:	471.35 KM	49.26170°N	99.88242°E
Suwallia teleckojensis	Within Known Range? N	Nearest Occurrence:	221.42 KM	47.11192°N	101.01048°E
Family: Perlidae					
Agnetina cocandica	Within Known Range? N	Nearest Occurrence:	509.44 KM	49.62785°N	99.99523°E
Family: Perlodidae					
Diura majuscula	Within Known Range? N	Nearest Occurrence:	221.42 KM	47.11192°N	101.01048°E



**Basin:** Internal Drainage Basin  
**Aimags:** Bayankhongor  
**Soums:** Bogd

**Freshwater Ecoregion:** Western Mongolia  
**Terrestrial Ecoregion:** Gobi Lakes Valley Desert Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

<b>LOE Rating:</b> Possible	<b>Total:</b> 10
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<b>Family:</b> Chloroperlidae						
Alaskaperla longidentata	Within Known Range? N	Nearest Occurrence:	210.65 KM	46.82177°N	101.70479°E	
<b>Family:</b> Nemouridae						
Nemoura arctica	Within Known Range? N	Nearest Occurrence:	260.72 KM	47.26999°N	101.80227°E	
<b>Family:</b> Perlodidae						
Arcynopteryx compacta	Within Known Range? N	Nearest Occurrence:	221.42 KM	47.11192°N	101.01048°E	
Isoperla altaica	Within Known Range? N	Nearest Occurrence:	221.42 KM	47.11192°N	101.01048°E	
Isoperla asiatica	Within Known Range? N	Nearest Occurrence:	303.00 KM	47.80440°N	100.31810°E	
Isoperla kozlovi	Within Known Range? N	Nearest Occurrence:	242.15 KM	47.28244°N	101.18793°E	
Isoperla potanini	Within Known Range? N	Nearest Occurrence:	212.26 KM	46.73093°N	101.88583°E	
Kaszabia nigricauda	Within Known Range? N	Nearest Occurrence:	261.82 KM	47.48567°N	100.87875°E	
Skwala pusilla	Within Known Range? N	Nearest Occurrence:	1,420.31 KM	48.51277°N	88.51107°E	
<b>Family:</b> Taeniopterygidae						
Taenionema japonicum	Within Known Range? N	Nearest Occurrence:	221.42 KM	47.11192°N	101.01048°E	

<b>LOE Rating:</b> Predicted	<b>Total:</b> 11
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<b>Family:</b> Capniidae						
Capnia nigra	Within Known Range? N	Nearest Occurrence:	490.25 KM	48.06257°N	97.55064°E	
<b>Family:</b> Chloroperlidae						
Alloperla deminuta	Within Known Range? N	Nearest Occurrence:	221.02 KM	47.11192°N	101.01048°E	
Alloperla mediata	Within Known Range? N	Nearest Occurrence:	566.49 KM	49.70678°N	103.10288°E	
<b>Family:</b> Leuctridae						
Paraleuctra zapekinae	Within Known Range? N	Nearest Occurrence:	660.63 KM	49.71481°N	104.64203°E	
<b>Family:</b> Nemouridae						
Amphinemura standfussi	Within Known Range? N	Nearest Occurrence:	484.21 KM	48.61518°N	98.23096°E	
Nemoura sahlbergi	Within Known Range? N	Nearest Occurrence:	262.34 KM	47.42580°N	100.30130°E	
<b>Family:</b> Perlidae						
Paragnetina flavotincta	Within Known Range? N	Nearest Occurrence:	459.60 KM	49.26765°N	100.82998°E	
<b>Family:</b> Perlodidae						
Isoperla lunigera	Within Known Range? N	Nearest Occurrence:	482.02 KM	49.45317°N	100.47234°E	
Isoperla mongolica	Within Known Range? N	Nearest Occurrence:	221.42 KM	47.11192°N	101.01048°E	
Isoperla obscura	Within Known Range? N	Nearest Occurrence:	516.14 KM	49.38617°N	102.71667°E	
Megarcys ochracea	Within Known Range? N	Nearest Occurrence:	600.17 KM	49.77776°N	103.60860°E	

<b>LOE Rating:</b> Unlikely	<b>Total:</b> 5
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<b>Family:</b> Capniidae						
Capnia khulsbagia	Within Known Range? N	Nearest Occurrence:	650.88 KM	50.98944°N	100.71944°E	
Mesocapnia altaica	Within Known Range? N	Nearest Occurrence:	1,376.35 KM	48.43684°N	88.90094°E	
<b>Family:</b> Leuctridae						
Leuctra fusca	Within Known Range? N	Nearest Occurrence:	839.03 KM	49.08643°N	107.28952°E	
<b>Family:</b> Nemouridae						
Nemurella pictetii	Within Known Range? N	Nearest Occurrence:	653.04 KM	50.81265°N	99.33803°E	
<b>Family:</b> Perlodidae						
Isoperla eximia	Within Known Range? N	Nearest Occurrence:	859.44 KM	49.01829°N	107.54453°E	

Research funded by the National Science Foundation  
 DEB-BSI #0206674: A Survey of the Aquatic Insects of the Selenge River Basin. P.I.'s: JKGelhaus, JCMorse, BHayford.  
 DEB # 0743732: Aquatic Insects of the Altai and Hangai Mountain Drainages. P.I.'s: JKGelhaus, JCMorse, CRNelson.  
<http://clade.ansp.org/entomology/mongolia/index.html>



**Basin:** Internal Drainage Basin  
**Aimags:** Bayankhongor  
**Soums:** Bombogor

**Freshwater Ecoregion:** Western Mongolia  
**Terrestrial Ecoregion:** Gobi Lakes Valley Desert Steppe

**WQM Sites:**

WQM Sites: # 83 (Olzit River @ N 46.51923° E 99.6119°)

**LOE Rating: Highly Likely Total: 7**

<b>Family: Capniidae</b>			
Isocapnia guentheri	Within Known Range? N	Nearest Occurrence: 197.63 KM	47.48567°N 100.87875°E
Isocapnia sibirica	Within Known Range? N	Nearest Occurrence: 210.58 KM	47.28244°N 101.18793°E
Mesocapnia variabilis	Within Known Range? N	Nearest Occurrence: 112.46 KM	47.21260°N 99.91083°E
<b>Family: Chloroperlidae</b>			
Alloperla rostellata	Within Known Range? N	Nearest Occurrence: 183.84 KM	47.11192°N 101.01048°E
<b>Family: Nemouridae</b>			
Nemoura cinerea	Within Known Range? N	Nearest Occurrence: 197.63 KM	47.48567°N 100.87875°E
<b>Family: Perlidae</b>			
Kamimuria exilis	Within Known Range? N	Nearest Occurrence: 442.89 KM	50.16278°N 98.84212°E
<b>Family: Perlodidae</b>			
Arcynopteryx polaris	Within Known Range? Y	Nearest Occurrence: 112.46 KM	47.21260°N 99.91083°E

**LOE Rating: Likely Total: 7**

<b>Family: Capniidae</b>			
Isocapnia kudia	Within Known Range? N	Nearest Occurrence: 555.26 KM	51.25356°N 99.66687°E
<b>Family: Chloroperlidae</b>			
Alloperla joosti	Within Known Range? N	Nearest Occurrence: 152.07 KM	47.42580°N 100.30130°E
Suwallia kerzhneri	Within Known Range? N	Nearest Occurrence: 197.63 KM	47.48567°N 100.87875°E
Suwallia teleckojensis	Within Known Range? Y	Nearest Occurrence: 125.95 KM	47.29702°N 100.03136°E
<b>Family: Perlodidae</b>			
Arcynopteryx sajanensis	Within Known Range? N	Nearest Occurrence: 606.65 KM	51.61397°N 100.59972°E
Diura bicaudata	Within Known Range? N	Nearest Occurrence: 113.41 KM	47.21768°N 99.92824°E
Pictetiella asiatica	Within Known Range? N	Nearest Occurrence: 609.02 KM	51.65822°N 100.53000°E

**LOE Rating: Probable Total: 9**

<b>Family: Chloroperlidae</b>			
Haploperla lepnevae	Within Known Range? N	Nearest Occurrence: 335.62 KM	49.26170°N 99.88242°E
<b>Family: Nemouridae</b>			
Amphinemura borealis	Within Known Range? Y	Nearest Occurrence: 152.07 KM	47.42580°N 100.30130°E
<b>Family: Perlidae</b>			
Agnetina brevipennis	Within Known Range? Y	Nearest Occurrence: 211.63 KM	48.12661°N 99.94128°E
Agnetina cocandica	Within Known Range? N	Nearest Occurrence: 378.05 KM	49.62785°N 99.99523°E
Agnetina extrema	Within Known Range? N	Nearest Occurrence: 176.98 KM	47.50949°N 100.57510°E
<b>Family: Perlodidae</b>			
Diura majuscula	Within Known Range? Y	Nearest Occurrence: 152.35 KM	47.42580°N 100.30130°E
Isoperla asiatica	Within Known Range? N	Nearest Occurrence: 190.11 KM	47.80440°N 100.31810°E
Isoperla potanini	Within Known Range? Y	Nearest Occurrence: 152.35 KM	47.42580°N 100.30130°E
<b>Family: Pteronarcyidae</b>			
Pteronarcys reticulata	Within Known Range? N	Nearest Occurrence: 190.11 KM	47.80440°N 100.31810°E

**Basin:** Internal Drainage Basin  
**Aimags:** Bayankhongor  
**Soums:** Bombogor

**Freshwater Ecoregion:** Western Mongolia  
**Terrestrial Ecoregion:** Gobi Lakes Valley Desert Steppe

**WQM Sites:**

WQM Sites: # 83 (Olzit River @ N 46.51923° E 99.6119°)

**LOE Rating: Possible Total: 7**

Family: Capniidae						
<i>Capnia nigra</i>	Within Known Range?	N	Nearest Occurrence:	303.16 KM	48.06257°N	97.55064°E
Family: Chloroperlidae						
<i>Alaskaperla longidentata</i>	Within Known Range?	N	Nearest Occurrence:	125.72 KM	47.29702°N	100.03136°E
Family: Perlodidae						
<i>Arcynopteryx compacta</i>	Within Known Range?	Y	Nearest Occurrence:	184.17 KM	47.11192°N	101.01048°E
<i>Isoperla kozlovi</i>	Within Known Range?	N	Nearest Occurrence:	190.11 KM	47.80440°N	100.31810°E
<i>Kaszabia nigricauda</i>	Within Known Range?	N	Nearest Occurrence:	190.11 KM	47.80440°N	100.31810°E
<i>Skwala pusilla</i>	Within Known Range?	N	Nearest Occurrence:	1,255.67 KM	48.51277°N	88.51107°E
Family: Taeniopterygidae						
<i>Taenionema japonicum</i>	Within Known Range?	N	Nearest Occurrence:	184.17 KM	47.11192°N	101.01048°E

**LOE Rating: Predicted Total: 12**

Family: Chloroperlidae						
<i>Alloperla deminuta</i>	Within Known Range?	N	Nearest Occurrence:	183.84 KM	47.11192°N	101.01048°E
<i>Alloperla mediata</i>	Within Known Range?	N	Nearest Occurrence:	487.53 KM	50.61826°N	99.12094°E
Family: Leuctridae						
<i>Paraleuctra zapekinae</i>	Within Known Range?	N	Nearest Occurrence:	679.40 KM	49.71481°N	104.64203°E
Family: Nemouridae						
<i>Amphinemura standfussi</i>	Within Known Range?	N	Nearest Occurrence:	300.80 KM	48.34410°N	97.87312°E
<i>Nemoura arctica</i>	Within Known Range?	N	Nearest Occurrence:	270.29 KM	47.26999°N	101.80227°E
<i>Nemoura sahlbergi</i>	Within Known Range?	N	Nearest Occurrence:	152.07 KM	47.42580°N	100.30130°E
Family: Perlidae						
<i>Paragnetina flavotincta</i>	Within Known Range?	N	Nearest Occurrence:	335.62 KM	49.26170°N	99.88242°E
Family: Perlodidae						
<i>Isoperla altaica</i>	Within Known Range?	Y	Nearest Occurrence:	184.17 KM	47.11192°N	101.01048°E
<i>Isoperla lunigera</i>	Within Known Range?	N	Nearest Occurrence:	368.45 KM	49.45317°N	100.47234°E
<i>Isoperla mongolica</i>	Within Known Range?	Y	Nearest Occurrence:	184.17 KM	47.11192°N	101.01048°E
<i>Isoperla obscura</i>	Within Known Range?	N	Nearest Occurrence:	491.02 KM	49.38617°N	102.71667°E
<i>Megarcys ochracea</i>	Within Known Range?	N	Nearest Occurrence:	573.47 KM	51.40978°N	99.30136°E

**LOE Rating: Unlikely Total: 5**

Family: Capniidae						
<i>Capnia khulsbagia</i>	Within Known Range?	N	Nearest Occurrence:	540.49 KM	50.98944°N	100.71944°E
<i>Mesocapnia altaica</i>	Within Known Range?	N	Nearest Occurrence:	1,211.59 KM	48.43684°N	88.90094°E
Family: Leuctridae						
<i>Leuctra fusca</i>	Within Known Range?	N	Nearest Occurrence:	910.19 KM	49.08643°N	107.28952°E
Family: Nemouridae						
<i>Nemurella pictetii</i>	Within Known Range?	N	Nearest Occurrence:	507.06 KM	50.81265°N	99.33803°E
Family: Perlodidae						
<i>Isoperla eximia</i>	Within Known Range?	N	Nearest Occurrence:	934.29 KM	49.01829°N	107.54453°E



**Basin:** Internal Drainage Basin  
**Aimags:** Bayankhongor  
**Soums:** Buutsagaan

**Freshwater Ecoregion:** Western Mongolia  
**Terrestrial Ecoregion:** Gobi Lakes Valley Desert Steppe

**WQM Sites:**

WQM Sites: # 82 (Baidrag River @ N 46.17595° E 99.26405°)

**LOE Rating: Highly Likely Total: 6**

Family: Capniidae					
Isocapnia guentheri	Within Known Range? N	Nearest Occurrence:	269.98 KM	47.48567°N	100.87875°E
Isocapnia sibirica	Within Known Range? N	Nearest Occurrence:	289.23 KM	47.28244°N	101.18793°E
Family: Chloroperlidae					
Alloperla rostellata	Within Known Range? N	Nearest Occurrence:	242.89 KM	48.36436°N	98.92737°E
Family: Nemouridae					
Nemoura cinerea	Within Known Range? N	Nearest Occurrence:	252.65 KM	48.06257°N	97.55064°E
Family: Perlidae					
Kamimuria exilis	Within Known Range? N	Nearest Occurrence:	443.06 KM	50.16278°N	98.84212°E
Family: Perlodidae					
Arcynopteryx polaris	Within Known Range? N	Nearest Occurrence:	166.52 KM	47.21260°N	99.91083°E

**LOE Rating: Likely Total: 8**

Family: Capniidae					
Isocapnia kudia	Within Known Range? N	Nearest Occurrence:	570.99 KM	51.25356°N	99.66687°E
Mesocapnia variabilis	Within Known Range? N	Nearest Occurrence:	166.52 KM	47.21260°N	99.91083°E
Family: Chloroperlidae					
Alloperla joosti	Within Known Range? N	Nearest Occurrence:	214.30 KM	47.42580°N	100.30130°E
Suwallia kerzhneri	Within Known Range? N	Nearest Occurrence:	252.40 KM	48.05989°N	97.55073°E
Suwallia teleckojensis	Within Known Range? Y	Nearest Occurrence:	182.71 KM	47.29702°N	100.03136°E
Family: Perlodidae					
Arcynopteryx sajanensis	Within Known Range? N	Nearest Occurrence:	635.73 KM	51.61397°N	100.59972°E
Diura bicaudata	Within Known Range? N	Nearest Occurrence:	168.02 KM	47.21768°N	99.92824°E
Pictetiella asiatica	Within Known Range? N	Nearest Occurrence:	636.93 KM	51.65822°N	100.53000°E

**LOE Rating: Probable Total: 8**

Family: Chloroperlidae					
Haploperla lepnevae	Within Known Range? N	Nearest Occurrence:	361.71 KM	49.26170°N	99.88242°E
Family: Nemouridae					
Amphinemura borealis	Within Known Range? Y	Nearest Occurrence:	214.30 KM	47.42580°N	100.30130°E
Family: Perlidae					
Agnetina brevipennis	Within Known Range? Y	Nearest Occurrence:	249.08 KM	48.12661°N	99.94128°E
Agnetina cocandica	Within Known Range? N	Nearest Occurrence:	404.94 KM	49.62785°N	99.99523°E
Agnetina extrema	Within Known Range? N	Nearest Occurrence:	243.82 KM	47.50949°N	100.57510°E
Family: Perlodidae					
Isoperla asiatica	Within Known Range? N	Nearest Occurrence:	244.83 KM	47.80440°N	100.31810°E
Isoperla potanini	Within Known Range? Y	Nearest Occurrence:	214.68 KM	47.42580°N	100.30130°E
Family: Pteronarcyidae					
Pteronarcys reticulata	Within Known Range? N	Nearest Occurrence:	244.83 KM	47.80440°N	100.31810°E

**Basin:** Internal Drainage Basin  
**Aimag:** Bayankhongor  
**Soum:** Buutsagaan

**Freshwater Ecoregion:** Western Mongolia  
**Terrestrial Ecoregion:** Gobi Lakes Valley Desert Steppe

**WQM Sites:**

WQM Sites: # 82 (Baidrag River @ N 46.17595° E 99.26405°)

**LOE Rating: Possible Total: 5**

Family: Capniidae					
<i>Capnia nigra</i>	Within Known Range? N	Nearest Occurrence:	252.65 KM	48.06257°N	97.55064 °E
Family: Nemouridae					
<i>Amphinemura standfussi</i>	Within Known Range? N	Nearest Occurrence:	252.40 KM	48.05989°N	97.55073 °E
Family: Perlodidae					
<i>Diura majuscula</i>	Within Known Range? N	Nearest Occurrence:	214.68 KM	47.42580°N	100.30130 °E
<i>Isoperla kozlovi</i>	Within Known Range? N	Nearest Occurrence:	244.83 KM	47.80440°N	100.31810 °E
<i>Skwala pusilla</i>	Within Known Range? N	Nearest Occurrence:	1,174.09 KM	48.51277°N	88.51107 °E

**LOE Rating: Predicted Total: 15**

Family: Chloroperlidae					
<i>Alaskaperla longidentata</i>	Within Known Range? N	Nearest Occurrence:	182.39 KM	47.29702°N	100.03136 °E
<i>Alloperla deminuta</i>	Within Known Range? N	Nearest Occurrence:	244.83 KM	47.80440°N	100.31810 °E
<i>Alloperla mediata</i>	Within Known Range? N	Nearest Occurrence:	493.89 KM	50.61826°N	99.12094 °E
Family: Leuctridae					
<i>Paraleuctra zapekinae</i>	Within Known Range? N	Nearest Occurrence:	755.39 KM	49.71481°N	104.64203 °E
Family: Nemouridae					
<i>Nemoura arctica</i>	Within Known Range? N	Nearest Occurrence:	352.33 KM	47.26999°N	101.80227 °E
<i>Nemoura sahlbergi</i>	Within Known Range? N	Nearest Occurrence:	214.30 KM	47.42580°N	100.30130 °E
Family: Perlidae					
<i>Paragnetina flavotincta</i>	Within Known Range? N	Nearest Occurrence:	361.71 KM	49.26170°N	99.88242 °E
Family: Perlodidae					
<i>Arcynopteryx compacta</i>	Within Known Range? Y	Nearest Occurrence:	263.98 KM	47.11192°N	101.01048 °E
<i>Isoperla altaica</i>	Within Known Range? Y	Nearest Occurrence:	263.98 KM	47.11192°N	101.01048 °E
<i>Isoperla lunigera</i>	Within Known Range? N	Nearest Occurrence:	404.22 KM	49.62785°N	99.99523 °E
<i>Isoperla mongolica</i>	Within Known Range? Y	Nearest Occurrence:	253.10 KM	48.06257°N	97.55064 °E
<i>Isoperla obscura</i>	Within Known Range? N	Nearest Occurrence:	559.57 KM	49.38617°N	102.71667 °E
<i>Kaszabia nigricauda</i>	Within Known Range? N	Nearest Occurrence:	244.83 KM	47.80440°N	100.31810 °E
<i>Megarcys ochracea</i>	Within Known Range? N	Nearest Occurrence:	583.05 KM	51.40978°N	99.30136 °E
Family: Taeniopterygidae					
<i>Taenionema japonicum</i>	Within Known Range? N	Nearest Occurrence:	263.98 KM	47.11192°N	101.01048 °E

**LOE Rating: Unlikely Total: 5**

Family: Capniidae					
<i>Capnia khulsbagia</i>	Within Known Range? N	Nearest Occurrence:	573.82 KM	50.98944°N	100.71944 °E
<i>Mesocapnia altaica</i>	Within Known Range? N	Nearest Occurrence:	1,130.03 KM	48.43684°N	88.90094 °E
Family: Leuctridae					
<i>Leuctra fusca</i>	Within Known Range? N	Nearest Occurrence:	993.18 KM	49.08643°N	107.28952 °E
Family: Nemouridae					
<i>Nemurella pictetii</i>	Within Known Range? N	Nearest Occurrence:	517.51 KM	50.81265°N	99.33803 °E
Family: Perlodidae					
<i>Isoperla eximia</i>	Within Known Range? N	Nearest Occurrence:	1,017.62 KM	49.01829°N	107.54453 °E

**Basin:** Internal Drainage Basin  
**Aimags:** Bayankhongor  
**Soum:** Erdenetsogt

**Freshwater Ecoregion:** Western Mongolia  
**Terrestrial Ecoregion:** Khangai Mountains Alpine Meadow

**WQM Sites:**

WQM Sites: # 79 (Shargaljuut River @ N 46.35707° E 101.26082°)  
 # 80 (Shargaljuut River @ N 46.3278° E 101.21918°)

**LOE Rating: Highly Likely Total: 6**

<b>Family: Capniidae</b>			
Isocapnia guentheri	Within Known Range? N	Nearest Occurrence: 105.38 KM	47.48567°N 100.87875 °E
Isocapnia sibirica	Within Known Range? N	Nearest Occurrence: 83.41 KM	47.28244°N 101.18793 °E
Mesocapnia variabilis	Within Known Range? N	Nearest Occurrence: 143.19 KM	47.21768°N 99.92824 °E
<b>Family: Chloroperlidae</b>			
Alloperla joosti	Within Known Range? Y	Nearest Occurrence: 62.61 KM	47.11192°N 101.01048 °E
Alloperla rostellata	Within Known Range? Y	Nearest Occurrence: 62.61 KM	47.11192°N 101.01048 °E
<b>Family: Perlodidae</b>			
Arcynopteryx polaris	Within Known Range? Y	Nearest Occurrence: 52.16 KM	47.00226°N 100.91051 °E

**LOE Rating: Likely Total: 10**

<b>Family: Capniidae</b>			
Isocapnia kudia	Within Known Range? N	Nearest Occurrence: 543.72 KM	51.25356°N 99.66687 °E
<b>Family: Chloroperlidae</b>			
Suwallia kerzhneri	Within Known Range? N	Nearest Occurrence: 105.38 KM	47.48567°N 100.87875 °E
<b>Family: Nemouridae</b>			
Amphinemura borealis	Within Known Range? Y	Nearest Occurrence: 83.41 KM	47.28244°N 101.18793 °E
Nemoura cinerea	Within Known Range? N	Nearest Occurrence: 105.38 KM	47.48567°N 100.87875 °E
<b>Family: Perlidae</b>			
Agnetina extrema	Within Known Range? N	Nearest Occurrence: 83.41 KM	47.28244°N 101.18793 °E
Kamimuria exilis	Within Known Range? N	Nearest Occurrence: 469.74 KM	50.16278°N 98.84212 °E
<b>Family: Perlodidae</b>			
Arcynopteryx sajanensis	Within Known Range? N	Nearest Occurrence: 565.32 KM	51.61397°N 100.59972 °E
Diura bicaudata	Within Known Range? N	Nearest Occurrence: 142.93 KM	47.21768°N 99.92824 °E
Diura majuscula	Within Known Range? Y	Nearest Occurrence: 62.71 KM	47.11192°N 101.01048 °E
Pictetiella asiatica	Within Known Range? N	Nearest Occurrence: 569.91 KM	51.65822°N 100.53000 °E

**LOE Rating: Probable Total: 5**

<b>Family: Chloroperlidae</b>			
Alloperla deminuta	Within Known Range? Y	Nearest Occurrence: 62.61 KM	47.11192°N 101.01048 °E
Suwallia teleckojensis	Within Known Range? Y	Nearest Occurrence: 62.71 KM	47.11192°N 101.01048 °E
<b>Family: Perlidae</b>			
Agnetina brevipennis	Within Known Range? Y	Nearest Occurrence: 106.81 KM	46.78742°N 101.96021 °E
<b>Family: Pteronarcyidae</b>			
Pteronarcys reticulata	Within Known Range? N	Nearest Occurrence: 160.18 KM	47.80440°N 100.31810 °E
<b>Family: Taeniopterygidae</b>			
Taenionema japonicum	Within Known Range? Y	Nearest Occurrence: 62.71 KM	47.11192°N 101.01048 °E

**Basin:** Internal Drainage Basin  
**Aimags:** Bayankhongor  
**Soums:** Erdenetsogt

**Freshwater Ecoregion:** Western Mongolia  
**Terrestrial Ecoregion:** Khangai Mountains Alpine Meadow

**WQM Sites:**

WQM Sites: # 79 (Shargaljuut River @ N 46.35707° E 101.26082°)  
 # 80 (Shargaljuut River @ N 46.3278° E 101.21918°)

<b>LOE Rating:</b>	<b>Possible</b>	<b>Total:</b>	<b>7</b>
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<b>Family:</b> Chloroperlidae			
Alaskaperla longidentata	Within Known Range? Y	Nearest Occurrence:	81.01 KM 46.82177°N 101.70479 °E
Haploperla lepnevae	Within Known Range? N	Nearest Occurrence:	326.95 KM 49.26170°N 99.88242 °E
<b>Family:</b> Nemouridae			
Nemoura arctica	Within Known Range? N	Nearest Occurrence:	117.69 KM 47.26999°N 101.80227 °E
<b>Family:</b> Perlodidae			
Arcynopteryx compacta	Within Known Range? Y	Nearest Occurrence:	62.71 KM 47.11192°N 101.01048 °E
Isoperla kozlovi	Within Known Range? N	Nearest Occurrence:	83.41 KM 47.28244°N 101.18793 °E
Isoperla potanini	Within Known Range? Y	Nearest Occurrence:	97.50 KM 46.73093°N 101.88583 °E
Kaszabia nigricauda	Within Known Range? N	Nearest Occurrence:	105.38 KM 47.48567°N 100.87875 °E

<b>LOE Rating:</b>	<b>Predicted</b>	<b>Total:</b>	<b>14</b>
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<b>Family:</b> Capniidae			
Capnia nigra	Within Known Range? N	Nearest Occurrence:	421.02 KM 48.06257°N 97.55064 °E
<b>Family:</b> Chloroperlidae			
Alloperla mediata	Within Known Range? N	Nearest Occurrence:	419.47 KM 49.70678°N 103.10288 °E
<b>Family:</b> Leuctridae			
Paraleuctra zapekinae	Within Known Range? N	Nearest Occurrence:	533.35 KM 49.71481°N 104.64203 °E
<b>Family:</b> Nemouridae			
Amphinemura standfussi	Within Known Range? N	Nearest Occurrence:	377.38 KM 49.33339°N 102.97786 °E
Nemoura sahlbergi	Within Known Range? N	Nearest Occurrence:	126.49 KM 47.42580°N 100.30130 °E
<b>Family:</b> Perlidae			
Agnetina cocandica	Within Known Range? N	Nearest Occurrence:	361.21 KM 49.62785°N 99.99523 °E
Paragnetina flavotincta	Within Known Range? N	Nearest Occurrence:	302.66 KM 49.26765°N 100.82998 °E
<b>Family:</b> Perlodidae			
Isoperla altaica	Within Known Range? Y	Nearest Occurrence:	62.71 KM 47.11192°N 101.01048 °E
Isoperla asiatica	Within Known Range? N	Nearest Occurrence:	160.18 KM 47.80440°N 100.31810 °E
Isoperla lunigera	Within Known Range? N	Nearest Occurrence:	328.31 KM 49.45317°N 100.47234 °E
Isoperla mongolica	Within Known Range? Y	Nearest Occurrence:	62.71 KM 47.11192°N 101.01048 °E
Isoperla obscura	Within Known Range? N	Nearest Occurrence:	366.55 KM 49.38617°N 102.71667 °E
Megarcys ochracea	Within Known Range? N	Nearest Occurrence:	458.86 KM 49.77776°N 103.60860 °E
Skwala pusilla	Within Known Range? N	Nearest Occurrence:	1,406.41 KM 48.51277°N 88.51107 °E

<b>LOE Rating:</b>	<b>Unlikely</b>	<b>Total:</b>	<b>5</b>
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<b>Family:</b> Capniidae			
Capnia khulsbagia	Within Known Range? N	Nearest Occurrence:	494.17 KM 50.98944°N 100.71944 °E
Mesocapnia altaica	Within Known Range? N	Nearest Occurrence:	1,362.35 KM 48.43684°N 88.90094 °E
<b>Family:</b> Leuctridae			
Leuctra fusca	Within Known Range? N	Nearest Occurrence:	749.94 KM 49.08643°N 107.28952 °E
<b>Family:</b> Nemouridae			
Nemurella pictetii	Within Known Range? N	Nearest Occurrence:	509.18 KM 50.81265°N 99.33803 °E
<b>Family:</b> Perlodidae			
Isoperla eximia	Within Known Range? N	Nearest Occurrence:	773.54 KM 49.01829°N 107.54453 °E



**Basin:** Internal Drainage Basin  
**Aimags:** Bayankhongor  
**Soums:** Galuut

**Freshwater Ecoregion:** Western Mongolia  
**Terrestrial Ecoregion:** Gobi Lakes Valley Desert Steppe

**WQM Sites:**

WQM Sites: # 84 (Tsagaan turuut River @ N 46.70343° E 99.87352°)

<b>LOE Rating:</b>	<b>Highly Likely</b>	<b>Total:</b>	<b>5</b>
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<b>Family:</b> Capniidae			
Isocapnia guentheri	Within Known Range? N	Nearest Occurrence:	115.92 KM 47.48567°N 100.87875°E
Isocapnia sibirica	Within Known Range? N	Nearest Occurrence:	131.02 KM 47.28244°N 101.18793°E
Mesocapnia variabilis	Within Known Range? Y	Nearest Occurrence:	56.07 KM 47.21768°N 99.92824°E
<b>Family:</b> Chloroperlidae			
Alloperla rostellata	Within Known Range? Y	Nearest Occurrence:	105.26 KM 47.11192°N 101.01048°E
<b>Family:</b> Perlodidae			
Arcynopteryx polaris	Within Known Range? Y	Nearest Occurrence:	56.07 KM 47.21768°N 99.92824°E

<b>LOE Rating:</b>	<b>Likely</b>	<b>Total:</b>	<b>9</b>
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<b>Family:</b> Capniidae			
Isocapnia kudia	Within Known Range? N	Nearest Occurrence:	501.87 KM 51.25356°N 99.66687°E
<b>Family:</b> Chloroperlidae			
Alloperla joosti	Within Known Range? Y	Nearest Occurrence:	76.68 KM 47.42580°N 100.30130°E
Suwallia kerzhneri	Within Known Range? N	Nearest Occurrence:	115.92 KM 47.48567°N 100.87875°E
<b>Family:</b> Nemouridae			
Nemoura cinerea	Within Known Range? N	Nearest Occurrence:	115.92 KM 47.48567°N 100.87875°E
<b>Family:</b> Perlidae			
Agnetina extrema	Within Known Range? N	Nearest Occurrence:	97.04 KM 47.50949°N 100.57510°E
Kamimuria exilis	Within Known Range? N	Nearest Occurrence:	405.04 KM 50.16278°N 98.84212°E
<b>Family:</b> Perlodidae			
Arcynopteryx sajanensis	Within Known Range? N	Nearest Occurrence:	542.69 KM 51.61397°N 100.59972°E
Diura bicaudata	Within Known Range? Y	Nearest Occurrence:	55.97 KM 47.21768°N 99.92824°E
Pictetiella asiatica	Within Known Range? N	Nearest Occurrence:	545.92 KM 51.65822°N 100.53000°E

<b>LOE Rating:</b>	<b>Probable</b>	<b>Total:</b>	<b>7</b>
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<b>Family:</b> Chloroperlidae			
Alaskaperla longidentata	Within Known Range? Y	Nearest Occurrence:	61.05 KM 47.29702°N 100.03136°E
Haploperla lepnevae	Within Known Range? N	Nearest Occurrence:	279.48 KM 49.26170°N 99.88242°E
Suwallia teleckojensis	Within Known Range? Y	Nearest Occurrence:	61.16 KM 47.29702°N 100.03136°E
<b>Family:</b> Nemouridae			
Amphinemura borealis	Within Known Range? Y	Nearest Occurrence:	76.68 KM 47.42580°N 100.30130°E
<b>Family:</b> Perlidae			
Agnetina brevipennis	Within Known Range? Y	Nearest Occurrence:	153.58 KM 48.12661°N 99.94128°E
<b>Family:</b> Perlodidae			
Diura majuscula	Within Known Range? Y	Nearest Occurrence:	76.82 KM 47.42580°N 100.30130°E
<b>Family:</b> Pteronarcyidae			
Pteronarcys reticulata	Within Known Range? N	Nearest Occurrence:	118.18 KM 47.80440°N 100.31810°E



**Basin:** Internal Drainage Basin  
**Aimags:** Bayankhongor  
**Soums:** Galuut

**Freshwater Ecoregion:** Western Mongolia  
**Terrestrial Ecoregion:** Gobi Lakes Valley Desert Steppe

**WQM Sites:**

WQM Sites: # 84 (Tsagaan turuut River @ N 46.70343° E 99.87352°)

<b>LOE Rating:</b> Possible	<b>Total:</b> 6
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<b>Family:</b> Capniidae					
Capnia nigra	Within Known Range? N	Nearest Occurrence:	321.08 KM	48.06257°N	97.55064°E
<b>Family:</b> Perlodidae					
Isoperla asiatica	Within Known Range? N	Nearest Occurrence:	118.18 KM	47.80440°N	100.31810°E
Isoperla kozlovi	Within Known Range? N	Nearest Occurrence:	115.92 KM	47.48567°N	100.87875°E
Isoperla potanini	Within Known Range? Y	Nearest Occurrence:	76.82 KM	47.42580°N	100.30130°E
Kaszabia nigricauda	Within Known Range? N	Nearest Occurrence:	115.92 KM	47.48567°N	100.87875°E
<b>Family:</b> Taeniopterygidae					
Taenionema japonicum	Within Known Range? Y	Nearest Occurrence:	105.45 KM	47.11192°N	101.01048°E

<b>LOE Rating:</b> Predicted	<b>Total:</b> 15
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<b>Family:</b> Chloroperlidae					
Alloperla deminuta	Within Known Range? Y	Nearest Occurrence:	105.26 KM	47.11192°N	101.01048°E
Alloperla mediata	Within Known Range? N	Nearest Occurrence:	434.11 KM	50.51517°N	101.21073°E
<b>Family:</b> Leuctridae					
Paraleuctra zapekinae	Within Known Range? N	Nearest Occurrence:	598.77 KM	49.71481°N	104.64203°E
<b>Family:</b> Nemouridae					
Amphinemura standfussi	Within Known Range? N	Nearest Occurrence:	295.10 KM	48.61518°N	98.23096°E
Nemoura arctica	Within Known Range? Y	Nearest Occurrence:	194.38 KM	47.26999°N	101.80227°E
Nemoura sahlbergi	Within Known Range? N	Nearest Occurrence:	76.68 KM	47.42580°N	100.30130°E
<b>Family:</b> Perlidae					
Agnetina cocandica	Within Known Range? Y	Nearest Occurrence:	319.69 KM	49.62785°N	99.99523°E
Paragnetina flavotincta	Within Known Range? N	Nearest Occurrence:	279.48 KM	49.26170°N	99.88242°E
<b>Family:</b> Perlodidae					
Arcynopteryx compacta	Within Known Range? Y	Nearest Occurrence:	105.45 KM	47.11192°N	101.01048°E
Isoperla altaica	Within Known Range? Y	Nearest Occurrence:	105.45 KM	47.11192°N	101.01048°E
Isoperla lunigera	Within Known Range? N	Nearest Occurrence:	301.75 KM	49.45317°N	100.47234°E
Isoperla mongolica	Within Known Range? Y	Nearest Occurrence:	105.45 KM	47.11192°N	101.01048°E
Isoperla obscura	Within Known Range? N	Nearest Occurrence:	409.35 KM	49.38617°N	102.71667°E
Megarcys ochracea	Within Known Range? N	Nearest Occurrence:	511.33 KM	49.77776°N	103.60860°E
Skwala pusilla	Within Known Range? N	Nearest Occurrence:	1,304.51 KM	48.51277°N	88.51107°E

<b>LOE Rating:</b> Unlikely	<b>Total:</b> 5
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<b>Family:</b> Capniidae					
Capnia khulsbagia	Within Known Range? N	Nearest Occurrence:	474.41 KM	50.98944°N	100.71944°E
Mesocapnia altaica	Within Known Range? N	Nearest Occurrence:	1,260.47 KM	48.43684°N	88.90094°E
<b>Family:</b> Leuctridae					
Leuctra fusca	Within Known Range? N	Nearest Occurrence:	835.59 KM	49.08643°N	107.28952°E
<b>Family:</b> Nemouridae					
Nemurella pictetii	Within Known Range? N	Nearest Occurrence:	458.80 KM	50.81265°N	99.33803°E
<b>Family:</b> Perlodidae					
Isoperla eximia	Within Known Range? N	Nearest Occurrence:	860.31 KM	49.01829°N	107.54453°E



**Basin:** Internal Drainage Basin  
**Aimag:** Bayankhongor  
**Soum:** Gurvanbulag

**Freshwater Ecoregion:** Western Mongolia  
**Terrestrial Ecoregion:** Khangai Mountains Alpine Meadow

**WQM Sites:**

WQM Sites: # 86 (Har us River @ N 47.29165° E 98.5589°) # 87  
 (Shar us River @ N 47.2229° E 98.28277°)

**LOE Rating: Highly Likely Total: 7**

Family: Capniidae					
Isocapnia guentheri	Within Known Range? N	Nearest Occurrence: 153.68 KM	48.61518°N	98.23096 °E	
Isocapnia sibirica	Within Known Range? N	Nearest Occurrence: 285.44 KM	47.28244°N	101.18793 °E	
Mesocapnia variabilis	Within Known Range? Y	Nearest Occurrence: 124.86 KM	48.36436°N	98.92737 °E	
Family: Chloroperlidae					
Alloperla rostellata	Within Known Range? N	Nearest Occurrence: 124.64 KM	48.36436°N	98.92737 °E	
Family: Nemouridae					
Nemoura cinerea	Within Known Range? Y	Nearest Occurrence: 146.41 KM	48.06257°N	97.55064 °E	
Family: Perlidae					
Kamimuria exilis	Within Known Range? N	Nearest Occurrence: 320.95 KM	50.16278°N	98.84212 °E	
Family: Perlodidae					
Arcynopteryx polaris	Within Known Range? Y	Nearest Occurrence: 124.86 KM	48.36436°N	98.92737 °E	

**LOE Rating: Likely Total: 7**

Family: Capniidae					
Capnia nigra	Within Known Range? N	Nearest Occurrence: 146.41 KM	48.06257°N	97.55064 °E	
Isocapnia kudia	Within Known Range? N	Nearest Occurrence: 455.64 KM	51.25356°N	99.66687 °E	
Family: Chloroperlidae					
Alloperla joosti	Within Known Range? Y	Nearest Occurrence: 153.68 KM	48.61518°N	98.23096 °E	
Suwallia kerzhneri	Within Known Range? Y	Nearest Occurrence: 146.23 KM	48.05989°N	97.55073 °E	
Family: Perlodidae					
Arcynopteryx sajanensis	Within Known Range? N	Nearest Occurrence: 529.46 KM	51.61397°N	100.59972 °E	
Diura bicaudata	Within Known Range? Y	Nearest Occurrence: 145.81 KM	47.21768°N	99.92824 °E	
Pictetiella asiatica	Within Known Range? N	Nearest Occurrence: 529.83 KM	51.65822°N	100.53000 °E	

**LOE Rating: Probable Total: 7**

Family: Chloroperlidae					
Suwallia teleckojensis	Within Known Range? Y	Nearest Occurrence: 124.86 KM	48.36436°N	98.92737 °E	
Family: Nemouridae					
Amphinemura borealis	Within Known Range? Y	Nearest Occurrence: 146.23 KM	48.05989°N	97.55073 °E	
Amphinemura standfussi	Within Known Range? N	Nearest Occurrence: 143.59 KM	48.34410°N	97.87312 °E	
Family: Perlidae					
Agnetina brevipennis	Within Known Range? Y	Nearest Occurrence: 159.25 KM	48.71968°N	98.65184 °E	
Agnetina extrema	Within Known Range? N	Nearest Occurrence: 218.83 KM	47.50949°N	100.57510 °E	
Family: Perlodidae					
Diura majuscula	Within Known Range? Y	Nearest Occurrence: 146.68 KM	48.06257°N	97.55064 °E	
Family: Pteronarcyidae					
Pteronarcys reticulata	Within Known Range? N	Nearest Occurrence: 197.48 KM	47.80440°N	100.31810 °E	



**Basin:** Internal Drainage Basin  
**Aimags:** Bayankhongor  
**Soum:** Gurvanbulag

**Freshwater Ecoregion:** Western Mongolia  
**Terrestrial Ecoregion:** Khangai Mountains Alpine Meadow

**WQM Sites:**

WQM Sites: # 86 (Har us River @ N 47.29165° E 98.5589°) # 87  
 (Shar us River @ N 47.2229° E 98.28277°)

**LOE Rating: Possible Total: 6**

<b>Family: Chloroperlidae</b>					
Alaskaperla longidentata	Within Known Range? Y	Nearest Occurrence:	143.59 KM	48.34410°N	97.87312°E
Haploperla lepnevae	Within Known Range? N	Nearest Occurrence:	260.52 KM	49.26170°N	99.88242°E
<b>Family: Perlodidae</b>					
Isoperla asiatica	Within Known Range? Y	Nearest Occurrence:	146.23 KM	48.05989°N	97.55073°E
Isoperla potanini	Within Known Range? Y	Nearest Occurrence:	143.85 KM	48.34410°N	97.87312°E
Skwala pusilla	Within Known Range? N	Nearest Occurrence:	1,129.94 KM	48.51277°N	88.51107°E
<b>Family: Taeniopterygidae</b>					
Taenionema japonicum	Within Known Range? Y	Nearest Occurrence:	266.92 KM	47.11192°N	101.01048°E

**LOE Rating: Predicted Total: 16**

<b>Family: Chloroperlidae</b>					
Alloperla deminuta	Within Known Range? N	Nearest Occurrence:	197.48 KM	47.80440°N	100.31810°E
Alloperla mediata	Within Known Range? N	Nearest Occurrence:	374.16 KM	50.61826°N	99.12094°E
<b>Family: Leuctridae</b>					
Paraleuctra zapekinae	Within Known Range? N	Nearest Occurrence:	721.16 KM	49.71481°N	104.64203°E
<b>Family: Nemouridae</b>					
Nemoura arctica	Within Known Range? Y	Nearest Occurrence:	354.27 KM	47.26999°N	101.80227°E
Nemoura sahlbergi	Within Known Range? N	Nearest Occurrence:	187.67 KM	47.42580°N	100.30130°E
Nemurella pictetii	Within Known Range? N	Nearest Occurrence:	399.64 KM	50.81265°N	99.33803°E
<b>Family: Perlidae</b>					
Agnetina cocandica	Within Known Range? Y	Nearest Occurrence:	302.26 KM	49.62785°N	99.99523°E
Paragnetina flavotincta	Within Known Range? N	Nearest Occurrence:	260.52 KM	49.26170°N	99.88242°E
<b>Family: Perlodidae</b>					
Arcynopteryx compacta	Within Known Range? Y	Nearest Occurrence:	266.92 KM	47.11192°N	101.01048°E
Isoperla altaica	Within Known Range? Y	Nearest Occurrence:	266.92 KM	47.11192°N	101.01048°E
Isoperla kozlovi	Within Known Range? Y	Nearest Occurrence:	197.48 KM	47.80440°N	100.31810°E
Isoperla lunigera	Within Known Range? N	Nearest Occurrence:	301.71 KM	49.62785°N	99.99523°E
Isoperla mongolica	Within Known Range? Y	Nearest Occurrence:	146.68 KM	48.06257°N	97.55064°E
Isoperla obscura	Within Known Range? N	Nearest Occurrence:	489.44 KM	50.60031°N	101.52392°E
Kaszabia nigricauda	Within Known Range? N	Nearest Occurrence:	159.25 KM	48.71968°N	98.65184°E
Megarcys ochracea	Within Known Range? N	Nearest Occurrence:	464.08 KM	51.40978°N	99.30136°E

**LOE Rating: Unlikely Total: 4**

<b>Family: Capniidae</b>					
Capnia khulsbagia	Within Known Range? N	Nearest Occurrence:	472.80 KM	50.98944°N	100.71944°E
Mesocapnia altaica	Within Known Range? N	Nearest Occurrence:	1,085.96 KM	48.43684°N	88.90094°E
<b>Family: Leuctridae</b>					
Leuctra fusca	Within Known Range? N	Nearest Occurrence:	983.25 KM	49.08643°N	107.28952°E
<b>Family: Perlodidae</b>					
Isoperla eximia	Within Known Range? N	Nearest Occurrence:	1,009.52 KM	49.01829°N	107.54453°E



**Basin:** Internal Drainage Basin  
**Aimags:** Bayankhongor  
**Soums:** Jargalant

Freshwater Ecoregion: Western Mongolia  
 Terrestrial Ecoregion: Selenge-Orkhon Forest Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Highly Likely Total: 2**

Family: Capniidae						
Mesocapnia variabilis	Within Known Range? Y	Nearest Occurrence:	41.84 KM	47.21260 °N	99.91083 °E	
Family: Perlodidae						
Arcynopteryx polaris	Within Known Range? Y	Nearest Occurrence:	41.84 KM	47.21260 °N	99.91083 °E	

**LOE Rating: Likely Total: 12**

Family: Capniidae						
Isocapnia guentheri	Within Known Range? Y	Nearest Occurrence:	152.32 KM	47.48567 °N	100.87875 °E	
Isocapnia kudia	Within Known Range? N	Nearest Occurrence:	449.15 KM	51.25356 °N	99.66687 °E	
Isocapnia sibirica	Within Known Range? N	Nearest Occurrence:	183.70 KM	47.28244 °N	101.18793 °E	
Family: Chloroperlidae						
Alloperla joosti	Within Known Range? Y	Nearest Occurrence:	88.43 KM	47.42580 °N	100.30130 °E	
Alloperla rostellata	Within Known Range? Y	Nearest Occurrence:	144.85 KM	48.36436 °N	98.92737 °E	
Suwallia kerzhneri	Within Known Range? Y	Nearest Occurrence:	152.32 KM	47.48567 °N	100.87875 °E	
Family: Nemouridae						
Nemoura cinerea	Within Known Range? Y	Nearest Occurrence:	152.32 KM	47.48567 °N	100.87875 °E	
Family: Perlidae						
Agnetina extrema	Within Known Range? N	Nearest Occurrence:	120.20 KM	47.50949 °N	100.57510 °E	
Kamimuria exilis	Within Known Range? N	Nearest Occurrence:	337.33 KM	50.16278 °N	98.84212 °E	
Family: Perlodidae						
Arcynopteryx sajanensis	Within Known Range? N	Nearest Occurrence:	503.91 KM	51.61397 °N	100.59972 °E	
Diura bicaudata	Within Known Range? Y	Nearest Occurrence:	43.70 KM	47.21768 °N	99.92824 °E	
Pictetiella asiatica	Within Known Range? N	Nearest Occurrence:	506.04 KM	51.65822 °N	100.53000 °E	

**LOE Rating: Probable Total: 7**

Family: Capniidae						
Capnia nigra	Within Known Range? N	Nearest Occurrence:	239.72 KM	48.06257 °N	97.55064 °E	
Family: Chloroperlidae						
Haploperla lepnevae	Within Known Range? N	Nearest Occurrence:	231.06 KM	49.26170 °N	99.88242 °E	
Suwallia teleckojensis	Within Known Range? Y	Nearest Occurrence:	56.09 KM	47.29702 °N	100.03136 °E	
Family: Nemouridae						
Amphinemura borealis	Within Known Range? Y	Nearest Occurrence:	88.43 KM	47.42580 °N	100.30130 °E	
Family: Perlidae						
Agnetina brevipennis	Within Known Range? Y	Nearest Occurrence:	111.37 KM	48.12661 °N	99.94128 °E	
Family: Perlodidae						
Diura majuscula	Within Known Range? Y	Nearest Occurrence:	88.59 KM	47.42580 °N	100.30130 °E	
Family: Pteronarcyidae						
Pteronarcys reticulata	Within Known Range? N	Nearest Occurrence:	109.21 KM	47.80440 °N	100.31810 °E	



**Basin:** Internal Drainage Basin  
**Aimags:** Bayankhongor  
**Soums:** Jargalant

**Freshwater Ecoregion:** Western Mongolia  
**Terrestrial Ecoregion:** Selenge-Orkhon Forest Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Possible Total: 6**

<b>Family: Chloroperlidae</b>						
Alaskaperla longidentata	Within Known Range?	Y	Nearest Occurrence:	55.99 KM	47.29702 °N	100.03136 °E
<b>Family: Perlodidae</b>						
Isoperla asiatica	Within Known Range?	Y	Nearest Occurrence:	109.21 KM	47.80440 °N	100.31810 °E
Isoperla kozlovi	Within Known Range?	Y	Nearest Occurrence:	109.21 KM	47.80440 °N	100.31810 °E
Isoperla potanini	Within Known Range?	Y	Nearest Occurrence:	88.59 KM	47.42580 °N	100.30130 °E
Kaszabia nigricauda	Within Known Range?	N	Nearest Occurrence:	109.21 KM	47.80440 °N	100.31810 °E
<b>Family: Taeniopterygidae</b>						
Taenionema japonicum	Within Known Range?	Y	Nearest Occurrence:	164.47 KM	47.11192 °N	101.01048 °E

**LOE Rating: Predicted Total: 16**

<b>Family: Chloroperlidae</b>						
Alloperla deminuta	Within Known Range?	N	Nearest Occurrence:	109.21 KM	47.80440 °N	100.31810 °E
Alloperla mediata	Within Known Range?	N	Nearest Occurrence:	381.17 KM	50.61826 °N	99.12094 °E
<b>Family: Leuctridae</b>						
Paraleuctra zapekinae	Within Known Range?	N	Nearest Occurrence:	631.46 KM	49.71481 °N	104.64203 °E
<b>Family: Nemouridae</b>						
Amphinemura standfussi	Within Known Range?	N	Nearest Occurrence:	212.82 KM	48.61518 °N	98.23096 °E
Nemoura arctica	Within Known Range?	Y	Nearest Occurrence:	252.25 KM	47.26999 °N	101.80227 °E
Nemoura sahlbergi	Within Known Range?	Y	Nearest Occurrence:	88.43 KM	47.42580 °N	100.30130 °E
Nemurella pictetii	Within Known Range?	N	Nearest Occurrence:	400.56 KM	50.81265 °N	99.33803 °E
<b>Family: Perlidae</b>						
Agnetina cocandica	Within Known Range?	Y	Nearest Occurrence:	273.77 KM	49.62785 °N	99.99523 °E
Paragnetina flavotincta	Within Known Range?	N	Nearest Occurrence:	231.06 KM	49.26170 °N	99.88242 °E
<b>Family: Perlodidae</b>						
Arcynopteryx compacta	Within Known Range?	Y	Nearest Occurrence:	164.47 KM	47.11192 °N	101.01048 °E
Isoperla altaica	Within Known Range?	Y	Nearest Occurrence:	164.47 KM	47.11192 °N	101.01048 °E
Isoperla lunigera	Within Known Range?	N	Nearest Occurrence:	269.94 KM	49.45317 °N	100.47234 °E
Isoperla mongolica	Within Known Range?	Y	Nearest Occurrence:	164.47 KM	47.11192 °N	101.01048 °E
Isoperla obscura	Within Known Range?	N	Nearest Occurrence:	427.95 KM	49.38617 °N	102.71667 °E
Megarcys ochracea	Within Known Range?	N	Nearest Occurrence:	466.97 KM	51.40978 °N	99.30136 °E
Skwala pusilla	Within Known Range?	N	Nearest Occurrence:	1,232.14 KM	48.51277 °N	88.51107 °E

**LOE Rating: Unlikely Total: 4**

<b>Family: Capniidae</b>						
Capnia khulsbagia	Within Known Range?	N	Nearest Occurrence:	439.72 KM	50.98944 °N	100.71944 °E
Mesocapnia altaica	Within Known Range?	N	Nearest Occurrence:	1,188.18 KM	48.43684 °N	88.90094 °E
<b>Family: Leuctridae</b>						
Leuctra fusca	Within Known Range?	N	Nearest Occurrence:	885.65 KM	49.08643 °N	107.28952 °E
<b>Family: Perlodidae</b>						
Isoperla eximia	Within Known Range?	N	Nearest Occurrence:	911.49 KM	49.01829 °N	107.54453 °E

**Basin:** Internal Drainage Basin  
**Aimags:** Bayankhongor  
**Soums:** Jinst

**Freshwater Ecoregion:** Western Mongolia  
**Terrestrial Ecoregion:** Gobi Lakes Valley Desert Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Highly Likely Total: 5**

Family: Capniidae						
	Isocapnia guentheri	Within Known Range? N	Nearest Occurrence: 239.48 KM	47.48567 °N	100.87875 °E	
	Isocapnia sibirica	Within Known Range? N	Nearest Occurrence: 230.30 KM	47.28244 °N	101.18793 °E	
Family: Chloroperlidae						
	Alloperla rostellata	Within Known Range? N	Nearest Occurrence: 204.99 KM	47.11192 °N	101.01048 °E	
Family: Perlidae						
	Kamimuria exilis	Within Known Range? N	Nearest Occurrence: 553.13 KM	50.16278 °N	98.84212 °E	
Family: Perlodidae						
	Arcynopteryx polaris	Within Known Range? N	Nearest Occurrence: 189.91 KM	47.00226 °N	100.91051 °E	

**LOE Rating: Likely Total: 10**

Family: Capniidae						
	Isocapnia kudia	Within Known Range? N	Nearest Occurrence: 652.75 KM	51.25356 °N	99.66687 °E	
	Mesocapnia variabilis	Within Known Range? N	Nearest Occurrence: 205.38 KM	47.21260 °N	99.91083 °E	
Family: Chloroperlidae						
	Alloperla joosti	Within Known Range? N	Nearest Occurrence: 204.99 KM	47.11192 °N	101.01048 °E	
Family: Nemouridae						
	Nemoura cinerea	Within Known Range? N	Nearest Occurrence: 239.48 KM	47.48567 °N	100.87875 °E	
Family: Perlidae						
	Agnetina brevipennis	Within Known Range? N	Nearest Occurrence: 239.63 KM	46.78742 °N	101.96021 °E	
	Agnetina extrema	Within Known Range? N	Nearest Occurrence: 230.30 KM	47.28244 °N	101.18793 °E	
Family: Perlodidae						
	Arcynopteryx sajanensis	Within Known Range? N	Nearest Occurrence: 691.00 KM	51.61397 °N	100.59972 °E	
	Diura bicaudata	Within Known Range? N	Nearest Occurrence: 205.17 KM	47.21768 °N	99.92824 °E	
	Pictetiella asiatica	Within Known Range? N	Nearest Occurrence: 694.34 KM	51.65822 °N	100.53000 °E	
Family: Pteronarcyidae						
	Pteronarcys reticulata	Within Known Range? N	Nearest Occurrence: 266.10 KM	47.80440 °N	100.31810 °E	

**LOE Rating: Probable Total: 5**

Family: Chloroperlidae						
	Haploperla lepnevae	Within Known Range? N	Nearest Occurrence: 430.36 KM	49.26170 °N	99.88242 °E	
	Suwallia kerzhneri	Within Known Range? N	Nearest Occurrence: 239.48 KM	47.48567 °N	100.87875 °E	
	Suwallia teleckojensis	Within Known Range? N	Nearest Occurrence: 205.36 KM	47.11192 °N	101.01048 °E	
Family: Nemouridae						
	Amphinemura borealis	Within Known Range? N	Nearest Occurrence: 224.07 KM	47.42580 °N	100.30130 °E	
Family: Perlidae						
	Agnetina cocandica	Within Known Range? N	Nearest Occurrence: 470.56 KM	49.62785 °N	99.99523 °E	

**Basin:** Internal Drainage Basin  
**Aimags:** Bayankhongor  
**Soums:** Jinst

**Freshwater Ecoregion:** Western Mongolia  
**Terrestrial Ecoregion:** Gobi Lakes Valley Desert Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

<b>LOE Rating:</b>	<b>Possible</b>	<b>Total:</b>	<b>8</b>
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**Family:** Perlodidae

Arcynopteryx compacta	Within Known Range? N	Nearest Occurrence:	205.36 KM	47.11192°N	101.01048°E
Diura majuscula	Within Known Range? N	Nearest Occurrence:	205.36 KM	47.11192°N	101.01048°E
Isoperla asiatica	Within Known Range? N	Nearest Occurrence:	266.10 KM	47.80440°N	100.31810°E
Isoperla kozlovi	Within Known Range? N	Nearest Occurrence:	230.30 KM	47.28244°N	101.18793°E
Isoperla potanini	Within Known Range? N	Nearest Occurrence:	224.47 KM	47.42580°N	100.30130°E
Kaszabia nigricauda	Within Known Range? N	Nearest Occurrence:	239.48 KM	47.48567°N	100.87875°E
Skwala pusilla	Within Known Range? N	Nearest Occurrence:	1,353.25 KM	48.51277°N	88.51107°E

**Family:** Taeniopterygidae

Taenionema japonicum	Within Known Range? N	Nearest Occurrence:	205.36 KM	47.11192°N	101.01048°E
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<b>LOE Rating:</b>	<b>Predicted</b>	<b>Total:</b>	<b>14</b>
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**Family:** Capniidae

Capnia nigra	Within Known Range? N	Nearest Occurrence:	424.30 KM	48.06257°N	97.55064°E
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**Family:** Chloroperlidae

Alaskaperla longidentata	Within Known Range? N	Nearest Occurrence:	211.89 KM	47.29702°N	100.03136°E
Alloperla deminuta	Within Known Range? N	Nearest Occurrence:	204.99 KM	47.11192°N	101.01048°E
Alloperla mediata	Within Known Range? N	Nearest Occurrence:	569.69 KM	49.70678°N	103.10288°E

**Family:** Leuctridae

Paraleuctra zapekinae	Within Known Range? N	Nearest Occurrence:	678.89 KM	49.71481°N	104.64203°E
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**Family:** Nemouridae

Amphinemura standfussi	Within Known Range? N	Nearest Occurrence:	422.92 KM	48.34410°N	97.87312°E
Nemoura arctica	Within Known Range? N	Nearest Occurrence:	266.09 KM	47.26999°N	101.80227°E
Nemoura sahlbergi	Within Known Range? N	Nearest Occurrence:	224.07 KM	47.42580°N	100.30130°E

**Family:** Perlidae

Paragnetina flavotincta	Within Known Range? N	Nearest Occurrence:	430.36 KM	49.26170°N	99.88242°E
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**Family:** Perlodidae

Isoperla altaica	Within Known Range? N	Nearest Occurrence:	205.36 KM	47.11192°N	101.01048°E
Isoperla lunigera	Within Known Range? N	Nearest Occurrence:	449.52 KM	49.45317°N	100.47234°E
Isoperla mongolica	Within Known Range? N	Nearest Occurrence:	205.36 KM	47.11192°N	101.01048°E
Isoperla obscura	Within Known Range? N	Nearest Occurrence:	516.73 KM	49.38617°N	102.71667°E
Megarcys ochracea	Within Known Range? N	Nearest Occurrence:	608.45 KM	49.77776°N	103.60860°E

<b>LOE Rating:</b>	<b>Unlikely</b>	<b>Total:</b>	<b>5</b>
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**Family:** Capniidae

Capnia khulsbagia	Within Known Range? N	Nearest Occurrence:	621.38 KM	50.98944°N	100.71944°E
Mesocapnia altaica	Within Known Range? N	Nearest Occurrence:	1,309.26 KM	48.43684°N	88.90094°E

**Family:** Leuctridae

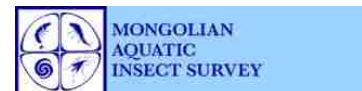
Leuctra fusca	Within Known Range? N	Nearest Occurrence:	876.73 KM	49.08643°N	107.28952°E
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**Family:** Nemouridae

Nemurella pictetii	Within Known Range? N	Nearest Occurrence:	609.44 KM	50.81265°N	99.33803°E
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**Family:** Perlodidae

Isoperla eximia	Within Known Range? N	Nearest Occurrence:	898.48 KM	49.01829°N	107.54453°E
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**Basin:** Internal Drainage Basin  
**Aimags:** Bayankhongor  
**Soums:** Khureemara

**Freshwater Ecoregion:** Western Mongolia  
**Terrestrial Ecoregion:** Gobi Lakes Valley Desert Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Highly Likely Total: 6**

<b>Family: Capniidae</b>					
Isocapnia guentheri	Within Known Range?	N	Nearest Occurrence:	236.95 KM	48.61518 °N 98.23096 °E
Isocapnia sibirica	Within Known Range?	N	Nearest Occurrence:	329.34 KM	47.28244 °N 101.18793 °E
<b>Family: Chloroperlidae</b>					
Alloperla rostellata	Within Known Range?	N	Nearest Occurrence:	219.10 KM	48.36436 °N 98.92737 °E
<b>Family: Nemouridae</b>					
Nemoura cinerea	Within Known Range?	N	Nearest Occurrence:	195.57 KM	48.06257 °N 97.55064 °E
<b>Family: Perlidae</b>					
Kamimuria exilis	Within Known Range?	N	Nearest Occurrence:	413.15 KM	50.16278 °N 98.84212 °E
<b>Family: Perlodidae</b>					
Arcynopteryx polaris	Within Known Range?	Y	Nearest Occurrence:	193.54 KM	47.21260 °N 99.91083 °E

**LOE Rating: Likely Total: 8**

<b>Family: Capniidae</b>					
Isocapnia kudia	Within Known Range?	N	Nearest Occurrence:	549.93 KM	51.25356 °N 99.66687 °E
Mesocapnia variabilis	Within Known Range?	N	Nearest Occurrence:	193.54 KM	47.21260 °N 99.91083 °E
<b>Family: Chloroperlidae</b>					
Alloperla joosti	Within Known Range?	N	Nearest Occurrence:	221.37 KM	48.24995 °N 97.40627 °E
Suwallia kerzhneri	Within Known Range?	N	Nearest Occurrence:	195.30 KM	48.05989 °N 97.55073 °E
Suwallia teleckojensis	Within Known Range?	Y	Nearest Occurrence:	195.65 KM	48.05989 °N 97.55073 °E
<b>Family: Perlodidae</b>					
Arcynopteryx sajanensis	Within Known Range?	N	Nearest Occurrence:	623.88 KM	51.61397 °N 100.59972 °E
Diura bicaudata	Within Known Range?	N	Nearest Occurrence:	195.19 KM	47.21768 °N 99.92824 °E
Pictetiella asiatica	Within Known Range?	N	Nearest Occurrence:	624.19 KM	51.65822 °N 100.53000 °E

**LOE Rating: Probable Total: 10**

<b>Family: Capniidae</b>					
Capnia nigra	Within Known Range?	N	Nearest Occurrence:	195.57 KM	48.06257 °N 97.55064 °E
<b>Family: Chloroperlidae</b>					
Haploperla lepnevae	Within Known Range?	N	Nearest Occurrence:	353.29 KM	49.26170 °N 99.88242 °E
<b>Family: Nemouridae</b>					
Amphinemura borealis	Within Known Range?	Y	Nearest Occurrence:	195.30 KM	48.05989 °N 97.55073 °E
Amphinemura standfussi	Within Known Range?	N	Nearest Occurrence:	195.30 KM	48.05989 °N 97.55073 °E
<b>Family: Perlidae</b>					
Agnetina brevipennis	Within Known Range?	Y	Nearest Occurrence:	250.84 KM	48.71968 °N 98.65184 °E
Agnetina cocandica	Within Known Range?	Y	Nearest Occurrence:	395.69 KM	49.62785 °N 99.99523 °E
Agnetina extrema	Within Known Range?	N	Nearest Occurrence:	273.95 KM	47.50949 °N 100.57510 °E
<b>Family: Perlodidae</b>					
Isoperla asiatica	Within Known Range?	N	Nearest Occurrence:	195.30 KM	48.05989 °N 97.55073 °E
Isoperla potanini	Within Known Range?	Y	Nearest Occurrence:	195.92 KM	48.06257 °N 97.55064 °E
<b>Family: Pteronarcyidae</b>					
Pteronarcys reticulata	Within Known Range?	N	Nearest Occurrence:	264.92 KM	47.80440 °N 100.31810 °E



**Basin:** Internal Drainage Basin  
**Aimag:** Bayankhongor  
**Soum:** Khureemara

Freshwater Ecoregion: Western Mongolia  
 Terrestrial Ecoregion: Gobi Lakes Valley Desert Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

<b>LOE Rating:</b>	<b>Possible</b>	<b>Total:</b>	<b>2</b>
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Family: Perlodidae

Diura majuscula	Within Known Range? Y	Nearest Occurrence: 195.92 KM	48.06257°N	97.55064°E
Skwala pusilla	Within Known Range? N	Nearest Occurrence: 1,113.03 KM	48.51277°N	88.51107°E

<b>LOE Rating:</b>	<b>Predicted</b>	<b>Total:</b>	<b>15</b>
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Family: Chloroperlidae

Alaskaperla longidentata	Within Known Range? N	Nearest Occurrence: 209.29 KM	47.29702°N	100.03136°E
Alloperla deminuta	Within Known Range? N	Nearest Occurrence: 264.92 KM	47.80440°N	100.31810°E
Alloperla mediata	Within Known Range? N	Nearest Occurrence: 467.34 KM	50.61826°N	99.12094°E

Family: Nemouridae

Nemoura arctica	Within Known Range? N	Nearest Occurrence: 395.84 KM	47.26999°N	101.80227°E
Nemoura sahlbergi	Within Known Range? N	Nearest Occurrence: 242.49 KM	47.42580°N	100.30130°E

Family: Perlidae

Paragnetina flavotincta	Within Known Range? N	Nearest Occurrence: 353.29 KM	49.26170°N	99.88242°E
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Family: Perlodidae

Arcynopteryx compacta	Within Known Range? Y	Nearest Occurrence: 306.09 KM	47.11192°N	101.01048°E
Isoperla altaica	Within Known Range? Y	Nearest Occurrence: 306.09 KM	47.11192°N	101.01048°E
Isoperla kozlovi	Within Known Range? N	Nearest Occurrence: 264.92 KM	47.80440°N	100.31810°E
Isoperla lunigera	Within Known Range? N	Nearest Occurrence: 394.98 KM	49.62785°N	99.99523°E
Isoperla mongolica	Within Known Range? Y	Nearest Occurrence: 195.92 KM	48.06257°N	97.55064°E
Isoperla obscura	Within Known Range? N	Nearest Occurrence: 578.38 KM	50.60031°N	101.52392°E
Kaszabia nigricauda	Within Known Range? N	Nearest Occurrence: 250.84 KM	48.71968°N	98.65184°E
Megarcys ochracea	Within Known Range? N	Nearest Occurrence: 557.41 KM	51.40978°N	99.30136°E

Family: Taeniopterygidae

Taenionema japonicum	Within Known Range? Y	Nearest Occurrence: 306.09 KM	47.11192°N	101.01048°E
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<b>LOE Rating:</b>	<b>Unlikely</b>	<b>Total:</b>	<b>6</b>
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Family: Capniidae

Capnia khulsbagia	Within Known Range? N	Nearest Occurrence: 566.16 KM	50.98944°N	100.71944°E
Mesocapnia altaica	Within Known Range? N	Nearest Occurrence: 1,068.94 KM	48.43684°N	88.90094°E

Family: Leuctridae

Leuctra fusca	Within Known Range? N	Nearest Occurrence: 1,035.57 KM	49.08643°N	107.28952°E
Paraleuctra zapekinae	Within Known Range? N	Nearest Occurrence: 787.07 KM	49.71481°N	104.64203°E

Family: Nemouridae

Nemurella pictetii	Within Known Range? N	Nearest Occurrence: 493.45 KM	50.81265°N	99.33803°E
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Family: Perlodidae

Isoperla eximia	Within Known Range? N	Nearest Occurrence: 1,060.75 KM	49.01829°N	107.54453°E
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**Basin:** Internal Drainage Basin  
**Aimags:** Bayankhongor  
**Soums:** Olziit

**Freshwater Ecoregion:** Western Mongolia  
**Terrestrial Ecoregion:** Gobi Lakes Valley Desert Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Highly Likely Total: 5**

Family: Capniidae					
Isocapnia guentheri	Within Known Range? N	Nearest Occurrence:	168.74 KM	47.48567°N	100.87875°E
Isocapnia sibirica	Within Known Range? N	Nearest Occurrence:	146.99 KM	47.28244°N	101.18793°E
Family: Chloroperlidae					
Alloperla rostellata	Within Known Range? N	Nearest Occurrence:	126.66 KM	47.11192°N	101.01048°E
Family: Perlodidae					
Arcynopteryx polaris	Within Known Range? N	Nearest Occurrence:	115.18 KM	47.00226°N	100.91051°E
Diura bicaudata	Within Known Range? N	Nearest Occurrence:	182.92 KM	47.21768°N	99.92824°E

**LOE Rating: Likely Total: 13**

Family: Capniidae					
Isocapnia kudia	Within Known Range? N	Nearest Occurrence:	604.92 KM	51.25356°N	99.66687°E
Mesocapnia variabilis	Within Known Range? N	Nearest Occurrence:	183.25 KM	47.21768°N	99.92824°E
Family: Chloroperlidae					
Alloperla joosti	Within Known Range? N	Nearest Occurrence:	126.66 KM	47.11192°N	101.01048°E
Suwallia kerzhneri	Within Known Range? N	Nearest Occurrence:	168.74 KM	47.48567°N	100.87875°E
Suwallia teleckojensis	Within Known Range? N	Nearest Occurrence:	126.89 KM	47.11192°N	101.01048°E
Family: Nemouridae					
Amphinemura borealis	Within Known Range? N	Nearest Occurrence:	129.08 KM	46.73093°N	101.88583°E
Nemoura cinerea	Within Known Range? N	Nearest Occurrence:	168.74 KM	47.48567°N	100.87875°E
Family: Perlidae					
Agnetina brevipennis	Within Known Range? N	Nearest Occurrence:	139.43 KM	46.78742°N	101.96021°E
Agnetina extrema	Within Known Range? N	Nearest Occurrence:	146.99 KM	47.28244°N	101.18793°E
Kamimuria exilis	Within Known Range? N	Nearest Occurrence:	524.57 KM	50.16278°N	98.84212°E
Family: Perlodidae					
Arcynopteryx sajanensis	Within Known Range? N	Nearest Occurrence:	629.14 KM	51.61397°N	100.59972°E
Diura majuscula	Within Known Range? N	Nearest Occurrence:	126.89 KM	47.11192°N	101.01048°E
Pictetiella asiatica	Within Known Range? N	Nearest Occurrence:	633.51 KM	51.65822°N	100.53000°E

**LOE Rating: Probable Total: 4**

Family: Chloroperlidae					
Haploperla lepnevae	Within Known Range? N	Nearest Occurrence:	385.98 KM	49.26170°N	99.88242°E
Family: Perlodidae					
Arcynopteryx compacta	Within Known Range? N	Nearest Occurrence:	126.89 KM	47.11192°N	101.01048°E
Isoperla potanini	Within Known Range? Y	Nearest Occurrence:	129.31 KM	46.73093°N	101.88583°E
Family: Pteronarcyidae					
Pteronarcys reticulata	Within Known Range? N	Nearest Occurrence:	217.37 KM	47.80440°N	100.31810°E



**Basin:** Internal Drainage Basin  
**Aimags:** Bayankhongor  
**Soums:** Olziit

**Freshwater Ecoregion:** Western Mongolia  
**Terrestrial Ecoregion:** Gobi Lakes Valley Desert Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

<b>LOE Rating:</b>	<b>Possible</b>	<b>Total:</b>	<b>8</b>
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<b>Family:</b> Chloroperlidae			
Alaskaperla longidentata	Within Known Range? N	Nearest Occurrence:	122.24 KM 46.82177°N 101.70479°E
Alloperla deminuta	Within Known Range? N	Nearest Occurrence:	126.66 KM 47.11192°N 101.01048°E
<b>Family:</b> Nemouridae			
Nemoura arctica	Within Known Range? N	Nearest Occurrence:	169.45 KM 47.26999°N 101.80227°E
<b>Family:</b> Perlidae			
Agnetina cocandica	Within Known Range? N	Nearest Occurrence:	421.90 KM 49.62785°N 99.99523°E
<b>Family:</b> Perlodidae			
Isoperla asiatica	Within Known Range? N	Nearest Occurrence:	217.37 KM 47.80440°N 100.31810°E
Isoperla kozlovi	Within Known Range? N	Nearest Occurrence:	146.99 KM 47.28244°N 101.18793°E
Kaszabia nigricauda	Within Known Range? N	Nearest Occurrence:	168.74 KM 47.48567°N 100.87875°E
<b>Family:</b> Taeniopterygidae			
Taenionema japonicum	Within Known Range? N	Nearest Occurrence:	126.89 KM 47.11192°N 101.01048°E

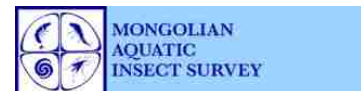
<b>LOE Rating:</b>	<b>Predicted</b>	<b>Total:</b>	<b>12</b>
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<b>Family:</b> Capniidae			
Capnia nigra	Within Known Range? N	Nearest Occurrence:	448.32 KM 48.06257°N 97.55064°E
<b>Family:</b> Chloroperlidae			
Alloperla mediata	Within Known Range? N	Nearest Occurrence:	475.56 KM 49.70678°N 103.10288°E
<b>Family:</b> Leuctridae			
Paraleuctra zapekinae	Within Known Range? N	Nearest Occurrence:	579.33 KM 49.71481°N 104.64203°E
<b>Family:</b> Nemouridae			
Amphinemura standfussi	Within Known Range? N	Nearest Occurrence:	425.47 KM 48.61518°N 98.23096°E
Nemoura sahlbergi	Within Known Range? N	Nearest Occurrence:	179.44 KM 47.42580°N 100.30130°E
<b>Family:</b> Perlidae			
Paragnetina flavotincta	Within Known Range? N	Nearest Occurrence:	366.47 KM 49.26765°N 100.82998°E
<b>Family:</b> Perlodidae			
Isoperla altaica	Within Known Range? N	Nearest Occurrence:	126.89 KM 47.11192°N 101.01048°E
Isoperla lunigera	Within Known Range? N	Nearest Occurrence:	391.05 KM 49.45317°N 100.47234°E
Isoperla mongolica	Within Known Range? N	Nearest Occurrence:	126.89 KM 47.11192°N 101.01048°E
Isoperla obscura	Within Known Range? N	Nearest Occurrence:	424.01 KM 49.38617°N 102.71667°E
Megarcys ochracea	Within Known Range? N	Nearest Occurrence:	511.90 KM 49.77776°N 103.60860°E
Skwala pusilla	Within Known Range? N	Nearest Occurrence:	1,415.32 KM 48.51277°N 88.51107°E

<b>LOE Rating:</b>	<b>Unlikely</b>	<b>Total:</b>	<b>5</b>
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<b>Family:</b> Capniidae			
Capnia khulsbagia	Within Known Range? N	Nearest Occurrence:	557.97 KM 50.98944°N 100.71944°E
Mesocapnia altaica	Within Known Range? N	Nearest Occurrence:	1,371.23 KM 48.43684°N 88.90094°E
<b>Family:</b> Leuctridae			
Leuctra fusca	Within Known Range? N	Nearest Occurrence:	778.53 KM 49.08643°N 107.28952°E
<b>Family:</b> Nemouridae			
Nemurella pictetii	Within Known Range? N	Nearest Occurrence:	568.43 KM 50.81265°N 99.33803°E
<b>Family:</b> Perlodidae			
Isoperla eximia	Within Known Range? N	Nearest Occurrence:	800.76 KM 49.01829°N 107.54453°E

Research funded by the National Science Foundation  
 DEB-BSI #0206674: A Survey of the Aquatic Insects of the Selenge River Basin. P.I.'s: JKGelhaus, JCMorse, BHayford.  
 DEB # 0743732: Aquatic Insects of the Altai and Hangai Mountain Drainages. P.I.'s: JKGelhaus, JCMorse, CRNelson.  
<http://clade.ansp.org/entomology/mongolia/index.html>





**Basin:** Internal Drainage Basin  
**Aimags:** Bayankhongor  
**Soums:** Shinejinst

Freshwater Ecoregion: Dzungaria  
 Terrestrial Ecoregion: Alashan Plateau Semi-Desert

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

<b>LOE Rating:</b>	<b>Highly Likely</b>	<b>Total:</b>	<b>5</b>
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Family: Capniidae					
Isocapnia guentheri	Within Known Range? N	Nearest Occurrence:	460.84 KM	47.48567°N	100.87875°E
Isocapnia sibirica	Within Known Range? N	Nearest Occurrence:	455.87 KM	47.28244°N	101.18793°E
Family: Chloroperlidae					
Alloperla rostellata	Within Known Range? N	Nearest Occurrence:	429.85 KM	47.11192°N	101.01048°E
Family: Perlidae					
Kamimuria exilis	Within Known Range? N	Nearest Occurrence:	721.10 KM	50.16278°N	98.84212°E
Family: Perlodidae					
Arcynopteryx polaris	Within Known Range? N	Nearest Occurrence:	399.79 KM	47.21260°N	99.91083°E

<b>LOE Rating:</b>	<b>Likely</b>	<b>Total:</b>	<b>10</b>
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Family: Capniidae					
Isocapnia kudia	Within Known Range? N	Nearest Occurrence:	841.37 KM	51.25356°N	99.66687°E
Mesocapnia variabilis	Within Known Range? N	Nearest Occurrence:	399.79 KM	47.21260°N	99.91083°E
Family: Chloroperlidae					
Alloperla joosti	Within Known Range? N	Nearest Occurrence:	429.85 KM	47.11192°N	101.01048°E
Family: Nemouridae					
Nemoura cinerea	Within Known Range? N	Nearest Occurrence:	460.84 KM	47.48567°N	100.87875°E
Family: Perlidae					
Agnetina brevipennis	Within Known Range? N	Nearest Occurrence:	460.59 KM	46.78742°N	101.96021°E
Agnetina extrema	Within Known Range? N	Nearest Occurrence:	450.77 KM	47.50949°N	100.57510°E
Family: Perlodidae					
Arcynopteryx sajanensis	Within Known Range? N	Nearest Occurrence:	894.97 KM	51.61397°N	100.59972°E
Diura bicaudata	Within Known Range? N	Nearest Occurrence:	400.02 KM	47.21768°N	99.92824°E
Pictetiella asiatica	Within Known Range? N	Nearest Occurrence:	896.91 KM	51.65822°N	100.53000°E
Family: Pteronarcyidae					
Pteronarcys reticulata	Within Known Range? N	Nearest Occurrence:	473.44 KM	47.80440°N	100.31810°E

<b>LOE Rating:</b>	<b>Probable</b>	<b>Total:</b>	<b>6</b>
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Family: Chloroperlidae					
Haploperla lepnevae	Within Known Range? N	Nearest Occurrence:	623.28 KM	49.26170°N	99.88242°E
Suwallia kerzhneri	Within Known Range? N	Nearest Occurrence:	460.84 KM	47.48567°N	100.87875°E
Suwallia teleckojensis	Within Known Range? N	Nearest Occurrence:	411.79 KM	47.29702°N	100.03136°E
Family: Nemouridae					
Amphinemura borealis	Within Known Range? N	Nearest Occurrence:	432.49 KM	47.42580°N	100.30130°E
Family: Perlidae					
Agnetina cocandica	Within Known Range? N	Nearest Occurrence:	666.38 KM	49.62785°N	99.99523°E
Family: Perlodidae					
Skwala pusilla	Within Known Range? N	Nearest Occurrence:	1,301.87 KM	48.51277°N	88.51107°E



**Basin:** Internal Drainage Basin  
**Aimags:** Bayankhongor  
**Soums:** Shinejinst

Freshwater Ecoregion: Dzungaria  
 Terrestrial Ecoregion: Alashan Plateau Semi-Desert

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Possible Total: 5**

Family: Chloroperlidae					
Alaskaperla longidentata	Within Known Range? N	Nearest Occurrence:	411.06 KM	47.29702 °N	100.03136 °E
Family: Perlodidae					
Diura majuscula	Within Known Range? N	Nearest Occurrence:	430.62 KM	47.11192 °N	101.01048 °E
Isoperla asiatica	Within Known Range? N	Nearest Occurrence:	473.44 KM	47.80440 °N	100.31810 °E
Isoperla kozlovi	Within Known Range? N	Nearest Occurrence:	455.87 KM	47.28244 °N	101.18793 °E
Isoperla potanini	Within Known Range? N	Nearest Occurrence:	433.26 KM	47.42580 °N	100.30130 °E

**LOE Rating: Predicted Total: 15**

Family: Capniidae					
Capnia nigra	Within Known Range? N	Nearest Occurrence:	518.99 KM	48.06257 °N	97.55064 °E
Family: Chloroperlidae					
Alloperla deminuta	Within Known Range? N	Nearest Occurrence:	429.85 KM	47.11192 °N	101.01048 °E
Alloperla mediata	Within Known Range? N	Nearest Occurrence:	769.31 KM	50.61826 °N	99.12094 °E
Family: Nemouridae					
Amphinemura standfussi	Within Known Range? N	Nearest Occurrence:	518.71 KM	48.05989 °N	97.55073 °E
Nemoura arctica	Within Known Range? N	Nearest Occurrence:	492.24 KM	47.26999 °N	101.80227 °E
Nemoura sahlbergi	Within Known Range? N	Nearest Occurrence:	432.49 KM	47.42580 °N	100.30130 °E
Family: Perlidae					
Paragnetina flavotincta	Within Known Range? N	Nearest Occurrence:	623.28 KM	49.26170 °N	99.88242 °E
Family: Perlodidae					
Arcynopteryx compacta	Within Known Range? N	Nearest Occurrence:	430.62 KM	47.11192 °N	101.01048 °E
Isoperla altaica	Within Known Range? N	Nearest Occurrence:	430.62 KM	47.11192 °N	101.01048 °E
Isoperla lunigera	Within Known Range? N	Nearest Occurrence:	655.30 KM	49.45317 °N	100.47234 °E
Isoperla mongolica	Within Known Range? N	Nearest Occurrence:	430.62 KM	47.11192 °N	101.01048 °E
Isoperla obscura	Within Known Range? N	Nearest Occurrence:	743.18 KM	49.38617 °N	102.71667 °E
Kaszabia nigricauda	Within Known Range? N	Nearest Occurrence:	460.84 KM	47.48567 °N	100.87875 °E
Megarcys ochracea	Within Known Range? N	Nearest Occurrence:	834.42 KM	49.77776 °N	103.60860 °E
Family: Taeniopterygidae					
Taenionema japonicum	Within Known Range? N	Nearest Occurrence:	430.62 KM	47.11192 °N	101.01048 °E

**LOE Rating: Unlikely Total: 6**

Family: Capniidae					
Capnia khulsbagia	Within Known Range? N	Nearest Occurrence:	827.80 KM	50.98944 °N	100.71944 °E
Mesocapnia altaica	Within Known Range? N	Nearest Occurrence:	1,259.00 KM	48.43684 °N	88.90094 °E
Family: Leuctridae					
Leuctra fusca	Within Known Range? N	Nearest Occurrence:	1,079.40 KM	49.08643 °N	107.28952 °E
Paraleuctra zapekinae	Within Known Range? N	Nearest Occurrence:	901.25 KM	49.71481 °N	104.64203 °E
Family: Nemouridae					
Nemurella pictetii	Within Known Range? N	Nearest Occurrence:	790.98 KM	50.81265 °N	99.33803 °E
Family: Perlodidae					
Isoperla eximia	Within Known Range? N	Nearest Occurrence:	1,098.97 KM	49.01829 °N	107.54453 °E

**Basin:** Internal Drainage Basin  
**Aimags:** Bayankhongor  
**Soums:** Zag

**Freshwater Ecoregion:** Western Mongolia  
**Terrestrial Ecoregion:** Gobi Lakes Valley Desert Steppe

**WQM Sites:**

WQM Sites: # 85 (Zag River @ N 46.95212° E 99.1582°)

**LOE Rating: Highly Likely Total: 7**

Family: Capniidae					
Isocapnia guentheri	Within Known Range? N	Nearest Occurrence:	200.29 KM	47.48567°N	100.87875°E
Isocapnia sibirica	Within Known Range? N	Nearest Occurrence:	227.68 KM	47.28244°N	101.18793°E
Mesocapnia variabilis	Within Known Range? Y	Nearest Occurrence:	89.24 KM	47.21260°N	99.91083°E
Family: Chloroperlidae					
Alloperla rostellata	Within Known Range? N	Nearest Occurrence:	165.29 KM	48.36436°N	98.92737°E
Family: Nemouridae					
Nemoura cinerea	Within Known Range? N	Nearest Occurrence:	200.29 KM	47.48567°N	100.87875°E
Family: Perlidae					
Kamimuria exilis	Within Known Range? N	Nearest Occurrence:	365.16 KM	50.16278°N	98.84212°E
Family: Perlodidae					
Arcynopteryx polaris	Within Known Range? Y	Nearest Occurrence:	89.24 KM	47.21260°N	99.91083°E

**LOE Rating: Likely Total: 7**

Family: Capniidae					
Isocapnia kudia	Within Known Range? N	Nearest Occurrence:	486.80 KM	51.25356°N	99.66687°E
Family: Chloroperlidae					
Alloperla joosti	Within Known Range? N	Nearest Occurrence:	138.32 KM	47.42580°N	100.30130°E
Suwallia kerzhneri	Within Known Range? N	Nearest Occurrence:	200.29 KM	47.48567°N	100.87875°E
Suwallia teleckojensis	Within Known Range? Y	Nearest Occurrence:	105.31 KM	47.29702°N	100.03136°E
Family: Perlodidae					
Arcynopteryx sajanensis	Within Known Range? N	Nearest Occurrence:	548.11 KM	51.61397°N	100.59972°E
Diura bicaudata	Within Known Range? Y	Nearest Occurrence:	91.08 KM	47.21768°N	99.92824°E
Pictetiella asiatica	Within Known Range? N	Nearest Occurrence:	549.66 KM	51.65822°N	100.53000°E

**LOE Rating: Probable Total: 8**

Family: Capniidae					
Capnia nigra	Within Known Range? N	Nearest Occurrence:	221.86 KM	48.06257°N	97.55064°E
Family: Chloroperlidae					
Haploperla lepnevae	Within Known Range? N	Nearest Occurrence:	274.15 KM	49.26170°N	99.88242°E
Family: Nemouridae					
Amphinemura borealis	Within Known Range? Y	Nearest Occurrence:	138.32 KM	47.42580°N	100.30130°E
Family: Perlidae					
Agnetina brevipennis	Within Known Range? Y	Nearest Occurrence:	161.02 KM	48.12661°N	99.94128°E
Agnetina extrema	Within Known Range? N	Nearest Occurrence:	169.84 KM	47.50949°N	100.57510°E
Family: Perlodidae					
Diura majuscula	Within Known Range? Y	Nearest Occurrence:	138.57 KM	47.42580°N	100.30130°E
Isoperla potanini	Within Known Range? Y	Nearest Occurrence:	138.57 KM	47.42580°N	100.30130°E
Family: Pteronarcyidae					
Pteronarcys reticulata	Within Known Range? N	Nearest Occurrence:	162.22 KM	47.80440°N	100.31810°E

**Basin:** Internal Drainage Basin  
**Aimag:** Bayankhongor  
**Soum:** Zag

**WQM Sites:**

WQM Sites: # 85 (Zag River @ N 46.95212° E 99.1582°)

Freshwater Ecoregion: Western Mongolia  
 Terrestrial Ecoregion: Gobi Lakes Valley Desert Steppe

**LOE Rating: Possible Total: 8**

Family: Chloroperlidae						
Alaskaperla longidentata	Within Known Range? Y	Nearest Occurrence:	105.12 KM	47.29702 °N	100.03136 °E	
Family: Nemouridae						
Amphinemura standfussi	Within Known Range? N	Nearest Occurrence:	216.06 KM	48.34410 °N	97.87312 °E	
Family: Perlidae						
Agnetina cocandica	Within Known Range? Y	Nearest Occurrence:	317.25 KM	49.62785 °N	99.99523 °E	
Family: Perlodidae						
Isoperla asiatica	Within Known Range? N	Nearest Occurrence:	162.22 KM	47.80440 °N	100.31810 °E	
Isoperla kozlovi	Within Known Range? N	Nearest Occurrence:	162.22 KM	47.80440 °N	100.31810 °E	
Kaszabia nigricauda	Within Known Range? N	Nearest Occurrence:	162.22 KM	47.80440 °N	100.31810 °E	
Skwala pusilla	Within Known Range? N	Nearest Occurrence:	1,197.06 KM	48.51277 °N	88.51107 °E	
Family: Taeniopterygidae						
Taenionema japonicum	Within Known Range? Y	Nearest Occurrence:	205.68 KM	47.11192 °N	101.01048 °E	

**LOE Rating: Predicted Total: 13**

Family: Chloroperlidae						
Alloperla deminuta	Within Known Range? N	Nearest Occurrence:	162.22 KM	47.80440 °N	100.31810 °E	
Alloperla mediata	Within Known Range? N	Nearest Occurrence:	413.24 KM	50.61826 °N	99.12094 °E	
Family: Leuctridae						
Paraleuctra zapekinae	Within Known Range? N	Nearest Occurrence:	682.91 KM	49.71481 °N	104.64203 °E	
Family: Nemouridae						
Nemoura arctica	Within Known Range? Y	Nearest Occurrence:	295.27 KM	47.26999 °N	101.80227 °E	
Nemoura sahlbergi	Within Known Range? N	Nearest Occurrence:	138.32 KM	47.42580 °N	100.30130 °E	
Nemurella pictetii	Within Known Range? N	Nearest Occurrence:	435.16 KM	50.81265 °N	99.33803 °E	
Family: Perlidae						
Paragnetina flavotincta	Within Known Range? N	Nearest Occurrence:	274.15 KM	49.26170 °N	99.88242 °E	
Family: Perlodidae						
Arcynopteryx compacta	Within Known Range? Y	Nearest Occurrence:	205.68 KM	47.11192 °N	101.01048 °E	
Isoperla altaica	Within Known Range? Y	Nearest Occurrence:	205.68 KM	47.11192 °N	101.01048 °E	
Isoperla lunigera	Within Known Range? N	Nearest Occurrence:	316.68 KM	49.62785 °N	99.99523 °E	
Isoperla mongolica	Within Known Range? Y	Nearest Occurrence:	205.68 KM	47.11192 °N	101.01048 °E	
Isoperla obscura	Within Known Range? N	Nearest Occurrence:	480.72 KM	49.38617 °N	102.71667 °E	
Megarcys ochracea	Within Known Range? N	Nearest Occurrence:	501.26 KM	51.40978 °N	99.30136 °E	

**LOE Rating: Unlikely Total: 4**

Family: Capniidae						
Capnia khulsbagia	Within Known Range? N	Nearest Occurrence:	485.72 KM	50.98944 °N	100.71944 °E	
Mesocapnia altaica	Within Known Range? N	Nearest Occurrence:	1,153.01 KM	48.43684 °N	88.90094 °E	
Family: Leuctridae						
Leuctra fusca	Within Known Range? N	Nearest Occurrence:	933.12 KM	49.08643 °N	107.28952 °E	
Family: Perlodidae						
Isoperla eximia	Within Known Range? N	Nearest Occurrence:	958.59 KM	49.01829 °N	107.54453 °E	

**Basin:** Internal Drainage Basin  
**Aimags:** Bayan-olgi  
**Soums:** Altai

**Freshwater Ecoregion:** Western Mongolia  
**Terrestrial Ecoregion:** Altai Alpine Meadow And Tundra

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Highly Likely Total: 2**

Family: Chloroperlidae					
Suwallia teleckojensis	Within Known Range? Y	Nearest Occurrence:	38.45 KM	48.34520°N	89.32622 °E
Family: Perlodidae					
Isoperla potanini	Within Known Range? Y	Nearest Occurrence:	6.82 KM	48.24164°N	89.60086 °E

**LOE Rating: Likely Total: 15**

Family: Capniidae					
Isocapnia guentheri	Within Known Range? N	Nearest Occurrence:	955.22 KM	48.61518°N	98.23096 °E
Isocapnia kudia	Within Known Range? N	Nearest Occurrence:	1,164.17 KM	51.25356°N	99.66687 °E
Isocapnia sibirica	Within Known Range? N	Nearest Occurrence:	1,286.25 KM	47.28244°N	101.18793 °E
Family: Nemouridae					
Amphinemura borealis	Within Known Range? Y	Nearest Occurrence:	73.21 KM	48.84329°N	89.53623 °E
Nemoura arctica	Within Known Range? Y	Nearest Occurrence:	130.06 KM	48.50631°N	88.50947 °E
Family: Perlidae					
Kamimuria exilis	Within Known Range? N	Nearest Occurrence:	1,046.95 KM	50.16278°N	98.84212 °E
Family: Perlodidae					
Arcynopteryx compacta	Within Known Range? Y	Nearest Occurrence:	57.80 KM	48.64815°N	89.88378 °E
Arcynopteryx polaris	Within Known Range? Y	Nearest Occurrence:	86.16 KM	48.43684°N	88.90094 °E
Diura bicaudata	Within Known Range? Y	Nearest Occurrence:	97.48 KM	49.04180°N	89.41675 °E
Diura majuscula	Within Known Range? Y	Nearest Occurrence:	86.61 KM	48.83461°N	89.19677 °E
Isoperla altaica	Within Known Range? Y	Nearest Occurrence:	86.16 KM	48.43684°N	88.90094 °E
Isoperla mongolica	Within Known Range? Y	Nearest Occurrence:	73.34 KM	48.84329°N	89.53623 °E
Isoperla obscura	Within Known Range? Y	Nearest Occurrence:	73.21 KM	48.84329°N	89.53623 °E
Skwala pusilla	Within Known Range? N	Nearest Occurrence:	129.85 KM	48.51277°N	88.51107 °E
Family: Taeniopterygidae					
Taenionema japonicum	Within Known Range? Y	Nearest Occurrence:	108.21 KM	47.85391°N	90.54864 °E

**LOE Rating: Probable Total: 5**

Family: Chloroperlidae					
Haploperla lepnevae	Within Known Range? Y	Nearest Occurrence:	73.21 KM	48.84329°N	89.53623 °E
Family: Nemouridae					
Nemoura cinerea	Within Known Range? N	Nearest Occurrence:	878.66 KM	48.06257°N	97.55064 °E
Family: Perlidae					
Agnetina brevipennis	Within Known Range? Y	Nearest Occurrence:	94.04 KM	48.97819°N	89.94996 °E
Family: Perlodidae					
Arcynopteryx sajanensis	Within Known Range? N	Nearest Occurrence:	1,277.21 KM	51.61397°N	100.59972 °E
Pictetiella asiatica	Within Known Range? N	Nearest Occurrence:	1,269.01 KM	51.65822°N	100.53000 °E



**Basin:** Internal Drainage Basin  
**Aimags:** Bayan-olgi  
**Soums:** Altai

**Freshwater Ecoregion:** Western Mongolia  
**Terrestrial Ecoregion:** Altai Alpine Meadow And Tundra

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Possible Total: 7**

<b>Family: Capniidae</b>			
Capnia nigra	Within Known Range? N	Nearest Occurrence: 197.20 KM	49.09162 °N 88.10423 °E
Mesocapnia altaica	Within Known Range? Y	Nearest Occurrence: 86.00 KM	48.43684 °N 88.90094 °E
Mesocapnia variabilis	Within Known Range? Y	Nearest Occurrence: 130.06 KM	48.50631 °N 88.50947 °E
<b>Family: Chloroperlidae</b>			
Alloperla joosti	Within Known Range? N	Nearest Occurrence: 862.54 KM	48.24995 °N 97.40627 °E
Alloperla rostellata	Within Known Range? N	Nearest Occurrence: 1,031.54 KM	48.36436 °N 98.92737 °E
Suwallia kerzhneri	Within Known Range? N	Nearest Occurrence: 862.54 KM	48.24995 °N 97.40627 °E
<b>Family: Perlidae</b>			
Agnetina cocandica	Within Known Range? Y	Nearest Occurrence: 141.44 KM	49.23285 °N 88.90569 °E

**LOE Rating: Predicted Total: 13**

<b>Family: Chloroperlidae</b>			
Alaskaperla longidentata	Within Known Range? N	Nearest Occurrence: 841.23 KM	48.15779 °N 97.21441 °E
Alloperla deminuta	Within Known Range? N	Nearest Occurrence: 1,104.06 KM	51.47065 °N 99.02617 °E
Alloperla mediata	Within Known Range? N	Nearest Occurrence: 1,086.76 KM	50.61826 °N 99.12094 °E
<b>Family: Nemouridae</b>			
Amphinemura standfussi	Within Known Range? N	Nearest Occurrence: 878.66 KM	48.06257 °N 97.55064 °E
Nemoura sahlbergi	Within Known Range? N	Nearest Occurrence: 1,092.18 KM	50.42996 °N 99.21727 °E
<b>Family: Perlidae</b>			
Agnetina extrema	Within Known Range? N	Nearest Occurrence: 1,216.61 KM	47.50949 °N 100.57510 °E
Paragnetina flavotincta	Within Known Range? N	Nearest Occurrence: 1,143.56 KM	49.26170 °N 99.88242 °E
<b>Family: Perlodidae</b>			
Isoperla asiatica	Within Known Range? N	Nearest Occurrence: 878.66 KM	48.06257 °N 97.55064 °E
Isoperla kozlovi	Within Known Range? N	Nearest Occurrence: 1,100.54 KM	50.31066 °N 99.32150 °E
Isoperla lunigera	Within Known Range? N	Nearest Occurrence: 1,122.39 KM	51.09845 °N 99.32051 °E
Kaszabia nigricauda	Within Known Range? N	Nearest Occurrence: 1,002.49 KM	48.71968 °N 98.65184 °E
Megarcys ochracea	Within Known Range? N	Nearest Occurrence: 1,121.98 KM	51.46205 °N 99.19994 °E
<b>Family: Pteronarcyidae</b>			
Pteronarcys reticulata	Within Known Range? N	Nearest Occurrence: 1,104.06 KM	51.47065 °N 99.02617 °E

**LOE Rating: Unlikely Total: 5**

<b>Family: Capniidae</b>			
Capnia khulsbagia	Within Known Range? N	Nearest Occurrence: 1,268.88 KM	50.98944 °N 100.71944 °E
<b>Family: Leuctridae</b>			
Leuctra fusca	Within Known Range? N	Nearest Occurrence: 1,962.08 KM	49.08643 °N 107.28952 °E
Paraleuctra zapekinae	Within Known Range? N	Nearest Occurrence: 1,674.25 KM	49.71481 °N 104.64203 °E
<b>Family: Nemouridae</b>			
Nemurella pictetii	Within Known Range? N	Nearest Occurrence: 1,115.56 KM	50.81265 °N 99.33803 °E
<b>Family: Perlodidae</b>			
Isoperla eximia	Within Known Range? N	Nearest Occurrence: 1,989.98 KM	49.01829 °N 107.54453 °E

**Basin:** Internal Drainage Basin  
**Aimags:** Bayan-olgi  
**Soums:** Altantsogts

**Freshwater Ecoregion:** Western Mongolia  
**Terrestrial Ecoregion:** Altai Montane Forest And Forest Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Highly Likely Total: 7**

Family: Chloroperlidae						
Suwallia teleckojensis	Within Known Range? Y	Nearest Occurrence:	108.49 KM	48.84329°N	89.53623°E	
Family: Nemouridae						
Nemoura arctica	Within Known Range? Y	Nearest Occurrence:	151.00 KM	47.62355°N	90.67122°E	
Family: Perlodidae						
Arcynopteryx compacta	Within Known Range? Y	Nearest Occurrence:	77.70 KM	48.64815°N	89.88378°E	
Diura bicaudata	Within Known Range? Y	Nearest Occurrence:	120.87 KM	49.04180°N	89.41675°E	
Diura majuscula	Within Known Range? Y	Nearest Occurrence:	146.09 KM	48.83461°N	89.19677°E	
Isoperla potanini	Within Known Range? Y	Nearest Occurrence:	61.55 KM	48.97819°N	89.94996°E	
Skwala pusilla	Within Known Range? N	Nearest Occurrence:	226.92 KM	48.51277°N	88.51107°E	

**LOE Rating: Likely Total: 13**

Family: Capniidae						
Isocapnia guentheri	Within Known Range? N	Nearest Occurrence:	858.67 KM	48.61518°N	98.23096°E	
Isocapnia kudia	Within Known Range? N	Nearest Occurrence:	1,048.23 KM	51.25356°N	99.66687°E	
Isocapnia sibirica	Within Known Range? N	Nearest Occurrence:	1,200.70 KM	47.28244°N	101.18793°E	
Family: Chloroperlidae						
Haploperla lepnevae	Within Known Range? Y	Nearest Occurrence:	61.44 KM	48.97819°N	89.94996°E	
Family: Nemouridae						
Amphinemura borealis	Within Known Range? Y	Nearest Occurrence:	108.29 KM	48.84329°N	89.53623°E	
Family: Perlidae						
Agnetina brevipennis	Within Known Range? Y	Nearest Occurrence:	61.44 KM	48.97819°N	89.94996°E	
Kamimuria exilis	Within Known Range? N	Nearest Occurrence:	936.69 KM	50.16278°N	98.84212°E	
Family: Perlodidae						
Arcynopteryx polaris	Within Known Range? Y	Nearest Occurrence:	187.65 KM	47.34650°N	90.95982°E	
Arcynopteryx sajanensis	Within Known Range? N	Nearest Occurrence:	1,160.54 KM	51.61397°N	100.59972°E	
Isoperla altaica	Within Known Range? Y	Nearest Occurrence:	180.04 KM	49.23285°N	88.90569°E	
Isoperla obscura	Within Known Range? Y	Nearest Occurrence:	61.44 KM	48.97819°N	89.94996°E	
Pictetiella asiatica	Within Known Range? N	Nearest Occurrence:	1,152.23 KM	51.65822°N	100.53000°E	
Family: Taeniopterygidae						
Taenionema japonicum	Within Known Range? Y	Nearest Occurrence:	124.33 KM	47.85391°N	90.54864°E	

**LOE Rating: Probable Total: 3**

Family: Nemouridae						
Nemoura cinerea	Within Known Range? N	Nearest Occurrence:	788.72 KM	48.06257°N	97.55064°E	
Family: Perlidae						
Agnetina cocandica	Within Known Range? Y	Nearest Occurrence:	175.13 KM	48.24533°N	91.90115°E	
Family: Perlodidae						
Isoperla mongolica	Within Known Range? Y	Nearest Occurrence:	108.49 KM	48.84329°N	89.53623°E	



**Basin:** Internal Drainage Basin  
**Aimags:** Bayan-olgi  
**Soums:** Altantsogts

**Freshwater Ecoregion:** Western Mongolia  
**Terrestrial Ecoregion:** Altai Montane Forest And Forest Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Possible Total: 7**

<b>Family: Capniidae</b>					
Capnia nigra	Within Known Range?	Y	Nearest Occurrence:	266.64 KM	49.09162°N 88.10423°E
Mesocapnia altaica	Within Known Range?	N	Nearest Occurrence:	187.50 KM	48.43684°N 88.90094°E
<b>Family: Chloroperlidae</b>					
Alloperla joosti	Within Known Range?	N	Nearest Occurrence:	770.39 KM	48.24995°N 97.40627°E
Alloperla rostellata	Within Known Range?	N	Nearest Occurrence:	937.48 KM	48.36436°N 98.92737°E
Suwallia kerzhneri	Within Known Range?	N	Nearest Occurrence:	770.39 KM	48.24995°N 97.40627°E
<b>Family: Perlidae</b>					
Agnentina extrema	Within Known Range?	N	Nearest Occurrence:	1,129.67 KM	47.50949°N 100.57510°E
<b>Family: Pteronarcyidae</b>					
Pteronarcys reticulata	Within Known Range?	N	Nearest Occurrence:	985.88 KM	51.47065°N 99.02617°E

**LOE Rating: Predicted Total: 12**

<b>Family: Capniidae</b>					
Mesocapnia variabilis	Within Known Range?	Y	Nearest Occurrence:	227.67 KM	48.50631°N 88.50947°E
<b>Family: Chloroperlidae</b>					
Alaskaperla longidentata	Within Known Range?	N	Nearest Occurrence:	750.37 KM	48.15779°N 97.21441°E
Alloperla deminuta	Within Known Range?	N	Nearest Occurrence:	985.88 KM	51.47065°N 99.02617°E
Alloperla mediata	Within Known Range?	N	Nearest Occurrence:	973.87 KM	50.61826°N 99.12094°E
<b>Family: Nemouridae</b>					
Amphinemura standfussi	Within Known Range?	N	Nearest Occurrence:	788.72 KM	48.06257°N 97.55064°E
Nemoura sahlbergi	Within Known Range?	N	Nearest Occurrence:	980.70 KM	50.42996°N 99.21727°E
<b>Family: Perlidae</b>					
Paragnetina flavotincta	Within Known Range?	N	Nearest Occurrence:	1,041.57 KM	49.26170°N 99.88242°E
<b>Family: Perlodidae</b>					
Isoperla asiatica	Within Known Range?	N	Nearest Occurrence:	788.72 KM	48.06257°N 97.55064°E
Isoperla kozlovi	Within Known Range?	N	Nearest Occurrence:	990.04 KM	50.31066°N 99.32150°E
Isoperla lunigera	Within Known Range?	N	Nearest Occurrence:	1,006.79 KM	51.09845°N 99.32051°E
Kaszabia nigricauda	Within Known Range?	N	Nearest Occurrence:	904.91 KM	48.71968°N 98.65184°E
Megarcys ochracea	Within Known Range?	N	Nearest Occurrence:	1,004.14 KM	51.46205°N 99.19994°E

**LOE Rating: Unlikely Total: 5**

<b>Family: Capniidae</b>					
Capnia khulsbagia	Within Known Range?	N	Nearest Occurrence:	1,155.90 KM	50.98944°N 100.71944°E
<b>Family: Leuctridae</b>					
Leuctra fusca	Within Known Range?	N	Nearest Occurrence:	1,863.30 KM	49.08643°N 107.28952°E
Paraleuctra zapekinae	Within Known Range?	N	Nearest Occurrence:	1,571.56 KM	49.71481°N 104.64203°E
<b>Family: Nemouridae</b>					
Nemurella pictetii	Within Known Range?	N	Nearest Occurrence:	1,001.72 KM	50.81265°N 99.33803°E
<b>Family: Perlodidae</b>					
Isoperla eximia	Within Known Range?	N	Nearest Occurrence:	1,891.57 KM	49.01829°N 107.54453°E



**Basin:** Internal Drainage Basin  
**Aimags:** Bayan-olgi  
**Soums:** Bayannuur

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**Freshwater Ecoregion:** Western Mongolia  
**Terrestrial Ecoregion:** Altai Montane Forest And Forest Steppe

**LOE Rating: Highly Likely Total: 7**

Family: Chloroperlidae						
Suwallia teleckojensis	Within Known Range? Y	Nearest Occurrence:	124.49 KM	47.85391 °N	90.54864 °E	
Family: Nemouridae						
Nemoura arctica	Within Known Range? Y	Nearest Occurrence:	145.66 KM	47.62355 °N	90.67122 °E	
Family: Perlodidae						
Arcynopteryx compacta	Within Known Range? Y	Nearest Occurrence:	54.49 KM	48.42161 °N	90.97337 °E	
Diura bicaudata	Within Known Range? Y	Nearest Occurrence:	167.84 KM	49.04180 °N	89.41675 °E	
Diura majuscula	Within Known Range? Y	Nearest Occurrence:	140.38 KM	47.66326 °N	90.71830 °E	
Isoperla potanini	Within Known Range? Y	Nearest Occurrence:	54.49 KM	48.42161 °N	90.97337 °E	
Skwala pusilla	Within Known Range? N	Nearest Occurrence:	271.31 KM	48.51277 °N	88.51107 °E	

**LOE Rating: Likely Total: 13**

Family: Capniidae						
Isocapnia guentheri	Within Known Range? N	Nearest Occurrence:	811.85 KM	48.61518 °N	98.23096 °E	
Isocapnia kudia	Within Known Range? N	Nearest Occurrence:	1,004.86 KM	51.25356 °N	99.66687 °E	
Isocapnia sibirica	Within Known Range? N	Nearest Occurrence:	1,153.63 KM	47.28244 °N	101.18793 °E	
Family: Chloroperlidae						
Haploperla lepnevae	Within Known Range? Y	Nearest Occurrence:	108.27 KM	48.97819 °N	89.94996 °E	
Family: Nemouridae						
Amphinemura borealis	Within Known Range? Y	Nearest Occurrence:	154.10 KM	48.84329 °N	89.53623 °E	
Family: Perlidae						
Agnetina brevipennis	Within Known Range? Y	Nearest Occurrence:	108.27 KM	48.97819 °N	89.94996 °E	
Kamimuria exilis	Within Known Range? N	Nearest Occurrence:	891.58 KM	50.16278 °N	98.84212 °E	
Family: Perlodidae						
Arcynopteryx polaris	Within Known Range? Y	Nearest Occurrence:	173.80 KM	47.34650 °N	90.95982 °E	
Arcynopteryx sajanensis	Within Known Range? N	Nearest Occurrence:	1,117.31 KM	51.61397 °N	100.59972 °E	
Isoperla altaica	Within Known Range? Y	Nearest Occurrence:	203.47 KM	47.33906 °N	91.86288 °E	
Isoperla obscura	Within Known Range? Y	Nearest Occurrence:	108.27 KM	48.97819 °N	89.94996 °E	
Pictetiella asiatica	Within Known Range? N	Nearest Occurrence:	1,109.19 KM	51.65822 °N	100.53000 °E	
Family: Taeniopterygidae						
Taenionema japonicum	Within Known Range? Y	Nearest Occurrence:	124.49 KM	47.85391 °N	90.54864 °E	

**LOE Rating: Probable Total: 3**

Family: Nemouridae						
Nemoura cinerea	Within Known Range? N	Nearest Occurrence:	741.65 KM	48.06257 °N	97.55064 °E	
Family: Perlidae						
Agnetina cocandica	Within Known Range? Y	Nearest Occurrence:	131.45 KM	48.24533 °N	91.90115 °E	
Family: Perlodidae						
Isoperla mongolica	Within Known Range? Y	Nearest Occurrence:	154.38 KM	48.84329 °N	89.53623 °E	



**Basin:** Internal Drainage Basin  
**Aimags:** Bayan-olgi  
**Soum:** Bayannuur

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**Freshwater Ecoregion:** Western Mongolia  
**Terrestrial Ecoregion:** Altai Montane Forest And Forest Steppe

**LOE Rating: Possible Total: 7**

<b>Family: Capniidae</b>					
Capnia nigra	Within Known Range?	Y	Nearest Occurrence:	313.53 KM	49.09162°N 88.10423°E
Mesocapnia altaica	Within Known Range?	N	Nearest Occurrence:	230.48 KM	48.43684°N 88.90094°E
<b>Family: Chloroperlidae</b>					
Alloperla joosti	Within Known Range?	N	Nearest Occurrence:	723.36 KM	48.24995°N 97.40627°E
Alloperla rostellata	Within Known Range?	N	Nearest Occurrence:	890.55 KM	48.36436°N 98.92737°E
Suwallia kerzhneri	Within Known Range?	N	Nearest Occurrence:	723.36 KM	48.24995°N 97.40627°E
<b>Family: Perlidae</b>					
Agnentina extrema	Within Known Range?	N	Nearest Occurrence:	1,082.59 KM	47.50949°N 100.57510°E
<b>Family: Pteronarcyidae</b>					
Pteronarcys reticulata	Within Known Range?	N	Nearest Occurrence:	943.33 KM	51.47065°N 99.02617°E

**LOE Rating: Predicted Total: 11**

<b>Family: Capniidae</b>					
Mesocapnia variabilis	Within Known Range?	Y	Nearest Occurrence:	272.09 KM	48.50631°N 88.50947°E
<b>Family: Chloroperlidae</b>					
Alaskaperla longidentata	Within Known Range?	N	Nearest Occurrence:	703.31 KM	48.15779°N 97.21441°E
Alloperla deminuta	Within Known Range?	N	Nearest Occurrence:	943.33 KM	51.47065°N 99.02617°E
Alloperla mediata	Within Known Range?	N	Nearest Occurrence:	929.55 KM	50.61826°N 99.12094°E
<b>Family: Nemouridae</b>					
Amphinemura standfussi	Within Known Range?	N	Nearest Occurrence:	741.65 KM	48.06257°N 97.55064°E
Nemoura sahlbergi	Within Known Range?	N	Nearest Occurrence:	936.02 KM	50.42996°N 99.21727°E
<b>Family: Perlodidae</b>					
Isoperla asiatica	Within Known Range?	N	Nearest Occurrence:	741.65 KM	48.06257°N 97.55064°E
Isoperla kozlovi	Within Known Range?	N	Nearest Occurrence:	945.13 KM	50.31066°N 99.32150°E
Isoperla lunigera	Within Known Range?	N	Nearest Occurrence:	963.29 KM	51.09845°N 99.32051°E
Kaszabia nigricauda	Within Known Range?	N	Nearest Occurrence:	858.16 KM	48.71968°N 98.65184°E
Megarcys ochracea	Within Known Range?	N	Nearest Occurrence:	961.46 KM	51.46205°N 99.19994°E

**LOE Rating: Unlikely Total: 6**

<b>Family: Capniidae</b>					
Capnia khulsbagia	Within Known Range?	N	Nearest Occurrence:	1,111.66 KM	50.98944°N 100.71944°E
<b>Family: Leuctridae</b>					
Leuctra fusca	Within Known Range?	N	Nearest Occurrence:	1,816.80 KM	49.08643°N 107.28952°E
Paraleuctra zapekinae	Within Known Range?	N	Nearest Occurrence:	1,525.44 KM	49.71481°N 104.64203°E
<b>Family: Nemouridae</b>					
Nemurella pictetii	Within Known Range?	N	Nearest Occurrence:	957.68 KM	50.81265°N 99.33803°E
<b>Family: Perlidae</b>					
Paragnetina flavotincta	Within Known Range?	N	Nearest Occurrence:	995.27 KM	49.26170°N 99.88242°E
<b>Family: Perlodidae</b>					
Isoperla eximia	Within Known Range?	N	Nearest Occurrence:	1,845.04 KM	49.01829°N 107.54453°E

**Basin:** Internal Drainage Basin  
**Aimag:** Bayan-olgi  
**Soum:** Bugat

**Freshwater Ecoregion:** Western Mongolia  
**Terrestrial Ecoregion:** Altai Montane Forest And Forest Steppe

**WQM Sites:**

WQM Sites: # 103 (Hovd River @ N 48.97513° E 89.94737°)

<b>LOE Rating:</b>	<b>Highly Likely</b>	<b>Total:</b>	<b>2</b>
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**Family:** Perlodidae

Isoperla obscura      **Within Known Range?** Y      **Nearest Occurrence:** 5.70 KM      48.97819°N      89.94996 °E

Isoperla potanini      **Within Known Range?** Y      **Nearest Occurrence:** 5.72 KM      48.97819°N      89.94996 °E

<b>LOE Rating:</b>	<b>Likely</b>	<b>Total:</b>	<b>14</b>
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**Family:** Capniidae

Isocapnia guentheri      **Within Known Range?** N      **Nearest Occurrence:** 915.87 KM      48.61518°N      98.23096 °E

**Family:** Chloroperlidae

Haploperla lepnevae      **Within Known Range?** Y      **Nearest Occurrence:** 5.70 KM      48.97819°N      89.94996 °E

Suwallia teleckojensis      **Within Known Range?** Y      **Nearest Occurrence:** 53.74 KM      48.84329°N      89.53623 °E

**Family:** Nemouridae

Amphinemura borealis      **Within Known Range?** Y      **Nearest Occurrence:** 53.64 KM      48.84329°N      89.53623 °E

Nemoura arctica      **Within Known Range?** Y      **Nearest Occurrence:** 150.91 KM      49.38138°N      88.68390 °E

**Family:** Perlidae

Agnetina brevipennis      **Within Known Range?** Y      **Nearest Occurrence:** 5.70 KM      48.97819°N      89.94996 °E

Kamimuria exilis      **Within Known Range?** N      **Nearest Occurrence:** 992.71 KM      50.16278°N      98.84212 °E

**Family:** Perlodidae

Arcynopteryx compacta      **Within Known Range?** Y      **Nearest Occurrence:** 42.03 KM      48.64815°N      89.88378 °E

Arcynopteryx polaris      **Within Known Range?** Y      **Nearest Occurrence:** 136.86 KM      48.43684°N      88.90094 °E

Diura bicaudata      **Within Known Range?** Y      **Nearest Occurrence:** 63.66 KM      49.04180°N      89.41675 °E

Diura majuscula      **Within Known Range?** Y      **Nearest Occurrence:** 90.31 KM      48.83461°N      89.19677 °E

Isoperla altaica      **Within Known Range?** Y      **Nearest Occurrence:** 123.02 KM      49.23285°N      88.90569 °E

Skwala pusilla      **Within Known Range?** N      **Nearest Occurrence:** 173.17 KM      48.51277°N      88.51107 °E

**Family:** Taeniopterygidae

Taenionema japonicum      **Within Known Range?** Y      **Nearest Occurrence:** 123.02 KM      49.23285°N      88.90569 °E

<b>LOE Rating:</b>	<b>Probable</b>	<b>Total:</b>	<b>6</b>
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**Family:** Capniidae

Isocapnia kudia      **Within Known Range?** N      **Nearest Occurrence:** 1,102.66 KM      51.25356°N      99.66687 °E

Isocapnia sibirica      **Within Known Range?** N      **Nearest Occurrence:** 1,257.76 KM      47.28244°N      101.18793 °E

**Family:** Nemouridae

Nemoura cinerea      **Within Known Range?** N      **Nearest Occurrence:** 845.87 KM      48.06257°N      97.55064 °E

**Family:** Perlodidae

Arcynopteryx sajanensis      **Within Known Range?** N      **Nearest Occurrence:** 1,214.84 KM      51.61397°N      100.59972 °E

Isoperla mongolica      **Within Known Range?** Y      **Nearest Occurrence:** 53.74 KM      48.84329°N      89.53623 °E

Pictetiella asiatica      **Within Known Range?** N      **Nearest Occurrence:** 1,206.34 KM      51.65822°N      100.53000 °E



**Basin:** Internal Drainage Basin  
**Aimags:** Bayan-olgi  
**Soum:** Bugat

**WQM Sites:**

WQM Sites: # 103 (Hovd River @ N 48.97513° E 89.94737°)

**Freshwater Ecoregion:** Western Mongolia  
**Terrestrial Ecoregion:** Altai Montane Forest And Forest Steppe

**LOE Rating: Possible Total: 7**

<b>Family: Capniidae</b>					
Capnia nigra	Within Known Range?	Y	Nearest Occurrence:	209.45 KM	49.09162°N 88.10423°E
Mesocapnia altaica	Within Known Range?	N	Nearest Occurrence:	136.60 KM	48.43684°N 88.90094°E
Mesocapnia variabilis	Within Known Range?	Y	Nearest Occurrence:	173.89 KM	48.50631°N 88.50947°E
<b>Family: Chloroperlidae</b>					
Alloperla joosti	Within Known Range?	N	Nearest Occurrence:	827.59 KM	48.24995°N 97.40627°E
Alloperla rostellata	Within Known Range?	N	Nearest Occurrence:	994.71 KM	48.36436°N 98.92737°E
Suwallia kerzhneri	Within Known Range?	N	Nearest Occurrence:	827.59 KM	48.24995°N 97.40627°E
<b>Family: Perlidae</b>					
Agnatina cocandica	Within Known Range?	Y	Nearest Occurrence:	123.02 KM	49.23285°N 88.90569°E

**LOE Rating: Predicted Total: 12**

<b>Family: Chloroperlidae</b>					
Alaskaperla longidentata	Within Known Range?	N	Nearest Occurrence:	807.55 KM	48.15779°N 97.21441°E
Alloperla deminuta	Within Known Range?	N	Nearest Occurrence:	1,039.57 KM	51.47065°N 99.02617°E
Alloperla mediata	Within Known Range?	N	Nearest Occurrence:	1,029.18 KM	50.61826°N 99.12094°E
<b>Family: Nemouridae</b>					
Amphinemura standfussi	Within Known Range?	N	Nearest Occurrence:	845.87 KM	48.06257°N 97.55064°E
Nemoura sahlbergi	Within Known Range?	N	Nearest Occurrence:	1,036.33 KM	50.42996°N 99.21727°E
<b>Family: Perlidae</b>					
Agnatina extrema	Within Known Range?	N	Nearest Occurrence:	1,186.77 KM	47.50949°N 100.57510°E
<b>Family: Perlodidae</b>					
Isoperla asiatica	Within Known Range?	N	Nearest Occurrence:	845.87 KM	48.06257°N 97.55064°E
Isoperla kozlovi	Within Known Range?	N	Nearest Occurrence:	1,045.86 KM	50.31066°N 99.32150°E
Isoperla lunigera	Within Known Range?	N	Nearest Occurrence:	1,061.35 KM	51.09845°N 99.32051°E
Kaszabia nigricauda	Within Known Range?	N	Nearest Occurrence:	962.07 KM	48.71968°N 98.65184°E
Megarcys ochracea	Within Known Range?	N	Nearest Occurrence:	1,057.95 KM	51.46205°N 99.19994°E
<b>Family: Pteronarcyidae</b>					
Pteronarcys reticulata	Within Known Range?	N	Nearest Occurrence:	1,039.57 KM	51.47065°N 99.02617°E

**LOE Rating: Unlikely Total: 6**

<b>Family: Capniidae</b>					
Capnia khulsbagia	Within Known Range?	N	Nearest Occurrence:	1,211.11 KM	50.98944°N 100.71944°E
<b>Family: Leuctridae</b>					
Leuctra fusca	Within Known Range?	N	Nearest Occurrence:	1,920.33 KM	49.08643°N 107.28952°E
Paraleuctra zapekinae	Within Known Range?	N	Nearest Occurrence:	1,628.31 KM	49.71481°N 104.64203°E
<b>Family: Nemouridae</b>					
Nemurella pictetii	Within Known Range?	N	Nearest Occurrence:	1,056.79 KM	50.81265°N 99.33803°E
<b>Family: Perlidae</b>					
Paragnetina flavotincta	Within Known Range?	N	Nearest Occurrence:	1,098.48 KM	49.26170°N 99.88242°E
<b>Family: Perlodidae</b>					
Isoperla eximia	Within Known Range?	N	Nearest Occurrence:	1,948.62 KM	49.01829°N 107.54453°E

**Basin:** Internal Drainage Basin  
**Aimags:** Bayan-olgi  
**Soums:** Bulgan

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

Freshwater Ecoregion: Upper Irtysh  
 Terrestrial Ecoregion: Altai Montane Forest And Forest Steppe

**LOE Rating: Highly Likely Total: 5**

Family: Chloroperlidae						
Suwallia teleckojensis	Within Known Range? Y	Nearest Occurrence:	15.23 KM	47.03925 °N	91.03419 °E	
Family: Nemouridae						
Nemoura arctica	Within Known Range? Y	Nearest Occurrence:	32.15 KM	46.77095 °N	91.31664 °E	
Family: Perlodidae						
Arcynopteryx compacta	Within Known Range? Y	Nearest Occurrence:	15.23 KM	47.03925 °N	91.03419 °E	
Diura majuscula	Within Known Range? Y	Nearest Occurrence:	15.23 KM	47.03925 °N	91.03419 °E	
Isoperla potanini	Within Known Range? Y	Nearest Occurrence:	15.23 KM	47.03925 °N	91.03419 °E	

**LOE Rating: Likely Total: 9**

Family: Capniidae						
Isocapnia guentheri	Within Known Range? N	Nearest Occurrence:	803.54 KM	48.61518 °N	98.23096 °E	
Family: Nemouridae						
Amphinemura borealis	Within Known Range? Y	Nearest Occurrence:	15.21 KM	47.03925 °N	91.03419 °E	
Family: Perlidae						
Agnetina brevipennis	Within Known Range? Y	Nearest Occurrence:	30.46 KM	46.77977 °N	91.30252 °E	
Family: Perlodidae						
Arcynopteryx polaris	Within Known Range? Y	Nearest Occurrence:	27.56 KM	47.11520 °N	90.94098 °E	
Diura bicaudata	Within Known Range? N	Nearest Occurrence:	297.04 KM	49.04180 °N	89.41675 °E	
Isoperla altaica	Within Known Range? Y	Nearest Occurrence:	32.15 KM	46.77095 °N	91.31664 °E	
Isoperla mongolica	Within Known Range? Y	Nearest Occurrence:	15.23 KM	47.03925 °N	91.03419 °E	
Skwala pusilla	Within Known Range? N	Nearest Occurrence:	338.46 KM	48.51277 °N	88.51107 °E	
Family: Taeniopterygidae						
Taenionema japonicum	Within Known Range? Y	Nearest Occurrence:	27.56 KM	47.11520 °N	90.94098 °E	

**LOE Rating: Probable Total: 8**

Family: Capniidae						
Isocapnia kudia	Within Known Range? N	Nearest Occurrence:	1,053.76 KM	51.25356 °N	99.66687 °E	
Isocapnia sibirica	Within Known Range? N	Nearest Occurrence:	1,112.39 KM	47.28244 °N	101.18793 °E	
Family: Chloroperlidae						
Haploperla lepnevae	Within Known Range? N	Nearest Occurrence:	256.09 KM	48.97819 °N	89.94996 °E	
Family: Nemouridae						
Nemoura cinerea	Within Known Range? N	Nearest Occurrence:	717.66 KM	48.06257 °N	97.55064 °E	
Family: Perlidae						
Kamimuria exilis	Within Known Range? N	Nearest Occurrence:	921.97 KM	50.16278 °N	98.84212 °E	
Family: Perlodidae						
Arcynopteryx sajanensis	Within Known Range? N	Nearest Occurrence:	1,166.42 KM	51.61397 °N	100.59972 °E	
Isoperla obscura	Within Known Range? N	Nearest Occurrence:	256.09 KM	48.97819 °N	89.94996 °E	
Pictetiella asiatica	Within Known Range? N	Nearest Occurrence:	1,159.55 KM	51.65822 °N	100.53000 °E	

**Basin:** Internal Drainage Basin  
**Aimags:** Bayan-olgi  
**Soums:** Bulgan

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

Freshwater Ecoregion: Upper Irtysh  
 Terrestrial Ecoregion: Altai Montane Forest And Forest Steppe

<b>LOE Rating:</b>	<b>Possible</b>	<b>Total:</b>	<b>6</b>
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<b>Family: Capniidae</b>			
Capnia nigra	Within Known Range? N	Nearest Occurrence: 410.69 KM	49.09162 °N 88.10423 °E
Mesocapnia altaica	Within Known Range? N	Nearest Occurrence: 296.92 KM	48.43684 °N 88.90094 °E
<b>Family: Chloroperlidae</b>			
Alloperla joosti	Within Known Range? N	Nearest Occurrence: 705.58 KM	48.24995 °N 97.40627 °E
Alloperla rostellata	Within Known Range? N	Nearest Occurrence: 873.92 KM	48.36436 °N 98.92737 °E
Suwallia kerzhneri	Within Known Range? N	Nearest Occurrence: 705.58 KM	48.24995 °N 97.40627 °E
<b>Family: Perlidae</b>			
Agnentina cocandica	Within Known Range? Y	Nearest Occurrence: 106.33 KM	46.13873 °N 91.54096 °E

<b>LOE Rating:</b>	<b>Predicted</b>	<b>Total:</b>	<b>14</b>
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<b>Family: Capniidae</b>			
Mesocapnia variabilis	Within Known Range? N	Nearest Occurrence: 338.87 KM	48.50631 °N 88.50947 °E
<b>Family: Chloroperlidae</b>			
Alaskaperla longidentata	Within Known Range? N	Nearest Occurrence: 682.73 KM	48.15779 °N 97.21441 °E
Alloperla deminuta	Within Known Range? N	Nearest Occurrence: 1,002.27 KM	51.47065 °N 99.02617 °E
Alloperla mediata	Within Known Range? N	Nearest Occurrence: 968.75 KM	50.61826 °N 99.12094 °E
<b>Family: Nemouridae</b>			
Amphinemura standfussi	Within Known Range? N	Nearest Occurrence: 717.63 KM	48.05989 °N 97.55073 °E
Nemoura sahlbergi	Within Known Range? N	Nearest Occurrence: 970.15 KM	50.42996 °N 99.21727 °E
<b>Family: Perlidae</b>			
Agnentina extrema	Within Known Range? N	Nearest Occurrence: 1,045.40 KM	47.50949 °N 100.57510 °E
Paragnetina flavotincta	Within Known Range? N	Nearest Occurrence: 998.60 KM	49.26170 °N 99.88242 °E
<b>Family: Perlodidae</b>			
Isoperla asiatica	Within Known Range? N	Nearest Occurrence: 717.63 KM	48.05989 °N 97.55073 °E
Isoperla kozlovi	Within Known Range? N	Nearest Occurrence: 975.78 KM	50.31066 °N 99.32150 °E
Isoperla lunigera	Within Known Range? N	Nearest Occurrence: 1,011.67 KM	51.09845 °N 99.32051 °E
Kaszabia nigricauda	Within Known Range? N	Nearest Occurrence: 851.67 KM	48.71968 °N 98.65184 °E
Megarcys ochracea	Within Known Range? N	Nearest Occurrence: 1,018.63 KM	51.46205 °N 99.19994 °E
<b>Family: Pteronarcyidae</b>			
Pteronarcys reticulata	Within Known Range? N	Nearest Occurrence: 1,002.27 KM	51.47065 °N 99.02617 °E

<b>LOE Rating:</b>	<b>Unlikely</b>	<b>Total:</b>	<b>5</b>
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<b>Family: Capniidae</b>			
Capnia khulsbagia	Within Known Range? N	Nearest Occurrence: 1,147.94 KM	50.98944 °N 100.71944 °E
<b>Family: Leuctridae</b>			
Leuctra fusca	Within Known Range? N	Nearest Occurrence: 1,803.93 KM	49.08643 °N 107.28952 °E
Paraleuctra zapekinae	Within Known Range? N	Nearest Occurrence: 1,525.04 KM	49.71481 °N 104.64203 °E
<b>Family: Nemouridae</b>			
Nemurella pictetii	Within Known Range? N	Nearest Occurrence: 999.64 KM	50.81265 °N 99.33803 °E
<b>Family: Perlodidae</b>			
Isoperla eximia	Within Known Range? N	Nearest Occurrence: 1,831.08 KM	49.01829 °N 107.54453 °E



**Basin:** Internal Drainage Basin  
**Aimags:** Bayan-olgi  
**Soums:** Buyant

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

Freshwater Ecoregion: Western Mongolia  
 Terrestrial Ecoregion: Altai Montane Forest And Forest Steppe

<b>LOE Rating:</b>	<b>Highly Likely</b>	<b>Total:</b>	<b>1</b>
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Family: Perlodidae  
 Arcynopteryx compacta      Within Known Range? Y      Nearest Occurrence: 14.06 KM      48.64815 °N      89.88378 °E

<b>LOE Rating:</b>	<b>Likely</b>	<b>Total:</b>	<b>16</b>
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Family: Capniidae  
 Isocapnia guentheri      Within Known Range? N      Nearest Occurrence: 939.12 KM      48.61518 °N      98.23096 °E  
 Isocapnia kudia      Within Known Range? N      Nearest Occurrence: 1,137.53 KM      51.25356 °N      99.66687 °E

Family: Chloroperlidae  
 Haploperla lepnevae      Within Known Range? Y      Nearest Occurrence: 38.11 KM      48.84329 °N      89.53623 °E  
 Suwallia teleckojensis      Within Known Range? Y      Nearest Occurrence: 38.18 KM      48.84329 °N      89.53623 °E

Family: Nemouridae  
 Amphinemura borealis      Within Known Range? Y      Nearest Occurrence: 38.11 KM      48.84329 °N      89.53623 °E  
 Nemoura arctica      Within Known Range? Y      Nearest Occurrence: 130.94 KM      48.75577 °N      88.60430 °E

Family: Perlidae  
 Kamimuria exilis      Within Known Range? N      Nearest Occurrence: 1,023.78 KM      50.16278 °N      98.84212 °E

Family: Perlodidae  
 Arcynopteryx polaris      Within Known Range? Y      Nearest Occurrence: 98.22 KM      48.43684 °N      88.90094 °E  
 Diura bicaudata      Within Known Range? Y      Nearest Occurrence: 63.49 KM      49.04180 °N      89.41675 °E  
 Diura majuscula      Within Known Range? Y      Nearest Occurrence: 69.25 KM      48.83461 °N      89.19677 °E  
 Isoperla altaica      Within Known Range? Y      Nearest Occurrence: 98.22 KM      48.43684 °N      88.90094 °E  
 Isoperla mongolica      Within Known Range? Y      Nearest Occurrence: 38.18 KM      48.84329 °N      89.53623 °E  
 Isoperla obscura      Within Known Range? Y      Nearest Occurrence: 38.11 KM      48.84329 °N      89.53623 °E  
 Isoperla potanini      Within Known Range? Y      Nearest Occurrence: 38.18 KM      48.84329 °N      89.53623 °E  
 Skwala pusilla      Within Known Range? N      Nearest Occurrence: 140.07 KM      48.51277 °N      88.51107 °E

Family: Taeniopterygidae  
 Taenionema japonicum      Within Known Range? Y      Nearest Occurrence: 119.29 KM      47.85391 °N      90.54864 °E

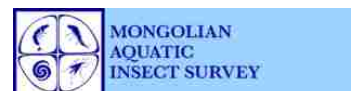
<b>LOE Rating:</b>	<b>Probable</b>	<b>Total:</b>	<b>5</b>
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Family: Capniidae  
 Isocapnia sibirica      Within Known Range? N      Nearest Occurrence: 1,275.66 KM      47.28244 °N      101.18793 °E

Family: Nemouridae  
 Nemoura cinerea      Within Known Range? N      Nearest Occurrence: 865.60 KM      48.06257 °N      97.55064 °E

Family: Perlidae  
 Agnetina brevipennis      Within Known Range? Y      Nearest Occurrence: 47.25 KM      48.97819 °N      89.94996 °E

Family: Perlodidae  
 Arcynopteryx sajanensis      Within Known Range? N      Nearest Occurrence: 1,250.22 KM      51.61397 °N      100.59972 °E  
 Pictetiella asiatica      Within Known Range? N      Nearest Occurrence: 1,241.86 KM      51.65822 °N      100.53000 °E



**Basin:** Internal Drainage Basin  
**Aimags:** Bayan-olgi  
**Soum:** Buyant

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

Freshwater Ecoregion: Western Mongolia  
 Terrestrial Ecoregion: Altai Montane Forest And Forest Steppe

**LOE Rating: Possible Total: 7**

<b>Family: Capniidae</b>					
Capnia nigra	Within Known Range? Y	Nearest Occurrence:	193.07 KM	49.09162 °N	88.10423 °E
Mesocapnia altaica	Within Known Range? Y	Nearest Occurrence:	98.04 KM	48.43684 °N	88.90094 °E
Mesocapnia variabilis	Within Known Range? Y	Nearest Occurrence:	140.54 KM	48.50631 °N	88.50947 °E
<b>Family: Chloroperlidae</b>					
Alloperla joosti	Within Known Range? N	Nearest Occurrence:	848.43 KM	48.24995 °N	97.40627 °E
Alloperla rostellata	Within Known Range? N	Nearest Occurrence:	1,016.74 KM	48.36436 °N	98.92737 °E
Suwallia kerzhneri	Within Known Range? N	Nearest Occurrence:	848.43 KM	48.24995 °N	97.40627 °E
<b>Family: Perlidae</b>					
Agnatina cocandica	Within Known Range? Y	Nearest Occurrence:	119.67 KM	49.23285 °N	88.90569 °E

**LOE Rating: Predicted Total: 12**

<b>Family: Chloroperlidae</b>					
Alaskaperla longidentata	Within Known Range? N	Nearest Occurrence:	827.69 KM	48.15779 °N	97.21441 °E
Alloperla deminuta	Within Known Range? N	Nearest Occurrence:	1,075.92 KM	51.47065 °N	99.02617 °E
Alloperla mediata	Within Known Range? N	Nearest Occurrence:	1,061.99 KM	50.61826 °N	99.12094 °E
<b>Family: Nemouridae</b>					
Amphinemura standfussi	Within Known Range? N	Nearest Occurrence:	865.60 KM	48.06257 °N	97.55064 °E
Nemoura sahlbergi	Within Known Range? N	Nearest Occurrence:	1,068.26 KM	50.42996 °N	99.21727 °E
<b>Family: Perlidae</b>					
Agnatina extrema	Within Known Range? N	Nearest Occurrence:	1,205.33 KM	47.50949 °N	100.57510 °E
<b>Family: Perlodidae</b>					
Isoperla asiatica	Within Known Range? N	Nearest Occurrence:	865.60 KM	48.06257 °N	97.55064 °E
Isoperla kozlovi	Within Known Range? N	Nearest Occurrence:	1,077.19 KM	50.31066 °N	99.32150 °E
Isoperla lunigera	Within Known Range? N	Nearest Occurrence:	1,095.95 KM	51.09845 °N	99.32051 °E
Kaszabia nigricauda	Within Known Range? N	Nearest Occurrence:	985.94 KM	48.71968 °N	98.65184 °E
Megarcys ochracea	Within Known Range? N	Nearest Occurrence:	1,094.08 KM	51.46205 °N	99.19994 °E
<b>Family: Pteronarcyidae</b>					
Pteronarcys reticulata	Within Known Range? N	Nearest Occurrence:	1,075.92 KM	51.47065 °N	99.02617 °E

**LOE Rating: Unlikely Total: 6**

<b>Family: Capniidae</b>					
Capnia khulsbagia	Within Known Range? N	Nearest Occurrence:	1,244.13 KM	50.98944 °N	100.71944 °E
<b>Family: Leuctridae</b>					
Leuctra fusca	Within Known Range? N	Nearest Occurrence:	1,945.39 KM	49.08643 °N	107.28952 °E
Paraleuctra zapekinae	Within Known Range? N	Nearest Occurrence:	1,655.44 KM	49.71481 °N	104.64203 °E
<b>Family: Nemouridae</b>					
Nemurella pictetii	Within Known Range? N	Nearest Occurrence:	1,090.23 KM	50.81265 °N	99.33803 °E
<b>Family: Perlidae</b>					
Paragnetina flavotincta	Within Known Range? N	Nearest Occurrence:	1,124.89 KM	49.26170 °N	99.88242 °E
<b>Family: Perlodidae</b>					
Isoperla eximia	Within Known Range? N	Nearest Occurrence:	1,973.49 KM	49.01829 °N	107.54453 °E



**Basin:** Internal Drainage Basin  
**Aimags:** Bayan-olgi  
**Soums:** Deluun

**Freshwater Ecoregion:** Western Mongolia  
**Terrestrial Ecoregion:** Altai Montane Forest And Forest Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Highly Likely Total: 5**

Family: Chloroperlidae						
Suwallia teleckojensis	Within Known Range? Y	Nearest Occurrence:	11.25 KM	47.85391 °N	90.54864 °E	
Family: Nemouridae						
Nemoura arctica	Within Known Range? Y	Nearest Occurrence:	19.11 KM	47.62355 °N	90.67122 °E	
Family: Perlodidae						
Arcynopteryx compacta	Within Known Range? Y	Nearest Occurrence:	17.35 KM	47.66326 °N	90.71830 °E	
Diura majuscula	Within Known Range? Y	Nearest Occurrence:	17.35 KM	47.66326 °N	90.71830 °E	
Isoperla potanini	Within Known Range? Y	Nearest Occurrence:	17.35 KM	47.66326 °N	90.71830 °E	

**LOE Rating: Likely Total: 9**

Family: Capniidae						
Isocapnia guentheri	Within Known Range? N	Nearest Occurrence:	849.05 KM	48.61518 °N	98.23096 °E	
Isocapnia kudia	Within Known Range? N	Nearest Occurrence:	1,074.62 KM	51.25356 °N	99.66687 °E	
Family: Perlidae						
Kamimuria exilis	Within Known Range? N	Nearest Occurrence:	950.92 KM	50.16278 °N	98.84212 °E	
Family: Perlodidae						
Arcynopteryx polaris	Within Known Range? Y	Nearest Occurrence:	61.64 KM	47.34650 °N	90.95982 °E	
Diura bicaudata	Within Known Range? Y	Nearest Occurrence:	193.28 KM	49.04180 °N	89.41675 °E	
Isoperla altaica	Within Known Range? Y	Nearest Occurrence:	136.81 KM	46.77095 °N	91.31664 °E	
Isoperla mongolica	Within Known Range? Y	Nearest Occurrence:	89.75 KM	47.08782 °N	91.02542 °E	
Skwala pusilla	Within Known Range? N	Nearest Occurrence:	248.17 KM	48.51277 °N	88.51107 °E	
Family: Taeniopterygidae						
Taenionema japonicum	Within Known Range? Y	Nearest Occurrence:	11.25 KM	47.85391 °N	90.54864 °E	

**LOE Rating: Probable Total: 8**

Family: Capniidae						
Isocapnia sibirica	Within Known Range? N	Nearest Occurrence:	1,173.66 KM	47.28244 °N	101.18793 °E	
Family: Chloroperlidae						
Haploperla lepnevae	Within Known Range? N	Nearest Occurrence:	151.83 KM	48.97819 °N	89.94996 °E	
Family: Nemouridae						
Amphinemura borealis	Within Known Range? Y	Nearest Occurrence:	94.77 KM	47.03925 °N	91.03419 °E	
Nemoura cinerea	Within Known Range? N	Nearest Occurrence:	769.17 KM	48.06257 °N	97.55064 °E	
Family: Perlidae						
Agnetina brevipennis	Within Known Range? Y	Nearest Occurrence:	134.87 KM	46.77977 °N	91.30252 °E	
Family: Perlodidae						
Arcynopteryx sajanensis	Within Known Range? N	Nearest Occurrence:	1,187.75 KM	51.61397 °N	100.59972 °E	
Isoperla obscura	Within Known Range? Y	Nearest Occurrence:	151.83 KM	48.97819 °N	89.94996 °E	
Pictetiella asiatica	Within Known Range? N	Nearest Occurrence:	1,180.18 KM	51.65822 °N	100.53000 °E	

**Basin:** Internal Drainage Basin  
**Aimags:** Bayan-olgi  
**Soums:** Deluun

**Freshwater Ecoregion:** Western Mongolia  
**Terrestrial Ecoregion:** Altai Montane Forest And Forest Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Possible Total: 7**

<b>Family: Capniidae</b>					
Capnia nigra	Within Known Range?	N	Nearest Occurrence:	315.09 KM	49.09162 °N 88.10423 °E
Mesocapnia altaica	Within Known Range?	N	Nearest Occurrence:	204.58 KM	48.43684 °N 88.90094 °E
Mesocapnia variabilis	Within Known Range?	Y	Nearest Occurrence:	248.56 KM	48.50631 °N 88.50947 °E
<b>Family: Chloroperlidae</b>					
Alloperla joosti	Within Known Range?	N	Nearest Occurrence:	754.28 KM	48.24995 °N 97.40627 °E
Alloperla rostellata	Within Known Range?	N	Nearest Occurrence:	923.59 KM	48.36436 °N 98.92737 °E
Suwallia kerzhneri	Within Known Range?	N	Nearest Occurrence:	754.28 KM	48.24995 °N 97.40627 °E
<b>Family: Perlidae</b>					
Agnetina cocandica	Within Known Range?	Y	Nearest Occurrence:	150.52 KM	48.24533 °N 91.90115 °E

**LOE Rating: Predicted Total: 13**

<b>Family: Chloroperlidae</b>					
Alaskaperla longidentata	Within Known Range?	N	Nearest Occurrence:	732.39 KM	48.15779 °N 97.21441 °E
Alloperla deminuta	Within Known Range?	N	Nearest Occurrence:	1,017.96 KM	51.47065 °N 99.02617 °E
Alloperla mediata	Within Known Range?	N	Nearest Occurrence:	993.78 KM	50.61826 °N 99.12094 °E
<b>Family: Nemouridae</b>					
Amphinemura standfussi	Within Known Range?	N	Nearest Occurrence:	769.17 KM	48.05989 °N 97.55073 °E
Nemoura sahlbergi	Within Known Range?	N	Nearest Occurrence:	997.59 KM	50.42996 °N 99.21727 °E
<b>Family: Perlidae</b>					
Agnetina extrema	Within Known Range?	N	Nearest Occurrence:	1,104.72 KM	47.50949 °N 100.57510 °E
Paragnetina flavotincta	Within Known Range?	N	Nearest Occurrence:	1,040.31 KM	49.26170 °N 99.88242 °E
<b>Family: Perlodidae</b>					
Isoperla asiatica	Within Known Range?	N	Nearest Occurrence:	769.17 KM	48.05989 °N 97.55073 °E
Isoperla kozlovi	Within Known Range?	N	Nearest Occurrence:	1,004.89 KM	50.31066 °N 99.32150 °E
Isoperla lunigera	Within Known Range?	N	Nearest Occurrence:	1,032.56 KM	51.09845 °N 99.32051 °E
Kaszabia nigricauda	Within Known Range?	N	Nearest Occurrence:	896.77 KM	48.71968 °N 98.65184 °E
Megarcys ochracea	Within Known Range?	N	Nearest Occurrence:	1,035.28 KM	51.46205 °N 99.19994 °E
<b>Family: Pteronarcyidae</b>					
Pteronarcys reticulata	Within Known Range?	N	Nearest Occurrence:	1,017.96 KM	51.47065 °N 99.02617 °E

**LOE Rating: Unlikely Total: 5**

<b>Family: Capniidae</b>					
Capnia khulsbagia	Within Known Range?	N	Nearest Occurrence:	1,175.27 KM	50.98944 °N 100.71944 °E
<b>Family: Leuctridae</b>					
Leuctra fusca	Within Known Range?	N	Nearest Occurrence:	1,855.18 KM	49.08643 °N 107.28952 °E
Paraleuctra zapekinae	Within Known Range?	N	Nearest Occurrence:	1,570.32 KM	49.71481 °N 104.64203 °E
<b>Family: Nemouridae</b>					
Nemurella pictetii	Within Known Range?	N	Nearest Occurrence:	1,023.54 KM	50.81265 °N 99.33803 °E
<b>Family: Perlodidae</b>					
Isoperla eximia	Within Known Range?	N	Nearest Occurrence:	1,882.84 KM	49.01829 °N 107.54453 °E

**Basin:** Internal Drainage Basin

**Aimags:** Bayan-olgi

**Soums:** Nogoonuur

Freshwater Ecoregion: Western Mongolia

Terrestrial Ecoregion: Altai Montane Forest And Forest Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Highly Likely Total: 8**

Family: Chloroperlidae						
Suwallia teleckojensis	Within Known Range? Y	Nearest Occurrence:	90.73 KM	48.84329°N	89.53623°E	
Family: Nemouridae						
Nemoura arctica	Within Known Range? Y	Nearest Occurrence:	145.93 KM	49.38138°N	88.68390°E	
Family: Perlodidae						
Arcynopteryx compacta	Within Known Range? Y	Nearest Occurrence:	97.90 KM	48.64815°N	89.88378°E	
Arcynopteryx polaris	Within Known Range? Y	Nearest Occurrence:	145.93 KM	49.38138°N	88.68390°E	
Diura bicaudata	Within Known Range? Y	Nearest Occurrence:	82.91 KM	49.04180°N	89.41675°E	
Diura majuscula	Within Known Range? Y	Nearest Occurrence:	116.62 KM	48.83461°N	89.19677°E	
Isoperla potanini	Within Known Range? Y	Nearest Occurrence:	60.65 KM	48.97819°N	89.94996°E	
Skwala pusilla	Within Known Range? N	Nearest Occurrence:	198.63 KM	48.51277°N	88.51107°E	

**LOE Rating: Likely Total: 12**

Family: Capniidae						
Isocapnia guentheri	Within Known Range? N	Nearest Occurrence:	920.43 KM	48.61518°N	98.23096°E	
Isocapnia kudia	Within Known Range? N	Nearest Occurrence:	1,091.34 KM	51.25356°N	99.66687°E	
Isocapnia sibirica	Within Known Range? N	Nearest Occurrence:	1,267.74 KM	47.28244°N	101.18793°E	
Family: Chloroperlidae						
Haploperla lepnevae	Within Known Range? Y	Nearest Occurrence:	60.55 KM	48.97819°N	89.94996°E	
Family: Nemouridae						
Amphinemura borealis	Within Known Range? Y	Nearest Occurrence:	90.56 KM	48.84329°N	89.53623°E	
Family: Perlidae						
Kamimuria exilis	Within Known Range? N	Nearest Occurrence:	987.08 KM	50.16278°N	98.84212°E	
Family: Perlodidae						
Arcynopteryx sajanensis	Within Known Range? N	Nearest Occurrence:	1,202.66 KM	51.61397°N	100.59972°E	
Isoperla altaica	Within Known Range? Y	Nearest Occurrence:	124.65 KM	49.23285°N	88.90569°E	
Isoperla mongolica	Within Known Range? Y	Nearest Occurrence:	90.73 KM	48.84329°N	89.53623°E	
Isoperla obscura	Within Known Range? Y	Nearest Occurrence:	60.55 KM	48.97819°N	89.94996°E	
Pictetiella asiatica	Within Known Range? N	Nearest Occurrence:	1,193.87 KM	51.65822°N	100.53000°E	
Family: Taeniopterygidae						
Taenionema japonicum	Within Known Range? Y	Nearest Occurrence:	124.65 KM	49.23285°N	88.90569°E	

**LOE Rating: Probable Total: 3**

Family: Capniidae						
Capnia nigra	Within Known Range? Y	Nearest Occurrence:	214.56 KM	49.09162°N	88.10423°E	
Family: Nemouridae						
Nemoura cinerea	Within Known Range? N	Nearest Occurrence:	854.88 KM	48.06257°N	97.55064°E	
Family: Perlidae						
Agnetina brevipennis	Within Known Range? Y	Nearest Occurrence:	60.55 KM	48.97819°N	89.94996°E	

Basin: Internal Drainage Basin

Aimags: Bayan-olgi

Soums: Nogoonuur

Freshwater Ecoregion: Western Mongolia

Terrestrial Ecoregion: Altai Montane Forest And Forest Steppe

WQM Sites:

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Possible Total: 6**

Family: Capniidae

Mesocapnia altaica Within Known Range? N Nearest Occurrence: 170.56 KM 48.43684°N 88.90094°E

Family: Chloroperlidae

Alloperla joosti Within Known Range? N Nearest Occurrence: 835.39 KM 48.24995°N 97.40627°E

Alloperla rostellata Within Known Range? N Nearest Occurrence: 1,000.49 KM 48.36436°N 98.92737°E

Suwallia kerzhneri Within Known Range? N Nearest Occurrence: 835.39 KM 48.24995°N 97.40627°E

Family: Perlidae

Agnetina cocandica Within Known Range? Y Nearest Occurrence: 124.65 KM 49.23285°N 88.90569°E

Family: Pteronarcyidae

Pteronarcys reticulata Within Known Range? N Nearest Occurrence: 1,026.22 KM 51.47065°N 99.02617°E

**LOE Rating: Predicted Total: 13**

Family: Capniidae

Mesocapnia variabilis Within Known Range? Y Nearest Occurrence: 199.54 KM 48.50631°N 88.50947°E

Family: Chloroperlidae

Alaskaperla longidentata Within Known Range? N Nearest Occurrence: 816.24 KM 48.15779°N 97.21441°E

Alloperla deminuta Within Known Range? N Nearest Occurrence: 1,026.22 KM 51.47065°N 99.02617°E

Alloperla mediata Within Known Range? N Nearest Occurrence: 1,020.96 KM 50.61826°N 99.12094°E

Family: Nemouridae

Amphinemura standfussi Within Known Range? N Nearest Occurrence: 854.88 KM 48.06257°N 97.55064°E

Nemoura sahlbergi Within Known Range? N Nearest Occurrence: 1,029.33 KM 50.42996°N 99.21727°E

Family: Perlidae

Agnetina extrema Within Known Range? N Nearest Occurrence: 1,196.15 KM 47.50949°N 100.57510°E

Paragnetina flavotincta Within Known Range? N Nearest Occurrence: 1,098.60 KM 49.26170°N 99.88242°E

Family: Perlodidae

Isoperla asiatica Within Known Range? N Nearest Occurrence: 854.88 KM 48.06257°N 97.55064°E

Isoperla kozlovi Within Known Range? N Nearest Occurrence: 1,039.64 KM 50.31066°N 99.32150°E

Isoperla lunigera Within Known Range? N Nearest Occurrence: 1,050.51 KM 51.09845°N 99.32051°E

Kaszabia nigricauda Within Known Range? N Nearest Occurrence: 965.74 KM 48.71968°N 98.65184°E

Megarcys ochracea Within Known Range? N Nearest Occurrence: 1,044.88 KM 51.46205°N 99.19994°E

**LOE Rating: Unlikely Total: 5**

Family: Capniidae

Capnia khulsbagia Within Known Range? N Nearest Occurrence: 1,202.21 KM 50.98944°N 100.71944°E

Family: Leuctridae

Leuctra fusca Within Known Range? N Nearest Occurrence: 1,921.01 KM 49.08643°N 107.28952°E

Paraleuctra zapekinae Within Known Range? N Nearest Occurrence: 1,626.67 KM 49.71481°N 104.64203°E

Family: Nemouridae

Nemurella pictetii Within Known Range? N Nearest Occurrence: 1,047.62 KM 50.81265°N 99.33803°E

Family: Perlodidae

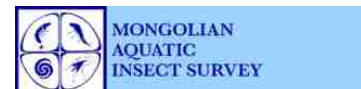
Isoperla eximia Within Known Range? N Nearest Occurrence: 1,949.51 KM 49.01829°N 107.54453°E

**LOE Rating: Unlikely Total: 1**

Family: Perlodidae

Arcynopteryx sajanensis Within Known Range? N Nearest Occurrence: 1,309.07 KM 51.61397°N 100.59972°E

Research funded by the National Science Foundation  
DEB-BSI #0206674: A Survey of the Aquatic Insects of the Selenge River Basin. P.I.'s: JKGelhaus, JCMorse, BHayford.  
DEB # 0743732: Aquatic Insects of the Altai and Hangai Mountain Drainages. P.I.'s: JKGelhaus, JCMorse, CRNelson.  
<http://clade.ansp.org/entomology/mongolia/index.html>



**Basin:** Internal Drainage Basin  
**Aimags:** Bayan-olgi  
**Soums:** Tolbo

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

Freshwater Ecoregion: Western Mongolia  
 Terrestrial Ecoregion: Altai Montane Forest And Forest Steppe

**LOE Rating: Highly Likely Total: 8**

Family: Chloroperlidae						
Suwallia teleckojensis	Within Known Range? Y	Nearest Occurrence:	63.90 KM	47.85391 °N	90.54864 °E	
Family: Nemouridae						
Nemoura arctica	Within Known Range? Y	Nearest Occurrence:	92.58 KM	47.62355 °N	90.67122 °E	
Family: Perlodidae						
Arcynopteryx compacta	Within Known Range? Y	Nearest Occurrence:	61.19 KM	48.64815 °N	89.88378 °E	
Arcynopteryx polaris	Within Known Range? Y	Nearest Occurrence:	134.14 KM	47.34650 °N	90.95982 °E	
Diura bicaudata	Within Known Range? Y	Nearest Occurrence:	127.98 KM	49.04180 °N	89.41675 °E	
Diura majuscula	Within Known Range? Y	Nearest Occurrence:	90.54 KM	47.66326 °N	90.71830 °E	
Isoperla potanini	Within Known Range? Y	Nearest Occurrence:	66.46 KM	48.42161 °N	90.97337 °E	
Skwala pusilla	Within Known Range? N	Nearest Occurrence:	207.37 KM	48.51277 °N	88.51107 °E	

**LOE Rating: Likely Total: 12**

Family: Capniidae						
Isocapnia guentheri	Within Known Range? N	Nearest Occurrence:	872.23 KM	48.61518 °N	98.23096 °E	
Isocapnia kudia	Within Known Range? N	Nearest Occurrence:	1,078.77 KM	51.25356 °N	99.66687 °E	
Isocapnia sibirica	Within Known Range? N	Nearest Occurrence:	1,206.55 KM	47.28244 °N	101.18793 °E	
Family: Chloroperlidae						
Haploperla lepnevae	Within Known Range? Y	Nearest Occurrence:	79.53 KM	48.97819 °N	89.94996 °E	
Family: Nemouridae						
Amphinemura borealis	Within Known Range? Y	Nearest Occurrence:	105.29 KM	48.84329 °N	89.53623 °E	
Family: Perlidae						
Kamimuria exilis	Within Known Range? N	Nearest Occurrence:	961.58 KM	50.16278 °N	98.84212 °E	
Family: Perlodidae						
Arcynopteryx sajanensis	Within Known Range? N	Nearest Occurrence:	1,191.66 KM	51.61397 °N	100.59972 °E	
Isoperla altaica	Within Known Range? Y	Nearest Occurrence:	164.07 KM	48.43684 °N	88.90094 °E	
Isoperla mongolica	Within Known Range? Y	Nearest Occurrence:	105.49 KM	48.84329 °N	89.53623 °E	
Isoperla obscura	Within Known Range? Y	Nearest Occurrence:	79.53 KM	48.97819 °N	89.94996 °E	
Pictetiella asiatica	Within Known Range? N	Nearest Occurrence:	1,183.63 KM	51.65822 °N	100.53000 °E	
Family: Taeniopterygidae						
Taenionema japonicum	Within Known Range? Y	Nearest Occurrence:	63.90 KM	47.85391 °N	90.54864 °E	

**LOE Rating: Probable Total: 3**

Family: Capniidae						
Capnia nigra	Within Known Range? Y	Nearest Occurrence:	263.52 KM	49.09162 °N	88.10423 °E	
Family: Nemouridae						
Nemoura cinerea	Within Known Range? N	Nearest Occurrence:	797.28 KM	48.06257 °N	97.55064 °E	
Family: Perlidae						
Agnetina brevipennis	Within Known Range? Y	Nearest Occurrence:	79.53 KM	48.97819 °N	89.94996 °E	



**Basin:** Internal Drainage Basin  
**Aimags:** Bayan-olgi  
**Soums:** Tolbo

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**Freshwater Ecoregion:** Western Mongolia  
**Terrestrial Ecoregion:** Altai Montane Forest And Forest Steppe

**LOE Rating: Possible Total: 6**

<b>Family: Capniidae</b>					
Mesocapnia altaica	Within Known Range? N	Nearest Occurrence:	163.77 KM	48.43684°N	88.90094°E
Mesocapnia variabilis	Within Known Range? Y	Nearest Occurrence:	207.88 KM	48.50631°N	88.50947°E
<b>Family: Chloroperlidae</b>					
Alloperla joosti	Within Known Range? N	Nearest Occurrence:	780.55 KM	48.24995°N	97.40627°E
Alloperla rostellata	Within Known Range? N	Nearest Occurrence:	949.22 KM	48.36436°N	98.92737°E
Suwallia kerzhneri	Within Known Range? N	Nearest Occurrence:	780.55 KM	48.24995°N	97.40627°E
<b>Family: Perlidae</b>					
Agnatina cocandica	Within Known Range? Y	Nearest Occurrence:	170.49 KM	48.24533°N	91.90115°E

**LOE Rating: Predicted Total: 12**

<b>Family: Chloroperlidae</b>					
Alaskaperla longidentata	Within Known Range? N	Nearest Occurrence:	759.55 KM	48.15779°N	97.21441°E
Alloperla deminuta	Within Known Range? N	Nearest Occurrence:	1,018.80 KM	51.47065°N	99.02617°E
Alloperla mediata	Within Known Range? N	Nearest Occurrence:	1,001.38 KM	50.61826°N	99.12094°E
<b>Family: Nemouridae</b>					
Amphinemura standfussi	Within Known Range? N	Nearest Occurrence:	797.28 KM	48.06257°N	97.55064°E
Nemoura sahlbergi	Within Known Range? N	Nearest Occurrence:	1,006.87 KM	50.42996°N	99.21727°E
<b>Family: Perlidae</b>					
Agnatina extrema	Within Known Range? N	Nearest Occurrence:	1,136.43 KM	47.50949°N	100.57510°E
<b>Family: Perlodidae</b>					
Isoperla asiatica	Within Known Range? N	Nearest Occurrence:	797.28 KM	48.06257°N	97.55064°E
Isoperla kozlovi	Within Known Range? N	Nearest Occurrence:	1,015.31 KM	50.31066°N	99.32150°E
Isoperla lunigera	Within Known Range? N	Nearest Occurrence:	1,036.98 KM	51.09845°N	99.32051°E
Kaszabia nigricauda	Within Known Range? N	Nearest Occurrence:	919.30 KM	48.71968°N	98.65184°E
Megarcys ochracea	Within Known Range? N	Nearest Occurrence:	1,036.69 KM	51.46205°N	99.19994°E
<b>Family: Pteronarcyidae</b>					
Pteronarcys reticulata	Within Known Range? N	Nearest Occurrence:	1,018.80 KM	51.47065°N	99.02617°E

**LOE Rating: Unlikely Total: 6**

<b>Family: Capniidae</b>					
Capnia khulsbagia	Within Known Range? N	Nearest Occurrence:	1,183.50 KM	50.98944°N	100.71944°E
<b>Family: Leuctridae</b>					
Leuctra fusca	Within Known Range? N	Nearest Occurrence:	1,878.94 KM	49.08643°N	107.28952°E
Paraleuctra zapekinae	Within Known Range? N	Nearest Occurrence:	1,590.23 KM	49.71481°N	104.64203°E
<b>Family: Nemouridae</b>					
Nemurella pictetii	Within Known Range? N	Nearest Occurrence:	1,030.15 KM	50.81265°N	99.33803°E
<b>Family: Perlidae</b>					
Paragnetina flavotincta	Within Known Range? N	Nearest Occurrence:	1,059.52 KM	49.26170°N	99.88242°E
<b>Family: Perlodidae</b>					
Isoperla eximia	Within Known Range? N	Nearest Occurrence:	1,906.94 KM	49.01829°N	107.54453°E

**Basin:** Internal Drainage Basin  
**Aimags:** Bayan-olgi  
**Soum:** Tsengel

**Freshwater Ecoregion:** Western Mongolia  
**Terrestrial Ecoregion:** Altai Montane Forest And Forest Steppe

**WQM Sites:**

WQM Sites: # 106 (Tsagaan\_bno River @ N 49.01813° E 88.76398°) # 107 (Mogoit River @ N 48.73818° E 88.64768°) # 108 (Hovd River @ N 48.57047° E 88.71842°) # 109 (Har chulu River @ N 48.61888° E 88.8253°) # 110 (Harganat River @ N 48.7853° E 89.1483°)

**LOE Rating: Highly Likely Total: 4**

Family: Chloroperlidae						
Suwallia teleckojensis	Within Known Range? Y	Nearest Occurrence:	34.33 KM	48.54090°N	88.52250°E	
Family: Nemouridae						
Nemoura arctica	Within Known Range? Y	Nearest Occurrence:	14.24 KM	48.75554°N	88.60099°E	
Family: Perlodidae						
Arcynopteryx compacta	Within Known Range? Y	Nearest Occurrence:	27.13 KM	49.09324°N	88.50467°E	
Isoperla potanini	Within Known Range? Y	Nearest Occurrence:	27.13 KM	49.09324°N	88.50467°E	

**LOE Rating: Likely Total: 9**

Family: Capniidae						
Mesocapnia altaica	Within Known Range? Y	Nearest Occurrence:	35.31 KM	48.62937°N	88.28434°E	
Family: Perlodidae						
Arcynopteryx polaris	Within Known Range? Y	Nearest Occurrence:	18.57 KM	48.72653°N	88.40106°E	
Diura bicaudata	Within Known Range? Y	Nearest Occurrence:	21.73 KM	49.04517°N	88.50878°E	
Diura majuscula	Within Known Range? Y	Nearest Occurrence:	29.17 KM	48.59874°N	88.43684°E	
Isoperla altaica	Within Known Range? Y	Nearest Occurrence:	41.51 KM	48.75548°N	88.15278°E	
Isoperla mongolica	Within Known Range? Y	Nearest Occurrence:	42.03 KM	48.75321°N	88.14850°E	
Isoperla obscura	Within Known Range? Y	Nearest Occurrence:	37.38 KM	48.51277°N	88.51107°E	
Skwala pusilla	Within Known Range? Y	Nearest Occurrence:	31.26 KM	48.66722°N	88.29927°E	
Family: Taeniopterygidae						
Taenionema japonicum	Within Known Range? Y	Nearest Occurrence:	60.95 KM	49.23285°N	88.90569°E	

**LOE Rating: Probable Total: 9**

Family: Capniidae						
Capnia nigra	Within Known Range? Y	Nearest Occurrence:	52.83 KM	49.09162°N	88.10423°E	
Isocapnia guentheri	Within Known Range? N	Nearest Occurrence:	1,078.89 KM	48.61518°N	98.23096°E	
Isocapnia kudia	Within Known Range? N	Nearest Occurrence:	1,266.40 KM	51.25356°N	99.66687°E	
Isocapnia sibirica	Within Known Range? N	Nearest Occurrence:	1,417.52 KM	47.28244°N	101.18793°E	
Family: Chloroperlidae						
Haploperla lepnevae	Within Known Range? Y	Nearest Occurrence:	75.80 KM	48.83461°N	89.19677°E	
Family: Nemouridae						
Amphinemura borealis	Within Known Range? Y	Nearest Occurrence:	113.47 KM	48.84329°N	89.53623°E	
Family: Perlidae						
Agnatina brevipennis	Within Known Range? N	Nearest Occurrence:	160.03 KM	48.97819°N	89.94996°E	
Kamimuria exilis	Within Known Range? N	Nearest Occurrence:	1,157.73 KM	50.16278°N	98.84212°E	
Family: Perlodidae						
Pictetiella asiatica	Within Known Range? N	Nearest Occurrence:	1,369.73 KM	51.65822°N	100.53000°E	



**Basin:** Internal Drainage Basin  
**Aimags:** Bayan-olgi  
**Soum:** Tsengel

**Freshwater Ecoregion:** Western Mongolia  
**Terrestrial Ecoregion:** Altai Montane Forest And Forest Steppe

**WQM Sites:**

WQM Sites: # 106 (Tsagaan\_bno River @ N 49.01813° E 88.76398°) # 107 (Mogoit River @ N 48.73818° E 88.64768°) # 108 (Hovd River @ N 48.57047° E 88.71842°) # 109 (Har chulu River @ N 48.61888° E 88.8253°) # 110 (Harganat River @ N 48.7853° E 89.1483°)

**LOE Rating: Possible Total: 7**

Family: Capniidae						
Mesocapnia variabilis	Within Known Range? Y	Nearest Occurrence:	38.16 KM	48.50631°N	88.50947°E	
Family: Chloroperlidae						
Alloperla joosti	Within Known Range? N	Nearest Occurrence:	989.28 KM	48.24995°N	97.40627°E	
Alloperla rostellata	Within Known Range? N	Nearest Occurrence:	1,157.14 KM	48.36436°N	98.92737°E	
Suwallia kerzhneri	Within Known Range? N	Nearest Occurrence:	989.28 KM	48.24995°N	97.40627°E	
Family: Nemouridae						
Nemoura cinerea	Within Known Range? N	Nearest Occurrence:	1,006.86 KM	48.06257°N	97.55064°E	
Family: Perlidae						
Agnetina cocandica	Within Known Range? Y	Nearest Occurrence:	60.95 KM	49.23285°N	88.90569°E	
Family: Perlodidae						
Arcynopteryx sajanensis	Within Known Range? N	Nearest Occurrence:	1,378.64 KM	51.61397°N	100.59972°E	

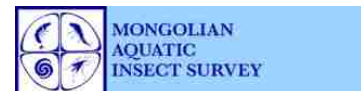
**LOE Rating: Predicted Total: 12**

Family: Chloroperlidae						
Alaskaperla longidentata	Within Known Range? N	Nearest Occurrence:	968.79 KM	48.15779°N	97.21441°E	
Alloperla deminuta	Within Known Range? N	Nearest Occurrence:	1,202.58 KM	51.47065°N	99.02617°E	
Alloperla mediata	Within Known Range? N	Nearest Occurrence:	1,193.63 KM	50.61826°N	99.12094°E	
Family: Nemouridae						
Amphinemura standfussi	Within Known Range? N	Nearest Occurrence:	1,006.86 KM	48.06257°N	97.55064°E	
Nemoura sahlbergi	Within Known Range? N	Nearest Occurrence:	1,200.94 KM	50.42996°N	99.21727°E	
Family: Perlidae						
Agnetina extrema	Within Known Range? N	Nearest Occurrence:	1,347.02 KM	47.50949°N	100.57510°E	
Family: Perlodidae						
Isoperla asiatica	Within Known Range? N	Nearest Occurrence:	1,006.86 KM	48.06257°N	97.55064°E	
Isoperla kozlovi	Within Known Range? N	Nearest Occurrence:	1,210.55 KM	50.31066°N	99.32150°E	
Isoperla lunigera	Within Known Range? N	Nearest Occurrence:	1,225.22 KM	51.09845°N	99.32051°E	
Kaszabia nigricauda	Within Known Range? N	Nearest Occurrence:	1,125.39 KM	48.71968°N	98.65184°E	
Megarcys ochracea	Within Known Range? N	Nearest Occurrence:	1,221.07 KM	51.46205°N	99.19994°E	
Family: Pteronarcyidae						
Pteronarcys reticulata	Within Known Range? N	Nearest Occurrence:	1,202.58 KM	51.47065°N	99.02617°E	

**LOE Rating: Unlikely Total: 6**

Family: Capniidae						
Capnia khulsbagia	Within Known Range? N	Nearest Occurrence:	1,375.47 KM	50.98944°N	100.71944°E	
Family: Leuctridae						
Leuctra fusca	Within Known Range? N	Nearest Occurrence:	2,084.25 KM	49.08643°N	107.28952°E	
Paraleuctra zapekinae	Within Known Range? N	Nearest Occurrence:	1,792.78 KM	49.71481°N	104.64203°E	
Family: Nemouridae						
Nemurella pictetii	Within Known Range? N	Nearest Occurrence:	1,221.07 KM	50.81265°N	99.33803°E	
Family: Perlidae						
Paragnetina flavotincta	Within Known Range? N	Nearest Occurrence:	1,262.72 KM	49.26170°N	99.88242°E	
Family: Perlodidae						
Isoperla eximia	Within Known Range? N	Nearest Occurrence:	2,112.47 KM	49.01829°N	107.54453°E	

Research funded by the National Science Foundation  
 DEB-BSI #0206674: A Survey of the Aquatic Insects of the Selenge River Basin. P.I.'s: JKGelhaus, JCMorse, BHayford.  
 DEB # 0743732: Aquatic Insects of the Altai and Hangai Mountain Drainages. P.I.'s: JKGelhaus, JCMorse, CRNelson.  
<http://clade.ansp.org/entomology/mongolia/index.html>





**Basin:** Internal Drainage Basin

**Aimags:** Bayan-olgi

**Soum:** Ulaankhus

**Freshwater Ecoregion:** Western Mongolia

**Terrestrial Ecoregion:** Altai Alpine Meadow And Tundra

**WQM Sites:**

WQM Sites: # 104 (Sogoo River @ N 49.23993° E 88.90047°) # 105 (Baga oigor River @ N 49.35698° E 88.3167°) # 137 (Ulaan davaanii River @ N 49.23614° E 88.35936°) # 138 (Ih oigor River @ N 49.23092° E 88.44568°)

**LOE Rating: Highly Likely Total: 4**

Family: Chloroperlidae						
Suwallia teleckojensis	Within Known Range? Y	Nearest Occurrence:	13.08 KM	49.23285°N	88.90569°E	
Family: Nemouridae						
Nemoura arctica	Within Known Range? Y	Nearest Occurrence:	39.76 KM	49.38138°N	88.68390°E	
Family: Perlodidae						
Arcynopteryx compacta	Within Known Range? Y	Nearest Occurrence:	39.76 KM	49.38138°N	88.68390°E	
Isoperla potanini	Within Known Range? Y	Nearest Occurrence:	13.08 KM	49.23285°N	88.90569°E	

**LOE Rating: Likely Total: 9**

Family: Capniidae						
Mesocapnia altaica	Within Known Range? Y	Nearest Occurrence:	95.06 KM	48.43684°N	88.90094°E	
Family: Perlodidae						
Arcynopteryx polaris	Within Known Range? Y	Nearest Occurrence:	39.76 KM	49.38138°N	88.68390°E	
Diura bicaudata	Within Known Range? Y	Nearest Occurrence:	16.47 KM	49.04180°N	89.41675°E	
Diura majuscula	Within Known Range? Y	Nearest Occurrence:	43.61 KM	48.83461°N	89.19677°E	
Isoperla altaica	Within Known Range? Y	Nearest Occurrence:	13.08 KM	49.23285°N	88.90569°E	
Isoperla mongolica	Within Known Range? Y	Nearest Occurrence:	74.54 KM	48.84329°N	89.53623°E	
Isoperla obscura	Within Known Range? Y	Nearest Occurrence:	16.47 KM	49.04180°N	89.41675°E	
Skwala pusilla	Within Known Range? Y	Nearest Occurrence:	117.70 KM	48.51277°N	88.51107°E	
Family: Taeniopterygidae						
Taenionema japonicum	Within Known Range? Y	Nearest Occurrence:	13.08 KM	49.23285°N	88.90569°E	

**LOE Rating: Probable Total: 9**

Family: Capniidae						
Capnia nigra	Within Known Range? Y	Nearest Occurrence:	137.76 KM	49.09162°N	88.10423°E	
Isocapnia guentheri	Within Known Range? N	Nearest Occurrence:	988.51 KM	48.61518°N	98.23096°E	
Isocapnia kudia	Within Known Range? N	Nearest Occurrence:	1,169.07 KM	51.25356°N	99.66687°E	
Isocapnia sibirica	Within Known Range? N	Nearest Occurrence:	1,331.41 KM	47.28244°N	101.18793°E	
Family: Chloroperlidae						
Haploperla lepnevae	Within Known Range? Y	Nearest Occurrence:	40.65 KM	48.83461°N	89.19677°E	
Family: Nemouridae						
Amphinemura borealis	Within Known Range? Y	Nearest Occurrence:	42.19 KM	48.84329°N	89.53623°E	
Family: Perlidae						
Kamimuria exilis	Within Known Range? N	Nearest Occurrence:	1,108.99 KM	50.16278°N	98.84212°E	
Family: Perlodidae						
Arcynopteryx sajanensis	Within Known Range? N	Nearest Occurrence:	1,327.68 KM	51.61397°N	100.59972°E	
Pictetiella asiatica	Within Known Range? N	Nearest Occurrence:	1,272.11 KM	51.65822°N	100.53000°E	



**Basin:** Internal Drainage Basin

**Aimags:** Bayan-olgi

**Soum:** Ulaankhus

**Freshwater Ecoregion:** Western Mongolia

**Terrestrial Ecoregion:** Altai Alpine Meadow And Tundra

**WQM Sites:**

WQM Sites: # 104 (Sogoo River @ N 49.23993° E 88.90047°) # 105 (Baga oigor River @ N 49.35698° E 88.3167°) # 137 (Ulaan davaanii River @ N 49.23614° E 88.35936°) # 138 (Ih oigor River @ N 49.23092° E 88.44568°)

**LOE Rating: Possible Total: 7**

Family: Capniidae						
Mesocapnia variabilis	Within Known Range? Y	Nearest Occurrence:	82.06 KM	48.50631°N	88.50947°E	
Family: Chloroperlidae						
Alloperla joosti	Within Known Range? N	Nearest Occurrence:	900.86 KM	48.24995°N	97.40627°E	
Alloperla rostellata	Within Known Range? N	Nearest Occurrence:	1,067.64 KM	48.36436°N	98.92737°E	
Suwallia kerzhneri	Within Known Range? N	Nearest Occurrence:	900.86 KM	48.24995°N	97.40627°E	
Family: Nemouridae						
Nemoura cinerea	Within Known Range? N	Nearest Occurrence:	919.33 KM	48.06257°N	97.55064°E	
Family: Perlidae						
Agnetina brevipennis	Within Known Range? Y	Nearest Occurrence:	70.69 KM	48.97819°N	89.94996°E	
Agnetina cocandica	Within Known Range? Y	Nearest Occurrence:	13.08 KM	49.23285°N	88.90569°E	

**LOE Rating: Predicted Total: 13**

Family: Chloroperlidae						
Alaskaperla longidentata	Within Known Range? N	Nearest Occurrence:	880.95 KM	48.15779°N	97.21441°E	
Alloperla deminuta	Within Known Range? N	Nearest Occurrence:	1,104.76 KM	51.47065°N	99.02617°E	
Alloperla mediata	Within Known Range? N	Nearest Occurrence:	1,097.21 KM	50.61826°N	99.12094°E	
Family: Nemouridae						
Amphinemura standfussi	Within Known Range? N	Nearest Occurrence:	919.33 KM	48.06257°N	97.55064°E	
Nemoura sahlbergi	Within Known Range? N	Nearest Occurrence:	1,104.95 KM	50.42996°N	99.21727°E	
Family: Perlidae						
Agnetina extrema	Within Known Range? N	Nearest Occurrence:	1,260.34 KM	47.50949°N	100.57510°E	
Paragnetina flavotincta	Within Known Range? N	Nearest Occurrence:	1,169.94 KM	49.26170°N	99.88242°E	
Family: Perlodidae						
Isoperla asiatica	Within Known Range? N	Nearest Occurrence:	919.33 KM	48.06257°N	97.55064°E	
Isoperla kozlovi	Within Known Range? N	Nearest Occurrence:	1,114.84 KM	50.31066°N	99.32150°E	
Isoperla lunigera	Within Known Range? N	Nearest Occurrence:	1,128.01 KM	51.09845°N	99.32051°E	
Kaszabia nigricauda	Within Known Range? N	Nearest Occurrence:	1,034.51 KM	48.71968°N	98.65184°E	
Megarcys ochracea	Within Known Range? N	Nearest Occurrence:	1,123.32 KM	51.46205°N	99.19994°E	
Family: Pteronarcyidae						
Pteronarcys reticulata	Within Known Range? N	Nearest Occurrence:	1,104.76 KM	51.47065°N	99.02617°E	

**LOE Rating: Unlikely Total: 5**

Family: Capniidae						
Capnia khulsbagia	Within Known Range? N	Nearest Occurrence:	1,278.85 KM	50.98944°N	100.71944°E	
Family: Leuctridae						
Leuctra fusca	Within Known Range? N	Nearest Occurrence:	1,992.11 KM	49.08643°N	107.28952°E	
Paraleuctra zapekinae	Within Known Range? N	Nearest Occurrence:	1,699.29 KM	49.71481°N	104.64203°E	
Family: Nemouridae						
Nemurella pictetii	Within Known Range? N	Nearest Occurrence:	1,124.35 KM	50.81265°N	99.33803°E	
Family: Perlodidae						
Isoperla eximia	Within Known Range? N	Nearest Occurrence:	2,020.46 KM	49.01829°N	107.54453°E	

**Basin:** Internal Drainage Basin  
**Aimags:** Dundgovi  
**Soums:** **Adaatsag**

**Freshwater Ecoregion:** Inner Mongolia Endorheic Basins  
**Terrestrial Ecoregion:** Mongolian-Manchurian Grassland

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

<b>LOE Rating:</b>	<b>Highly Likely</b>	<b>Total:</b>	<b>4</b>
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<b>Family:</b> Capniidae			
Isocapnia guentheri	Within Known Range? N	Nearest Occurrence:	222.30 KM 47.88349°N 106.98829 °E
Isocapnia sibirica	Within Known Range? N	Nearest Occurrence:	306.35 KM 48.09549°N 107.84265 °E
<b>Family:</b> Chloroperlidae			
Alloperla rostellata	Within Known Range? N	Nearest Occurrence:	447.70 KM 49.77776°N 103.60860 °E
<b>Family:</b> Perlidae			
Agnetina extrema	Within Known Range? N	Nearest Occurrence:	267.78 KM 48.50028°N 106.78434 °E

<b>LOE Rating:</b>	<b>Likely</b>	<b>Total:</b>	<b>14</b>
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<b>Family:</b> Capniidae			
Isocapnia kudia	Within Known Range? N	Nearest Occurrence:	865.08 KM 51.25356°N 99.66687 °E
<b>Family:</b> Chloroperlidae			
Alloperla joosti	Within Known Range? N	Nearest Occurrence:	419.72 KM 46.78742°N 101.96021 °E
Haploperla lepnevae	Within Known Range? N	Nearest Occurrence:	244.03 KM 47.82258°N 107.33613 °E
Suwallia kerzhneri	Within Known Range? N	Nearest Occurrence:	284.10 KM 48.12416°N 107.54780 °E
<b>Family:</b> Nemouridae			
Amphinemura borealis	Within Known Range? N	Nearest Occurrence:	244.03 KM 47.82258°N 107.33613 °E
Nemoura cinerea	Within Known Range? N	Nearest Occurrence:	276.03 KM 47.96783°N 107.59278 °E
<b>Family:</b> Perlidae			
Agnetina brevipennis	Within Known Range? N	Nearest Occurrence:	324.53 KM 49.10740°N 106.65177 °E
Agnetina cocandica	Within Known Range? N	Nearest Occurrence:	319.60 KM 49.16354°N 105.18880 °E
Kamimuria exilis	Within Known Range? N	Nearest Occurrence:	874.60 KM 50.16278°N 98.84212 °E
<b>Family:</b> Perlodidae			
Arcynopteryx sajanensis	Within Known Range? N	Nearest Occurrence:	817.14 KM 51.61397°N 100.59972 °E
Diura bicaudata	Within Known Range? N	Nearest Occurrence:	649.67 KM 47.21768°N 99.92824 °E
Isoperla kozlovi	Within Known Range? N	Nearest Occurrence:	175.66 KM 47.85250°N 105.25567 °E
Pictetiella asiatica	Within Known Range? N	Nearest Occurrence:	824.58 KM 51.65822°N 100.53000 °E
<b>Family:</b> Pteronarcyidae			
Pteronarcys reticulata	Within Known Range? N	Nearest Occurrence:	351.61 KM 49.08643°N 107.28952 °E

<b>LOE Rating:</b>	<b>Probable</b>	<b>Total:</b>	<b>5</b>
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<b>Family:</b> Chloroperlidae			
Suwallia teleckojensis	Within Known Range? N	Nearest Occurrence:	268.26 KM 48.50028°N 106.78434 °E
<b>Family:</b> Perlodidae			
Isoperla asiatica	Within Known Range? N	Nearest Occurrence:	245.40 KM 47.82110°N 107.35422 °E
Isoperla lunigera	Within Known Range? N	Nearest Occurrence:	245.40 KM 47.82110°N 107.35422 °E
Isoperla obscura	Within Known Range? N	Nearest Occurrence:	175.66 KM 47.85250°N 105.25567 °E
Kaszabia nigricauda	Within Known Range? N	Nearest Occurrence:	175.66 KM 47.85250°N 105.25567 °E



**Basin:** Internal Drainage Basin

**Aimags:** Dundgovi

**Soums:** Adaatsag

Freshwater Ecoregion: Inner Mongolia Endorheic Basins

Terrestrial Ecoregion: Mongolian-Manchurian Grassland

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Possible Total: 3**

Family: Leuctridae

Paraleuctra zapekinae Within Known Range? N Nearest Occurrence: 266.97 KM 47.99158°N 107.46116 °E

Family: Perlodidae

Diura majuscula Within Known Range? N Nearest Occurrence: 267.45 KM 47.99158°N 107.46116 °E

Family: Taeniopterygidae

Taenionema japonicum Within Known Range? N Nearest Occurrence: 345.95 KM 49.05411°N 107.23175 °E

**LOE Rating: Predicted Total: 18**

Family: Capniidae

Capnia nigra Within Known Range? N Nearest Occurrence: 749.65 KM 50.51003°N 100.40375 °E

Mesocapnia variabilis Within Known Range? N Nearest Occurrence: 336.84 KM 48.42080°N 107.91406 °E

Family: Chloroperlidae

Alaskaperla longidentata Within Known Range? N Nearest Occurrence: 284.10 KM 48.12416°N 107.54780 °E

Alloperla deminuta Within Known Range? N Nearest Occurrence: 244.03 KM 47.82258°N 107.33613 °E

Alloperla mediata Within Known Range? N Nearest Occurrence: 447.70 KM 49.77776°N 103.60860 °E

Family: Leuctridae

Leuctra fusca Within Known Range? N Nearest Occurrence: 351.61 KM 49.08643°N 107.28952 °E

Family: Nemouridae

Amphinemura standfussi Within Known Range? N Nearest Occurrence: 432.78 KM 49.73130°N 107.63484 °E

Nemoura arctica Within Known Range? N Nearest Occurrence: 209.35 KM 47.77758°N 106.92780 °E

Nemoura sahlbergi Within Known Range? N Nearest Occurrence: 299.24 KM 48.16668°N 107.69548 °E

Family: Perlidae

Paragnetina flavotincta Within Known Range? N Nearest Occurrence: 319.02 KM 49.16354°N 105.18880 °E

Family: Perlodidae

Arcynopteryx compacta Within Known Range? N Nearest Occurrence: 264.21 KM 47.84324°N 107.55299 °E

Arcynopteryx polaris Within Known Range? N Nearest Occurrence: 336.84 KM 48.42080°N 107.91406 °E

Isoperla altaica Within Known Range? N Nearest Occurrence: 286.03 KM 48.87748°N 106.12370 °E

Isoperla eximia Within Known Range? N Nearest Occurrence: 344.93 KM 48.60182°N 107.84335 °E

Isoperla mongolica Within Known Range? N Nearest Occurrence: 306.77 KM 48.09694°N 107.83988 °E

Isoperla potanini Within Known Range? N Nearest Occurrence: 428.00 KM 46.73093°N 101.88583 °E

Megarcys ochracea Within Known Range? N Nearest Occurrence: 266.97 KM 47.99158°N 107.46116 °E

Skwala pusilla Within Known Range? N Nearest Occurrence: 1,924.79 KM 48.51277°N 88.51107 °E

**LOE Rating: Unlikely Total: 3**

Family: Capniidae

Capnia khulsbagia Within Known Range? N Nearest Occurrence: 757.64 KM 50.98944°N 100.71944 °E

Mesocapnia altaica Within Known Range? N Nearest Occurrence: 1,880.81 KM 48.43684°N 88.90094 °E

Family: Nemouridae

Nemurella pictetii Within Known Range? N Nearest Occurrence: 849.35 KM 51.07896°N 99.70857 °E

**Basin:** Internal Drainage Basin

**Aimags:** Dundgovi

**Soums:** Bayanjargalan

Freshwater Ecoregion: Inner Mongolia Endorheic Basins

Terrestrial Ecoregion: Eastern Gobi Desert Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Highly Likely Total: 3**

Family: Capniidae

Isocapnia guentheri

Within Known Range? N Nearest Occurrence: 253.34 KM 47.99158°N 107.46116°E

Isocapnia sibirica

Within Known Range? N Nearest Occurrence: 257.32 KM 48.09549°N 107.84265°E

Family: Perlidae

Agnetina extrema

Within Known Range? N Nearest Occurrence: 257.39 KM 48.09671°N 107.84928°E

**LOE Rating: Likely Total: 14**

Family: Capniidae

Isocapnia kudia

Within Known Range? N Nearest Occurrence: 1,110.97 KM 51.25356°N 99.66687°E

Family: Chloroperlidae

Alloperla rostellata

Within Known Range? N Nearest Occurrence: 662.85 KM 49.77776°N 103.60860°E

Haploperla lepnevae

Within Known Range? N Nearest Occurrence: 239.50 KM 47.82258°N 107.33613°E

Suwallia kerzhneri

Within Known Range? N Nearest Occurrence: 265.40 KM 48.12416°N 107.54780°E

Family: Nemouridae

Amphinemura borealis

Within Known Range? N Nearest Occurrence: 239.50 KM 47.82258°N 107.33613°E

Nemoura cinerea

Within Known Range? N Nearest Occurrence: 247.39 KM 47.96783°N 107.59278°E

Family: Perlidae

Agnetina brevipennis

Within Known Range? N Nearest Occurrence: 375.44 KM 49.08636°N 107.30750°E

Agnetina cocandica

Within Known Range? N Nearest Occurrence: 492.22 KM 49.16354°N 105.18880°E

Kamimuria exilis

Within Known Range? N Nearest Occurrence: 1,133.74 KM 50.16278°N 98.84212°E

Family: Perlodidae

Arcynopteryx sajanensis

Within Known Range? N Nearest Occurrence: 1,051.85 KM 51.61397°N 100.59972°E

Diura bicaudata

Within Known Range? N Nearest Occurrence: 915.48 KM 47.21768°N 99.92824°E

Isoperla obscura

Within Known Range? N Nearest Occurrence: 385.79 KM 47.85250°N 105.25567°E

Pictetiella asiatica

Within Known Range? N Nearest Occurrence: 1,059.08 KM 51.65822°N 100.53000°E

Family: Pteronarcyidae

Pteronarcys reticulata

Within Known Range? N Nearest Occurrence: 375.44 KM 49.08636°N 107.30750°E

**LOE Rating: Probable Total: 5**

Family: Chloroperlidae

Suwallia teleckojensis

Within Known Range? N Nearest Occurrence: 267.59 KM 48.16668°N 107.69548°E

Family: Perlodidae

Isoperla asiatica

Within Known Range? N Nearest Occurrence: 238.69 KM 47.82110°N 107.35422°E

Isoperla kozlovi

Within Known Range? N Nearest Occurrence: 260.63 KM 48.13111°N 107.92120°E

Kaszabia nigricauda

Within Known Range? N Nearest Occurrence: 247.39 KM 47.96783°N 107.59278°E

Family: Taeniopterygidae

Taenionema japonicum

Within Known Range? N Nearest Occurrence: 374.58 KM 49.05411°N 107.23175°E

**Basin:** Internal Drainage Basin

**Aimags:** Dundgovi

**Soums:** Bayanjargalan

Freshwater Ecoregion: Inner Mongolia Endorheic Basins

Terrestrial Ecoregion: Eastern Gobi Desert Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Possible Total: 5**

Family: Chloroperlidae					
Alloperla joosti	Within Known Range? N	Nearest Occurrence:	667.85 KM	49.21675 °N	103.10750 °E
Family: Leuctridae					
Paraleuctra zapekinae	Within Known Range? N	Nearest Occurrence:	251.57 KM	47.97944 °N	107.47761 °E
Family: Perlodidae					
Isoperla altaica	Within Known Range? N	Nearest Occurrence:	313.89 KM	48.60182 °N	107.84335 °E
Isoperla lunigera	Within Known Range? N	Nearest Occurrence:	238.69 KM	47.82110 °N	107.35422 °E
Megarcys ochracea	Within Known Range? N	Nearest Occurrence:	250.18 KM	47.97108 °N	107.49534 °E

**LOE Rating: Predicted Total: 17**

Family: Capniidae					
Capnia nigra	Within Known Range? N	Nearest Occurrence:	990.45 KM	50.92452 °N	100.75528 °E
Mesocapnia variabilis	Within Known Range? N	Nearest Occurrence:	293.31 KM	48.42080 °N	107.91406 °E
Family: Chloroperlidae					
Alaskaperla longidentata	Within Known Range? N	Nearest Occurrence:	256.31 KM	48.07956 °N	107.77729 °E
Alloperla deminuta	Within Known Range? N	Nearest Occurrence:	239.50 KM	47.82258 °N	107.33613 °E
Alloperla mediata	Within Known Range? N	Nearest Occurrence:	662.85 KM	49.77776 °N	103.60860 °E
Family: Leuctridae					
Leuctra fusca	Within Known Range? N	Nearest Occurrence:	375.89 KM	49.08643 °N	107.28952 °E
Family: Nemouridae					
Amphinemura standfussi	Within Known Range? N	Nearest Occurrence:	440.28 KM	49.73130 °N	107.63484 °E
Nemoura arctica	Within Known Range? N	Nearest Occurrence:	254.17 KM	47.77758 °N	106.92780 °E
Nemoura sahlbergi	Within Known Range? N	Nearest Occurrence:	267.11 KM	48.16668 °N	107.69548 °E
Family: Perlidae					
Paragnetina flavotincta	Within Known Range? N	Nearest Occurrence:	491.34 KM	49.16354 °N	105.18880 °E
Family: Perlodidae					
Arcynopteryx compacta	Within Known Range? N	Nearest Occurrence:	235.29 KM	47.84324 °N	107.55299 °E
Arcynopteryx polaris	Within Known Range? N	Nearest Occurrence:	293.31 KM	48.42080 °N	107.91406 °E
Diura majuscula	Within Known Range? N	Nearest Occurrence:	253.80 KM	47.99158 °N	107.46116 °E
Isoperla eximia	Within Known Range? N	Nearest Occurrence:	313.33 KM	48.60182 °N	107.84335 °E
Isoperla mongolica	Within Known Range? N	Nearest Occurrence:	257.78 KM	48.09549 °N	107.84265 °E
Isoperla potanini	Within Known Range? N	Nearest Occurrence:	693.53 KM	46.73093 °N	101.88583 °E
Skwala pusilla	Within Known Range? N	Nearest Occurrence:	2,189.90 KM	48.51277 °N	88.51107 °E

**LOE Rating: Unlikely Total: 3**

Family: Capniidae					
Capnia khulsbagia	Within Known Range? N	Nearest Occurrence:	997.86 KM	50.98944 °N	100.71944 °E
Mesocapnia altaica	Within Known Range? N	Nearest Occurrence:	2,145.88 KM	48.43684 °N	88.90094 °E
Family: Nemouridae					
Nemurella pictetii	Within Known Range? N	Nearest Occurrence:	1,096.59 KM	51.07896 °N	99.70857 °E

Basin: Internal Drainage Basin

Aimags: Dundgovi

Soums: Delgerkhantai

Freshwater Ecoregion: Western Mongolia

Terrestrial Ecoregion: Eastern Gobi Desert Steppe

WQM Sites:

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Highly Likely Total: 4**

Family: Capniidae

Isocapnia guentheri

Within Known Range? N Nearest Occurrence: 400.44 KM 47.88349°N 106.98829°E

Isocapnia sibirica

Within Known Range? N Nearest Occurrence: 397.34 KM 47.26999°N 101.80227°E

Family: Chloroperlidae

Alloperla rostellata

Within Known Range? N Nearest Occurrence: 461.99 KM 47.11192°N 101.01048°E

Family: Perlidae

Agnetina cocandica

Within Known Range? N Nearest Occurrence: 453.10 KM 49.16354°N 105.18880°E

**LOE Rating: Likely Total: 13**

Family: Capniidae

Isocapnia kudia

Within Known Range? N Nearest Occurrence: 878.12 KM 51.25356°N 99.66687°E

Family: Chloroperlidae

Alloperla joosti

Within Known Range? N Nearest Occurrence: 352.67 KM 46.78742°N 101.96021°E

Haploperla lepnevae

Within Known Range? N Nearest Occurrence: 421.48 KM 47.82258°N 107.33613°E

Suwallia kerzhneri

Within Known Range? N Nearest Occurrence: 461.86 KM 48.12416°N 107.54780°E

Family: Nemouridae

Amphinemura borealis

Within Known Range? N Nearest Occurrence: 352.67 KM 46.78742°N 101.96021°E

Nemoura cinerea

Within Known Range? N Nearest Occurrence: 453.07 KM 47.96783°N 107.59278°E

Family: Perlidae

Agnetina brevipennis

Within Known Range? N Nearest Occurrence: 319.70 KM 46.89303°N 102.39457°E

Agnetina extrema

Within Known Range? N Nearest Occurrence: 397.34 KM 47.26999°N 101.80227°E

Kamimuria exilis

Within Known Range? N Nearest Occurrence: 856.49 KM 50.16278°N 98.84212°E

Family: Perlodidae

Arcynopteryx sajanensis

Within Known Range? N Nearest Occurrence: 851.79 KM 51.61397°N 100.59972°E

Diura bicaudata

Within Known Range? N Nearest Occurrence: 575.05 KM 47.21768°N 99.92824°E

Pictetiella asiatica

Within Known Range? N Nearest Occurrence: 858.54 KM 51.65822°N 100.53000°E

Family: Pteronarcyidae

Pteronarcys reticulata

Within Known Range? N Nearest Occurrence: 527.61 KM 49.08643°N 107.28952°E

**LOE Rating: Probable Total: 5**

Family: Chloroperlidae

Suwallia teleckojensis

Within Known Range? N Nearest Occurrence: 353.30 KM 46.78742°N 101.96021°E

Family: Perlodidae

Isoperla asiatica

Within Known Range? N Nearest Occurrence: 422.78 KM 47.82110°N 107.35422°E

Isoperla kozlovi

Within Known Range? N Nearest Occurrence: 310.01 KM 47.85250°N 105.25567°E

Isoperla obscura

Within Known Range? N Nearest Occurrence: 310.01 KM 47.85250°N 105.25567°E

Kaszabia nigricauda

Within Known Range? N Nearest Occurrence: 310.01 KM 47.85250°N 105.25567°E

**LOE Rating: Possible Total: 1**

Family: Perlodidae

Isoperla lunigera

Within Known Range? N Nearest Occurrence: 422.78 KM 47.82110°N 107.35422°E

Research funded by the National Science Foundation

DEB-BSI #0206674: A Survey of the Aquatic Insects of the Selenge River Basin. P.I.'s: JKGelhaus, JCMorse, BHayford.

DEB # 0743732: Aquatic Insects of the Altai and Hangai Mountain Drainages. P.I.'s: JKGelhaus, JCMorse, CRNelson.

<http://clade.ansp.org/entomology/mongolia/index.html>



**Basin:** Internal Drainage Basin

**Aimags:** Dundgovi

**Soums:** Delgerkhantai

Freshwater Ecoregion: Western Mongolia

Terrestrial Ecoregion: Eastern Gobi Desert Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

<b>LOE Rating:</b>	<b>Predicted</b>	<b>Total:</b>	<b>22</b>
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Family: Capniidae

Capnia khulsbagia	Within Known Range? N	Nearest Occurrence:	784.87 KM	50.98944 °N	100.71944 °E
Capnia nigra	Within Known Range? N	Nearest Occurrence:	762.55 KM	50.51003 °N	100.40375 °E
Mesocapnia variabilis	Within Known Range? N	Nearest Occurrence:	514.73 KM	48.42080 °N	107.91406 °E

Family: Chloroperlidae

Alaskaperla longidentata	Within Known Range? N	Nearest Occurrence:	378.99 KM	46.82177 °N	101.70479 °E
Alloperla deminuta	Within Known Range? N	Nearest Occurrence:	352.67 KM	46.78742 °N	101.96021 °E
Alloperla mediata	Within Known Range? N	Nearest Occurrence:	529.90 KM	49.77776 °N	103.60860 °E

Family: Leuctridae

Leuctra fusca	Within Known Range? N	Nearest Occurrence:	527.61 KM	49.08643 °N	107.28952 °E
Paraleuctra zapekinae	Within Known Range? N	Nearest Occurrence:	444.59 KM	47.99158 °N	107.46116 °E

Family: Nemouridae

Amphinemura standfussi	Within Known Range? N	Nearest Occurrence:	503.58 KM	49.33339 °N	102.97786 °E
Nemoura arctica	Within Known Range? N	Nearest Occurrence:	387.82 KM	47.77758 °N	106.92780 °E
Nemoura sahlbergi	Within Known Range? N	Nearest Occurrence:	476.69 KM	48.16668 °N	107.69548 °E

Family: Perlidae

Paragnetina flavotincta	Within Known Range? N	Nearest Occurrence:	452.28 KM	49.16354 °N	105.18880 °E
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Family: Perlodidae

Arcynopteryx compacta	Within Known Range? N	Nearest Occurrence:	324.36 KM	46.88627 °N	102.34304 °E
Arcynopteryx polaris	Within Known Range? N	Nearest Occurrence:	387.10 KM	47.04409 °N	101.76352 °E
Diura majuscula	Within Known Range? N	Nearest Occurrence:	320.27 KM	46.89303 °N	102.39457 °E
Isoperla altaica	Within Known Range? N	Nearest Occurrence:	447.89 KM	48.87748 °N	106.12370 °E
Isoperla eximia	Within Known Range? N	Nearest Occurrence:	522.99 KM	48.60182 °N	107.84335 °E
Isoperla mongolica	Within Known Range? N	Nearest Occurrence:	398.06 KM	47.26999 °N	101.80227 °E
Isoperla potanini	Within Known Range? N	Nearest Occurrence:	357.19 KM	46.73093 °N	101.88583 °E
Megarcys ochracea	Within Known Range? N	Nearest Occurrence:	444.59 KM	47.99158 °N	107.46116 °E
Skwala pusilla	Within Known Range? N	Nearest Occurrence:	1,832.29 KM	48.51277 °N	88.51107 °E

Family: Taeniopterygidae

Taenionema japonicum	Within Known Range? N	Nearest Occurrence:	455.30 KM	47.28244 °N	101.18793 °E
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<b>LOE Rating:</b>	<b>Unlikely</b>	<b>Total:</b>	<b>2</b>
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Family: Capniidae

Mesocapnia altaica	Within Known Range? N	Nearest Occurrence:	1,788.21 KM	48.43684 °N	88.90094 °E
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Family: Nemouridae

Nemurella pictetii	Within Known Range? N	Nearest Occurrence:	860.22 KM	51.07896 °N	99.70857 °E
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**Basin:** Internal Drainage Basin

**Aimags:** Dundgovi

**Soums:** Delgertsogt

**Freshwater Ecoregion:** Inner Mongolia Endorheic Basins

**Terrestrial Ecoregion:** Mongolian-Manchurian Grassland

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Highly Likely Total: 3**

**Family:** Capniidae

Isocapnia guentheri Within Known Range? N Nearest Occurrence: 195.91 KM 47.88349°N 106.98829°E

Isocapnia sibirica Within Known Range? N Nearest Occurrence: 267.80 KM 48.09549°N 107.84265°E

**Family:** Perlidae

Agnatina extrema Within Known Range? N Nearest Occurrence: 253.61 KM 48.50028°N 106.78434°E

**LOE Rating: Likely Total: 16**

**Family:** Capniidae

Isocapnia kudia Within Known Range? N Nearest Occurrence: 916.62 KM 51.25356°N 99.66687°E

**Family:** Chloroperlidae

Alloperla joosti Within Known Range? N Nearest Occurrence: 478.20 KM 49.21675°N 103.10750°E

Alloperla rostellata Within Known Range? N Nearest Occurrence: 487.23 KM 49.77776°N 103.60860°E

Haploperla lepnevae Within Known Range? N Nearest Occurrence: 209.22 KM 47.82258°N 107.33613°E

Suwallia kerzhneri Within Known Range? N Nearest Occurrence: 250.12 KM 48.12416°N 107.54780°E

**Family:** Nemouridae

Amphinemura borealis Within Known Range? N Nearest Occurrence: 209.22 KM 47.82258°N 107.33613°E

Nemoura cinerea Within Known Range? N Nearest Occurrence: 239.17 KM 47.96783°N 107.59278°E

**Family:** Perlidae

Agnatina brevipennis Within Known Range? N Nearest Occurrence: 317.19 KM 49.10740°N 106.65177°E

Agnatina cocandica Within Known Range? N Nearest Occurrence: 342.23 KM 49.16354°N 105.18880°E

Kamimuria exilis Within Known Range? N Nearest Occurrence: 930.87 KM 50.16278°N 98.84212°E

**Family:** Perlodidae

Arcynopteryx sajanensis Within Known Range? N Nearest Occurrence: 864.82 KM 51.61397°N 100.59972°E

Diura bicaudata Within Known Range? N Nearest Occurrence: 710.20 KM 47.21768°N 99.92824°E

Isoperla kozlovi Within Known Range? N Nearest Occurrence: 207.18 KM 47.85250°N 105.25567°E

Kaszabia nigricauda Within Known Range? N Nearest Occurrence: 207.18 KM 47.85250°N 105.25567°E

Pictetiella asiatica Within Known Range? N Nearest Occurrence: 872.27 KM 51.65822°N 100.53000°E

**Family:** Pteronarcyidae

Pteronarcys reticulata Within Known Range? N Nearest Occurrence: 332.22 KM 49.08643°N 107.28952°E

**LOE Rating: Probable Total: 3**

**Family:** Perlodidae

Isoperla asiatica Within Known Range? N Nearest Occurrence: 210.24 KM 47.82110°N 107.35422°E

Isoperla lunigera Within Known Range? N Nearest Occurrence: 210.24 KM 47.82110°N 107.35422°E

Isoperla obscura Within Known Range? N Nearest Occurrence: 207.18 KM 47.85250°N 105.25567°E

**Basin:** Internal Drainage Basin  
**Aimags:** Dundgovi  
**Soum:** Delgertsogt

**Freshwater Ecoregion:** Inner Mongolia Endorheic Basins  
**Terrestrial Ecoregion:** Mongolian-Manchurian Grassland

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

<b>LOE Rating:</b>	<b>Possible</b>	<b>Total:</b>	<b>5</b>
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<b>Family:</b> Chloroperlidae						
Suwallia teleckojensis	Within Known Range? N	Nearest Occurrence:	254.06 KM	48.50028°N	106.78434°E	
<b>Family:</b> Leuctridae						
Paraleuctra zapekinae	Within Known Range? N	Nearest Occurrence:	232.51 KM	47.97944°N	107.47761°E	
<b>Family:</b> Perlodidae						
Diura majuscula	Within Known Range? N	Nearest Occurrence:	232.97 KM	47.99158°N	107.46116°E	
Megarcys ochracea	Within Known Range? N	Nearest Occurrence:	232.55 KM	47.99158°N	107.46116°E	
<b>Family:</b> Taeniopterygidae						
Taenionema japonicum	Within Known Range? N	Nearest Occurrence:	327.26 KM	49.05411°N	107.23175°E	

<b>LOE Rating:</b>	<b>Predicted</b>	<b>Total:</b>	<b>17</b>
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<b>Family:</b> Capniidae						
Capnia nigra	Within Known Range? N	Nearest Occurrence:	799.39 KM	50.92452°N	100.75528°E	
Mesocapnia variabilis	Within Known Range? N	Nearest Occurrence:	301.29 KM	48.42080°N	107.91406°E	
<b>Family:</b> Chloroperlidae						
Alaskaperla longidentata	Within Known Range? N	Nearest Occurrence:	250.12 KM	48.12416°N	107.54780°E	
Alloperla deminuta	Within Known Range? N	Nearest Occurrence:	209.22 KM	47.82258°N	107.33613°E	
Alloperla mediata	Within Known Range? N	Nearest Occurrence:	487.23 KM	49.77776°N	103.60860°E	
<b>Family:</b> Leuctridae						
Leuctra fusca	Within Known Range? N	Nearest Occurrence:	332.22 KM	49.08643°N	107.28952°E	
<b>Family:</b> Nemouridae						
Amphinemura standfussi	Within Known Range? N	Nearest Occurrence:	412.78 KM	49.73130°N	107.63484°E	
Nemoura arctica	Within Known Range? N	Nearest Occurrence:	182.76 KM	47.77758°N	106.92780°E	
Nemoura sahlbergi	Within Known Range? N	Nearest Occurrence:	263.60 KM	48.16668°N	107.69548°E	
<b>Family:</b> Perlidae						
Paragnetina flavotincta	Within Known Range? N	Nearest Occurrence:	341.61 KM	49.16354°N	105.18880°E	
<b>Family:</b> Perlodidae						
Arcynopteryx compacta	Within Known Range? N	Nearest Occurrence:	226.04 KM	47.84324°N	107.55299°E	
Arcynopteryx polaris	Within Known Range? N	Nearest Occurrence:	301.29 KM	48.42080°N	107.91406°E	
Isoperla altaica	Within Known Range? N	Nearest Occurrence:	289.53 KM	48.87748°N	106.12370°E	
Isoperla eximia	Within Known Range? N	Nearest Occurrence:	312.39 KM	48.60182°N	107.84335°E	
Isoperla mongolica	Within Known Range? N	Nearest Occurrence:	268.20 KM	48.09694°N	107.83988°E	
Isoperla potanini	Within Known Range? N	Nearest Occurrence:	488.67 KM	46.73093°N	101.88583°E	
Skwala pusilla	Within Known Range? N	Nearest Occurrence:	1,985.36 KM	48.51277°N	88.51107°E	

<b>LOE Rating:</b>	<b>Unlikely</b>	<b>Total:</b>	<b>3</b>
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<b>Family:</b> Capniidae						
Capnia khulsbagia	Within Known Range? N	Nearest Occurrence:	807.09 KM	50.98944°N	100.71944°E	
Mesocapnia altaica	Within Known Range? N	Nearest Occurrence:	1,941.37 KM	48.43684°N	88.90094°E	
<b>Family:</b> Nemouridae						
Nemurella pictetii	Within Known Range? N	Nearest Occurrence:	901.34 KM	51.07896°N	99.70857°E	



**Basin:** Internal Drainage Basin  
**Aimags:** Dundgovi  
**Soum:** Deren

**Freshwater Ecoregion:** Inner Mongolia Endorheic Basins  
**Terrestrial Ecoregion:** Mongolian-Manchurian Grassland

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Highly Likely Total: 3**

Family: Capniidae					
Isocapnia guentheri	Within Known Range? N	Nearest Occurrence:	183.49 KM	47.88349°N	106.98829 °E
Isocapnia sibirica	Within Known Range? N	Nearest Occurrence:	235.96 KM	48.09549°N	107.84265 °E
Family: Perlidae					
Agnetina extrema	Within Known Range? N	Nearest Occurrence:	236.43 KM	48.09671°N	107.84928 °E

**LOE Rating: Likely Total: 18**

Family: Capniidae					
Isocapnia kudia	Within Known Range? N	Nearest Occurrence:	968.12 KM	51.25356°N	99.66687 °E
Family: Chloroperlidae					
Alloperla joosti	Within Known Range? N	Nearest Occurrence:	526.78 KM	49.21675°N	103.10750 °E
Alloperla rostellata	Within Known Range? N	Nearest Occurrence:	529.11 KM	49.77776°N	103.60860 °E
Haploperla lepnevae	Within Known Range? N	Nearest Occurrence:	185.25 KM	47.82258°N	107.33613 °E
Suwallia kerzhneri	Within Known Range? N	Nearest Occurrence:	224.77 KM	48.12416°N	107.54780 °E
Family: Nemouridae					
Amphinemura borealis	Within Known Range? N	Nearest Occurrence:	185.25 KM	47.82258°N	107.33613 °E
Nemoura cinerea	Within Known Range? N	Nearest Occurrence:	210.75 KM	47.96783°N	107.59278 °E
Family: Perlidae					
Agnetina brevipennis	Within Known Range? N	Nearest Occurrence:	318.65 KM	49.10740°N	106.65177 °E
Agnetina cocandica	Within Known Range? N	Nearest Occurrence:	371.35 KM	49.16354°N	105.18880 °E
Kamimuria exilis	Within Known Range? N	Nearest Occurrence:	986.97 KM	50.16278°N	98.84212 °E
Family: Perlodidae					
Arcynopteryx sajanensis	Within Known Range? N	Nearest Occurrence:	912.70 KM	51.61397°N	100.59972 °E
Diura bicaudata	Within Known Range? N	Nearest Occurrence:	770.89 KM	47.21768°N	99.92824 °E
Isoperla asiatica	Within Known Range? N	Nearest Occurrence:	185.75 KM	47.82110°N	107.35422 °E
Isoperla kozlovi	Within Known Range? N	Nearest Occurrence:	243.73 KM	48.13111°N	107.92120 °E
Isoperla lunigera	Within Known Range? N	Nearest Occurrence:	185.75 KM	47.82110°N	107.35422 °E
Kaszabia nigricauda	Within Known Range? N	Nearest Occurrence:	210.75 KM	47.96783°N	107.59278 °E
Pictetiella asiatica	Within Known Range? N	Nearest Occurrence:	920.12 KM	51.65822°N	100.53000 °E
Family: Pteronarcyidae					
Pteronarcys reticulata	Within Known Range? N	Nearest Occurrence:	320.44 KM	49.08643°N	107.28952 °E

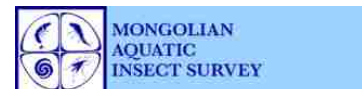
**LOE Rating: Probable Total: 2**

Family: Leuctridae					
Paraleuctra zapekinae	Within Known Range? N	Nearest Occurrence:	206.97 KM	47.97944°N	107.47761 °E
Family: Perlodidae					
Isoperla obscura	Within Known Range? N	Nearest Occurrence:	248.09 KM	47.85250°N	105.25567 °E

**LOE Rating: Possible Total: 3**

Family: Chloroperlidae					
Suwallia teleckojensis	Within Known Range? N	Nearest Occurrence:	235.99 KM	48.16668°N	107.69548 °E
Family: Perlodidae					
Megarcys ochracea	Within Known Range? N	Nearest Occurrence:	206.83 KM	47.97108°N	107.49534 °E
Family: Taeniopterygidae					
Taenionema japonicum	Within Known Range? N	Nearest Occurrence:	316.44 KM	49.05411°N	107.23175 °E

Research funded by the National Science Foundation  
 DEB-BSI #0206674: A Survey of the Aquatic Insects of the Selenge River Basin. P.I.'s: JKGelhaus, JCMorse, BHayford.  
 DEB # 0743732: Aquatic Insects of the Altai and Hangai Mountain Drainages. P.I.'s: JKGelhaus, JCMorse, CRNelson.  
<http://clade.ansp.org/entomology/mongolia/index.html>



**Basin:** Internal Drainage Basin  
**Aimags:** Dundgovi  
**Soums:** Deren

**Freshwater Ecoregion:** Inner Mongolia Endorheic Basins  
**Terrestrial Ecoregion:** Mongolian-Manchurian Grassland

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

<b>LOE Rating:</b>	<b>Predicted</b>	<b>Total:</b>	18
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<b>Family:</b> Capniidae			
Capnia nigra	Within Known Range? N	Nearest Occurrence: 849.18 KM	50.92452 °N 100.75528 °E
Mesocapnia variabilis	Within Known Range? N	Nearest Occurrence: 272.03 KM	48.42080 °N 107.91406 °E
<b>Family:</b> Chloroperlidae			
Alaskaperla longidentata	Within Known Range? N	Nearest Occurrence: 224.77 KM	48.12416 °N 107.54780 °E
Alloperla deminuta	Within Known Range? N	Nearest Occurrence: 185.25 KM	47.82258 °N 107.33613 °E
Alloperla mediata	Within Known Range? N	Nearest Occurrence: 529.11 KM	49.77776 °N 103.60860 °E
<b>Family:</b> Leuctridae			
Leuctra fusca	Within Known Range? N	Nearest Occurrence: 320.44 KM	49.08643 °N 107.28952 °E
<b>Family:</b> Nemouridae			
Amphinemura standfussi	Within Known Range? N	Nearest Occurrence: 398.28 KM	49.73130 °N 107.63484 °E
Nemoura arctica	Within Known Range? N	Nearest Occurrence: 171.45 KM	47.77758 °N 106.92780 °E
Nemoura sahlbergi	Within Known Range? N	Nearest Occurrence: 235.57 KM	48.16668 °N 107.69548 °E
<b>Family:</b> Perlidae			
Paragnetina flavotincta	Within Known Range? N	Nearest Occurrence: 370.68 KM	49.16354 °N 105.18880 °E
<b>Family:</b> Perlodidae			
Arcynopteryx compacta	Within Known Range? N	Nearest Occurrence: 196.69 KM	47.84324 °N 107.55299 °E
Arcynopteryx polaris	Within Known Range? N	Nearest Occurrence: 272.03 KM	48.42080 °N 107.91406 °E
Diura majuscula	Within Known Range? N	Nearest Occurrence: 207.95 KM	47.99158 °N 107.46116 °E
Isoperla altaica	Within Known Range? N	Nearest Occurrence: 286.86 KM	48.60182 °N 107.84335 °E
Isoperla eximia	Within Known Range? N	Nearest Occurrence: 286.35 KM	48.60182 °N 107.84335 °E
Isoperla mongolica	Within Known Range? N	Nearest Occurrence: 236.37 KM	48.09694 °N 107.83988 °E
Isoperla potanini	Within Known Range? N	Nearest Occurrence: 549.63 KM	46.73093 °N 101.88583 °E
Skwala pusilla	Within Known Range? N	Nearest Occurrence: 2,046.13 KM	48.51277 °N 88.51107 °E

<b>LOE Rating:</b>	<b>Unlikely</b>	<b>Total:</b>	3
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<b>Family:</b> Capniidae			
Capnia khulsbagia	Within Known Range? N	Nearest Occurrence: 856.74 KM	50.98944 °N 100.71944 °E
Mesocapnia altaica	Within Known Range? N	Nearest Occurrence: 2,002.15 KM	48.43684 °N 88.90094 °E
<b>Family:</b> Nemouridae			
Nemurella pictetii	Within Known Range? N	Nearest Occurrence: 953.28 KM	51.07896 °N 99.70857 °E



**Basin:** Internal Drainage Basin  
**Aimags:** Dundgovi  
**Soums:** Erdenedalai

**Freshwater Ecoregion:** Western Mongolia  
**Terrestrial Ecoregion:** Mongolian-Manchurian Grassland

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

<b>LOE Rating:</b>	<b>Highly Likely</b>	<b>Total:</b>	<b>4</b>
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<b>Family:</b> Capniidae			
Isocapnia guentheri	Within Known Range? N	Nearest Occurrence:	303.59 KM 47.88349°N 106.98829 °E
Isocapnia sibirica	Within Known Range? N	Nearest Occurrence:	376.73 KM 47.26999°N 101.80227 °E
<b>Family:</b> Chloroperlidae			
Alloperla rostellata	Within Known Range? N	Nearest Occurrence:	441.22 KM 49.77776°N 103.60860 °E
<b>Family:</b> Perlidae			
Agnentina cocandica	Within Known Range? N	Nearest Occurrence:	348.01 KM 49.16354°N 105.18880 °E

<b>LOE Rating:</b>	<b>Likely</b>	<b>Total:</b>	<b>14</b>
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<b>Family:</b> Capniidae			
Isocapnia kudia	Within Known Range? N	Nearest Occurrence:	825.03 KM 51.25356°N 99.66687 °E
<b>Family:</b> Chloroperlidae			
Alloperla joosti	Within Known Range? N	Nearest Occurrence:	343.77 KM 46.78742°N 101.96021 °E
Haploperla lepnevae	Within Known Range? N	Nearest Occurrence:	329.05 KM 47.82258°N 107.33613 °E
Suwallia kerzhneri	Within Known Range? N	Nearest Occurrence:	368.16 KM 48.12416°N 107.54780 °E
<b>Family:</b> Nemouridae			
Amphinemura borealis	Within Known Range? N	Nearest Occurrence:	329.05 KM 47.82258°N 107.33613 °E
Nemoura cinerea	Within Known Range? N	Nearest Occurrence:	361.53 KM 47.96783°N 107.59278 °E
<b>Family:</b> Perlidae			
Agnentina brevipennis	Within Known Range? N	Nearest Occurrence:	300.68 KM 46.89303°N 102.39457 °E
Agnentina extrema	Within Known Range? N	Nearest Occurrence:	339.41 KM 48.50028°N 106.78434 °E
Kamimuria exilis	Within Known Range? N	Nearest Occurrence:	820.82 KM 50.16278°N 98.84212 °E
<b>Family:</b> Perlodidae			
Arcynopteryx sajanensis	Within Known Range? N	Nearest Occurrence:	787.20 KM 51.61397°N 100.59972 °E
Diura bicaudata	Within Known Range? N	Nearest Occurrence:	574.24 KM 47.21768°N 99.92824 °E
Isoperla kozlovi	Within Known Range? N	Nearest Occurrence:	203.53 KM 47.85250°N 105.25567 °E
Pictetiella asiatica	Within Known Range? N	Nearest Occurrence:	794.43 KM 51.65822°N 100.53000 °E
<b>Family:</b> Pteronarcyidae			
Pteronarcys reticulata	Within Known Range? N	Nearest Occurrence:	425.11 KM 49.08643°N 107.28952 °E

<b>LOE Rating:</b>	<b>Probable</b>	<b>Total:</b>	<b>5</b>
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<b>Family:</b> Chloroperlidae			
Suwallia teleckojensis	Within Known Range? N	Nearest Occurrence:	340.01 KM 48.50028°N 106.78434 °E
<b>Family:</b> Perlodidae			
Isoperla asiatica	Within Known Range? N	Nearest Occurrence:	330.56 KM 47.82110°N 107.35422 °E
Isoperla lunigera	Within Known Range? N	Nearest Occurrence:	330.56 KM 47.82110°N 107.35422 °E
Isoperla obscura	Within Known Range? N	Nearest Occurrence:	203.53 KM 47.85250°N 105.25567 °E
Kaszabia nigricauda	Within Known Range? N	Nearest Occurrence:	203.53 KM 47.85250°N 105.25567 °E



**Basin:** Internal Drainage Basin

**Aimags:** Dundgovi

**Soums:** Erdenedalai

Freshwater Ecoregion: Western Mongolia

Terrestrial Ecoregion: Mongolian-Manchurian Grassland

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

<b>LOE Rating:</b>	<b>Predicted</b>	<b>Total:</b>	<b>22</b>
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**Family:** Capniidae

Capnia khulsbagia	Within Known Range? N	Nearest Occurrence:	723.75 KM	50.98944 °N	100.71944 °E
Capnia nigra	Within Known Range? N	Nearest Occurrence:	708.84 KM	50.51003 °N	100.40375 °E
Mesocapnia variabilis	Within Known Range? N	Nearest Occurrence:	421.23 KM	48.42080 °N	107.91406 °E

**Family:** Chloroperlidae

Alaskaperla longidentata	Within Known Range? N	Nearest Occurrence:	368.16 KM	48.12416 °N	107.54780 °E
Alloperla deminuta	Within Known Range? N	Nearest Occurrence:	329.05 KM	47.82258 °N	107.33613 °E
Alloperla mediata	Within Known Range? N	Nearest Occurrence:	441.22 KM	49.77776 °N	103.60860 °E

**Family:** Leuctridae

Leuctra fusca	Within Known Range? N	Nearest Occurrence:	425.11 KM	49.08643 °N	107.28952 °E
Paraleuctra zapekinae	Within Known Range? N	Nearest Occurrence:	351.47 KM	47.99158 °N	107.46116 °E

**Family:** Nemouridae

Amphinemura standfussi	Within Known Range? N	Nearest Occurrence:	426.85 KM	49.33339 °N	102.97786 °E
Nemoura arctica	Within Known Range? N	Nearest Occurrence:	291.26 KM	47.77758 °N	106.92780 °E
Nemoura sahlbergi	Within Known Range? N	Nearest Occurrence:	383.94 KM	48.16668 °N	107.69548 °E

**Family:** Perlidae

Paragnetina flavotincta	Within Known Range? N	Nearest Occurrence:	347.39 KM	49.16354 °N	105.18880 °E
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**Family:** Perlodidae

Arcynopteryx compacta	Within Known Range? N	Nearest Occurrence:	306.44 KM	46.88627 °N	102.34304 °E
Arcynopteryx polaris	Within Known Range? N	Nearest Occurrence:	373.17 KM	47.04409 °N	101.76352 °E
Diura majuscula	Within Known Range? N	Nearest Occurrence:	301.23 KM	46.89303 °N	102.39457 °E
Isoperla altaica	Within Known Range? N	Nearest Occurrence:	340.58 KM	48.87748 °N	106.12370 °E
Isoperla eximia	Within Known Range? N	Nearest Occurrence:	427.48 KM	48.60182 °N	107.84335 °E
Isoperla mongolica	Within Known Range? N	Nearest Occurrence:	377.41 KM	47.26999 °N	101.80227 °E
Isoperla potanini	Within Known Range? N	Nearest Occurrence:	351.01 KM	46.73093 °N	101.88583 °E
Megarcys ochracea	Within Known Range? N	Nearest Occurrence:	351.47 KM	47.99158 °N	107.46116 °E
Skwala pusilla	Within Known Range? N	Nearest Occurrence:	1,847.00 KM	48.51277 °N	88.51107 °E

**Family:** Taeniopterygidae

Taenionema japonicum	Within Known Range? N	Nearest Occurrence:	419.12 KM	49.05411 °N	107.23175 °E
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<b>LOE Rating:</b>	<b>Unlikely</b>	<b>Total:</b>	<b>2</b>
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**Family:** Capniidae

Mesocapnia altaica	Within Known Range? N	Nearest Occurrence:	1,802.95 KM	48.43684 °N	88.90094 °E
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**Family:** Nemouridae

Nemurella pictetii	Within Known Range? N	Nearest Occurrence:	808.21 KM	51.07896 °N	99.70857 °E
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**Basin:** Internal Drainage Basin

**Aimags:** Dundgovi

**Soums:** Govi-ugtaal

Freshwater Ecoregion: Inner Mongolia Endorheic Basins

Terrestrial Ecoregion: Mongolian-Manchurian Grassland

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Highly Likely Total: 3**

Family: Capniidae

Isocapnia guentheri Within Known Range? N Nearest Occurrence: 214.05 KM 47.88349°N 106.98829 °E

Isocapnia sibirica Within Known Range? N Nearest Occurrence: 234.59 KM 48.09549°N 107.84265 °E

Family: Perlidae

Agnetina extrema Within Known Range? N Nearest Occurrence: 234.86 KM 48.09671°N 107.84928 °E

**LOE Rating: Likely Total: 14**

Family: Capniidae

Isocapnia kudia Within Known Range? N Nearest Occurrence: 1,042.96 KM 51.25356°N 99.66687 °E

Family: Chloroperlidae

Alloperla rostellata Within Known Range? N Nearest Occurrence: 598.21 KM 49.77776°N 103.60860 °E

Haploperla lepnevae Within Known Range? N Nearest Occurrence: 201.10 KM 47.82258°N 107.33613 °E

Suwallia kerzhneri Within Known Range? N Nearest Occurrence: 234.22 KM 48.12416°N 107.54780 °E

Family: Nemouridae

Amphinemura borealis Within Known Range? N Nearest Occurrence: 201.10 KM 47.82258°N 107.33613 °E

Nemoura cinerea Within Known Range? N Nearest Occurrence: 217.14 KM 47.96783°N 107.59278 °E

Family: Perlidae

Agnetina brevipennis Within Known Range? N Nearest Occurrence: 341.31 KM 49.08636°N 107.30750 °E

Agnetina cocandica Within Known Range? N Nearest Occurrence: 432.13 KM 49.16354°N 105.18880 °E

Kamimuria exilis Within Known Range? N Nearest Occurrence: 1,064.25 KM 50.16278°N 98.84212 °E

Family: Perlodidae

Arcynopteryx sajanensis Within Known Range? N Nearest Occurrence: 985.28 KM 51.61397°N 100.59972 °E

Diura bicaudata Within Known Range? N Nearest Occurrence: 847.42 KM 47.21768°N 99.92824 °E

Kaszabia nigricauda Within Known Range? N Nearest Occurrence: 217.14 KM 47.96783°N 107.59278 °E

Pictetiella asiatica Within Known Range? N Nearest Occurrence: 992.61 KM 51.65822°N 100.53000 °E

Family: Pteronarcyidae

Pteronarcys reticulata Within Known Range? N Nearest Occurrence: 341.31 KM 49.08636°N 107.30750 °E

**LOE Rating: Probable Total: 7**

Family: Chloroperlidae

Alloperla joosti Within Known Range? N Nearest Occurrence: 600.39 KM 49.21675°N 103.10750 °E

Family: Leuctridae

Paraleuctra zapekinae Within Known Range? N Nearest Occurrence: 217.99 KM 47.97944°N 107.47761 °E

Family: Perlodidae

Isoperla asiatica Within Known Range? N Nearest Occurrence: 200.80 KM 47.82110°N 107.35422 °E

Isoperla kozlovi Within Known Range? N Nearest Occurrence: 240.16 KM 48.13111°N 107.92120 °E

Isoperla lunigera Within Known Range? N Nearest Occurrence: 200.80 KM 47.82110°N 107.35422 °E

Isoperla obscura Within Known Range? N Nearest Occurrence: 319.13 KM 47.85250°N 105.25567 °E

Family: Taeniopterygidae

Taenionema japonicum Within Known Range? N Nearest Occurrence: 338.89 KM 49.05411°N 107.23175 °E

**Basin:** Internal Drainage Basin

**Aimag:** Dundgovi

**Soum:** Govi-ugtaal

**Freshwater Ecoregion:** Inner Mongolia Endorheic Basins

**Terrestrial Ecoregion:** Mongolian-Manchurian Grassland

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Possible Total: 2**

**Family:** Chloroperlidae

Suwallia teleckojensis Within Known Range? N Nearest Occurrence: 240.53 KM 48.16668°N 107.69548 °E

**Family:** Perlodidae

Megarcys ochracea Within Known Range? N Nearest Occurrence: 217.08 KM 47.97108°N 107.49534 °E

**LOE Rating: Predicted Total: 18**

**Family:** Capniidae

Capnia nigra Within Known Range? N Nearest Occurrence: 923.04 KM 50.92452°N 100.75528 °E

Mesocapnia variabilis Within Known Range? N Nearest Occurrence: 272.02 KM 48.42080°N 107.91406 °E

**Family:** Chloroperlidae

Alaskaperla longidentata Within Known Range? N Nearest Occurrence: 231.66 KM 48.07956°N 107.77729 °E

Alloperla deminuta Within Known Range? N Nearest Occurrence: 201.10 KM 47.82258°N 107.33613 °E

Alloperla mediata Within Known Range? N Nearest Occurrence: 598.21 KM 49.77776°N 103.60860 °E

**Family:** Leuctridae

Leuctra fusca Within Known Range? N Nearest Occurrence: 341.43 KM 49.08643°N 107.28952 °E

**Family:** Nemouridae

Amphinemura standfussi Within Known Range? N Nearest Occurrence: 412.86 KM 49.73130°N 107.63484 °E

Nemoura arctica Within Known Range? N Nearest Occurrence: 204.91 KM 47.77758°N 106.92780 °E

Nemoura sahlbergi Within Known Range? N Nearest Occurrence: 240.10 KM 48.16668°N 107.69548 °E

**Family:** Perlidae

Paragnetina flavotincta Within Known Range? N Nearest Occurrence: 431.36 KM 49.16354°N 105.18880 °E

**Family:** Perlodidae

Arcynopteryx compacta Within Known Range? N Nearest Occurrence: 203.45 KM 47.84324°N 107.55299 °E

Arcynopteryx polaris Within Known Range? N Nearest Occurrence: 272.02 KM 48.42080°N 107.91406 °E

Diura majuscula Within Known Range? N Nearest Occurrence: 219.72 KM 47.99158°N 107.46116 °E

Isoperla altaica Within Known Range? N Nearest Occurrence: 290.60 KM 48.60182°N 107.84335 °E

Isoperla eximia Within Known Range? N Nearest Occurrence: 290.08 KM 48.60182°N 107.84335 °E

Isoperla mongolica Within Known Range? N Nearest Occurrence: 235.01 KM 48.09549°N 107.84265 °E

Isoperla potanini Within Known Range? N Nearest Occurrence: 625.76 KM 46.73093°N 101.88583 °E

Skwala pusilla Within Known Range? N Nearest Occurrence: 2,122.34 KM 48.51277°N 88.51107 °E

**LOE Rating: Unlikely Total: 3**

**Family:** Capniidae

Capnia khulsbagia Within Known Range? N Nearest Occurrence: 930.51 KM 50.98944°N 100.71944 °E

Mesocapnia altaica Within Known Range? N Nearest Occurrence: 2,078.33 KM 48.43684°N 88.90094 °E

**Family:** Nemouridae

Nemurella pictetii Within Known Range? N Nearest Occurrence: 1,028.40 KM 51.07896°N 99.70857 °E



**Basin:** Internal Drainage Basin

**Aimags:** Dundgovi

**Soums:** Gurvansaikhan

**Freshwater Ecoregion:** Inner Mongolia Endorheic Basins

**Terrestrial Ecoregion:** Eastern Gobi Desert Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Highly Likely Total: 3**

Family: Capniidae

Isocapnia guentheri

Within Known Range? N Nearest Occurrence: 262.33 KM 47.88349°N 106.98829 °E

Isocapnia sibirica

Within Known Range? N Nearest Occurrence: 296.60 KM 48.09549°N 107.84265 °E

Family: Perlidae

Agnetina extrema

Within Known Range? N Nearest Occurrence: 296.93 KM 48.09671°N 107.84928 °E

**LOE Rating: Likely Total: 13**

Family: Capniidae

Isocapnia kudia

Within Known Range? N Nearest Occurrence: 1,043.31 KM 51.25356°N 99.66687 °E

Family: Chloroperlidae

Alloperla rostellata

Within Known Range? N Nearest Occurrence: 612.12 KM 49.77776°N 103.60860 °E

Haploperla lepnevae

Within Known Range? N Nearest Occurrence: 256.33 KM 47.82258°N 107.33613 °E

Suwallia kerzhneri

Within Known Range? N Nearest Occurrence: 292.58 KM 48.12416°N 107.54780 °E

Family: Nemouridae

Amphinemura borealis

Within Known Range? N Nearest Occurrence: 256.33 KM 47.82258°N 107.33613 °E

Nemoura cinerea

Within Known Range? N Nearest Occurrence: 276.38 KM 47.96783°N 107.59278 °E

Family: Perlidae

Agnetina brevipennis

Within Known Range? N Nearest Occurrence: 396.02 KM 49.08636°N 107.30750 °E

Agnetina cocandica

Within Known Range? N Nearest Occurrence: 458.07 KM 49.16354°N 105.18880 °E

Kamimuria exilis

Within Known Range? N Nearest Occurrence: 1,054.97 KM 50.16278°N 98.84212 °E

Family: Perlodidae

Arcynopteryx sajanensis

Within Known Range? N Nearest Occurrence: 991.96 KM 51.61397°N 100.59972 °E

Diura bicaudata

Within Known Range? N Nearest Occurrence: 819.87 KM 47.21768°N 99.92824 °E

Pictetiella asiatica

Within Known Range? N Nearest Occurrence: 999.18 KM 51.65822°N 100.53000 °E

Family: Pteronarcyidae

Pteronarcys reticulata

Within Known Range? N Nearest Occurrence: 395.93 KM 49.08643°N 107.28952 °E

**LOE Rating: Probable Total: 5**

Family: Chloroperlidae

Alloperla joosti

Within Known Range? N Nearest Occurrence: 589.41 KM 46.78742°N 101.96021 °E

Family: Perlodidae

Isoperla asiatica

Within Known Range? N Nearest Occurrence: 256.36 KM 47.82110°N 107.35422 °E

Isoperla kozlovi

Within Known Range? N Nearest Occurrence: 302.86 KM 48.13111°N 107.92120 °E

Isoperla obscura

Within Known Range? N Nearest Occurrence: 330.96 KM 47.85250°N 105.25567 °E

Kaszabia nigricauda

Within Known Range? N Nearest Occurrence: 276.38 KM 47.96783°N 107.59278 °E

**LOE Rating: Possible Total: 4**

Family: Chloroperlidae

Suwallia teleckojensis

Within Known Range? N Nearest Occurrence: 300.84 KM 48.16668°N 107.69548 °E

Family: Leuctridae

Paraleuctra zapekinae

Within Known Range? N Nearest Occurrence: 275.50 KM 47.97944°N 107.47761 °E

Family: Perlodidae

Isoperla lunigera

Within Known Range? N Nearest Occurrence: 256.36 KM 47.82110°N 107.35422 °E

Family: Taeniopterygidae

Taenionema japonicum

Within Known Range? N Nearest Occurrence: 392.79 KM 49.05411°N 107.23175 °E

Research funded by the National Science Foundation  
DEB-BSI #0206674: A Survey of the Aquatic Insects of the Selenge River Basin. P.I.'s: JKGelhaus, JCMorse, BHayford.  
DEB # 0743732: Aquatic Insects of the Altai and Hangai Mountain Drainages. P.I.'s: JKGelhaus, JCMorse, CRNelson.  
<http://clade.ansp.org/entomology/mongolia/index.html>



**MONGOLIAN  
AQUATIC  
INSECT SURVEY**

**Basin:** Internal Drainage Basin

**Aimags:** Dundgovi

**Soums:** Gurvansaikhan

**Freshwater Ecoregion:** Inner Mongolia Endorheic Basins

**Terrestrial Ecoregion:** Eastern Gobi Desert Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

<b>LOE Rating:</b>	<b>Predicted</b>	<b>Total:</b>	19
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**Family:** Capniidae

Capnia nigra      **Within Known Range?** N      **Nearest Occurrence:** 926.36 KM      50.92452 °N      100.75528 °E

Mesocapnia variabilis      **Within Known Range?** N      **Nearest Occurrence:** 334.11 KM      48.42080 °N      107.91406 °E

**Family:** Chloroperlidae

Alaskaperla longidentata      **Within Known Range?** N      **Nearest Occurrence:** 292.58 KM      48.12416 °N      107.54780 °E

Alloperla deminuta      **Within Known Range?** N      **Nearest Occurrence:** 256.33 KM      47.82258 °N      107.33613 °E

Alloperla mediata      **Within Known Range?** N      **Nearest Occurrence:** 612.12 KM      49.77776 °N      103.60860 °E

**Family:** Leuctridae

Leuctra fusca      **Within Known Range?** N      **Nearest Occurrence:** 395.93 KM      49.08643 °N      107.28952 °E

**Family:** Nemouridae

Amphinemura standfussi      **Within Known Range?** N      **Nearest Occurrence:** 470.56 KM      49.73130 °N      107.63484 °E

Nemoura arctica      **Within Known Range?** N      **Nearest Occurrence:** 251.52 KM      47.77758 °N      106.92780 °E

Nemoura sahlbergi      **Within Known Range?** N      **Nearest Occurrence:** 300.30 KM      48.16668 °N      107.69548 °E

**Family:** Perlidae

Paragnetina flavotincta      **Within Known Range?** N      **Nearest Occurrence:** 457.25 KM      49.16354 °N      105.18880 °E

**Family:** Perlodidae

Arcynopteryx compacta      **Within Known Range?** N      **Nearest Occurrence:** 262.44 KM      47.84324 °N      107.55299 °E

Arcynopteryx polaris      **Within Known Range?** N      **Nearest Occurrence:** 334.11 KM      48.42080 °N      107.91406 °E

Diura majuscula      **Within Known Range?** N      **Nearest Occurrence:** 277.07 KM      47.99158 °N      107.46116 °E

Isoperla altaica      **Within Known Range?** N      **Nearest Occurrence:** 351.67 KM      48.60182 °N      107.84335 °E

Isoperla eximia      **Within Known Range?** N      **Nearest Occurrence:** 351.04 KM      48.60182 °N      107.84335 °E

Isoperla mongolica      **Within Known Range?** N      **Nearest Occurrence:** 297.13 KM      48.09549 °N      107.84265 °E

Isoperla potanini      **Within Known Range?** N      **Nearest Occurrence:** 597.07 KM      46.73093 °N      101.88583 °E

Megarcys ochracea      **Within Known Range?** N      **Nearest Occurrence:** 274.88 KM      47.97108 °N      107.49534 °E

Skwala pusilla      **Within Known Range?** N      **Nearest Occurrence:** 2,091.81 KM      48.51277 °N      88.51107 °E

<b>LOE Rating:</b>	<b>Unlikely</b>	<b>Total:</b>	3
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**Family:** Capniidae

Capnia khulsbagia      **Within Known Range?** N      **Nearest Occurrence:** 934.06 KM      50.98944 °N      100.71944 °E

Mesocapnia altaica      **Within Known Range?** N      **Nearest Occurrence:** 2,047.74 KM      48.43684 °N      88.90094 °E

**Family:** Nemouridae

Nemurella pictetii      **Within Known Range?** N      **Nearest Occurrence:** 1,027.90 KM      51.07896 °N      99.70857 °E

**Basin:** Internal Drainage Basin  
**Aimags:** Dundgovi  
**Soums:** Khuld

**Freshwater Ecoregion:** Inner Mongolia Endorheic Basins  
**Terrestrial Ecoregion:** Eastern Gobi Desert Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Highly Likely Total: 2**

Family: Capniidae					
Isocapnia guentheri	Within Known Range? N	Nearest Occurrence:	349.03 KM	47.88349°N	106.98829°E
Isocapnia sibirica	Within Known Range? N	Nearest Occurrence:	420.91 KM	48.09549°N	107.84265°E

**LOE Rating: Likely Total: 14**

Family: Capniidae					
Isocapnia kudia	Within Known Range? N	Nearest Occurrence:	940.12 KM	51.25356°N	99.66687°E
Family: Chloroperlidae					
Alloperla joosti	Within Known Range? N	Nearest Occurrence:	434.69 KM	46.78742°N	101.96021°E
Alloperla rostellata	Within Known Range? N	Nearest Occurrence:	545.53 KM	47.11192°N	101.01048°E
Haploperla lepnevae	Within Known Range? N	Nearest Occurrence:	363.25 KM	47.82258°N	107.33613°E
Suwallia kerzhneri	Within Known Range? N	Nearest Occurrence:	404.15 KM	48.12416°N	107.54780°E
Family: Nemouridae					
Nemoura cinerea	Within Known Range? N	Nearest Occurrence:	392.85 KM	47.96783°N	107.59278°E
Family: Perlidae					
Agnetina brevipennis	Within Known Range? N	Nearest Occurrence:	397.34 KM	46.89303°N	102.39457°E
Agnetina cocandica	Within Known Range? N	Nearest Occurrence:	451.71 KM	49.16354°N	105.18880°E
Agnetina extrema	Within Known Range? N	Nearest Occurrence:	402.05 KM	48.50028°N	106.78434°E
Kamimuria exilis	Within Known Range? N	Nearest Occurrence:	929.24 KM	50.16278°N	98.84212°E
Family: Perlodidae					
Arcynopteryx sajanensis	Within Known Range? N	Nearest Occurrence:	905.27 KM	51.61397°N	100.59972°E
Diura bicaudata	Within Known Range? N	Nearest Occurrence:	661.15 KM	47.21768°N	99.92824°E
Pictetiella asiatica	Within Known Range? N	Nearest Occurrence:	912.23 KM	51.65822°N	100.53000°E
Family: Pteronarcyidae					
Pteronarcys reticulata	Within Known Range? N	Nearest Occurrence:	483.66 KM	49.08643°N	107.28952°E

**LOE Rating: Probable Total: 5**

Family: Nemouridae					
Amphinemura borealis	Within Known Range? N	Nearest Occurrence:	363.25 KM	47.82258°N	107.33613°E
Family: Perlodidae					
Isoperla asiatica	Within Known Range? N	Nearest Occurrence:	364.25 KM	47.82110°N	107.35422°E
Isoperla kozlovi	Within Known Range? N	Nearest Occurrence:	305.26 KM	47.85250°N	105.25567°E
Isoperla obscura	Within Known Range? N	Nearest Occurrence:	305.26 KM	47.85250°N	105.25567°E
Kaszabia nigricauda	Within Known Range? N	Nearest Occurrence:	305.26 KM	47.85250°N	105.25567°E

**LOE Rating: Possible Total: 2**

Family: Chloroperlidae					
Suwallia teleckojensis	Within Known Range? N	Nearest Occurrence:	402.77 KM	48.50028°N	106.78434°E
Family: Perlodidae					
Isoperla lunigera	Within Known Range? N	Nearest Occurrence:	364.25 KM	47.82110°N	107.35422°E



**Basin:** Internal Drainage Basin  
**Aimags:** Dundgovi  
**Soums:** Khuld

**Freshwater Ecoregion:** Inner Mongolia Endorheic Basins  
**Terrestrial Ecoregion:** Eastern Gobi Desert Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

<b>LOE Rating:</b>	<b>Predicted</b>	<b>Total:</b>	<b>22</b>
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**Family:** Capniidae

Capnia khulsbagia	Within Known Range? N	Nearest Occurrence:	840.87 KM	50.98944 °N	100.71944 °E
Capnia nigra	Within Known Range? N	Nearest Occurrence:	823.95 KM	50.51003 °N	100.40375 °E
Mesocapnia variabilis	Within Known Range? N	Nearest Occurrence:	455.30 KM	48.42080 °N	107.91406 °E

**Family:** Chloroperlidae

Alaskaperla longidentata	Within Known Range? N	Nearest Occurrence:	404.15 KM	48.12416 °N	107.54780 °E
Alloperla deminuta	Within Known Range? N	Nearest Occurrence:	363.25 KM	47.82258 °N	107.33613 °E
Alloperla mediata	Within Known Range? N	Nearest Occurrence:	558.72 KM	49.77776 °N	103.60860 °E

**Family:** Leuctridae

Leuctra fusca	Within Known Range? N	Nearest Occurrence:	483.66 KM	49.08643 °N	107.28952 °E
Paraleuctra zapekinae	Within Known Range? N	Nearest Occurrence:	386.49 KM	47.97944 °N	107.47761 °E

**Family:** Nemouridae

Amphinemura standfussi	Within Known Range? N	Nearest Occurrence:	545.73 KM	49.33339 °N	102.97786 °E
Nemoura arctica	Within Known Range? N	Nearest Occurrence:	336.10 KM	47.77758 °N	106.92780 °E
Nemoura sahlbergi	Within Known Range? N	Nearest Occurrence:	417.41 KM	48.16668 °N	107.69548 °E

**Family:** Perlidae

Paragnetina flavotincta	Within Known Range? N	Nearest Occurrence:	450.90 KM	49.16354 °N	105.18880 °E
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**Family:** Perlodidae

Arcynopteryx compacta	Within Known Range? N	Nearest Occurrence:	379.79 KM	47.84324 °N	107.55299 °E
Arcynopteryx polaris	Within Known Range? N	Nearest Occurrence:	455.30 KM	48.42080 °N	107.91406 °E
Diura majuscula	Within Known Range? N	Nearest Occurrence:	387.26 KM	47.99158 °N	107.46116 °E
Isoperla altaica	Within Known Range? N	Nearest Occurrence:	424.27 KM	48.87748 °N	106.12370 °E
Isoperla eximia	Within Known Range? N	Nearest Occurrence:	466.45 KM	48.60182 °N	107.84335 °E
Isoperla mongolica	Within Known Range? N	Nearest Occurrence:	421.60 KM	48.09694 °N	107.83988 °E
Isoperla potanini	Within Known Range? N	Nearest Occurrence:	440.36 KM	46.73093 °N	101.88583 °E
Megarcys ochracea	Within Known Range? N	Nearest Occurrence:	386.57 KM	47.99158 °N	107.46116 °E
Skwala pusilla	Within Known Range? N	Nearest Occurrence:	1,923.20 KM	48.51277 °N	88.51107 °E

**Family:** Taeniopterygidae

Taenionema japonicum	Within Known Range? N	Nearest Occurrence:	478.63 KM	49.05411 °N	107.23175 °E
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<b>LOE Rating:</b>	<b>Unlikely</b>	<b>Total:</b>	<b>2</b>
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**Family:** Capniidae

Mesocapnia altaica	Within Known Range? N	Nearest Occurrence:	1,879.11 KM	48.43684 °N	88.90094 °E
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**Family:** Nemouridae

Nemurella pictetii	Within Known Range? N	Nearest Occurrence:	922.93 KM	51.07896 °N	99.70857 °E
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**Basin:** Internal Drainage Basin  
**Aimags:** Dundgovi  
**Soums:** Luus

**Freshwater Ecoregion:** Inner Mongolia Endorheic Basins  
**Terrestrial Ecoregion:** Eastern Gobi Desert Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Highly Likely Total: 3**

Family: Capniidae			
Isocapnia guentheri	Within Known Range? N	Nearest Occurrence: 287.04 KM	47.88349°N 106.98829°E
Isocapnia sibirica	Within Known Range? N	Nearest Occurrence: 359.36 KM	48.09549°N 107.84265°E
Family: Perlidae			
Agnestina cocandica	Within Known Range? N	Nearest Occurrence: 402.77 KM	49.16354°N 105.18880°E

**LOE Rating: Likely Total: 12**

Family: Capniidae			
Isocapnia kudia	Within Known Range? N	Nearest Occurrence: 925.71 KM	51.25356°N 99.66687°E
Family: Chloroperlidae			
Alloperla rostellata	Within Known Range? N	Nearest Occurrence: 523.96 KM	49.77776°N 103.60860°E
Haploperla lepnevae	Within Known Range? N	Nearest Occurrence: 301.26 KM	47.82258°N 107.33613°E
Suwallia kerzhneri	Within Known Range? N	Nearest Occurrence: 342.16 KM	48.12416°N 107.54780°E
Family: Nemouridae			
Nemoura cinerea	Within Known Range? N	Nearest Occurrence: 331.05 KM	47.96783°N 107.59278°E
Family: Perlidae			
Agnestina brevipennis	Within Known Range? N	Nearest Occurrence: 401.78 KM	49.10740°N 106.65177°E
Agnestina extrema	Within Known Range? N	Nearest Occurrence: 341.18 KM	48.50028°N 106.78434°E
Kamimuria exilis	Within Known Range? N	Nearest Occurrence: 924.84 KM	50.16278°N 98.84212°E
Family: Perlodidae			
Arcynopteryx sajanensis	Within Known Range? N	Nearest Occurrence: 884.08 KM	51.61397°N 100.59972°E
Diura bicaudata	Within Known Range? N	Nearest Occurrence: 675.25 KM	47.21768°N 99.92824°E
Pictetiella asiatica	Within Known Range? N	Nearest Occurrence: 891.27 KM	51.65822°N 100.53000°E
Family: Pteronarcyidae			
Pteronarcys reticulata	Within Known Range? N	Nearest Occurrence: 422.10 KM	49.08643°N 107.28952°E

**LOE Rating: Probable Total: 7**

Family: Chloroperlidae			
Alloperla joosti	Within Known Range? N	Nearest Occurrence: 445.37 KM	46.78742°N 101.96021°E
Suwallia teleckojensis	Within Known Range? N	Nearest Occurrence: 341.79 KM	48.50028°N 106.78434°E
Family: Nemouridae			
Amphinemura borealis	Within Known Range? N	Nearest Occurrence: 301.26 KM	47.82258°N 107.33613°E
Family: Perlodidae			
Isoperla asiatica	Within Known Range? N	Nearest Occurrence: 302.28 KM	47.82110°N 107.35422°E
Isoperla kozlovi	Within Known Range? N	Nearest Occurrence: 257.86 KM	47.85250°N 105.25567°E
Isoperla obscura	Within Known Range? N	Nearest Occurrence: 257.86 KM	47.85250°N 105.25567°E
Kaszabia nigricauda	Within Known Range? N	Nearest Occurrence: 257.86 KM	47.85250°N 105.25567°E

**LOE Rating: Possible Total: 2**

Family: Perlodidae			
Arcynopteryx compacta	Within Known Range? N	Nearest Occurrence: 317.97 KM	47.84324°N 107.55299°E
Family: Taeniopterygidae			
Taenionema japonicum	Within Known Range? N	Nearest Occurrence: 417.05 KM	49.05411°N 107.23175°E

Research funded by the National Science Foundation  
 DEB-BSI #0206674: A Survey of the Aquatic Insects of the Selenge River Basin. P.I.'s: JKGelhaus, JCMorse, BHayford.  
 DEB # 0743732: Aquatic Insects of the Altai and Hangai Mountain Drainages. P.I.'s: JKGelhaus, JCMorse, CRNelson.  
<http://clade.ansp.org/entomology/mongolia/index.html>



**Basin:** Internal Drainage Basin  
**Aimags:** Dundgovi  
**Soums:** Luus

**Freshwater Ecoregion:** Inner Mongolia Endorheic Basins  
**Terrestrial Ecoregion:** Eastern Gobi Desert Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

<b>LOE Rating:</b>	<b>Predicted</b>	<b>Total:</b>	20
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<b>Family:</b> Capniidae			
Capnia nigra	Within Known Range? N	Nearest Occurrence: 809.64 KM	50.51003°N 100.40375°E
Mesocapnia variabilis	Within Known Range? N	Nearest Occurrence: 393.37 KM	48.42080°N 107.91406°E
<b>Family:</b> Chloroperlidae			
Alaskaperla longidentata	Within Known Range? N	Nearest Occurrence: 342.16 KM	48.12416°N 107.54780°E
Alloperla deminuta	Within Known Range? N	Nearest Occurrence: 301.26 KM	47.82258°N 107.33613°E
Alloperla mediata	Within Known Range? N	Nearest Occurrence: 523.96 KM	49.77776°N 103.60860°E
<b>Family:</b> Leuctridae			
Leuctra fusca	Within Known Range? N	Nearest Occurrence: 422.10 KM	49.08643°N 107.28952°E
Paraleuctra zapekinae	Within Known Range? N	Nearest Occurrence: 324.53 KM	47.97944°N 107.47761°E
<b>Family:</b> Nemouridae			
Amphinemura standfussi	Within Known Range? N	Nearest Occurrence: 503.04 KM	49.73130°N 107.63484°E
Nemoura arctica	Within Known Range? N	Nearest Occurrence: 274.00 KM	47.77758°N 106.92780°E
Nemoura sahlbergi	Within Known Range? N	Nearest Occurrence: 355.55 KM	48.16668°N 107.69548°E
<b>Family:</b> Perlidae			
Paragnetina flavotincta	Within Known Range? N	Nearest Occurrence: 402.05 KM	49.16354°N 105.18880°E
<b>Family:</b> Perlodidae			
Arcynopteryx polaris	Within Known Range? N	Nearest Occurrence: 393.37 KM	48.42080°N 107.91406°E
Diura majuscula	Within Known Range? N	Nearest Occurrence: 325.17 KM	47.99158°N 107.46116°E
Isoperla altaica	Within Known Range? N	Nearest Occurrence: 367.25 KM	48.87748°N 106.12370°E
Isoperla eximia	Within Known Range? N	Nearest Occurrence: 404.44 KM	48.60182°N 107.84335°E
Isoperla lunigera	Within Known Range? N	Nearest Occurrence: 302.28 KM	47.82110°N 107.35422°E
Isoperla mongolica	Within Known Range? N	Nearest Occurrence: 359.93 KM	48.09694°N 107.83988°E
Isoperla potanini	Within Known Range? N	Nearest Occurrence: 452.28 KM	46.73093°N 101.88583°E
Megarcys ochracea	Within Known Range? N	Nearest Occurrence: 324.59 KM	47.99158°N 107.46116°E
Skwala pusilla	Within Known Range? N	Nearest Occurrence: 1,945.20 KM	48.51277°N 88.51107°E

<b>LOE Rating:</b>	<b>Unlikely</b>	<b>Total:</b>	3
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<b>Family:</b> Capniidae			
Capnia khulsbagia	Within Known Range? N	Nearest Occurrence: 822.06 KM	50.98944°N 100.71944°E
Mesocapnia altaica	Within Known Range? N	Nearest Occurrence: 1,901.13 KM	48.43684°N 88.90094°E
<b>Family:</b> Nemouridae			
Nemurella pictetii	Within Known Range? N	Nearest Occurrence: 909.22 KM	51.07896°N 99.70857°E



**Basin:** Internal Drainage Basin  
**Aimags:** Dundgovi  
**Soums:** Olziit

**Freshwater Ecoregion:** Inner Mongolia Endorheic Basins  
**Terrestrial Ecoregion:** Eastern Gobi Desert Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Highly Likely Total: 2**

Family: Capniidae

Isocapnia guentheri Within Known Range? N Nearest Occurrence: 345.05 KM 47.88349°N 106.98829°E

Isocapnia sibirica Within Known Range? N Nearest Occurrence: 388.46 KM 48.09549°N 107.84265°E

**LOE Rating: Likely Total: 14**

Family: Capniidae

Isocapnia kudia Within Known Range? N Nearest Occurrence: 1,060.15 KM 51.25356°N 99.66687°E

Family: Chloroperlidae

Alloperla rostellata Within Known Range? N Nearest Occurrence: 651.32 KM 49.77776°N 103.60860°E

Haploperla lepnevae Within Known Range? N Nearest Occurrence: 344.16 KM 47.82258°N 107.33613°E

Suwallia kerzhneri Within Known Range? N Nearest Occurrence: 382.09 KM 48.12416°N 107.54780°E

Family: Nemouridae

Amphinemura borealis Within Known Range? N Nearest Occurrence: 344.16 KM 47.82258°N 107.33613°E

Nemoura cinerea Within Known Range? N Nearest Occurrence: 366.63 KM 47.96783°N 107.59278°E

Family: Perlidae

Agnetina brevipennis Within Known Range? N Nearest Occurrence: 479.41 KM 49.10740°N 106.65177°E

Agnetina cocandica Within Known Range? N Nearest Occurrence: 514.59 KM 49.16354°N 105.18880°E

Agnetina extrema Within Known Range? N Nearest Occurrence: 388.83 KM 48.09671°N 107.84928°E

Kamimuria exilis Within Known Range? N Nearest Occurrence: 1,058.34 KM 50.16278°N 98.84212°E

Family: Perlodidae

Arcynopteryx sajanensis Within Known Range? N Nearest Occurrence: 1,017.72 KM 51.61397°N 100.59972°E

Diura bicaudata Within Known Range? N Nearest Occurrence: 798.25 KM 47.21768°N 99.92824°E

Pictetiella asiatica Within Known Range? N Nearest Occurrence: 1,024.72 KM 51.65822°N 100.53000°E

Family: Pteronarcyidae

Pteronarcys reticulata Within Known Range? N Nearest Occurrence: 481.57 KM 49.08643°N 107.28952°E

**LOE Rating: Probable Total: 6**

Family: Chloroperlidae

Alloperla joosti Within Known Range? N Nearest Occurrence: 570.68 KM 46.78742°N 101.96021°E

Family: Perlodidae

Isoperla asiatica Within Known Range? N Nearest Occurrence: 344.42 KM 47.82110°N 107.35422°E

Isoperla kozlovi Within Known Range? N Nearest Occurrence: 375.84 KM 47.85250°N 105.25567°E

Isoperla lunigera Within Known Range? N Nearest Occurrence: 344.42 KM 47.82110°N 107.35422°E

Isoperla obscura Within Known Range? N Nearest Occurrence: 375.84 KM 47.85250°N 105.25567°E

Kaszabia nigricauda Within Known Range? N Nearest Occurrence: 366.63 KM 47.96783°N 107.59278°E

**LOE Rating: Possible Total: 3**

Family: Chloroperlidae

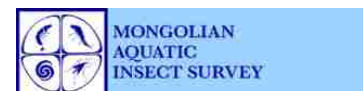
Suwallia teleckojensis Within Known Range? N Nearest Occurrence: 391.70 KM 48.16668°N 107.69548°E

Family: Perlodidae

Isoperla altaica Within Known Range? N Nearest Occurrence: 442.77 KM 48.60182°N 107.84335°E

Family: Taeniopterygidae

Taenionema japonicum Within Known Range? N Nearest Occurrence: 478.03 KM 49.05411°N 107.23175°E



**Basin:** Internal Drainage Basin  
**Aimags:** Dundgovi  
**Soum:** Olziit

**Freshwater Ecoregion:** Inner Mongolia Endorheic Basins  
**Terrestrial Ecoregion:** Eastern Gobi Desert Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

<b>LOE Rating:</b>	<b>Predicted</b>	<b>Total:</b>	19
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<b>Family:</b> Capniidae			
Capnia nigra	Within Known Range? N	Nearest Occurrence:	944.09 KM 50.51003°N 100.40375°E
Mesocapnia variabilis	Within Known Range? N	Nearest Occurrence:	425.96 KM 48.42080°N 107.91406°E
<b>Family:</b> Chloroperlidae			
Alaskaperla longidentata	Within Known Range? N	Nearest Occurrence:	382.09 KM 48.12416°N 107.54780°E
Alloperla deminuta	Within Known Range? N	Nearest Occurrence:	344.16 KM 47.82258°N 107.33613°E
Alloperla mediata	Within Known Range? N	Nearest Occurrence:	651.32 KM 49.77776°N 103.60860°E
<b>Family:</b> Leuctridae			
Leuctra fusca	Within Known Range? N	Nearest Occurrence:	481.57 KM 49.08643°N 107.28952°E
Paraleuctra zapekinae	Within Known Range? N	Nearest Occurrence:	364.62 KM 47.97944°N 107.47761°E
<b>Family:</b> Nemouridae			
Amphinemura standfussi	Within Known Range? N	Nearest Occurrence:	558.42 KM 49.73130°N 107.63484°E
Nemoura arctica	Within Known Range? N	Nearest Occurrence:	333.36 KM 47.77758°N 106.92780°E
Nemoura sahlbergi	Within Known Range? N	Nearest Occurrence:	391.00 KM 48.16668°N 107.69548°E
<b>Family:</b> Perlidae			
Paragnetina flavotincta	Within Known Range? N	Nearest Occurrence:	513.66 KM 49.16354°N 105.18880°E
<b>Family:</b> Perlodidae			
Arcynopteryx compacta	Within Known Range? N	Nearest Occurrence:	352.75 KM 47.84324°N 107.55299°E
Arcynopteryx polaris	Within Known Range? N	Nearest Occurrence:	425.96 KM 48.42080°N 107.91406°E
Diura majuscula	Within Known Range? N	Nearest Occurrence:	366.16 KM 47.99158°N 107.46116°E
Isoperla eximia	Within Known Range? N	Nearest Occurrence:	441.97 KM 48.60182°N 107.84335°E
Isoperla mongolica	Within Known Range? N	Nearest Occurrence:	389.16 KM 48.09549°N 107.84265°E
Isoperla potanini	Within Known Range? N	Nearest Occurrence:	576.96 KM 46.73093°N 101.88583°E
Megarcys ochracea	Within Known Range? N	Nearest Occurrence:	364.19 KM 47.97108°N 107.49534°E
Skwala pusilla	Within Known Range? N	Nearest Occurrence:	2,060.54 KM 48.51277°N 88.51107°E

<b>LOE Rating:</b>	<b>Unlikely</b>	<b>Total:</b>	3
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<b>Family:</b> Capniidae			
Capnia khulsbagia	Within Known Range? N	Nearest Occurrence:	956.03 KM 50.98944°N 100.71944°E
Mesocapnia altaica	Within Known Range? N	Nearest Occurrence:	2,016.45 KM 48.43684°N 88.90094°E
<b>Family:</b> Nemouridae			
Nemurella pictetii	Within Known Range? N	Nearest Occurrence:	1,043.68 KM 51.07896°N 99.70857°E





**Basin:** Internal Drainage Basin  
**Aimags:** Dundgovi  
**Soums:** Ondorshil

**Freshwater Ecoregion:** Inner Mongolia Endorheic Basins  
**Terrestrial Ecoregion:** Eastern Gobi Desert Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Highly Likely Total: 2**

Family: Capniidae					
Isocapnia guentheri	Within Known Range? N	Nearest Occurrence:	315.38 KM	47.99158°N	107.46116°E
Isocapnia sibirica	Within Known Range? N	Nearest Occurrence:	318.98 KM	48.09549°N	107.84265°E

**LOE Rating: Likely Total: 15**

Family: Capniidae					
Isocapnia kudia	Within Known Range? N	Nearest Occurrence:	1,156.22 KM	51.25356°N	99.66687°E
Family: Chloroperlidae					
Alloperla rostellata	Within Known Range? N	Nearest Occurrence:	714.33 KM	49.77776°N	103.60860°E
Haploperla lepnevae	Within Known Range? N	Nearest Occurrence:	301.24 KM	47.82258°N	107.33613°E
Suwallia kerzhneri	Within Known Range? N	Nearest Occurrence:	327.48 KM	48.12416°N	107.54780°E
Family: Nemouridae					
Amphinemura borealis	Within Known Range? N	Nearest Occurrence:	301.24 KM	47.82258°N	107.33613°E
Nemoura cinerea	Within Known Range? N	Nearest Occurrence:	309.46 KM	47.96783°N	107.59278°E
Family: Perlidae					
Agnetina brevipennis	Within Known Range? N	Nearest Occurrence:	437.52 KM	49.08636°N	107.30750°E
Agnetina cocandica	Within Known Range? N	Nearest Occurrence:	548.06 KM	49.16354°N	105.18880°E
Agnetina extrema	Within Known Range? N	Nearest Occurrence:	319.03 KM	48.09671°N	107.84928°E
Kamimuria exilis	Within Known Range? N	Nearest Occurrence:	1,173.07 KM	50.16278°N	98.84212°E
Family: Perlodidae					
Arcynopteryx sajanensis	Within Known Range? N	Nearest Occurrence:	1,100.64 KM	51.61397°N	100.59972°E
Diura bicaudata	Within Known Range? N	Nearest Occurrence:	941.07 KM	47.21768°N	99.92824°E
Isoperla obscura	Within Known Range? N	Nearest Occurrence:	434.60 KM	47.85250°N	105.25567°E
Pictetiella asiatica	Within Known Range? N	Nearest Occurrence:	1,107.74 KM	51.65822°N	100.53000°E
Family: Pteronarcyidae					
Pteronarcys reticulata	Within Known Range? N	Nearest Occurrence:	437.52 KM	49.08636°N	107.30750°E

**LOE Rating: Probable Total: 5**

Family: Chloroperlidae					
Suwallia teleckojensis	Within Known Range? N	Nearest Occurrence:	329.65 KM	48.16668°N	107.69548°E
Family: Perlodidae					
Isoperla asiatica	Within Known Range? N	Nearest Occurrence:	300.47 KM	47.82110°N	107.35422°E
Isoperla kozlovi	Within Known Range? N	Nearest Occurrence:	322.03 KM	48.13111°N	107.92120°E
Kaszabia nigricauda	Within Known Range? N	Nearest Occurrence:	309.46 KM	47.96783°N	107.59278°E
Family: Taeniopterygidae					
Taenionema japonicum	Within Known Range? N	Nearest Occurrence:	436.75 KM	49.05411°N	107.23175°E

**LOE Rating: Possible Total: 3**

Family: Chloroperlidae					
Alloperla joosti	Within Known Range? N	Nearest Occurrence:	710.63 KM	46.78742°N	101.96021°E
Family: Perlodidae					
Isoperla altaica	Within Known Range? N	Nearest Occurrence:	375.53 KM	48.60182°N	107.84335°E
Isoperla lunigera	Within Known Range? N	Nearest Occurrence:	300.47 KM	47.82110°N	107.35422°E



**Basin:** Internal Drainage Basin  
**Aimags:** Dundgovi  
**Soums:** Ondorshil

**Freshwater Ecoregion:** Inner Mongolia Endorheic Basins  
**Terrestrial Ecoregion:** Eastern Gobi Desert Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

<b>LOE Rating:</b>	<b>Predicted</b>	<b>Total:</b>	19
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**Family:** Capniidae

Capnia nigra	Within Known Range? N	Nearest Occurrence:	1,037.25 KM	50.92452 °N	100.75528 °E
Mesocapnia variabilis	Within Known Range? N	Nearest Occurrence:	354.78 KM	48.42080 °N	107.91406 °E

**Family:** Chloroperlidae

Alaskaperla longidentata	Within Known Range? N	Nearest Occurrence:	318.14 KM	48.07956 °N	107.77729 °E
Alloperla deminuta	Within Known Range? N	Nearest Occurrence:	301.24 KM	47.82258 °N	107.33613 °E
Alloperla mediata	Within Known Range? N	Nearest Occurrence:	714.33 KM	49.77776 °N	103.60860 °E

**Family:** Leuctridae

Leuctra fusca	Within Known Range? N	Nearest Occurrence:	437.97 KM	49.08643 °N	107.28952 °E
Paraleuctra zapekinae	Within Known Range? N	Nearest Occurrence:	313.62 KM	47.97944 °N	107.47761 °E

**Family:** Nemouridae

Amphinemura standfussi	Within Known Range? N	Nearest Occurrence:	502.00 KM	49.73130 °N	107.63484 °E
Nemoura arctica	Within Known Range? N	Nearest Occurrence:	314.22 KM	47.77758 °N	106.92780 °E
Nemoura sahlbergi	Within Known Range? N	Nearest Occurrence:	329.06 KM	48.16668 °N	107.69548 °E

**Family:** Perlidae

Paragnetina flavotincta	Within Known Range? N	Nearest Occurrence:	547.07 KM	49.16354 °N	105.18880 °E
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**Family:** Perlodidae

Arcynopteryx compacta	Within Known Range? N	Nearest Occurrence:	297.48 KM	47.84324 °N	107.55299 °E
Arcynopteryx polaris	Within Known Range? N	Nearest Occurrence:	354.78 KM	48.42080 °N	107.91406 °E
Diura majuscula	Within Known Range? N	Nearest Occurrence:	315.95 KM	47.99158 °N	107.46116 °E
Isoperla eximia	Within Known Range? N	Nearest Occurrence:	374.85 KM	48.60182 °N	107.84335 °E
Isoperla mongolica	Within Known Range? N	Nearest Occurrence:	319.55 KM	48.09549 °N	107.84265 °E
Isoperla potanini	Within Known Range? N	Nearest Occurrence:	718.47 KM	46.73093 °N	101.88583 °E
Megarcys ochracea	Within Known Range? N	Nearest Occurrence:	312.24 KM	47.97108 °N	107.49534 °E
Skwala pusilla	Within Known Range? N	Nearest Occurrence:	2,212.45 KM	48.51277 °N	88.51107 °E

<b>LOE Rating:</b>	<b>Unlikely</b>	<b>Total:</b>	3
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**Family:** Capniidae

Capnia khulsbagia	Within Known Range? N	Nearest Occurrence:	1,044.80 KM	50.98944 °N	100.71944 °E
Mesocapnia altaica	Within Known Range? N	Nearest Occurrence:	2,168.38 KM	48.43684 °N	88.90094 °E

**Family:** Nemouridae

Nemurella pictetii	Within Known Range? N	Nearest Occurrence:	1,141.33 KM	51.07896 °N	99.70857 °E
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**Basin:** Internal Drainage Basin

**Aimags:** Dundgovi

**Soums:** Saikhan-ovoo

Freshwater Ecoregion: Western Mongolia

Terrestrial Ecoregion: Gobi Lakes Valley Desert Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Highly Likely Total: 4**

Family: Capniidae

Isocapnia guentheri

Within Known Range? N Nearest Occurrence: 411.48 KM 47.88349°N 106.98829°E

Isocapnia sibirica

Within Known Range? N Nearest Occurrence: 318.75 KM 47.26999°N 101.80227°E

Family: Chloroperlidae

Alloperla rostellata

Within Known Range? N Nearest Occurrence: 384.54 KM 47.11192°N 101.01048°E

Family: Perlidae

Agnetina cocandica

Within Known Range? N Nearest Occurrence: 419.09 KM 49.16354°N 105.18880°E

**LOE Rating: Likely Total: 13**

Family: Capniidae

Isocapnia kudia

Within Known Range? N Nearest Occurrence: 801.82 KM 51.25356°N 99.66687°E

Family: Chloroperlidae

Alloperla joosti

Within Known Range? N Nearest Occurrence: 274.61 KM 46.78742°N 101.96021°E

Haploperla lepnevae

Within Known Range? N Nearest Occurrence: 431.65 KM 48.87748°N 106.12370°E

Suwallia kerzhneri

Within Known Range? N Nearest Occurrence: 390.24 KM 47.59928°N 101.24521°E

Family: Nemouridae

Amphinemura borealis

Within Known Range? N Nearest Occurrence: 274.61 KM 46.78742°N 101.96021°E

Nemoura cinerea

Within Known Range? N Nearest Occurrence: 417.37 KM 47.48567°N 100.87875°E

Family: Perlidae

Agnetina brevipennis

Within Known Range? N Nearest Occurrence: 241.09 KM 46.89303°N 102.39457°E

Agnetina extrema

Within Known Range? N Nearest Occurrence: 318.75 KM 47.26999°N 101.80227°E

Kamimuria exilis

Within Known Range? N Nearest Occurrence: 777.89 KM 50.16278°N 98.84212°E

Family: Perlodidae

Arcynopteryx sajanensis

Within Known Range? N Nearest Occurrence: 778.47 KM 51.61397°N 100.59972°E

Diura bicaudata

Within Known Range? N Nearest Occurrence: 499.02 KM 47.21768°N 99.92824°E

Pictetiella asiatica

Within Known Range? N Nearest Occurrence: 785.21 KM 51.65822°N 100.53000°E

Family: Pteronarcyidae

Pteronarcys reticulata

Within Known Range? N Nearest Occurrence: 480.92 KM 49.63453°N 102.64845°E

**LOE Rating: Probable Total: 5**

Family: Chloroperlidae

Suwallia teleckojensis

Within Known Range? N Nearest Occurrence: 275.10 KM 46.78742°N 101.96021°E

Family: Perlodidae

Isoperla asiatica

Within Known Range? N Nearest Occurrence: 431.65 KM 48.87748°N 106.12370°E

Isoperla kozlovi

Within Known Range? N Nearest Occurrence: 285.34 KM 47.85250°N 105.25567°E

Isoperla obscura

Within Known Range? N Nearest Occurrence: 285.34 KM 47.85250°N 105.25567°E

Kaszabia nigricauda

Within Known Range? N Nearest Occurrence: 285.34 KM 47.85250°N 105.25567°E

**Basin:** Internal Drainage Basin

**Aimags:** Dundgovi

**Soums:** Saikhan-ovoo

Freshwater Ecoregion: Western Mongolia

Terrestrial Ecoregion: Gobi Lakes Valley Desert Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

<b>LOE Rating:</b>	<b>Predicted</b>	<b>Total:</b>	<b>24</b>
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Family: Capniidae

Capnia khulsbagia

Within Known Range? N Nearest Occurrence: 710.79 KM 50.98944 °N 100.71944 °E

Capnia nigra

Within Known Range? N Nearest Occurrence: 686.58 KM 50.51003 °N 100.40375 °E

Mesocapnia variabilis

Within Known Range? N Nearest Occurrence: 499.92 KM 47.21768 °N 99.92824 °E

Family: Chloroperlidae

Alaskaperla longidentata

Within Known Range? N Nearest Occurrence: 301.28 KM 46.82177 °N 101.70479 °E

Alloperla deminuta

Within Known Range? N Nearest Occurrence: 274.61 KM 46.78742 °N 101.96021 °E

Alloperla mediata

Within Known Range? N Nearest Occurrence: 472.06 KM 49.77776 °N 103.60860 °E

Family: Leuctridae

Leuctra fusca

Within Known Range? N Nearest Occurrence: 527.94 KM 49.08643 °N 107.28952 °E

Paraleuctra zapekinae

Within Known Range? N Nearest Occurrence: 460.45 KM 47.99158 °N 107.46116 °E

Family: Nemouridae

Amphinemura standfussi

Within Known Range? N Nearest Occurrence: 437.77 KM 49.33339 °N 102.97786 °E

Nemoura arctica

Within Known Range? N Nearest Occurrence: 319.32 KM 47.26999 °N 101.80227 °E

Nemoura sahlbergi

Within Known Range? N Nearest Occurrence: 461.65 KM 49.70184 °N 103.80040 °E

Nemurella pictetii

Within Known Range? N Nearest Occurrence: 783.72 KM 51.07896 °N 99.70857 °E

Family: Perlidae

Paragnetina flavotincta

Within Known Range? N Nearest Occurrence: 418.34 KM 49.16354 °N 105.18880 °E

Family: Perlodidae

Arcynopteryx compacta

Within Known Range? N Nearest Occurrence: 245.61 KM 46.88627 °N 102.34304 °E

Arcynopteryx polaris

Within Known Range? N Nearest Occurrence: 308.60 KM 47.04409 °N 101.76352 °E

Diura majuscula

Within Known Range? N Nearest Occurrence: 241.53 KM 46.89303 °N 102.39457 °E

Isoperla altaica

Within Known Range? N Nearest Occurrence: 385.24 KM 47.11192 °N 101.01048 °E

Isoperla eximia

Within Known Range? N Nearest Occurrence: 535.42 KM 48.60182 °N 107.84335 °E

Isoperla lunigera

Within Known Range? N Nearest Occurrence: 431.65 KM 48.87748 °N 106.12370 °E

Isoperla mongolica

Within Known Range? N Nearest Occurrence: 319.32 KM 47.26999 °N 101.80227 °E

Isoperla potanini

Within Known Range? N Nearest Occurrence: 279.31 KM 46.73093 °N 101.88583 °E

Megarcys ochracea

Within Known Range? N Nearest Occurrence: 460.45 KM 47.99158 °N 107.46116 °E

Skwala pusilla

Within Known Range? N Nearest Occurrence: 1,761.78 KM 48.51277 °N 88.51107 °E

Family: Taeniopterygidae

Taenionema japonicum

Within Known Range? N Nearest Occurrence: 377.02 KM 47.28244 °N 101.18793 °E

<b>LOE Rating:</b>	<b>Unlikely</b>	<b>Total:</b>	<b>1</b>
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Family: Capniidae

Mesocapnia altaica

Within Known Range? N Nearest Occurrence: 1,717.69 KM 48.43684 °N 88.90094 °E

Basin: Internal Drainage Basin

Aimags: Dundgovi

Soums: Saintsagaan

Freshwater Ecoregion: Inner Mongolia Endorheic Basins

Terrestrial Ecoregion: Eastern Gobi Desert Steppe

WQM Sites:

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Highly Likely Total: 3**

Family: Capniidae

Isocapnia guentheri Within Known Range? N Nearest Occurrence: 246.92 KM 47.88349°N 106.98829 °E

Isocapnia sibirica Within Known Range? N Nearest Occurrence: 310.15 KM 48.09549°N 107.84265 °E

Family: Perlidae

Agnetina extrema Within Known Range? N Nearest Occurrence: 307.89 KM 48.50028°N 106.78434 °E

**LOE Rating: Likely Total: 14**

Family: Capniidae

Isocapnia kudia Within Known Range? N Nearest Occurrence: 954.69 KM 51.25356°N 99.66687 °E

Family: Chloroperlidae

Alloperla joosti Within Known Range? N Nearest Occurrence: 494.04 KM 46.78742°N 101.96021 °E

Alloperla rostellata Within Known Range? N Nearest Occurrence: 535.41 KM 49.77776°N 103.60860 °E

Haploperla lepnevae Within Known Range? N Nearest Occurrence: 255.53 KM 47.82258°N 107.33613 °E

Suwallia kerzhneri Within Known Range? N Nearest Occurrence: 296.07 KM 48.12416°N 107.54780 °E

Family: Nemouridae

Amphinemura borealis Within Known Range? N Nearest Occurrence: 255.53 KM 47.82258°N 107.33613 °E

Nemoura cinerea Within Known Range? N Nearest Occurrence: 283.38 KM 47.96783°N 107.59278 °E

Family: Perlidae

Agnetina brevipennis Within Known Range? N Nearest Occurrence: 372.55 KM 49.10740°N 106.65177 °E

Agnetina cocandica Within Known Range? N Nearest Occurrence: 396.81 KM 49.16354°N 105.18880 °E

Kamimuria exilis Within Known Range? N Nearest Occurrence: 961.82 KM 50.16278°N 98.84212 °E

Family: Perlodidae

Arcynopteryx sajanensis Within Known Range? N Nearest Occurrence: 907.25 KM 51.61397°N 100.59972 °E

Diura bicaudata Within Known Range? N Nearest Occurrence: 724.55 KM 47.21768°N 99.92824 °E

Pictetiella asiatica Within Known Range? N Nearest Occurrence: 914.54 KM 51.65822°N 100.53000 °E

Family: Pteronarcyidae

Pteronarcys reticulata Within Known Range? N Nearest Occurrence: 384.34 KM 49.08643°N 107.28952 °E

**LOE Rating: Probable Total: 5**

Family: Perlodidae

Isoperla asiatica Within Known Range? N Nearest Occurrence: 256.30 KM 47.82110°N 107.35422 °E

Isoperla kozlovi Within Known Range? N Nearest Occurrence: 258.23 KM 47.85250°N 105.25567 °E

Isoperla lunigera Within Known Range? N Nearest Occurrence: 256.30 KM 47.82110°N 107.35422 °E

Isoperla obscura Within Known Range? N Nearest Occurrence: 258.23 KM 47.85250°N 105.25567 °E

Kaszabia nigricauda Within Known Range? N Nearest Occurrence: 258.23 KM 47.85250°N 105.25567 °E

**LOE Rating: Possible Total: 4**

Family: Chloroperlidae

Suwallia teleckojensis Within Known Range? N Nearest Occurrence: 307.72 KM 48.43755°N 107.03066 °E

Family: Leuctridae

Paraleuctra zapekinae Within Known Range? N Nearest Occurrence: 278.23 KM 47.97944°N 107.47761 °E

Family: Perlodidae

Diura majuscula Within Known Range? N Nearest Occurrence: 279.06 KM 47.99158°N 107.46116 °E

Family: Taeniopterygidae

Taenionema japonicum Within Known Range? N Nearest Occurrence: 379.77 KM 49.05411°N 107.23175 °E

Research funded by the National Science Foundation  
DEB-BSI #0206674: A Survey of the Aquatic Insects of the Selenge River Basin. P.I.'s: JKGelhaus, JCMorse, BHayford.  
DEB # 0743732: Aquatic Insects of the Altai and Hangai Mountain Drainages. P.I.'s: JKGelhaus, JCMorse, CRNelson.  
<http://clade.ansp.org/entomology/mongolia/index.html>



**Basin:** Internal Drainage Basin

**Aimags:** Dundgovi

**Soums:** Saintsagaan

**Freshwater Ecoregion:** Inner Mongolia Endorheic Basins

**Terrestrial Ecoregion:** Eastern Gobi Desert Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

<b>LOE Rating:</b>	<b>Predicted</b>	<b>Total:</b>	18
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**Family:** Capniidae

Capnia nigra      **Within Known Range?** N      **Nearest Occurrence:** 839.14 KM      50.51003 °N      100.40375 °E  
Mesocapnia variabilis      **Within Known Range?** N      **Nearest Occurrence:** 345.47 KM      48.42080 °N      107.91406 °E

**Family:** Chloroperlidae

Alaskaperla longidentata      **Within Known Range?** N      **Nearest Occurrence:** 296.07 KM      48.12416 °N      107.54780 °E  
Alloperla deminuta      **Within Known Range?** N      **Nearest Occurrence:** 255.53 KM      47.82258 °N      107.33613 °E  
Alloperla mediata      **Within Known Range?** N      **Nearest Occurrence:** 535.41 KM      49.77776 °N      103.60860 °E

**Family:** Leuctridae

Leuctra fusca      **Within Known Range?** N      **Nearest Occurrence:** 384.34 KM      49.08643 °N      107.28952 °E

**Family:** Nemouridae

Amphinemura standfussi      **Within Known Range?** N      **Nearest Occurrence:** 464.20 KM      49.73130 °N      107.63484 °E  
Nemoura arctica      **Within Known Range?** N      **Nearest Occurrence:** 234.09 KM      47.77758 °N      106.92780 °E  
Nemoura sahlbergi      **Within Known Range?** N      **Nearest Occurrence:** 308.19 KM      48.16668 °N      107.69548 °E

**Family:** Perlidae

Paragnetina flavotincta      **Within Known Range?** N      **Nearest Occurrence:** 396.09 KM      49.16354 °N      105.18880 °E

**Family:** Perlodidae

Arcynopteryx compacta      **Within Known Range?** N      **Nearest Occurrence:** 269.73 KM      47.84324 °N      107.55299 °E  
Arcynopteryx polaris      **Within Known Range?** N      **Nearest Occurrence:** 345.47 KM      48.42080 °N      107.91406 °E  
Isoperla altaica      **Within Known Range?** N      **Nearest Occurrence:** 346.03 KM      48.87748 °N      106.12370 °E  
Isoperla eximia      **Within Known Range?** N      **Nearest Occurrence:** 358.31 KM      48.60182 °N      107.84335 °E  
Isoperla mongolica      **Within Known Range?** N      **Nearest Occurrence:** 310.66 KM      48.09694 °N      107.83988 °E  
Isoperla potanini      **Within Known Range?** N      **Nearest Occurrence:** 501.61 KM      46.73093 °N      101.88583 °E  
Megarcys ochracea      **Within Known Range?** N      **Nearest Occurrence:** 278.35 KM      47.97108 °N      107.49534 °E  
Skwala pusilla      **Within Known Range?** N      **Nearest Occurrence:** 1,997.16 KM      48.51277 °N      88.51107 °E

<b>LOE Rating:</b>	<b>Unlikely</b>	<b>Total:</b>	3
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**Family:** Capniidae

Capnia khulsbagia      **Within Known Range?** N      **Nearest Occurrence:** 847.58 KM      50.98944 °N      100.71944 °E  
Mesocapnia altaica      **Within Known Range?** N      **Nearest Occurrence:** 1,953.10 KM      48.43684 °N      88.90094 °E

**Family:** Nemouridae

Nemurella pictetii      **Within Known Range?** N      **Nearest Occurrence:** 938.85 KM      51.07896 °N      99.70857 °E

**Basin:** Internal Drainage Basin  
**Aimags:** Dundgovi  
**Soums:** Tsagaandelger

Freshwater Ecoregion: Inner Mongolia Endorheic Basins  
 Terrestrial Ecoregion: Mongolian-Manchurian Grassland

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

<b>LOE Rating:</b>	<b>Highly Likely</b>	<b>Total:</b>	<b>4</b>
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Family: Capniidae			
Isocapnia guentheri	Within Known Range? N	Nearest Occurrence:	183.55 KM 47.99158°N 107.46116 °E
Isocapnia sibirica	Within Known Range? N	Nearest Occurrence:	189.68 KM 48.09549°N 107.84265 °E
Family: Perlidae			
Agnetina extrema	Within Known Range? N	Nearest Occurrence:	189.81 KM 48.09671°N 107.84928 °E
Family: Pteronarcyidae			
Pteronarcys reticulata	Within Known Range? N	Nearest Occurrence:	305.86 KM 49.08636°N 107.30750 °E

<b>LOE Rating:</b>	<b>Likely</b>	<b>Total:</b>	<b>16</b>
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Family: Capniidae			
Isocapnia kudia	Within Known Range? N	Nearest Occurrence:	1,057.79 KM 51.25356°N 99.66687 °E
Family: Chloroperlidae			
Alloperla rostellata	Within Known Range? N	Nearest Occurrence:	603.63 KM 49.77776°N 103.60860 °E
Haploperla lepnevae	Within Known Range? N	Nearest Occurrence:	169.65 KM 47.82258°N 107.33613 °E
Suwallia kerzhneri	Within Known Range? N	Nearest Occurrence:	195.94 KM 48.12416°N 107.54780 °E
Family: Nemouridae			
Amphinemura borealis	Within Known Range? N	Nearest Occurrence:	169.65 KM 47.82258°N 107.33613 °E
Nemoura cinerea	Within Known Range? N	Nearest Occurrence:	177.98 KM 47.96783°N 107.59278 °E
Family: Perlidae			
Agnetina brevipennis	Within Known Range? N	Nearest Occurrence:	305.86 KM 49.08636°N 107.30750 °E
Agnetina cocandica	Within Known Range? N	Nearest Occurrence:	428.46 KM 49.16354°N 105.18880 °E
Kamimuria exilis	Within Known Range? N	Nearest Occurrence:	1,087.15 KM 50.16278°N 98.84212 °E
Family: Perlodidae			
Arcynopteryx sajanensis	Within Known Range? N	Nearest Occurrence:	994.82 KM 51.61397°N 100.59972 °E
Diura bicaudata	Within Known Range? N	Nearest Occurrence:	885.25 KM 47.21768°N 99.92824 °E
Isoperla asiatica	Within Known Range? N	Nearest Occurrence:	168.82 KM 47.82110°N 107.35422 °E
Isoperla kozlovi	Within Known Range? N	Nearest Occurrence:	193.74 KM 48.13111°N 107.92120 °E
Isoperla lunigera	Within Known Range? N	Nearest Occurrence:	168.82 KM 47.82110°N 107.35422 °E
Kaszabia nigricauda	Within Known Range? N	Nearest Occurrence:	177.98 KM 47.96783°N 107.59278 °E
Pictetiella asiatica	Within Known Range? N	Nearest Occurrence:	1,002.18 KM 51.65822°N 100.53000 °E

<b>LOE Rating:</b>	<b>Probable</b>	<b>Total:</b>	<b>3</b>
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Family: Chloroperlidae			
Alloperla joosti	Within Known Range? N	Nearest Occurrence:	613.97 KM 49.21675°N 103.10750 °E
Family: Leuctridae			
Paraleuctra zapekinae	Within Known Range? N	Nearest Occurrence:	181.81 KM 47.97944°N 107.47761 °E
Family: Perlodidae			
Isoperla obscura	Within Known Range? N	Nearest Occurrence:	331.72 KM 47.85250°N 105.25567 °E



**Basin:** Internal Drainage Basin

**Aimags:** Dundgovi

**Soums:** Tsagaandelger

Freshwater Ecoregion: Inner Mongolia Endorheic Basins

Terrestrial Ecoregion: Mongolian-Manchurian Grassland

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Possible Total: 3**

Family: Chloroperlidae					
Suwallia teleckojensis	Within Known Range? N	Nearest Occurrence:	198.77 KM	48.16668 °N	107.69548 °E
Family: Perlodidae					
Megarcys ochracea	Within Known Range? N	Nearest Occurrence:	180.46 KM	47.97108 °N	107.49534 °E
Family: Taeniopterygidae					
Taenionema japonicum	Within Known Range? N	Nearest Occurrence:	304.72 KM	49.05411 °N	107.23175 °E

**LOE Rating: Predicted Total: 18**

Family: Capniidae					
Capnia nigra	Within Known Range? N	Nearest Occurrence:	935.75 KM	50.92452 °N	100.75528 °E
Mesocapnia variabilis	Within Known Range? N	Nearest Occurrence:	226.26 KM	48.42080 °N	107.91406 °E
Family: Chloroperlidae					
Alaskaperla longidentata	Within Known Range? N	Nearest Occurrence:	188.12 KM	48.07956 °N	107.77729 °E
Alloperla deminuta	Within Known Range? N	Nearest Occurrence:	169.65 KM	47.82258 °N	107.33613 °E
Alloperla mediata	Within Known Range? N	Nearest Occurrence:	603.63 KM	49.77776 °N	103.60860 °E
Family: Leuctridae					
Leuctra fusca	Within Known Range? N	Nearest Occurrence:	306.28 KM	49.08643 °N	107.28952 °E
Family: Nemouridae					
Amphinemura standfussi	Within Known Range? N	Nearest Occurrence:	372.08 KM	49.73130 °N	107.63484 °E
Nemoura arctica	Within Known Range? N	Nearest Occurrence:	186.18 KM	47.77758 °N	106.92780 °E
Nemoura sahlbergi	Within Known Range? N	Nearest Occurrence:	198.41 KM	48.16668 °N	107.69548 °E
Family: Perlidae					
Paragnetina flavotincta	Within Known Range? N	Nearest Occurrence:	427.69 KM	49.16354 °N	105.18880 °E
Family: Perlodidae					
Arcynopteryx compacta	Within Known Range? N	Nearest Occurrence:	165.52 KM	47.84324 °N	107.55299 °E
Arcynopteryx polaris	Within Known Range? N	Nearest Occurrence:	226.26 KM	48.42080 °N	107.91406 °E
Diura majuscula	Within Known Range? N	Nearest Occurrence:	183.88 KM	47.99158 °N	107.46116 °E
Isoperla altaica	Within Known Range? N	Nearest Occurrence:	246.32 KM	48.60182 °N	107.84335 °E
Isoperla eximia	Within Known Range? N	Nearest Occurrence:	245.88 KM	48.60182 °N	107.84335 °E
Isoperla mongolica	Within Known Range? N	Nearest Occurrence:	190.02 KM	48.09549 °N	107.84265 °E
Isoperla potanini	Within Known Range? N	Nearest Occurrence:	665.43 KM	46.73093 °N	101.88583 °E
Skwala pusilla	Within Known Range? N	Nearest Occurrence:	2,160.66 KM	48.51277 °N	88.51107 °E

**LOE Rating: Unlikely Total: 3**

Family: Capniidae					
Capnia khulsbagia	Within Known Range? N	Nearest Occurrence:	942.99 KM	50.98944 °N	100.71944 °E
Mesocapnia altaica	Within Known Range? N	Nearest Occurrence:	2,116.73 KM	48.43684 °N	88.90094 °E
Family: Nemouridae					
Nemurella pictetii	Within Known Range? N	Nearest Occurrence:	1,044.01 KM	51.07896 °N	99.70857 °E



**Basin:** Internal Drainage Basin  
**Aimags:** Govi-Altai  
**Soums:** Altai

Freshwater Ecoregion: Dzungaria  
 Terrestrial Ecoregion: Alashan Plateau Semi-Desert

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

<b>LOE Rating:</b>	<b>Highly Likely</b>	<b>Total:</b>	<b>4</b>
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Family: Capniidae			
Isocapnia guentheri	Within Known Range? N	Nearest Occurrence: 553.73 KM	48.61518°N 98.23096°E
Isocapnia sibirica	Within Known Range? N	Nearest Occurrence: 700.20 KM	47.28244°N 101.18793°E
Family: Chloroperlidae			
Suwallia teleckojensis	Within Known Range? N	Nearest Occurrence: 285.05 KM	46.32080°N 93.90083°E
Family: Perlodidae			
Isoperla potanini	Within Known Range? N	Nearest Occurrence: 285.05 KM	46.32080°N 93.90083°E

<b>LOE Rating:</b>	<b>Likely</b>	<b>Total:</b>	<b>11</b>
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Family: Capniidae			
Isocapnia kudia	Within Known Range? N	Nearest Occurrence: 886.77 KM	51.25356°N 99.66687°E
Family: Chloroperlidae			
Alloperla rostellata	Within Known Range? N	Nearest Occurrence: 576.78 KM	48.36436°N 98.92737°E
Family: Nemouridae			
Amphinemura borealis	Within Known Range? N	Nearest Occurrence: 462.48 KM	48.05989°N 97.55073°E
Nemoura cinerea	Within Known Range? N	Nearest Occurrence: 462.74 KM	48.06257°N 97.55064°E
Family: Perlidae			
Agnetina brevipennis	Within Known Range? N	Nearest Occurrence: 507.12 KM	46.28532°N 91.42793°E
Agnetina cocandica	Within Known Range? N	Nearest Occurrence: 437.49 KM	46.12479°N 92.05382°E
Kamimuria exilis	Within Known Range? N	Nearest Occurrence: 737.43 KM	50.16278°N 98.84212°E
Family: Perlodidae			
Arcynopteryx sajanensis	Within Known Range? N	Nearest Occurrence: 978.25 KM	51.61397°N 100.59972°E
Diura bicaudata	Within Known Range? N	Nearest Occurrence: 575.59 KM	47.21768°N 99.92824°E
Pictetiella asiatica	Within Known Range? N	Nearest Occurrence: 976.15 KM	51.65822°N 100.53000°E
Skwala pusilla	Within Known Range? N	Nearest Occurrence: 908.85 KM	48.51277°N 88.51107°E

<b>LOE Rating:</b>	<b>Probable</b>	<b>Total:</b>	<b>6</b>
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Family: Chloroperlidae			
Alloperla joosti	Within Known Range? N	Nearest Occurrence: 474.12 KM	48.24995°N 97.40627°E
Haploperla lepnevae	Within Known Range? N	Nearest Occurrence: 721.44 KM	49.26170°N 99.88242°E
Suwallia kerzhneri	Within Known Range? N	Nearest Occurrence: 462.48 KM	48.05989°N 97.55073°E
Family: Perlodidae			
Arcynopteryx compacta	Within Known Range? N	Nearest Occurrence: 489.71 KM	46.13371°N 91.54083°E
Diura majuscula	Within Known Range? N	Nearest Occurrence: 463.57 KM	48.06257°N 97.55064°E
Family: Pteronarcyidae			
Pteronarcys reticulata	Within Known Range? N	Nearest Occurrence: 648.13 KM	47.80440°N 100.31810°E



**Basin:** Internal Drainage Basin  
**Aimags:** Govi-altai  
**Soums:** Altai

Freshwater Ecoregion: Dzungaria  
 Terrestrial Ecoregion: Alashan Plateau Semi-Desert

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Possible Total: 7**

Family: Chloroperlidae						
Alaskaperla longidentata	Within Known Range? N	Nearest Occurrence:	456.02 KM	48.15779°N	97.21441°E	
Family: Nemouridae						
Nemoura arctica	Within Known Range? N	Nearest Occurrence:	543.51 KM	46.77095°N	91.31664°E	
Family: Perlidae						
Agnetina extrema	Within Known Range? N	Nearest Occurrence:	653.54 KM	47.50949°N	100.57510°E	
Family: Perlodidae						
Arcynopteryx polaris	Within Known Range? N	Nearest Occurrence:	448.02 KM	46.61982°N	92.22981°E	
Isoperla altaica	Within Known Range? N	Nearest Occurrence:	489.71 KM	46.13371°N	91.54083°E	
Isoperla asiatica	Within Known Range? N	Nearest Occurrence:	462.48 KM	48.05989°N	97.55073°E	
Isoperla mongolica	Within Known Range? N	Nearest Occurrence:	463.57 KM	48.06257°N	97.55064°E	

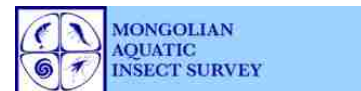
**LOE Rating: Predicted Total: 13**

Family: Capniidae						
Capnia nigra	Within Known Range? N	Nearest Occurrence:	462.74 KM	48.06257°N	97.55064°E	
Mesocapnia variabilis	Within Known Range? N	Nearest Occurrence:	574.69 KM	47.21260°N	99.91083°E	
Family: Chloroperlidae						
Alloperla deminuta	Within Known Range? N	Nearest Occurrence:	648.13 KM	47.80440°N	100.31810°E	
Alloperla mediata	Within Known Range? N	Nearest Occurrence:	795.35 KM	50.61826°N	99.12094°E	
Family: Nemouridae						
Amphinemura standfussi	Within Known Range? N	Nearest Occurrence:	462.48 KM	48.05989°N	97.55073°E	
Nemoura sahlbergi	Within Known Range? N	Nearest Occurrence:	622.90 KM	47.42580°N	100.30130°E	
Family: Perlidae						
Paragnetina flavotincta	Within Known Range? N	Nearest Occurrence:	721.44 KM	49.26170°N	99.88242°E	
Family: Perlodidae						
Isoperla kozlovi	Within Known Range? N	Nearest Occurrence:	648.13 KM	47.80440°N	100.31810°E	
Isoperla lunigera	Within Known Range? N	Nearest Occurrence:	760.40 KM	49.62785°N	99.99523°E	
Isoperla obscura	Within Known Range? N	Nearest Occurrence:	806.69 KM	48.97819°N	89.94996°E	
Kaszabia nigricauda	Within Known Range? N	Nearest Occurrence:	589.31 KM	48.71968°N	98.65184°E	
Megarcys ochracea	Within Known Range? N	Nearest Occurrence:	881.97 KM	51.46205°N	99.19994°E	
Family: Taeniopterygidae						
Taenionema japonicum	Within Known Range? N	Nearest Occurrence:	598.79 KM	47.11520°N	90.94098°E	

**LOE Rating: Unlikely Total: 6**

Family: Capniidae						
Capnia khulsbagia	Within Known Range? N	Nearest Occurrence:	928.49 KM	50.98944°N	100.71944°E	
Mesocapnia altaica	Within Known Range? N	Nearest Occurrence:	867.35 KM	48.43684°N	88.90094°E	
Family: Leuctridae						
Leuctra fusca	Within Known Range? N	Nearest Occurrence:	1,400.16 KM	49.08643°N	107.28952°E	
Paraleuctra zapekinae	Within Known Range? N	Nearest Occurrence:	1,166.51 KM	49.71481°N	104.64203°E	
Family: Nemouridae						
Nemurella pictetii	Within Known Range? N	Nearest Occurrence:	826.07 KM	50.81265°N	99.33803°E	
Family: Perlodidae						
Isoperla eximia	Within Known Range? N	Nearest Occurrence:	1,423.72 KM	49.01829°N	107.54453°E	

Research funded by the National Science Foundation  
 DEB-BSI #0206674: A Survey of the Aquatic Insects of the Selenge River Basin. P.I.'s: JKGelhaus, JCMorse, BHayford.  
 DEB # 0743732: Aquatic Insects of the Altai and Hangai Mountain Drainages. P.I.'s: JKGelhaus, JCMorse, CRNelson.  
<http://clade.ansp.org/entomology/mongolia/index.html>



**Basin:** Internal Drainage Basin  
**Aimags:** Govi-altai  
**Soums:** Bayan-uul

**Freshwater Ecoregion:** Western Mongolia  
**Terrestrial Ecoregion:** Great Lakes Basin Desert Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Highly Likely Total: 3**

Family: Capniidae						
Isocapnia guentheri	Within Known Range? N	Nearest Occurrence:	394.04 KM	48.61518 °N	98.23096 °E	
Family: Chloroperlidae						
Suwallia teleckojensis	Within Known Range? Y	Nearest Occurrence:	150.96 KM	46.32080 °N	93.90083 °E	
Family: Perlodidae						
Isoperla potanini	Within Known Range? Y	Nearest Occurrence:	150.96 KM	46.32080 °N	93.90083 °E	

**LOE Rating: Likely Total: 10**

Family: Capniidae						
Isocapnia kudia	Within Known Range? N	Nearest Occurrence:	693.25 KM	51.25356 °N	99.66687 °E	
Isocapnia sibirica	Within Known Range? N	Nearest Occurrence:	682.74 KM	47.28244 °N	101.18793 °E	
Family: Chloroperlidae						
Alloperla rostellata	Within Known Range? N	Nearest Occurrence:	455.11 KM	48.36436 °N	98.92737 °E	
Family: Nemouridae						
Nemoura cinerea	Within Known Range? N	Nearest Occurrence:	300.07 KM	48.06257 °N	97.55064 °E	
Family: Perlidae						
Agnetina cocandica	Within Known Range? Y	Nearest Occurrence:	285.08 KM	48.33025 °N	92.81616 °E	
Kamimuria exilis	Within Known Range? N	Nearest Occurrence:	545.80 KM	50.16278 °N	98.84212 °E	
Family: Perlodidae						
Arcynopteryx sajanensis	Within Known Range? N	Nearest Occurrence:	799.25 KM	51.61397 °N	100.59972 °E	
Diura bicaudata	Within Known Range? N	Nearest Occurrence:	542.75 KM	47.21768 °N	99.92824 °E	
Pictetiella asiatica	Within Known Range? N	Nearest Occurrence:	795.00 KM	51.65822 °N	100.53000 °E	
Skwala pusilla	Within Known Range? N	Nearest Occurrence:	742.64 KM	48.51277 °N	88.51107 °E	

**LOE Rating: Probable Total: 10**

Family: Chloroperlidae						
Alloperla joosti	Within Known Range? N	Nearest Occurrence:	294.02 KM	48.24995 °N	97.40627 °E	
Haploperla lepnevae	Within Known Range? N	Nearest Occurrence:	590.46 KM	49.26170 °N	99.88242 °E	
Suwallia kerzhneri	Within Known Range? N	Nearest Occurrence:	294.02 KM	48.24995 °N	97.40627 °E	
Family: Nemouridae						
Amphinemura borealis	Within Known Range? Y	Nearest Occurrence:	299.97 KM	48.05989 °N	97.55073 °E	
Family: Perlidae						
Agnetina brevipennis	Within Known Range? Y	Nearest Occurrence:	409.39 KM	46.55341 °N	91.38764 °E	
Family: Perlodidae						
Arcynopteryx compacta	Within Known Range? Y	Nearest Occurrence:	348.48 KM	46.92107 °N	91.91048 °E	
Diura majuscula	Within Known Range? Y	Nearest Occurrence:	300.60 KM	48.06257 °N	97.55064 °E	
Isoperla altaica	Within Known Range? Y	Nearest Occurrence:	354.83 KM	47.33906 °N	91.86288 °E	
Isoperla asiatica	Within Known Range? N	Nearest Occurrence:	299.97 KM	48.05989 °N	97.55073 °E	
Family: Pteronarcyidae						
Pteronarcys reticulata	Within Known Range? N	Nearest Occurrence:	591.57 KM	47.80440 °N	100.31810 °E	



**Basin:** Internal Drainage Basin

**Aimags:** Govi-altai

**Soums:** Bayan-uul

Freshwater Ecoregion: Western Mongolia

Terrestrial Ecoregion: Great Lakes Basin Desert Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Possible Total: 7**

Family: Capniidae						
<i>Capnia nigra</i>	Within Known Range? N	Nearest Occurrence:	300.07 KM	48.06257°N	97.55064°E	
Family: Chloroperlidae						
<i>Alaskaperla longidentata</i>	Within Known Range? N	Nearest Occurrence:	270.39 KM	48.15779°N	97.21441°E	
Family: Nemouridae						
<i>Nemoura arctica</i>	Within Known Range? Y	Nearest Occurrence:	415.41 KM	46.77095°N	91.31664°E	
Family: Perlidae						
<i>Agnetina extrema</i>	Within Known Range? N	Nearest Occurrence:	616.30 KM	47.50949°N	100.57510°E	
Family: Perlodidae						
<i>Arcynopteryx polaris</i>	Within Known Range? Y	Nearest Occurrence:	316.40 KM	46.61982°N	92.22981°E	
<i>Isoperla mongolica</i>	Within Known Range? Y	Nearest Occurrence:	294.54 KM	48.24995°N	97.40627°E	
Family: Taeniopterygidae						
<i>Taenionema japonicum</i>	Within Known Range? Y	Nearest Occurrence:	456.01 KM	47.11520°N	90.94098°E	

**LOE Rating: Predicted Total: 12**

Family: Capniidae						
<i>Mesocapnia variabilis</i>	Within Known Range? Y	Nearest Occurrence:	455.92 KM	48.36436°N	98.92737°E	
Family: Chloroperlidae						
<i>Alloperla deminuta</i>	Within Known Range? N	Nearest Occurrence:	591.57 KM	47.80440°N	100.31810°E	
<i>Alloperla mediata</i>	Within Known Range? N	Nearest Occurrence:	601.10 KM	50.61826°N	99.12094°E	
Family: Nemouridae						
<i>Amphinemura standfussi</i>	Within Known Range? N	Nearest Occurrence:	299.97 KM	48.05989°N	97.55073°E	
<i>Nemoura sahlbergi</i>	Within Known Range? N	Nearest Occurrence:	585.30 KM	47.42580°N	100.30130°E	
<i>Nemurella pictetii</i>	Within Known Range? N	Nearest Occurrence:	633.44 KM	50.81265°N	99.33803°E	
Family: Perlidae						
<i>Paragnetina flavotincta</i>	Within Known Range? N	Nearest Occurrence:	590.46 KM	49.26170°N	99.88242°E	
Family: Perlodidae						
<i>Isoperla kozlovi</i>	Within Known Range? N	Nearest Occurrence:	591.57 KM	47.80440°N	100.31810°E	
<i>Isoperla lunigera</i>	Within Known Range? N	Nearest Occurrence:	619.52 KM	49.62785°N	99.99523°E	
<i>Isoperla obscura</i>	Within Known Range? N	Nearest Occurrence:	604.03 KM	48.97819°N	89.94996°E	
<i>Kaszabia nigricauda</i>	Within Known Range? N	Nearest Occurrence:	441.22 KM	48.71968°N	98.65184°E	
<i>Megarcys ochracea</i>	Within Known Range? N	Nearest Occurrence:	672.43 KM	51.46205°N	99.19994°E	

**LOE Rating: Unlikely Total: 5**

Family: Capniidae						
<i>Capnia khulsbagia</i>	Within Known Range? N	Nearest Occurrence:	766.66 KM	50.98944°N	100.71944°E	
<i>Mesocapnia altaica</i>	Within Known Range? N	Nearest Occurrence:	698.57 KM	48.43684°N	88.90094°E	
Family: Leuctridae						
<i>Leuctra fusca</i>	Within Known Range? N	Nearest Occurrence:	1,378.09 KM	49.08643°N	107.28952°E	
<i>Paraleuctra zapekinae</i>	Within Known Range? N	Nearest Occurrence:	1,105.76 KM	49.71481°N	104.64203°E	
Family: Perlodidae						
<i>Isoperla eximia</i>	Within Known Range? N	Nearest Occurrence:	1,404.83 KM	49.01829°N	107.54453°E	

**Basin:** Internal Drainage Basin  
**Aimags:** Govi-altai  
**Soums:** Biger

**Freshwater Ecoregion:** Western Mongolia  
**Terrestrial Ecoregion:** Gobi Lakes Valley Desert Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

<b>LOE Rating:</b>	<b>Highly Likely</b>	<b>Total:</b>	<b>5</b>
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<b>Family:</b> Capniidae			
Isocapnia guentheri	Within Known Range? N	Nearest Occurrence:	339.58 KM 48.61518°N 98.23096°E
Isocapnia sibirica	Within Known Range? N	Nearest Occurrence:	477.17 KM 47.28244°N 101.18793°E
<b>Family:</b> Chloroperlidae			
Alloperla rostellata	Within Known Range? N	Nearest Occurrence:	349.96 KM 48.36436°N 98.92737°E
Suwallia teleckojensis	Within Known Range? N	Nearest Occurrence:	260.88 KM 48.05989°N 97.55073°E
<b>Family:</b> Perlodidae			
Isoperla potanini	Within Known Range? Y	Nearest Occurrence:	261.17 KM 48.06257°N 97.55064°E

<b>LOE Rating:</b>	<b>Likely</b>	<b>Total:</b>	<b>10</b>
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<b>Family:</b> Capniidae			
Isocapnia kudia	Within Known Range? N	Nearest Occurrence:	671.23 KM 51.25356°N 99.66687°E
<b>Family:</b> Chloroperlidae			
Alloperla joosti	Within Known Range? N	Nearest Occurrence:	279.32 KM 48.24995°N 97.40627°E
Suwallia kerzhneri	Within Known Range? N	Nearest Occurrence:	260.41 KM 48.05989°N 97.55073°E
<b>Family:</b> Nemouridae			
Amphinemura borealis	Within Known Range? N	Nearest Occurrence:	260.41 KM 48.05989°N 97.55073°E
Nemoura cinerea	Within Known Range? N	Nearest Occurrence:	260.70 KM 48.06257°N 97.55064°E
<b>Family:</b> Perlidae			
Agnetina brevipennis	Within Known Range? N	Nearest Occurrence:	368.77 KM 48.71968°N 98.65184°E
Kamimuria exilis	Within Known Range? N	Nearest Occurrence:	525.19 KM 50.16278°N 98.84212°E
<b>Family:</b> Perlodidae			
Arcynopteryx sajanensis	Within Known Range? N	Nearest Occurrence:	755.75 KM 51.61397°N 100.59972°E
Diura bicaudata	Within Known Range? N	Nearest Occurrence:	346.75 KM 47.21768°N 99.92824°E
Pictetiella asiatica	Within Known Range? N	Nearest Occurrence:	754.79 KM 51.65822°N 100.53000°E

<b>LOE Rating:</b>	<b>Probable</b>	<b>Total:</b>	<b>6</b>
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<b>Family:</b> Chloroperlidae			
Haploperla lepnevae	Within Known Range? N	Nearest Occurrence:	492.78 KM 49.26170°N 99.88242°E
<b>Family:</b> Perlidae			
Agnetina cocandica	Within Known Range? N	Nearest Occurrence:	533.79 KM 49.62785°N 99.99523°E
<b>Family:</b> Perlodidae			
Diura majuscula	Within Known Range? N	Nearest Occurrence:	261.17 KM 48.06257°N 97.55064°E
Isoperla mongolica	Within Known Range? N	Nearest Occurrence:	261.17 KM 48.06257°N 97.55064°E
Skwala pusilla	Within Known Range? N	Nearest Occurrence:	1,009.46 KM 48.51277°N 88.51107°E
<b>Family:</b> Pteronarcyidae			
Pteronarcys reticulata	Within Known Range? N	Nearest Occurrence:	417.27 KM 47.80440°N 100.31810°E



**Basin:** Internal Drainage Basin  
**Aimags:** Govi-Altai  
**Soums:** Biger

**Freshwater Ecoregion:** Western Mongolia  
**Terrestrial Ecoregion:** Gobi Lakes Valley Desert Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Possible Total: 9**

Family: Capniidae					
<i>Capnia nigra</i>	Within Known Range? N	Nearest Occurrence:	260.70 KM	48.06257°N	97.55064 °E
Family: Chloroperlidae					
<i>Alaskaperla longidentata</i>	Within Known Range? N	Nearest Occurrence:	267.93 KM	48.15779°N	97.21441 °E
Family: Nemouridae					
<i>Amphinemura standfussi</i>	Within Known Range? N	Nearest Occurrence:	260.41 KM	48.05989°N	97.55073 °E
Family: Perlidae					
<i>Agnetina extrema</i>	Within Known Range? N	Nearest Occurrence:	425.37 KM	47.50949°N	100.57510 °E
Family: Perlodidae					
<i>Arcynopteryx compacta</i>	Within Known Range? N	Nearest Occurrence:	452.94 KM	47.11192°N	101.01048 °E
<i>Arcynopteryx polaris</i>	Within Known Range? N	Nearest Occurrence:	345.39 KM	47.21260°N	99.91083 °E
<i>Isoperla altaica</i>	Within Known Range? N	Nearest Occurrence:	452.94 KM	47.11192°N	101.01048 °E
<i>Isoperla asiatica</i>	Within Known Range? N	Nearest Occurrence:	260.41 KM	48.05989°N	97.55073 °E
<i>Isoperla kozlovi</i>	Within Known Range? N	Nearest Occurrence:	417.27 KM	47.80440°N	100.31810 °E

**LOE Rating: Predicted Total: 12**

Family: Capniidae					
<i>Mesocapnia variabilis</i>	Within Known Range? N	Nearest Occurrence:	345.39 KM	47.21260°N	99.91083 °E
Family: Chloroperlidae					
<i>Alloperla deminuta</i>	Within Known Range? N	Nearest Occurrence:	417.27 KM	47.80440°N	100.31810 °E
<i>Alloperla mediata</i>	Within Known Range? N	Nearest Occurrence:	582.58 KM	50.61826°N	99.12094 °E
Family: Nemouridae					
<i>Nemoura arctica</i>	Within Known Range? N	Nearest Occurrence:	541.93 KM	47.26999°N	101.80227 °E
<i>Nemoura sahlbergi</i>	Within Known Range? N	Nearest Occurrence:	394.16 KM	47.42580°N	100.30130 °E
<i>Nemurella pictetii</i>	Within Known Range? N	Nearest Occurrence:	611.73 KM	50.81265°N	99.33803 °E
Family: Perlidae					
<i>Paragnetina flavotincta</i>	Within Known Range? N	Nearest Occurrence:	492.78 KM	49.26170°N	99.88242 °E
Family: Perlodidae					
<i>Isoperla lunigera</i>	Within Known Range? N	Nearest Occurrence:	532.83 KM	49.62785°N	99.99523 °E
<i>Isoperla obscura</i>	Within Known Range? N	Nearest Occurrence:	723.67 KM	50.60031°N	101.52392 °E
<i>Kaszabia nigricauda</i>	Within Known Range? N	Nearest Occurrence:	368.77 KM	48.71968°N	98.65184 °E
<i>Megarcys ochracea</i>	Within Known Range? N	Nearest Occurrence:	671.75 KM	51.40978°N	99.30136 °E
Family: Taeniopterygidae					
<i>Taenionema japonicum</i>	Within Known Range? N	Nearest Occurrence:	452.94 KM	47.11192°N	101.01048 °E

**LOE Rating: Unlikely Total: 5**

Family: Capniidae					
<i>Capnia khulsbagia</i>	Within Known Range? N	Nearest Occurrence:	702.76 KM	50.98944°N	100.71944 °E
<i>Mesocapnia altaica</i>	Within Known Range? N	Nearest Occurrence:	965.68 KM	48.43684°N	88.90094 °E
Family: Leuctridae					
<i>Leuctra fusca</i>	Within Known Range? N	Nearest Occurrence:	1,182.55 KM	49.08643°N	107.28952 °E
<i>Paraleuctra zapekinae</i>	Within Known Range? N	Nearest Occurrence:	938.86 KM	49.71481°N	104.64203 °E
Family: Perlodidae					
<i>Isoperla eximia</i>	Within Known Range? N	Nearest Occurrence:	1,207.17 KM	49.01829°N	107.54453 °E

Research funded by the National Science Foundation  
 DEB-BSI #0206674: A Survey of the Aquatic Insects of the Selenge River Basin. P.I.'s: JKGelhaus, JCMorse, BHayford.  
 DEB # 0743732: Aquatic Insects of the Altai and Hangai Mountain Drainages. P.I.'s: JKGelhaus, JCMorse, CRNelson.  
<http://clade.ansp.org/entomology/mongolia/index.html>



**Basin:** Internal Drainage Basin  
**Aimags:** Govi-altai  
**Soums:** Bugat

Freshwater Ecoregion: Upper Irtysh  
 Terrestrial Ecoregion: Junggar Basin Semi-Desert

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Highly Likely Total: 3**

Family: Capniidae					
Isocapnia guentheri	Within Known Range? N	Nearest Occurrence:	590.49 KM	48.61518 °N	98.23096 °E
Family: Chloroperlidae					
Suwallia teleckojensis	Within Known Range? N	Nearest Occurrence:	123.71 KM	46.32080 °N	93.90083 °E
Family: Perlodidae					
Isoperla potanini	Within Known Range? N	Nearest Occurrence:	123.71 KM	46.32080 °N	93.90083 °E

**LOE Rating: Likely Total: 12**

Family: Capniidae					
Isocapnia kudia	Within Known Range? N	Nearest Occurrence:	908.34 KM	51.25356 °N	99.66687 °E
Isocapnia sibirica	Within Known Range? N	Nearest Occurrence:	816.25 KM	47.28244 °N	101.18793 °E
Family: Chloroperlidae					
Alloperla rostellata	Within Known Range? N	Nearest Occurrence:	636.36 KM	48.36436 °N	98.92737 °E
Family: Nemouridae					
Amphinemura borealis	Within Known Range? N	Nearest Occurrence:	397.57 KM	47.03925 °N	91.03419 °E
Nemoura cinerea	Within Known Range? N	Nearest Occurrence:	493.20 KM	48.06257 °N	97.55064 °E
Family: Perlidae					
Agnetina brevipennis	Within Known Range? N	Nearest Occurrence:	321.54 KM	46.28532 °N	91.42793 °E
Agnetina cocandica	Within Known Range? N	Nearest Occurrence:	250.95 KM	46.12479 °N	92.05382 °E
Kamimuria exilis	Within Known Range? N	Nearest Occurrence:	758.76 KM	50.16278 °N	98.84212 °E
Family: Perlodidae					
Arcynopteryx sajanensis	Within Known Range? N	Nearest Occurrence:	1,010.90 KM	51.61397 °N	100.59972 °E
Diura bicaudata	Within Known Range? N	Nearest Occurrence:	672.43 KM	49.04180 °N	89.41675 °E
Pictetiella asiatica	Within Known Range? N	Nearest Occurrence:	1,007.06 KM	51.65822 °N	100.53000 °E
Skwala pusilla	Within Known Range? N	Nearest Occurrence:	721.90 KM	48.51277 °N	88.51107 °E

**LOE Rating: Probable Total: 7**

Family: Chloroperlidae					
Alloperla joosti	Within Known Range? N	Nearest Occurrence:	494.80 KM	48.24995 °N	97.40627 °E
Haploperla lepnevae	Within Known Range? N	Nearest Occurrence:	622.78 KM	48.97819 °N	89.94996 °E
Suwallia kerzhneri	Within Known Range? N	Nearest Occurrence:	493.02 KM	48.05989 °N	97.55073 °E
Family: Perlodidae					
Arcynopteryx compacta	Within Known Range? N	Nearest Occurrence:	304.50 KM	46.13371 °N	91.54083 °E
Diura majuscula	Within Known Range? N	Nearest Occurrence:	345.82 KM	47.24104 °N	91.75287 °E
Isoperla altaica	Within Known Range? N	Nearest Occurrence:	304.50 KM	46.13371 °N	91.54083 °E
Isoperla mongolica	Within Known Range? N	Nearest Occurrence:	304.50 KM	46.13371 °N	91.54083 °E



**Basin:** Internal Drainage Basin  
**Aimags:** Govi-Altai  
**Soums:** Bugat

**Freshwater Ecoregion:** Upper Irtysh  
**Terrestrial Ecoregion:** Junggar Basin Semi-Desert

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

<b>LOE Rating:</b>	<b>Possible</b>	<b>Total:</b>	<b>8</b>
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<b>Family:</b> Chloroperlidae						
Alaskaperla longidentata	Within Known Range? N	Nearest Occurrence:	472.25 KM	48.15779°N	97.21441°E	
<b>Family:</b> Nemouridae						
Nemoura arctica	Within Known Range? N	Nearest Occurrence:	356.26 KM	46.77095°N	91.31664°E	
<b>Family:</b> Perlidae						
Agnetina extrema	Within Known Range? N	Nearest Occurrence:	759.18 KM	47.50949°N	100.57510°E	
<b>Family:</b> Perlodidae						
Arcynopteryx polaris	Within Known Range? N	Nearest Occurrence:	261.36 KM	46.61982°N	92.22981°E	
Isoperla asiatica	Within Known Range? N	Nearest Occurrence:	493.02 KM	48.05989°N	97.55073°E	
Isoperla obscura	Within Known Range? N	Nearest Occurrence:	622.78 KM	48.97819°N	89.94996°E	
<b>Family:</b> Pteronarcyidae						
Pteronarcys reticulata	Within Known Range? N	Nearest Occurrence:	744.28 KM	47.80440°N	100.31810°E	
<b>Family:</b> Taeniopterygidae						
Taenionema japonicum	Within Known Range? N	Nearest Occurrence:	411.51 KM	47.11520°N	90.94098°E	

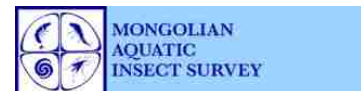
<b>LOE Rating:</b>	<b>Predicted</b>	<b>Total:</b>	<b>12</b>
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<b>Family:</b> Capniidae						
Capnia nigra	Within Known Range? N	Nearest Occurrence:	493.20 KM	48.06257°N	97.55064°E	
Mesocapnia altaica	Within Known Range? N	Nearest Occurrence:	680.44 KM	48.43684°N	88.90094°E	
Mesocapnia variabilis	Within Known Range? N	Nearest Occurrence:	637.50 KM	48.36436°N	98.92737°E	
<b>Family:</b> Chloroperlidae						
Alloperla deminuta	Within Known Range? N	Nearest Occurrence:	744.28 KM	47.80440°N	100.31810°E	
Alloperla mediata	Within Known Range? N	Nearest Occurrence:	815.42 KM	50.61826°N	99.12094°E	
<b>Family:</b> Nemouridae						
Amphinemura standfussi	Within Known Range? N	Nearest Occurrence:	493.02 KM	48.05989°N	97.55073°E	
Nemoura sahlbergi	Within Known Range? N	Nearest Occurrence:	727.43 KM	47.42580°N	100.30130°E	
<b>Family:</b> Perlidae						
Paragnetina flavotincta	Within Known Range? N	Nearest Occurrence:	779.99 KM	49.26170°N	99.88242°E	
<b>Family:</b> Perlodidae						
Isoperla kozlovi	Within Known Range? N	Nearest Occurrence:	744.28 KM	47.80440°N	100.31810°E	
Isoperla lunigera	Within Known Range? N	Nearest Occurrence:	813.98 KM	49.62785°N	99.99523°E	
Kaszabia nigricauda	Within Known Range? N	Nearest Occurrence:	634.25 KM	48.71968°N	98.65184°E	
Megarcys ochracea	Within Known Range? N	Nearest Occurrence:	891.91 KM	51.46205°N	99.19994°E	

<b>LOE Rating:</b>	<b>Unlikely</b>	<b>Total:</b>	<b>5</b>
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<b>Family:</b> Capniidae						
Capnia khulsbagia	Within Known Range? N	Nearest Occurrence:	971.65 KM	50.98944°N	100.71944°E	
<b>Family:</b> Leuctridae						
Leuctra fusca	Within Known Range? N	Nearest Occurrence:	1,522.50 KM	49.08643°N	107.28952°E	
Paraleuctra zapekinae	Within Known Range? N	Nearest Occurrence:	1,268.92 KM	49.71481°N	104.64203°E	
<b>Family:</b> Nemouridae						
Nemurella pictetii	Within Known Range? N	Nearest Occurrence:	847.63 KM	50.81265°N	99.33803°E	
<b>Family:</b> Perlodidae						
Isoperla eximia	Within Known Range? N	Nearest Occurrence:	1,547.61 KM	49.01829°N	107.54453°E	

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 DEB-BSI #0206674: A Survey of the Aquatic Insects of the Selenge River Basin. P.I.'s: JKGelhaus, JCMorse, BHayford.  
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<http://clade.ansp.org/entomology/mongolia/index.html>





**Basin:** Internal Drainage Basin  
**Aimags:** Govi-altai  
**Soums:** Chandmany

**Freshwater Ecoregion:** Western Mongolia  
**Terrestrial Ecoregion:** Gobi Lakes Valley Desert Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

<b>LOE Rating:</b>	<b>Highly Likely</b>	<b>Total:</b>	<b>5</b>
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<b>Family:</b> Capniidae			
Isocapnia guentheri	Within Known Range? N	Nearest Occurrence:	348.18 KM 48.61518°N 98.23096 °E
Isocapnia sibirica	Within Known Range? N	Nearest Occurrence:	405.61 KM 47.28244°N 101.18793 °E
<b>Family:</b> Chloroperlidae			
Alloperla rostellata	Within Known Range? N	Nearest Occurrence:	335.42 KM 48.36436°N 98.92737 °E
Suwallia teleckojensis	Within Known Range? N	Nearest Occurrence:	290.59 KM 48.05989°N 97.55073 °E
<b>Family:</b> Perlodidae			
Isoperla potanini	Within Known Range? N	Nearest Occurrence:	290.88 KM 48.06257°N 97.55064 °E

<b>LOE Rating:</b>	<b>Likely</b>	<b>Total:</b>	<b>8</b>
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<b>Family:</b> Capniidae			
Isocapnia kudia	Within Known Range? N	Nearest Occurrence:	666.17 KM 51.25356°N 99.66687 °E
<b>Family:</b> Chloroperlidae			
Alloperla joosti	Within Known Range? N	Nearest Occurrence:	313.87 KM 48.24995°N 97.40627 °E
<b>Family:</b> Nemouridae			
Nemoura cinerea	Within Known Range? N	Nearest Occurrence:	290.36 KM 48.06257°N 97.55064 °E
<b>Family:</b> Perlidae			
Agnetina brevipennis	Within Known Range? N	Nearest Occurrence:	363.38 KM 48.12661°N 99.94128 °E
Kamimuria exilis	Within Known Range? N	Nearest Occurrence:	528.25 KM 50.16278°N 98.84212 °E
<b>Family:</b> Perlodidae			
Arcynopteryx sajanensis	Within Known Range? N	Nearest Occurrence:	739.91 KM 51.61397°N 100.59972 °E
Diura bicaudata	Within Known Range? N	Nearest Occurrence:	287.18 KM 47.21768°N 99.92824 °E
Pictetiella asiatica	Within Known Range? N	Nearest Occurrence:	740.15 KM 51.65822°N 100.53000 °E

<b>LOE Rating:</b>	<b>Probable</b>	<b>Total:</b>	<b>8</b>
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<b>Family:</b> Chloroperlidae			
Haploperla lepnevae	Within Known Range? N	Nearest Occurrence:	467.97 KM 49.26170°N 99.88242 °E
Suwallia kerzhneri	Within Known Range? N	Nearest Occurrence:	290.07 KM 48.05989°N 97.55073 °E
<b>Family:</b> Nemouridae			
Amphinemura borealis	Within Known Range? N	Nearest Occurrence:	290.07 KM 48.05989°N 97.55073 °E
<b>Family:</b> Perlidae			
Agnetina cocandica	Within Known Range? N	Nearest Occurrence:	510.90 KM 49.62785°N 99.99523 °E
Agnetina extrema	Within Known Range? N	Nearest Occurrence:	363.00 KM 47.50949°N 100.57510 °E
<b>Family:</b> Perlodidae			
Diura majuscula	Within Known Range? N	Nearest Occurrence:	290.88 KM 48.06257°N 97.55064 °E
Skwala pusilla	Within Known Range? N	Nearest Occurrence:	1,106.12 KM 48.51277°N 88.51107 °E
<b>Family:</b> Pteronarcyidae			
Pteronarcys reticulata	Within Known Range? N	Nearest Occurrence:	363.44 KM 47.80440°N 100.31810 °E



**Basin:** Internal Drainage Basin  
**Aimags:** Govi-Altai  
**Soums:** Chandmany

**Freshwater Ecoregion:** Western Mongolia  
**Terrestrial Ecoregion:** Gobi Lakes Valley Desert Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Possible Total: 8**

Family: Capniidae					
<i>Capnia nigra</i>	Within Known Range? N	Nearest Occurrence:	290.36 KM	48.06257°N	97.55064°E
Family: Nemouridae					
<i>Amphinemura standfussi</i>	Within Known Range? N	Nearest Occurrence:	290.07 KM	48.05989°N	97.55073°E
Family: Perlodidae					
<i>Arcynopteryx compacta</i>	Within Known Range? N	Nearest Occurrence:	379.89 KM	47.11192°N	101.01048°E
<i>Arcynopteryx polaris</i>	Within Known Range? N	Nearest Occurrence:	285.87 KM	47.21260°N	99.91083°E
<i>Isoperla altaica</i>	Within Known Range? N	Nearest Occurrence:	379.89 KM	47.11192°N	101.01048°E
<i>Isoperla asiatica</i>	Within Known Range? N	Nearest Occurrence:	290.07 KM	48.05989°N	97.55073°E
<i>Isoperla kozlovi</i>	Within Known Range? N	Nearest Occurrence:	363.44 KM	47.80440°N	100.31810°E
<i>Isoperla mongolica</i>	Within Known Range? N	Nearest Occurrence:	290.88 KM	48.06257°N	97.55064°E

**LOE Rating: Predicted Total: 12**

Family: Capniidae					
<i>Mesocapnia variabilis</i>	Within Known Range? N	Nearest Occurrence:	285.87 KM	47.21260°N	99.91083°E
Family: Chloroperlidae					
<i>Alaskaperla longidentata</i>	Within Known Range? N	Nearest Occurrence:	301.58 KM	47.29702°N	100.03136°E
<i>Alloperla deminuta</i>	Within Known Range? N	Nearest Occurrence:	363.44 KM	47.80440°N	100.31810°E
<i>Alloperla mediata</i>	Within Known Range? N	Nearest Occurrence:	582.92 KM	50.61826°N	99.12094°E
Family: Nemouridae					
<i>Nemoura arctica</i>	Within Known Range? N	Nearest Occurrence:	466.45 KM	47.26999°N	101.80227°E
<i>Nemoura sahlbergi</i>	Within Known Range? N	Nearest Occurrence:	333.58 KM	47.42580°N	100.30130°E
Family: Perlidae					
<i>Paragnetina flavotincta</i>	Within Known Range? N	Nearest Occurrence:	467.97 KM	49.26170°N	99.88242°E
Family: Perlodidae					
<i>Isoperla lunigera</i>	Within Known Range? N	Nearest Occurrence:	509.99 KM	49.62785°N	99.99523°E
<i>Isoperla obscura</i>	Within Known Range? N	Nearest Occurrence:	678.84 KM	49.38617°N	102.71667°E
<i>Kaszabia nigricauda</i>	Within Known Range? N	Nearest Occurrence:	363.44 KM	47.80440°N	100.31810°E
<i>Megarcys ochracea</i>	Within Known Range? N	Nearest Occurrence:	673.03 KM	51.40978°N	99.30136°E
Family: Taeniopterygidae					
<i>Taenionema japonicum</i>	Within Known Range? N	Nearest Occurrence:	379.89 KM	47.11192°N	101.01048°E

**LOE Rating: Unlikely Total: 6**

Family: Capniidae					
<i>Capnia khulsbagia</i>	Within Known Range? N	Nearest Occurrence:	681.06 KM	50.98944°N	100.71944°E
<i>Mesocapnia altaica</i>	Within Known Range? N	Nearest Occurrence:	1,062.34 KM	48.43684°N	88.90094°E
Family: Leuctridae					
<i>Leuctra fusca</i>	Within Known Range? N	Nearest Occurrence:	1,105.28 KM	49.08643°N	107.28952°E
<i>Paraleuctra zapekinae</i>	Within Known Range? N	Nearest Occurrence:	873.46 KM	49.71481°N	104.64203°E
Family: Nemouridae					
<i>Nemurella pictetii</i>	Within Known Range? N	Nearest Occurrence:	609.42 KM	50.81265°N	99.33803°E
Family: Perlodidae					
<i>Isoperla eximia</i>	Within Known Range? N	Nearest Occurrence:	1,129.07 KM	49.01829°N	107.54453°E

**Basin:** Internal Drainage Basin  
**Aimag:** Govi-Altai  
**Soum:** Darvi

**WQM Sites:**

WQM Sites: # 150 (Zavhan River @ N 46.69747° E 94.43577°)

**Freshwater Ecoregion:** Western Mongolia

**Terrestrial Ecoregion:** Altai Montane Forest And Forest Steppe

**LOE Rating: Highly Likely Total: 3**

Family: Capniidae					
Isocapnia guentheri	Within Known Range? N	Nearest Occurrence:	496.34 KM	48.61518°N	98.23096°E
Family: Chloroperlidae					
Suwallia teleckojensis	Within Known Range? Y	Nearest Occurrence:	47.73 KM	46.32080°N	93.90083°E
Family: Perlodidae					
Isoperla potanini	Within Known Range? Y	Nearest Occurrence:	47.73 KM	46.32080°N	93.90083°E

**LOE Rating: Likely Total: 13**

Family: Capniidae					
Isocapnia kudia	Within Known Range? N	Nearest Occurrence:	796.33 KM	51.25356°N	99.66687°E
Isocapnia sibirica	Within Known Range? N	Nearest Occurrence:	770.74 KM	47.28244°N	101.18793°E
Family: Chloroperlidae					
Alloperla rostellata	Within Known Range? N	Nearest Occurrence:	554.75 KM	48.36436°N	98.92737°E
Family: Nemouridae					
Amphinemura borealis	Within Known Range? Y	Nearest Occurrence:	365.96 KM	47.03925°N	91.03419°E
Nemoura cinerea	Within Known Range? N	Nearest Occurrence:	401.25 KM	48.06257°N	97.55064°E
Family: Perlidae					
Agnentina brevipennis	Within Known Range? Y	Nearest Occurrence:	318.39 KM	46.28532°N	91.42793°E
Agnentina cocandica	Within Known Range? Y	Nearest Occurrence:	252.02 KM	46.12479°N	92.05382°E
Kamimuria exilis	Within Known Range? N	Nearest Occurrence:	649.45 KM	50.16278°N	98.84212°E
Family: Perlodidae					
Arcynopteryx sajanensis	Within Known Range? N	Nearest Occurrence:	902.88 KM	51.61397°N	100.59972°E
Diura bicaudata	Within Known Range? N	Nearest Occurrence:	609.54 KM	49.04180°N	89.41675°E
Diura majuscula	Within Known Range? Y	Nearest Occurrence:	293.48 KM	47.24104°N	91.75287°E
Pictetiella asiatica	Within Known Range? N	Nearest Occurrence:	898.38 KM	51.65822°N	100.53000°E
Skwala pusilla	Within Known Range? N	Nearest Occurrence:	678.79 KM	48.51277°N	88.51107°E

**LOE Rating: Probable Total: 6**

Family: Chloroperlidae					
Alloperla joosti	Within Known Range? N	Nearest Occurrence:	396.57 KM	48.24995°N	97.40627°E
Haploperla lepnevae	Within Known Range? N	Nearest Occurrence:	554.18 KM	48.97819°N	89.94996°E
Suwallia kerzhneri	Within Known Range? N	Nearest Occurrence:	396.57 KM	48.24995°N	97.40627°E
Family: Perlodidae					
Arcynopteryx compacta	Within Known Range? Y	Nearest Occurrence:	268.35 KM	46.92107°N	91.91048°E
Arcynopteryx polaris	Within Known Range? Y	Nearest Occurrence:	229.20 KM	46.61982°N	92.22981°E
Isoperla altaica	Within Known Range? Y	Nearest Occurrence:	285.10 KM	47.33906°N	91.86288°E

**Basin:** Internal Drainage Basin  
**Aimag:** Govi-altai  
**Soum:** Darvi

**WQM Sites:**

WQM Sites: # 150 (Zavhan River @ N 46.69747° E 94.43577°)

**Freshwater Ecoregion:** Western Mongolia  
**Terrestrial Ecoregion:** Altai Montane Forest And Forest Steppe

<b>LOE Rating:</b>	<b>Possible</b>	<b>Total:</b>	<b>8</b>
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<b>Family:</b> Chloroperlidae						
	Alaskaperla longidentata	Within Known Range? N	Nearest Occurrence:	372.99 KM	48.15779°N	97.21441°E
<b>Family:</b> Nemouridae						
	Nemoura arctica	Within Known Range? Y	Nearest Occurrence:	331.70 KM	46.77095°N	91.31664°E
<b>Family:</b> Perlidae						
	Agnetina extrema	Within Known Range? N	Nearest Occurrence:	706.71 KM	47.50949°N	100.57510°E
<b>Family:</b> Perlodidae						
	Isoperla asiatica	Within Known Range? N	Nearest Occurrence:	401.13 KM	48.05989°N	97.55073°E
	Isoperla mongolica	Within Known Range? Y	Nearest Occurrence:	308.27 KM	46.13371°N	91.54083°E
	Isoperla obscura	Within Known Range? N	Nearest Occurrence:	554.18 KM	48.97819°N	89.94996°E
<b>Family:</b> Pteronarcyidae						
	Pteronarcys reticulata	Within Known Range? N	Nearest Occurrence:	684.69 KM	47.80440°N	100.31810°E
<b>Family:</b> Taeniopterygidae						
	Taenionema japonicum	Within Known Range? Y	Nearest Occurrence:	378.27 KM	47.11520°N	90.94098°E

<b>LOE Rating:</b>	<b>Predicted</b>	<b>Total:</b>	<b>13</b>
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<b>Family:</b> Capniidae						
	Capnia nigra	Within Known Range? N	Nearest Occurrence:	401.25 KM	48.06257°N	97.55064°E
	Mesocapnia altaica	Within Known Range? N	Nearest Occurrence:	635.17 KM	48.43684°N	88.90094°E
	Mesocapnia variabilis	Within Known Range? N	Nearest Occurrence:	555.74 KM	48.36436°N	98.92737°E
<b>Family:</b> Chloroperlidae						
	Alloperla deminuta	Within Known Range? N	Nearest Occurrence:	684.69 KM	47.80440°N	100.31810°E
	Alloperla mediata	Within Known Range? N	Nearest Occurrence:	704.35 KM	50.61826°N	99.12094°E
<b>Family:</b> Nemouridae						
	Amphinemura standfussi	Within Known Range? N	Nearest Occurrence:	401.13 KM	48.05989°N	97.55073°E
	Nemoura sahlbergi	Within Known Range? N	Nearest Occurrence:	675.25 KM	47.42580°N	100.30130°E
	Nemurella pictetii	Within Known Range? N	Nearest Occurrence:	736.69 KM	50.81265°N	99.33803°E
<b>Family:</b> Perlidae						
	Paragnetina flavotincta	Within Known Range? N	Nearest Occurrence:	692.22 KM	49.26170°N	99.88242°E
<b>Family:</b> Perlodidae						
	Isoperla kozlovi	Within Known Range? N	Nearest Occurrence:	684.69 KM	47.80440°N	100.31810°E
	Isoperla lunigera	Within Known Range? N	Nearest Occurrence:	722.08 KM	49.62785°N	99.99523°E
	Kaszabia nigricauda	Within Known Range? N	Nearest Occurrence:	543.14 KM	48.71968°N	98.65184°E
	Megarcys ochracea	Within Known Range? N	Nearest Occurrence:	774.51 KM	51.46205°N	99.19994°E

<b>LOE Rating:</b>	<b>Unlikely</b>	<b>Total:</b>	<b>4</b>
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<b>Family:</b> Capniidae						
	Capnia khulsbagia	Within Known Range? N	Nearest Occurrence:	870.22 KM	50.98944°N	100.71944°E
<b>Family:</b> Leuctridae						
	Leuctra fusca	Within Known Range? N	Nearest Occurrence:	1,471.33 KM	49.08643°N	107.28952°E
	Paraleuctra zapekinae	Within Known Range? N	Nearest Occurrence:	1,203.23 KM	49.71481°N	104.64203°E
<b>Family:</b> Perlodidae						
	Isoperla eximia	Within Known Range? N	Nearest Occurrence:	1,497.68 KM	49.01829°N	107.54453°E

Research funded by the National Science Foundation  
 DEB-BSI #0206674: A Survey of the Aquatic Insects of the Selenge River Basin. P.I.'s: JKGelhaus, JCMorse, BHayford.  
 DEB # 0743732: Aquatic Insects of the Altai and Hangai Mountain Drainages. P.I.'s: JKGelhaus, JCMorse, CRNelson.  
<http://clade.ansp.org/entomology/mongolia/index.html>



**Basin:** Internal Drainage Basin  
**Aimags:** Govi-Altai  
**Soums:** Delger

**Freshwater Ecoregion:** Western Mongolia  
**Terrestrial Ecoregion:** Gobi Lakes Valley Desert Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Highly Likely Total: 4**

Family: Capniidae					
Isocapnia guentheri	Within Known Range? N	Nearest Occurrence:	279.38 KM	48.61518°N	98.23096°E
Family: Chloroperlidae					
Alloperla rostellata	Within Known Range? N	Nearest Occurrence:	286.26 KM	48.36436°N	98.92737°E
Suwallia teleckojensis	Within Known Range? Y	Nearest Occurrence:	206.99 KM	48.05989°N	97.55073°E
Family: Perlodidae					
Isoperla potanini	Within Known Range? Y	Nearest Occurrence:	207.28 KM	48.06257°N	97.55064°E

**LOE Rating: Likely Total: 8**

Family: Capniidae					
Isocapnia kudia	Within Known Range? N	Nearest Occurrence:	609.30 KM	51.25356°N	99.66687°E
Isocapnia sibirica	Within Known Range? N	Nearest Occurrence:	423.78 KM	47.28244°N	101.18793°E
Family: Nemouridae					
Nemoura cinerea	Within Known Range? N	Nearest Occurrence:	206.92 KM	48.06257°N	97.55064°E
Family: Perlidae					
Agnatina cocandica	Within Known Range? N	Nearest Occurrence:	469.82 KM	49.62785°N	99.99523°E
Kamimuria exilis	Within Known Range? N	Nearest Occurrence:	464.43 KM	50.16278°N	98.84212°E
Family: Perlodidae					
Arcynopteryx sajanensis	Within Known Range? N	Nearest Occurrence:	692.36 KM	51.61397°N	100.59972°E
Diura bicaudata	Within Known Range? N	Nearest Occurrence:	289.53 KM	47.21768°N	99.92824°E
Pictetiella asiatica	Within Known Range? N	Nearest Occurrence:	691.63 KM	51.65822°N	100.53000°E

**LOE Rating: Probable Total: 9**

Family: Chloroperlidae					
Alloperla joosti	Within Known Range? N	Nearest Occurrence:	228.10 KM	48.24995°N	97.40627°E
Haploperla lepnevae	Within Known Range? N	Nearest Occurrence:	428.89 KM	49.26170°N	99.88242°E
Suwallia kerzhneri	Within Known Range? N	Nearest Occurrence:	206.62 KM	48.05989°N	97.55073°E
Family: Nemouridae					
Amphinemura borealis	Within Known Range? Y	Nearest Occurrence:	206.62 KM	48.05989°N	97.55073°E
Family: Perlidae					
Agnatina brevipennis	Within Known Range? Y	Nearest Occurrence:	306.42 KM	48.71968°N	98.65184°E
Family: Perlodidae					
Diura majuscula	Within Known Range? N	Nearest Occurrence:	207.28 KM	48.06257°N	97.55064°E
Isoperla asiatica	Within Known Range? N	Nearest Occurrence:	206.62 KM	48.05989°N	97.55073°E
Skwala pusilla	Within Known Range? N	Nearest Occurrence:	1,033.23 KM	48.51277°N	88.51107°E
Family: Pteronarcyidae					
Pteronarcys reticulata	Within Known Range? N	Nearest Occurrence:	357.41 KM	47.80440°N	100.31810°E



**Basin:** Internal Drainage Basin  
**Aimags:** Govi-altai  
**Soums:** Delger

**Freshwater Ecoregion:** Western Mongolia  
**Terrestrial Ecoregion:** Gobi Lakes Valley Desert Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Possible Total: 7**

Family: Capniidae					
<i>Capnia nigra</i>	Within Known Range? N	Nearest Occurrence:	206.92 KM	48.06257°N	97.55064 °E
Family: Chloroperlidae					
<i>Alaskaperla longidentata</i>	Within Known Range? N	Nearest Occurrence:	220.22 KM	48.15779°N	97.21441 °E
Family: Nemouridae					
<i>Amphinemura standfussi</i>	Within Known Range? N	Nearest Occurrence:	206.62 KM	48.05989°N	97.55073 °E
Family: Perlidae					
<i>Agnetina extrema</i>	Within Known Range? N	Nearest Occurrence:	368.28 KM	47.50949°N	100.57510 °E
Family: Perlodidae					
<i>Arcynopteryx compacta</i>	Within Known Range? Y	Nearest Occurrence:	400.43 KM	47.11192°N	101.01048 °E
<i>Arcynopteryx polaris</i>	Within Known Range? Y	Nearest Occurrence:	286.77 KM	48.36436°N	98.92737 °E
<i>Isoperla mongolica</i>	Within Known Range? Y	Nearest Occurrence:	207.28 KM	48.06257°N	97.55064 °E

**LOE Rating: Predicted Total: 14**

Family: Capniidae					
<i>Mesocapnia variabilis</i>	Within Known Range? N	Nearest Occurrence:	286.77 KM	48.36436°N	98.92737 °E
Family: Chloroperlidae					
<i>Alloperla deminuta</i>	Within Known Range? N	Nearest Occurrence:	357.41 KM	47.80440°N	100.31810 °E
<i>Alloperla mediata</i>	Within Known Range? N	Nearest Occurrence:	521.50 KM	50.61826°N	99.12094 °E
Family: Nemouridae					
<i>Nemoura arctica</i>	Within Known Range? N	Nearest Occurrence:	490.09 KM	47.26999°N	101.80227 °E
<i>Nemoura sahlbergi</i>	Within Known Range? N	Nearest Occurrence:	336.71 KM	47.42580°N	100.30130 °E
<i>Nemurella pictetii</i>	Within Known Range? N	Nearest Occurrence:	550.19 KM	50.81265°N	99.33803 °E
Family: Perlidae					
<i>Paragnetina flavotincta</i>	Within Known Range? N	Nearest Occurrence:	428.89 KM	49.26170°N	99.88242 °E
Family: Perlodidae					
<i>Isoperla altaica</i>	Within Known Range? Y	Nearest Occurrence:	400.43 KM	47.11192°N	101.01048 °E
<i>Isoperla kozlovi</i>	Within Known Range? N	Nearest Occurrence:	357.41 KM	47.80440°N	100.31810 °E
<i>Isoperla lunigera</i>	Within Known Range? N	Nearest Occurrence:	468.98 KM	49.62785°N	99.99523 °E
<i>Isoperla obscura</i>	Within Known Range? N	Nearest Occurrence:	659.95 KM	50.60031°N	101.52392 °E
<i>Kaszabia nigricauda</i>	Within Known Range? N	Nearest Occurrence:	306.42 KM	48.71968°N	98.65184 °E
<i>Megarcys ochracea</i>	Within Known Range? N	Nearest Occurrence:	611.05 KM	51.40978°N	99.30136 °E
Family: Taeniopterygidae					
<i>Taenionema japonicum</i>	Within Known Range? N	Nearest Occurrence:	400.43 KM	47.11192°N	101.01048 °E

**LOE Rating: Unlikely Total: 5**

Family: Capniidae					
<i>Capnia khulsbagia</i>	Within Known Range? N	Nearest Occurrence:	639.02 KM	50.98944°N	100.71944 °E
<i>Mesocapnia altaica</i>	Within Known Range? N	Nearest Occurrence:	989.22 KM	48.43684°N	88.90094 °E
Family: Leuctridae					
<i>Leuctra fusca</i>	Within Known Range? N	Nearest Occurrence:	1,130.04 KM	49.08643°N	107.28952 °E
<i>Paraleuctra zapekinae</i>	Within Known Range? N	Nearest Occurrence:	880.93 KM	49.71481°N	104.64203 °E
Family: Perlodidae					
<i>Isoperla eximia</i>	Within Known Range? N	Nearest Occurrence:	1,155.14 KM	49.01829°N	107.54453 °E

Research funded by the National Science Foundation  
 DEB-BSI #0206674: A Survey of the Aquatic Insects of the Selenge River Basin. P.I.'s: JKGelhaus, JCMorse, BHayford.  
 DEB # 0743732: Aquatic Insects of the Altai and Hangai Mountain Drainages. P.I.'s: JKGelhaus, JCMorse, CRNelson.  
<http://clade.ansp.org/entomology/mongolia/index.html>



**Basin:** Internal Drainage Basin  
**Aimags:** Govi-Altai  
**Soums:** Erdene

Freshwater Ecoregion: Dzungaria  
 Terrestrial Ecoregion: Alashan Plateau Semi-Desert

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Highly Likely Total: 7**

Family: Capniidae						
	Isocapnia guentheri	Within Known Range? N	Nearest Occurrence:	519.58 KM	48.61518 °N	98.23096 °E
	Isocapnia sibirica	Within Known Range? N	Nearest Occurrence:	552.71 KM	47.28244 °N	101.18793 °E
Family: Chloroperlidae						
	Alloperla rostellata	Within Known Range? N	Nearest Occurrence:	511.59 KM	48.36436 °N	98.92737 °E
	Suwallia teleckojensis	Within Known Range? N	Nearest Occurrence:	451.50 KM	48.05989 °N	97.55073 °E
Family: Perlidae						
	Kamimuria exilis	Within Known Range? N	Nearest Occurrence:	702.63 KM	50.16278 °N	98.84212 °E
Family: Perlodidae						
	Diura bicaudata	Within Known Range? N	Nearest Occurrence:	451.22 KM	47.21768 °N	99.92824 °E
	Isoperla potanini	Within Known Range? N	Nearest Occurrence:	451.79 KM	48.06257 °N	97.55064 °E

**LOE Rating: Likely Total: 8**

Family: Capniidae						
	Isocapnia kudia	Within Known Range? N	Nearest Occurrence:	842.03 KM	51.25356 °N	99.66687 °E
Family: Chloroperlidae						
	Alloperla joosti	Within Known Range? N	Nearest Occurrence:	471.64 KM	48.24995 °N	97.40627 °E
Family: Nemouridae						
	Nemoura cinerea	Within Known Range? N	Nearest Occurrence:	450.98 KM	48.06257 °N	97.55064 °E
Family: Perlidae						
	Agnetina brevipennis	Within Known Range? N	Nearest Occurrence:	535.37 KM	48.12661 °N	99.94128 °E
Family: Perlodidae						
	Arcynopteryx sajanensis	Within Known Range? N	Nearest Occurrence:	916.45 KM	51.61397 °N	100.59972 °E
	Pictetiella asiatica	Within Known Range? N	Nearest Occurrence:	916.43 KM	51.65822 °N	100.53000 °E
	Skwala pusilla	Within Known Range? N	Nearest Occurrence:	1,110.72 KM	48.51277 °N	88.51107 °E
Family: Pteronarcyidae						
	Pteronarcys reticulata	Within Known Range? N	Nearest Occurrence:	529.24 KM	47.80440 °N	100.31810 °E

**LOE Rating: Probable Total: 6**

Family: Chloroperlidae						
	Haploperla lepnevae	Within Known Range? N	Nearest Occurrence:	643.67 KM	49.26170 °N	99.88242 °E
	Suwallia kerzhneri	Within Known Range? N	Nearest Occurrence:	450.69 KM	48.05989 °N	97.55073 °E
Family: Nemouridae						
	Amphinemura borealis	Within Known Range? N	Nearest Occurrence:	450.69 KM	48.05989 °N	97.55073 °E
Family: Perlidae						
	Agnetina cocandica	Within Known Range? N	Nearest Occurrence:	644.10 KM	46.12479 °N	92.05382 °E
	Agnetina extrema	Within Known Range? N	Nearest Occurrence:	522.06 KM	47.50949 °N	100.57510 °E
Family: Perlodidae						
	Diura majuscula	Within Known Range? N	Nearest Occurrence:	451.79 KM	48.06257 °N	97.55064 °E



**Basin:** Internal Drainage Basin  
**Aimags:** Govi-Altai  
**Soums:** Erdene

**Freshwater Ecoregion:** Dzungaria  
**Terrestrial Ecoregion:** Alashan Plateau Semi-Desert

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Possible Total: 7**

<b>Family: Chloroperlidae</b>					
Alaskaperla longidentata	Within Known Range? N	Nearest Occurrence:	462.09 KM	48.15779°N	97.21441°E
<b>Family: Perlodidae</b>					
Arcynopteryx compacta	Within Known Range? N	Nearest Occurrence:	526.36 KM	47.11192°N	101.01048°E
Arcynopteryx polaris	Within Known Range? N	Nearest Occurrence:	450.39 KM	47.21260°N	99.91083°E
Isoperla altaica	Within Known Range? N	Nearest Occurrence:	526.36 KM	47.11192°N	101.01048°E
Isoperla asiatica	Within Known Range? N	Nearest Occurrence:	450.69 KM	48.05989°N	97.55073°E
Isoperla kozlovi	Within Known Range? N	Nearest Occurrence:	529.24 KM	47.80440°N	100.31810°E
Isoperla mongolica	Within Known Range? N	Nearest Occurrence:	451.79 KM	48.06257°N	97.55064°E

**LOE Rating: Predicted Total: 13**

<b>Family: Capniidae</b>					
Capnia nigra	Within Known Range? N	Nearest Occurrence:	450.98 KM	48.06257°N	97.55064°E
Mesocapnia variabilis	Within Known Range? N	Nearest Occurrence:	450.39 KM	47.21260°N	99.91083°E
<b>Family: Chloroperlidae</b>					
Alloperla deminuta	Within Known Range? N	Nearest Occurrence:	525.42 KM	47.11192°N	101.01048°E
Alloperla mediata	Within Known Range? N	Nearest Occurrence:	757.76 KM	50.61826°N	99.12094°E
<b>Family: Nemouridae</b>					
Amphinemura standfussi	Within Known Range? N	Nearest Occurrence:	450.69 KM	48.05989°N	97.55073°E
Nemoura arctica	Within Known Range? N	Nearest Occurrence:	605.92 KM	47.26999°N	101.80227°E
Nemoura sahlbergi	Within Known Range? N	Nearest Occurrence:	495.17 KM	47.42580°N	100.30130°E
<b>Family: Perlidae</b>					
Paragnetina flavotincta	Within Known Range? N	Nearest Occurrence:	643.67 KM	49.26170°N	99.88242°E
<b>Family: Perlodidae</b>					
Isoperla lunigera	Within Known Range? N	Nearest Occurrence:	685.83 KM	49.62785°N	99.99523°E
Isoperla obscura	Within Known Range? N	Nearest Occurrence:	836.66 KM	49.38617°N	102.71667°E
Kaszabia nigricauda	Within Known Range? N	Nearest Occurrence:	529.24 KM	47.80440°N	100.31810°E
Megarcys ochracea	Within Known Range? N	Nearest Occurrence:	847.85 KM	51.40978°N	99.30136°E
<b>Family: Taeniopterygidae</b>					
Taenionema japonicum	Within Known Range? N	Nearest Occurrence:	526.36 KM	47.11192°N	101.01048°E

**LOE Rating: Unlikely Total: 6**

<b>Family: Capniidae</b>					
Capnia khulsbagia	Within Known Range? N	Nearest Occurrence:	856.74 KM	50.98944°N	100.71944°E
Mesocapnia altaica	Within Known Range? N	Nearest Occurrence:	1,068.36 KM	48.43684°N	88.90094°E
<b>Family: Leuctridae</b>					
Leuctra fusca	Within Known Range? N	Nearest Occurrence:	1,230.15 KM	49.08643°N	107.28952°E
Paraleuctra zapekinae	Within Known Range? N	Nearest Occurrence:	1,020.21 KM	49.71481°N	104.64203°E
<b>Family: Nemouridae</b>					
Nemurella pictetii	Within Known Range? N	Nearest Occurrence:	784.81 KM	50.81265°N	99.33803°E
<b>Family: Perlodidae</b>					
Isoperla eximia	Within Known Range? N	Nearest Occurrence:	1,251.98 KM	49.01829°N	107.54453°E



**Basin:** Internal Drainage Basin  
**Aimags:** Govi-Altai  
**Soums:** Jargalan

**Freshwater Ecoregion:** Western Mongolia  
**Terrestrial Ecoregion:** Great Lakes Basin Desert Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Highly Likely Total: 3**

Family: Capniidae						
Isocapnia guentheri	Within Known Range? N	Nearest Occurrence:	312.15 KM	48.61518°N	98.23096°E	
Family: Chloroperlidae						
Suwallia teleckojensis	Within Known Range? Y	Nearest Occurrence:	213.84 KM	48.13246°N	97.48425°E	
Family: Perlodidae						
Isoperla potanini	Within Known Range? Y	Nearest Occurrence:	191.33 KM	48.15779°N	97.21441°E	

**LOE Rating: Likely Total: 13**

Family: Capniidae						
Isocapnia kudia	Within Known Range? N	Nearest Occurrence:	626.27 KM	51.25356°N	99.66687°E	
Isocapnia sibirica	Within Known Range? N	Nearest Occurrence:	589.48 KM	47.28244°N	101.18793°E	
Family: Chloroperlidae						
Alloperla rostellata	Within Known Range? N	Nearest Occurrence:	367.36 KM	48.36436°N	98.92737°E	
Suwallia kerzhneri	Within Known Range? N	Nearest Occurrence:	214.02 KM	48.24995°N	97.40627°E	
Family: Nemouridae						
Amphinemura borealis	Within Known Range? Y	Nearest Occurrence:	215.42 KM	48.05989°N	97.55073°E	
Nemoura cinerea	Within Known Range? N	Nearest Occurrence:	215.57 KM	48.06257°N	97.55064°E	
Family: Perlidae						
Agnetina cocandica	Within Known Range? Y	Nearest Occurrence:	368.58 KM	48.33025°N	92.81616°E	
Kamimuria exilis	Within Known Range? N	Nearest Occurrence:	476.11 KM	50.16278°N	98.84212°E	
Family: Perlodidae						
Arcynopteryx sajanensis	Within Known Range? N	Nearest Occurrence:	728.43 KM	51.61397°N	100.59972°E	
Diura bicaudata	Within Known Range? Y	Nearest Occurrence:	449.48 KM	47.21768°N	99.92824°E	
Diura majuscula	Within Known Range? Y	Nearest Occurrence:	215.95 KM	48.06257°N	97.55064°E	
Pictetiella asiatica	Within Known Range? N	Nearest Occurrence:	725.01 KM	51.65822°N	100.53000°E	
Skwala pusilla	Within Known Range? N	Nearest Occurrence:	833.66 KM	48.51277°N	88.51107°E	

**LOE Rating: Probable Total: 6**

Family: Chloroperlidae						
Alloperla joosti	Within Known Range? N	Nearest Occurrence:	214.02 KM	48.24995°N	97.40627°E	
Haploperla lepnevae	Within Known Range? N	Nearest Occurrence:	506.38 KM	49.26170°N	99.88242°E	
Family: Perlidae						
Agnetina brevipennis	Within Known Range? Y	Nearest Occurrence:	357.91 KM	48.71968°N	98.65184°E	
Family: Perlodidae						
Arcynopteryx compacta	Within Known Range? Y	Nearest Occurrence:	441.90 KM	46.92107°N	91.91048°E	
Isoperla asiatica	Within Known Range? N	Nearest Occurrence:	215.42 KM	48.05989°N	97.55073°E	
Family: Pteronarcyidae						
Pteronarcys reticulata	Within Known Range? N	Nearest Occurrence:	499.16 KM	47.80440°N	100.31810°E	

**Basin:** Internal Drainage Basin  
**Aimags:** Govi-Altai  
**Soums:** Jargalan

**Freshwater Ecoregion:** Western Mongolia  
**Terrestrial Ecoregion:** Great Lakes Basin Desert Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Possible Total: 8**

Family: Capniidae					
<i>Capnia nigra</i>	Within Known Range? N	Nearest Occurrence:	215.57 KM	48.06257°N	97.55064 °E
Family: Chloroperlidae					
<i>Alaskaperla longidentata</i>	Within Known Range? N	Nearest Occurrence:	190.98 KM	48.15779°N	97.21441 °E
Family: Nemouridae					
<i>Amphinemura standfussi</i>	Within Known Range? N	Nearest Occurrence:	215.42 KM	48.05989°N	97.55073 °E
<i>Nemoura arctica</i>	Within Known Range? Y	Nearest Occurrence:	508.71 KM	46.77095°N	91.31664 °E
Family: Perlidae					
<i>Agnetina extrema</i>	Within Known Range? N	Nearest Occurrence:	523.26 KM	47.50949°N	100.57510 °E
Family: Perlodidae					
<i>Arcynopteryx polaris</i>	Within Known Range? Y	Nearest Occurrence:	368.02 KM	48.36436°N	98.92737 °E
<i>Isoperla altaica</i>	Within Known Range? Y	Nearest Occurrence:	447.89 KM	47.33906°N	91.86288 °E
<i>Isoperla mongolica</i>	Within Known Range? Y	Nearest Occurrence:	214.40 KM	48.24995°N	97.40627 °E

**LOE Rating: Predicted Total: 12**

Family: Capniidae					
<i>Mesocapnia variabilis</i>	Within Known Range? Y	Nearest Occurrence:	368.02 KM	48.36436°N	98.92737 °E
Family: Chloroperlidae					
<i>Alloperla deminuta</i>	Within Known Range? N	Nearest Occurrence:	499.16 KM	47.80440°N	100.31810 °E
<i>Alloperla mediata</i>	Within Known Range? N	Nearest Occurrence:	533.33 KM	50.61826°N	99.12094 °E
Family: Nemouridae					
<i>Nemoura sahlbergi</i>	Within Known Range? N	Nearest Occurrence:	492.18 KM	47.42580°N	100.30130 °E
<i>Nemurella pictetii</i>	Within Known Range? N	Nearest Occurrence:	565.52 KM	50.81265°N	99.33803 °E
Family: Perlidae					
<i>Paragnetina flavotincta</i>	Within Known Range? N	Nearest Occurrence:	506.38 KM	49.26170°N	99.88242 °E
Family: Perlodidae					
<i>Isoperla kozlovi</i>	Within Known Range? N	Nearest Occurrence:	499.16 KM	47.80440°N	100.31810 °E
<i>Isoperla lunigera</i>	Within Known Range? N	Nearest Occurrence:	537.71 KM	49.62785°N	99.99523 °E
<i>Isoperla obscura</i>	Within Known Range? N	Nearest Occurrence:	691.65 KM	48.97819°N	89.94996 °E
<i>Kaszabia nigricauda</i>	Within Known Range? N	Nearest Occurrence:	357.91 KM	48.71968°N	98.65184 °E
<i>Megarcys ochracea</i>	Within Known Range? N	Nearest Occurrence:	611.05 KM	51.46205°N	99.19994 °E
Family: Taeniopterygidae					
<i>Taenionema japonicum</i>	Within Known Range? Y	Nearest Occurrence:	534.29 KM	50.61826°N	99.12094 °E

**LOE Rating: Unlikely Total: 5**

Family: Capniidae					
<i>Capnia khulsbagia</i>	Within Known Range? N	Nearest Occurrence:	691.14 KM	50.98944°N	100.71944 °E
<i>Mesocapnia altaica</i>	Within Known Range? N	Nearest Occurrence:	789.57 KM	48.43684°N	88.90094 °E
Family: Leuctridae					
<i>Leuctra fusca</i>	Within Known Range? N	Nearest Occurrence:	1,285.91 KM	49.08643°N	107.28952 °E
<i>Paraleuctra zapekinae</i>	Within Known Range? N	Nearest Occurrence:	1,015.77 KM	49.71481°N	104.64203 °E
Family: Perlodidae					
<i>Isoperla eximia</i>	Within Known Range? N	Nearest Occurrence:	1,312.53 KM	49.01829°N	107.54453 °E

**Basin:** Internal Drainage Basin  
**Aimags:** Govi-altai  
**Soums:** Khaliun

**Freshwater Ecoregion:** Western Mongolia  
**Terrestrial Ecoregion:** Great Lakes Basin Desert Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Highly Likely Total: 3**

Family: Capniidae						
Isocapnia guentheri	Within Known Range? N	Nearest Occurrence:	380.46 KM	48.61518°N	98.23096°E	
Family: Chloroperlidae						
Suwallia teleckojensis	Within Known Range? Y	Nearest Occurrence:	239.92 KM	46.32080°N	93.90083°E	
Family: Perlodidae						
Isoperla potanini	Within Known Range? Y	Nearest Occurrence:	239.92 KM	46.32080°N	93.90083°E	

**LOE Rating: Likely Total: 15**

Family: Capniidae						
Isocapnia kudia	Within Known Range? N	Nearest Occurrence:	710.41 KM	51.25356°N	99.66687°E	
Isocapnia sibirica	Within Known Range? N	Nearest Occurrence:	590.11 KM	47.28244°N	101.18793°E	
Family: Chloroperlidae						
Alloperla joosti	Within Known Range? N	Nearest Occurrence:	293.99 KM	48.24995°N	97.40627°E	
Alloperla rostellata	Within Known Range? N	Nearest Occurrence:	415.91 KM	48.36436°N	98.92737°E	
Suwallia kerzhneri	Within Known Range? N	Nearest Occurrence:	285.34 KM	48.05989°N	97.55073°E	
Family: Nemouridae						
Amphinemura borealis	Within Known Range? N	Nearest Occurrence:	285.34 KM	48.05989°N	97.55073°E	
Nemoura cinerea	Within Known Range? N	Nearest Occurrence:	285.57 KM	48.06257°N	97.55064°E	
Family: Perlidae						
Agnetina brevipennis	Within Known Range? Y	Nearest Occurrence:	420.29 KM	48.71968°N	98.65184°E	
Agnetina cocandica	Within Known Range? N	Nearest Occurrence:	442.57 KM	48.33025°N	92.81616°E	
Kamimuria exilis	Within Known Range? N	Nearest Occurrence:	559.80 KM	50.16278°N	98.84212°E	
Family: Perlodidae						
Arcynopteryx sajanensis	Within Known Range? N	Nearest Occurrence:	806.02 KM	51.61397°N	100.59972°E	
Diura bicaudata	Within Known Range? N	Nearest Occurrence:	453.57 KM	47.21768°N	99.92824°E	
Diura majuscula	Within Known Range? N	Nearest Occurrence:	286.09 KM	48.06257°N	97.55064°E	
Pictetiella asiatica	Within Known Range? N	Nearest Occurrence:	803.56 KM	51.65822°N	100.53000°E	
Skwala pusilla	Within Known Range? N	Nearest Occurrence:	880.71 KM	48.51277°N	88.51107°E	

**LOE Rating: Probable Total: 3**

Family: Chloroperlidae						
Haploperla lepnevae	Within Known Range? N	Nearest Occurrence:	561.14 KM	49.26170°N	99.88242°E	
Family: Perlodidae						
Arcynopteryx compacta	Within Known Range? Y	Nearest Occurrence:	469.99 KM	46.92107°N	91.91048°E	
Family: Pteronarcyidae						
Pteronarcys reticulata	Within Known Range? N	Nearest Occurrence:	516.79 KM	47.80440°N	100.31810°E	



**Basin:** Internal Drainage Basin  
**Aimags:** Govi-altai  
**Soums:** Khaliun

**Freshwater Ecoregion:** Western Mongolia  
**Terrestrial Ecoregion:** Great Lakes Basin Desert Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Possible Total: 7**

Family: Capniidae					
<i>Capnia nigra</i>	Within Known Range? N	Nearest Occurrence:	285.57 KM	48.06257°N	97.55064 °E
Family: Chloroperlidae					
<i>Alaskaperla longidentata</i>	Within Known Range? N	Nearest Occurrence:	274.50 KM	48.15779°N	97.21441 °E
Family: Perlidae					
<i>Agnetina extrema</i>	Within Known Range? N	Nearest Occurrence:	531.87 KM	47.50949°N	100.57510 °E
Family: Perlodidae					
<i>Arcynopteryx polaris</i>	Within Known Range? N	Nearest Occurrence:	416.66 KM	48.36436°N	98.92737 °E
<i>Isoperla altaica</i>	Within Known Range? Y	Nearest Occurrence:	487.44 KM	47.33906°N	91.86288 °E
<i>Isoperla asiatica</i>	Within Known Range? N	Nearest Occurrence:	285.34 KM	48.05989°N	97.55073 °E
<i>Isoperla mongolica</i>	Within Known Range? Y	Nearest Occurrence:	286.09 KM	48.06257°N	97.55064 °E

**LOE Rating: Predicted Total: 14**

Family: Capniidae					
<i>Mesocapnia variabilis</i>	Within Known Range? N	Nearest Occurrence:	416.66 KM	48.36436°N	98.92737 °E
Family: Chloroperlidae					
<i>Alloperla deminuta</i>	Within Known Range? N	Nearest Occurrence:	516.79 KM	47.80440°N	100.31810 °E
<i>Alloperla mediata</i>	Within Known Range? N	Nearest Occurrence:	618.03 KM	50.61826°N	99.12094 °E
Family: Nemouridae					
<i>Amphinemura standfussi</i>	Within Known Range? N	Nearest Occurrence:	285.34 KM	48.05989°N	97.55073 °E
<i>Nemoura arctica</i>	Within Known Range? N	Nearest Occurrence:	531.59 KM	46.77095°N	91.31664 °E
<i>Nemoura sahlbergi</i>	Within Known Range? N	Nearest Occurrence:	500.10 KM	47.42580°N	100.30130 °E
<i>Nemurella pictetii</i>	Within Known Range? N	Nearest Occurrence:	649.40 KM	50.81265°N	99.33803 °E
Family: Perlidae					
<i>Paragnetina flavotincta</i>	Within Known Range? N	Nearest Occurrence:	561.14 KM	49.26170°N	99.88242 °E
Family: Perlodidae					
<i>Isoperla kozlovi</i>	Within Known Range? N	Nearest Occurrence:	516.79 KM	47.80440°N	100.31810 °E
<i>Isoperla lunigera</i>	Within Known Range? N	Nearest Occurrence:	597.45 KM	49.62785°N	99.99523 °E
<i>Isoperla obscura</i>	Within Known Range? N	Nearest Occurrence:	752.42 KM	48.97819°N	89.94996 °E
<i>Kaszabia nigricauda</i>	Within Known Range? N	Nearest Occurrence:	420.29 KM	48.71968°N	98.65184 °E
<i>Megarcys ochracea</i>	Within Known Range? N	Nearest Occurrence:	702.24 KM	51.46205°N	99.19994 °E
Family: Taeniopterygidae					
<i>Taenionema japonicum</i>	Within Known Range? N	Nearest Occurrence:	567.57 KM	47.11192°N	101.01048 °E

**LOE Rating: Unlikely Total: 5**

Family: Capniidae					
<i>Capnia khulsbagia</i>	Within Known Range? N	Nearest Occurrence:	761.04 KM	50.98944°N	100.71944 °E
<i>Mesocapnia altaica</i>	Within Known Range? N	Nearest Occurrence:	837.02 KM	48.43684°N	88.90094 °E
Family: Leuctridae					
<i>Leuctra fusca</i>	Within Known Range? N	Nearest Occurrence:	1,296.10 KM	49.08643°N	107.28952 °E
<i>Paraleuctra zapekinae</i>	Within Known Range? N	Nearest Occurrence:	1,041.48 KM	49.71481°N	104.64203 °E
Family: Perlodidae					
<i>Isoperla eximia</i>	Within Known Range? N	Nearest Occurrence:	1,321.46 KM	49.01829°N	107.54453 °E

Basin: Internal Drainage Basin

Aimags: Govi-Altai

Soums: Khokhmoryt

Freshwater Ecoregion: Western Mongolia

Terrestrial Ecoregion: Great Lakes Basin Desert Steppe

WQM Sites:

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Highly Likely Total: 4**

Family: Capniidae						
Isocapnia guentheri	Within Known Range? N	Nearest Occurrence:	448.05 KM	48.61518 °N	98.23096 °E	
Family: Chloroperlidae						
Suwallia teleckojensis	Within Known Range? Y	Nearest Occurrence:	133.96 KM	46.32080 °N	93.90083 °E	
Family: Perlidae						
Agnatina cocandica	Within Known Range? Y	Nearest Occurrence:	199.99 KM	48.33025 °N	92.81616 °E	
Family: Perlodidae						
Isoperla potanini	Within Known Range? Y	Nearest Occurrence:	133.96 KM	46.32080 °N	93.90083 °E	

**LOE Rating: Likely Total: 10**

Family: Capniidae						
Isocapnia kudia	Within Known Range? N	Nearest Occurrence:	724.95 KM	51.25356 °N	99.66687 °E	
Isocapnia sibirica	Within Known Range? N	Nearest Occurrence:	756.67 KM	47.28244 °N	101.18793 °E	
Family: Chloroperlidae						
Alloperla rostellata	Within Known Range? N	Nearest Occurrence:	516.12 KM	48.36436 °N	98.92737 °E	
Family: Nemouridae						
Nemoura cinerea	Within Known Range? N	Nearest Occurrence:	359.70 KM	48.06257 °N	97.55064 °E	
Family: Perlidae						
Agnatina brevipennis	Within Known Range? Y	Nearest Occurrence:	345.30 KM	46.55341 °N	91.38764 °E	
Kamimuria exilis	Within Known Range? N	Nearest Occurrence:	582.59 KM	50.16278 °N	98.84212 °E	
Family: Perlodidae						
Arcynopteryx sajanensis	Within Known Range? N	Nearest Occurrence:	834.29 KM	51.61397 °N	100.59972 °E	
Diura bicaudata	Within Known Range? Y	Nearest Occurrence:	578.49 KM	49.04180 °N	89.41675 °E	
Pictetiella asiatica	Within Known Range? N	Nearest Occurrence:	829.15 KM	51.65822 °N	100.53000 °E	
Skwala pusilla	Within Known Range? N	Nearest Occurrence:	661.66 KM	48.51277 °N	88.51107 °E	

**LOE Rating: Probable Total: 9**

Family: Chloroperlidae						
Haploperla lepnevae	Within Known Range? N	Nearest Occurrence:	520.16 KM	48.97819 °N	89.94996 °E	
Suwallia kerzhneri	Within Known Range? N	Nearest Occurrence:	348.84 KM	48.24995 °N	97.40627 °E	
Family: Nemouridae						
Amphinemura borealis	Within Known Range? Y	Nearest Occurrence:	359.65 KM	48.05989 °N	97.55073 °E	
Family: Perlodidae						
Arcynopteryx compacta	Within Known Range? Y	Nearest Occurrence:	279.56 KM	46.92107 °N	91.91048 °E	
Diura majuscula	Within Known Range? Y	Nearest Occurrence:	292.07 KM	47.24104 °N	91.75287 °E	
Isoperla altaica	Within Known Range? Y	Nearest Occurrence:	279.27 KM	47.33906 °N	91.86288 °E	
Isoperla asiatica	Within Known Range? N	Nearest Occurrence:	359.65 KM	48.05989 °N	97.55073 °E	
Family: Pteronarcyidae						
Pteronarcys reticulata	Within Known Range? N	Nearest Occurrence:	661.26 KM	47.80440 °N	100.31810 °E	
Family: Taeniopterygidae						
Taenionema japonicum	Within Known Range? Y	Nearest Occurrence:	383.19 KM	47.11520 °N	90.94098 °E	

Basin: Internal Drainage Basin

Aimags: Govi-Altai

Soums: Khokhmoryt

Freshwater Ecoregion: Western Mongolia

Terrestrial Ecoregion: Great Lakes Basin Desert Steppe

WQM Sites:

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Possible Total: 6**

Family: Chloroperlidae

Alaskaperla longidentata Within Known Range? N Nearest Occurrence: 325.64 KM 48.15779°N 97.21441°E

Alloperla joosti Within Known Range? N Nearest Occurrence: 348.84 KM 48.24995°N 97.40627°E

Family: Nemouridae

Nemoura arctica Within Known Range? Y Nearest Occurrence: 343.72 KM 47.53132°N 91.28330°E

Family: Perlidae

Agnetina extrema Within Known Range? N Nearest Occurrence: 688.53 KM 47.50949°N 100.57510°E

Family: Perlodidae

Arcynopteryx polaris Within Known Range? Y Nearest Occurrence: 254.71 KM 46.61982°N 92.22981°E

Isoperla mongolica Within Known Range? Y Nearest Occurrence: 346.29 KM 46.13371°N 91.54083°E

**LOE Rating: Predicted Total: 14**

Family: Capniidae

Capnia nigra Within Known Range? N Nearest Occurrence: 359.70 KM 48.06257°N 97.55064°E

Mesocapnia altaica Within Known Range? N Nearest Occurrence: 617.57 KM 48.43684°N 88.90094°E

Mesocapnia variabilis Within Known Range? Y Nearest Occurrence: 517.05 KM 48.36436°N 98.92737°E

Family: Chloroperlidae

Alloperla deminuta Within Known Range? N Nearest Occurrence: 661.26 KM 47.80440°N 100.31810°E

Alloperla mediata Within Known Range? N Nearest Occurrence: 634.90 KM 50.61826°N 99.12094°E

Family: Nemouridae

Amphinemura standfussi Within Known Range? N Nearest Occurrence: 359.65 KM 48.05989°N 97.55073°E

Nemoura sahlbergi Within Known Range? N Nearest Occurrence: 632.55 KM 50.42996°N 99.21727°E

Nemurella pictetii Within Known Range? N Nearest Occurrence: 666.95 KM 50.81265°N 99.33803°E

Family: Perlidae

Paragnetina flavotincta Within Known Range? N Nearest Occurrence: 644.52 KM 49.26170°N 99.88242°E

Family: Perlodidae

Isoperla kozlovi Within Known Range? N Nearest Occurrence: 635.65 KM 50.31066°N 99.32150°E

Isoperla lunigera Within Known Range? N Nearest Occurrence: 670.13 KM 49.62785°N 99.99523°E

Isoperla obscura Within Known Range? N Nearest Occurrence: 520.16 KM 48.97819°N 89.94996°E

Kaszabia nigricauda Within Known Range? N Nearest Occurrence: 496.12 KM 48.71968°N 98.65184°E

Megarcys ochracea Within Known Range? N Nearest Occurrence: 698.21 KM 51.46205°N 99.19994°E

**LOE Rating: Unlikely Total: 4**

Family: Capniidae

Capnia khulsbagia Within Known Range? N Nearest Occurrence: 807.77 KM 50.98944°N 100.71944°E

Family: Leuctridae

Leuctra fusca Within Known Range? N Nearest Occurrence: 1,445.53 KM 49.08643°N 107.28952°E

Paraleuctra zapekinae Within Known Range? N Nearest Occurrence: 1,167.79 KM 49.71481°N 104.64203°E

Family: Perlodidae

Isoperla eximia Within Known Range? N Nearest Occurrence: 1,472.68 KM 49.01829°N 107.54453°E

**Basin:** Internal Drainage Basin  
**Aimags:** Govi-Altai  
**Soums:** Sharga

**Freshwater Ecoregion:** Western Mongolia  
**Terrestrial Ecoregion:** Great Lakes Basin Desert Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Highly Likely Total: 3**

Family: Capniidae					
Isocapnia guentheri	Within Known Range? N	Nearest Occurrence:	404.86 KM	48.61518°N	98.23096°E
Family: Chloroperlidae					
Suwallia teleckojensis	Within Known Range? Y	Nearest Occurrence:	153.36 KM	46.32080°N	93.90083°E
Family: Perlodidae					
Isoperla potanini	Within Known Range? Y	Nearest Occurrence:	153.36 KM	46.32080°N	93.90083°E

**LOE Rating: Likely Total: 11**

Family: Capniidae					
Isocapnia kudia	Within Known Range? N	Nearest Occurrence:	719.96 KM	51.25356°N	99.66687°E
Isocapnia sibirica	Within Known Range? N	Nearest Occurrence:	662.81 KM	47.28244°N	101.18793°E
Family: Chloroperlidae					
Alloperla rostellata	Within Known Range? N	Nearest Occurrence:	456.41 KM	48.36436°N	98.92737°E
Family: Nemouridae					
Amphinemura borealis	Within Known Range? Y	Nearest Occurrence:	307.63 KM	48.05989°N	97.55073°E
Nemoura cinerea	Within Known Range? N	Nearest Occurrence:	307.79 KM	48.06257°N	97.55064°E
Family: Perlidae					
Agnentina cocandica	Within Known Range? Y	Nearest Occurrence:	341.42 KM	48.33025°N	92.81616°E
Kamimuria exilis	Within Known Range? N	Nearest Occurrence:	570.10 KM	50.16278°N	98.84212°E
Family: Perlodidae					
Arcynopteryx sajanensis	Within Known Range? N	Nearest Occurrence:	822.50 KM	51.61397°N	100.59972°E
Diura bicaudata	Within Known Range? N	Nearest Occurrence:	523.40 KM	47.21768°N	99.92824°E
Pictetiella asiatica	Within Known Range? N	Nearest Occurrence:	818.90 KM	51.65822°N	100.53000°E
Skwala pusilla	Within Known Range? N	Nearest Occurrence:	783.30 KM	48.51277°N	88.51107°E

**LOE Rating: Probable Total: 7**

Family: Chloroperlidae					
Alloperla joosti	Within Known Range? N	Nearest Occurrence:	307.57 KM	48.24995°N	97.40627°E
Haploperla lepnevae	Within Known Range? N	Nearest Occurrence:	597.57 KM	49.26170°N	99.88242°E
Suwallia kerzhneri	Within Known Range? N	Nearest Occurrence:	307.57 KM	48.24995°N	97.40627°E
Family: Perlidae					
Agnentina brevipennis	Within Known Range? Y	Nearest Occurrence:	427.07 KM	46.28532°N	91.42793°E
Family: Perlodidae					
Arcynopteryx compacta	Within Known Range? Y	Nearest Occurrence:	376.73 KM	46.92107°N	91.91048°E
Diura majuscula	Within Known Range? Y	Nearest Occurrence:	308.35 KM	48.06257°N	97.55064°E
Family: Pteronarcyidae					
Pteronarcys reticulata	Within Known Range? N	Nearest Occurrence:	579.14 KM	47.80440°N	100.31810°E



**Basin:** Internal Drainage Basin  
**Aimags:** Govi-Altai  
**Soums:** Sharga

**Freshwater Ecoregion:** Western Mongolia  
**Terrestrial Ecoregion:** Great Lakes Basin Desert Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Possible Total: 9**

Family: Capniidae					
<i>Capnia nigra</i>	Within Known Range?	N	Nearest Occurrence:	307.79 KM	48.06257°N 97.55064°E
Family: Chloroperlidae					
<i>Alaskaperla longidentata</i>	Within Known Range?	N	Nearest Occurrence:	284.69 KM	48.15779°N 97.21441°E
Family: Nemouridae					
<i>Nemoura arctica</i>	Within Known Range?	Y	Nearest Occurrence:	440.78 KM	46.77095°N 91.31664°E
Family: Perlidae					
<i>Agnetina extrema</i>	Within Known Range?	N	Nearest Occurrence:	599.72 KM	47.50949°N 100.57510°E
Family: Perlodidae					
<i>Arcynopteryx polaris</i>	Within Known Range?	Y	Nearest Occurrence:	338.42 KM	46.61982°N 92.22981°E
<i>Isoperla altaica</i>	Within Known Range?	Y	Nearest Occurrence:	390.61 KM	47.33906°N 91.86288°E
<i>Isoperla asiatica</i>	Within Known Range?	N	Nearest Occurrence:	307.63 KM	48.05989°N 97.55073°E
<i>Isoperla mongolica</i>	Within Known Range?	Y	Nearest Occurrence:	308.12 KM	48.24995°N 97.40627°E
Family: Taeniopterygidae					
<i>Taenionema japonicum</i>	Within Known Range?	Y	Nearest Occurrence:	486.48 KM	47.11520°N 90.94098°E

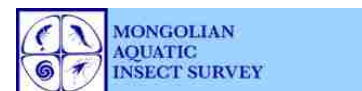
**LOE Rating: Predicted Total: 12**

Family: Capniidae					
<i>Mesocapnia variabilis</i>	Within Known Range?	N	Nearest Occurrence:	457.23 KM	48.36436°N 98.92737°E
Family: Chloroperlidae					
<i>Alloperla deminuta</i>	Within Known Range?	N	Nearest Occurrence:	579.14 KM	47.80440°N 100.31810°E
<i>Alloperla mediata</i>	Within Known Range?	N	Nearest Occurrence:	627.04 KM	50.61826°N 99.12094°E
Family: Nemouridae					
<i>Amphinemura standfussi</i>	Within Known Range?	N	Nearest Occurrence:	307.63 KM	48.05989°N 97.55073°E
<i>Nemoura sahlbergi</i>	Within Known Range?	N	Nearest Occurrence:	568.13 KM	47.42580°N 100.30130°E
<i>Nemurella pictetii</i>	Within Known Range?	N	Nearest Occurrence:	659.26 KM	50.81265°N 99.33803°E
Family: Perlidae					
<i>Paragnetina flavotincta</i>	Within Known Range?	N	Nearest Occurrence:	597.57 KM	49.26170°N 99.88242°E
Family: Perlodidae					
<i>Isoperla kozlovi</i>	Within Known Range?	N	Nearest Occurrence:	579.14 KM	47.80440°N 100.31810°E
<i>Isoperla lunigera</i>	Within Known Range?	N	Nearest Occurrence:	629.90 KM	49.62785°N 99.99523°E
<i>Isoperla obscura</i>	Within Known Range?	N	Nearest Occurrence:	652.17 KM	48.97819°N 89.94996°E
<i>Kaszabia nigricauda</i>	Within Known Range?	N	Nearest Occurrence:	449.91 KM	48.71968°N 98.65184°E
<i>Megarcys ochracea</i>	Within Known Range?	N	Nearest Occurrence:	703.90 KM	51.46205°N 99.19994°E

**LOE Rating: Unlikely Total: 5**

Family: Capniidae					
<i>Capnia khulsbagia</i>	Within Known Range?	N	Nearest Occurrence:	784.76 KM	50.98944°N 100.71944°E
<i>Mesocapnia altaica</i>	Within Known Range?	N	Nearest Occurrence:	739.44 KM	48.43684°N 88.90094°E
Family: Leuctridae					
<i>Leuctra fusca</i>	Within Known Range?	N	Nearest Occurrence:	1,365.04 KM	49.08643°N 107.28952°E
<i>Paraleuctra zapekinae</i>	Within Known Range?	N	Nearest Occurrence:	1,100.32 KM	49.71481°N 104.64203°E
Family: Perlodidae					
<i>Isoperla eximia</i>	Within Known Range?	N	Nearest Occurrence:	1,391.17 KM	49.01829°N 107.54453°E

Research funded by the National Science Foundation  
 DEB-BSI #0206674: A Survey of the Aquatic Insects of the Selenge River Basin. P.I.'s: JKGelhaus, JCMorse, BHayford.  
 DEB # 0743732: Aquatic Insects of the Altai and Hangai Mountain Drainages. P.I.'s: JKGelhaus, JCMorse, CRNelson.  
<http://clade.ansp.org/entomology/mongolia/index.html>





**Basin:** Internal Drainage Basin  
**Aimags:** Govi-Altai  
**Soums:** Taishir

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

Freshwater Ecoregion: Western Mongolia  
 Terrestrial Ecoregion: Great Lakes Basin Desert Steppe

**LOE Rating: Highly Likely Total: 3**

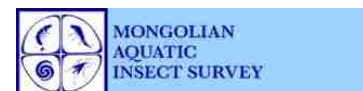
Family: Capniidae						
Isocapnia guentheri	Within Known Range? N	Nearest Occurrence:	294.33 KM	48.61518 °N	98.23096 °E	
Family: Chloroperlidae						
Suwallia teleckojensis	Within Known Range? Y	Nearest Occurrence:	199.48 KM	48.05989 °N	97.55073 °E	
Family: Perlodidae						
Isoperla potanini	Within Known Range? Y	Nearest Occurrence:	190.09 KM	48.15779 °N	97.21441 °E	

**LOE Rating: Likely Total: 12**

Family: Capniidae						
Isocapnia kudia	Within Known Range? N	Nearest Occurrence:	624.29 KM	51.25356 °N	99.66687 °E	
Isocapnia sibirica	Within Known Range? N	Nearest Occurrence:	525.34 KM	47.28244 °N	101.18793 °E	
Family: Chloroperlidae						
Alloperla joosti	Within Known Range? N	Nearest Occurrence:	208.45 KM	48.24995 °N	97.40627 °E	
Alloperla rostellata	Within Known Range? N	Nearest Occurrence:	332.53 KM	48.36436 °N	98.92737 °E	
Suwallia kerzhneri	Within Known Range? N	Nearest Occurrence:	199.13 KM	48.05989 °N	97.55073 °E	
Family: Nemouridae						
Amphinemura borealis	Within Known Range? Y	Nearest Occurrence:	199.13 KM	48.05989 °N	97.55073 °E	
Nemoura cinerea	Within Known Range? N	Nearest Occurrence:	199.36 KM	48.06257 °N	97.55064 °E	
Family: Perlidae						
Kamimuria exilis	Within Known Range? N	Nearest Occurrence:	473.59 KM	50.16278 °N	98.84212 °E	
Family: Perlodidae						
Arcynopteryx sajanensis	Within Known Range? N	Nearest Occurrence:	719.66 KM	51.61397 °N	100.59972 °E	
Diura bicaudata	Within Known Range? N	Nearest Occurrence:	386.15 KM	47.21768 °N	99.92824 °E	
Diura majuscula	Within Known Range? Y	Nearest Occurrence:	199.72 KM	48.06257 °N	97.55064 °E	
Pictetiella asiatica	Within Known Range? N	Nearest Occurrence:	717.34 KM	51.65822 °N	100.53000 °E	

**LOE Rating: Probable Total: 7**

Family: Chloroperlidae						
Haploperla lepnevae	Within Known Range? N	Nearest Occurrence:	477.19 KM	49.26170 °N	99.88242 °E	
Family: Perlidae						
Agnentina brevipennis	Within Known Range? Y	Nearest Occurrence:	334.72 KM	48.71968 °N	98.65184 °E	
Agnentina cocandica	Within Known Range? Y	Nearest Occurrence:	452.87 KM	48.33025 °N	92.81616 °E	
Family: Perlodidae						
Arcynopteryx compacta	Within Known Range? Y	Nearest Occurrence:	504.28 KM	47.11192 °N	101.01048 °E	
Arcynopteryx polaris	Within Known Range? Y	Nearest Occurrence:	333.12 KM	48.36436 °N	98.92737 °E	
Skwala pusilla	Within Known Range? N	Nearest Occurrence:	912.21 KM	48.51277 °N	88.51107 °E	
Family: Pteronarcyidae						
Pteronarcys reticulata	Within Known Range? N	Nearest Occurrence:	443.86 KM	47.80440 °N	100.31810 °E	



**Basin:** Internal Drainage Basin  
**Aimags:** Govi-Altai  
**Soums:** Taishir

**Freshwater Ecoregion:** Western Mongolia  
**Terrestrial Ecoregion:** Great Lakes Basin Desert Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Possible Total: 7**

Family: Capniidae					
<i>Capnia nigra</i>	Within Known Range?	N	Nearest Occurrence:	199.36 KM	48.06257°N 97.55064°E
Family: Chloroperlidae					
<i>Alaskaperla longidentata</i>	Within Known Range?	N	Nearest Occurrence:	189.75 KM	48.15779°N 97.21441°E
Family: Nemouridae					
<i>Amphinemura standfussi</i>	Within Known Range?	N	Nearest Occurrence:	199.13 KM	48.05989°N 97.55073°E
Family: Perlidae					
<i>Agnetina extrema</i>	Within Known Range?	N	Nearest Occurrence:	462.94 KM	47.50949°N 100.57510°E
Family: Perlodidae					
<i>Isoperla asiatica</i>	Within Known Range?	N	Nearest Occurrence:	199.13 KM	48.05989°N 97.55073°E
<i>Isoperla mongolica</i>	Within Known Range?	Y	Nearest Occurrence:	199.72 KM	48.06257°N 97.55064°E
Family: Taeniopterygidae					
<i>Taenionema japonicum</i>	Within Known Range?	Y	Nearest Occurrence:	504.28 KM	47.11192°N 101.01048°E

**LOE Rating: Predicted Total: 13**

Family: Capniidae					
<i>Mesocapnia variabilis</i>	Within Known Range?	N	Nearest Occurrence:	333.12 KM	48.36436°N 98.92737°E
Family: Chloroperlidae					
<i>Alloperla deminuta</i>	Within Known Range?	N	Nearest Occurrence:	443.86 KM	47.80440°N 100.31810°E
<i>Alloperla mediata</i>	Within Known Range?	N	Nearest Occurrence:	532.00 KM	50.61826°N 99.12094°E
Family: Nemouridae					
<i>Nemoura arctica</i>	Within Known Range?	Y	Nearest Occurrence:	521.66 KM	50.42996°N 99.21727°E
<i>Nemoura sahlbergi</i>	Within Known Range?	N	Nearest Occurrence:	431.26 KM	47.42580°N 100.30130°E
<i>Nemurella pictetii</i>	Within Known Range?	N	Nearest Occurrence:	563.30 KM	50.81265°N 99.33803°E
Family: Perlidae					
<i>Paragnetina flavotincta</i>	Within Known Range?	N	Nearest Occurrence:	477.19 KM	49.26170°N 99.88242°E
Family: Perlodidae					
<i>Isoperla altaica</i>	Within Known Range?	Y	Nearest Occurrence:	504.28 KM	47.11192°N 101.01048°E
<i>Isoperla kozlovi</i>	Within Known Range?	N	Nearest Occurrence:	443.86 KM	47.80440°N 100.31810°E
<i>Isoperla lunigera</i>	Within Known Range?	N	Nearest Occurrence:	512.74 KM	49.62785°N 99.99523°E
<i>Isoperla obscura</i>	Within Known Range?	N	Nearest Occurrence:	712.28 KM	50.60031°N 101.52392°E
<i>Kaszabia nigricauda</i>	Within Known Range?	N	Nearest Occurrence:	334.72 KM	48.71968°N 98.65184°E
<i>Megarcys ochracea</i>	Within Known Range?	N	Nearest Occurrence:	616.81 KM	51.46205°N 99.19994°E

**LOE Rating: Unlikely Total: 5**

Family: Capniidae					
<i>Capnia khulsbagia</i>	Within Known Range?	N	Nearest Occurrence:	675.28 KM	50.98944°N 100.71944°E
<i>Mesocapnia altaica</i>	Within Known Range?	N	Nearest Occurrence:	868.17 KM	48.43684°N 88.90094°E
Family: Leuctridae					
<i>Leuctra fusca</i>	Within Known Range?	N	Nearest Occurrence:	1,228.50 KM	49.08643°N 107.28952°E
<i>Paraleuctra zapekinae</i>	Within Known Range?	N	Nearest Occurrence:	967.09 KM	49.71481°N 104.64203°E
Family: Perlodidae					
<i>Isoperla eximia</i>	Within Known Range?	N	Nearest Occurrence:	1,254.46 KM	49.01829°N 107.54453°E

**Basin:** Internal Drainage Basin  
**Aimags:** Govi-altai  
**Soums:** Togrog

**Freshwater Ecoregion:** Dzungaria  
**Terrestrial Ecoregion:** Altai Montane Forest And Forest Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Highly Likely Total: 3**

Family: Capniidae						
Isocapnia guentheri	Within Known Range? N	Nearest Occurrence:	486.55 KM	48.61518 °N	98.23096 °E	
Family: Chloroperlidae						
Suwallia teleckojensis	Within Known Range? Y	Nearest Occurrence:	119.10 KM	46.32080 °N	93.90083 °E	
Family: Perlodidae						
Isoperla potanini	Within Known Range? Y	Nearest Occurrence:	119.10 KM	46.32080 °N	93.90083 °E	

**LOE Rating: Likely Total: 12**

Family: Capniidae						
Isocapnia kudia	Within Known Range? N	Nearest Occurrence:	805.56 KM	51.25356 °N	99.66687 °E	
Isocapnia sibirica	Within Known Range? N	Nearest Occurrence:	721.84 KM	47.28244 °N	101.18793 °E	
Family: Chloroperlidae						
Alloperla rostellata	Within Known Range? N	Nearest Occurrence:	533.16 KM	48.36436 °N	98.92737 °E	
Family: Nemouridae						
Amphinemura borealis	Within Known Range? N	Nearest Occurrence:	389.08 KM	48.05989 °N	97.55073 °E	
Nemoura cinerea	Within Known Range? N	Nearest Occurrence:	389.27 KM	48.06257 °N	97.55064 °E	
Family: Perlidae						
Agnentina brevipennis	Within Known Range? Y	Nearest Occurrence:	383.30 KM	46.28532 °N	91.42793 °E	
Agnentina cocandica	Within Known Range? N	Nearest Occurrence:	312.75 KM	46.12479 °N	92.05382 °E	
Kamimuria exilis	Within Known Range? N	Nearest Occurrence:	655.51 KM	50.16278 °N	98.84212 °E	
Family: Perlodidae						
Arcynopteryx sajanensis	Within Known Range? N	Nearest Occurrence:	907.26 KM	51.61397 °N	100.59972 °E	
Diura bicaudata	Within Known Range? N	Nearest Occurrence:	584.47 KM	47.21768 °N	99.92824 °E	
Pictetiella asiatica	Within Known Range? N	Nearest Occurrence:	903.71 KM	51.65822 °N	100.53000 °E	
Skwala pusilla	Within Known Range? N	Nearest Occurrence:	764.28 KM	48.51277 °N	88.51107 °E	

**LOE Rating: Probable Total: 7**

Family: Chloroperlidae						
Alloperla joosti	Within Known Range? N	Nearest Occurrence:	391.08 KM	48.24995 °N	97.40627 °E	
Haploperla lepnevae	Within Known Range? N	Nearest Occurrence:	646.81 KM	48.97819 °N	89.94996 °E	
Suwallia kerzhneri	Within Known Range? N	Nearest Occurrence:	389.08 KM	48.05989 °N	97.55073 °E	
Family: Perlodidae						
Arcynopteryx compacta	Within Known Range? Y	Nearest Occurrence:	348.88 KM	46.92107 °N	91.91048 °E	
Diura majuscula	Within Known Range? N	Nearest Occurrence:	378.71 KM	47.24104 °N	91.75287 °E	
Isoperla altaica	Within Known Range? Y	Nearest Occurrence:	369.61 KM	46.13371 °N	91.54083 °E	
Family: Pteronarcyidae						
Pteronarcys reticulata	Within Known Range? N	Nearest Occurrence:	645.47 KM	47.80440 °N	100.31810 °E	

**Basin:** Internal Drainage Basin  
**Aimags:** Govi-Altai  
**Soums:** Togrog

**Freshwater Ecoregion:** Dzungaria  
**Terrestrial Ecoregion:** Altai Montane Forest And Forest Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

<b>LOE Rating:</b>	<b>Possible</b>	<b>Total:</b>	<b>8</b>
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<b>Family:</b> Chloroperlidae						
	Alaskaperla longidentata	Within Known Range? N	Nearest Occurrence:	368.66 KM	48.15779°N	97.21441°E
<b>Family:</b> Nemouridae						
	Nemoura arctica	Within Known Range? N	Nearest Occurrence:	406.77 KM	46.77095°N	91.31664°E
<b>Family:</b> Perlidae						
	Agnetina extrema	Within Known Range? N	Nearest Occurrence:	662.39 KM	47.50949°N	100.57510°E
<b>Family:</b> Perlodidae						
	Arcynopteryx polaris	Within Known Range? N	Nearest Occurrence:	304.50 KM	46.61982°N	92.22981°E
	Isoperla asiatica	Within Known Range? N	Nearest Occurrence:	389.08 KM	48.05989°N	97.55073°E
	Isoperla mongolica	Within Known Range? Y	Nearest Occurrence:	369.61 KM	46.13371°N	91.54083°E
	Isoperla obscura	Within Known Range? N	Nearest Occurrence:	646.81 KM	48.97819°N	89.94996°E
<b>Family:</b> Taeniopterygidae						
	Taenionema japonicum	Within Known Range? N	Nearest Occurrence:	457.77 KM	47.11520°N	90.94098°E

<b>LOE Rating:</b>	<b>Predicted</b>	<b>Total:</b>	<b>13</b>
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<b>Family:</b> Capniidae						
	Capnia nigra	Within Known Range? N	Nearest Occurrence:	389.27 KM	48.06257°N	97.55064°E
	Mesocapnia altaica	Within Known Range? N	Nearest Occurrence:	721.21 KM	48.43684°N	88.90094°E
	Mesocapnia variabilis	Within Known Range? N	Nearest Occurrence:	534.11 KM	48.36436°N	98.92737°E
<b>Family:</b> Chloroperlidae						
	Alloperla deminuta	Within Known Range? N	Nearest Occurrence:	645.47 KM	47.80440°N	100.31810°E
	Alloperla mediata	Within Known Range? N	Nearest Occurrence:	712.59 KM	50.61826°N	99.12094°E
<b>Family:</b> Nemouridae						
	Amphinemura standfussi	Within Known Range? N	Nearest Occurrence:	389.08 KM	48.05989°N	97.55073°E
	Nemoura sahlbergi	Within Known Range? N	Nearest Occurrence:	630.61 KM	47.42580°N	100.30130°E
	Nemurella pictetii	Within Known Range? N	Nearest Occurrence:	744.74 KM	50.81265°N	99.33803°E
<b>Family:</b> Perlidae						
	Paragnetina flavotincta	Within Known Range? N	Nearest Occurrence:	676.40 KM	49.26170°N	99.88242°E
<b>Family:</b> Perlodidae						
	Isoperla kozlovi	Within Known Range? N	Nearest Occurrence:	645.47 KM	47.80440°N	100.31810°E
	Isoperla lunigera	Within Known Range? N	Nearest Occurrence:	710.15 KM	49.62785°N	99.99523°E
	Kaszabia nigricauda	Within Known Range? N	Nearest Occurrence:	530.37 KM	48.71968°N	98.65184°E
	Megarcys ochracea	Within Known Range? N	Nearest Occurrence:	790.32 KM	51.46205°N	99.19994°E

<b>LOE Rating:</b>	<b>Unlikely</b>	<b>Total:</b>	<b>4</b>
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<b>Family:</b> Capniidae						
	Capnia khulsbagia	Within Known Range? N	Nearest Occurrence:	867.77 KM	50.98944°N	100.71944°E
<b>Family:</b> Leuctridae						
	Leuctra fusca	Within Known Range? N	Nearest Occurrence:	1,427.43 KM	49.08643°N	107.28952°E
	Paraleuctra zapekinae	Within Known Range? N	Nearest Occurrence:	1,169.50 KM	49.71481°N	104.64203°E
<b>Family:</b> Perlodidae						
	Isoperla eximia	Within Known Range? N	Nearest Occurrence:	1,452.96 KM	49.01829°N	107.54453°E

Research funded by the National Science Foundation  
 DEB-BSI #0206674: A Survey of the Aquatic Insects of the Selenge River Basin. P.I.'s: JKGelhaus, JCMorse, BHayford.  
 DEB # 0743732: Aquatic Insects of the Altai and Hangai Mountain Drainages. P.I.'s: JKGelhaus, JCMorse, CRNelson.  
<http://clade.ansp.org/entomology/mongolia/index.html>



**Basin:** Internal Drainage Basin  
**Aimag:** Govi-altai  
**Soum:** Tonkhil

**WQM Sites:**

WQM Sites: # 136 (Zuil River @ N 46.31863° E 93.90444°)

Freshwater Ecoregion: Upper Irtysh

Terrestrial Ecoregion: Altai Montane Forest And Forest Steppe

**LOE Rating: Highly Likely Total: 2**

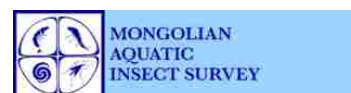
Family: Chloroperlidae						
Suwallia teleckojensis	Within Known Range? Y	Nearest Occurrence:	57.40 KM	46.32080°N	93.90083°E	
Family: Perlodidae						
Isoperla potanini	Within Known Range? Y	Nearest Occurrence:	57.40 KM	46.32080°N	93.90083°E	

**LOE Rating: Likely Total: 14**

Family: Capniidae						
Isocapnia guentheri	Within Known Range? N	Nearest Occurrence:	591.12 KM	48.61518°N	98.23096°E	
Isocapnia kudia	Within Known Range? N	Nearest Occurrence:	895.07 KM	51.25356°N	99.66687°E	
Isocapnia sibirica	Within Known Range? N	Nearest Occurrence:	848.71 KM	47.28244°N	101.18793°E	
Family: Chloroperlidae						
Alloperla rostellata	Within Known Range? N	Nearest Occurrence:	645.97 KM	48.36436°N	98.92737°E	
Family: Nemouridae						
Amphinemura borealis	Within Known Range? N	Nearest Occurrence:	321.33 KM	47.03925°N	91.03419°E	
Nemoura cinerea	Within Known Range? N	Nearest Occurrence:	494.93 KM	48.06257°N	97.55064°E	
Family: Perlidae						
Agnetina brevipennis	Within Known Range? Y	Nearest Occurrence:	254.06 KM	46.28532°N	91.42793°E	
Agnetina cocandica	Within Known Range? Y	Nearest Occurrence:	182.86 KM	46.12479°N	92.05382°E	
Kamimuria exilis	Within Known Range? N	Nearest Occurrence:	747.90 KM	50.16278°N	98.84212°E	
Family: Perlodidae						
Arcynopteryx sajanensis	Within Known Range? N	Nearest Occurrence:	1,001.35 KM	51.61397°N	100.59972°E	
Diura bicaudata	Within Known Range? N	Nearest Occurrence:	590.41 KM	49.04180°N	89.41675°E	
Diura majuscula	Within Known Range? N	Nearest Occurrence:	263.55 KM	47.24104°N	91.75287°E	
Pictetiella asiatica	Within Known Range? N	Nearest Occurrence:	996.79 KM	51.65822°N	100.53000°E	
Skwala pusilla	Within Known Range? N	Nearest Occurrence:	644.72 KM	48.51277°N	88.51107°E	

**LOE Rating: Probable Total: 6**

Family: Chloroperlidae						
Alloperla joosti	Within Known Range? N	Nearest Occurrence:	491.98 KM	48.24995°N	97.40627°E	
Haploperla lepnevae	Within Known Range? N	Nearest Occurrence:	539.61 KM	48.97819°N	89.94996°E	
Suwallia kerzhneri	Within Known Range? N	Nearest Occurrence:	491.98 KM	48.24995°N	97.40627°E	
Family: Perlodidae						
Arcynopteryx compacta	Within Known Range? Y	Nearest Occurrence:	229.30 KM	46.92107°N	91.91048°E	
Arcynopteryx polaris	Within Known Range? N	Nearest Occurrence:	181.88 KM	46.61982°N	92.22981°E	
Isoperla altaica	Within Known Range? Y	Nearest Occurrence:	239.45 KM	46.13371°N	91.54083°E	



**Basin:** Internal Drainage Basin  
**Aimags:** Govi-altai  
**Soums:** Tonkhil

**WQM Sites:**

WQM Sites: # 136 (Zuil River @ N 46.31863° E 93.90444°)

Freshwater Ecoregion: Upper Irtysh  
 Terrestrial Ecoregion: Altai Montane Forest And Forest Steppe

LOE Rating:	Possible	Total:				
<b>Family: Capniidae</b>						
	Capnia nigra	Within Known Range?	N	Nearest Occurrence:	494.93 KM	48.06257°N 97.55064°E
<b>Family: Chloroperlidae</b>						
	Alaskaperla longidentata	Within Known Range?	N	Nearest Occurrence:	468.54 KM	48.15779°N 97.21441°E
<b>Family: Nemouridae</b>						
	Nemoura arctica	Within Known Range?	N	Nearest Occurrence:	281.41 KM	46.77095°N 91.31664°E
<b>Family: Perlidae</b>						
	Agnatina extrema	Within Known Range?	N	Nearest Occurrence:	787.47 KM	47.50949°N 100.57510°E
<b>Family: Perlodidae</b>						
	Isoperla asiatica	Within Known Range?	N	Nearest Occurrence:	494.79 KM	48.05989°N 97.55073°E
	Isoperla mongolica	Within Known Range?	Y	Nearest Occurrence:	239.45 KM	46.13371°N 91.54083°E
	Isoperla obscura	Within Known Range?	N	Nearest Occurrence:	539.61 KM	48.97819°N 89.94996°E
<b>Family: Pteronarcyidae</b>						
	Pteronarcys reticulata	Within Known Range?	N	Nearest Occurrence:	768.33 KM	47.80440°N 100.31810°E
<b>Family: Taeniopterygidae</b>						
	Taenionema japonicum	Within Known Range?	N	Nearest Occurrence:	334.84 KM	47.11520°N 90.94098°E
LOE Rating:	Predicted	Total:				
<b>Family: Capniidae</b>						
	Mesocapnia altaica	Within Known Range?	N	Nearest Occurrence:	602.51 KM	48.43684°N 88.90094°E
	Mesocapnia variabilis	Within Known Range?	N	Nearest Occurrence:	645.72 KM	48.50631°N 88.50947°E
<b>Family: Chloroperlidae</b>						
	Alloperla deminuta	Within Known Range?	N	Nearest Occurrence:	768.33 KM	47.80440°N 100.31810°E
	Alloperla mediata	Within Known Range?	N	Nearest Occurrence:	802.93 KM	50.61826°N 99.12094°E
<b>Family: Nemouridae</b>						
	Amphinemura standfussi	Within Known Range?	N	Nearest Occurrence:	494.79 KM	48.05989°N 97.55073°E
	Nemoura sahlbergi	Within Known Range?	N	Nearest Occurrence:	755.76 KM	47.42580°N 100.30130°E
	Nemurella pictetii	Within Known Range?	N	Nearest Occurrence:	835.28 KM	50.81265°N 99.33803°E
<b>Family: Perlidae</b>						
	Paragnetina flavotincta	Within Known Range?	N	Nearest Occurrence:	785.81 KM	49.26170°N 99.88242°E
<b>Family: Perlodidae</b>						
	Isoperla kozlovi	Within Known Range?	N	Nearest Occurrence:	768.33 KM	47.80440°N 100.31810°E
	Isoperla lunigera	Within Known Range?	N	Nearest Occurrence:	816.87 KM	49.62785°N 99.99523°E
	Kaszabia nigricauda	Within Known Range?	N	Nearest Occurrence:	637.24 KM	48.71968°N 98.65184°E
	Megarcys ochracea	Within Known Range?	N	Nearest Occurrence:	873.60 KM	51.46205°N 99.19994°E
LOE Rating:	Unlikely	Total:				
<b>Family: Capniidae</b>						
	Capnia khulsbagia	Within Known Range?	N	Nearest Occurrence:	967.43 KM	50.98944°N 100.71944°E
<b>Family: Leuctridae</b>						
	Leuctra fusca	Within Known Range?	N	Nearest Occurrence:	1,553.05 KM	49.08643°N 107.28952°E
	Paraleuctra zapekinae	Within Known Range?	N	Nearest Occurrence:	1,290.38 KM	49.71481°N 104.64203°E
<b>Family: Perlodidae</b>						
	Isoperla eximia	Within Known Range?	N	Nearest Occurrence:	1,578.90 KM	49.01829°N 107.54453°E

Research funded by the National Science Foundation  
 DEB-BSI #0206674: A Survey of the Aquatic Insects of the Selenge River Basin. P.I.'s: JKGelhaus, JCMorse, BHayford.  
 DEB # 0743732: Aquatic Insects of the Altai and Hangai Mountain Drainages. P.I.'s: JKGelhaus, JCMorse, CRNelson.  
<http://clade.ansp.org/entomology/mongolia/index.html>



**Basin:** Internal Drainage Basin  
**Aimag:** Govi-altai  
**Soum:** Tseel

**Freshwater Ecoregion:** Dzungaria  
**Terrestrial Ecoregion:** Alashan Plateau Semi-Desert

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Highly Likely Total: 3**

Family: Capniidae					
Isocapnia guentheri	Within Known Range? N	Nearest Occurrence:	449.30 KM	48.61518°N	98.23096 °E
Family: Chloroperlidae					
Suwallia teleckojensis	Within Known Range? N	Nearest Occurrence:	218.83 KM	46.32080°N	93.90083 °E
Family: Perlodidae					
Isoperla potanini	Within Known Range? N	Nearest Occurrence:	218.83 KM	46.32080°N	93.90083 °E

**LOE Rating: Likely Total: 13**

Family: Capniidae					
Isocapnia kudia	Within Known Range? N	Nearest Occurrence:	779.47 KM	51.25356°N	99.66687 °E
Isocapnia sibirica	Within Known Range? N	Nearest Occurrence:	643.74 KM	47.28244°N	101.18793 °E
Family: Chloroperlidae					
Alloperla joosti	Within Known Range? N	Nearest Occurrence:	362.95 KM	48.24995°N	97.40627 °E
Alloperla rostellata	Within Known Range? N	Nearest Occurrence:	482.73 KM	48.36436°N	98.92737 °E
Family: Nemouridae					
Amphinemura borealis	Within Known Range? N	Nearest Occurrence:	354.39 KM	48.05989°N	97.55073 °E
Nemoura cinerea	Within Known Range? N	Nearest Occurrence:	354.62 KM	48.06257°N	97.55064 °E
Family: Perlidae					
Agnetina cocandica	Within Known Range? N	Nearest Occurrence:	409.38 KM	46.12479°N	92.05382 °E
Kamimuria exilis	Within Known Range? N	Nearest Occurrence:	628.99 KM	50.16278°N	98.84212 °E
Family: Perlodidae					
Arcynopteryx sajanensis	Within Known Range? N	Nearest Occurrence:	875.03 KM	51.61397°N	100.59972 °E
Diura bicaudata	Within Known Range? N	Nearest Occurrence:	509.97 KM	47.21768°N	99.92824 °E
Diura majuscula	Within Known Range? N	Nearest Occurrence:	355.26 KM	48.06257°N	97.55064 °E
Pictetiella asiatica	Within Known Range? N	Nearest Occurrence:	872.50 KM	51.65822°N	100.53000 °E
Skwala pusilla	Within Known Range? N	Nearest Occurrence:	864.00 KM	48.51277°N	88.51107 °E

**LOE Rating: Probable Total: 5**

Family: Chloroperlidae					
Haploperla lepnevae	Within Known Range? N	Nearest Occurrence:	628.15 KM	49.26170°N	99.88242 °E
Suwallia kerzhneri	Within Known Range? N	Nearest Occurrence:	354.39 KM	48.05989°N	97.55073 °E
Family: Perlidae					
Agnetina brevipennis	Within Known Range? N	Nearest Occurrence:	480.20 KM	46.28532°N	91.42793 °E
Family: Perlodidae					
Arcynopteryx compacta	Within Known Range? N	Nearest Occurrence:	448.71 KM	46.92107°N	91.91048 °E
Isoperla mongolica	Within Known Range? N	Nearest Occurrence:	355.26 KM	48.06257°N	97.55064 °E



**Basin:** Internal Drainage Basin  
**Aimag:** Govi-altai  
**Soum:** Tseel

Freshwater Ecoregion: Dzungaria  
 Terrestrial Ecoregion: Alashan Plateau Semi-Desert

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

<b>LOE Rating:</b>	<b>Possible</b>	<b>Total:</b>	<b>8</b>
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Family: Capniidae						
<i>Capnia nigra</i>	Within Known Range? N	Nearest Occurrence:	354.62 KM	48.06257°N	97.55064°E	
Family: Chloroperlidae						
<i>Alaskaperla longidentata</i>	Within Known Range? N	Nearest Occurrence:	343.24 KM	48.15779°N	97.21441°E	
Family: Nemouridae						
<i>Nemoura arctica</i>	Within Known Range? N	Nearest Occurrence:	505.90 KM	46.77095°N	91.31664°E	
Family: Perlidae						
<i>Agnetina extrema</i>	Within Known Range? N	Nearest Occurrence:	588.70 KM	47.50949°N	100.57510°E	
Family: Perlodidae						
<i>Arcynopteryx polaris</i>	Within Known Range? N	Nearest Occurrence:	403.98 KM	46.61982°N	92.22981°E	
<i>Isoperla altaica</i>	Within Known Range? N	Nearest Occurrence:	465.80 KM	46.13371°N	91.54083°E	
<i>Isoperla asiatica</i>	Within Known Range? N	Nearest Occurrence:	354.39 KM	48.05989°N	97.55073°E	
Family: Pteronarcyidae						
<i>Pteronarcys reticulata</i>	Within Known Range? N	Nearest Occurrence:	576.39 KM	47.80440°N	100.31810°E	

<b>LOE Rating:</b>	<b>Predicted</b>	<b>Total:</b>	<b>13</b>
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Family: Capniidae						
<i>Mesocapnia variabilis</i>	Within Known Range? N	Nearest Occurrence:	483.60 KM	48.36436°N	98.92737°E	
Family: Chloroperlidae						
<i>Alloperla deminuta</i>	Within Known Range? N	Nearest Occurrence:	576.39 KM	47.80440°N	100.31810°E	
<i>Alloperla mediata</i>	Within Known Range? N	Nearest Occurrence:	687.08 KM	50.61826°N	99.12094°E	
Family: Nemouridae						
<i>Amphinemura standfussi</i>	Within Known Range? N	Nearest Occurrence:	354.39 KM	48.05989°N	97.55073°E	
<i>Nemoura sahlbergi</i>	Within Known Range? N	Nearest Occurrence:	557.08 KM	47.42580°N	100.30130°E	
<i>Nemurella pictetii</i>	Within Known Range? N	Nearest Occurrence:	718.46 KM	50.81265°N	99.33803°E	
Family: Perlidae						
<i>Paragnetina flavotincta</i>	Within Known Range? N	Nearest Occurrence:	628.15 KM	49.26170°N	99.88242°E	
Family: Perlodidae						
<i>Isoperla kozlovi</i>	Within Known Range? N	Nearest Occurrence:	576.39 KM	47.80440°N	100.31810°E	
<i>Isoperla lunigera</i>	Within Known Range? N	Nearest Occurrence:	665.01 KM	49.62785°N	99.99523°E	
<i>Isoperla obscura</i>	Within Known Range? N	Nearest Occurrence:	745.27 KM	48.97819°N	89.94996°E	
<i>Kaszabia nigricauda</i>	Within Known Range? N	Nearest Occurrence:	488.63 KM	48.71968°N	98.65184°E	
<i>Megarcys ochracea</i>	Within Known Range? N	Nearest Occurrence:	771.09 KM	51.46205°N	99.19994°E	
Family: Taeniopterygidae						
<i>Taenionema japonicum</i>	Within Known Range? N	Nearest Occurrence:	557.40 KM	47.11520°N	90.94098°E	





**Basin:** Internal Drainage Basin

**Aimag:** Govi-altai

**Soum:** Tseel

Freshwater Ecoregion: Dzungaria

Terrestrial Ecoregion: Alashan Plateau Semi-Desert

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

<b>LOE Rating:</b> Unlikely	<b>Total:</b> 5
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Family: Capniidae

Capnia khulsbagia

Within Known Range? N Nearest Occurrence: 829.43 KM 50.98944 °N 100.71944 °E

Mesocapnia altaica

Within Known Range? N Nearest Occurrence: 820.92 KM 48.43684 °N 88.90094 °E

Family: Leuctridae

Leuctra fusca

Within Known Range? N Nearest Occurrence: 1,349.85 KM 49.08643 °N 107.28952 °E

Paraleuctra zapekinae

Within Known Range? N Nearest Occurrence: 1,100.77 KM 49.71481 °N 104.64203 °E

Family: Perlodidae

Isoperla eximia

Within Known Range? N Nearest Occurrence: 1,374.72 KM 49.01829 °N 107.54453 °E

**Basin:** Internal Drainage Basin  
**Aimags:** Govi-Altai  
**Soums:** Tsogt

Freshwater Ecoregion: Dzungaria  
 Terrestrial Ecoregion: Alashan Plateau Semi-Desert

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Highly Likely Total: 7**

Family: Capniidae						
Isocapnia guentheri	Within Known Range? N	Nearest Occurrence:	488.25 KM	48.61518 °N	98.23096 °E	
Isocapnia sibirica	Within Known Range? N	Nearest Occurrence:	593.14 KM	47.28244 °N	101.18793 °E	
Family: Chloroperlidae						
Alloperla rostellata	Within Known Range? N	Nearest Occurrence:	497.67 KM	48.36436 °N	98.92737 °E	
Suwallia teleckojensis	Within Known Range? N	Nearest Occurrence:	361.38 KM	46.32080 °N	93.90083 °E	
Family: Perlidae						
Kamimuria exilis	Within Known Range? N	Nearest Occurrence:	674.15 KM	50.16278 °N	98.84212 °E	
Family: Perlodidae						
Diura bicaudata	Within Known Range? N	Nearest Occurrence:	474.25 KM	47.21768 °N	99.92824 °E	
Isoperla potanini	Within Known Range? N	Nearest Occurrence:	361.38 KM	46.32080 °N	93.90083 °E	

**LOE Rating: Likely Total: 8**

Family: Capniidae						
Isocapnia kudia	Within Known Range? N	Nearest Occurrence:	820.22 KM	51.25356 °N	99.66687 °E	
Family: Chloroperlidae						
Alloperla joosti	Within Known Range? N	Nearest Occurrence:	422.69 KM	48.24995 °N	97.40627 °E	
Family: Nemouridae						
Amphinemura borealis	Within Known Range? N	Nearest Occurrence:	405.91 KM	48.05989 °N	97.55073 °E	
Nemoura cinerea	Within Known Range? N	Nearest Occurrence:	406.19 KM	48.06257 °N	97.55064 °E	
Family: Perlidae						
Agnetina cocandica	Within Known Range? N	Nearest Occurrence:	536.95 KM	46.12479 °N	92.05382 °E	
Family: Perlodidae						
Arcynopteryx sajanensis	Within Known Range? N	Nearest Occurrence:	904.45 KM	51.61397 °N	100.59972 °E	
Pictetiella asiatica	Within Known Range? N	Nearest Occurrence:	903.36 KM	51.65822 °N	100.53000 °E	
Skwala pusilla	Within Known Range? N	Nearest Occurrence:	1,002.01 KM	48.51277 °N	88.51107 °E	

**LOE Rating: Probable Total: 6**

Family: Chloroperlidae						
Haploperla lepnevae	Within Known Range? N	Nearest Occurrence:	638.94 KM	49.26170 °N	99.88242 °E	
Suwallia kerzhneri	Within Known Range? N	Nearest Occurrence:	405.91 KM	48.05989 °N	97.55073 °E	
Family: Perlidae						
Agnetina brevipennis	Within Known Range? N	Nearest Occurrence:	517.73 KM	48.71968 °N	98.65184 °E	
Agnetina extrema	Within Known Range? N	Nearest Occurrence:	550.78 KM	47.50949 °N	100.57510 °E	
Family: Perlodidae						
Diura majuscula	Within Known Range? N	Nearest Occurrence:	406.92 KM	48.06257 °N	97.55064 °E	
Family: Pteronarcyidae						
Pteronarcys reticulata	Within Known Range? N	Nearest Occurrence:	549.38 KM	47.80440 °N	100.31810 °E	

**Basin:** Internal Drainage Basin  
**Aimags:** Govi-Altai  
**Soums:** Tsogt

Freshwater Ecoregion: Dzungaria  
 Terrestrial Ecoregion: Alashan Plateau Semi-Desert

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Possible Total: 8**

Family: Capniidae					
<i>Capnia nigra</i>	Within Known Range? N	Nearest Occurrence:	406.19 KM	48.06257°N	97.55064°E
Family: Chloroperlidae					
<i>Alaskaperla longidentata</i>	Within Known Range? N	Nearest Occurrence:	408.66 KM	48.15779°N	97.21441°E
Family: Perlodidae					
<i>Arcynopteryx compacta</i>	Within Known Range? N	Nearest Occurrence:	567.55 KM	47.11192°N	101.01048°E
<i>Arcynopteryx polaris</i>	Within Known Range? N	Nearest Occurrence:	473.24 KM	47.21260°N	99.91083°E
<i>Isoperla altaica</i>	Within Known Range? N	Nearest Occurrence:	567.55 KM	47.11192°N	101.01048°E
<i>Isoperla asiatica</i>	Within Known Range? N	Nearest Occurrence:	405.91 KM	48.05989°N	97.55073°E
<i>Isoperla kozlovi</i>	Within Known Range? N	Nearest Occurrence:	549.38 KM	47.80440°N	100.31810°E
<i>Isoperla mongolica</i>	Within Known Range? N	Nearest Occurrence:	406.92 KM	48.06257°N	97.55064°E

**LOE Rating: Predicted Total: 12**

Family: Capniidae					
<i>Mesocapnia variabilis</i>	Within Known Range? N	Nearest Occurrence:	473.24 KM	47.21260°N	99.91083°E
Family: Chloroperlidae					
<i>Alloperla deminuta</i>	Within Known Range? N	Nearest Occurrence:	549.38 KM	47.80440°N	100.31810°E
<i>Alloperla mediata</i>	Within Known Range? N	Nearest Occurrence:	731.41 KM	50.61826°N	99.12094°E
Family: Nemouridae					
<i>Amphinemura standfussi</i>	Within Known Range? N	Nearest Occurrence:	405.91 KM	48.05989°N	97.55073°E
<i>Nemoura arctica</i>	Within Known Range? N	Nearest Occurrence:	639.38 KM	46.77095°N	91.31664°E
<i>Nemoura sahlbergi</i>	Within Known Range? N	Nearest Occurrence:	521.03 KM	47.42580°N	100.30130°E
Family: Perlidae					
<i>Paragnetina flavotincta</i>	Within Known Range? N	Nearest Occurrence:	638.94 KM	49.26170°N	99.88242°E
Family: Perlodidae					
<i>Isoperla lunigera</i>	Within Known Range? N	Nearest Occurrence:	679.61 KM	49.62785°N	99.99523°E
<i>Isoperla obscura</i>	Within Known Range? N	Nearest Occurrence:	866.30 KM	49.38617°N	102.71667°E
<i>Kaszabia nigricauda</i>	Within Known Range? N	Nearest Occurrence:	517.73 KM	48.71968°N	98.65184°E
<i>Megarcys ochracea</i>	Within Known Range? N	Nearest Occurrence:	820.41 KM	51.40978°N	99.30136°E
Family: Taeniopterygidae					
<i>Taenionema japonicum</i>	Within Known Range? N	Nearest Occurrence:	567.55 KM	47.11192°N	101.01048°E

**LOE Rating: Unlikely Total: 6**

Family: Capniidae					
<i>Capnia khulsbagia</i>	Within Known Range? N	Nearest Occurrence:	850.16 KM	50.98944°N	100.71944°E
<i>Mesocapnia altaica</i>	Within Known Range? N	Nearest Occurrence:	959.53 KM	48.43684°N	88.90094°E
Family: Leuctridae					
<i>Leuctra fusca</i>	Within Known Range? N	Nearest Occurrence:	1,288.97 KM	49.08643°N	107.28952°E
<i>Paraleuctra zapekinae</i>	Within Known Range? N	Nearest Occurrence:	1,061.40 KM	49.71481°N	104.64203°E
Family: Nemouridae					
<i>Nemurella pictetii</i>	Within Known Range? N	Nearest Occurrence:	760.67 KM	50.81265°N	99.33803°E
Family: Perlodidae					
<i>Isoperla eximia</i>	Within Known Range? N	Nearest Occurrence:	1,312.15 KM	49.01829°N	107.54453°E

**Basin:** Internal Drainage Basin

**Aimag:** Govi-altai

**Soum:** Yesonbulag

Freshwater Ecoregion: Western Mongolia

Terrestrial Ecoregion: Altai Montane Forest And Forest Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Highly Likely Total: 3**

Family: Capniidae

Isocapnia guentheri Within Known Range? N Nearest Occurrence: 337.79 KM 48.61518°N 98.23096°E

Family: Chloroperlidae

Suwallia teleckojensis Within Known Range? Y Nearest Occurrence: 243.76 KM 48.05989°N 97.55073°E

Family: Perlodidae

Isoperla potanini Within Known Range? Y Nearest Occurrence: 234.86 KM 48.15779°N 97.21441°E

**LOE Rating: Likely Total: 13**

Family: Capniidae

Isocapnia kudia Within Known Range? N Nearest Occurrence: 668.57 KM 51.25356°N 99.66687°E

Isocapnia sibirica Within Known Range? N Nearest Occurrence: 551.80 KM 47.28244°N 101.18793°E

Family: Chloroperlidae

Alloperla joosti Within Known Range? N Nearest Occurrence: 253.12 KM 48.24995°N 97.40627°E

Alloperla rostellata Within Known Range? N Nearest Occurrence: 372.63 KM 48.36436°N 98.92737°E

Suwallia kerzhneri Within Known Range? N Nearest Occurrence: 243.32 KM 48.05989°N 97.55073°E

Family: Nemouridae

Amphinemura borealis Within Known Range? Y Nearest Occurrence: 243.32 KM 48.05989°N 97.55073°E

Nemoura cinerea Within Known Range? N Nearest Occurrence: 243.56 KM 48.06257°N 97.55064°E

Family: Perlidae

Kamimuria exilis Within Known Range? N Nearest Occurrence: 518.06 KM 50.16278°N 98.84212°E

Family: Perlodidae

Arcynopteryx sajanensis Within Known Range? N Nearest Occurrence: 763.34 KM 51.61397°N 100.59972°E

Diura bicaudata Within Known Range? N Nearest Occurrence: 414.17 KM 47.21768°N 99.92824°E

Diura majuscula Within Known Range? Y Nearest Occurrence: 244.00 KM 48.06257°N 97.55064°E

Pictetiella asiatica Within Known Range? N Nearest Occurrence: 761.06 KM 51.65822°N 100.53000°E

Skwala pusilla Within Known Range? N Nearest Occurrence: 903.47 KM 48.51277°N 88.51107°E

**LOE Rating: Probable Total: 5**

Family: Chloroperlidae

Haploperla lepnevae Within Known Range? N Nearest Occurrence: 517.84 KM 49.26170°N 99.88242°E

Family: Perlidae

Agnetina brevipennis Within Known Range? Y Nearest Occurrence: 377.20 KM 48.71968°N 98.65184°E

Agnetina cocandica Within Known Range? Y Nearest Occurrence: 454.31 KM 48.33025°N 92.81616°E

Family: Perlodidae

Arcynopteryx compacta Within Known Range? Y Nearest Occurrence: 496.92 KM 46.92107°N 91.91048°E

Arcynopteryx polaris Within Known Range? Y Nearest Occurrence: 373.30 KM 48.36436°N 98.92737°E

**Basin:** Internal Drainage Basin

**Aimags:** Govi-Altai

**Soums:** Yesonbulag

Freshwater Ecoregion: Western Mongolia

Terrestrial Ecoregion: Altai Montane Forest And Forest Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Possible Total: 8**

Family: Capniidae						
<i>Capnia nigra</i>	Within Known Range?	N	Nearest Occurrence:	243.56 KM	48.06257°N	97.55064°E
Family: Chloroperlidae						
<i>Alaskaperla longidentata</i>	Within Known Range?	N	Nearest Occurrence:	234.44 KM	48.15779°N	97.21441°E
Family: Nemouridae						
<i>Amphinemura standfussi</i>	Within Known Range?	N	Nearest Occurrence:	243.32 KM	48.05989°N	97.55073°E
Family: Perlidae						
<i>Agnetina extrema</i>	Within Known Range?	N	Nearest Occurrence:	492.10 KM	47.50949°N	100.57510°E
Family: Perlodidae						
<i>Isoperla asiatica</i>	Within Known Range?	N	Nearest Occurrence:	243.32 KM	48.05989°N	97.55073°E
<i>Isoperla kozlovi</i>	Within Known Range?	N	Nearest Occurrence:	475.78 KM	47.80440°N	100.31810°E
<i>Isoperla mongolica</i>	Within Known Range?	Y	Nearest Occurrence:	244.00 KM	48.06257°N	97.55064°E
Family: Taeniopterygidae						
<i>Taenionema japonicum</i>	Within Known Range?	N	Nearest Occurrence:	529.72 KM	47.11192°N	101.01048°E

**LOE Rating: Predicted Total: 12**

Family: Capniidae						
<i>Mesocapnia variabilis</i>	Within Known Range?	N	Nearest Occurrence:	373.30 KM	48.36436°N	98.92737°E
Family: Chloroperlidae						
<i>Alloperla deminuta</i>	Within Known Range?	N	Nearest Occurrence:	475.78 KM	47.80440°N	100.31810°E
<i>Alloperla mediata</i>	Within Known Range?	N	Nearest Occurrence:	576.40 KM	50.61826°N	99.12094°E
Family: Nemouridae						
<i>Nemoura arctica</i>	Within Known Range?	N	Nearest Occurrence:	560.27 KM	46.77095°N	91.31664°E
<i>Nemoura sahlbergi</i>	Within Known Range?	N	Nearest Occurrence:	460.32 KM	47.42580°N	100.30130°E
<i>Nemurella pictetii</i>	Within Known Range?	N	Nearest Occurrence:	607.62 KM	50.81265°N	99.33803°E
Family: Perlidae						
<i>Paragnetina flavotincta</i>	Within Known Range?	N	Nearest Occurrence:	517.84 KM	49.26170°N	99.88242°E
Family: Perlodidae						
<i>Isoperla altaica</i>	Within Known Range?	Y	Nearest Occurrence:	511.22 KM	47.33906°N	91.86288°E
<i>Isoperla lunigera</i>	Within Known Range?	N	Nearest Occurrence:	554.17 KM	49.62785°N	99.99523°E
<i>Isoperla obscura</i>	Within Known Range?	N	Nearest Occurrence:	752.92 KM	50.60031°N	101.52392°E
<i>Kaszabia nigricauda</i>	Within Known Range?	N	Nearest Occurrence:	377.20 KM	48.71968°N	98.65184°E
<i>Megarcys ochracea</i>	Within Known Range?	N	Nearest Occurrence:	661.47 KM	51.46205°N	99.19994°E

**LOE Rating: Unlikely Total: 5**

Family: Capniidae						
<i>Capnia khulsbagia</i>	Within Known Range?	N	Nearest Occurrence:	717.99 KM	50.98944°N	100.71944°E
<i>Mesocapnia altaica</i>	Within Known Range?	N	Nearest Occurrence:	859.57 KM	48.43684°N	88.90094°E
Family: Leuctridae						
<i>Leuctra fusca</i>	Within Known Range?	N	Nearest Occurrence:	1,257.15 KM	49.08643°N	107.28952°E
<i>Paraleuctra zapekinae</i>	Within Known Range?	N	Nearest Occurrence:	1,000.27 KM	49.71481°N	104.64203°E
Family: Perlodidae						
<i>Isoperla eximia</i>	Within Known Range?	N	Nearest Occurrence:	1,282.73 KM	49.01829°N	107.54453°E

**Basin:** Internal Drainage Basin  
**Aimags:** Govisumber  
**Soums:** Shiveegovi

**Freshwater Ecoregion:** Inner Mongolia Endorheic Basins  
**Terrestrial Ecoregion:** Mongolian-Manchurian Grassland

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

<b>LOE Rating:</b>	<b>Highly Likely</b>	<b>Total:</b>	<b>4</b>
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<b>Family:</b> Capniidae			
Isocapnia guentheri	Within Known Range? N	Nearest Occurrence:	243.15 KM 47.99158°N 107.46116 °E
Isocapnia sibirica	Within Known Range? N	Nearest Occurrence:	236.89 KM 48.09549°N 107.84265 °E
<b>Family:</b> Chloroperlidae			
Haploperla lepnevae	Within Known Range? N	Nearest Occurrence:	234.29 KM 47.82258°N 107.33613 °E
<b>Family:</b> Perlidae			
Agnetina extrema	Within Known Range? N	Nearest Occurrence:	236.79 KM 48.09671°N 107.84928 °E

<b>LOE Rating:</b>	<b>Likely</b>	<b>Total:</b>	<b>16</b>
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<b>Family:</b> Capniidae			
Isocapnia kudia	Within Known Range? N	Nearest Occurrence:	1,137.87 KM 51.25356°N 99.66687 °E
<b>Family:</b> Chloroperlidae			
Alloperla rostellata	Within Known Range? N	Nearest Occurrence:	682.28 KM 49.77776°N 103.60860 °E
Suwallia kerzhneri	Within Known Range? N	Nearest Occurrence:	251.95 KM 48.12416°N 107.54780 °E
<b>Family:</b> Nemouridae			
Amphinemura borealis	Within Known Range? N	Nearest Occurrence:	234.29 KM 47.82258°N 107.33613 °E
Nemoura cinerea	Within Known Range? N	Nearest Occurrence:	234.13 KM 47.96783°N 107.59278 °E
<b>Family:</b> Perlidae			
Agnetina brevipennis	Within Known Range? N	Nearest Occurrence:	360.61 KM 49.08636°N 107.30750 °E
Agnetina cocandica	Within Known Range? N	Nearest Occurrence:	504.82 KM 49.16354°N 105.18880 °E
Kamimuria exilis	Within Known Range? N	Nearest Occurrence:	1,167.49 KM 50.16278°N 98.84212 °E
<b>Family:</b> Perlodidae			
Arcynopteryx sajanensis	Within Known Range? N	Nearest Occurrence:	1,074.24 KM 51.61397°N 100.59972 °E
Diura bicaudata	Within Known Range? N	Nearest Occurrence:	961.05 KM 47.21768°N 99.92824 °E
Isoperla asiatica	Within Known Range? N	Nearest Occurrence:	233.04 KM 47.82110°N 107.35422 °E
Isoperla obscura	Within Known Range? N	Nearest Occurrence:	411.94 KM 47.85250°N 105.25567 °E
Kaszabia nigricauda	Within Known Range? N	Nearest Occurrence:	234.13 KM 47.96783°N 107.59278 °E
Pictetiella asiatica	Within Known Range? N	Nearest Occurrence:	1,081.46 KM 51.65822°N 100.53000 °E
<b>Family:</b> Pteronarcyidae			
Pteronarcys reticulata	Within Known Range? N	Nearest Occurrence:	360.61 KM 49.08636°N 107.30750 °E
<b>Family:</b> Taeniopterygidae			
Taenionema japonicum	Within Known Range? N	Nearest Occurrence:	361.16 KM 49.05411°N 107.23175 °E

<b>LOE Rating:</b>	<b>Probable</b>	<b>Total:</b>	<b>3</b>
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<b>Family:</b> Leuctridae			
Paraleuctra zapekinae	Within Known Range? N	Nearest Occurrence:	236.79 KM 48.09671°N 107.84928 °E
<b>Family:</b> Perlodidae			
Isoperla kozlovi	Within Known Range? N	Nearest Occurrence:	238.11 KM 48.13111°N 107.92120 °E
Isoperla lunigera	Within Known Range? N	Nearest Occurrence:	233.04 KM 47.82110°N 107.35422 °E



**Basin:** Internal Drainage Basin  
**Aimags:** Govisumber  
**Soums:** Shiveegovi

**Freshwater Ecoregion:** Inner Mongolia Endorheic Basins  
**Terrestrial Ecoregion:** Mongolian-Manchurian Grassland

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

<b>LOE Rating:</b> Possible	<b>Total:</b> 4
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**Family:** Chloroperlidae

Alloperla joosti	Within Known Range? N	Nearest Occurrence: 694.06 KM	49.21675 °N	103.10750 °E
Suwallia teleckojensis	Within Known Range? N	Nearest Occurrence: 250.29 KM	48.16668 °N	107.69548 °E

**Family:** Perlodidae

Isoperla altaica	Within Known Range? N	Nearest Occurrence: 291.31 KM	48.60182 °N	107.84335 °E
Megarcys ochracea	Within Known Range? N	Nearest Occurrence: 239.35 KM	47.97108 °N	107.49534 °E

<b>LOE Rating:</b> Predicted	<b>Total:</b> 17
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**Family:** Capniidae

Capnia nigra	Within Known Range? N	Nearest Occurrence: 1,015.60 KM	50.92452 °N	100.75528 °E
Mesocapnia variabilis	Within Known Range? N	Nearest Occurrence: 269.85 KM	48.42080 °N	107.91406 °E

**Family:** Chloroperlidae

Alaskaperla longidentata	Within Known Range? N	Nearest Occurrence: 237.60 KM	48.07956 °N	107.77729 °E
Alloperla deminuta	Within Known Range? N	Nearest Occurrence: 234.13 KM	47.96783 °N	107.59278 °E
Alloperla mediata	Within Known Range? N	Nearest Occurrence: 682.28 KM	49.77776 °N	103.60860 °E

**Family:** Leuctridae

Leuctra fusca	Within Known Range? N	Nearest Occurrence: 361.36 KM	49.08643 °N	107.28952 °E
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**Family:** Nemouridae

Amphinemura standfussi	Within Known Range? N	Nearest Occurrence: 418.03 KM	49.73130 °N	107.63484 °E
Nemoura arctica	Within Known Range? N	Nearest Occurrence: 237.32 KM	48.09549 °N	107.84265 °E
Nemoura sahlbergi	Within Known Range? N	Nearest Occurrence: 247.89 KM	48.21780 °N	107.90392 °E

**Family:** Perlidae

Paragnetina flavotincta	Within Known Range? N	Nearest Occurrence: 503.91 KM	49.16354 °N	105.18880 °E
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**Family:** Perlodidae

Arcynopteryx compacta	Within Known Range? N	Nearest Occurrence: 224.22 KM	47.84324 °N	107.55299 °E
Arcynopteryx polaris	Within Known Range? N	Nearest Occurrence: 269.85 KM	48.42080 °N	107.91406 °E
Diura majuscula	Within Known Range? N	Nearest Occurrence: 237.22 KM	48.09671 °N	107.84928 °E
Isoperla eximia	Within Known Range? N	Nearest Occurrence: 290.79 KM	48.60182 °N	107.84335 °E
Isoperla mongolica	Within Known Range? N	Nearest Occurrence: 237.32 KM	48.09549 °N	107.84265 °E
Isoperla potanini	Within Known Range? N	Nearest Occurrence: 740.26 KM	46.73093 °N	101.88583 °E
Skwala pusilla	Within Known Range? N	Nearest Occurrence: 2,236.38 KM	48.51277 °N	88.51107 °E

<b>LOE Rating:</b> Unlikely	<b>Total:</b> 3
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**Family:** Capniidae

Capnia khulsbagia	Within Known Range? N	Nearest Occurrence: 1,022.81 KM	50.98944 °N	100.71944 °E
Mesocapnia altaica	Within Known Range? N	Nearest Occurrence: 2,192.40 KM	48.43684 °N	88.90094 °E

**Family:** Nemouridae

Nemurella pictetii	Within Known Range? N	Nearest Occurrence: 1,124.16 KM	51.07896 °N	99.70857 °E
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**Basin:** Internal Drainage Basin  
**Aimag:** Govisumber  
**Soum:** Sumber

**Freshwater Ecoregion:** Inner Mongolia Endorheic Basins  
**Terrestrial Ecoregion:** Mongolian-Manchurian Grassland

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

<b>LOE Rating:</b>	<b>Highly Likely</b>	<b>Total:</b>	<b>12</b>
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**Family:** Capniidae

Isocapnia guentheri	<b>Within Known Range?</b> N	<b>Nearest Occurrence:</b> 209.30 KM	48.24734 °N	107.90589 °E
Isocapnia guentheri	<b>Within Known Range?</b> N	<b>Nearest Occurrence:</b> 209.30 KM	48.24734 °N	107.90589 °E
Isocapnia sibirica	<b>Within Known Range?</b> N	<b>Nearest Occurrence:</b> 196.97 KM	48.09549 °N	107.84265 °E
Isocapnia sibirica	<b>Within Known Range?</b> N	<b>Nearest Occurrence:</b> 196.97 KM	48.09549 °N	107.84265 °E

**Family:** Chloroperlidae

Haploperla lepnevae	<b>Within Known Range?</b> N	<b>Nearest Occurrence:</b> 205.49 KM	47.82258 °N	107.33613 °E
Haploperla lepnevae	<b>Within Known Range?</b> N	<b>Nearest Occurrence:</b> 205.49 KM	47.82258 °N	107.33613 °E
Suwallia kerzhneri	<b>Within Known Range?</b> N	<b>Nearest Occurrence:</b> 216.37 KM	48.12416 °N	107.54780 °E
Suwallia kerzhneri	<b>Within Known Range?</b> N	<b>Nearest Occurrence:</b> 216.37 KM	48.12416 °N	107.54780 °E

**Family:** Perlidae

Agnetina extrema	<b>Within Known Range?</b> N	<b>Nearest Occurrence:</b> 196.76 KM	48.09671 °N	107.84928 °E
Agnetina extrema	<b>Within Known Range?</b> N	<b>Nearest Occurrence:</b> 196.76 KM	48.09671 °N	107.84928 °E

**Family:** Pteronarcyidae

Pteronarcys reticulata	<b>Within Known Range?</b> N	<b>Nearest Occurrence:</b> 321.94 KM	49.08636 °N	107.30750 °E
Pteronarcys reticulata	<b>Within Known Range?</b> N	<b>Nearest Occurrence:</b> 321.94 KM	49.08636 °N	107.30750 °E





**Basin:** Internal Drainage Basin  
**Aimags:** Govisumber  
**Soums:** Sumber

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**Freshwater Ecoregion:** Inner Mongolia Endorheic Basins  
**Terrestrial Ecoregion:** Mongolian-Manchurian Grassland

<b>LOE Rating:</b>	<b>Likely</b>	<b>Total:</b>	30
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<b>Family: Capniidae</b>			
Isocapnia kudia	Within Known Range? N	Nearest Occurrence: 1,126.89 KM	51.25356 °N 99.66687 °E
Isocapnia kudia	Within Known Range? N	Nearest Occurrence: 1,126.89 KM	51.25356 °N 99.66687 °E
<b>Family: Chloroperlidae</b>			
Alloperla rostellata	Within Known Range? N	Nearest Occurrence: 666.16 KM	49.77776 °N 103.60860 °E
Alloperla rostellata	Within Known Range? N	Nearest Occurrence: 666.16 KM	49.77776 °N 103.60860 °E
<b>Family: Leuctridae</b>			
Paraleuctra zapekinae	Within Known Range? N	Nearest Occurrence: 196.76 KM	48.09671 °N 107.84928 °E
Paraleuctra zapekinae	Within Known Range? N	Nearest Occurrence: 196.76 KM	48.09671 °N 107.84928 °E
<b>Family: Nemouridae</b>			
Amphinemura borealis	Within Known Range? N	Nearest Occurrence: 205.49 KM	47.82258 °N 107.33613 °E
Amphinemura borealis	Within Known Range? N	Nearest Occurrence: 205.49 KM	47.82258 °N 107.33613 °E
Nemoura cinerea	Within Known Range? N	Nearest Occurrence: 199.30 KM	47.96783 °N 107.59278 °E
Nemoura cinerea	Within Known Range? N	Nearest Occurrence: 199.30 KM	47.96783 °N 107.59278 °E
<b>Family: Perlidae</b>			
Agnetina brevipennis	Within Known Range? N	Nearest Occurrence: 321.94 KM	49.08636 °N 107.30750 °E
Agnetina brevipennis	Within Known Range? N	Nearest Occurrence: 321.94 KM	49.08636 °N 107.30750 °E
Agnetina cocandica	Within Known Range? N	Nearest Occurrence: 483.70 KM	50.06476 °N 106.13388 °E
Agnetina cocandica	Within Known Range? N	Nearest Occurrence: 483.70 KM	50.06476 °N 106.13388 °E
Kamimuria exilis	Within Known Range? N	Nearest Occurrence: 1,163.09 KM	50.16278 °N 98.84212 °E
<b>Family: Perlodidae</b>			
Arcynopteryx sajanensis	Within Known Range? N	Nearest Occurrence: 1,059.24 KM	51.61397 °N 100.59972 °E
Diura bicaudata	Within Known Range? N	Nearest Occurrence: 970.59 KM	47.21768 °N 99.92824 °E
Diura bicaudata	Within Known Range? N	Nearest Occurrence: 970.59 KM	47.21768 °N 99.92824 °E
Isoperla asiatica	Within Known Range? N	Nearest Occurrence: 199.30 KM	47.96783 °N 107.59278 °E
Isoperla asiatica	Within Known Range? N	Nearest Occurrence: 199.30 KM	47.96783 °N 107.59278 °E
Isoperla kozlovi	Within Known Range? N	Nearest Occurrence: 196.79 KM	48.13111 °N 107.92120 °E
Isoperla kozlovi	Within Known Range? N	Nearest Occurrence: 196.79 KM	48.13111 °N 107.92120 °E
Isoperla lunigera	Within Known Range? N	Nearest Occurrence: 196.97 KM	48.09549 °N 107.84265 °E
Isoperla lunigera	Within Known Range? N	Nearest Occurrence: 196.97 KM	48.09549 °N 107.84265 °E
Kaszabia nigricauda	Within Known Range? N	Nearest Occurrence: 196.76 KM	48.09671 °N 107.84928 °E
Kaszabia nigricauda	Within Known Range? N	Nearest Occurrence: 196.76 KM	48.09671 °N 107.84928 °E
Pictetiella asiatica	Within Known Range? N	Nearest Occurrence: 1,066.50 KM	51.65822 °N 100.53000 °E
Pictetiella asiatica	Within Known Range? N	Nearest Occurrence: 1,066.50 KM	51.65822 °N 100.53000 °E
<b>Family: Taeniopterygidae</b>			
Taenionema japonicum	Within Known Range? N	Nearest Occurrence: 323.35 KM	49.05411 °N 107.23175 °E
Taenionema japonicum	Within Known Range? N	Nearest Occurrence: 323.35 KM	49.05411 °N 107.23175 °E



**Basin:** Internal Drainage Basin

**Aimag:** Govisumber

**Soum:** Sumber

Freshwater Ecoregion: Inner Mongolia Endorheic Basins

Terrestrial Ecoregion: Mongolian-Manchurian Grassland

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

<b>LOE Rating:</b> Probable	<b>Total:</b> 6
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Family: Chloroperlidae

Alloperla joosti

Within Known Range? N Nearest Occurrence: 683.94 KM 49.21675 °N 103.10750 °E

Alloperla joosti

Within Known Range? N Nearest Occurrence: 683.94 KM 49.21675 °N 103.10750 °E

Family: Perlodidae

Isoperla obscura

Within Known Range? N Nearest Occurrence: 404.44 KM 47.85250 °N 105.25567 °E

Isoperla obscura

Within Known Range? N Nearest Occurrence: 404.44 KM 47.85250 °N 105.25567 °E

Megarcys ochracea

Within Known Range? N Nearest Occurrence: 206.10 KM 47.97108 °N 107.49534 °E

Megarcys ochracea

Within Known Range? N Nearest Occurrence: 206.10 KM 47.97108 °N 107.49534 °E

<b>LOE Rating:</b> Possible	<b>Total:</b> 2
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Family: Chloroperlidae

Suwallia teleckojensis

Within Known Range? N Nearest Occurrence: 212.06 KM 48.16668 °N 107.69548 °E

Suwallia teleckojensis

Within Known Range? N Nearest Occurrence: 212.06 KM 48.16668 °N 107.69548 °E

**Basin:** Internal Drainage Basin  
**Aimags:** Govisumber  
**Soums:** Sumber

Freshwater Ecoregion: Inner Mongolia Endorheic Basins  
 Terrestrial Ecoregion: Mongolian-Manchurian Grassland

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

<b>LOE Rating:</b>	<b>Predicted</b>	<b>Total:</b>	<b>36</b>
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**Family:** Capniidae

Capnia nigra	Within Known Range? N	Nearest Occurrence: 1,003.29 KM	50.92452 °N	100.75528 °E
Capnia nigra	Within Known Range? N	Nearest Occurrence: 1,003.29 KM	50.92452 °N	100.75528 °E
Mesocapnia variabilis	Within Known Range? N	Nearest Occurrence: 227.22 KM	48.42080 °N	107.91406 °E
Mesocapnia variabilis	Within Known Range? N	Nearest Occurrence: 227.22 KM	48.42080 °N	107.91406 °E

**Family:** Chloroperlidae

Alaskaperla longidentata	Within Known Range? N	Nearest Occurrence: 198.80 KM	48.07956 °N	107.77729 °E
Alaskaperla longidentata	Within Known Range? N	Nearest Occurrence: 198.80 KM	48.07956 °N	107.77729 °E
Alloperla deminuta	Within Known Range? N	Nearest Occurrence: 197.25 KM	48.09694 °N	107.83988 °E
Alloperla deminuta	Within Known Range? N	Nearest Occurrence: 197.25 KM	48.09694 °N	107.83988 °E
Alloperla mediata	Within Known Range? N	Nearest Occurrence: 666.16 KM	49.77776 °N	103.60860 °E
Alloperla mediata	Within Known Range? N	Nearest Occurrence: 666.16 KM	49.77776 °N	103.60860 °E

**Family:** Leuctridae

Leuctra fusca	Within Known Range? N	Nearest Occurrence: 322.88 KM	49.08643 °N	107.28952 °E
Leuctra fusca	Within Known Range? N	Nearest Occurrence: 322.88 KM	49.08643 °N	107.28952 °E

**Family:** Nemouridae

Amphinemura standfussi	Within Known Range? N	Nearest Occurrence: 374.47 KM	49.73130 °N	107.63484 °E
Amphinemura standfussi	Within Known Range? N	Nearest Occurrence: 374.47 KM	49.73130 °N	107.63484 °E
Nemoura arctica	Within Known Range? N	Nearest Occurrence: 197.32 KM	48.09549 °N	107.84265 °E
Nemoura arctica	Within Known Range? N	Nearest Occurrence: 197.32 KM	48.09549 °N	107.84265 °E
Nemoura sahlbergi	Within Known Range? N	Nearest Occurrence: 206.37 KM	48.21780 °N	107.90392 °E
Nemoura sahlbergi	Within Known Range? N	Nearest Occurrence: 206.37 KM	48.21780 °N	107.90392 °E

**Family:** Perlidae

Paragnetina flavotincta	Within Known Range? N	Nearest Occurrence: 482.83 KM	50.06476 °N	106.13388 °E
Paragnetina flavotincta	Within Known Range? N	Nearest Occurrence: 482.83 KM	50.06476 °N	106.13388 °E

**Family:** Perlodidae

Arcynopteryx compacta	Within Known Range? N	Nearest Occurrence: 191.37 KM	47.84324 °N	107.55299 °E
Arcynopteryx compacta	Within Known Range? N	Nearest Occurrence: 191.37 KM	47.84324 °N	107.55299 °E
Arcynopteryx polaris	Within Known Range? N	Nearest Occurrence: 227.22 KM	48.42080 °N	107.91406 °E
Arcynopteryx polaris	Within Known Range? N	Nearest Occurrence: 227.22 KM	48.42080 °N	107.91406 °E
Diura majuscula	Within Known Range? N	Nearest Occurrence: 197.11 KM	48.09671 °N	107.84928 °E
Diura majuscula	Within Known Range? N	Nearest Occurrence: 197.11 KM	48.09671 °N	107.84928 °E
Isoperla altaica	Within Known Range? N	Nearest Occurrence: 248.83 KM	48.60182 °N	107.84335 °E
Isoperla altaica	Within Known Range? N	Nearest Occurrence: 248.83 KM	48.60182 °N	107.84335 °E
Isoperla eximia	Within Known Range? N	Nearest Occurrence: 248.39 KM	48.60182 °N	107.84335 °E
Isoperla eximia	Within Known Range? N	Nearest Occurrence: 248.39 KM	48.60182 °N	107.84335 °E
Isoperla mongolica	Within Known Range? N	Nearest Occurrence: 197.32 KM	48.09549 °N	107.84265 °E
Isoperla mongolica	Within Known Range? N	Nearest Occurrence: 197.32 KM	48.09549 °N	107.84265 °E
Isoperla potanini	Within Known Range? N	Nearest Occurrence: 751.88 KM	46.73093 °N	101.88583 °E
Isoperla potanini	Within Known Range? N	Nearest Occurrence: 751.88 KM	46.73093 °N	101.88583 °E
Skwala pusilla	Within Known Range? N	Nearest Occurrence: 2,245.74 KM	48.51277 °N	88.51107 °E
Skwala pusilla	Within Known Range? N	Nearest Occurrence: 2,245.74 KM	48.51277 °N	88.51107 °E



**Basin:** Internal Drainage Basin

**Aimag:** Govisumber

**Soum:** Sumber

Freshwater Ecoregion: Inner Mongolia Endorheic Basins

Terrestrial Ecoregion: Mongolian-Manchurian Grassland

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

<b>LOE Rating:</b> Unlikely	<b>Total:</b> 6
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Family: Capniidae

Capnia khulsbagia

Within Known Range? N Nearest Occurrence: 1,010.29 KM 50.98944 °N 100.71944 °E

Capnia khulsbagia

Within Known Range? N Nearest Occurrence: 1,010.29 KM 50.98944 °N 100.71944 °E

Mesocapnia altaica

Within Known Range? N Nearest Occurrence: 2,201.85 KM 48.43684 °N 88.90094 °E

Mesocapnia altaica

Within Known Range? N Nearest Occurrence: 2,201.85 KM 48.43684 °N 88.90094 °E

Family: Nemouridae

Nemurella pictetii

Within Known Range? N Nearest Occurrence: 1,113.85 KM 51.07896 °N 99.70857 °E

Nemurella pictetii

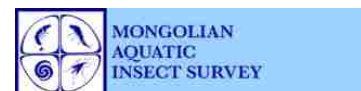
Within Known Range? N Nearest Occurrence: 1,113.85 KM 51.07896 °N 99.70857 °E

Research funded by the National Science Foundation

DEB-BSI #0206674: A Survey of the Aquatic Insects of the Selenge River Basin. P.I.'s: JKGelhaus, JCMorse, BHayford.

DEB # 0743732: Aquatic Insects of the Altai and Hangai Mountain Drainages. P.I.'s: JKGelhaus, JCMorse, CRNelson.

<http://clade.ansp.org/entomology/mongolia/index.html>



**Basin:** Internal Drainage Basin  
**Aimag:** Khentii  
**Soum:** Galshar

**Freshwater Ecoregion:** Inner Mongolia Endorheic Basins  
**Terrestrial Ecoregion:** Mongolian-Manchurian Grassland

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

<b>LOE Rating:</b>	<b>Highly Likely</b>	<b>Total:</b>	<b>14</b>
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**Family:** Capniidae

Isocapnia guentheri	Within Known Range? N	Nearest Occurrence:	371.79 KM	48.24734 °N	107.90589 °E
Isocapnia guentheri	Within Known Range? N	Nearest Occurrence:	371.79 KM	48.24734 °N	107.90589 °E
Isocapnia sibirica	Within Known Range? N	Nearest Occurrence:	369.76 KM	48.09549 °N	107.84265 °E
Isocapnia sibirica	Within Known Range? N	Nearest Occurrence:	369.76 KM	48.09549 °N	107.84265 °E

**Family:** Chloroperlidae

Alloperla rostellata	Within Known Range? N	Nearest Occurrence:	874.34 KM	49.77776 °N	103.60860 °E
Alloperla rostellata	Within Known Range? N	Nearest Occurrence:	874.34 KM	49.77776 °N	103.60860 °E
Haploperla lepnevae	Within Known Range? N	Nearest Occurrence:	409.00 KM	47.82258 °N	107.33613 °E
Haploperla lepnevae	Within Known Range? N	Nearest Occurrence:	409.00 KM	47.82258 °N	107.33613 °E
Suwallia kerzhneri	Within Known Range? N	Nearest Occurrence:	400.43 KM	48.12416 °N	107.54780 °E
Suwallia kerzhneri	Within Known Range? N	Nearest Occurrence:	400.43 KM	48.12416 °N	107.54780 °E

**Family:** Perlidae

Agnetina extrema	Within Known Range? N	Nearest Occurrence:	369.17 KM	48.09671 °N	107.84928 °E
Agnetina extrema	Within Known Range? N	Nearest Occurrence:	369.17 KM	48.09671 °N	107.84928 °E

**Family:** Pteronarcyidae

Pteronarcys reticulata	Within Known Range? N	Nearest Occurrence:	478.48 KM	49.08636 °N	107.30750 °E
Pteronarcys reticulata	Within Known Range? N	Nearest Occurrence:	478.48 KM	49.08636 °N	107.30750 °E



**Basin:** Internal Drainage Basin  
**Aimags:** Khentii  
**Soums:** Galshar

**Freshwater Ecoregion:** Inner Mongolia Endorheic Basins  
**Terrestrial Ecoregion:** Mongolian-Manchurian Grassland

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

<b>LOE Rating:</b> Likely	<b>Total:</b> 26
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<b>Family:</b> Capniidae					
Isocapnia kudia	Within Known Range? N	Nearest Occurrence:	1,340.92 KM	51.25356 °N	99.66687 °E
Isocapnia kudia	Within Known Range? N	Nearest Occurrence:	1,340.92 KM	51.25356 °N	99.66687 °E
<b>Family:</b> Leuctridae					
Paraleuctra zapekinae	Within Known Range? N	Nearest Occurrence:	365.70 KM	48.14846 °N	107.91267 °E
Paraleuctra zapekinae	Within Known Range? N	Nearest Occurrence:	365.70 KM	48.14846 °N	107.91267 °E
<b>Family:</b> Nemouridae					
Amphinemura borealis	Within Known Range? N	Nearest Occurrence:	409.00 KM	47.82258 °N	107.33613 °E
Amphinemura borealis	Within Known Range? N	Nearest Occurrence:	409.00 KM	47.82258 °N	107.33613 °E
Nemoura cinerea	Within Known Range? N	Nearest Occurrence:	388.61 KM	47.96783 °N	107.59278 °E
Nemoura cinerea	Within Known Range? N	Nearest Occurrence:	388.61 KM	47.96783 °N	107.59278 °E
<b>Family:</b> Perlidae					
Agnetina brevipennis	Within Known Range? N	Nearest Occurrence:	478.48 KM	49.08636 °N	107.30750 °E
Agnetina brevipennis	Within Known Range? N	Nearest Occurrence:	478.48 KM	49.08636 °N	107.30750 °E
Agnetina cocandica	Within Known Range? N	Nearest Occurrence:	648.97 KM	50.06476 °N	106.13388 °E
Agnetina cocandica	Within Known Range? N	Nearest Occurrence:	648.97 KM	50.06476 °N	106.13388 °E
Kamimuria exilis	Within Known Range? N	Nearest Occurrence:	1,388.47 KM	50.16278 °N	98.84212 °E
<b>Family:</b> Perlodidae					
Arcynopteryx sajanensis	Within Known Range? N	Nearest Occurrence:	1,265.73 KM	51.61397 °N	100.59972 °E
Isoperla asiatica	Within Known Range? N	Nearest Occurrence:	388.61 KM	47.96783 °N	107.59278 °E
Isoperla asiatica	Within Known Range? N	Nearest Occurrence:	388.61 KM	47.96783 °N	107.59278 °E
Isoperla kozlovi	Within Known Range? N	Nearest Occurrence:	363.94 KM	48.13111 °N	107.92120 °E
Isoperla kozlovi	Within Known Range? N	Nearest Occurrence:	363.94 KM	48.13111 °N	107.92120 °E
Isoperla lunigera	Within Known Range? N	Nearest Occurrence:	369.76 KM	48.09549 °N	107.84265 °E
Isoperla lunigera	Within Known Range? N	Nearest Occurrence:	369.76 KM	48.09549 °N	107.84265 °E
Kaszabia nigricauda	Within Known Range? N	Nearest Occurrence:	369.17 KM	48.09671 °N	107.84928 °E
Kaszabia nigricauda	Within Known Range? N	Nearest Occurrence:	369.17 KM	48.09671 °N	107.84928 °E
Megarcys ochracea	Within Known Range? N	Nearest Occurrence:	398.67 KM	47.97108 °N	107.49534 °E
Megarcys ochracea	Within Known Range? N	Nearest Occurrence:	398.67 KM	47.97108 °N	107.49534 °E
Pictetiella asiatica	Within Known Range? N	Nearest Occurrence:	1,272.57 KM	51.65822 °N	100.53000 °E
Pictetiella asiatica	Within Known Range? N	Nearest Occurrence:	1,272.57 KM	51.65822 °N	100.53000 °E

<b>LOE Rating:</b> Probable	<b>Total:</b> 4
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<b>Family:</b> Chloroperlidae					
Suwallia teleckojensis	Within Known Range? N	Nearest Occurrence:	381.82 KM	48.42080 °N	107.91406 °E
Suwallia teleckojensis	Within Known Range? N	Nearest Occurrence:	381.82 KM	48.42080 °N	107.91406 °E
<b>Family:</b> Taeniopterygidae					
Taenionema japonicum	Within Known Range? N	Nearest Occurrence:	484.12 KM	49.05411 °N	107.23175 °E
Taenionema japonicum	Within Known Range? N	Nearest Occurrence:	484.12 KM	49.05411 °N	107.23175 °E



**Basin:** Internal Drainage Basin

**Aimag:** Khentii

**Soum:** Galshar

Freshwater Ecoregion: Inner Mongolia Endorheic Basins

Terrestrial Ecoregion: Mongolian-Manchurian Grassland

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

<b>LOE Rating:</b>	<b>Possible</b>	<b>Total:</b>	<b>8</b>
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Family: Chloroperlidae

Alloperla deminuta

Within Known Range? N Nearest Occurrence: 365.70 KM 48.14846 °N 107.91267 °E

Alloperla deminuta

Within Known Range? N Nearest Occurrence: 365.70 KM 48.14846 °N 107.91267 °E

Alloperla joosti

Within Known Range? N Nearest Occurrence: 903.10 KM 49.21675 °N 103.10750 °E

Alloperla joosti

Within Known Range? N Nearest Occurrence: 903.10 KM 49.21675 °N 103.10750 °E

Family: Perlodidae

Diura bicaudata

Within Known Range? N Nearest Occurrence: 1,208.48 KM 47.21768 °N 99.92824 °E

Diura bicaudata

Within Known Range? N Nearest Occurrence: 1,208.48 KM 47.21768 °N 99.92824 °E

Isoperla obscura

Within Known Range? N Nearest Occurrence: 578.67 KM 49.72192 °N 106.65562 °E

Isoperla obscura

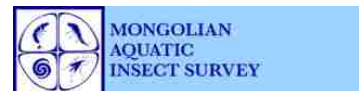
Within Known Range? N Nearest Occurrence: 578.67 KM 49.72192 °N 106.65562 °E

Research funded by the National Science Foundation

DEB-BSI #0206674: A Survey of the Aquatic Insects of the Selenge River Basin. P.I.'s: JKGelhaus, JCMorse, BHayford.

DEB # 0743732: Aquatic Insects of the Altai and Hangai Mountain Drainages. P.I.'s: JKGelhaus, JCMorse, CRNelson.

<http://clade.ansp.org/entomology/mongolia/index.html>



**Basin:** Internal Drainage Basin  
**Aimag:** Khentii  
**Soum:** Galshar

**Freshwater Ecoregion:** Inner Mongolia Endorheic Basins  
**Terrestrial Ecoregion:** Mongolian-Manchurian Grassland

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

<b>LOE Rating:</b>	<b>Predicted</b>	<b>Total:</b>	<b>34</b>
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**Family:** Capniidae

Capnia nigra	Within Known Range? N	Nearest Occurrence: 1,215.49 KM	50.92452 °N	100.75528 °E
Capnia nigra	Within Known Range? N	Nearest Occurrence: 1,215.49 KM	50.92452 °N	100.75528 °E
Mesocapnia variabilis	Within Known Range? N	Nearest Occurrence: 381.82 KM	48.42080 °N	107.91406 °E
Mesocapnia variabilis	Within Known Range? N	Nearest Occurrence: 381.82 KM	48.42080 °N	107.91406 °E

**Family:** Chloroperlidae

Alaskaperla longidentata	Within Known Range? N	Nearest Occurrence: 365.70 KM	48.14846 °N	107.91267 °E
Alaskaperla longidentata	Within Known Range? N	Nearest Occurrence: 365.70 KM	48.14846 °N	107.91267 °E
Alloperla mediata	Within Known Range? N	Nearest Occurrence: 874.34 KM	49.77776 °N	103.60860 °E
Alloperla mediata	Within Known Range? N	Nearest Occurrence: 874.34 KM	49.77776 °N	103.60860 °E

**Family:** Leuctridae

Leuctra fusca	Within Known Range? N	Nearest Occurrence: 480.10 KM	49.08643 °N	107.28952 °E
Leuctra fusca	Within Known Range? N	Nearest Occurrence: 480.10 KM	49.08643 °N	107.28952 °E

**Family:** Nemouridae

Amphinemura standfussi	Within Known Range? N	Nearest Occurrence: 497.51 KM	49.73130 °N	107.63484 °E
Amphinemura standfussi	Within Known Range? N	Nearest Occurrence: 497.51 KM	49.73130 °N	107.63484 °E
Nemoura arctica	Within Known Range? N	Nearest Occurrence: 364.92 KM	48.13287 °N	107.91890 °E
Nemoura arctica	Within Known Range? N	Nearest Occurrence: 364.92 KM	48.13287 °N	107.91890 °E
Nemoura sahlbergi	Within Known Range? N	Nearest Occurrence: 370.33 KM	48.21780 °N	107.90392 °E
Nemoura sahlbergi	Within Known Range? N	Nearest Occurrence: 370.33 KM	48.21780 °N	107.90392 °E

**Family:** Perlidae

Paragnetina flavotincta	Within Known Range? N	Nearest Occurrence: 647.81 KM	50.06476 °N	106.13388 °E
Paragnetina flavotincta	Within Known Range? N	Nearest Occurrence: 647.81 KM	50.06476 °N	106.13388 °E

**Family:** Perlodidae

Arcynopteryx compacta	Within Known Range? N	Nearest Occurrence: 388.03 KM	47.84324 °N	107.55299 °E
Arcynopteryx compacta	Within Known Range? N	Nearest Occurrence: 388.03 KM	47.84324 °N	107.55299 °E
Arcynopteryx polaris	Within Known Range? N	Nearest Occurrence: 381.82 KM	48.42080 °N	107.91406 °E
Arcynopteryx polaris	Within Known Range? N	Nearest Occurrence: 381.82 KM	48.42080 °N	107.91406 °E
Diura majuscula	Within Known Range? N	Nearest Occurrence: 364.92 KM	48.13287 °N	107.91890 °E
Diura majuscula	Within Known Range? N	Nearest Occurrence: 364.92 KM	48.13287 °N	107.91890 °E
Isoperla altaica	Within Known Range? N	Nearest Occurrence: 399.56 KM	48.60182 °N	107.84335 °E
Isoperla altaica	Within Known Range? N	Nearest Occurrence: 399.56 KM	48.60182 °N	107.84335 °E
Isoperla eximia	Within Known Range? N	Nearest Occurrence: 398.84 KM	48.60182 °N	107.84335 °E
Isoperla eximia	Within Known Range? N	Nearest Occurrence: 398.84 KM	48.60182 °N	107.84335 °E
Isoperla mongolica	Within Known Range? N	Nearest Occurrence: 370.43 KM	48.09549 °N	107.84265 °E
Isoperla mongolica	Within Known Range? N	Nearest Occurrence: 370.43 KM	48.09549 °N	107.84265 °E
Isoperla potanini	Within Known Range? N	Nearest Occurrence: 990.92 KM	46.73093 °N	101.88583 °E
Isoperla potanini	Within Known Range? N	Nearest Occurrence: 990.92 KM	46.73093 °N	101.88583 °E
Skwala pusilla	Within Known Range? N	Nearest Occurrence: 2,483.08 KM	48.51277 °N	88.51107 °E
Skwala pusilla	Within Known Range? N	Nearest Occurrence: 2,483.08 KM	48.51277 °N	88.51107 °E





**Basin:** Internal Drainage Basin  
**Aimag:** Khentii  
**Soum:** Galshar

Freshwater Ecoregion: Inner Mongolia Endorheic Basins  
 Terrestrial Ecoregion: Mongolian-Manchurian Grassland

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

<b>LOE Rating:</b>	<b>Unlikely</b>	<b>Total:</b>	<b>6</b>
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**Family:** Capniidae

Capnia khulsbagia	<b>Within Known Range?</b> N	<b>Nearest Occurrence:</b> 1,222.02 KM	50.98944 °N	100.71944 °E
Capnia khulsbagia	<b>Within Known Range?</b> N	<b>Nearest Occurrence:</b> 1,222.02 KM	50.98944 °N	100.71944 °E
Mesocapnia altaica	<b>Within Known Range?</b> N	<b>Nearest Occurrence:</b> 2,439.24 KM	48.43684 °N	88.90094 °E
Mesocapnia altaica	<b>Within Known Range?</b> N	<b>Nearest Occurrence:</b> 2,439.24 KM	48.43684 °N	88.90094 °E

**Family:** Nemouridae

Nemurella pictetii	<b>Within Known Range?</b> N	<b>Nearest Occurrence:</b> 1,329.21 KM	51.07896 °N	99.70857 °E
Nemurella pictetii	<b>Within Known Range?</b> N	<b>Nearest Occurrence:</b> 1,329.21 KM	51.07896 °N	99.70857 °E



**Basin:** Internal Drainage Basin  
**Aimag:** Khovd  
**Soum:** Altai

**Freshwater Ecoregion:** Upper Irtysh  
**Terrestrial Ecoregion:** Junggar Basin Semi-Desert

**WQM Sites:**

WQM Sites: # 116 (Angirt River @ N 46.09778° E 92.9289°) # 117 (Bodonch River @ N 46.03125° E 92.5382°)

**LOE Rating: Highly Likely Total: 3**

Family: Chloroperlidae					
Suwallia teleckojensis	Within Known Range? Y	Nearest Occurrence:	87.54 KM	46.26026°N	92.07248°E
Family: Perlidae					
Agnetina cocandica	Within Known Range? Y	Nearest Occurrence:	78.07 KM	46.12479°N	92.05382°E
Family: Perlodidae					
Isoperla potanini	Within Known Range? Y	Nearest Occurrence:	87.68 KM	46.26136°N	92.07183°E

**LOE Rating: Likely Total: 15**

Family: Capniidae					
Isocapnia guentheri	Within Known Range? N	Nearest Occurrence:	708.72 KM	48.61518°N	98.23096°E
Isocapnia kudia	Within Known Range? N	Nearest Occurrence:	1,003.06 KM	51.25356°N	99.66687°E
Isocapnia sibirica	Within Known Range? N	Nearest Occurrence:	973.04 KM	47.28244°N	101.18793°E
Family: Chloroperlidae					
Alloperla rostellata	Within Known Range? N	Nearest Occurrence:	766.68 KM	48.36436°N	98.92737°E
Haploperla lepnevae	Within Known Range? N	Nearest Occurrence:	470.14 KM	48.97819°N	89.94996°E
Family: Perlidae					
Agnetina brevipennis	Within Known Range? Y	Nearest Occurrence:	145.29 KM	46.28532°N	91.42793°E
Kamimuria exilis	Within Known Range? N	Nearest Occurrence:	858.58 KM	50.16278°N	98.84212°E
Family: Perlodidae					
Arcynopteryx compacta	Within Known Range? Y	Nearest Occurrence:	126.72 KM	46.13371°N	91.54083°E
Arcynopteryx sajanensis	Within Known Range? N	Nearest Occurrence:	1,111.60 KM	51.61397°N	100.59972°E
Diura bicaudata	Within Known Range? N	Nearest Occurrence:	514.08 KM	49.04180°N	89.41675°E
Diura majuscula	Within Known Range? N	Nearest Occurrence:	198.74 KM	47.24104°N	91.75287°E
Isoperla altaica	Within Known Range? Y	Nearest Occurrence:	126.72 KM	46.13371°N	91.54083°E
Isoperla mongolica	Within Known Range? Y	Nearest Occurrence:	126.72 KM	46.13371°N	91.54083°E
Pictetiella asiatica	Within Known Range? N	Nearest Occurrence:	1,106.36 KM	51.65822°N	100.53000°E
Skwala pusilla	Within Known Range? N	Nearest Occurrence:	551.49 KM	48.51277°N	88.51107°E

**LOE Rating: Probable Total: 4**

Family: Nemouridae					
Amphinemura borealis	Within Known Range? N	Nearest Occurrence:	229.95 KM	47.03925°N	91.03419°E
Nemoura arctica	Within Known Range? N	Nearest Occurrence:	187.07 KM	46.77095°N	91.31664°E
Nemoura cinerea	Within Known Range? N	Nearest Occurrence:	613.67 KM	48.06257°N	97.55064°E
Family: Perlodidae					
Arcynopteryx polaris	Within Known Range? N	Nearest Occurrence:	114.05 KM	46.61982°N	92.22981°E

**Basin:** Internal Drainage Basin  
**Aimags:** Khovd  
**Soums:** Altai

**Freshwater Ecoregion:** Upper Irtysh  
**Terrestrial Ecoregion:** Junggar Basin Semi-Desert

**WQM Sites:**

WQM Sites: # 116 (Angirt River @ N 46.09778° E 92.9289°) # 117 (Bodonch River @ N 46.03125° E 92.5382°)

**LOE Rating: Possible Total: 6**

<b>Family: Chloroperlidae</b>		
Alloperla joosti	Within Known Range? N	Nearest Occurrence: 608.85 KM 48.24995°N 97.40627°E
Suwallia kerzhneri	Within Known Range? N	Nearest Occurrence: 608.85 KM 48.24995°N 97.40627°E
<b>Family: Perlodidae</b>		
Isoperla asiatica	Within Known Range? N	Nearest Occurrence: 613.55 KM 48.05989°N 97.55073°E
Isoperla obscura	Within Known Range? N	Nearest Occurrence: 470.14 KM 48.97819°N 89.94996°E
<b>Family: Pteronarcyidae</b>		
Pteronarcys reticulata	Within Known Range? N	Nearest Occurrence: 892.08 KM 47.80440°N 100.31810°E
<b>Family: Taeniopterygidae</b>		
Taenionema japonicum	Within Known Range? N	Nearest Occurrence: 243.72 KM 47.11520°N 90.94098°E

**LOE Rating: Predicted Total: 14**

<b>Family: Capniidae</b>		
Capnia nigra	Within Known Range? N	Nearest Occurrence: 613.67 KM 48.06257°N 97.55064°E
Mesocapnia altaica	Within Known Range? N	Nearest Occurrence: 511.56 KM 48.43684°N 88.90094°E
Mesocapnia variabilis	Within Known Range? N	Nearest Occurrence: 552.21 KM 48.50631°N 88.50947°E
<b>Family: Chloroperlidae</b>		
Alaskaperla longidentata	Within Known Range? N	Nearest Occurrence: 585.25 KM 48.15779°N 97.21441°E
Alloperla deminuta	Within Known Range? N	Nearest Occurrence: 892.08 KM 47.80440°N 100.31810°E
Alloperla mediata	Within Known Range? N	Nearest Occurrence: 911.98 KM 50.61826°N 99.12094°E
<b>Family: Nemouridae</b>		
Amphinemura standfussi	Within Known Range? N	Nearest Occurrence: 613.55 KM 48.05989°N 97.55073°E
Nemoura sahlbergi	Within Known Range? N	Nearest Occurrence: 879.95 KM 47.42580°N 100.30130°E
<b>Family: Perlidae</b>		
Agnetina extrema	Within Known Range? N	Nearest Occurrence: 911.65 KM 47.50949°N 100.57510°E
Paragnetina flavotincta	Within Known Range? N	Nearest Occurrence: 904.66 KM 49.26170°N 99.88242°E
<b>Family: Perlodidae</b>		
Isoperla kozlovi	Within Known Range? N	Nearest Occurrence: 892.08 KM 47.80440°N 100.31810°E
Isoperla lunigera	Within Known Range? N	Nearest Occurrence: 934.39 KM 49.62785°N 99.99523°E
Kaszabia nigricauda	Within Known Range? N	Nearest Occurrence: 755.57 KM 48.71968°N 98.65184°E
Megarcys ochracea	Within Known Range? N	Nearest Occurrence: 978.02 KM 51.46205°N 99.19994°E

**LOE Rating: Unlikely Total: 5**

<b>Family: Capniidae</b>		
Capnia khulsbagia	Within Known Range? N	Nearest Occurrence: 1,080.82 KM 50.98944°N 100.71944°E
<b>Family: Leuctridae</b>		
Leuctra fusca	Within Known Range? N	Nearest Occurrence: 1,677.23 KM 49.08643°N 107.28952°E
Paraleuctra zapekinae	Within Known Range? N	Nearest Occurrence: 1,413.32 KM 49.71481°N 104.64203°E
<b>Family: Nemouridae</b>		
Nemurella pictetii	Within Known Range? N	Nearest Occurrence: 944.22 KM 50.81265°N 99.33803°E
<b>Family: Perlodidae</b>		
Isoperla eximia	Within Known Range? N	Nearest Occurrence: 1,703.13 KM 49.01829°N 107.54453°E

**Basin:** Internal Drainage Basin  
**Aimags:** Khovd  
**Soums:** Bulgan

Freshwater Ecoregion: Upper Irtysh  
 Terrestrial Ecoregion: Junggar Basin Semi-Desert

**WQM Sites:**

WQM Sites: # 119 (Bulgan River @ N 46.10303° E 91.5406°)

**LOE Rating: Highly Likely Total: 6**

Family: Chloroperlidae						
Suwallia teleckojensis	Within Known Range? Y	Nearest Occurrence:	75.29 KM	46.55341°N	91.38764°E	
Family: Perlidae						
Agnetina brevipennis	Within Known Range? Y	Nearest Occurrence:	49.56 KM	46.28532°N	91.42793°E	
Agnetina cocandica	Within Known Range? Y	Nearest Occurrence:	46.12 KM	46.13371°N	91.54083°E	
Family: Perlodidae						
Arcynopteryx compacta	Within Known Range? Y	Nearest Occurrence:	46.12 KM	46.13371°N	91.54083°E	
Isoperla altaica	Within Known Range? Y	Nearest Occurrence:	46.12 KM	46.13371°N	91.54083°E	
Isoperla potanini	Within Known Range? Y	Nearest Occurrence:	46.12 KM	46.13371°N	91.54083°E	

**LOE Rating: Likely Total: 10**

Family: Capniidae						
Isocapnia guentheri	Within Known Range? N	Nearest Occurrence:	836.92 KM	48.61518°N	98.23096°E	
Isocapnia kudia	Within Known Range? N	Nearest Occurrence:	1,112.12 KM	51.25356°N	99.66687°E	
Isocapnia sibirica	Within Known Range? N	Nearest Occurrence:	1,119.68 KM	47.28244°N	101.18793°E	
Family: Chloroperlidae						
Haploperla lepnevae	Within Known Range? N	Nearest Occurrence:	368.14 KM	48.97819°N	89.94996°E	
Family: Nemouridae						
Nemoura arctica	Within Known Range? N	Nearest Occurrence:	97.32 KM	46.77095°N	91.31664°E	
Family: Perlidae						
Kamimuria exilis	Within Known Range? N	Nearest Occurrence:	973.29 KM	50.16278°N	98.84212°E	
Family: Perlodidae						
Diura bicaudata	Within Known Range? N	Nearest Occurrence:	400.33 KM	49.04180°N	89.41675°E	
Diura majuscula	Within Known Range? N	Nearest Occurrence:	127.48 KM	47.03925°N	91.03419°E	
Isoperla mongolica	Within Known Range? Y	Nearest Occurrence:	46.12 KM	46.13371°N	91.54083°E	
Skwala pusilla	Within Known Range? N	Nearest Occurrence:	415.46 KM	48.51277°N	88.51107°E	

**LOE Rating: Probable Total: 6**

Family: Chloroperlidae						
Alloperla rostellata	Within Known Range? N	Nearest Occurrence:	900.65 KM	48.36436°N	98.92737°E	
Family: Nemouridae						
Amphinemura borealis	Within Known Range? N	Nearest Occurrence:	127.25 KM	47.03925°N	91.03419°E	
Family: Perlodidae						
Arcynopteryx polaris	Within Known Range? N	Nearest Occurrence:	127.98 KM	46.91446°N	91.74682°E	
Arcynopteryx sajanensis	Within Known Range? N	Nearest Occurrence:	1,223.42 KM	51.61397°N	100.59972°E	
Isoperla obscura	Within Known Range? N	Nearest Occurrence:	368.14 KM	48.97819°N	89.94996°E	
Pictetiella asiatica	Within Known Range? N	Nearest Occurrence:	1,217.18 KM	51.65822°N	100.53000°E	

**Basin:** Internal Drainage Basin  
**Aimags:** Khovd  
**Soums:** Bulgan

Freshwater Ecoregion: Upper Irtysh  
 Terrestrial Ecoregion: Junggar Basin Semi-Desert

**WQM Sites:**

WQM Sites: # 119 (Bulgan River @ N 46.10303° E 91.5406°)

**LOE Rating: Possible Total: 6**

<b>Family: Chloroperlidae</b>					
Alloperla joosti	Within Known Range? N	Nearest Occurrence:	736.95 KM	48.24995°N	97.40627°E
Suwallia kerzhneri	Within Known Range? N	Nearest Occurrence:	736.95 KM	48.24995°N	97.40627°E
<b>Family: Nemouridae</b>					
Nemoura cinerea	Within Known Range? N	Nearest Occurrence:	745.01 KM	48.06257°N	97.55064°E
<b>Family: Perlodidae</b>					
Isoperla asiatica	Within Known Range? N	Nearest Occurrence:	744.93 KM	48.05989°N	97.55073°E
<b>Family: Pteronarcyidae</b>					
Pteronarcys reticulata	Within Known Range? N	Nearest Occurrence:	1,034.36 KM	47.80440°N	100.31810°E
<b>Family: Taeniopterygidae</b>					
Taenionema japonicum	Within Known Range? N	Nearest Occurrence:	137.59 KM	47.11520°N	90.94098°E

**LOE Rating: Predicted Total: 14**

<b>Family: Capniidae</b>					
Capnia nigra	Within Known Range? N	Nearest Occurrence:	492.85 KM	49.09162°N	88.10423°E
Mesocapnia altaica	Within Known Range? N	Nearest Occurrence:	379.32 KM	48.43684°N	88.90094°E
Mesocapnia variabilis	Within Known Range? N	Nearest Occurrence:	415.84 KM	48.50631°N	88.50947°E
<b>Family: Chloroperlidae</b>					
Alaskaperla longidentata	Within Known Range? N	Nearest Occurrence:	713.41 KM	48.15779°N	97.21441°E
Alloperla deminuta	Within Known Range? N	Nearest Occurrence:	1,034.36 KM	47.80440°N	100.31810°E
Alloperla mediata	Within Known Range? N	Nearest Occurrence:	1,023.59 KM	50.61826°N	99.12094°E
<b>Family: Nemouridae</b>					
Amphinemura standfussi	Within Known Range? N	Nearest Occurrence:	744.93 KM	48.05989°N	97.55073°E
Nemoura sahlbergi	Within Known Range? N	Nearest Occurrence:	1,022.37 KM	50.42996°N	99.21727°E
<b>Family: Perlidae</b>					
Agnetina extrema	Within Known Range? N	Nearest Occurrence:	1,056.29 KM	47.50949°N	100.57510°E
Paragnetina flavotincta	Within Known Range? N	Nearest Occurrence:	1,033.78 KM	49.26170°N	99.88242°E
<b>Family: Perlodidae</b>					
Isoperla kozlovi	Within Known Range? N	Nearest Occurrence:	1,026.08 KM	50.31066°N	99.32150°E
Isoperla lunigera	Within Known Range? N	Nearest Occurrence:	1,060.64 KM	49.62785°N	99.99523°E
Kaszabia nigricauda	Within Known Range? N	Nearest Occurrence:	884.71 KM	48.71968°N	98.65184°E
Megarcys ochracea	Within Known Range? N	Nearest Occurrence:	1,081.68 KM	51.46205°N	99.19994°E

**LOE Rating: Unlikely Total: 5**

<b>Family: Capniidae</b>					
Capnia khulsbagia	Within Known Range? N	Nearest Occurrence:	1,198.43 KM	50.98944°N	100.71944°E
<b>Family: Leuctridae</b>					
Leuctra fusca	Within Known Range? N	Nearest Occurrence:	1,821.04 KM	49.08643°N	107.28952°E
Paraleuctra zapekinae	Within Known Range? N	Nearest Occurrence:	1,551.36 KM	49.71481°N	104.64203°E
<b>Family: Nemouridae</b>					
Nemurella pictetii	Within Known Range? N	Nearest Occurrence:	1,055.35 KM	50.81265°N	99.33803°E
<b>Family: Perlodidae</b>					
Isoperla eximia	Within Known Range? N	Nearest Occurrence:	1,847.39 KM	49.01829°N	107.54453°E

**Basin:** Internal Drainage Basin  
**Aimag:** Khovd  
**Soum:** Buyant

**Freshwater Ecoregion:** Western Mongolia  
**Terrestrial Ecoregion:** Great Lakes Basin Desert Steppe

**WQM Sites:**

WQM Sites: # 114 (Hovd River @ N 48.21957° E 91.93382°) # 122 (Buyant River @ N 48.01515° E 91.62125°)

**LOE Rating: Highly Likely Total: 3**

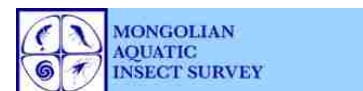
Family: Chloroperlidae						
Suwallia teleckojensis	Within Known Range? Y	Nearest Occurrence:	37.90 KM	47.55886°N	91.76095°E	
Family: Perlidae						
Agnetina cocandica	Within Known Range? Y	Nearest Occurrence:	40.58 KM	48.24533°N	91.90115°E	
Family: Perlodidae						
Isoperla potanini	Within Known Range? Y	Nearest Occurrence:	79.35 KM	47.60884°N	91.13502°E	

**LOE Rating: Likely Total: 15**

Family: Capniidae						
Isocapnia guentheri	Within Known Range? N	Nearest Occurrence:	719.68 KM	48.61518°N	98.23096°E	
Isocapnia kudia	Within Known Range? N	Nearest Occurrence:	950.63 KM	51.25356°N	99.66687°E	
Isocapnia sibirica	Within Known Range? N	Nearest Occurrence:	1,045.74 KM	47.28244°N	101.18793°E	
Family: Chloroperlidae						
Alloperla rostellata	Within Known Range? N	Nearest Occurrence:	794.26 KM	48.36436°N	98.92737°E	
Haploperla lepnevae	Within Known Range? N	Nearest Occurrence:	236.52 KM	48.97819°N	89.94996°E	
Family: Nemouridae						
Amphinemura borealis	Within Known Range? Y	Nearest Occurrence:	126.83 KM	47.03925°N	91.03419°E	
Family: Perlidae						
Agnetina brevipennis	Within Known Range? Y	Nearest Occurrence:	135.35 KM	46.77977°N	91.30252°E	
Kamimuria exilis	Within Known Range? N	Nearest Occurrence:	823.93 KM	50.16278°N	98.84212°E	
Family: Perlodidae						
Arcynopteryx compacta	Within Known Range? Y	Nearest Occurrence:	94.13 KM	47.05445°N	91.84839°E	
Arcynopteryx sajanensis	Within Known Range? N	Nearest Occurrence:	1,063.49 KM	51.61397°N	100.59972°E	
Diura bicaudata	Within Known Range? Y	Nearest Occurrence:	292.10 KM	49.04180°N	89.41675°E	
Diura majuscula	Within Known Range? Y	Nearest Occurrence:	73.23 KM	47.24104°N	91.75287°E	
Isoperla altaica	Within Known Range? Y	Nearest Occurrence:	62.80 KM	47.33906°N	91.86288°E	
Pictetiella asiatica	Within Known Range? N	Nearest Occurrence:	1,056.39 KM	51.65822°N	100.53000°E	
Skwala pusilla	Within Known Range? N	Nearest Occurrence:	369.97 KM	48.51277°N	88.51107°E	

**LOE Rating: Probable Total: 5**

Family: Chloroperlidae						
Suwallia kerzhneri	Within Known Range? N	Nearest Occurrence:	624.95 KM	48.24995°N	97.40627°E	
Family: Nemouridae						
Nemoura arctica	Within Known Range? Y	Nearest Occurrence:	69.33 KM	47.53132°N	91.28330°E	
Nemoura cinerea	Within Known Range? N	Nearest Occurrence:	640.02 KM	48.06257°N	97.55064°E	
Family: Perlodidae						
Arcynopteryx polaris	Within Known Range? Y	Nearest Occurrence:	109.54 KM	46.91446°N	91.74682°E	
Family: Taeniopterygidae						
Taenionema japonicum	Within Known Range? Y	Nearest Occurrence:	128.23 KM	47.11520°N	90.94098°E	



**Basin:** Internal Drainage Basin  
**Aimags:** Khovd  
**Soums:** Buyant

**Freshwater Ecoregion:** Western Mongolia  
**Terrestrial Ecoregion:** Great Lakes Basin Desert Steppe

**WQM Sites:**

WQM Sites: # 114 (Hovd River @ N 48.21957° E 91.93382°) # 122 (Buyant River @ N 48.01515° E 91.62125°)

**LOE Rating: Possible Total: 5**

Family: Chloroperlidae					
Alloperla joosti	Within Known Range? N	Nearest Occurrence:	624.95 KM	48.24995°N	97.40627°E
Family: Perlodidae					
Isoperla asiatica	Within Known Range? N	Nearest Occurrence:	640.02 KM	48.06257°N	97.55064°E
Isoperla mongolica	Within Known Range? Y	Nearest Occurrence:	123.71 KM	47.08782°N	91.02542°E
Isoperla obscura	Within Known Range? Y	Nearest Occurrence:	236.52 KM	48.97819°N	89.94996°E
Family: Pteronarcyidae					
Pteronarcys reticulata	Within Known Range? N	Nearest Occurrence:	896.04 KM	51.47065°N	99.02617°E

**LOE Rating: Predicted Total: 15**

Family: Capniidae					
Capnia nigra	Within Known Range? N	Nearest Occurrence:	429.70 KM	49.09162°N	88.10423°E
Mesocapnia altaica	Within Known Range? N	Nearest Occurrence:	325.88 KM	48.43684°N	88.90094°E
Mesocapnia variabilis	Within Known Range? Y	Nearest Occurrence:	370.68 KM	48.50631°N	88.50947°E
Family: Chloroperlidae					
Alaskaperla longidentata	Within Known Range? N	Nearest Occurrence:	603.12 KM	48.15779°N	97.21441°E
Alloperla deminuta	Within Known Range? N	Nearest Occurrence:	896.04 KM	51.47065°N	99.02617°E
Alloperla mediata	Within Known Range? N	Nearest Occurrence:	868.23 KM	50.61826°N	99.12094°E
Family: Leuctridae					
Paraleuctra zapekinae	Within Known Range? N	Nearest Occurrence:	1,441.07 KM	49.71481°N	104.64203°E
Family: Nemouridae					
Amphinemura standfussi	Within Known Range? N	Nearest Occurrence:	640.02 KM	48.06257°N	97.55064°E
Nemoura sahlbergi	Within Known Range? N	Nearest Occurrence:	871.30 KM	50.42996°N	99.21727°E
Family: Perlidae					
Agnetina extrema	Within Known Range? N	Nearest Occurrence:	976.43 KM	47.50949°N	100.57510°E
Paragnetina flavotincta	Within Known Range? N	Nearest Occurrence:	911.23 KM	49.26170°N	99.88242°E
Family: Perlodidae					
Isoperla kozlovi	Within Known Range? N	Nearest Occurrence:	878.13 KM	50.31066°N	99.32150°E
Isoperla lunigera	Within Known Range? N	Nearest Occurrence:	908.51 KM	51.09845°N	99.32051°E
Kaszabia nigricauda	Within Known Range? N	Nearest Occurrence:	767.42 KM	48.71968°N	98.65184°E
Megarcys ochracea	Within Known Range? N	Nearest Occurrence:	912.96 KM	51.46205°N	99.19994°E

**LOE Rating: Unlikely Total: 4**

Family: Capniidae					
Capnia khulsbagia	Within Known Range? N	Nearest Occurrence:	1,049.17 KM	50.98944°N	100.71944°E
Family: Leuctridae					
Leuctra fusca	Within Known Range? N	Nearest Occurrence:	1,725.82 KM	49.08643°N	107.28952°E
Family: Nemouridae					
Nemurella pictetii	Within Known Range? N	Nearest Occurrence:	898.40 KM	50.81265°N	99.33803°E
Family: Perlodidae					
Isoperla eximia	Within Known Range? N	Nearest Occurrence:	1,753.49 KM	49.01829°N	107.54453°E

**Basin:** Internal Drainage Basin  
**Aimags:** Khovd  
**Soums:** Chandmany

**Freshwater Ecoregion:** Western Mongolia  
**Terrestrial Ecoregion:** Altai Montane Forest And Forest Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Highly Likely Total: 2**

Family: Chloroperlidae					
Suwallia teleckojensis	Within Known Range? Y	Nearest Occurrence:	138.74 KM	47.55886°N	91.76095°E
Family: Perlidae					
Agnatina cocandica	Within Known Range? Y	Nearest Occurrence:	67.14 KM	48.33025°N	92.81616°E

**LOE Rating: Likely Total: 17**

Family: Capniidae					
Isocapnia guentheri	Within Known Range? N	Nearest Occurrence:	589.19 KM	48.61518°N	98.23096°E
Isocapnia kudia	Within Known Range? N	Nearest Occurrence:	836.48 KM	51.25356°N	99.66687°E
Isocapnia sibirica	Within Known Range? N	Nearest Occurrence:	911.09 KM	47.28244°N	101.18793°E
Family: Chloroperlidae					
Alloperla rostellata	Within Known Range? N	Nearest Occurrence:	662.16 KM	48.36436°N	98.92737°E
Haploperla lepnevae	Within Known Range? N	Nearest Occurrence:	364.16 KM	48.97819°N	89.94996°E
Family: Nemouridae					
Amphinemura borealis	Within Known Range? Y	Nearest Occurrence:	231.46 KM	47.03925°N	91.03419°E
Nemoura cinerea	Within Known Range? N	Nearest Occurrence:	507.02 KM	48.06257°N	97.55064°E
Family: Perlidae					
Agnatina brevipennis	Within Known Range? Y	Nearest Occurrence:	214.86 KM	46.76864°N	91.32673°E
Kamimuria exilis	Within Known Range? N	Nearest Occurrence:	703.42 KM	50.16278°N	98.84212°E
Family: Perlodidae					
Arcynopteryx compacta	Within Known Range? Y	Nearest Occurrence:	149.15 KM	47.05445°N	91.84839°E
Arcynopteryx sajanensis	Within Known Range? N	Nearest Occurrence:	948.55 KM	51.61397°N	100.59972°E
Diura bicaudata	Within Known Range? Y	Nearest Occurrence:	421.99 KM	49.04180°N	89.41675°E
Diura majuscula	Within Known Range? Y	Nearest Occurrence:	149.23 KM	47.24104°N	91.75287°E
Isoperla altaica	Within Known Range? Y	Nearest Occurrence:	133.88 KM	47.33906°N	91.86288°E
Isoperla potanini	Within Known Range? Y	Nearest Occurrence:	180.16 KM	46.38199°N	92.13033°E
Pictetiella asiatica	Within Known Range? N	Nearest Occurrence:	942.20 KM	51.65822°N	100.53000°E
Skwala pusilla	Within Known Range? N	Nearest Occurrence:	504.63 KM	48.51277°N	88.51107°E

**LOE Rating: Probable Total: 5**

Family: Chloroperlidae					
Suwallia kerzhneri	Within Known Range? N	Nearest Occurrence:	492.93 KM	48.24995°N	97.40627°E
Family: Perlodidae					
Arcynopteryx polaris	Within Known Range? Y	Nearest Occurrence:	151.96 KM	46.61982°N	92.22981°E
Isoperla mongolica	Within Known Range? Y	Nearest Occurrence:	215.25 KM	46.76864°N	91.32673°E
Family: Pteronarcyidae					
Pteronarcys reticulata	Within Known Range? N	Nearest Occurrence:	786.57 KM	51.47065°N	99.02617°E
Family: Taeniopterygidae					
Taenionema japonicum	Within Known Range? Y	Nearest Occurrence:	239.00 KM	47.11520°N	90.94098°E





**Basin:** Internal Drainage Basin  
**Aimags:** Khovd  
**Soums:** Chandmany

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**Freshwater Ecoregion:** Western Mongolia  
**Terrestrial Ecoregion:** Altai Montane Forest And Forest Steppe

**LOE Rating: Possible Total: 4**

Family: Chloroperlidae					
Alloperla joosti	Within Known Range? N	Nearest Occurrence:	492.93 KM	48.24995 °N	97.40627 °E
Family: Nemouridae					
Nemoura arctica	Within Known Range? Y	Nearest Occurrence:	191.75 KM	47.53132 °N	91.28330 °E
Family: Perlodidae					
Isoperla asiatica	Within Known Range? N	Nearest Occurrence:	507.01 KM	48.05989 °N	97.55073 °E
Isoperla obscura	Within Known Range? Y	Nearest Occurrence:	364.16 KM	48.97819 °N	89.94996 °E

**LOE Rating: Predicted Total: 15**

Family: Capniidae					
Capnia nigra	Within Known Range? N	Nearest Occurrence:	507.02 KM	48.06257 °N	97.55064 °E
Mesocapnia altaica	Within Known Range? N	Nearest Occurrence:	460.56 KM	48.43684 °N	88.90094 °E
Mesocapnia variabilis	Within Known Range? Y	Nearest Occurrence:	505.60 KM	48.50631 °N	88.50947 °E
Family: Chloroperlidae					
Alaskaperla longidentata	Within Known Range? N	Nearest Occurrence:	470.68 KM	48.15779 °N	97.21441 °E
Alloperla deminuta	Within Known Range? N	Nearest Occurrence:	786.57 KM	51.47065 °N	99.02617 °E
Alloperla mediata	Within Known Range? N	Nearest Occurrence:	750.84 KM	50.61826 °N	99.12094 °E
Family: Leuctridae					
Paraleuctra zapekinae	Within Known Range? N	Nearest Occurrence:	1,311.21 KM	49.71481 °N	104.64203 °E
Family: Nemouridae					
Amphinemura standfussi	Within Known Range? N	Nearest Occurrence:	507.01 KM	48.05989 °N	97.55073 °E
Nemoura sahlbergi	Within Known Range? N	Nearest Occurrence:	752.04 KM	50.42996 °N	99.21727 °E
Family: Perlidae					
Agnetina extrema	Within Known Range? N	Nearest Occurrence:	842.00 KM	47.50949 °N	100.57510 °E
Paragnetina flavotincta	Within Known Range? N	Nearest Occurrence:	782.80 KM	49.26170 °N	99.88242 °E
Family: Perlodidae					
Isoperla kozlovi	Within Known Range? N	Nearest Occurrence:	757.62 KM	50.31066 °N	99.32150 °E
Isoperla lunigera	Within Known Range? N	Nearest Occurrence:	794.44 KM	51.09845 °N	99.32051 °E
Kaszabia nigricauda	Within Known Range? N	Nearest Occurrence:	637.19 KM	48.71968 °N	98.65184 °E
Megarcys ochracea	Within Known Range? N	Nearest Occurrence:	802.57 KM	51.46205 °N	99.19994 °E

**LOE Rating: Unlikely Total: 4**

Family: Capniidae					
Capnia khulsbagia	Within Known Range? N	Nearest Occurrence:	929.79 KM	50.98944 °N	100.71944 °E
Family: Leuctridae					
Leuctra fusca	Within Known Range? N	Nearest Occurrence:	1,593.76 KM	49.08643 °N	107.28952 °E
Family: Nemouridae					
Nemurella pictetii	Within Known Range? N	Nearest Occurrence:	781.86 KM	50.81265 °N	99.33803 °E
Family: Perlodidae					
Isoperla eximia	Within Known Range? N	Nearest Occurrence:	1,621.27 KM	49.01829 °N	107.54453 °E

**Basin:** Internal Drainage Basin  
**Aimags:** Khovd  
**Soums:** Darvi

**Freshwater Ecoregion:** Western Mongolia  
**Terrestrial Ecoregion:** Great Lakes Basin Desert Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Highly Likely Total: 3**

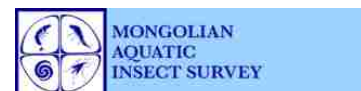
Family: Chloroperlidae						
Suwallia teleckojensis	Within Known Range? Y	Nearest Occurrence:	81.86 KM	46.32080 °N	93.90083 °E	
Family: Perlidae						
Agnetina cocandica	Within Known Range? Y	Nearest Occurrence:	173.98 KM	48.33025 °N	92.81616 °E	
Family: Perlodidae						
Isoperla potanini	Within Known Range? Y	Nearest Occurrence:	81.86 KM	46.32080 °N	93.90083 °E	

**LOE Rating: Likely Total: 15**

Family: Capniidae						
Isocapnia guentheri	Within Known Range? N	Nearest Occurrence:	536.15 KM	48.61518 °N	98.23096 °E	
Isocapnia kudia	Within Known Range? N	Nearest Occurrence:	814.64 KM	51.25356 °N	99.66687 °E	
Isocapnia sibirica	Within Known Range? N	Nearest Occurrence:	834.81 KM	47.28244 °N	101.18793 °E	
Family: Chloroperlidae						
Alloperla rostellata	Within Known Range? N	Nearest Occurrence:	602.16 KM	48.36436 °N	98.92737 °E	
Family: Nemouridae						
Amphinemura borealis	Within Known Range? Y	Nearest Occurrence:	292.77 KM	47.03925 °N	91.03419 °E	
Nemoura cinerea	Within Known Range? N	Nearest Occurrence:	445.84 KM	48.06257 °N	97.55064 °E	
Family: Perlidae						
Agnetina brevipennis	Within Known Range? Y	Nearest Occurrence:	258.77 KM	46.55341 °N	91.38764 °E	
Kamimuria exilis	Within Known Range? N	Nearest Occurrence:	672.81 KM	50.16278 °N	98.84212 °E	
Family: Perlodidae						
Arcynopteryx compacta	Within Known Range? Y	Nearest Occurrence:	196.16 KM	46.92107 °N	91.91048 °E	
Arcynopteryx sajanensis	Within Known Range? N	Nearest Occurrence:	924.36 KM	51.61397 °N	100.59972 °E	
Diura bicaudata	Within Known Range? N	Nearest Occurrence:	522.89 KM	49.04180 °N	89.41675 °E	
Diura majuscula	Within Known Range? Y	Nearest Occurrence:	214.78 KM	47.24104 °N	91.75287 °E	
Isoperla altaica	Within Known Range? Y	Nearest Occurrence:	204.24 KM	47.33906 °N	91.86288 °E	
Pictetiella asiatica	Within Known Range? N	Nearest Occurrence:	919.00 KM	51.65822 °N	100.53000 °E	
Skwala pusilla	Within Known Range? N	Nearest Occurrence:	596.30 KM	48.51277 °N	88.51107 °E	

**LOE Rating: Probable Total: 5**

Family: Chloroperlidae						
Haploperla lepnevae	Within Known Range? N	Nearest Occurrence:	466.79 KM	48.97819 °N	89.94996 °E	
Suwallia kerzhneri	Within Known Range? N	Nearest Occurrence:	436.43 KM	48.24995 °N	97.40627 °E	
Family: Nemouridae						
Nemoura arctica	Within Known Range? Y	Nearest Occurrence:	263.35 KM	46.77095 °N	91.31664 °E	
Family: Perlodidae						
Arcynopteryx polaris	Within Known Range? Y	Nearest Occurrence:	166.41 KM	46.61982 °N	92.22981 °E	
Isoperla mongolica	Within Known Range? Y	Nearest Occurrence:	256.65 KM	46.13371 °N	91.54083 °E	



**Basin:** Internal Drainage Basin  
**Aimags:** Khovd  
**Soums:** Darvi

**Freshwater Ecoregion:** Western Mongolia  
**Terrestrial Ecoregion:** Great Lakes Basin Desert Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Possible Total: 6**

Family: Chloroperlidae						
Alloperla joosti	Within Known Range?	N	Nearest Occurrence:	436.43 KM	48.24995°N	97.40627°E
Family: Perlidae						
Agnentina extrema	Within Known Range?	N	Nearest Occurrence:	768.20 KM	47.50949°N	100.57510°E
Family: Perlodidae						
Isoperla asiatica	Within Known Range?	N	Nearest Occurrence:	445.77 KM	48.05989°N	97.55073°E
Isoperla obscura	Within Known Range?	N	Nearest Occurrence:	466.79 KM	48.97819°N	89.94996°E
Family: Pteronarcyidae						
Pteronarcys reticulata	Within Known Range?	N	Nearest Occurrence:	742.87 KM	47.80440°N	100.31810°E
Family: Taeniopterygidae						
Taenionema japonicum	Within Known Range?	Y	Nearest Occurrence:	303.84 KM	47.11520°N	90.94098°E

**LOE Rating: Predicted Total: 14**

Family: Capniidae						
Capnia nigra	Within Known Range?	N	Nearest Occurrence:	445.84 KM	48.06257°N	97.55064°E
Mesocapnia altaica	Within Known Range?	N	Nearest Occurrence:	552.40 KM	48.43684°N	88.90094°E
Mesocapnia variabilis	Within Known Range?	N	Nearest Occurrence:	597.35 KM	48.50631°N	88.50947°E
Family: Chloroperlidae						
Alaskaperla longidentata	Within Known Range?	N	Nearest Occurrence:	413.02 KM	48.15779°N	97.21441°E
Alloperla deminuta	Within Known Range?	N	Nearest Occurrence:	742.87 KM	47.80440°N	100.31810°E
Alloperla mediata	Within Known Range?	N	Nearest Occurrence:	724.82 KM	50.61826°N	99.12094°E
Family: Nemouridae						
Amphinemura standfussi	Within Known Range?	N	Nearest Occurrence:	445.77 KM	48.05989°N	97.55073°E
Nemoura sahlbergi	Within Known Range?	N	Nearest Occurrence:	722.60 KM	50.42996°N	99.21727°E
Nemurella pictetii	Within Known Range?	N	Nearest Occurrence:	756.83 KM	50.81265°N	99.33803°E
Family: Perlidae						
Paragnetina flavotincta	Within Known Range?	N	Nearest Occurrence:	732.91 KM	49.26170°N	99.88242°E
Family: Perlodidae						
Isoperla kozlovi	Within Known Range?	N	Nearest Occurrence:	725.73 KM	50.31066°N	99.32150°E
Isoperla lunigera	Within Known Range?	N	Nearest Occurrence:	759.25 KM	49.62785°N	99.99523°E
Kaszabia nigricauda	Within Known Range?	N	Nearest Occurrence:	584.10 KM	48.71968°N	98.65184°E
Megarcys ochracea	Within Known Range?	N	Nearest Occurrence:	787.17 KM	51.46205°N	99.19994°E

**LOE Rating: Unlikely Total: 4**

Family: Capniidae						
Capnia khulsbagia	Within Known Range?	N	Nearest Occurrence:	897.83 KM	50.98944°N	100.71944°E
Family: Leuctridae						
Leuctra fusca	Within Known Range?	N	Nearest Occurrence:	1,528.88 KM	49.08643°N	107.28952°E
Paraleuctra zapekinae	Within Known Range?	N	Nearest Occurrence:	1,253.90 KM	49.71481°N	104.64203°E
Family: Perlodidae						
Isoperla eximia	Within Known Range?	N	Nearest Occurrence:	1,555.78 KM	49.01829°N	107.54453°E

**Basin:** Internal Drainage Basin  
**Aimags:** Khovd  
**Soums:** Dorgon

**Freshwater Ecoregion:** Western Mongolia  
**Terrestrial Ecoregion:** Great Lakes Basin Desert Steppe

**WQM Sites:**

WQM Sites: # 115 (Chono haraih River @ N 48.33182° E 92.81973°)

<b>LOE Rating:</b>	<b>Highly Likely</b>	<b>Total:</b>	1
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Family: Perlidae

<i>Agnatina cocandica</i>	Within Known Range? Y	Nearest Occurrence:	4.25 KM	48.33025°N	92.81616 °E
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<b>LOE Rating:</b>	<b>Likely</b>	<b>Total:</b>	15
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Family: Capniidae

<i>Isocapnia guentheri</i>	Within Known Range? N	Nearest Occurrence:	600.66 KM	48.61518°N	98.23096 °E
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<i>Isocapnia kudia</i>	Within Known Range? N	Nearest Occurrence:	824.23 KM	51.25356°N	99.66687 °E
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<i>Isocapnia sibirica</i>	Within Known Range? N	Nearest Occurrence:	936.03 KM	47.28244°N	101.18793 °E
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Family: Chloroperlidae

<i>Haploperla lepnevae</i>	Within Known Range? Y	Nearest Occurrence:	326.28 KM	48.97819°N	89.94996 °E
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<i>Suwallia teleckojensis</i>	Within Known Range? Y	Nearest Occurrence:	148.63 KM	47.55886°N	91.76095 °E
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Family: Nemouridae

<i>Nemoura cinerea</i>	Within Known Range? N	Nearest Occurrence:	525.60 KM	48.06257°N	97.55064 °E
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Family: Perlidae

<i>Agnatina brevipennis</i>	Within Known Range? Y	Nearest Occurrence:	243.23 KM	46.76864°N	91.32673 °E
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<i>Kamimuria exilis</i>	Within Known Range? N	Nearest Occurrence:	698.23 KM	50.16278°N	98.84212 °E
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Family: Perlodidae

<i>Arcynopteryx compacta</i>	Within Known Range? Y	Nearest Occurrence:	181.97 KM	47.05445°N	91.84839 °E
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<i>Arcynopteryx sajanensis</i>	Within Known Range? N	Nearest Occurrence:	936.87 KM	51.61397°N	100.59972 °E
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<i>Diura bicaudata</i>	Within Known Range? Y	Nearest Occurrence:	385.68 KM	49.04180°N	89.41675 °E
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<i>Isoperla altaica</i>	Within Known Range? Y	Nearest Occurrence:	156.61 KM	47.33906°N	91.86288 °E
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<i>Isoperla potanini</i>	Within Known Range? Y	Nearest Occurrence:	205.58 KM	47.05258°N	91.52564 °E
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<i>Pictetiella asiatica</i>	Within Known Range? N	Nearest Occurrence:	929.97 KM	51.65822°N	100.53000 °E
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<i>Skwala pusilla</i>	Within Known Range? N	Nearest Occurrence:	479.15 KM	48.51277°N	88.51107 °E
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<b>LOE Rating:</b>	<b>Probable</b>	<b>Total:</b>	6
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Family: Chloroperlidae

<i>Alloperla rostellata</i>	Within Known Range? N	Nearest Occurrence:	677.33 KM	48.36436°N	98.92737 °E
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Family: Nemouridae

<i>Amphinemura borealis</i>	Within Known Range? Y	Nearest Occurrence:	247.50 KM	47.03925°N	91.03419 °E
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Family: Perlodidae

<i>Arcynopteryx polaris</i>	Within Known Range? Y	Nearest Occurrence:	201.21 KM	46.91446°N	91.74682 °E
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<i>Diura majuscula</i>	Within Known Range? Y	Nearest Occurrence:	172.94 KM	47.24104°N	91.75287 °E
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Family: Pteronarcyidae

<i>Pteronarcys reticulata</i>	Within Known Range? N	Nearest Occurrence:	769.68 KM	51.47065°N	99.02617 °E
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Family: Taeniopterygidae

<i>Taenionema japonicum</i>	Within Known Range? Y	Nearest Occurrence:	251.58 KM	47.11520°N	90.94098 °E
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**Basin:** Internal Drainage Basin  
**Aimag:** Khovd  
**Soum:** Dorgon

**Freshwater Ecoregion:** Western Mongolia  
**Terrestrial Ecoregion:** Great Lakes Basin Desert Steppe

**WQM Sites:**

WQM Sites: # 115 (Chono haraih River @ N 48.33182° E 92.81973°)

**LOE Rating: Possible Total: 5**

Family: Chloroperlidae					
Suwallia kerzhneri	Within Known Range? N	Nearest Occurrence:	508.66 KM	48.24995°N	97.40627°E
Family: Nemouridae					
Nemoura arctica	Within Known Range? Y	Nearest Occurrence:	195.05 KM	47.53132°N	91.28330°E
Family: Perlodidae					
Isoperla asiatica	Within Known Range? N	Nearest Occurrence:	525.60 KM	48.06257°N	97.55064°E
Isoperla mongolica	Within Known Range? Y	Nearest Occurrence:	243.67 KM	46.76864°N	91.32673°E
Isoperla obscura	Within Known Range? Y	Nearest Occurrence:	326.28 KM	48.97819°N	89.94996°E

**LOE Rating: Predicted Total: 17**

Family: Capniidae					
Capnia nigra	Within Known Range? Y	Nearest Occurrence:	525.60 KM	48.06257°N	97.55064°E
Mesocapnia altaica	Within Known Range? N	Nearest Occurrence:	435.67 KM	48.43684°N	88.90094°E
Mesocapnia variabilis	Within Known Range? Y	Nearest Occurrence:	480.17 KM	48.50631°N	88.50947°E
Family: Chloroperlidae					
Alaskaperla longidentata	Within Known Range? N	Nearest Occurrence:	487.75 KM	48.15779°N	97.21441°E
Alloperla deminuta	Within Known Range? N	Nearest Occurrence:	769.68 KM	51.47065°N	99.02617°E
Alloperla joosti	Within Known Range? N	Nearest Occurrence:	508.66 KM	48.24995°N	97.40627°E
Alloperla mediata	Within Known Range? N	Nearest Occurrence:	742.14 KM	50.61826°N	99.12094°E
Family: Leuctridae					
Paraleuctra zapekinae	Within Known Range? N	Nearest Occurrence:	1,320.16 KM	49.71481°N	104.64203°E
Family: Nemouridae					
Amphinemura standfussi	Within Known Range? N	Nearest Occurrence:	525.60 KM	48.06257°N	97.55064°E
Nemoura sahlbergi	Within Known Range? N	Nearest Occurrence:	745.54 KM	50.42996°N	99.21727°E
Nemurella pictetii	Within Known Range? N	Nearest Occurrence:	772.19 KM	50.81265°N	99.33803°E
Family: Perlidae					
Agnetina extrema	Within Known Range? N	Nearest Occurrence:	865.48 KM	47.50949°N	100.57510°E
Paragnetina flavotincta	Within Known Range? N	Nearest Occurrence:	789.61 KM	49.26170°N	99.88242°E
Family: Perlodidae					
Isoperla kozlovi	Within Known Range? N	Nearest Occurrence:	752.65 KM	50.31066°N	99.32150°E
Isoperla lunigera	Within Known Range? N	Nearest Occurrence:	782.11 KM	51.09845°N	99.32051°E
Kaszabia nigricauda	Within Known Range? N	Nearest Occurrence:	647.93 KM	48.71968°N	98.65184°E
Megarcys ochracea	Within Known Range? N	Nearest Occurrence:	786.56 KM	51.46205°N	99.19994°E

**LOE Rating: Unlikely Total: 3**

Family: Capniidae					
Capnia khulsbagia	Within Known Range? N	Nearest Occurrence:	923.33 KM	50.98944°N	100.71944°E
Family: Leuctridae					
Leuctra fusca	Within Known Range? N	Nearest Occurrence:	1,607.51 KM	49.08643°N	107.28952°E
Family: Perlodidae					
Isoperla eximia	Within Known Range? N	Nearest Occurrence:	1,635.43 KM	49.01829°N	107.54453°E

**Basin:** Internal Drainage Basin  
**Aimags:** Khovd  
**Soums:** Duut

**Freshwater Ecoregion:** Western Mongolia  
**Terrestrial Ecoregion:** Altai Alpine Meadow And Tundra

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

<b>LOE Rating:</b>	<b>Highly Likely</b>	<b>Total:</b>	<b>2</b>
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<b>Family:</b> Chloroperlidae			
Suwallia teleckojensis	Within Known Range? Y	Nearest Occurrence:	31.80 KM 47.55886°N 91.76095 °E
<b>Family:</b> Nemouridae			
Nemoura arctica	Within Known Range? Y	Nearest Occurrence:	21.77 KM 47.53132°N 91.28330 °E

<b>LOE Rating:</b>	<b>Likely</b>	<b>Total:</b>	<b>16</b>
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<b>Family:</b> Capniidae			
Isocapnia guentheri	Within Known Range? N	Nearest Occurrence:	759.43 KM 48.61518°N 98.23096 °E
Isocapnia kudia	Within Known Range? N	Nearest Occurrence:	999.18 KM 51.25356°N 99.66687 °E
Isocapnia sibirica	Within Known Range? N	Nearest Occurrence:	1,078.07 KM 47.28244°N 101.18793 °E
<b>Family:</b> Perlidae			
Agnetina brevipennis	Within Known Range? Y	Nearest Occurrence:	83.90 KM 46.77977°N 91.30252 °E
Agnetina cocandica	Within Known Range? Y	Nearest Occurrence:	93.85 KM 48.24533°N 91.90115 °E
Kamimuria exilis	Within Known Range? N	Nearest Occurrence:	870.18 KM 50.16278°N 98.84212 °E
<b>Family:</b> Perlodidae			
Arcynopteryx compacta	Within Known Range? Y	Nearest Occurrence:	57.32 KM 47.25218°N 91.03486 °E
Arcynopteryx polaris	Within Known Range? Y	Nearest Occurrence:	60.62 KM 47.34650°N 90.95982 °E
Arcynopteryx sajanensis	Within Known Range? N	Nearest Occurrence:	1,112.01 KM 51.61397°N 100.59972 °E
Diura bicaudata	Within Known Range? N	Nearest Occurrence:	284.77 KM 49.04180°N 89.41675 °E
Diura majuscula	Within Known Range? Y	Nearest Occurrence:	39.58 KM 47.60884°N 91.13502 °E
Isoperla altaica	Within Known Range? Y	Nearest Occurrence:	47.02 KM 47.33906°N 91.86288 °E
Isoperla mongolica	Within Known Range? Y	Nearest Occurrence:	69.22 KM 47.08782°N 91.02542 °E
Isoperla potanini	Within Known Range? Y	Nearest Occurrence:	39.58 KM 47.60884°N 91.13502 °E
Pictetiella asiatica	Within Known Range? N	Nearest Occurrence:	1,104.99 KM 51.65822°N 100.53000 °E
Skwala pusilla	Within Known Range? N	Nearest Occurrence:	347.49 KM 48.51277°N 88.51107 °E

<b>LOE Rating:</b>	<b>Probable</b>	<b>Total:</b>	<b>5</b>
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<b>Family:</b> Chloroperlidae			
Alloperla rostellata	Within Known Range? N	Nearest Occurrence:	832.20 KM 48.36436°N 98.92737 °E
Haploperla lepnevae	Within Known Range? N	Nearest Occurrence:	234.87 KM 48.97819°N 89.94996 °E
<b>Family:</b> Nemouridae			
Amphinemura borealis	Within Known Range? Y	Nearest Occurrence:	72.23 KM 47.03925°N 91.03419 °E
Nemoura cinerea	Within Known Range? N	Nearest Occurrence:	676.76 KM 48.06257°N 97.55064 °E
<b>Family:</b> Taeniopterygidae			
Taenionema japonicum	Within Known Range? Y	Nearest Occurrence:	74.47 KM 47.11520°N 90.94098 °E



**Basin:** Internal Drainage Basin  
**Aimags:** Khovd  
**Soums:** Duut

**Freshwater Ecoregion:** Western Mongolia  
**Terrestrial Ecoregion:** Altai Alpine Meadow And Tundra

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Possible Total: 5**

Family: Capniidae					
<i>Capnia nigra</i>	Within Known Range?	N	Nearest Occurrence:	413.40 KM	49.09162 °N 88.10423 °E
Family: Chloroperlidae					
<i>Alloperla joosti</i>	Within Known Range?	N	Nearest Occurrence:	663.04 KM	48.24995 °N 97.40627 °E
<i>Suwallia kerzhneri</i>	Within Known Range?	N	Nearest Occurrence:	663.04 KM	48.24995 °N 97.40627 °E
Family: Perlodidae					
<i>Isoperla obscura</i>	Within Known Range?	N	Nearest Occurrence:	234.87 KM	48.97819 °N 89.94996 °E
Family: Pteronarcyidae					
<i>Pteronarcys reticulata</i>	Within Known Range?	N	Nearest Occurrence:	945.90 KM	51.47065 °N 99.02617 °E

**LOE Rating: Predicted Total: 15**

Family: Capniidae					
<i>Mesocapnia altaica</i>	Within Known Range?	N	Nearest Occurrence:	303.85 KM	48.43684 °N 88.90094 °E
<i>Mesocapnia variabilis</i>	Within Known Range?	Y	Nearest Occurrence:	348.06 KM	48.50631 °N 88.50947 °E
Family: Chloroperlidae					
<i>Alaskaperla longidentata</i>	Within Known Range?	N	Nearest Occurrence:	640.69 KM	48.15779 °N 97.21441 °E
<i>Alloperla deminuta</i>	Within Known Range?	N	Nearest Occurrence:	945.90 KM	51.47065 °N 99.02617 °E
<i>Alloperla mediata</i>	Within Known Range?	N	Nearest Occurrence:	915.60 KM	50.61826 °N 99.12094 °E
Family: Leuctridae					
<i>Paraleuctra zapekinae</i>	Within Known Range?	N	Nearest Occurrence:	1,481.43 KM	49.71481 °N 104.64203 °E
Family: Nemouridae					
<i>Amphinemura standfussi</i>	Within Known Range?	N	Nearest Occurrence:	676.74 KM	48.05989 °N 97.55073 °E
<i>Nemoura sahlbergi</i>	Within Known Range?	N	Nearest Occurrence:	917.94 KM	50.42996 °N 99.21727 °E
Family: Perlidae					
<i>Agnetina extrema</i>	Within Known Range?	N	Nearest Occurrence:	1,009.74 KM	47.50949 °N 100.57510 °E
<i>Paragnetina flavotincta</i>	Within Known Range?	N	Nearest Occurrence:	952.79 KM	49.26170 °N 99.88242 °E
Family: Perlodidae					
<i>Isoperla asiatica</i>	Within Known Range?	N	Nearest Occurrence:	676.74 KM	48.05989 °N 97.55073 °E
<i>Isoperla kozlovi</i>	Within Known Range?	N	Nearest Occurrence:	924.25 KM	50.31066 °N 99.32150 °E
<i>Isoperla lunigera</i>	Within Known Range?	N	Nearest Occurrence:	957.06 KM	51.09845 °N 99.32051 °E
<i>Kaszabia nigricauda</i>	Within Known Range?	N	Nearest Occurrence:	807.41 KM	48.71968 °N 98.65184 °E
<i>Megarcys ochracea</i>	Within Known Range?	N	Nearest Occurrence:	962.59 KM	51.46205 °N 99.19994 °E

**LOE Rating: Unlikely Total: 4**

Family: Capniidae					
<i>Capnia khulsbagia</i>	Within Known Range?	N	Nearest Occurrence:	1,095.87 KM	50.98944 °N 100.71944 °E
Family: Leuctridae					
<i>Leuctra fusca</i>	Within Known Range?	N	Nearest Occurrence:	1,763.69 KM	49.08643 °N 107.28952 °E
Family: Nemouridae					
<i>Nemurella pictetii</i>	Within Known Range?	N	Nearest Occurrence:	946.11 KM	50.81265 °N 99.33803 °E
Family: Perlodidae					
<i>Isoperla eximia</i>	Within Known Range?	N	Nearest Occurrence:	1,791.14 KM	49.01829 °N 107.54453 °E

**Basin:** Internal Drainage Basin  
**Aimags:** Khovd  
**Soums:** Erdeneburen

**Freshwater Ecoregion:** Western Mongolia  
**Terrestrial Ecoregion:** Altai Montane Forest And Forest Steppe

**WQM Sites:**

WQM Sites: # 113 (Hongio River @ N 48.40483° E 91.01145°)

<b>LOE Rating:</b>	<b>Highly Likely</b>	<b>Total:</b>	<b>2</b>
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**Family:** Perlodidae

Arcynopteryx compacta	Within Known Range? Y	Nearest Occurrence:	25.29 KM	48.42161°N	90.97337°E
Isoperla potanini	Within Known Range? Y	Nearest Occurrence:	25.29 KM	48.42161°N	90.97337°E

<b>LOE Rating:</b>	<b>Likely</b>	<b>Total:</b>	<b>14</b>
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**Family:** Capniidae

Isocapnia guentheri	Within Known Range? N	Nearest Occurrence:	781.02 KM	48.61518°N	98.23096°E
Isocapnia kudia	Within Known Range? N	Nearest Occurrence:	989.81 KM	51.25356°N	99.66687°E
Isocapnia sibirica	Within Known Range? N	Nearest Occurrence:	1,116.84 KM	47.28244°N	101.18793°E

**Family:** Chloroperlidae

Haploperla lepnevae	Within Known Range? Y	Nearest Occurrence:	149.53 KM	48.97819°N	89.94996°E
Suwallia teleckojensis	Within Known Range? Y	Nearest Occurrence:	99.17 KM	47.85391°N	90.54864°E

**Family:** Perlidae

Agnetina brevipennis	Within Known Range? Y	Nearest Occurrence:	149.53 KM	48.97819°N	89.94996°E
Agnetina cocandica	Within Known Range? Y	Nearest Occurrence:	82.17 KM	48.24533°N	91.90115°E
Kamimuria exilis	Within Known Range? N	Nearest Occurrence:	870.88 KM	50.16278°N	98.84212°E

**Family:** Perlodidae

Arcynopteryx sajanensis	Within Known Range? N	Nearest Occurrence:	1,102.67 KM	51.61397°N	100.59972°E
Diura bicaudata	Within Known Range? Y	Nearest Occurrence:	207.58 KM	49.04180°N	89.41675°E
Diura majuscula	Within Known Range? Y	Nearest Occurrence:	95.67 KM	47.60884°N	91.13502°E
Isoperla altaica	Within Known Range? Y	Nearest Occurrence:	145.70 KM	47.33906°N	91.86288°E
Pictetiella asiatica	Within Known Range? N	Nearest Occurrence:	1,094.93 KM	51.65822°N	100.53000°E
Skwala pusilla	Within Known Range? N	Nearest Occurrence:	298.10 KM	48.51277°N	88.51107°E

<b>LOE Rating:</b>	<b>Probable</b>	<b>Total:</b>	<b>6</b>
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**Family:** Chloroperlidae

Alloperla rostellata	Within Known Range? N	Nearest Occurrence:	858.23 KM	48.36436°N	98.92737°E
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**Family:** Nemouridae

Amphinemura borealis	Within Known Range? Y	Nearest Occurrence:	159.50 KM	47.03925°N	91.03419°E
Nemoura arctica	Within Known Range? Y	Nearest Occurrence:	104.50 KM	47.53132°N	91.28330°E
Nemoura cinerea	Within Known Range? N	Nearest Occurrence:	706.76 KM	48.06257°N	97.55064°E

**Family:** Perlodidae

Arcynopteryx polaris	Within Known Range? Y	Nearest Occurrence:	127.35 KM	47.34650°N	90.95982°E
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**Family:** Taeniopterygidae

Taenionema japonicum	Within Known Range? Y	Nearest Occurrence:	99.17 KM	47.85391°N	90.54864°E
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**Basin:** Internal Drainage Basin  
**Aimags:** Khovd  
**Soums:** Erdeneburen

**Freshwater Ecoregion:** Western Mongolia  
**Terrestrial Ecoregion:** Altai Montane Forest And Forest Steppe

**WQM Sites:**

WQM Sites: # 113 (Hongio River @ N 48.40483° E 91.01145°)

<b>LOE Rating:</b> Possible	<b>Total:</b> 8
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Family: Capniidae					
<i>Capnia nigra</i>	Within Known Range? Y	Nearest Occurrence:	350.15 KM	49.09162°N	88.10423°E
Family: Chloroperlidae					
<i>Alloperla joosti</i>	Within Known Range? N	Nearest Occurrence:	689.73 KM	48.24995°N	97.40627°E
<i>Suwallia kerzhneri</i>	Within Known Range? N	Nearest Occurrence:	689.73 KM	48.24995°N	97.40627°E
Family: Perlidae					
<i>Agnetina extrema</i>	Within Known Range? N	Nearest Occurrence:	1,046.46 KM	47.50949°N	100.57510°E
Family: Perlodidae					
<i>Isoperla asiatica</i>	Within Known Range? N	Nearest Occurrence:	706.76 KM	48.06257°N	97.55064°E
<i>Isoperla mongolica</i>	Within Known Range? Y	Nearest Occurrence:	154.54 KM	47.08782°N	91.02542°E
<i>Isoperla obscura</i>	Within Known Range? Y	Nearest Occurrence:	149.53 KM	48.97819°N	89.94996°E
Family: Pteronarcyidae					
<i>Pteronarcys reticulata</i>	Within Known Range? N	Nearest Occurrence:	930.88 KM	51.47065°N	99.02617°E

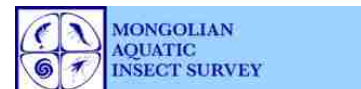
<b>LOE Rating:</b> Predicted	<b>Total:</b> 13
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Family: Capniidae					
<i>Mesocapnia altaica</i>	Within Known Range? N	Nearest Occurrence:	254.80 KM	48.43684°N	88.90094°E
<i>Mesocapnia variabilis</i>	Within Known Range? Y	Nearest Occurrence:	298.80 KM	48.50631°N	88.50947°E
Family: Chloroperlidae					
<i>Alaskaperla longidentata</i>	Within Known Range? N	Nearest Occurrence:	668.90 KM	48.15779°N	97.21441°E
<i>Alloperla deminuta</i>	Within Known Range? N	Nearest Occurrence:	930.88 KM	51.47065°N	99.02617°E
<i>Alloperla mediata</i>	Within Known Range? N	Nearest Occurrence:	911.47 KM	50.61826°N	99.12094°E
Family: Leuctridae					
<i>Paraleuctra zapekinae</i>	Within Known Range? N	Nearest Occurrence:	1,498.89 KM	49.71481°N	104.64203°E
Family: Nemouridae					
<i>Amphinemura standfussi</i>	Within Known Range? N	Nearest Occurrence:	706.76 KM	48.06257°N	97.55064°E
<i>Nemoura sahlbergi</i>	Within Known Range? N	Nearest Occurrence:	916.61 KM	50.42996°N	99.21727°E
Family: Perlidae					
<i>Paragnetina flavotincta</i>	Within Known Range? N	Nearest Occurrence:	968.19 KM	49.26170°N	99.88242°E
Family: Perlodidae					
<i>Isoperla kozlovi</i>	Within Known Range? N	Nearest Occurrence:	924.83 KM	50.31066°N	99.32150°E
<i>Isoperla lunigera</i>	Within Known Range? N	Nearest Occurrence:	947.92 KM	51.09845°N	99.32051°E
<i>Kaszabia nigricauda</i>	Within Known Range? N	Nearest Occurrence:	828.04 KM	48.71968°N	98.65184°E
<i>Megarcys ochracea</i>	Within Known Range? N	Nearest Occurrence:	948.57 KM	51.46205°N	99.19994°E

<b>LOE Rating:</b> Unlikely	<b>Total:</b> 4
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Family: Capniidae					
<i>Capnia khulsbagia</i>	Within Known Range? N	Nearest Occurrence:	1,093.53 KM	50.98944°N	100.71944°E
Family: Leuctridae					
<i>Leuctra fusca</i>	Within Known Range? N	Nearest Occurrence:	1,787.67 KM	49.08643°N	107.28952°E
Family: Nemouridae					
<i>Nemurella pictetii</i>	Within Known Range? N	Nearest Occurrence:	940.50 KM	50.81265°N	99.33803°E
Family: Perlodidae					
<i>Isoperla eximia</i>	Within Known Range? N	Nearest Occurrence:	1,815.69 KM	49.01829°N	107.54453°E

Research funded by the National Science Foundation  
 DEB-BSI #0206674: A Survey of the Aquatic Insects of the Selenge River Basin. P.I.'s: JKGelhaus, JCMorse, BHayford.  
 DEB # 0743732: Aquatic Insects of the Altai and Hangai Mountain Drainages. P.I.'s: JKGelhaus, JCMorse, CRNelson.  
<http://clade.ansp.org/entomology/mongolia/index.html>



**Basin:** Internal Drainage Basin  
**Aimags:** Khovd  
**Soums:** Khovd

**Freshwater Ecoregion:** Western Mongolia  
**Terrestrial Ecoregion:** Great Lakes Basin Desert Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Highly Likely Total: 4**

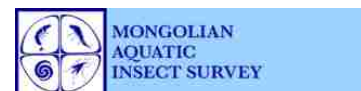
Family: Chloroperlidae					
Suwallia teleckojensis	Within Known Range? Y	Nearest Occurrence:	78.01 KM	47.55886°N	91.76095°E
Family: Perlidae					
Agnentina cocandica	Within Known Range? Y	Nearest Occurrence:	67.46 KM	48.24533°N	91.90115°E
Family: Perlodidae					
Isoperla potanini	Within Known Range? Y	Nearest Occurrence:	52.10 KM	48.42161°N	90.97337°E
Skwala pusilla	Within Known Range? N	Nearest Occurrence:	314.35 KM	48.51277°N	88.51107°E

**LOE Rating: Likely Total: 14**

Family: Capniidae					
Isocapnia guentheri	Within Known Range? N	Nearest Occurrence:	770.08 KM	48.61518°N	98.23096°E
Isocapnia kudia	Within Known Range? N	Nearest Occurrence:	991.26 KM	51.25356°N	99.66687°E
Isocapnia sibirica	Within Known Range? N	Nearest Occurrence:	1,099.90 KM	47.28244°N	101.18793°E
Family: Chloroperlidae					
Haploperla lepnevae	Within Known Range? Y	Nearest Occurrence:	180.04 KM	48.97819°N	89.94996°E
Family: Nemouridae					
Amphinemura borealis	Within Known Range? Y	Nearest Occurrence:	121.56 KM	47.03925°N	91.03419°E
Family: Perlidae					
Agnentina brevipennis	Within Known Range? Y	Nearest Occurrence:	146.37 KM	46.77977°N	91.30252°E
Kamimuria exilis	Within Known Range? N	Nearest Occurrence:	868.18 KM	50.16278°N	98.84212°E
Family: Perlodidae					
Arcynopteryx compacta	Within Known Range? Y	Nearest Occurrence:	52.10 KM	48.42161°N	90.97337°E
Arcynopteryx polaris	Within Known Range? Y	Nearest Occurrence:	92.36 KM	47.34650°N	90.95982°E
Arcynopteryx sajanensis	Within Known Range? N	Nearest Occurrence:	1,104.25 KM	51.61397°N	100.59972°E
Diura bicaudata	Within Known Range? Y	Nearest Occurrence:	235.05 KM	49.04180°N	89.41675°E
Diura majuscula	Within Known Range? Y	Nearest Occurrence:	57.91 KM	47.60884°N	91.13502°E
Isoperla altaica	Within Known Range? Y	Nearest Occurrence:	104.28 KM	47.33906°N	91.86288°E
Pictetiella asiatica	Within Known Range? N	Nearest Occurrence:	1,096.79 KM	51.65822°N	100.53000°E

**LOE Rating: Probable Total: 6**

Family: Chloroperlidae					
Alloperla rostellata	Within Known Range? N	Nearest Occurrence:	845.76 KM	48.36436°N	98.92737°E
Suwallia kerzhneri	Within Known Range? N	Nearest Occurrence:	676.61 KM	48.24995°N	97.40627°E
Family: Nemouridae					
Nemoura arctica	Within Known Range? Y	Nearest Occurrence:	63.14 KM	47.53132°N	91.28330°E
Nemoura cinerea	Within Known Range? N	Nearest Occurrence:	692.44 KM	48.06257°N	97.55064°E
Family: Perlodidae					
Isoperla mongolica	Within Known Range? Y	Nearest Occurrence:	116.82 KM	47.08782°N	91.02542°E
Family: Taeniopterygidae					
Taenionema japonicum	Within Known Range? Y	Nearest Occurrence:	89.19 KM	47.85391°N	90.54864°E



**Basin:** Internal Drainage Basin  
**Aimags:** Khovd  
**Soums:** Khovd

**Freshwater Ecoregion:** Western Mongolia  
**Terrestrial Ecoregion:** Great Lakes Basin Desert Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Possible Total: 5**

Family: Capniidae					
<i>Capnia nigra</i>	Within Known Range?	Y	Nearest Occurrence:	372.80 KM	49.09162°N 88.10423°E
Family: Chloroperlidae					
<i>Alloperla joosti</i>	Within Known Range?	N	Nearest Occurrence:	676.61 KM	48.24995°N 97.40627°E
Family: Perlidae					
<i>Agnetina extrema</i>	Within Known Range?	N	Nearest Occurrence:	1,030.22 KM	47.50949°N 100.57510°E
Family: Perlodidae					
<i>Isoperla obscura</i>	Within Known Range?	Y	Nearest Occurrence:	180.04 KM	48.97819°N 89.94996°E
Family: Pteronarcyidae					
<i>Pteronarcys reticulata</i>	Within Known Range?	N	Nearest Occurrence:	934.46 KM	51.47065°N 99.02617°E

**LOE Rating: Predicted Total: 14**

Family: Capniidae					
<i>Mesocapnia altaica</i>	Within Known Range?	N	Nearest Occurrence:	270.32 KM	48.43684°N 88.90094°E
<i>Mesocapnia variabilis</i>	Within Known Range?	Y	Nearest Occurrence:	314.99 KM	48.50631°N 88.50947°E
Family: Chloroperlidae					
<i>Alaskaperla longidentata</i>	Within Known Range?	N	Nearest Occurrence:	655.14 KM	48.15779°N 97.21441°E
<i>Alloperla deminuta</i>	Within Known Range?	N	Nearest Occurrence:	934.46 KM	51.47065°N 99.02617°E
<i>Alloperla mediata</i>	Within Known Range?	N	Nearest Occurrence:	910.74 KM	50.61826°N 99.12094°E
Family: Leuctridae					
<i>Paraleuctra zapekinae</i>	Within Known Range?	N	Nearest Occurrence:	1,490.41 KM	49.71481°N 104.64203°E
Family: Nemouridae					
<i>Amphinemura standfussi</i>	Within Known Range?	N	Nearest Occurrence:	692.44 KM	48.06257°N 97.55064°E
<i>Nemoura sahlbergi</i>	Within Known Range?	N	Nearest Occurrence:	914.79 KM	50.42996°N 99.21727°E
Family: Perlidae					
<i>Paragnetina flavotincta</i>	Within Known Range?	N	Nearest Occurrence:	959.98 KM	49.26170°N 99.88242°E
Family: Perlodidae					
<i>Isoperla asiatica</i>	Within Known Range?	N	Nearest Occurrence:	692.44 KM	48.06257°N 97.55064°E
<i>Isoperla kozlovi</i>	Within Known Range?	N	Nearest Occurrence:	922.28 KM	50.31066°N 99.32150°E
<i>Isoperla lunigera</i>	Within Known Range?	N	Nearest Occurrence:	949.21 KM	51.09845°N 99.32051°E
<i>Kaszabia nigricauda</i>	Within Known Range?	N	Nearest Occurrence:	817.57 KM	48.71968°N 98.65184°E
<i>Megarcys ochracea</i>	Within Known Range?	N	Nearest Occurrence:	951.79 KM	51.46205°N 99.19994°E

**LOE Rating: Unlikely Total: 4**

Family: Capniidae					
<i>Capnia khulsbagia</i>	Within Known Range?	N	Nearest Occurrence:	1,092.36 KM	50.98944°N 100.71944°E
Family: Leuctridae					
<i>Leuctra fusca</i>	Within Known Range?	N	Nearest Occurrence:	1,776.83 KM	49.08643°N 107.28952°E
Family: Nemouridae					
<i>Nemurella pictetii</i>	Within Known Range?	N	Nearest Occurrence:	940.39 KM	50.81265°N 99.33803°E
Family: Perlodidae					
<i>Isoperla eximia</i>	Within Known Range?	N	Nearest Occurrence:	1,804.64 KM	49.01829°N 107.54453°E

**Basin:** Internal Drainage Basin  
**Aimags:** Khovd  
**Soums:** Mankhan

**Freshwater Ecoregion:** Western Mongolia  
**Terrestrial Ecoregion:** Great Lakes Basin Desert Steppe

**WQM Sites:**

WQM Sites: # 121 (Hoid tsenher River @ N 47.35768° E 91.95982°)

**LOE Rating: Highly Likely Total: 2**

Family: Chloroperlidae					
Suwallia teleckojensis	Within Known Range? Y	Nearest Occurrence:	50.72 KM	47.17426°N	91.86176°E
Family: Perlodidae					
Isoperla altaica	Within Known Range? Y	Nearest Occurrence:	44.94 KM	47.33906°N	91.86288°E

**LOE Rating: Likely Total: 16**

Family: Capniidae					
Isocapnia guentheri	Within Known Range? N	Nearest Occurrence:	676.17 KM	48.61518°N	98.23096°E
Isocapnia kudia	Within Known Range? N	Nearest Occurrence:	926.93 KM	51.25356°N	99.66687°E
Isocapnia sibirica	Within Known Range? N	Nearest Occurrence:	990.64 KM	47.28244°N	101.18793°E
Family: Chloroperlidae					
Alloperla rostellata	Within Known Range? N	Nearest Occurrence:	747.52 KM	48.36436°N	98.92737°E
Haploperla lepnevae	Within Known Range? N	Nearest Occurrence:	311.54 KM	48.97819°N	89.94996°E
Family: Nemouridae					
Amphinemura borealis	Within Known Range? Y	Nearest Occurrence:	141.93 KM	47.03925°N	91.03419°E
Family: Perlidae					
Agnetina brevipennis	Within Known Range? Y	Nearest Occurrence:	124.79 KM	46.76864°N	91.32673°E
Agnetina cocandica	Within Known Range? Y	Nearest Occurrence:	103.35 KM	48.24533°N	91.90115°E
Kamimuria exilis	Within Known Range? N	Nearest Occurrence:	793.84 KM	50.16278°N	98.84212°E
Family: Perlodidae					
Arcynopteryx compacta	Within Known Range? Y	Nearest Occurrence:	59.36 KM	47.05445°N	91.84839°E
Arcynopteryx sajanensis	Within Known Range? N	Nearest Occurrence:	1,039.18 KM	51.61397°N	100.59972°E
Diura bicaudata	Within Known Range? N	Nearest Occurrence:	365.38 KM	49.04180°N	89.41675°E
Diura majuscula	Within Known Range? Y	Nearest Occurrence:	59.18 KM	47.24104°N	91.75287°E
Isoperla potanini	Within Known Range? Y	Nearest Occurrence:	90.24 KM	47.05258°N	91.52564°E
Pictetiella asiatica	Within Known Range? N	Nearest Occurrence:	1,032.66 KM	51.65822°N	100.53000°E
Skwala pusilla	Within Known Range? N	Nearest Occurrence:	434.82 KM	48.51277°N	88.51107°E

**LOE Rating: Probable Total: 5**

Family: Nemouridae					
Nemoura arctica	Within Known Range? Y	Nearest Occurrence:	110.17 KM	47.53132°N	91.28330°E
Nemoura cinerea	Within Known Range? N	Nearest Occurrence:	591.57 KM	48.06257°N	97.55064°E
Family: Perlodidae					
Arcynopteryx polaris	Within Known Range? Y	Nearest Occurrence:	78.09 KM	46.91446°N	91.74682°E
Isoperla mongolica	Within Known Range? Y	Nearest Occurrence:	125.01 KM	46.76864°N	91.32673°E
Family: Taeniopterygidae					
Taenionema japonicum	Within Known Range? Y	Nearest Occurrence:	150.24 KM	47.11520°N	90.94098°E

**Basin:** Internal Drainage Basin  
**Aimags:** Khovd  
**Soums:** Mankhan

**Freshwater Ecoregion:** Western Mongolia  
**Terrestrial Ecoregion:** Great Lakes Basin Desert Steppe

**WQM Sites:**

WQM Sites: # 121 (Hoid tsenher River @ N 47.35768° E 91.95982°)

<b>LOE Rating:</b> Possible	<b>Total:</b> 5
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<b>Family:</b> Chloroperlidae			
Alloperla joosti	Within Known Range? N	Nearest Occurrence: 578.74 KM	48.24995°N 97.40627°E
Suwallia kerzhneri	Within Known Range? N	Nearest Occurrence: 578.74 KM	48.24995°N 97.40627°E
<b>Family:</b> Perlodidae			
Isoperla asiatica	Within Known Range? N	Nearest Occurrence: 591.54 KM	48.05989°N 97.55073°E
Isoperla obscura	Within Known Range? N	Nearest Occurrence: 311.54 KM	48.97819°N 89.94996°E
<b>Family:</b> Pteronarcyidae			
Pteronarcys reticulata	Within Known Range? N	Nearest Occurrence: 876.71 KM	51.47065°N 99.02617°E

<b>LOE Rating:</b> Predicted	<b>Total:</b> 15
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<b>Family:</b> Capniidae			
Capnia nigra	Within Known Range? N	Nearest Occurrence: 498.87 KM	49.09162°N 88.10423°E
Mesocapnia altaica	Within Known Range? N	Nearest Occurrence: 390.96 KM	48.43684°N 88.90094°E
Mesocapnia variabilis	Within Known Range? Y	Nearest Occurrence: 435.56 KM	48.50631°N 88.50947°E
<b>Family:</b> Chloroperlidae			
Alaskaperla longidentata	Within Known Range? N	Nearest Occurrence: 556.09 KM	48.15779°N 97.21441°E
Alloperla deminuta	Within Known Range? N	Nearest Occurrence: 876.71 KM	51.47065°N 99.02617°E
Alloperla mediata	Within Known Range? N	Nearest Occurrence: 841.29 KM	50.61826°N 99.12094°E
<b>Family:</b> Leuctridae			
Paraleuctra zapekinae	Within Known Range? N	Nearest Occurrence: 1,398.01 KM	49.71481°N 104.64203°E
<b>Family:</b> Nemouridae			
Amphinemura standfussi	Within Known Range? N	Nearest Occurrence: 591.54 KM	48.05989°N 97.55073°E
Nemoura sahlbergi	Within Known Range? N	Nearest Occurrence: 842.38 KM	50.42996°N 99.21727°E
<b>Family:</b> Perlidae			
Agnetina extrema	Within Known Range? N	Nearest Occurrence: 922.64 KM	47.50949°N 100.57510°E
Paragnetina flavotincta	Within Known Range? N	Nearest Occurrence: 870.82 KM	49.26170°N 99.88242°E
<b>Family:</b> Perlodidae			
Isoperla kozlovi	Within Known Range? N	Nearest Occurrence: 847.84 KM	50.31066°N 99.32150°E
Isoperla lunigera	Within Known Range? N	Nearest Occurrence: 884.88 KM	51.09845°N 99.32051°E
Kaszabia nigricauda	Within Known Range? N	Nearest Occurrence: 724.27 KM	48.71968°N 98.65184°E
Megarcys ochracea	Within Known Range? N	Nearest Occurrence: 892.80 KM	51.46205°N 99.19994°E

<b>LOE Rating:</b> Unlikely	<b>Total:</b> 4
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<b>Family:</b> Capniidae			
Capnia khulsbagia	Within Known Range? N	Nearest Occurrence: 1,020.09 KM	50.98944°N 100.71944°E
<b>Family:</b> Leuctridae			
Leuctra fusca	Within Known Range? N	Nearest Occurrence: 1,678.45 KM	49.08643°N 107.28952°E
<b>Family:</b> Nemouridae			
Nemurella pictetii	Within Known Range? N	Nearest Occurrence: 872.33 KM	50.81265°N 99.33803°E
<b>Family:</b> Perlodidae			
Isoperla eximia	Within Known Range? N	Nearest Occurrence: 1,705.76 KM	49.01829°N 107.54453°E



Basin: Internal Drainage Basin

Aimags: Khovd

Soums: Monkhhkhaikhan

Freshwater Ecoregion: Western Mongolia

Terrestrial Ecoregion: Altai Alpine Meadow And Tundra

WQM Sites:

WQM Sites: # 120 (Tsenher River @ N 47.06282° E 91.84925°)

**LOE Rating: Highly Likely Total: 1**

Family: Chloroperlidae

Suwallia teleckojensis Within Known Range? Y Nearest Occurrence: 7.36 KM 47.05445°N 91.84839°E

**LOE Rating: Likely Total: 16**

Family: Capniidae

Isocapnia guentheri Within Known Range? N Nearest Occurrence: 736.30 KM 48.61518°N 98.23096°E

Isocapnia kudia Within Known Range? N Nearest Occurrence: 992.43 KM 51.25356°N 99.66687°E

Isocapnia sibirica Within Known Range? N Nearest Occurrence: 1,043.29 KM 47.28244°N 101.18793°E

Family: Perlidae

Agnetina brevipennis Within Known Range? Y Nearest Occurrence: 58.69 KM 46.76864°N 91.32673°E

Agnetina cocandica Within Known Range? Y Nearest Occurrence: 101.78 KM 46.13873°N 91.54096°E

Kamimuria exilis Within Known Range? N Nearest Occurrence: 858.33 KM 50.16278°N 98.84212°E

Family: Perlodidae

Arcynopteryx compacta Within Known Range? Y Nearest Occurrence: 7.36 KM 47.05445°N 91.84839°E

Arcynopteryx polaris Within Known Range? Y Nearest Occurrence: 12.66 KM 46.91446°N 91.74682°E

Arcynopteryx sajanensis Within Known Range? N Nearest Occurrence: 1,104.64 KM 51.61397°N 100.59972°E

Diura bicaudata Within Known Range? N Nearest Occurrence: 346.38 KM 49.04180°N 89.41675°E

Diura majuscula Within Known Range? Y Nearest Occurrence: 25.11 KM 47.24104°N 91.75287°E

Isoperla altaica Within Known Range? Y Nearest Occurrence: 36.47 KM 47.33906°N 91.86288°E

Isoperla mongolica Within Known Range? Y Nearest Occurrence: 58.80 KM 46.76864°N 91.32673°E

Isoperla potanini Within Known Range? Y Nearest Occurrence: 29.93 KM 47.05258°N 91.52564°E

Pictetiella asiatica Within Known Range? N Nearest Occurrence: 1,098.10 KM 51.65822°N 100.53000°E

Skwala pusilla Within Known Range? N Nearest Occurrence: 400.23 KM 48.51277°N 88.51107°E

**LOE Rating: Probable Total: 6**

Family: Chloroperlidae

Alloperla rostellata Within Known Range? N Nearest Occurrence: 805.92 KM 48.36436°N 98.92737°E

Haploperla lepnevae Within Known Range? N Nearest Occurrence: 298.57 KM 48.97819°N 89.94996°E

Family: Nemouridae

Amphinemura borealis Within Known Range? Y Nearest Occurrence: 84.22 KM 47.03925°N 91.03419°E

Nemoura arctica Within Known Range? Y Nearest Occurrence: 59.67 KM 46.77095°N 91.31664°E

Nemoura cinerea Within Known Range? N Nearest Occurrence: 649.56 KM 48.06257°N 97.55064°E

Family: Taeniopterygidae

Taenionema japonicum Within Known Range? Y Nearest Occurrence: 95.31 KM 47.11520°N 90.94098°E

**LOE Rating: Possible Total: 5**

Family: Capniidae

Capnia nigra Within Known Range? N Nearest Occurrence: 469.64 KM 49.09162°N 88.10423°E

Family: Chloroperlidae

Alloperla joosti Within Known Range? N Nearest Occurrence: 637.92 KM 48.24995°N 97.40627°E

Suwallia kerzhneri Within Known Range? N Nearest Occurrence: 637.92 KM 48.24995°N 97.40627°E

Family: Perlodidae

Isoperla obscura Within Known Range? N Nearest Occurrence: 298.57 KM 48.97819°N 89.94996°E

Family: Pteronarcyidae

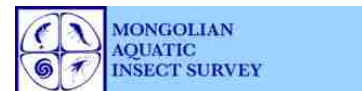
Pteronarcys reticulata Within Known Range? N Nearest Occurrence: 942.81 KM 51.47065°N 99.02617°E

Research funded by the National Science Foundation

DEB-BSI #0206674: A Survey of the Aquatic Insects of the Selenge River Basin. P.I.'s: JKGelhaus, JCMorse, BHayford.

DEB # 0743732: Aquatic Insects of the Altai and Hangai Mountain Drainages. P.I.'s: JKGelhaus, JCMorse, CRNelson.

<http://clade.ansp.org/entomology/mongolia/index.html>



**Basin:** Internal Drainage Basin

**Aimag:** Khovd

**Soum:** Monkhhkhaikhan

Freshwater Ecoregion: Western Mongolia

Terrestrial Ecoregion: Altai Alpine Meadow And Tundra

**WQM Sites:**

WQM Sites: # 120 (Tsenher River @ N 47.06282° E 91.84925°)

<b>LOE Rating:</b>	<b>Predicted</b>	<b>Total:</b>	<b>14</b>
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Family: Capniidae

Mesocapnia altaica      Within Known Range? N      Nearest Occurrence: 357.50 KM      48.43684°N      88.90094 °E

Mesocapnia variabilis      Within Known Range? N      Nearest Occurrence: 400.82 KM      48.50631°N      88.50947 °E

Family: Chloroperlidae

Alaskaperla longidentata      Within Known Range? N      Nearest Occurrence: 614.96 KM      48.15779°N      97.21441 °E

Alloperla deminuta      Within Known Range? N      Nearest Occurrence: 942.81 KM      51.47065°N      99.02617 °E

Alloperla mediata      Within Known Range? N      Nearest Occurrence: 906.27 KM      50.61826°N      99.12094 °E

Family: Nemouridae

Amphinemura standfussi      Within Known Range? N      Nearest Occurrence: 649.51 KM      48.05989°N      97.55073 °E

Nemoura sahlbergi      Within Known Range? N      Nearest Occurrence: 906.96 KM      50.42996°N      99.21727 °E

Family: Perlidae

Agnetina extrema      Within Known Range? N      Nearest Occurrence: 976.37 KM      47.50949°N      100.57510 °E

Paragnetina flavotincta      Within Known Range? N      Nearest Occurrence: 931.84 KM      49.26170°N      99.88242 °E

Family: Perlodidae

Isoperla asiatica      Within Known Range? N      Nearest Occurrence: 649.51 KM      48.05989°N      97.55073 °E

Isoperla kozlovi      Within Known Range? N      Nearest Occurrence: 912.10 KM      50.31066°N      99.32150 °E

Isoperla lunigera      Within Known Range? N      Nearest Occurrence: 950.42 KM      51.09845°N      99.32051 °E

Kaszabia nigricauda      Within Known Range? N      Nearest Occurrence: 784.43 KM      48.71968°N      98.65184 °E

Megarcys ochracea      Within Known Range? N      Nearest Occurrence: 958.79 KM      51.46205°N      99.19994 °E

<b>LOE Rating:</b>	<b>Unlikely</b>	<b>Total:</b>	<b>5</b>
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Family: Capniidae

Capnia khulsbagia      Within Known Range? N      Nearest Occurrence: 1,084.48 KM      50.98944°N      100.71944 °E

Family: Leuctridae

Leuctra fusca      Within Known Range? N      Nearest Occurrence: 1,735.40 KM      49.08643°N      107.28952 °E

Paraleuctra zapekinae      Within Known Range? N      Nearest Occurrence: 1,457.34 KM      49.71481°N      104.64203 °E

Family: Nemouridae

Nemurella pictetii      Within Known Range? N      Nearest Occurrence: 937.45 KM      50.81265°N      99.33803 °E

Family: Perlodidae

Isoperla eximia      Within Known Range? N      Nearest Occurrence: 1,762.49 KM      49.01829°N      107.54453 °E

**Basin:** Internal Drainage Basin  
**Aimag:** Khovd  
**Soum:** Most

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

Freshwater Ecoregion: Upper Irtysh  
 Terrestrial Ecoregion: Altai Montane Forest And Forest Steppe

**LOE Rating: Highly Likely Total: 2**

Family: Chloroperlidae					
Suwallia teleckojensis	Within Known Range? Y	Nearest Occurrence:	62.16 KM	46.38199°N	92.13033 °E
Family: Perlodidae					
Arcynopteryx polaris	Within Known Range? Y	Nearest Occurrence:	40.85 KM	46.61982°N	92.22981 °E

**LOE Rating: Likely Total: 16**

Family: Capniidae					
Isocapnia guentheri	Within Known Range? N	Nearest Occurrence:	661.38 KM	48.61518°N	98.23096 °E
Isocapnia kudia	Within Known Range? N	Nearest Occurrence:	934.11 KM	51.25356°N	99.66687 °E
Isocapnia sibirica	Within Known Range? N	Nearest Occurrence:	956.80 KM	47.28244°N	101.18793 °E
Family: Nemouridae					
Nemoura cinerea	Within Known Range? N	Nearest Occurrence:	571.18 KM	48.06257°N	97.55064 °E
Family: Perlidae					
Agnetina brevipennis	Within Known Range? Y	Nearest Occurrence:	134.23 KM	46.55341°N	91.38764 °E
Agnetina cocandica	Within Known Range? Y	Nearest Occurrence:	87.55 KM	46.12479°N	92.05382 °E
Kamimuria exilis	Within Known Range? N	Nearest Occurrence:	794.80 KM	50.16278°N	98.84212 °E
Family: Perlodidae					
Arcynopteryx compacta	Within Known Range? Y	Nearest Occurrence:	79.08 KM	46.92107°N	91.91048 °E
Arcynopteryx sajanensis	Within Known Range? N	Nearest Occurrence:	1,044.97 KM	51.61397°N	100.59972 °E
Diura bicaudata	Within Known Range? N	Nearest Occurrence:	437.31 KM	49.04180°N	89.41675 °E
Diura majuscula	Within Known Range? Y	Nearest Occurrence:	110.39 KM	47.24104°N	91.75287 °E
Isoperla altaica	Within Known Range? Y	Nearest Occurrence:	107.18 KM	47.33906°N	91.86288 °E
Isoperla mongolica	Within Known Range? Y	Nearest Occurrence:	132.53 KM	46.13371°N	91.54083 °E
Isoperla potanini	Within Known Range? Y	Nearest Occurrence:	62.16 KM	46.38199°N	92.13033 °E
Pictetiella asiatica	Within Known Range? N	Nearest Occurrence:	1,039.09 KM	51.65822°N	100.53000 °E
Skwala pusilla	Within Known Range? N	Nearest Occurrence:	495.05 KM	48.51277°N	88.51107 °E

**LOE Rating: Probable Total: 5**

Family: Chloroperlidae					
Alloperla rostellata	Within Known Range? N	Nearest Occurrence:	727.47 KM	48.36436°N	98.92737 °E
Haploperla lepnevae	Within Known Range? N	Nearest Occurrence:	386.60 KM	48.97819°N	89.94996 °E
Family: Nemouridae					
Amphinemura borealis	Within Known Range? Y	Nearest Occurrence:	176.40 KM	47.03925°N	91.03419 °E
Nemoura arctica	Within Known Range? Y	Nearest Occurrence:	141.52 KM	46.77095°N	91.31664 °E
Family: Taeniopterygidae					
Taenionema japonicum	Within Known Range? Y	Nearest Occurrence:	188.73 KM	47.11520°N	90.94098 °E



**Basin:** Internal Drainage Basin  
**Aimag:** Khovd  
**Soum:** Most

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

Freshwater Ecoregion: Upper Irtysh  
 Terrestrial Ecoregion: Altai Montane Forest And Forest Steppe

**LOE Rating: Possible Total: 5**

Family: Capniidae					
<i>Capnia nigra</i>	Within Known Range? N	Nearest Occurrence:	563.84 KM	49.09162 °N	88.10423 °E
Family: Chloroperlidae					
<i>Alloperla joosti</i>	Within Known Range? N	Nearest Occurrence:	561.75 KM	48.24995 °N	97.40627 °E
<i>Suwallia kerzhneri</i>	Within Known Range? N	Nearest Occurrence:	561.75 KM	48.24995 °N	97.40627 °E
Family: Perlodidae					
<i>Isoperla obscura</i>	Within Known Range? N	Nearest Occurrence:	386.60 KM	48.97819 °N	89.94996 °E
Family: Pteronarcyidae					
<i>Pteronarcys reticulata</i>	Within Known Range? N	Nearest Occurrence:	866.75 KM	47.80440 °N	100.31810 °E

**LOE Rating: Predicted Total: 14**

Family: Capniidae					
<i>Mesocapnia altaica</i>	Within Known Range? N	Nearest Occurrence:	452.18 KM	48.43684 °N	88.90094 °E
<i>Mesocapnia variabilis</i>	Within Known Range? N	Nearest Occurrence:	495.81 KM	48.50631 °N	88.50947 °E
Family: Chloroperlidae					
<i>Alaskaperla longidentata</i>	Within Known Range? N	Nearest Occurrence:	538.35 KM	48.15779 °N	97.21441 °E
<i>Alloperla deminuta</i>	Within Known Range? N	Nearest Occurrence:	866.75 KM	47.80440 °N	100.31810 °E
<i>Alloperla mediata</i>	Within Known Range? N	Nearest Occurrence:	845.43 KM	50.61826 °N	99.12094 °E
Family: Nemouridae					
<i>Amphinemura standfussi</i>	Within Known Range? N	Nearest Occurrence:	571.12 KM	48.05989 °N	97.55073 °E
<i>Nemoura sahlbergi</i>	Within Known Range? N	Nearest Occurrence:	844.18 KM	50.42996 °N	99.21727 °E
Family: Perlidae					
<i>Agnetina extrema</i>	Within Known Range? N	Nearest Occurrence:	891.12 KM	47.50949 °N	100.57510 °E
<i>Paragnetina flavotincta</i>	Within Known Range? N	Nearest Occurrence:	858.08 KM	49.26170 °N	99.88242 °E
Family: Perlodidae					
<i>Isoperla asiatica</i>	Within Known Range? N	Nearest Occurrence:	571.12 KM	48.05989 °N	97.55073 °E
<i>Isoperla kozlovi</i>	Within Known Range? N	Nearest Occurrence:	847.95 KM	50.31066 °N	99.32150 °E
<i>Isoperla lunigera</i>	Within Known Range? N	Nearest Occurrence:	884.00 KM	49.62785 °N	99.99523 °E
<i>Kaszabia nigricauda</i>	Within Known Range? N	Nearest Occurrence:	709.36 KM	48.71968 °N	98.65184 °E
<i>Megarcys ochracea</i>	Within Known Range? N	Nearest Occurrence:	904.27 KM	51.46205 °N	99.19994 °E

**LOE Rating: Unlikely Total: 5**

Family: Capniidae					
<i>Capnia khulsbagia</i>	Within Known Range? N	Nearest Occurrence:	1,020.34 KM	50.98944 °N	100.71944 °E
Family: Leuctridae					
<i>Leuctra fusca</i>	Within Known Range? N	Nearest Occurrence:	1,653.22 KM	49.08643 °N	107.28952 °E
<i>Paraleuctra zapekinae</i>	Within Known Range? N	Nearest Occurrence:	1,379.17 KM	49.71481 °N	104.64203 °E
Family: Nemouridae					
<i>Nemurella pictetii</i>	Within Known Range? N	Nearest Occurrence:	877.21 KM	50.81265 °N	99.33803 °E
Family: Perlodidae					
<i>Isoperla eximia</i>	Within Known Range? N	Nearest Occurrence:	1,679.99 KM	49.01829 °N	107.54453 °E

**Basin:** Internal Drainage Basin  
**Aimags:** Khovd  
**Soums:** Myangad

**Freshwater Ecoregion:** Western Mongolia  
**Terrestrial Ecoregion:** Great Lakes Basin Desert Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

<b>LOE Rating:</b>	<b>Highly Likely</b>	<b>Total:</b>	<b>1</b>
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Family: Perlidae

<i>Agnatina cocandica</i>	Within Known Range? Y	Nearest Occurrence:	36.21 KM	48.24533°N	91.90115°E
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<b>LOE Rating:</b>	<b>Likely</b>	<b>Total:</b>	<b>17</b>
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Family: Capniidae

<i>Isocapnia guentheri</i>	Within Known Range? N	Nearest Occurrence:	702.80 KM	48.61518°N	98.23096°E
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<i>Isocapnia kudia</i>	Within Known Range? N	Nearest Occurrence:	912.14 KM	51.25356°N	99.66687°E
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<i>Isocapnia sibirica</i>	Within Known Range? N	Nearest Occurrence:	1,040.88 KM	47.28244°N	101.18793°E
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Family: Chloroperlidae

<i>Haploperla lepnevae</i>	Within Known Range? Y	Nearest Occurrence:	221.08 KM	48.97819°N	89.94996°E
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<i>Suwallia teleckojensis</i>	Within Known Range? Y	Nearest Occurrence:	113.59 KM	47.55886°N	91.76095°E
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Family: Nemouridae

<i>Amphinemura borealis</i>	Within Known Range? Y	Nearest Occurrence:	195.28 KM	47.03925°N	91.03419°E
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<i>Nemoura cinerea</i>	Within Known Range? N	Nearest Occurrence:	629.80 KM	48.06257°N	97.55064°E
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Family: Perlidae

<i>Agnatina brevipennis</i>	Within Known Range? Y	Nearest Occurrence:	209.57 KM	46.77977°N	91.30252°E
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<i>Kamimuria exilis</i>	Within Known Range? N	Nearest Occurrence:	792.05 KM	50.16278°N	98.84212°E
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Family: Perlodidae

<i>Arcynopteryx compacta</i>	Within Known Range? Y	Nearest Occurrence:	104.32 KM	48.42161°N	90.97337°E
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<i>Arcynopteryx sajanensis</i>	Within Known Range? N	Nearest Occurrence:	1,024.93 KM	51.61397°N	100.59972°E
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<i>Diura bicaudata</i>	Within Known Range? Y	Nearest Occurrence:	280.50 KM	49.04180°N	89.41675°E
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<i>Diura majuscula</i>	Within Known Range? Y	Nearest Occurrence:	136.65 KM	47.60884°N	91.13502°E
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<i>Isoperla altaica</i>	Within Known Range? Y	Nearest Occurrence:	137.05 KM	47.33906°N	91.86288°E
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<i>Isoperla potanini</i>	Within Known Range? Y	Nearest Occurrence:	104.32 KM	48.42161°N	90.97337°E
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<i>Pictetiella asiatica</i>	Within Known Range? N	Nearest Occurrence:	1,017.43 KM	51.65822°N	100.53000°E
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<i>Skwala pusilla</i>	Within Known Range? N	Nearest Occurrence:	376.18 KM	48.51277°N	88.51107°E
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<b>LOE Rating:</b>	<b>Probable</b>	<b>Total:</b>	<b>4</b>
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Family: Chloroperlidae

<i>Alloperla rostellata</i>	Within Known Range? N	Nearest Occurrence:	780.42 KM	48.36436°N	98.92737°E
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Family: Nemouridae

<i>Nemoura arctica</i>	Within Known Range? Y	Nearest Occurrence:	134.39 KM	47.53132°N	91.28330°E
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Family: Perlodidae

<i>Arcynopteryx polaris</i>	Within Known Range? Y	Nearest Occurrence:	171.64 KM	47.34650°N	90.95982°E
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Family: Taeniopterygidae

<i>Taenionema japonicum</i>	Within Known Range? Y	Nearest Occurrence:	170.07 KM	47.85391°N	90.54864°E
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Basin: Internal Drainage Basin

Aimags: Khovd

Soums: Myangad

Freshwater Ecoregion: Western Mongolia

Terrestrial Ecoregion: Great Lakes Basin Desert Steppe

WQM Sites:

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Possible Total: 8**

Family: Capniidae					
Capnia nigra	Within Known Range? Y	Nearest Occurrence:	425.23 KM	49.09162°N	88.10423°E
Family: Chloroperlidae					
Alloperla joosti	Within Known Range? N	Nearest Occurrence:	612.28 KM	48.24995°N	97.40627°E
Suwallia kerzhneri	Within Known Range? N	Nearest Occurrence:	612.28 KM	48.24995°N	97.40627°E
Family: Perlidae					
Agnetina extrema	Within Known Range? N	Nearest Occurrence:	970.17 KM	47.50949°N	100.57510°E
Family: Perlodidae					
Isoperla asiatica	Within Known Range? N	Nearest Occurrence:	629.80 KM	48.06257°N	97.55064°E
Isoperla mongolica	Within Known Range? Y	Nearest Occurrence:	191.44 KM	47.08782°N	91.02542°E
Isoperla obscura	Within Known Range? Y	Nearest Occurrence:	221.08 KM	48.97819°N	89.94996°E
Family: Pteronarcyidae					
Pteronarcys reticulata	Within Known Range? N	Nearest Occurrence:	854.03 KM	51.47065°N	99.02617°E

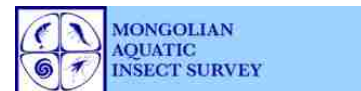
**LOE Rating: Predicted Total: 13**

Family: Capniidae					
Mesocapnia altaica	Within Known Range? N	Nearest Occurrence:	333.18 KM	48.43684°N	88.90094°E
Mesocapnia variabilis	Within Known Range? Y	Nearest Occurrence:	377.05 KM	48.50631°N	88.50947°E
Family: Chloroperlidae					
Alaskaperla longidentata	Within Known Range? N	Nearest Occurrence:	591.73 KM	48.15779°N	97.21441°E
Alloperla deminuta	Within Known Range? N	Nearest Occurrence:	854.03 KM	51.47065°N	99.02617°E
Alloperla mediata	Within Known Range? N	Nearest Occurrence:	833.16 KM	50.61826°N	99.12094°E
Family: Leuctridae					
Paraleuctra zapekinae	Within Known Range? N	Nearest Occurrence:	1,420.10 KM	49.71481°N	104.64203°E
Family: Nemouridae					
Amphinemura standfussi	Within Known Range? N	Nearest Occurrence:	629.80 KM	48.06257°N	97.55064°E
Nemoura sahlbergi	Within Known Range? N	Nearest Occurrence:	838.07 KM	50.42996°N	99.21727°E
Family: Perlidae					
Paragnetina flavotincta	Within Known Range? N	Nearest Occurrence:	889.41 KM	49.26170°N	99.88242°E
Family: Perlodidae					
Isoperla kozlovi	Within Known Range? N	Nearest Occurrence:	846.17 KM	50.31066°N	99.32150°E
Isoperla lunigera	Within Known Range? N	Nearest Occurrence:	870.19 KM	51.09845°N	99.32051°E
Kaszabia nigricauda	Within Known Range? N	Nearest Occurrence:	749.68 KM	48.71968°N	98.65184°E
Megarcys ochracea	Within Known Range? N	Nearest Occurrence:	871.57 KM	51.46205°N	99.19994°E

**LOE Rating: Unlikely Total: 4**

Family: Capniidae					
Capnia khulsbagia	Within Known Range? N	Nearest Occurrence:	1,015.15 KM	50.98944°N	100.71944°E
Family: Leuctridae					
Leuctra fusca	Within Known Range? N	Nearest Occurrence:	1,709.24 KM	49.08643°N	107.28952°E
Family: Nemouridae					
Nemurella pictetii	Within Known Range? N	Nearest Occurrence:	862.35 KM	50.81265°N	99.33803°E
Family: Perlodidae					
Isoperla eximia	Within Known Range? N	Nearest Occurrence:	1,737.30 KM	49.01829°N	107.54453°E

Research funded by the National Science Foundation  
DEB-BSI #0206674: A Survey of the Aquatic Insects of the Selenge River Basin. P.I.'s: JKGelhaus, JCMorse, BHayford.  
DEB # 0743732: Aquatic Insects of the Altai and Hangai Mountain Drainages. P.I.'s: JKGelhaus, JCMorse, CRNelson.  
<http://clade.ansp.org/entomology/mongolia/index.html>



**Basin:** Internal Drainage Basin  
**Aimags:** Khovd  
**Soums:** Null

**Freshwater Ecoregion:** Western Mongolia  
**Terrestrial Ecoregion:** Great Lakes Basin Desert Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Highly Likely Total: 2**

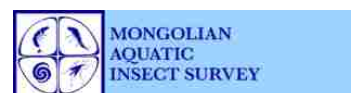
Family: Chloroperlidae					
Suwallia teleckojensis	Within Known Range? Y	Nearest Occurrence:	75.34 KM	47.55886°N	91.76095°E
Family: Perlidae					
Agnentina cocandica	Within Known Range? Y	Nearest Occurrence:	42.80 KM	48.24533°N	91.90115°E

**LOE Rating: Likely Total: 16**

Family: Capniidae					
Isocapnia guentheri	Within Known Range? N	Nearest Occurrence:	668.98 KM	48.61518°N	98.23096°E
Isocapnia kudia	Within Known Range? N	Nearest Occurrence:	898.86 KM	51.25356°N	99.66687°E
Isocapnia sibirica	Within Known Range? N	Nearest Occurrence:	997.84 KM	47.28244°N	101.18793°E
Family: Chloroperlidae					
Alloperla rostellata	Within Known Range? N	Nearest Occurrence:	744.14 KM	48.36436°N	98.92737°E
Haploperla lepnevae	Within Known Range? Y	Nearest Occurrence:	273.48 KM	48.97819°N	89.94996°E
Family: Nemouridae					
Nemoura cinerea	Within Known Range? N	Nearest Occurrence:	590.49 KM	48.06257°N	97.55064°E
Family: Perlidae					
Agnentina brevipennis	Within Known Range? Y	Nearest Occurrence:	173.80 KM	46.76864°N	91.32673°E
Kamimuria exilis	Within Known Range? N	Nearest Occurrence:	771.90 KM	50.16278°N	98.84212°E
Family: Perlodidae					
Arcynopteryx compacta	Within Known Range? Y	Nearest Occurrence:	118.28 KM	47.05445°N	91.84839°E
Arcynopteryx sajanensis	Within Known Range? N	Nearest Occurrence:	1,011.62 KM	51.61397°N	100.59972°E
Diura bicaudata	Within Known Range? Y	Nearest Occurrence:	331.32 KM	49.04180°N	89.41675°E
Isoperla altaica	Within Known Range? Y	Nearest Occurrence:	88.72 KM	47.33906°N	91.86288°E
Isoperla potanini	Within Known Range? Y	Nearest Occurrence:	131.24 KM	47.60884°N	91.13502°E
Pictetiella asiatica	Within Known Range? N	Nearest Occurrence:	1,004.63 KM	51.65822°N	100.53000°E
Skwala pusilla	Within Known Range? N	Nearest Occurrence:	416.13 KM	48.51277°N	88.51107°E
Family: Pteronarcyidae					
Pteronarcys reticulata	Within Known Range? N	Nearest Occurrence:	844.60 KM	51.47065°N	99.02617°E

**LOE Rating: Probable Total: 6**

Family: Nemouridae					
Amphinemura borealis	Within Known Range? Y	Nearest Occurrence:	173.66 KM	47.03925°N	91.03419°E
Nemoura arctica	Within Known Range? Y	Nearest Occurrence:	119.97 KM	47.53132°N	91.28330°E
Family: Perlodidae					
Arcynopteryx polaris	Within Known Range? Y	Nearest Occurrence:	136.95 KM	46.91446°N	91.74682°E
Diura majuscula	Within Known Range? Y	Nearest Occurrence:	104.19 KM	47.24104°N	91.75287°E
Isoperla asiatica	Within Known Range? N	Nearest Occurrence:	590.49 KM	48.06257°N	97.55064°E
Isoperla mongolica	Within Known Range? Y	Nearest Occurrence:	171.30 KM	47.08782°N	91.02542°E



**Basin:** Internal Drainage Basin  
**Aimags:** Khovd  
**Soums:** Null

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

Freshwater Ecoregion: Western Mongolia  
 Terrestrial Ecoregion: Great Lakes Basin Desert Steppe

**LOE Rating: Possible Total: 3**

Family: Chloroperlidae					
Suwallia kerzhneri	Within Known Range? N	Nearest Occurrence:	574.90 KM	48.24995°N	97.40627°E
Family: Perlodidae					
Isoperla obscura	Within Known Range? Y	Nearest Occurrence:	273.48 KM	48.97819°N	89.94996°E
Family: Taeniopterygidae					
Taenionema japonicum	Within Known Range? Y	Nearest Occurrence:	176.95 KM	47.11520°N	90.94098°E

**LOE Rating: Predicted Total: 15**

Family: Capniidae					
Capnia nigra	Within Known Range? Y	Nearest Occurrence:	472.52 KM	49.09162°N	88.10423°E
Mesocapnia altaica	Within Known Range? N	Nearest Occurrence:	372.16 KM	48.43684°N	88.90094°E
Mesocapnia variabilis	Within Known Range? Y	Nearest Occurrence:	416.97 KM	48.50631°N	88.50947°E
Family: Chloroperlidae					
Alaskaperla longidentata	Within Known Range? N	Nearest Occurrence:	553.30 KM	48.15779°N	97.21441°E
Alloperla deminuta	Within Known Range? N	Nearest Occurrence:	844.60 KM	51.47065°N	99.02617°E
Alloperla joosti	Within Known Range? N	Nearest Occurrence:	574.90 KM	48.24995°N	97.40627°E
Alloperla mediata	Within Known Range? N	Nearest Occurrence:	816.31 KM	50.61826°N	99.12094°E
Family: Nemouridae					
Amphinemura standfussi	Within Known Range? N	Nearest Occurrence:	590.49 KM	48.06257°N	97.55064°E
Nemoura sahlbergi	Within Known Range? N	Nearest Occurrence:	819.35 KM	50.42996°N	99.21727°E
Family: Perlidae					
Agnetina extrema	Within Known Range? N	Nearest Occurrence:	928.12 KM	47.50949°N	100.57510°E
Paragnetina flavotincta	Within Known Range? N	Nearest Occurrence:	859.95 KM	49.26170°N	99.88242°E
Family: Perlodidae					
Isoperla kozlovi	Within Known Range? N	Nearest Occurrence:	826.19 KM	50.31066°N	99.32150°E
Isoperla lunigera	Within Known Range? N	Nearest Occurrence:	856.74 KM	51.09845°N	99.32051°E
Kaszabia nigricauda	Within Known Range? N	Nearest Occurrence:	716.62 KM	48.71968°N	98.65184°E
Megarcys ochracea	Within Known Range? N	Nearest Occurrence:	861.45 KM	51.46205°N	99.19994°E

**LOE Rating: Unlikely Total: 5**

Family: Capniidae					
Capnia khulsbagia	Within Known Range? N	Nearest Occurrence:	997.23 KM	50.98944°N	100.71944°E
Family: Leuctridae					
Leuctra fusca	Within Known Range? N	Nearest Occurrence:	1,675.48 KM	49.08643°N	107.28952°E
Paraleuctra zapekinae	Within Known Range? N	Nearest Occurrence:	1,390.01 KM	49.71481°N	104.64203°E
Family: Nemouridae					
Nemurella pictetii	Within Known Range? N	Nearest Occurrence:	846.52 KM	50.81265°N	99.33803°E
Family: Perlodidae					
Isoperla eximia	Within Known Range? N	Nearest Occurrence:	1,703.22 KM	49.01829°N	107.54453°E

**Basin:** Internal Drainage Basin  
**Aimag:** Khovd  
**Soum:** Tsetseg

**Freshwater Ecoregion:** Upper Irtysh  
**Terrestrial Ecoregion:** Altai Montane Forest And Forest Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Highly Likely Total: 2**

Family: Chloroperlidae						
Suwallia teleckojensis	Within Known Range? Y	Nearest Occurrence:	71.37 KM	46.32080 °N	93.90083 °E	
Family: Perlodidae						
Isoperla potanini	Within Known Range? Y	Nearest Occurrence:	71.37 KM	46.32080 °N	93.90083 °E	

**LOE Rating: Likely Total: 17**

Family: Capniidae						
Isocapnia guentheri	Within Known Range? N	Nearest Occurrence:	605.93 KM	48.61518 °N	98.23096 °E	
Isocapnia kudia	Within Known Range? N	Nearest Occurrence:	894.92 KM	51.25356 °N	99.66687 °E	
Isocapnia sibirica	Within Known Range? N	Nearest Occurrence:	885.93 KM	47.28244 °N	101.18793 °E	
Family: Chloroperlidae						
Alloperla rostellata	Within Known Range? N	Nearest Occurrence:	667.28 KM	48.36436 °N	98.92737 °E	
Family: Nemouridae						
Amphinemura borealis	Within Known Range? Y	Nearest Occurrence:	258.36 KM	47.03925 °N	91.03419 °E	
Nemoura cinerea	Within Known Range? N	Nearest Occurrence:	512.41 KM	48.06257 °N	97.55064 °E	
Family: Perlidae						
Agnetina brevipennis	Within Known Range? Y	Nearest Occurrence:	203.54 KM	46.28532 °N	91.42793 °E	
Agnetina cocandica	Within Known Range? Y	Nearest Occurrence:	136.66 KM	46.12479 °N	92.05382 °E	
Kamimuria exilis	Within Known Range? N	Nearest Occurrence:	751.12 KM	50.16278 °N	98.84212 °E	
Family: Perlodidae						
Arcynopteryx compacta	Within Known Range? Y	Nearest Occurrence:	162.58 KM	46.92107 °N	91.91048 °E	
Arcynopteryx polaris	Within Known Range? Y	Nearest Occurrence:	118.19 KM	46.61982 °N	92.22981 °E	
Arcynopteryx sajanensis	Within Known Range? N	Nearest Occurrence:	1,003.77 KM	51.61397 °N	100.59972 °E	
Diura bicaudata	Within Known Range? N	Nearest Occurrence:	520.26 KM	49.04180 °N	89.41675 °E	
Diura majuscula	Within Known Range? Y	Nearest Occurrence:	194.19 KM	47.24104 °N	91.75287 °E	
Isoperla altaica	Within Known Range? Y	Nearest Occurrence:	189.78 KM	47.33906 °N	91.86288 °E	
Pictetiella asiatica	Within Known Range? N	Nearest Occurrence:	998.57 KM	51.65822 °N	100.53000 °E	
Skwala pusilla	Within Known Range? N	Nearest Occurrence:	578.82 KM	48.51277 °N	88.51107 °E	

**LOE Rating: Probable Total: 5**

Family: Chloroperlidae						
Alloperla joosti	Within Known Range? N	Nearest Occurrence:	505.82 KM	48.24995 °N	97.40627 °E	
Haploperla lepnevae	Within Known Range? N	Nearest Occurrence:	468.53 KM	48.97819 °N	89.94996 °E	
Suwallia kerzhneri	Within Known Range? N	Nearest Occurrence:	505.82 KM	48.24995 °N	97.40627 °E	
Family: Nemouridae						
Nemoura arctica	Within Known Range? Y	Nearest Occurrence:	220.92 KM	46.77095 °N	91.31664 °E	
Family: Perlodidae						
Isoperla mongolica	Within Known Range? Y	Nearest Occurrence:	192.83 KM	46.13371 °N	91.54083 °E	



**Basin:** Internal Drainage Basin  
**Aimags:** Khovd  
**Soums:** Tsetseg

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

Freshwater Ecoregion: Upper Irtysh  
 Terrestrial Ecoregion: Altai Montane Forest And Forest Steppe

**LOE Rating: Possible Total: 6**

Family: Capniidae					
Capnia nigra	Within Known Range? N	Nearest Occurrence:	512.41 KM	48.06257 °N	97.55064 °E
Family: Perlidae					
Agnatina extrema	Within Known Range? N	Nearest Occurrence:	821.94 KM	47.50949 °N	100.57510 °E
Family: Perlodidae					
Isoperla asiatica	Within Known Range? N	Nearest Occurrence:	512.31 KM	48.05989 °N	97.55073 °E
Isoperla obscura	Within Known Range? N	Nearest Occurrence:	468.53 KM	48.97819 °N	89.94996 °E
Family: Pteronarcyidae					
Pteronarcys reticulata	Within Known Range? N	Nearest Occurrence:	799.69 KM	47.80440 °N	100.31810 °E
Family: Taeniopterygidae					
Taenionema japonicum	Within Known Range? Y	Nearest Occurrence:	271.25 KM	47.11520 °N	90.94098 °E

**LOE Rating: Predicted Total: 12**

Family: Capniidae					
Mesocapnia altaica	Within Known Range? N	Nearest Occurrence:	536.02 KM	48.43684 °N	88.90094 °E
Mesocapnia variabilis	Within Known Range? N	Nearest Occurrence:	579.73 KM	48.50631 °N	88.50947 °E
Family: Chloroperlidae					
Alaskaperla longidentata	Within Known Range? N	Nearest Occurrence:	482.20 KM	48.15779 °N	97.21441 °E
Alloperla deminuta	Within Known Range? N	Nearest Occurrence:	799.69 KM	47.80440 °N	100.31810 °E
Alloperla mediata	Within Known Range? N	Nearest Occurrence:	804.19 KM	50.61826 °N	99.12094 °E
Family: Nemouridae					
Amphinemura standfussi	Within Known Range? N	Nearest Occurrence:	512.31 KM	48.05989 °N	97.55073 °E
Nemoura sahlbergi	Within Known Range? N	Nearest Occurrence:	790.49 KM	47.42580 °N	100.30130 °E
Family: Perlidae					
Paragnetina flavotincta	Within Known Range? N	Nearest Occurrence:	802.58 KM	49.26170 °N	99.88242 °E
Family: Perlodidae					
Isoperla kozlovi	Within Known Range? N	Nearest Occurrence:	799.69 KM	47.80440 °N	100.31810 °E
Isoperla lunigera	Within Known Range? N	Nearest Occurrence:	830.99 KM	49.62785 °N	99.99523 °E
Kaszabia nigricauda	Within Known Range? N	Nearest Occurrence:	653.32 KM	48.71968 °N	98.65184 °E
Megarcys ochracea	Within Known Range? N	Nearest Occurrence:	869.21 KM	51.46205 °N	99.19994 °E

**LOE Rating: Unlikely Total: 5**

Family: Capniidae					
Capnia khulsbagia	Within Known Range? N	Nearest Occurrence:	974.53 KM	50.98944 °N	100.71944 °E
Family: Leuctridae					
Leuctra fusca	Within Known Range? N	Nearest Occurrence:	1,586.41 KM	49.08643 °N	107.28952 °E
Paraleuctra zapekinae	Within Known Range? N	Nearest Occurrence:	1,317.15 KM	49.71481 °N	104.64203 °E
Family: Nemouridae					
Nemurella pictetii	Within Known Range? N	Nearest Occurrence:	836.37 KM	50.81265 °N	99.33803 °E
Family: Perlodidae					
Isoperla eximia	Within Known Range? N	Nearest Occurrence:	1,612.81 KM	49.01829 °N	107.54453 °E

**Basin:** Internal Drainage Basin  
**Aimags:** Khovd  
**Soums:** Uyench

Freshwater Ecoregion: Upper Irtysh  
 Terrestrial Ecoregion: Junggar Basin Semi-Desert

**WQM Sites:**

WQM Sites: # 118 (Yench River @ N 46.11427° E 92.0485°)

**LOE Rating: Highly Likely Total: 2**

Family: Chloroperlidae					
Suwallia teleckojensis	Within Known Range? Y	Nearest Occurrence:	50.68 KM	46.26026°N	92.07248°E
Family: Perlodidae					
Isoperla potanini	Within Known Range? Y	Nearest Occurrence:	39.58 KM	46.13371°N	91.54083°E

**LOE Rating: Likely Total: 15**

Family: Capniidae					
Isocapnia guentheri	Within Known Range? N	Nearest Occurrence:	774.87 KM	48.61518°N	98.23096°E
Isocapnia kudia	Within Known Range? N	Nearest Occurrence:	1,056.43 KM	51.25356°N	99.66687°E
Isocapnia sibirica	Within Known Range? N	Nearest Occurrence:	1,053.10 KM	47.28244°N	101.18793°E
Family: Chloroperlidae					
Alloperla rostellata	Within Known Range? N	Nearest Occurrence:	837.06 KM	48.36436°N	98.92737°E
Family: Perlidae					
Agnetina brevipennis	Within Known Range? Y	Nearest Occurrence:	60.25 KM	46.28532°N	91.42793°E
Agnetina cocandica	Within Known Range? Y	Nearest Occurrence:	38.00 KM	46.12479°N	92.05382°E
Kamimuria exilis	Within Known Range? N	Nearest Occurrence:	915.52 KM	50.16278°N	98.84212°E
Family: Perlodidae					
Arcynopteryx compacta	Within Known Range? Y	Nearest Occurrence:	39.58 KM	46.13371°N	91.54083°E
Arcynopteryx sajanensis	Within Known Range? N	Nearest Occurrence:	1,166.89 KM	51.61397°N	100.59972°E
Diura bicaudata	Within Known Range? N	Nearest Occurrence:	438.55 KM	49.04180°N	89.41675°E
Diura majuscula	Within Known Range? N	Nearest Occurrence:	150.03 KM	47.24104°N	91.75287°E
Isoperla altaica	Within Known Range? Y	Nearest Occurrence:	39.58 KM	46.13371°N	91.54083°E
Isoperla mongolica	Within Known Range? Y	Nearest Occurrence:	39.58 KM	46.13371°N	91.54083°E
Pictetiella asiatica	Within Known Range? N	Nearest Occurrence:	1,161.02 KM	51.65822°N	100.53000°E
Skwala pusilla	Within Known Range? N	Nearest Occurrence:	466.99 KM	48.51277°N	88.51107°E

**LOE Rating: Probable Total: 5**

Family: Chloroperlidae					
Haploperla lepnevae	Within Known Range? N	Nearest Occurrence:	399.49 KM	48.97819°N	89.94996°E
Family: Nemouridae					
Amphinemura borealis	Within Known Range? N	Nearest Occurrence:	153.21 KM	47.03925°N	91.03419°E
Nemoura arctica	Within Known Range? N	Nearest Occurrence:	111.62 KM	46.77095°N	91.31664°E
Nemoura cinerea	Within Known Range? N	Nearest Occurrence:	681.95 KM	48.06257°N	97.55064°E
Family: Perlodidae					
Arcynopteryx polaris	Within Known Range? N	Nearest Occurrence:	93.75 KM	46.61982°N	92.22981°E



**Basin:** Internal Drainage Basin  
**Aimags:** Khovd  
**Soums:** Uyench

Freshwater Ecoregion: Upper Irtysh  
 Terrestrial Ecoregion: Junggar Basin Semi-Desert

**WQM Sites:**

WQM Sites: # 118 (Yench River @ N 46.11427° E 92.0485°)

**LOE Rating: Possible Total: 6**

Family: Chloroperlidae					
Alloperla joosti	Within Known Range? N	Nearest Occurrence:	674.77 KM	48.24995°N	97.40627°E
Suwallia kerzhneri	Within Known Range? N	Nearest Occurrence:	674.77 KM	48.24995°N	97.40627°E
Family: Perlodidae					
Isoperla asiatica	Within Known Range? N	Nearest Occurrence:	681.85 KM	48.05989°N	97.55073°E
Isoperla obscura	Within Known Range? N	Nearest Occurrence:	399.49 KM	48.97819°N	89.94996°E
Family: Pteronarcyidae					
Pteronarcys reticulata	Within Known Range? N	Nearest Occurrence:	968.72 KM	47.80440°N	100.31810°E
Family: Taeniopterygidae					
Taenionema japonicum	Within Known Range? N	Nearest Occurrence:	166.32 KM	47.11520°N	90.94098°E

**LOE Rating: Predicted Total: 14**

Family: Capniidae					
Capnia nigra	Within Known Range? N	Nearest Occurrence:	542.79 KM	49.09162°N	88.10423°E
Mesocapnia altaica	Within Known Range? N	Nearest Occurrence:	428.37 KM	48.43684°N	88.90094°E
Mesocapnia variabilis	Within Known Range? N	Nearest Occurrence:	467.52 KM	48.50631°N	88.50947°E
Family: Chloroperlidae					
Alaskaperla longidentata	Within Known Range? N	Nearest Occurrence:	651.17 KM	48.15779°N	97.21441°E
Alloperla deminuta	Within Known Range? N	Nearest Occurrence:	968.72 KM	47.80440°N	100.31810°E
Alloperla mediata	Within Known Range? N	Nearest Occurrence:	966.94 KM	50.61826°N	99.12094°E
Family: Nemouridae					
Amphinemura standfussi	Within Known Range? N	Nearest Occurrence:	681.85 KM	48.05989°N	97.55073°E
Nemoura sahlbergi	Within Known Range? N	Nearest Occurrence:	958.55 KM	47.42580°N	100.30130°E
Family: Perlidae					
Aagnetina extrema	Within Known Range? N	Nearest Occurrence:	990.12 KM	47.50949°N	100.57510°E
Paragnetina flavotincta	Within Known Range? N	Nearest Occurrence:	971.67 KM	49.26170°N	99.88242°E
Family: Perlodidae					
Isoperla kozlovi	Within Known Range? N	Nearest Occurrence:	967.98 KM	50.31066°N	99.32150°E
Isoperla lunigera	Within Known Range? N	Nearest Occurrence:	999.40 KM	49.62785°N	99.99523°E
Kaszabia nigricauda	Within Known Range? N	Nearest Occurrence:	822.45 KM	48.71968°N	98.65184°E
Megarcys ochracea	Within Known Range? N	Nearest Occurrence:	1,027.77 KM	51.46205°N	99.19994°E

**LOE Rating: Unlikely Total: 5**

Family: Capniidae					
Capnia khulsbagia	Within Known Range? N	Nearest Occurrence:	1,140.02 KM	50.98944°N	100.71944°E
Family: Leuctridae					
Leuctra fusca	Within Known Range? N	Nearest Occurrence:	1,755.19 KM	49.08643°N	107.28952°E
Paraleuctra zapekinae	Within Known Range? N	Nearest Occurrence:	1,486.95 KM	49.71481°N	104.64203°E
Family: Nemouridae					
Nemurella pictetii	Within Known Range? N	Nearest Occurrence:	998.90 KM	50.81265°N	99.33803°E
Family: Perlodidae					
Isoperla eximia	Within Known Range? N	Nearest Occurrence:	1,781.44 KM	49.01829°N	107.54453°E

**Basin:** Internal Drainage Basin  
**Aimags:** Khovd  
**Soums:** Zereg

**Freshwater Ecoregion:** Western Mongolia  
**Terrestrial Ecoregion:** Altai Montane Forest And Forest Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Highly Likely Total: 4**

Family: Chloroperlidae					
Suwallia teleckojensis	Within Known Range? Y	Nearest Occurrence:	104.55 KM	46.90924 °N	91.93402 °E
Family: Perlidae					
Agnetina cocandica	Within Known Range? Y	Nearest Occurrence:	134.24 KM	48.33025 °N	92.81616 °E
Family: Perlodidae					
Isoperla altaica	Within Known Range? Y	Nearest Occurrence:	112.30 KM	47.33906 °N	91.86288 °E
Isoperla potanini	Within Known Range? Y	Nearest Occurrence:	114.87 KM	46.38199 °N	92.13033 °E

**LOE Rating: Likely Total: 17**

Family: Capniidae					
Isocapnia guentheri	Within Known Range? N	Nearest Occurrence:	619.87 KM	48.61518 °N	98.23096 °E
Isocapnia kudia	Within Known Range? N	Nearest Occurrence:	884.76 KM	51.25356 °N	99.66687 °E
Isocapnia sibirica	Within Known Range? N	Nearest Occurrence:	925.74 KM	47.28244 °N	101.18793 °E
Family: Chloroperlidae					
Alloperla rostellata	Within Known Range? N	Nearest Occurrence:	688.56 KM	48.36436 °N	98.92737 °E
Haploperla lepnevae	Within Known Range? N	Nearest Occurrence:	382.06 KM	48.97819 °N	89.94996 °E
Family: Nemouridae					
Amphinemura borealis	Within Known Range? Y	Nearest Occurrence:	201.71 KM	47.03925 °N	91.03419 °E
Nemoura cinerea	Within Known Range? N	Nearest Occurrence:	532.14 KM	48.06257 °N	97.55064 °E
Family: Perlidae					
Agnetina brevipennis	Within Known Range? Y	Nearest Occurrence:	173.55 KM	46.76864 °N	91.32673 °E
Kamimuria exilis	Within Known Range? N	Nearest Occurrence:	747.19 KM	50.16278 °N	98.84212 °E
Family: Perlodidae					
Arcynopteryx compacta	Within Known Range? Y	Nearest Occurrence:	106.82 KM	46.92107 °N	91.91048 °E
Arcynopteryx polaris	Within Known Range? Y	Nearest Occurrence:	88.80 KM	46.61982 °N	92.22981 °E
Arcynopteryx sajanensis	Within Known Range? N	Nearest Occurrence:	996.03 KM	51.61397 °N	100.59972 °E
Diura bicaudata	Within Known Range? N	Nearest Occurrence:	436.49 KM	49.04180 °N	89.41675 °E
Diura majuscula	Within Known Range? Y	Nearest Occurrence:	122.64 KM	47.24104 °N	91.75287 °E
Isoperla mongolica	Within Known Range? Y	Nearest Occurrence:	173.87 KM	46.76864 °N	91.32673 °E
Pictetiella asiatica	Within Known Range? N	Nearest Occurrence:	990.04 KM	51.65822 °N	100.53000 °E
Skwala pusilla	Within Known Range? N	Nearest Occurrence:	505.65 KM	48.51277 °N	88.51107 °E

**LOE Rating: Probable Total: 3**

Family: Chloroperlidae					
Suwallia kerzhneri	Within Known Range? N	Nearest Occurrence:	521.03 KM	48.24995 °N	97.40627 °E
Family: Nemouridae					
Nemoura arctica	Within Known Range? Y	Nearest Occurrence:	174.90 KM	46.77095 °N	91.31664 °E
Family: Taeniopterygidae					
Taenionema japonicum	Within Known Range? Y	Nearest Occurrence:	212.23 KM	47.11520 °N	90.94098 °E



**Basin:** Internal Drainage Basin  
**Aimags:** Khovd  
**Soums:** Zereg

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

Freshwater Ecoregion: Western Mongolia  
 Terrestrial Ecoregion: Altai Montane Forest And Forest Steppe

**LOE Rating: Possible Total: 4**

Family: Chloroperlidae					
Alloperla joosti	Within Known Range? N	Nearest Occurrence:	521.03 KM	48.24995 °N	97.40627 °E
Family: Perlodidae					
Isoperla asiatica	Within Known Range? N	Nearest Occurrence:	532.09 KM	48.05989 °N	97.55073 °E
Isoperla obscura	Within Known Range? N	Nearest Occurrence:	382.06 KM	48.97819 °N	89.94996 °E
Family: Pteronarcyidae					
Pteronarcys reticulata	Within Known Range? N	Nearest Occurrence:	832.46 KM	47.80440 °N	100.31810 °E

**LOE Rating: Predicted Total: 15**

Family: Capniidae					
Capnia nigra	Within Known Range? N	Nearest Occurrence:	532.14 KM	48.06257 °N	97.55064 °E
Mesocapnia altaica	Within Known Range? N	Nearest Occurrence:	461.90 KM	48.43684 °N	88.90094 °E
Mesocapnia variabilis	Within Known Range? N	Nearest Occurrence:	506.51 KM	48.50631 °N	88.50947 °E
Family: Chloroperlidae					
Alaskaperla longidentata	Within Known Range? N	Nearest Occurrence:	497.92 KM	48.15779 °N	97.21441 °E
Alloperla deminuta	Within Known Range? N	Nearest Occurrence:	832.46 KM	47.80440 °N	100.31810 °E
Alloperla mediata	Within Known Range? N	Nearest Occurrence:	796.92 KM	50.61826 °N	99.12094 °E
Family: Leuctridae					
Paraleuctra zapekinae	Within Known Range? N	Nearest Occurrence:	1,340.20 KM	49.71481 °N	104.64203 °E
Family: Nemouridae					
Amphinemura standfussi	Within Known Range? N	Nearest Occurrence:	532.09 KM	48.05989 °N	97.55073 °E
Nemoura sahlbergi	Within Known Range? N	Nearest Occurrence:	796.43 KM	50.42996 °N	99.21727 °E
Family: Perlidae					
Agnetina extrema	Within Known Range? N	Nearest Occurrence:	858.61 KM	47.50949 °N	100.57510 °E
Paragnetina flavotincta	Within Known Range? N	Nearest Occurrence:	815.94 KM	49.26170 °N	99.88242 °E
Family: Perlodidae					
Isoperla kozlovi	Within Known Range? N	Nearest Occurrence:	800.78 KM	50.31066 °N	99.32150 °E
Isoperla lunigera	Within Known Range? N	Nearest Occurrence:	840.48 KM	49.62785 °N	99.99523 °E
Kaszabia nigricauda	Within Known Range? N	Nearest Occurrence:	667.99 KM	48.71968 °N	98.65184 °E
Megarcys ochracea	Within Known Range? N	Nearest Occurrence:	853.70 KM	51.46205 °N	99.19994 °E

**LOE Rating: Unlikely Total: 4**

Family: Capniidae					
Capnia khulsbagia	Within Known Range? N	Nearest Occurrence:	973.27 KM	50.98944 °N	100.71944 °E
Family: Leuctridae					
Leuctra fusca	Within Known Range? N	Nearest Occurrence:	1,617.59 KM	49.08643 °N	107.28952 °E
Family: Nemouridae					
Nemurella pictetii	Within Known Range? N	Nearest Occurrence:	828.50 KM	50.81265 °N	99.33803 °E
Family: Perlodidae					
Isoperla eximia	Within Known Range? N	Nearest Occurrence:	1,644.65 KM	49.01829 °N	107.54453 °E



**Basin:** Internal Drainage Basin  
**Aimags:** Khovsgol  
**Soums:** Tsetserleg

**Freshwater Ecoregion:** Western Mongolia  
**Terrestrial Ecoregion:** Selenge-Orkhon Forest Steppe

**WQM Sites:**

WQM Sites: # 152 (Tes River @ N 49.2733° E 98.15272°)

**LOE Rating: Highly Likely Total: 9**

<b>Family: Capniidae</b>					
Capnia nigra	Within Known Range? Y	Nearest Occurrence:	157.02 KM	48.06257°N	97.55064 °E
Isocapnia guentheri	Within Known Range? Y	Nearest Occurrence:	112.94 KM	48.61518°N	98.23096 °E
<b>Family: Chloroperlidae</b>					
Alaskaperla longidentata	Within Known Range? Y	Nearest Occurrence:	96.78 KM	48.62624°N	97.89617 °E
Alloperla rostellata	Within Known Range? N	Nearest Occurrence:	185.03 KM	48.36436°N	98.92737 °E
Suwallia kerzhneri	Within Known Range? Y	Nearest Occurrence:	112.94 KM	48.61518°N	98.23096 °E
<b>Family: Nemouridae</b>					
Amphinemura standfussi	Within Known Range? Y	Nearest Occurrence:	96.78 KM	48.62624°N	97.89617 °E
Nemoura arctica	Within Known Range? Y	Nearest Occurrence:	201.38 KM	50.42996°N	99.21727 °E
Nemoura cinerea	Within Known Range? Y	Nearest Occurrence:	157.02 KM	48.06257°N	97.55064 °E
<b>Family: Taeniopterygidae</b>					
Taenionema japonicum	Within Known Range? Y	Nearest Occurrence:	204.72 KM	50.61826°N	99.12094 °E

**LOE Rating: Likely Total: 9**

<b>Family: Capniidae</b>					
Isocapnia kudia	Within Known Range? N	Nearest Occurrence:	296.20 KM	51.25356°N	99.66687 °E
Mesocapnia variabilis	Within Known Range? Y	Nearest Occurrence:	185.36 KM	48.36436°N	98.92737 °E
<b>Family: Chloroperlidae</b>					
Suwallia teleckojensis	Within Known Range? Y	Nearest Occurrence:	127.14 KM	48.34410°N	97.87312 °E
<b>Family: Perlidae</b>					
Kamimuria exilis	Within Known Range? N	Nearest Occurrence:	150.29 KM	50.16278°N	98.84212 °E
<b>Family: Perlodidae</b>					
Arcynopteryx compacta	Within Known Range? Y	Nearest Occurrence:	204.72 KM	50.61826°N	99.12094 °E
Arcynopteryx polaris	Within Known Range? Y	Nearest Occurrence:	185.36 KM	48.36436°N	98.92737 °E
Diura majuscula	Within Known Range? Y	Nearest Occurrence:	157.31 KM	48.06257°N	97.55064 °E
Megarcys ochracea	Within Known Range? N	Nearest Occurrence:	277.96 KM	51.46205°N	99.19994 °E
Pictetiella asiatica	Within Known Range? N	Nearest Occurrence:	398.68 KM	51.65822°N	100.53000 °E

**LOE Rating: Probable Total: 6**

<b>Family: Capniidae</b>					
Isocapnia sibirica	Within Known Range? N	Nearest Occurrence:	458.86 KM	47.28244°N	101.18793 °E
<b>Family: Chloroperlidae</b>					
Alloperla mediata	Within Known Range? N	Nearest Occurrence:	204.35 KM	50.61826°N	99.12094 °E
<b>Family: Nemouridae</b>					
Amphinemura borealis	Within Known Range? Y	Nearest Occurrence:	112.94 KM	48.61518°N	98.23096 °E
<b>Family: Perlodidae</b>					
Arcynopteryx sajanensis	Within Known Range? N	Nearest Occurrence:	402.64 KM	51.61397°N	100.59972 °E
Isoperla altaica	Within Known Range? Y	Nearest Occurrence:	237.08 KM	50.81265°N	99.33803 °E
Kaszabia nigricauda	Within Known Range? N	Nearest Occurrence:	136.28 KM	48.71968°N	98.65184 °E

**Basin:** Internal Drainage Basin  
**Aimags:** Khovsgol  
**Soums:** Tsetserleg

**Freshwater Ecoregion:** Western Mongolia  
**Terrestrial Ecoregion:** Selenge-Orkhon Forest Steppe

**WQM Sites:**

WQM Sites: # 152 (Tes River @ N 49.2733° E 98.15272°)

<b>LOE Rating:</b>	<b>Possible</b>	<b>Total:</b>	<b>8</b>
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<b>Family:</b> Chloroperlidae			
Alloperla joosti	Within Known Range? N	Nearest Occurrence:	112.94 KM 48.61518°N 98.23096 °E
Haploperla lepnevae	Within Known Range? Y	Nearest Occurrence:	245.46 KM 49.26170°N 99.88242 °E
<b>Family:</b> Nemouridae			
Nemoura sahlbergi	Within Known Range? N	Nearest Occurrence:	201.01 KM 50.42996°N 99.21727 °E
<b>Family:</b> Perlidae			
Agnetina brevipennis	Within Known Range? Y	Nearest Occurrence:	136.28 KM 48.71968°N 98.65184 °E
<b>Family:</b> Perlodidae			
Diura bicaudata	Within Known Range? Y	Nearest Occurrence:	313.88 KM 51.39852°N 99.75011 °E
Isoperla kozlovi	Within Known Range? Y	Nearest Occurrence:	204.55 KM 50.31066°N 99.32150 °E
Isoperla lunigera	Within Known Range? N	Nearest Occurrence:	256.41 KM 51.09845°N 99.32051 °E
<b>Family:</b> Pteronarcyidae			
Pteronarcys reticulata	Within Known Range? N	Nearest Occurrence:	267.49 KM 51.47065°N 99.02617 °E

<b>LOE Rating:</b>	<b>Predicted</b>	<b>Total:</b>	<b>12</b>
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<b>Family:</b> Capniidae			
Capnia khulsbagia	Within Known Range? N	Nearest Occurrence:	377.03 KM 50.98944°N 100.71944 °E
<b>Family:</b> Chloroperlidae			
Alloperla deminuta	Within Known Range? N	Nearest Occurrence:	267.49 KM 51.47065°N 99.02617 °E
<b>Family:</b> Leuctridae			
Paraleuctra zapekinae	Within Known Range? N	Nearest Occurrence:	773.15 KM 49.71481°N 104.64203 °E
<b>Family:</b> Nemouridae			
Nemurella pictetii	Within Known Range? N	Nearest Occurrence:	236.65 KM 50.81265°N 99.33803 °E
<b>Family:</b> Perlidae			
Agnetina cocandica	Within Known Range? Y	Nearest Occurrence:	244.69 KM 49.76390°N 99.86185 °E
Agnetina extrema	Within Known Range? N	Nearest Occurrence:	388.09 KM 47.50949°N 100.57510 °E
Paragnetina flavotincta	Within Known Range? N	Nearest Occurrence:	245.46 KM 49.26170°N 99.88242 °E
<b>Family:</b> Perlodidae			
Isoperla asiatica	Within Known Range? N	Nearest Occurrence:	157.02 KM 48.06257°N 97.55064 °E
Isoperla mongolica	Within Known Range? Y	Nearest Occurrence:	139.19 KM 48.24995°N 97.40627 °E
Isoperla obscura	Within Known Range? Y	Nearest Occurrence:	397.85 KM 51.65045°N 100.52664 °E
Isoperla potanini	Within Known Range? Y	Nearest Occurrence:	96.96 KM 48.62624°N 97.89617 °E
Skwala pusilla	Within Known Range? N	Nearest Occurrence:	1,023.40 KM 48.51277°N 88.51107 °E

<b>LOE Rating:</b>	<b>Unlikely</b>	<b>Total:</b>	<b>3</b>
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<b>Family:</b> Capniidae			
Mesocapnia altaica	Within Known Range? N	Nearest Occurrence:	981.32 KM 48.43684°N 88.90094 °E
<b>Family:</b> Leuctridae			
Leuctra fusca	Within Known Range? N	Nearest Occurrence:	1,067.40 KM 49.08643°N 107.28952 °E
<b>Family:</b> Perlodidae			
Isoperla eximia	Within Known Range? N	Nearest Occurrence:	1,096.01 KM 49.01829°N 107.54453 °E



**Basin:** Internal Drainage Basin

**Aimag:** Omnogovi

**Soum:** Bayandalai

**Freshwater Ecoregion:** Inner Mongolia Endorheic Basins

**Terrestrial Ecoregion:** Alashan Plateau Semi-Desert

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Highly Likely Total: 5**

**Family:** Capniidae

*Isocapnia guentheri*

**Within Known Range?** N **Nearest Occurrence:** 554.39 KM 47.50523°N 100.93208°E

*Isocapnia sibirica*

**Within Known Range?** N **Nearest Occurrence:** 491.57 KM 47.26999°N 101.80227°E

**Family:** Chloroperlidae

*Alloperla rostellata*

**Within Known Range?** N **Nearest Occurrence:** 511.89 KM 47.11192°N 101.01048°E

**Family:** Perlidae

*Kamimuria exilis*

**Within Known Range?** N **Nearest Occurrence:** 927.74 KM 50.16278°N 98.84212°E

**Family:** Perlodidae

*Diura bicaudata*

**Within Known Range?** N **Nearest Occurrence:** 589.36 KM 47.21768°N 99.92824°E

**LOE Rating: Likely Total: 11**

**Family:** Capniidae

*Isocapnia kudia*

**Within Known Range?** N **Nearest Occurrence:** 990.31 KM 51.25356°N 99.66687°E

**Family:** Chloroperlidae

*Alloperla joosti*

**Within Known Range?** N **Nearest Occurrence:** 435.22 KM 46.78742°N 101.96021°E

*Suwallia kerzhneri*

**Within Known Range?** N **Nearest Occurrence:** 548.50 KM 47.59928°N 101.24521°E

*Suwallia teleckojensis*

**Within Known Range?** N **Nearest Occurrence:** 436.00 KM 46.78742°N 101.96021°E

**Family:** Nemouridae

*Amphinemura borealis*

**Within Known Range?** N **Nearest Occurrence:** 431.61 KM 46.72826°N 101.89317°E

*Nemoura cinerea*

**Within Known Range?** N **Nearest Occurrence:** 555.27 KM 47.48567°N 100.87875°E

**Family:** Perlidae

*Agnetina brevipennis*

**Within Known Range?** N **Nearest Occurrence:** 432.98 KM 46.89303°N 102.39457°E

*Agnetina extrema*

**Within Known Range?** N **Nearest Occurrence:** 491.57 KM 47.26999°N 101.80227°E

**Family:** Perlodidae

*Arcynopteryx sajanensis*

**Within Known Range?** N **Nearest Occurrence:** 993.09 KM 51.61397°N 100.59972°E

*Pictetiella asiatica*

**Within Known Range?** N **Nearest Occurrence:** 998.33 KM 51.65822°N 100.53000°E

**Family:** Pteronarcyidae

*Pteronarcys reticulata*

**Within Known Range?** N **Nearest Occurrence:** 617.25 KM 47.80440°N 100.31810°E

**LOE Rating: Probable Total: 5**

**Family:** Perlidae

*Agnetina cocandica*

**Within Known Range?** N **Nearest Occurrence:** 708.07 KM 49.16354°N 105.18880°E

**Family:** Perlodidae

*Arcynopteryx compacta*

**Within Known Range?** N **Nearest Occurrence:** 434.35 KM 46.88627°N 102.34304°E

*Diura majuscula*

**Within Known Range?** N **Nearest Occurrence:** 433.76 KM 46.89303°N 102.39457°E

*Isoperla kozlovi*

**Within Known Range?** N **Nearest Occurrence:** 491.57 KM 47.26999°N 101.80227°E

*Isoperla potanini*

**Within Known Range?** N **Nearest Occurrence:** 432.95 KM 46.73093°N 101.88583°E

Research funded by the National Science Foundation

DEB-BSI #0206674: A Survey of the Aquatic Insects of the Selenge River Basin. P.I.'s: JKGelhaus, JCMorse, BHayford.

DEB # 0743732: Aquatic Insects of the Altai and Hangai Mountain Drainages. P.I.'s: JKGelhaus, JCMorse, CRNelson.

<http://clade.ansp.org/entomology/mongolia/index.html>



Basin: Internal Drainage Basin

Aimags: Omnogovi

Soums: Bayandalai

Freshwater Ecoregion: Inner Mongolia Endorheic Basins

Terrestrial Ecoregion: Alashan Plateau Semi-Desert

WQM Sites:

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Possible Total: 10**

Family: Chloroperlidae

Alaskaperla longidentata Within Known Range? N Nearest Occurrence: 449.01 KM 46.82177°N 101.70479°E

Alloperla deminuta Within Known Range? N Nearest Occurrence: 435.22 KM 46.78742°N 101.96021°E

Haploperla lepnevae Within Known Range? N Nearest Occurrence: 692.41 KM 47.82258°N 107.33613°E

Family: Nemouridae

Nemoura arctica Within Known Range? N Nearest Occurrence: 492.45 KM 47.26999°N 101.80227°E

Family: Perlodidae

Isoperla altaica Within Known Range? N Nearest Occurrence: 512.81 KM 47.11192°N 101.01048°E

Isoperla mongolica Within Known Range? N Nearest Occurrence: 492.45 KM 47.26999°N 101.80227°E

Isoperla obscura Within Known Range? N Nearest Occurrence: 572.55 KM 47.85250°N 105.25567°E

Kaszabia nigricauda Within Known Range? N Nearest Occurrence: 548.50 KM 47.59928°N 101.24521°E

Skwala pusilla Within Known Range? N Nearest Occurrence: 1,745.27 KM 48.51277°N 88.51107°E

Family: Taeniopterygidae

Taenionema japonicum Within Known Range? N Nearest Occurrence: 512.81 KM 47.11192°N 101.01048°E

**LOE Rating: Predicted Total: 15**

Family: Capniidae

Capnia khulsbagia Within Known Range? N Nearest Occurrence: 921.22 KM 50.98944°N 100.71944°E

Capnia nigra Within Known Range? N Nearest Occurrence: 841.12 KM 48.06257°N 97.55064°E

Mesocapnia variabilis Within Known Range? N Nearest Occurrence: 590.42 KM 47.21768°N 99.92824°E

Family: Chloroperlidae

Alloperla mediata Within Known Range? N Nearest Occurrence: 734.49 KM 49.70678°N 103.10288°E

Family: Leuctridae

Leuctra fusca Within Known Range? N Nearest Occurrence: 801.12 KM 49.08643°N 107.28952°E

Paraleuctra zapekinae Within Known Range? N Nearest Occurrence: 715.68 KM 47.99158°N 107.46116°E

Family: Nemouridae

Amphinemura standfussi Within Known Range? N Nearest Occurrence: 693.57 KM 49.33339°N 102.97786°E

Nemoura sahlbergi Within Known Range? N Nearest Occurrence: 583.12 KM 47.42580°N 100.30130°E

Nemurella pictetii Within Known Range? N Nearest Occurrence: 961.75 KM 50.81265°N 99.33803°E

Family: Perlidae

Paragnetina flavotincta Within Known Range? N Nearest Occurrence: 693.57 KM 49.33339°N 102.97786°E

Family: Perlodidae

Arcynopteryx polaris Within Known Range? N Nearest Occurrence: 470.34 KM 47.04409°N 101.76352°E

Isoperla asiatica Within Known Range? N Nearest Occurrence: 617.25 KM 47.80440°N 100.31810°E

Isoperla eximia Within Known Range? N Nearest Occurrence: 794.82 KM 48.60182°N 107.84335°E

Isoperla lunigera Within Known Range? N Nearest Occurrence: 693.59 KM 47.82110°N 107.35422°E

Megarcys ochracea Within Known Range? N Nearest Occurrence: 715.68 KM 47.99158°N 107.46116°E

**LOE Rating: Unlikely Total: 1**

Family: Capniidae

Mesocapnia altaica Within Known Range? N Nearest Occurrence: 1,701.76 KM 48.43684°N 88.90094°E

**Basin:** Internal Drainage Basin

**Aimags:** Omnogovi

**Soums:** Bayan-ovoo

**Freshwater Ecoregion:** Inner Mongolia Endorheic Basins

**Terrestrial Ecoregion:** Eastern Gobi Desert Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Highly Likely Total: 3**

Family: Capniidae

Isocapnia guentheri Within Known Range? N Nearest Occurrence: 569.69 KM 47.88349°N 106.98829 °E

Isocapnia sibirica Within Known Range? N Nearest Occurrence: 616.15 KM 48.09549°N 107.84265 °E

Family: Perlodidae

Diura bicaudata Within Known Range? N Nearest Occurrence: 838.41 KM 47.21768°N 99.92824 °E

**LOE Rating: Likely Total: 13**

Family: Capniidae

Isocapnia kudia Within Known Range? N Nearest Occurrence: 1,174.81 KM 51.25356°N 99.66687 °E

Family: Chloroperlidae

Alloperla joosti Within Known Range? N Nearest Occurrence: 633.76 KM 46.78742°N 101.96021 °E

Alloperla rostellata Within Known Range? N Nearest Occurrence: 736.25 KM 47.11192°N 101.01048 °E

Haploperla lepnevae Within Known Range? N Nearest Occurrence: 571.23 KM 47.82258°N 107.33613 °E

Suwallia kerzhneri Within Known Range? N Nearest Occurrence: 609.61 KM 48.12416°N 107.54780 °E

Family: Nemouridae

Amphinemura borealis Within Known Range? N Nearest Occurrence: 571.23 KM 47.82258°N 107.33613 °E

Nemoura cinerea Within Known Range? N Nearest Occurrence: 594.30 KM 47.96783°N 107.59278 °E

Family: Perlidae

Agnetina cocandica Within Known Range? N Nearest Occurrence: 710.92 KM 49.16354°N 105.18880 °E

Agnetina extrema Within Known Range? N Nearest Occurrence: 616.52 KM 48.09671°N 107.84928 °E

Kamimuria exilis Within Known Range? N Nearest Occurrence: 1,145.38 KM 50.16278°N 98.84212 °E

Family: Perlodidae

Arcynopteryx sajanensis Within Known Range? N Nearest Occurrence: 1,150.95 KM 51.61397°N 100.59972 °E

Pictetiella asiatica Within Known Range? N Nearest Occurrence: 1,157.15 KM 51.65822°N 100.53000 °E

Family: Pteronarcyidae

Pteronarcys reticulata Within Known Range? N Nearest Occurrence: 707.09 KM 49.08643°N 107.28952 °E

**LOE Rating: Probable Total: 4**

Family: Chloroperlidae

Suwallia teleckojensis Within Known Range? N Nearest Occurrence: 619.82 KM 48.16668°N 107.69548 °E

Family: Perlidae

Agnetina brevipennis Within Known Range? N Nearest Occurrence: 608.55 KM 46.89303°N 102.39457 °E

Family: Perlodidae

Isoperla kozlovi Within Known Range? N Nearest Occurrence: 564.65 KM 47.85250°N 105.25567 °E

Isoperla obscura Within Known Range? N Nearest Occurrence: 564.65 KM 47.85250°N 105.25567 °E

**LOE Rating: Possible Total: 3**

Family: Nemouridae

Nemoura arctica Within Known Range? N Nearest Occurrence: 557.95 KM 47.77758°N 106.92780 °E

Family: Perlodidae

Isoperla altaica Within Known Range? N Nearest Occurrence: 670.90 KM 48.60182°N 107.84335 °E

Kaszabia nigricauda Within Known Range? N Nearest Occurrence: 564.65 KM 47.85250°N 105.25567 °E



**Basin:** Internal Drainage Basin

**Aimag:** Omnogovi

**Soum:** Bayan-ovoo

**Freshwater Ecoregion:** Inner Mongolia Endorheic Basins

**Terrestrial Ecoregion:** Eastern Gobi Desert Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

<b>LOE Rating:</b>	<b>Predicted</b>	<b>Total:</b>	<b>21</b>
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**Family:** Capniidae

Capnia nigra      **Within Known Range?** N      **Nearest Occurrence:** 1,059.71 KM      50.51003 °N      100.40375 °E

Mesocapnia variabilis      **Within Known Range?** N      **Nearest Occurrence:** 654.09 KM      48.42080 °N      107.91406 °E

**Family:** Chloroperlidae

Alaskaperla longidentata      **Within Known Range?** N      **Nearest Occurrence:** 609.61 KM      48.12416 °N      107.54780 °E

Alloperla deminuta      **Within Known Range?** N      **Nearest Occurrence:** 571.23 KM      47.82258 °N      107.33613 °E

Alloperla mediata      **Within Known Range?** N      **Nearest Occurrence:** 818.21 KM      49.77776 °N      103.60860 °E

**Family:** Leuctridae

Leuctra fusca      **Within Known Range?** N      **Nearest Occurrence:** 707.09 KM      49.08643 °N      107.28952 °E

Paraleuctra zapekinae      **Within Known Range?** N      **Nearest Occurrence:** 592.06 KM      47.97944 °N      107.47761 °E

**Family:** Nemouridae

Amphinemura standfussi      **Within Known Range?** N      **Nearest Occurrence:** 785.02 KM      49.73130 °N      107.63484 °E

Nemoura sahlbergi      **Within Known Range?** N      **Nearest Occurrence:** 618.72 KM      48.16668 °N      107.69548 °E

**Family:** Perlidae

Paragnetina flavotincta      **Within Known Range?** N      **Nearest Occurrence:** 709.65 KM      49.16354 °N      105.18880 °E

**Family:** Perlodidae

Arcynopteryx compacta      **Within Known Range?** N      **Nearest Occurrence:** 580.83 KM      47.84324 °N      107.55299 °E

Arcynopteryx polaris      **Within Known Range?** N      **Nearest Occurrence:** 654.09 KM      48.42080 °N      107.91406 °E

Diura majuscula      **Within Known Range?** N      **Nearest Occurrence:** 593.94 KM      47.99158 °N      107.46116 °E

Isoperla asiatica      **Within Known Range?** N      **Nearest Occurrence:** 571.57 KM      47.82110 °N      107.35422 °E

Isoperla eximia      **Within Known Range?** N      **Nearest Occurrence:** 669.70 KM      48.60182 °N      107.84335 °E

Isoperla lunigera      **Within Known Range?** N      **Nearest Occurrence:** 571.57 KM      47.82110 °N      107.35422 °E

Isoperla mongolica      **Within Known Range?** N      **Nearest Occurrence:** 617.26 KM      48.09549 °N      107.84265 °E

Isoperla potanini      **Within Known Range?** N      **Nearest Occurrence:** 636.60 KM      46.73093 °N      101.88583 °E

Megarcys ochracea      **Within Known Range?** N      **Nearest Occurrence:** 591.68 KM      47.97108 °N      107.49534 °E

Skwala pusilla      **Within Known Range?** N      **Nearest Occurrence:** 2,049.35 KM      48.51277 °N      88.51107 °E

**Family:** Taeniopterygidae

Taenionema japonicum      **Within Known Range?** N      **Nearest Occurrence:** 703.63 KM      49.05411 °N      107.23175 °E

<b>LOE Rating:</b>	<b>Unlikely</b>	<b>Total:</b>	<b>3</b>
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**Family:** Capniidae

Capnia khulsbagia      **Within Known Range?** N      **Nearest Occurrence:** 1,083.33 KM      50.98944 °N      100.71944 °E

Mesocapnia altaica      **Within Known Range?** N      **Nearest Occurrence:** 2,005.58 KM      48.43684 °N      88.90094 °E

**Family:** Nemouridae

Nemurella pictetii      **Within Known Range?** N      **Nearest Occurrence:** 1,156.62 KM      51.07896 °N      99.70857 °E

**Basin:** Internal Drainage Basin  
**Aimag:** Omnogovi  
**Soum:** Bulgan

**Freshwater Ecoregion:** Western Mongolia  
**Terrestrial Ecoregion:** Alashan Plateau Semi-Desert

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Highly Likely Total: 5**

Family: Capniidae					
Isocapnia guentheri	Within Known Range? N	Nearest Occurrence:	463.26 KM	47.50523 °N	100.93208 °E
Isocapnia sibirica	Within Known Range? N	Nearest Occurrence:	388.53 KM	47.26999 °N	101.80227 °E
Family: Chloroperlidae					
Alloperla rostellata	Within Known Range? N	Nearest Occurrence:	423.78 KM	47.11192 °N	101.01048 °E
Family: Perlidae					
Kamimuria exilis	Within Known Range? N	Nearest Occurrence:	840.03 KM	50.16278 °N	98.84212 °E
Family: Perlodidae					
Diura bicaudata	Within Known Range? N	Nearest Occurrence:	517.12 KM	47.21768 °N	99.92824 °E

**LOE Rating: Likely Total: 12**

Family: Capniidae					
Isocapnia kudia	Within Known Range? N	Nearest Occurrence:	890.23 KM	51.25356 °N	99.66687 °E
Family: Chloroperlidae					
Alloperla joosti	Within Known Range? N	Nearest Occurrence:	333.25 KM	46.78742 °N	101.96021 °E
Suwallia kerzhneri	Within Known Range? N	Nearest Occurrence:	451.67 KM	47.59928 °N	101.24521 °E
Suwallia teleckojensis	Within Known Range? N	Nearest Occurrence:	333.84 KM	46.78742 °N	101.96021 °E
Family: Nemouridae					
Amphinemura borealis	Within Known Range? N	Nearest Occurrence:	331.46 KM	46.72826 °N	101.89317 °E
Nemoura cinerea	Within Known Range? N	Nearest Occurrence:	465.18 KM	47.48567 °N	100.87875 °E
Family: Perlidae					
Agnetina brevipennis	Within Known Range? N	Nearest Occurrence:	322.61 KM	46.89303 °N	102.39457 °E
Agnetina cocandica	Within Known Range? N	Nearest Occurrence:	584.66 KM	49.16354 °N	105.18880 °E
Agnetina extrema	Within Known Range? N	Nearest Occurrence:	388.53 KM	47.26999 °N	101.80227 °E
Family: Perlodidae					
Arcynopteryx sajanensis	Within Known Range? N	Nearest Occurrence:	884.79 KM	51.61397 °N	100.59972 °E
Pictetiella asiatica	Within Known Range? N	Nearest Occurrence:	890.60 KM	51.65822 °N	100.53000 °E
Family: Pteronarcyidae					
Pteronarcys reticulata	Within Known Range? N	Nearest Occurrence:	532.17 KM	47.80440 °N	100.31810 °E

**LOE Rating: Probable Total: 5**

Family: Chloroperlidae					
Haploperla lepnevae	Within Known Range? N	Nearest Occurrence:	588.38 KM	47.82258 °N	107.33613 °E
Family: Perlodidae					
Arcynopteryx compacta	Within Known Range? N	Nearest Occurrence:	324.67 KM	46.88627 °N	102.34304 °E
Diura majuscula	Within Known Range? N	Nearest Occurrence:	323.19 KM	46.89303 °N	102.39457 °E
Isoperla altaica	Within Known Range? N	Nearest Occurrence:	424.54 KM	47.11192 °N	101.01048 °E
Isoperla potanini	Within Known Range? N	Nearest Occurrence:	332.74 KM	46.73093 °N	101.88583 °E



**Basin:** Internal Drainage Basin  
**Aimags:** Omnogovi  
**Soums:** Bulgan

**Freshwater Ecoregion:** Western Mongolia  
**Terrestrial Ecoregion:** Alashan Plateau Semi-Desert

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

<b>LOE Rating:</b>	<b>Possible</b>	<b>Total:</b>	<b>6</b>
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<b>Family:</b> Chloroperlidae			
Alaskaperla longidentata	Within Known Range? N	Nearest Occurrence:	351.54 KM 46.82177°N 101.70479°E
Alloperla deminuta	Within Known Range? N	Nearest Occurrence:	333.25 KM 46.78742°N 101.96021°E
<b>Family:</b> Nemouridae			
Nemoura arctica	Within Known Range? N	Nearest Occurrence:	389.23 KM 47.26999°N 101.80227°E
<b>Family:</b> Perlodidae			
Isoperla kozlovi	Within Known Range? N	Nearest Occurrence:	388.53 KM 47.26999°N 101.80227°E
Isoperla mongolica	Within Known Range? N	Nearest Occurrence:	389.23 KM 47.26999°N 101.80227°E
Isoperla obscura	Within Known Range? N	Nearest Occurrence:	451.79 KM 47.85250°N 105.25567°E

<b>LOE Rating:</b>	<b>Predicted</b>	<b>Total:</b>	<b>18</b>
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<b>Family:</b> Capniidae			
Capnia khulsbagia	Within Known Range? N	Nearest Occurrence:	813.86 KM 50.98944°N 100.71944°E
Capnia nigra	Within Known Range? N	Nearest Occurrence:	779.46 KM 50.51003°N 100.40375°E
Mesocapnia variabilis	Within Known Range? N	Nearest Occurrence:	518.06 KM 47.21768°N 99.92824°E
<b>Family:</b> Chloroperlidae			
Alloperla mediata	Within Known Range? N	Nearest Occurrence:	613.31 KM 49.70678°N 103.10288°E
<b>Family:</b> Leuctridae			
Leuctra fusca	Within Known Range? N	Nearest Occurrence:	688.82 KM 49.08643°N 107.28952°E
Paraleuctra zapekinae	Within Known Range? N	Nearest Occurrence:	611.35 KM 47.99158°N 107.46116°E
<b>Family:</b> Nemouridae			
Amphinemura standfussi	Within Known Range? N	Nearest Occurrence:	573.13 KM 49.33339°N 102.97786°E
Nemoura sahlbergi	Within Known Range? N	Nearest Occurrence:	502.59 KM 47.42580°N 100.30130°E
Nemurella pictetii	Within Known Range? N	Nearest Occurrence:	866.24 KM 50.81265°N 99.33803°E
<b>Family:</b> Perlidae			
Paragnetina flavotincta	Within Known Range? N	Nearest Occurrence:	573.13 KM 49.33339°N 102.97786°E
<b>Family:</b> Perlodidae			
Arcynopteryx polaris	Within Known Range? N	Nearest Occurrence:	369.54 KM 47.04409°N 101.76352°E
Isoperla asiatica	Within Known Range? N	Nearest Occurrence:	532.17 KM 47.80440°N 100.31810°E
Isoperla eximia	Within Known Range? N	Nearest Occurrence:	689.07 KM 48.60182°N 107.84335°E
Isoperla lunigera	Within Known Range? N	Nearest Occurrence:	582.42 KM 49.38617°N 102.71667°E
Kaszabia nigricauda	Within Known Range? N	Nearest Occurrence:	451.67 KM 47.59928°N 101.24521°E
Megarcys ochracea	Within Known Range? N	Nearest Occurrence:	611.35 KM 47.99158°N 107.46116°E
Skwala pusilla	Within Known Range? N	Nearest Occurrence:	1,728.51 KM 48.51277°N 88.51107°E
<b>Family:</b> Taeniopterygidae			
Taenionema japonicum	Within Known Range? N	Nearest Occurrence:	424.54 KM 47.11192°N 101.01048°E

<b>LOE Rating:</b>	<b>Unlikely</b>	<b>Total:</b>	<b>1</b>
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<b>Family:</b> Capniidae			
Mesocapnia altaica	Within Known Range? N	Nearest Occurrence:	1,684.60 KM 48.43684°N 88.90094°E



**Basin:** Internal Drainage Basin  
**Aimags:** Omnogovi  
**Soums:** Gurvantes

Freshwater Ecoregion: Dzungaria  
 Terrestrial Ecoregion: Alashan Plateau Semi-Desert

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

<b>LOE Rating:</b>	<b>Highly Likely</b>	<b>Total:</b>	<b>5</b>
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<b>Family:</b> Capniidae			
Isocapnia guentheri	Within Known Range? N	Nearest Occurrence:	467.00 KM 47.48567°N 100.87875°E
Isocapnia sibirica	Within Known Range? N	Nearest Occurrence:	447.58 KM 47.28244°N 101.18793°E
<b>Family:</b> Chloroperlidae			
Alloperla rostellata	Within Known Range? N	Nearest Occurrence:	426.62 KM 47.11192°N 101.01048°E
<b>Family:</b> Perlidae			
Kamimuria exilis	Within Known Range? N	Nearest Occurrence:	791.50 KM 50.16278°N 98.84212°E
<b>Family:</b> Perlodidae			
Diura bicaudata	Within Known Range? N	Nearest Occurrence:	444.37 KM 47.21768°N 99.92824°E

<b>LOE Rating:</b>	<b>Likely</b>	<b>Total:</b>	<b>10</b>
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<b>Family:</b> Capniidae			
Isocapnia kudia	Within Known Range? N	Nearest Occurrence:	891.64 KM 51.25356°N 99.66687°E
<b>Family:</b> Chloroperlidae			
Alloperla joosti	Within Known Range? N	Nearest Occurrence:	414.46 KM 46.78742°N 101.96021°E
Suwallia kerzhneri	Within Known Range? N	Nearest Occurrence:	467.00 KM 47.48567°N 100.87875°E
<b>Family:</b> Nemouridae			
Amphinemura borealis	Within Known Range? N	Nearest Occurrence:	405.75 KM 46.72826°N 101.89317°E
Nemoura cinerea	Within Known Range? N	Nearest Occurrence:	467.00 KM 47.48567°N 100.87875°E
<b>Family:</b> Perlidae			
Agnetina brevipennis	Within Known Range? N	Nearest Occurrence:	414.46 KM 46.78742°N 101.96021°E
Agnetina extrema	Within Known Range? N	Nearest Occurrence:	447.58 KM 47.28244°N 101.18793°E
<b>Family:</b> Perlodidae			
Arcynopteryx sajanensis	Within Known Range? N	Nearest Occurrence:	926.36 KM 51.61397°N 100.59972°E
Pictetiella asiatica	Within Known Range? N	Nearest Occurrence:	929.71 KM 51.65822°N 100.53000°E
<b>Family:</b> Pteronarcyidae			
Pteronarcys reticulata	Within Known Range? N	Nearest Occurrence:	503.32 KM 47.80440°N 100.31810°E

<b>LOE Rating:</b>	<b>Probable</b>	<b>Total:</b>	<b>4</b>
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<b>Family:</b> Chloroperlidae			
Haploperla lepnevae	Within Known Range? N	Nearest Occurrence:	669.30 KM 49.26170°N 99.88242°E
Suwallia teleckojensis	Within Known Range? N	Nearest Occurrence:	415.20 KM 46.78742°N 101.96021°E
<b>Family:</b> Perlodidae			
Isoperla kozlovi	Within Known Range? N	Nearest Occurrence:	447.58 KM 47.28244°N 101.18793°E
Skwala pusilla	Within Known Range? N	Nearest Occurrence:	1,469.14 KM 48.51277°N 88.51107°E



**Basin:** Internal Drainage Basin  
**Aimags:** Omnogovi  
**Soums:** Gurvantes

**Freshwater Ecoregion:** Dzungaria  
**Terrestrial Ecoregion:** Alashan Plateau Semi-Desert

**WQM Sites:**

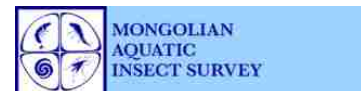
No current Asia Foundation WQM sites in this soum.

<b>LOE Rating:</b>	<b>Possible</b>	<b>Total:</b>	10
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<b>Family:</b> Chloroperlidae			
Alaskaperla longidentata	Within Known Range? N	Nearest Occurrence:	409.19 KM 46.82177°N 101.70479°E
Alloperla deminuta	Within Known Range? N	Nearest Occurrence:	414.46 KM 46.78742°N 101.96021°E
<b>Family:</b> Nemouridae			
Nemoura arctica	Within Known Range? N	Nearest Occurrence:	460.82 KM 47.26999°N 101.80227°E
<b>Family:</b> Perlidae			
Agnetina cocandica	Within Known Range? N	Nearest Occurrence:	709.45 KM 49.62785°N 99.99523°E
<b>Family:</b> Perlodidae			
Arcynopteryx compacta	Within Known Range? N	Nearest Occurrence:	427.38 KM 47.11192°N 101.01048°E
Diura majuscula	Within Known Range? N	Nearest Occurrence:	427.38 KM 47.11192°N 101.01048°E
Isoperla altaica	Within Known Range? N	Nearest Occurrence:	427.38 KM 47.11192°N 101.01048°E
Isoperla potanini	Within Known Range? N	Nearest Occurrence:	406.49 KM 46.73093°N 101.88583°E
Kaszabia nigricauda	Within Known Range? N	Nearest Occurrence:	467.00 KM 47.48567°N 100.87875°E
<b>Family:</b> Taeniopterygidae			
Taenionema japonicum	Within Known Range? N	Nearest Occurrence:	427.38 KM 47.11192°N 101.01048°E

<b>LOE Rating:</b>	<b>Predicted</b>	<b>Total:</b>	13
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<b>Family:</b> Capniidae			
Capnia nigra	Within Known Range? N	Nearest Occurrence:	633.45 KM 48.06257°N 97.55064°E
Mesocapnia variabilis	Within Known Range? N	Nearest Occurrence:	444.97 KM 47.21260°N 99.91083°E
<b>Family:</b> Chloroperlidae			
Alloperla mediata	Within Known Range? N	Nearest Occurrence:	762.41 KM 49.70678°N 103.10288°E
<b>Family:</b> Leuctridae			
Paraleuctra zapekinae	Within Known Range? N	Nearest Occurrence:	839.05 KM 49.71481°N 104.64203°E
<b>Family:</b> Nemouridae			
Amphinemura standfussi	Within Known Range? N	Nearest Occurrence:	633.20 KM 48.05989°N 97.55073°E
Nemoura sahlbergi	Within Known Range? N	Nearest Occurrence:	461.60 KM 47.42580°N 100.30130°E
<b>Family:</b> Perlidae			
Paragnetina flavotincta	Within Known Range? N	Nearest Occurrence:	664.46 KM 49.26765°N 100.82998°E
<b>Family:</b> Perlodidae			
Arcynopteryx polaris	Within Known Range? N	Nearest Occurrence:	414.37 KM 47.00226°N 100.91051°E
Isoperla asiatica	Within Known Range? N	Nearest Occurrence:	503.32 KM 47.80440°N 100.31810°E
Isoperla lunigera	Within Known Range? N	Nearest Occurrence:	685.17 KM 49.45317°N 100.47234°E
Isoperla mongolica	Within Known Range? N	Nearest Occurrence:	427.38 KM 47.11192°N 101.01048°E
Isoperla obscura	Within Known Range? N	Nearest Occurrence:	714.47 KM 49.38617°N 102.71667°E
Megarocys ochracea	Within Known Range? N	Nearest Occurrence:	791.22 KM 49.77776°N 103.60860°E



**Basin:** Internal Drainage Basin

**Aimag:** Omnogovi

**Soum:** Gurvantes

Freshwater Ecoregion: Dzungaria

Terrestrial Ecoregion: Alashan Plateau Semi-Desert

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

<b>LOE Rating:</b>	<b>Unlikely</b>	<b>Total:</b>	<b>5</b>
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Family: Capniidae

Capnia khulsbagia

Within Known Range? N Nearest Occurrence: 855.36 KM 50.98944 °N 100.71944 °E

Mesocapnia altaica

Within Known Range? N Nearest Occurrence: 1,426.09 KM 48.43684 °N 88.90094 °E

Family: Leuctridae

Leuctra fusca

Within Known Range? N Nearest Occurrence: 977.14 KM 49.08643 °N 107.28952 °E

Family: Nemouridae

Nemurella pictetii

Within Known Range? N Nearest Occurrence: 848.69 KM 50.81265 °N 99.33803 °E

Family: Perlodidae

Isoperla eximia

Within Known Range? N Nearest Occurrence: 991.22 KM 48.60182 °N 107.84335 °E

Basin: Internal Drainage Basin

Aimags: Omnogovi

Soums: Khanbogd

Freshwater Ecoregion: Inner Mongolia Endorheic Basins

Terrestrial Ecoregion: Alashan Plateau Semi-Desert

WQM Sites:

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Highly Likely Total: 2**

Family: Capniidae

Isocapnia guentheri

Within Known Range? N Nearest Occurrence: 550.21 KM 47.88349°N 106.98829 °E

Isocapnia sibirica

Within Known Range? N Nearest Occurrence: 575.75 KM 48.09549°N 107.84265 °E

**LOE Rating: Likely Total: 13**

Family: Capniidae

Isocapnia kudia

Within Known Range? N Nearest Occurrence: 1,253.32 KM 51.25356°N 99.66687 °E

Family: Chloroperlidae

Alloperla rostellata

Within Known Range? N Nearest Occurrence: 838.30 KM 47.11192°N 101.01048 °E

Haploperla lepnevae

Within Known Range? N Nearest Occurrence: 542.35 KM 47.82258°N 107.33613 °E

Suwallia kerzhneri

Within Known Range? N Nearest Occurrence: 576.45 KM 48.12416°N 107.54780 °E

Family: Nemouridae

Amphinemura borealis

Within Known Range? N Nearest Occurrence: 542.35 KM 47.82258°N 107.33613 °E

Nemoura cinerea

Within Known Range? N Nearest Occurrence: 559.38 KM 47.96783°N 107.59278 °E

Family: Perlidae

Agnetina cocandica

Within Known Range? N Nearest Occurrence: 731.27 KM 49.16354°N 105.18880 °E

Agnetina extrema

Within Known Range? N Nearest Occurrence: 575.96 KM 48.09671°N 107.84928 °E

Kamimuria exilis

Within Known Range? N Nearest Occurrence: 1,237.34 KM 50.16278°N 98.84212 °E

Family: Perlodidae

Arcynopteryx sajanensis

Within Known Range? N Nearest Occurrence: 1,219.34 KM 51.61397°N 100.59972 °E

Diura bicaudata

Within Known Range? N Nearest Occurrence: 946.58 KM 47.21768°N 99.92824 °E

Pictetiella asiatica

Within Known Range? N Nearest Occurrence: 1,225.77 KM 51.65822°N 100.53000 °E

Family: Pteronarcyidae

Pteronarcys reticulata

Within Known Range? N Nearest Occurrence: 682.62 KM 49.08636°N 107.30750 °E

**LOE Rating: Probable Total: 5**

Family: Chloroperlidae

Alloperla joosti

Within Known Range? N Nearest Occurrence: 731.09 KM 46.78742°N 101.96021 °E

Suwallia teleckojensis

Within Known Range? N Nearest Occurrence: 583.21 KM 48.16668°N 107.69548 °E

Family: Perlidae

Agnetina brevipennis

Within Known Range? N Nearest Occurrence: 682.62 KM 49.08636°N 107.30750 °E

Family: Perlodidae

Isoperla kozlovi

Within Known Range? N Nearest Occurrence: 580.65 KM 48.13111°N 107.92120 °E

Isoperla obscura

Within Known Range? N Nearest Occurrence: 591.12 KM 47.85250°N 105.25567 °E

**LOE Rating: Possible Total: 3**

Family: Nemouridae

Nemoura arctica

Within Known Range? N Nearest Occurrence: 539.93 KM 47.77758°N 106.92780 °E

Family: Perlodidae

Isoperla altaica

Within Known Range? N Nearest Occurrence: 632.82 KM 48.60182°N 107.84335 °E

Kaszabia nigricauda

Within Known Range? N Nearest Occurrence: 559.38 KM 47.96783°N 107.59278 °E

**Basin:** Internal Drainage Basin  
**Aimags:** Omnogovi  
**Soums:** Khanbogd

**Freshwater Ecoregion:** Inner Mongolia Endorheic Basins  
**Terrestrial Ecoregion:** Alashan Plateau Semi-Desert

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

<b>LOE Rating:</b>	<b>Predicted</b>	<b>Total:</b>	<b>21</b>
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**Family:** Capniidae

Capnia nigra	Within Known Range? N	Nearest Occurrence: 1,137.22 KM	50.51003°N	100.40375°E
Mesocapnia variabilis	Within Known Range? N	Nearest Occurrence: 613.61 KM	48.42080°N	107.91406°E

**Family:** Chloroperlidae

Alaskaperla longidentata	Within Known Range? N	Nearest Occurrence: 573.28 KM	48.07956°N	107.77729°E
Alloperla deminuta	Within Known Range? N	Nearest Occurrence: 542.35 KM	47.82258°N	107.33613°E
Alloperla mediata	Within Known Range? N	Nearest Occurrence: 863.05 KM	49.77776°N	103.60860°E

**Family:** Leuctridae

Leuctra fusca	Within Known Range? N	Nearest Occurrence: 682.63 KM	49.08643°N	107.28952°E
Paraleuctra zapekinae	Within Known Range? N	Nearest Occurrence: 560.08 KM	47.97944°N	107.47761°E

**Family:** Nemouridae

Amphinemura standfussi	Within Known Range? N	Nearest Occurrence: 755.10 KM	49.73130°N	107.63484°E
Nemoura sahlbergi	Within Known Range? N	Nearest Occurrence: 582.16 KM	48.16668°N	107.69548°E

**Family:** Perlidae

Paragnetina flavotincta	Within Known Range? N	Nearest Occurrence: 729.96 KM	49.16354°N	105.18880°E
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**Family:** Perlodidae

Arcynopteryx compacta	Within Known Range? N	Nearest Occurrence: 546.32 KM	47.84324°N	107.55299°E
Arcynopteryx polaris	Within Known Range? N	Nearest Occurrence: 613.61 KM	48.42080°N	107.91406°E
Diura majuscula	Within Known Range? N	Nearest Occurrence: 562.38 KM	47.99158°N	107.46116°E
Isoperla asiatica	Within Known Range? N	Nearest Occurrence: 542.20 KM	47.82110°N	107.35422°E
Isoperla eximia	Within Known Range? N	Nearest Occurrence: 631.68 KM	48.60182°N	107.84335°E
Isoperla lunigera	Within Known Range? N	Nearest Occurrence: 542.20 KM	47.82110°N	107.35422°E
Isoperla mongolica	Within Known Range? N	Nearest Occurrence: 576.79 KM	48.09549°N	107.84265°E
Isoperla potanini	Within Known Range? N	Nearest Occurrence: 735.51 KM	46.73093°N	101.88583°E
Megarcys ochracea	Within Known Range? N	Nearest Occurrence: 559.23 KM	47.97108°N	107.49534°E
Skwala pusilla	Within Known Range? N	Nearest Occurrence: 2,175.86 KM	48.51277°N	88.51107°E

**Family:** Taeniopterygidae

Taenionema japonicum	Within Known Range? N	Nearest Occurrence: 680.31 KM	49.05411°N	107.23175°E
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<b>LOE Rating:</b>	<b>Unlikely</b>	<b>Total:</b>	<b>3</b>
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**Family:** Capniidae

Capnia khulsbagia	Within Known Range? N	Nearest Occurrence: 1,154.61 KM	50.98944°N	100.71944°E
Mesocapnia altaica	Within Known Range? N	Nearest Occurrence: 2,131.98 KM	48.43684°N	88.90094°E

**Family:** Nemouridae

Nemurella pictetii	Within Known Range? N	Nearest Occurrence: 1,235.95 KM	51.07896°N	99.70857°E
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Basin: Internal Drainage Basin

Aimags: Omnogovi

Soums: Khankhongor

Freshwater Ecoregion: Inner Mongolia Endorheic Basins

Terrestrial Ecoregion: Eastern Gobi Desert Steppe

WQM Sites:

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Highly Likely Total: 5**

Family: Capniidae

Isocapnia guentheri

Within Known Range? N Nearest Occurrence: 538.54 KM 47.88349°N 106.98829 °E

Isocapnia sibirica

Within Known Range? N Nearest Occurrence: 512.03 KM 47.26999°N 101.80227 °E

Family: Chloroperlidae

Alloperla rostellata

Within Known Range? N Nearest Occurrence: 558.12 KM 47.11192°N 101.01048 °E

Family: Perlidae

Kamimuria exilis

Within Known Range? N Nearest Occurrence: 971.05 KM 50.16278°N 98.84212 °E

Family: Perlodidae

Diura bicaudata

Within Known Range? N Nearest Occurrence: 657.27 KM 47.21768°N 99.92824 °E

**LOE Rating: Likely Total: 12**

Family: Capniidae

Isocapnia kudia

Within Known Range? N Nearest Occurrence: 1,010.01 KM 51.25356°N 99.66687 °E

Family: Chloroperlidae

Alloperla joosti

Within Known Range? N Nearest Occurrence: 459.44 KM 46.78742°N 101.96021 °E

Haploperla lepnevae

Within Known Range? N Nearest Occurrence: 552.53 KM 47.82258°N 107.33613 °E

Suwallia kerzhneri

Within Known Range? N Nearest Occurrence: 579.51 KM 47.59928°N 101.24521 °E

Family: Nemouridae

Amphinemura borealis

Within Known Range? N Nearest Occurrence: 459.37 KM 46.72826°N 101.89317 °E

Nemoura cinerea

Within Known Range? N Nearest Occurrence: 581.70 KM 47.96783°N 107.59278 °E

Family: Perlidae

Agnetina brevipennis

Within Known Range? N Nearest Occurrence: 439.35 KM 46.89303°N 102.39457 °E

Agnetina cocandica

Within Known Range? N Nearest Occurrence: 617.65 KM 49.16354°N 105.18880 °E

Agnetina extrema

Within Known Range? N Nearest Occurrence: 512.03 KM 47.26999°N 101.80227 °E

Family: Perlodidae

Arcynopteryx sajanensis

Within Known Range? N Nearest Occurrence: 994.61 KM 51.61397°N 100.59972 °E

Pictetiella asiatica

Within Known Range? N Nearest Occurrence: 1,000.71 KM 51.65822°N 100.53000 °E

Family: Pteronarcyidae

Pteronarcys reticulata

Within Known Range? N Nearest Occurrence: 666.79 KM 47.80440°N 100.31810 °E

**LOE Rating: Probable Total: 4**

Family: Chloroperlidae

Suwallia teleckojensis

Within Known Range? N Nearest Occurrence: 460.27 KM 46.78742°N 101.96021 °E

Family: Perlodidae

Arcynopteryx compacta

Within Known Range? N Nearest Occurrence: 442.80 KM 46.88627°N 102.34304 °E

Diura majuscula

Within Known Range? N Nearest Occurrence: 440.14 KM 46.89303°N 102.39457 °E

Isoperla kozlovi

Within Known Range? N Nearest Occurrence: 472.94 KM 47.85250°N 105.25567 °E

**LOE Rating: Possible Total: 4**

Family: Perlodidae

Isoperla altaica

Within Known Range? N Nearest Occurrence: 559.12 KM 47.11192°N 101.01048 °E

Isoperla obscura

Within Known Range? N Nearest Occurrence: 472.94 KM 47.85250°N 105.25567 °E

Isoperla potanini

Within Known Range? N Nearest Occurrence: 460.96 KM 46.73093°N 101.88583 °E

Kaszabia nigricauda

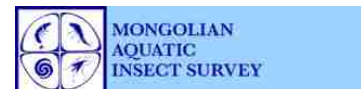
Within Known Range? N Nearest Occurrence: 472.94 KM 47.85250°N 105.25567 °E

Research funded by the National Science Foundation

DEB-BSI #0206674: A Survey of the Aquatic Insects of the Selenge River Basin. P.I.'s: JKGelhaus, JCMorse, BHayford.

DEB # 0743732: Aquatic Insects of the Altai and Hangai Mountain Drainages. P.I.'s: JKGelhaus, JCMorse, CRNelson.

<http://clade.ansp.org/entomology/mongolia/index.html>



**Basin:** Internal Drainage Basin

**Aimag:** Omnogovi

**Soum:** Khankhongor

**Freshwater Ecoregion:** Inner Mongolia Endorheic Basins

**Terrestrial Ecoregion:** Eastern Gobi Desert Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

<b>LOE Rating:</b>	<b>Predicted</b>	<b>Total:</b>	20
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**Family:** Capniidae

Capnia khulsbagia	Within Known Range? N	Nearest Occurrence:	925.18 KM	50.98944 °N	100.71944 °E
Capnia nigra	Within Known Range? N	Nearest Occurrence:	896.48 KM	50.51003 °N	100.40375 °E
Mesocapnia variabilis	Within Known Range? N	Nearest Occurrence:	644.49 KM	48.42080 °N	107.91406 °E

**Family:** Chloroperlidae

Alaskaperla longidentata	Within Known Range? N	Nearest Occurrence:	481.10 KM	46.82177 °N	101.70479 °E
Alloperla deminuta	Within Known Range? N	Nearest Occurrence:	459.44 KM	46.78742 °N	101.96021 °E
Alloperla mediata	Within Known Range? N	Nearest Occurrence:	691.35 KM	49.77776 °N	103.60860 °E

**Family:** Leuctridae

Leuctra fusca	Within Known Range? N	Nearest Occurrence:	672.52 KM	49.08643 °N	107.28952 °E
Paraleuctra zapekinae	Within Known Range? N	Nearest Occurrence:	575.68 KM	47.97944 °N	107.47761 °E

**Family:** Nemouridae

Amphinemura standfussi	Within Known Range? N	Nearest Occurrence:	658.89 KM	49.33339 °N	102.97786 °E
Nemoura arctica	Within Known Range? N	Nearest Occurrence:	512.96 KM	47.26999 °N	101.80227 °E
Nemoura sahlbergi	Within Known Range? N	Nearest Occurrence:	606.36 KM	48.16668 °N	107.69548 °E

**Family:** Perlidae

Paragnetina flavotincta	Within Known Range? N	Nearest Occurrence:	616.54 KM	49.16354 °N	105.18880 °E
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**Family:** Perlodidae

Arcynopteryx polaris	Within Known Range? N	Nearest Occurrence:	496.18 KM	47.04409 °N	101.76352 °E
Isoperla asiatica	Within Known Range? N	Nearest Occurrence:	553.48 KM	47.82110 °N	107.35422 °E
Isoperla eximia	Within Known Range? N	Nearest Occurrence:	655.73 KM	48.60182 °N	107.84335 °E
Isoperla lunigera	Within Known Range? N	Nearest Occurrence:	553.48 KM	47.82110 °N	107.35422 °E
Isoperla mongolica	Within Known Range? N	Nearest Occurrence:	512.96 KM	47.26999 °N	101.80227 °E
Megarcys ochracea	Within Known Range? N	Nearest Occurrence:	575.81 KM	47.99158 °N	107.46116 °E
Skwala pusilla	Within Known Range? N	Nearest Occurrence:	1,870.74 KM	48.51277 °N	88.51107 °E

**Family:** Taeniopterygidae

Taenionema japonicum	Within Known Range? N	Nearest Occurrence:	558.64 KM	47.28244 °N	101.18793 °E
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<b>LOE Rating:</b>	<b>Unlikely</b>	<b>Total:</b>	2
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**Family:** Capniidae

Mesocapnia altaica	Within Known Range? N	Nearest Occurrence:	1,826.88 KM	48.43684 °N	88.90094 °E
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**Family:** Nemouridae

Nemurella pictetii	Within Known Range? N	Nearest Occurrence:	990.66 KM	50.81265 °N	99.33803 °E
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**Basin:** Internal Drainage Basin  
**Aimags:** Omnogovi  
**Soums:** Khurmen

**Freshwater Ecoregion:** Inner Mongolia Endorheic Basins  
**Terrestrial Ecoregion:** Alashan Plateau Semi-Desert

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

<b>LOE Rating:</b>	<b>Highly Likely</b>	<b>Total:</b>	<b>5</b>
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<b>Family:</b> Capniidae			
Isocapnia guentheri	Within Known Range? N	Nearest Occurrence:	639.60 KM 47.50523°N 100.93208°E
Isocapnia sibirica	Within Known Range? N	Nearest Occurrence:	572.75 KM 47.26999°N 101.80227°E
<b>Family:</b> Chloroperlidae			
Alloperla rostellata	Within Known Range? N	Nearest Occurrence:	597.67 KM 47.11192°N 101.01048°E
<b>Family:</b> Perlidae			
Kamimuria exilis	Within Known Range? N	Nearest Occurrence:	1,014.42 KM 50.16278°N 98.84212°E
<b>Family:</b> Perlodidae			
Diura bicaudata	Within Known Range? N	Nearest Occurrence:	677.48 KM 47.21768°N 99.92824°E

<b>LOE Rating:</b>	<b>Likely</b>	<b>Total:</b>	<b>10</b>
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<b>Family:</b> Capniidae			
Isocapnia kudia	Within Known Range? N	Nearest Occurrence:	1,073.42 KM 51.25356°N 99.66687°E
<b>Family:</b> Chloroperlidae			
Alloperla joosti	Within Known Range? N	Nearest Occurrence:	516.63 KM 46.78742°N 101.96021°E
Suwallia kerzhneri	Within Known Range? N	Nearest Occurrence:	632.11 KM 47.59928°N 101.24521°E
<b>Family:</b> Nemouridae			
Amphinemura borealis	Within Known Range? N	Nearest Occurrence:	513.70 KM 46.72826°N 101.89317°E
Nemoura cinerea	Within Known Range? N	Nearest Occurrence:	640.73 KM 47.48567°N 100.87875°E
<b>Family:</b> Perlidae			
Agnetina brevipennis	Within Known Range? N	Nearest Occurrence:	510.32 KM 46.89303°N 102.39457°E
Agnetina extrema	Within Known Range? N	Nearest Occurrence:	572.75 KM 47.26999°N 101.80227°E
<b>Family:</b> Perlodidae			
Arcynopteryx sajanensis	Within Known Range? N	Nearest Occurrence:	1,072.59 KM 51.61397°N 100.59972°E
Pictetiella asiatica	Within Known Range? N	Nearest Occurrence:	1,077.90 KM 51.65822°N 100.53000°E
<b>Family:</b> Pteronarcyidae			
Pteronarcys reticulata	Within Known Range? N	Nearest Occurrence:	703.86 KM 47.80440°N 100.31810°E

<b>LOE Rating:</b>	<b>Probable</b>	<b>Total:</b>	<b>5</b>
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<b>Family:</b> Chloroperlidae			
Haploperla lepnevae	Within Known Range? N	Nearest Occurrence:	704.92 KM 47.82258°N 107.33613°E
Suwallia teleckojensis	Within Known Range? N	Nearest Occurrence:	517.56 KM 46.78742°N 101.96021°E
<b>Family:</b> Perlidae			
Agnetina cocandica	Within Known Range? N	Nearest Occurrence:	753.34 KM 49.16354°N 105.18880°E
<b>Family:</b> Perlodidae			
Diura majuscula	Within Known Range? N	Nearest Occurrence:	511.24 KM 46.89303°N 102.39457°E
Isoperla kozlovi	Within Known Range? N	Nearest Occurrence:	572.75 KM 47.26999°N 101.80227°E



**Basin:** Internal Drainage Basin  
**Aimags:** Omnogovi  
**Soums:** Khurmen

**Freshwater Ecoregion:** Inner Mongolia Endorheic Basins  
**Terrestrial Ecoregion:** Alashan Plateau Semi-Desert

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

<b>LOE Rating:</b>	<b>Possible</b>	<b>Total:</b>	<b>8</b>
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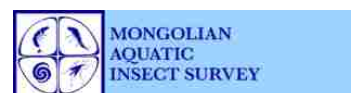
<b>Family:</b> Chloroperlidae			
Alaskaperla longidentata	Within Known Range? N	Nearest Occurrence:	532.09 KM 46.82177°N 101.70479 °E
Alloperla deminuta	Within Known Range? N	Nearest Occurrence:	516.63 KM 46.78742°N 101.96021 °E
<b>Family:</b> Nemouridae			
Nemoura arctica	Within Known Range? N	Nearest Occurrence:	573.78 KM 47.26999°N 101.80227 °E
<b>Family:</b> Perlodidae			
Arcynopteryx compacta	Within Known Range? N	Nearest Occurrence:	512.35 KM 46.88627°N 102.34304 °E
Isoperla altaica	Within Known Range? N	Nearest Occurrence:	598.74 KM 47.11192°N 101.01048 °E
Isoperla obscura	Within Known Range? N	Nearest Occurrence:	611.98 KM 47.85250°N 105.25567 °E
Isoperla potanini	Within Known Range? N	Nearest Occurrence:	515.24 KM 46.73093°N 101.88583 °E
Kaszabia nigricauda	Within Known Range? N	Nearest Occurrence:	611.98 KM 47.85250°N 105.25567 °E

<b>LOE Rating:</b>	<b>Predicted</b>	<b>Total:</b>	<b>17</b>
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<b>Family:</b> Capniidae			
Capnia khulsbagia	Within Known Range? N	Nearest Occurrence:	1,000.95 KM 50.98944°N 100.71944 °E
Capnia nigra	Within Known Range? N	Nearest Occurrence:	929.42 KM 48.06257°N 97.55064 °E
Mesocapnia variabilis	Within Known Range? N	Nearest Occurrence:	678.70 KM 47.21768°N 99.92824 °E
<b>Family:</b> Chloroperlidae			
Alloperla mediata	Within Known Range? N	Nearest Occurrence:	801.15 KM 49.70678°N 103.10288 °E
<b>Family:</b> Leuctridae			
Leuctra fusca	Within Known Range? N	Nearest Occurrence:	823.13 KM 49.08643°N 107.28952 °E
Paraleuctra zapekinae	Within Known Range? N	Nearest Occurrence:	728.11 KM 47.97944°N 107.47761 °E
<b>Family:</b> Nemouridae			
Amphinemura standfussi	Within Known Range? N	Nearest Occurrence:	761.53 KM 49.33339°N 102.97786 °E
Nemoura sahlbergi	Within Known Range? N	Nearest Occurrence:	670.37 KM 47.42580°N 100.30130 °E
<b>Family:</b> Perlidae			
Paragnetina flavotincta	Within Known Range? N	Nearest Occurrence:	751.98 KM 49.16354°N 105.18880 °E
<b>Family:</b> Perlodidae			
Arcynopteryx polaris	Within Known Range? N	Nearest Occurrence:	552.56 KM 47.04409°N 101.76352 °E
Isoperla asiatica	Within Known Range? N	Nearest Occurrence:	703.86 KM 47.80440°N 100.31810 °E
Isoperla eximia	Within Known Range? N	Nearest Occurrence:	808.12 KM 48.60182°N 107.84335 °E
Isoperla lunigera	Within Known Range? N	Nearest Occurrence:	705.89 KM 47.82110°N 107.35422 °E
Isoperla mongolica	Within Known Range? N	Nearest Occurrence:	573.78 KM 47.26999°N 101.80227 °E
Megarcys ochracea	Within Known Range? N	Nearest Occurrence:	728.22 KM 47.99158°N 107.46116 °E
Skwala pusilla	Within Known Range? N	Nearest Occurrence:	1,825.86 KM 48.51277°N 88.51107 °E
<b>Family:</b> Taeniopterygidae			
Taenionema japonicum	Within Known Range? N	Nearest Occurrence:	598.74 KM 47.11192°N 101.01048 °E

<b>LOE Rating:</b>	<b>Unlikely</b>	<b>Total:</b>	<b>2</b>
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<b>Family:</b> Capniidae			
Mesocapnia altaica	Within Known Range? N	Nearest Occurrence:	1,782.51 KM 48.43684°N 88.90094 °E
<b>Family:</b> Nemouridae			
Nemurella pictetii	Within Known Range? N	Nearest Occurrence:	1,046.37 KM 50.81265°N 99.33803 °E



**Basin:** Internal Drainage Basin

**Aimag:** Omnogovi

**Soum:** Mandal-ovoo

Freshwater Ecoregion: Western Mongolia

Terrestrial Ecoregion: Gobi Lakes Valley Desert Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Highly Likely Total: 5**

Family: Capniidae

Isocapnia guentheri

Within Known Range? N Nearest Occurrence: 463.54 KM 47.50523°N 100.93208°E

Isocapnia sibirica

Within Known Range? N Nearest Occurrence: 377.55 KM 47.26999°N 101.80227°E

Family: Chloroperlidae

Alloperla rostellata

Within Known Range? N Nearest Occurrence: 428.42 KM 47.11192°N 101.01048°E

Family: Perlidae

Kamimuria exilis

Within Known Range? N Nearest Occurrence: 837.62 KM 50.16278°N 98.84212°E

Family: Perlodidae

Diura bicaudata

Within Known Range? N Nearest Occurrence: 533.29 KM 47.21768°N 99.92824°E

**LOE Rating: Likely Total: 11**

Family: Capniidae

Isocapnia kudia

Within Known Range? N Nearest Occurrence: 874.33 KM 51.25356°N 99.66687°E

Family: Chloroperlidae

Alloperla joosti

Within Known Range? N Nearest Occurrence: 326.11 KM 46.78742°N 101.96021°E

Haploperla lepnevae

Within Known Range? N Nearest Occurrence: 507.93 KM 47.82258°N 107.33613°E

Family: Nemouridae

Amphinemura borealis

Within Known Range? N Nearest Occurrence: 326.11 KM 46.78742°N 101.96021°E

Nemoura cinerea

Within Known Range? N Nearest Occurrence: 466.47 KM 47.48567°N 100.87875°E

Family: Perlidae

Agnetina brevipennis

Within Known Range? N Nearest Occurrence: 303.92 KM 46.89303°N 102.39457°E

Agnetina cocandica

Within Known Range? N Nearest Occurrence: 515.40 KM 49.16354°N 105.18880°E

Agnetina extrema

Within Known Range? N Nearest Occurrence: 377.55 KM 47.26999°N 101.80227°E

Family: Perlodidae

Arcynopteryx sajanensis

Within Known Range? N Nearest Occurrence: 859.07 KM 51.61397°N 100.59972°E

Pictetiella asiatica

Within Known Range? N Nearest Occurrence: 865.36 KM 51.65822°N 100.53000°E

Family: Pteronarcyidae

Pteronarcys reticulata

Within Known Range? N Nearest Occurrence: 536.64 KM 47.80440°N 100.31810°E

**LOE Rating: Probable Total: 4**

Family: Chloroperlidae

Suwallia kerzhneri

Within Known Range? N Nearest Occurrence: 446.09 KM 47.59928°N 101.24521°E

Suwallia teleckojensis

Within Known Range? N Nearest Occurrence: 326.70 KM 46.78742°N 101.96021°E

Family: Perlodidae

Isoperla kozlovi

Within Known Range? N Nearest Occurrence: 377.55 KM 47.26999°N 101.80227°E

Isoperla obscura

Within Known Range? N Nearest Occurrence: 378.23 KM 47.85250°N 105.25567°E

Basin: Internal Drainage Basin

Aimags: Omnogovi

Soums: Mandal-ovoo

Freshwater Ecoregion: Western Mongolia

Terrestrial Ecoregion: Gobi Lakes Valley Desert Steppe

WQM Sites:

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Possible Total: 7**

Family: Chloroperlidae

*Alaskaperla longidentata* Within Known Range? N Nearest Occurrence: 349.06 KM 46.82177°N 101.70479°E

Family: Nemouridae

*Nemoura arctica* Within Known Range? N Nearest Occurrence: 378.23 KM 47.26999°N 101.80227°E

Family: Perlodidae

*Arcynopteryx compacta* Within Known Range? N Nearest Occurrence: 307.28 KM 46.88627°N 102.34304°E

*Diura majuscula* Within Known Range? N Nearest Occurrence: 304.47 KM 46.89303°N 102.39457°E

*Isoperla altaica* Within Known Range? N Nearest Occurrence: 429.19 KM 47.11192°N 101.01048°E

*Isoperla potanini* Within Known Range? N Nearest Occurrence: 328.13 KM 46.73093°N 101.88583°E

*Kaszabia nigricauda* Within Known Range? N Nearest Occurrence: 378.23 KM 47.85250°N 105.25567°E

**LOE Rating: Predicted Total: 19**

Family: Capniidae

*Capnia khulsbagia* Within Known Range? N Nearest Occurrence: 789.67 KM 50.98944°N 100.71944°E

*Capnia nigra* Within Known Range? N Nearest Occurrence: 760.73 KM 50.51003°N 100.40375°E

*Mesocapnia variabilis* Within Known Range? N Nearest Occurrence: 534.26 KM 47.21768°N 99.92824°E

Family: Chloroperlidae

*Alloperla deminuta* Within Known Range? N Nearest Occurrence: 326.11 KM 46.78742°N 101.96021°E

*Alloperla mediata* Within Known Range? N Nearest Occurrence: 566.81 KM 49.70678°N 103.10288°E

Family: Leuctridae

*Leuctra fusca* Within Known Range? N Nearest Occurrence: 609.68 KM 49.08643°N 107.28952°E

*Paraleuctra zapekinae* Within Known Range? N Nearest Occurrence: 530.92 KM 47.99158°N 107.46116°E

Family: Nemouridae

*Amphinemura standfussi* Within Known Range? N Nearest Occurrence: 528.90 KM 49.33339°N 102.97786°E

*Nemoura sahlbergi* Within Known Range? N Nearest Occurrence: 512.00 KM 47.42580°N 100.30130°E

*Nemurella pictetii* Within Known Range? N Nearest Occurrence: 855.55 KM 50.81265°N 99.33803°E

Family: Perlidae

*Paragnetina flavotincta* Within Known Range? N Nearest Occurrence: 514.48 KM 49.16354°N 105.18880°E

Family: Perlodidae

*Arcynopteryx polaris* Within Known Range? N Nearest Occurrence: 362.44 KM 47.04409°N 101.76352°E

*Isoperla asiatica* Within Known Range? N Nearest Occurrence: 509.28 KM 47.82110°N 107.35422°E

*Isoperla eximia* Within Known Range? N Nearest Occurrence: 608.73 KM 48.60182°N 107.84335°E

*Isoperla lunigera* Within Known Range? N Nearest Occurrence: 509.28 KM 47.82110°N 107.35422°E

*Isoperla mongolica* Within Known Range? N Nearest Occurrence: 378.23 KM 47.26999°N 101.80227°E

*Megarcys ochracea* Within Known Range? N Nearest Occurrence: 530.92 KM 47.99158°N 107.46116°E

*Skwala pusilla* Within Known Range? N Nearest Occurrence: 1,772.02 KM 48.51277°N 88.51107°E

Family: Taeniopterygidae

*Taenionema japonicum* Within Known Range? N Nearest Occurrence: 426.67 KM 47.28244°N 101.18793°E

**LOE Rating: Unlikely Total: 1**

Family: Capniidae

*Mesocapnia altaica* Within Known Range? N Nearest Occurrence: 1,727.99 KM 48.43684°N 88.90094°E

**Basin:** Internal Drainage Basin  
**Aimags:** Omnogovi  
**Soums:** Manlai

**Freshwater Ecoregion:** Inner Mongolia Endorheic Basins  
**Terrestrial Ecoregion:** Eastern Gobi Desert Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Highly Likely Total: 2**

Family: Capniidae					
Isocapnia guentheri	Within Known Range? N	Nearest Occurrence:	437.68 KM	47.88349°N	106.98829 °E
Isocapnia sibirica	Within Known Range? N	Nearest Occurrence:	467.40 KM	48.09549°N	107.84265 °E

**LOE Rating: Likely Total: 13**

Family: Capniidae					
Isocapnia kudia	Within Known Range? N	Nearest Occurrence:	1,160.53 KM	51.25356°N	99.66687 °E
Family: Chloroperlidae					
Alloperla rostellata	Within Known Range? N	Nearest Occurrence:	757.10 KM	49.77776°N	103.60860 °E
Haploperla lepnevae	Within Known Range? N	Nearest Occurrence:	431.12 KM	47.82258°N	107.33613 °E
Suwallia kerzhneri	Within Known Range? N	Nearest Occurrence:	466.24 KM	48.12416°N	107.54780 °E
Family: Nemouridae					
Amphinemura borealis	Within Known Range? N	Nearest Occurrence:	431.12 KM	47.82258°N	107.33613 °E
Nemoura cinerea	Within Known Range? N	Nearest Occurrence:	449.50 KM	47.96783°N	107.59278 °E
Family: Perlidae					
Agnetina cocandica	Within Known Range? N	Nearest Occurrence:	619.77 KM	49.16354°N	105.18880 °E
Agnetina extrema	Within Known Range? N	Nearest Occurrence:	467.65 KM	48.09671°N	107.84928 °E
Kamimuria exilis	Within Known Range? N	Nearest Occurrence:	1,153.29 KM	50.16278°N	98.84212 °E
Family: Perlodidae					
Arcynopteryx sajanensis	Within Known Range? N	Nearest Occurrence:	1,121.05 KM	51.61397°N	100.59972 °E
Diura bicaudata	Within Known Range? N	Nearest Occurrence:	879.33 KM	47.21768°N	99.92824 °E
Pictetiella asiatica	Within Known Range? N	Nearest Occurrence:	1,127.80 KM	51.65822°N	100.53000 °E
Family: Pteronarcyidae					
Pteronarcys reticulata	Within Known Range? N	Nearest Occurrence:	571.11 KM	49.08643°N	107.28952 °E

**LOE Rating: Probable Total: 5**

Family: Chloroperlidae					
Alloperla joosti	Within Known Range? N	Nearest Occurrence:	656.09 KM	46.78742°N	101.96021 °E
Suwallia teleckojensis	Within Known Range? N	Nearest Occurrence:	473.64 KM	48.16668°N	107.69548 °E
Family: Perlidae					
Agnetina brevipennis	Within Known Range? N	Nearest Occurrence:	571.16 KM	49.08636°N	107.30750 °E
Family: Perlodidae					
Isoperla kozlovi	Within Known Range? N	Nearest Occurrence:	472.81 KM	48.13111°N	107.92120 °E
Isoperla obscura	Within Known Range? N	Nearest Occurrence:	481.77 KM	47.85250°N	105.25567 °E

**LOE Rating: Possible Total: 4**

Family: Nemouridae					
Nemoura arctica	Within Known Range? N	Nearest Occurrence:	427.02 KM	47.77758°N	106.92780 °E
Family: Perlodidae					
Isoperla altaica	Within Known Range? N	Nearest Occurrence:	523.85 KM	48.60182°N	107.84335 °E
Isoperla asiatica	Within Known Range? N	Nearest Occurrence:	431.06 KM	47.82110°N	107.35422 °E
Kaszabia nigricauda	Within Known Range? N	Nearest Occurrence:	449.50 KM	47.96783°N	107.59278 °E

Research funded by the National Science Foundation  
 DEB-BSI #0206674: A Survey of the Aquatic Insects of the Selenge River Basin. P.I.'s: JKGelhaus, JCMorse, BHayford.  
 DEB # 0743732: Aquatic Insects of the Altai and Hangai Mountain Drainages. P.I.'s: JKGelhaus, JCMorse, CRNelson.  
<http://clade.ansp.org/entomology/mongolia/index.html>



**Basin:** Internal Drainage Basin  
**Aimags:** Omnogovi  
**Soums:** Manlai

**Freshwater Ecoregion:** Inner Mongolia Endorheic Basins  
**Terrestrial Ecoregion:** Eastern Gobi Desert Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

<b>LOE Rating:</b>	<b>Predicted</b>	<b>Total:</b>	20
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**Family:** Capniidae

Capnia nigra	Within Known Range? N	Nearest Occurrence:	1,044.35 KM	50.51003 °N	100.40375 °E
Mesocapnia variabilis	Within Known Range? N	Nearest Occurrence:	505.23 KM	48.42080 °N	107.91406 °E

**Family:** Chloroperlidae

Alaskaperla longidentata	Within Known Range? N	Nearest Occurrence:	464.50 KM	48.07956 °N	107.77729 °E
Alloperla deminuta	Within Known Range? N	Nearest Occurrence:	431.12 KM	47.82258 °N	107.33613 °E
Alloperla mediata	Within Known Range? N	Nearest Occurrence:	757.10 KM	49.77776 °N	103.60860 °E

**Family:** Leuctridae

Leuctra fusca	Within Known Range? N	Nearest Occurrence:	571.11 KM	49.08643 °N	107.28952 °E
Paraleuctra zapekinae	Within Known Range? N	Nearest Occurrence:	449.54 KM	47.97944 °N	107.47761 °E

**Family:** Nemouridae

Amphinemura standfussi	Within Known Range? N	Nearest Occurrence:	644.78 KM	49.73130 °N	107.63484 °E
Nemoura sahlbergi	Within Known Range? N	Nearest Occurrence:	472.79 KM	48.16668 °N	107.69548 °E

**Family:** Perlidae

Paragnetina flavotincta	Within Known Range? N	Nearest Occurrence:	618.65 KM	49.16354 °N	105.18880 °E
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**Family:** Perlodidae

Arcynopteryx compacta	Within Known Range? N	Nearest Occurrence:	436.06 KM	47.84324 °N	107.55299 °E
Arcynopteryx polaris	Within Known Range? N	Nearest Occurrence:	505.23 KM	48.42080 °N	107.91406 °E
Diura majuscula	Within Known Range? N	Nearest Occurrence:	451.55 KM	47.99158 °N	107.46116 °E
Isoperla eximia	Within Known Range? N	Nearest Occurrence:	522.91 KM	48.60182 °N	107.84335 °E
Isoperla lunigera	Within Known Range? N	Nearest Occurrence:	431.06 KM	47.82110 °N	107.35422 °E
Isoperla mongolica	Within Known Range? N	Nearest Occurrence:	468.24 KM	48.09549 °N	107.84265 °E
Isoperla potanini	Within Known Range? N	Nearest Occurrence:	661.57 KM	46.73093 °N	101.88583 °E
Megarcys ochracea	Within Known Range? N	Nearest Occurrence:	448.79 KM	47.97108 °N	107.49534 °E
Skwala pusilla	Within Known Range? N	Nearest Occurrence:	2,129.30 KM	48.51277 °N	88.51107 °E

**Family:** Taeniopterygidae

Taenionema japonicum	Within Known Range? N	Nearest Occurrence:	568.39 KM	49.05411 °N	107.23175 °E
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<b>LOE Rating:</b>	<b>Unlikely</b>	<b>Total:</b>	3
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**Family:** Capniidae

Capnia khulsbagia	Within Known Range? N	Nearest Occurrence:	1,058.25 KM	50.98944 °N	100.71944 °E
Mesocapnia altaica	Within Known Range? N	Nearest Occurrence:	2,085.26 KM	48.43684 °N	88.90094 °E

**Family:** Nemouridae

Nemurella pictetii	Within Known Range? N	Nearest Occurrence:	1,143.72 KM	51.07896 °N	99.70857 °E
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**Basin:** Internal Drainage Basin  
**Aimags:** Omnogovi  
**Soums:** Nomgon

**Freshwater Ecoregion:** Inner Mongolia Endorheic Basins  
**Terrestrial Ecoregion:** Alashan Plateau Semi-Desert

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Highly Likely Total: 3**

Family: Capniidae					
	Isocapnia guentheri	Within Known Range? N	Nearest Occurrence:	646.22 KM	47.88349°N 106.98829 °E
	Isocapnia sibirica	Within Known Range? N	Nearest Occurrence:	647.27 KM	47.26999°N 101.80227 °E
Family: Perlodidae					
	Diura bicaudata	Within Known Range? N	Nearest Occurrence:	777.48 KM	47.21768°N 99.92824 °E

**LOE Rating: Likely Total: 13**

Family: Capniidae					
	Isocapnia kudia	Within Known Range? N	Nearest Occurrence:	1,147.77 KM	51.25356°N 99.66687 °E
Family: Chloroperlidae					
	Alloperla joosti	Within Known Range? N	Nearest Occurrence:	593.10 KM	46.78742°N 101.96021 °E
	Alloperla rostellata	Within Known Range? N	Nearest Occurrence:	686.13 KM	47.11192°N 101.01048 °E
	Haploperla lepnevae	Within Known Range? N	Nearest Occurrence:	654.07 KM	47.82258°N 107.33613 °E
	Suwallia kerzhneri	Within Known Range? N	Nearest Occurrence:	694.14 KM	48.12416°N 107.54780 °E
Family: Nemouridae					
	Amphinemura borealis	Within Known Range? N	Nearest Occurrence:	592.06 KM	46.72826°N 101.89317 °E
	Nemoura cinerea	Within Known Range? N	Nearest Occurrence:	680.39 KM	47.96783°N 107.59278 °E
Family: Perlidae					
	Agnetina brevipennis	Within Known Range? N	Nearest Occurrence:	576.98 KM	46.89303°N 102.39457 °E
	Agnetina extrema	Within Known Range? N	Nearest Occurrence:	647.27 KM	47.26999°N 101.80227 °E
	Kamimuria exilis	Within Known Range? N	Nearest Occurrence:	1,102.59 KM	50.16278°N 98.84212 °E
Family: Perlodidae					
	Arcynopteryx sajanensis	Within Known Range? N	Nearest Occurrence:	1,135.74 KM	51.61397°N 100.59972 °E
	Pictetiella asiatica	Within Known Range? N	Nearest Occurrence:	1,141.49 KM	51.65822°N 100.53000 °E
Family: Pteronarcyidae					
	Pteronarcys reticulata	Within Known Range? N	Nearest Occurrence:	783.30 KM	49.08643°N 107.28952 °E

**LOE Rating: Probable Total: 4**

Family: Chloroperlidae					
	Suwallia teleckojensis	Within Known Range? N	Nearest Occurrence:	594.17 KM	46.78742°N 101.96021 °E
Family: Perlidae					
	Agnetina cocandica	Within Known Range? N	Nearest Occurrence:	751.75 KM	49.16354°N 105.18880 °E
Family: Perlodidae					
	Isoperla kozlovi	Within Known Range? N	Nearest Occurrence:	605.21 KM	47.85250°N 105.25567 °E
	Isoperla obscura	Within Known Range? N	Nearest Occurrence:	605.21 KM	47.85250°N 105.25567 °E

**LOE Rating: Possible Total: 4**

Family: Perlodidae					
	Arcynopteryx compacta	Within Known Range? N	Nearest Occurrence:	580.29 KM	46.88627°N 102.34304 °E
	Diura majuscula	Within Known Range? N	Nearest Occurrence:	578.02 KM	46.89303°N 102.39457 °E
	Isoperla altaica	Within Known Range? N	Nearest Occurrence:	687.37 KM	47.11192°N 101.01048 °E
	Kaszabia nigricauda	Within Known Range? N	Nearest Occurrence:	605.21 KM	47.85250°N 105.25567 °E

Research funded by the National Science Foundation  
 DEB-BSI #0206674: A Survey of the Aquatic Insects of the Selenge River Basin. P.I.'s: JKGelhaus, JCMorse, BHayford.  
 DEB # 0743732: Aquatic Insects of the Altai and Hangai Mountain Drainages. P.I.'s: JKGelhaus, JCMorse, CRNelson.  
<http://clade.ansp.org/entomology/mongolia/index.html>



**Basin:** Internal Drainage Basin

**Aimag:** Omnogovi

**Soum:** Nomgon

**Freshwater Ecoregion:** Inner Mongolia Endorheic Basins

**Terrestrial Ecoregion:** Alashan Plateau Semi-Desert

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

<b>LOE Rating:</b>	<b>Predicted</b>	<b>Total:</b>	<b>21</b>
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**Family:** Capniidae

Capnia khulsbagia

Within Known Range? N Nearest Occurrence: 1,065.61 KM 50.98944°N 100.71944 °E

Capnia nigra

Within Known Range? N Nearest Occurrence: 1,035.18 KM 50.51003°N 100.40375 °E

Mesocapnia variabilis

Within Known Range? N Nearest Occurrence: 742.42 KM 48.42080°N 107.91406 °E

**Family:** Chloroperlidae

Alaskaperla longidentata

Within Known Range? N Nearest Occurrence: 612.81 KM 46.82177°N 101.70479 °E

Alloperla deminuta

Within Known Range? N Nearest Occurrence: 593.10 KM 46.78742°N 101.96021 °E

Alloperla mediata

Within Known Range? N Nearest Occurrence: 833.15 KM 49.77776°N 103.60860 °E

**Family:** Leuctridae

Leuctra fusca

Within Known Range? N Nearest Occurrence: 783.30 KM 49.08643°N 107.28952 °E

Paraleuctra zapekinae

Within Known Range? N Nearest Occurrence: 676.29 KM 47.97944°N 107.47761 °E

**Family:** Nemouridae

Amphinemura standfussi

Within Known Range? N Nearest Occurrence: 801.65 KM 49.33339°N 102.97786 °E

Nemoura arctica

Within Known Range? N Nearest Occurrence: 634.03 KM 47.77758°N 106.92780 °E

Nemoura sahlbergi

Within Known Range? N Nearest Occurrence: 705.21 KM 48.16668°N 107.69548 °E

**Family:** Perlidae

Paragnetina flavotincta

Within Known Range? N Nearest Occurrence: 750.40 KM 49.16354°N 105.18880 °E

**Family:** Perlodidae

Arcynopteryx polaris

Within Known Range? N Nearest Occurrence: 630.09 KM 47.04409°N 101.76352 °E

Isoperla asiatica

Within Known Range? N Nearest Occurrence: 654.71 KM 47.82110°N 107.35422 °E

Isoperla eximia

Within Known Range? N Nearest Occurrence: 755.94 KM 48.60182°N 107.84335 °E

Isoperla lunigera

Within Known Range? N Nearest Occurrence: 654.71 KM 47.82110°N 107.35422 °E

Isoperla mongolica

Within Known Range? N Nearest Occurrence: 648.43 KM 47.26999°N 101.80227 °E

Isoperla potanini

Within Known Range? N Nearest Occurrence: 593.84 KM 46.73093°N 101.88583 °E

Megarcys ochracea

Within Known Range? N Nearest Occurrence: 676.24 KM 47.97108°N 107.49534 °E

Skwala pusilla

Within Known Range? N Nearest Occurrence: 1,953.63 KM 48.51277°N 88.51107 °E

**Family:** Taeniopterygidae

Taenionema japonicum

Within Known Range? N Nearest Occurrence: 687.37 KM 47.11192°N 101.01048 °E

<b>LOE Rating:</b>	<b>Unlikely</b>	<b>Total:</b>	<b>2</b>
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**Family:** Capniidae

Mesocapnia altaica

Within Known Range? N Nearest Occurrence: 1,910.13 KM 48.43684°N 88.90094 °E

**Family:** Nemouridae

Nemurella pictetii

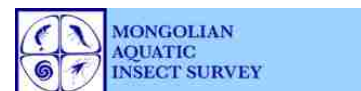
Within Known Range? N Nearest Occurrence: 1,126.20 KM 50.81265°N 99.33803 °E

Research funded by the National Science Foundation

DEB-BSI #0206674: A Survey of the Aquatic Insects of the Selenge River Basin. P.I.'s: JKGelhaus, JCMorse, BHayford.

DEB # 0743732: Aquatic Insects of the Altai and Hangai Mountain Drainages. P.I.'s: JKGelhaus, JCMorse, CRNelson.

<http://clade.ansp.org/entomology/mongolia/index.html>



**Basin:** Internal Drainage Basin

**Aimags:** Omnogovi

**Soum:** Noyon

**Freshwater Ecoregion:** Inner Mongolia Endorheic Basins

**Terrestrial Ecoregion:** Alashan Plateau Semi-Desert

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Highly Likely Total: 5**

Family: Capniidae

Isocapnia guentheri

Within Known Range? N Nearest Occurrence: 549.49 KM 47.48567°N 100.87875°E

Isocapnia sibirica

Within Known Range? N Nearest Occurrence: 503.78 KM 47.26999°N 101.80227°E

Family: Chloroperlidae

Alloperla rostellata

Within Known Range? N Nearest Occurrence: 505.52 KM 47.11192°N 101.01048°E

Family: Perlidae

Kamimuria exilis

Within Known Range? N Nearest Occurrence: 911.51 KM 50.16278°N 98.84212°E

Family: Perlodidae

Diura bicaudata

Within Known Range? N Nearest Occurrence: 563.87 KM 47.21768°N 99.92824°E

**LOE Rating: Likely Total: 10**

Family: Capniidae

Isocapnia kudia

Within Known Range? N Nearest Occurrence: 988.82 KM 51.25356°N 99.66687°E

Family: Chloroperlidae

Alloperla joosti

Within Known Range? N Nearest Occurrence: 448.54 KM 46.78742°N 101.96021°E

Suwallia kerzhneri

Within Known Range? N Nearest Occurrence: 549.49 KM 47.48567°N 100.87875°E

Family: Nemouridae

Amphinemura borealis

Within Known Range? N Nearest Occurrence: 442.86 KM 46.72826°N 101.89317°E

Nemoura cinerea

Within Known Range? N Nearest Occurrence: 549.49 KM 47.48567°N 100.87875°E

Family: Perlidae

Agnetina brevipennis

Within Known Range? N Nearest Occurrence: 448.54 KM 46.78742°N 101.96021°E

Agnetina extrema

Within Known Range? N Nearest Occurrence: 503.78 KM 47.26999°N 101.80227°E

Family: Perlodidae

Arcynopteryx sajanensis

Within Known Range? N Nearest Occurrence: 1,003.35 KM 51.61397°N 100.59972°E

Pictetiella asiatica

Within Known Range? N Nearest Occurrence: 1,007.91 KM 51.65822°N 100.53000°E

Family: Pteronarcyidae

Pteronarcys reticulata

Within Known Range? N Nearest Occurrence: 604.02 KM 47.80440°N 100.31810°E

**LOE Rating: Probable Total: 2**

Family: Chloroperlidae

Suwallia teleckojensis

Within Known Range? N Nearest Occurrence: 449.35 KM 46.78742°N 101.96021°E

Family: Perlodidae

Isoperla kozlovi

Within Known Range? N Nearest Occurrence: 503.78 KM 47.26999°N 101.80227°E

**Basin:** Internal Drainage Basin  
**Aimags:** Omnogovi  
**Soum:** Noyon

**Freshwater Ecoregion:** Inner Mongolia Endorheic Basins  
**Terrestrial Ecoregion:** Alashan Plateau Semi-Desert

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

<b>LOE Rating:</b>	<b>Possible</b>	<b>Total:</b>	<b>12</b>
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<b>Family:</b> Chloroperlidae			
Alaskaperla longidentata	Within Known Range? N	Nearest Occurrence: 456.13 KM	46.82177 °N 101.70479 °E
Alloperla deminuta	Within Known Range? N	Nearest Occurrence: 448.54 KM	46.78742 °N 101.96021 °E
Haploperla lepnevae	Within Known Range? N	Nearest Occurrence: 771.63 KM	49.45317 °N 100.47234 °E
<b>Family:</b> Nemouridae			
Nemoura arctica	Within Known Range? N	Nearest Occurrence: 504.69 KM	47.26999 °N 101.80227 °E
<b>Family:</b> Perlidae			
Agnetina cocandica	Within Known Range? N	Nearest Occurrence: 776.74 KM	49.16354 °N 105.18880 °E
<b>Family:</b> Perlodidae			
Arcynopteryx compacta	Within Known Range? N	Nearest Occurrence: 457.94 KM	46.88627 °N 102.34304 °E
Diura majuscula	Within Known Range? N	Nearest Occurrence: 458.67 KM	46.89303 °N 102.39457 °E
Isoperla altaica	Within Known Range? N	Nearest Occurrence: 506.43 KM	47.11192 °N 101.01048 °E
Isoperla potanini	Within Known Range? N	Nearest Occurrence: 444.05 KM	46.73093 °N 101.88583 °E
Kaszabia nigricauda	Within Known Range? N	Nearest Occurrence: 549.49 KM	47.48567 °N 100.87875 °E
Skwala pusilla	Within Known Range? N	Nearest Occurrence: 1,666.23 KM	48.51277 °N 88.51107 °E
<b>Family:</b> Taeniopterygidae			
Taenionema japonicum	Within Known Range? N	Nearest Occurrence: 506.43 KM	47.11192 °N 101.01048 °E

<b>LOE Rating:</b>	<b>Predicted</b>	<b>Total:</b>	<b>16</b>
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<b>Family:</b> Capniidae			
Capnia khulsbagia	Within Known Range? N	Nearest Occurrence: 930.96 KM	50.98944 °N 100.71944 °E
Capnia nigra	Within Known Range? N	Nearest Occurrence: 795.39 KM	48.06257 °N 97.55064 °E
Mesocapnia variabilis	Within Known Range? N	Nearest Occurrence: 564.89 KM	47.21768 °N 99.92824 °E
<b>Family:</b> Chloroperlidae			
Alloperla mediata	Within Known Range? N	Nearest Occurrence: 774.34 KM	49.70678 °N 103.10288 °E
<b>Family:</b> Leuctridae			
Leuctra fusca	Within Known Range? N	Nearest Occurrence: 888.19 KM	49.08643 °N 107.28952 °E
Paraleuctra zapekinae	Within Known Range? N	Nearest Occurrence: 808.90 KM	47.99158 °N 107.46116 °E
<b>Family:</b> Nemouridae			
Amphinemura standfussi	Within Known Range? N	Nearest Occurrence: 731.74 KM	49.33339 °N 102.97786 °E
Nemoura sahlbergi	Within Known Range? N	Nearest Occurrence: 566.11 KM	47.42580 °N 100.30130 °E
<b>Family:</b> Perlidae			
Paragnetina flavotincta	Within Known Range? N	Nearest Occurrence: 731.74 KM	49.33339 °N 102.97786 °E
<b>Family:</b> Perlodidae			
Arcynopteryx polaris	Within Known Range? N	Nearest Occurrence: 480.38 KM	47.04409 °N 101.76352 °E
Isoperla asiatica	Within Known Range? N	Nearest Occurrence: 604.02 KM	47.80440 °N 100.31810 °E
Isoperla eximia	Within Known Range? N	Nearest Occurrence: 887.19 KM	48.60182 °N 107.84335 °E
Isoperla lunigera	Within Known Range? N	Nearest Occurrence: 735.54 KM	49.38617 °N 102.71667 °E
Isoperla mongolica	Within Known Range? N	Nearest Occurrence: 504.69 KM	47.26999 °N 101.80227 °E
Isoperla obscura	Within Known Range? N	Nearest Occurrence: 648.39 KM	47.85250 °N 105.25567 °E
Megarcys ochracea	Within Known Range? N	Nearest Occurrence: 789.92 KM	49.77776 °N 103.60860 °E



**Basin:** Internal Drainage Basin

**Aimag:** Omnogovi

**Soum:** Noyon

Freshwater Ecoregion: Inner Mongolia Endorheic Basins

Terrestrial Ecoregion: Alashan Plateau Semi-Desert

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

<b>LOE Rating:</b>	<b>Unlikely</b>	<b>Total:</b>	<b>2</b>
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Family: Capniidae

Mesocapnia altaica

Within Known Range? N Nearest Occurrence: 1,623.05 KM 48.43684 °N 88.90094 °E

Family: Nouridae

Nemurella pictetii

Within Known Range? N Nearest Occurrence: 954.61 KM 50.81265 °N 99.33803 °E

Research funded by the National Science Foundation

DEB-BSI #0206674: A Survey of the Aquatic Insects of the Selenge River Basin. P.I.'s: JKGelhaus, JCMorse, BHayford.

DEB # 0743732: Aquatic Insects of the Altai and Hangai Mountain Drainages. P.I.'s: JKGelhaus, JCMorse, CRNelson.

<http://clade.ansp.org/entomology/mongolia/index.html>



**Basin:** Internal Drainage Basin  
**Aimag:** Omnogovi  
**Soum:** Sevrei

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**Freshwater Ecoregion:** Inner Mongolia Endorheic Basins  
**Terrestrial Ecoregion:** Alashan Plateau Semi-Desert

**LOE Rating: Highly Likely Total: 5**

Family: Capniidae					
Isocapnia guentheri	Within Known Range? N	Nearest Occurrence:	446.41 KM	47.50523 °N	100.93208 °E
Isocapnia sibirica	Within Known Range? N	Nearest Occurrence:	395.12 KM	47.26999 °N	101.80227 °E
Family: Chloroperlidae					
Alloperla rostellata	Within Known Range? N	Nearest Occurrence:	402.66 KM	47.11192 °N	101.01048 °E
Family: Perlidae					
Kamimuria exilis	Within Known Range? N	Nearest Occurrence:	814.43 KM	50.16278 °N	98.84212 °E
Family: Perlodidae					
Diura bicaudata	Within Known Range? N	Nearest Occurrence:	471.68 KM	47.21768 °N	99.92824 °E

**LOE Rating: Likely Total: 11**

Family: Capniidae					
Isocapnia kudia	Within Known Range? N	Nearest Occurrence:	885.28 KM	51.25356 °N	99.66687 °E
Family: Chloroperlidae					
Alloperla joosti	Within Known Range? N	Nearest Occurrence:	339.48 KM	46.78742 °N	101.96021 °E
Suwallia kerzhneri	Within Known Range? N	Nearest Occurrence:	444.92 KM	47.59928 °N	101.24521 °E
Suwallia teleckojensis	Within Known Range? N	Nearest Occurrence:	340.09 KM	46.78742 °N	101.96021 °E
Family: Nemouridae					
Amphinemura borealis	Within Known Range? N	Nearest Occurrence:	334.15 KM	46.72826 °N	101.89317 °E
Nemoura cinerea	Within Known Range? N	Nearest Occurrence:	446.59 KM	47.48567 °N	100.87875 °E
Family: Perlidae					
Agnentina brevipennis	Within Known Range? N	Nearest Occurrence:	339.48 KM	46.78742 °N	101.96021 °E
Agnentina extrema	Within Known Range? N	Nearest Occurrence:	395.12 KM	47.26999 °N	101.80227 °E
Family: Perlodidae					
Arcynopteryx sajanensis	Within Known Range? N	Nearest Occurrence:	895.92 KM	51.61397 °N	100.59972 °E
Pictetiella asiatica	Within Known Range? N	Nearest Occurrence:	900.84 KM	51.65822 °N	100.53000 °E
Family: Pteronarcyidae					
Pteronarcys reticulata	Within Known Range? N	Nearest Occurrence:	504.81 KM	47.80440 °N	100.31810 °E

**LOE Rating: Probable Total: 4**

Family: Perlidae					
Agnentina cocandica	Within Known Range? N	Nearest Occurrence:	676.13 KM	49.16354 °N	105.18880 °E
Family: Perlodidae					
Diura majuscula	Within Known Range? N	Nearest Occurrence:	348.31 KM	46.89303 °N	102.39457 °E
Isoperla kozlovi	Within Known Range? N	Nearest Occurrence:	395.12 KM	47.26999 °N	101.80227 °E
Isoperla potanini	Within Known Range? N	Nearest Occurrence:	335.18 KM	46.73093 °N	101.88583 °E



**Basin:** Internal Drainage Basin  
**Aimags:** Omnogovi  
**Soums:** Sevrei

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**Freshwater Ecoregion:** Inner Mongolia Endorheic Basins  
**Terrestrial Ecoregion:** Alashan Plateau Semi-Desert

**LOE Rating: Possible Total: 9**

<b>Family: Chloroperlidae</b>						
Alaskaperla longidentata	Within Known Range?	N	Nearest Occurrence:	348.41 KM	46.82177°N	101.70479°E
Alloperla deminuta	Within Known Range?	N	Nearest Occurrence:	339.48 KM	46.78742°N	101.96021°E
Haploperla lepnevae	Within Known Range?	N	Nearest Occurrence:	664.61 KM	49.70678°N	103.10288°E
<b>Family: Nemouridae</b>						
Nemoura arctica	Within Known Range?	N	Nearest Occurrence:	395.84 KM	47.26999°N	101.80227°E
<b>Family: Perlodidae</b>						
Arcynopteryx compacta	Within Known Range?	N	Nearest Occurrence:	347.61 KM	46.88627°N	102.34304°E
Isoperla altaica	Within Known Range?	N	Nearest Occurrence:	403.39 KM	47.11192°N	101.01048°E
Kaszabia nigricauda	Within Known Range?	N	Nearest Occurrence:	444.92 KM	47.59928°N	101.24521°E
Skwala pusilla	Within Known Range?	N	Nearest Occurrence:	1,629.35 KM	48.51277°N	88.51107°E
<b>Family: Taeniopterygidae</b>						
Taenionema japonicum	Within Known Range?	N	Nearest Occurrence:	403.39 KM	47.11192°N	101.01048°E

**LOE Rating: Predicted Total: 16**

<b>Family: Capniidae</b>						
Capnia khulsbagia	Within Known Range?	N	Nearest Occurrence:	823.77 KM	50.98944°N	100.71944°E
Capnia nigra	Within Known Range?	N	Nearest Occurrence:	719.50 KM	48.06257°N	97.55064°E
Mesocapnia variabilis	Within Known Range?	N	Nearest Occurrence:	472.53 KM	47.21768°N	99.92824°E
<b>Family: Chloroperlidae</b>						
Alloperla mediata	Within Known Range?	N	Nearest Occurrence:	664.61 KM	49.70678°N	103.10288°E
<b>Family: Leuctridae</b>						
Leuctra fusca	Within Known Range?	N	Nearest Occurrence:	802.55 KM	49.08643°N	107.28952°E
Paraleuctra zapekinae	Within Known Range?	N	Nearest Occurrence:	706.22 KM	49.71481°N	104.64203°E
<b>Family: Nemouridae</b>						
Amphinemura standfussi	Within Known Range?	N	Nearest Occurrence:	621.88 KM	49.33339°N	102.97786°E
Nemoura sahlbergi	Within Known Range?	N	Nearest Occurrence:	468.77 KM	47.42580°N	100.30130°E
<b>Family: Perlidae</b>						
Paragnetina flavotincta	Within Known Range?	N	Nearest Occurrence:	621.88 KM	49.33339°N	102.97786°E
<b>Family: Perlodidae</b>						
Arcynopteryx polaris	Within Known Range?	N	Nearest Occurrence:	371.89 KM	47.04409°N	101.76352°E
Isoperla asiatica	Within Known Range?	N	Nearest Occurrence:	504.81 KM	47.80440°N	100.31810°E
Isoperla eximia	Within Known Range?	N	Nearest Occurrence:	808.64 KM	48.60182°N	107.84335°E
Isoperla lunigera	Within Known Range?	N	Nearest Occurrence:	625.41 KM	49.38617°N	102.71667°E
Isoperla mongolica	Within Known Range?	N	Nearest Occurrence:	395.84 KM	47.26999°N	101.80227°E
Isoperla obscura	Within Known Range?	N	Nearest Occurrence:	553.89 KM	47.85250°N	105.25567°E
Megarcys ochracea	Within Known Range?	N	Nearest Occurrence:	681.24 KM	49.77776°N	103.60860°E

**LOE Rating: Unlikely Total: 2**

<b>Family: Capniidae</b>						
Mesocapnia altaica	Within Known Range?	N	Nearest Occurrence:	1,585.69 KM	48.43684°N	88.90094°E
<b>Family: Nemouridae</b>						
Nemurella pictetii	Within Known Range?	N	Nearest Occurrence:	853.34 KM	50.81265°N	99.33803°E

**Basin:** Internal Drainage Basin  
**Aimag:** Omnogovi  
**Soum:** Tsogt-ovoo

**Freshwater Ecoregion:** Inner Mongolia Endorheic Basins  
**Terrestrial Ecoregion:** Eastern Gobi Desert Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

<b>LOE Rating:</b>	<b>Highly Likely</b>	<b>Total:</b>	<b>3</b>
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<b>Family:</b> Capniidae			
Isocapnia guentheri	Within Known Range? N	Nearest Occurrence:	444.86 KM 47.88349°N 106.98829 °E
Isocapnia sibirica	Within Known Range? N	Nearest Occurrence:	490.31 KM 47.26999°N 101.80227 °E
<b>Family:</b> Perlodidae			
Diura bicaudata	Within Known Range? N	Nearest Occurrence:	657.81 KM 47.21768°N 99.92824 °E

<b>LOE Rating:</b>	<b>Likely</b>	<b>Total:</b>	<b>14</b>
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<b>Family:</b> Capniidae			
Isocapnia kudia	Within Known Range? N	Nearest Occurrence:	976.48 KM 51.25356°N 99.66687 °E
<b>Family:</b> Chloroperlidae			
Alloperla joosti	Within Known Range? N	Nearest Occurrence:	442.61 KM 46.78742°N 101.96021 °E
Alloperla rostellata	Within Known Range? N	Nearest Occurrence:	549.17 KM 47.11192°N 101.01048 °E
Haploperla lepnevae	Within Known Range? N	Nearest Occurrence:	458.49 KM 47.82258°N 107.33613 °E
Suwallia kerzhneri	Within Known Range? N	Nearest Occurrence:	499.36 KM 48.12416°N 107.54780 °E
<b>Family:</b> Nemouridae			
Amphinemura borealis	Within Known Range? N	Nearest Occurrence:	442.61 KM 46.78742°N 101.96021 °E
Nemoura cinerea	Within Known Range? N	Nearest Occurrence:	487.67 KM 47.96783°N 107.59278 °E
<b>Family:</b> Perlidae			
Agnetina brevipennis	Within Known Range? N	Nearest Occurrence:	413.53 KM 46.89303°N 102.39457 °E
Agnetina cocandica	Within Known Range? N	Nearest Occurrence:	536.12 KM 49.16354°N 105.18880 °E
Agnetina extrema	Within Known Range? N	Nearest Occurrence:	490.31 KM 47.26999°N 101.80227 °E
Kamimuria exilis	Within Known Range? N	Nearest Occurrence:	951.15 KM 50.16278°N 98.84212 °E
<b>Family:</b> Perlodidae			
Arcynopteryx sajanensis	Within Known Range? N	Nearest Occurrence:	951.49 KM 51.61397°N 100.59972 °E
Pictetiella asiatica	Within Known Range? N	Nearest Occurrence:	958.04 KM 51.65822°N 100.53000 °E
<b>Family:</b> Pteronarcyidae			
Pteronarcys reticulata	Within Known Range? N	Nearest Occurrence:	579.43 KM 49.08643°N 107.28952 °E

<b>LOE Rating:</b>	<b>Probable</b>	<b>Total:</b>	<b>3</b>
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<b>Family:</b> Chloroperlidae			
Suwallia teleckojensis	Within Known Range? N	Nearest Occurrence:	443.40 KM 46.78742°N 101.96021 °E
<b>Family:</b> Perlodidae			
Isoperla kozlovi	Within Known Range? N	Nearest Occurrence:	389.90 KM 47.85250°N 105.25567 °E
Isoperla obscura	Within Known Range? N	Nearest Occurrence:	389.90 KM 47.85250°N 105.25567 °E

<b>LOE Rating:</b>	<b>Possible</b>	<b>Total:</b>	<b>3</b>
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<b>Family:</b> Perlodidae			
Arcynopteryx compacta	Within Known Range? N	Nearest Occurrence:	417.96 KM 46.88627°N 102.34304 °E
Isoperla altaica	Within Known Range? N	Nearest Occurrence:	516.67 KM 48.87748°N 106.12370 °E
Kaszabia nigricauda	Within Known Range? N	Nearest Occurrence:	389.90 KM 47.85250°N 105.25567 °E





**Basin:** Internal Drainage Basin

**Aimag:** Omnogovi

**Soum:** Tsogt-ovoo

**Freshwater Ecoregion:** Inner Mongolia Endorheic Basins

**Terrestrial Ecoregion:** Eastern Gobi Desert Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

<b>LOE Rating:</b>	<b>Predicted</b>	<b>Total:</b>	<b>22</b>
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**Family:** Capniidae

Capnia khulsbagia	Within Known Range? N	Nearest Occurrence:	884.23 KM	50.98944 °N	100.71944 °E
Capnia nigra	Within Known Range? N	Nearest Occurrence:	861.14 KM	50.51003 °N	100.40375 °E
Mesocapnia variabilis	Within Known Range? N	Nearest Occurrence:	550.28 KM	48.42080 °N	107.91406 °E

**Family:** Chloroperlidae

Alaskaperla longidentata	Within Known Range? N	Nearest Occurrence:	467.57 KM	46.82177 °N	101.70479 °E
Alloperla deminuta	Within Known Range? N	Nearest Occurrence:	442.61 KM	46.78742 °N	101.96021 °E
Alloperla mediata	Within Known Range? N	Nearest Occurrence:	625.88 KM	49.77776 °N	103.60860 °E

**Family:** Leuctridae

Leuctra fusca	Within Known Range? N	Nearest Occurrence:	579.43 KM	49.08643 °N	107.28952 °E
Paraleuctra zapekinae	Within Known Range? N	Nearest Occurrence:	481.64 KM	47.97944 °N	107.47761 °E

**Family:** Nemouridae

Amphinemura standfussi	Within Known Range? N	Nearest Occurrence:	602.40 KM	49.33339 °N	102.97786 °E
Nemoura arctica	Within Known Range? N	Nearest Occurrence:	432.09 KM	47.77758 °N	106.92780 °E
Nemoura sahlbergi	Within Known Range? N	Nearest Occurrence:	512.33 KM	48.16668 °N	107.69548 °E

**Family:** Perlidae

Paragnetina flavotincta	Within Known Range? N	Nearest Occurrence:	535.16 KM	49.16354 °N	105.18880 °E
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**Family:** Perlodidae

Arcynopteryx polaris	Within Known Range? N	Nearest Occurrence:	478.27 KM	47.04409 °N	101.76352 °E
Diura majuscula	Within Known Range? N	Nearest Occurrence:	414.27 KM	46.89303 °N	102.39457 °E
Isoperla asiatica	Within Known Range? N	Nearest Occurrence:	459.44 KM	47.82110 °N	107.35422 °E
Isoperla eximia	Within Known Range? N	Nearest Occurrence:	561.70 KM	48.60182 °N	107.84335 °E
Isoperla lunigera	Within Known Range? N	Nearest Occurrence:	459.44 KM	47.82110 °N	107.35422 °E
Isoperla mongolica	Within Known Range? N	Nearest Occurrence:	491.19 KM	47.26999 °N	101.80227 °E
Isoperla potanini	Within Known Range? N	Nearest Occurrence:	446.20 KM	46.73093 °N	101.88583 °E
Megarcys ochracea	Within Known Range? N	Nearest Occurrence:	481.78 KM	47.99158 °N	107.46116 °E
Skwala pusilla	Within Known Range? N	Nearest Occurrence:	1,899.78 KM	48.51277 °N	88.51107 °E

**Family:** Taeniopterygidae

Taenionema japonicum	Within Known Range? N	Nearest Occurrence:	545.07 KM	47.28244 °N	101.18793 °E
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<b>LOE Rating:</b>	<b>Unlikely</b>	<b>Total:</b>	<b>2</b>
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**Family:** Capniidae

Mesocapnia altaica	Within Known Range? N	Nearest Occurrence:	1,855.76 KM	48.43684 °N	88.90094 °E
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**Family:** Nemouridae

Nemurella pictetii	Within Known Range? N	Nearest Occurrence:	958.43 KM	51.07896 °N	99.70857 °E
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Basin: Internal Drainage Basin

Aimags: Omnogovi

Soums: Tsogttsetsy

Freshwater Ecoregion: Inner Mongolia Endorheic Basins

Terrestrial Ecoregion: Eastern Gobi Desert Steppe

WQM Sites:

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Highly Likely Total: 3**

Family: Capniidae

Isocapnia guentheri Within Known Range? N Nearest Occurrence: 472.36 KM 47.88349°N 106.98829 °E

Isocapnia sibirica Within Known Range? N Nearest Occurrence: 526.77 KM 48.09549°N 107.84265 °E

Family: Perlodidae

Diura bicaudata Within Known Range? N Nearest Occurrence: 763.11 KM 47.21768°N 99.92824 °E

**LOE Rating: Likely Total: 13**

Family: Capniidae

Isocapnia kudia Within Known Range? N Nearest Occurrence: 1,079.15 KM 51.25356°N 99.66687 °E

Family: Chloroperlidae

Alloperla rostellata Within Known Range? N Nearest Occurrence: 655.16 KM 47.11192°N 101.01048 °E

Haploperla lepnevae Within Known Range? N Nearest Occurrence: 477.49 KM 47.82258°N 107.33613 °E

Suwallia kerzhneri Within Known Range? N Nearest Occurrence: 517.06 KM 48.12416°N 107.54780 °E

Family: Nemouridae

Amphinemura borealis Within Known Range? N Nearest Occurrence: 477.49 KM 47.82258°N 107.33613 °E

Nemoura cinerea Within Known Range? N Nearest Occurrence: 502.77 KM 47.96783°N 107.59278 °E

Family: Perlidae

Agnetina brevipennis Within Known Range? N Nearest Occurrence: 519.01 KM 46.89303°N 102.39457 °E

Agnetina cocandica Within Known Range? N Nearest Occurrence: 604.08 KM 49.16354°N 105.18880 °E

Agnetina extrema Within Known Range? N Nearest Occurrence: 527.20 KM 48.09671°N 107.84928 °E

Kamimuria exilis Within Known Range? N Nearest Occurrence: 1,056.81 KM 50.16278°N 98.84212 °E

Family: Perlodidae

Arcynopteryx sajanensis Within Known Range? N Nearest Occurrence: 1,050.94 KM 51.61397°N 100.59972 °E

Pictetiella asiatica Within Known Range? N Nearest Occurrence: 1,057.45 KM 51.65822°N 100.53000 °E

Family: Pteronarcyidae

Pteronarcys reticulata Within Known Range? N Nearest Occurrence: 609.99 KM 49.08643°N 107.28952 °E

**LOE Rating: Probable Total: 3**

Family: Chloroperlidae

Alloperla joosti Within Known Range? N Nearest Occurrence: 548.65 KM 46.78742°N 101.96021 °E

Suwallia teleckojensis Within Known Range? N Nearest Occurrence: 528.46 KM 48.16668°N 107.69548 °E

Family: Perlodidae

Isoperla obscura Within Known Range? N Nearest Occurrence: 457.85 KM 47.85250°N 105.25567 °E

**LOE Rating: Possible Total: 6**

Family: Nemouridae

Nemoura arctica Within Known Range? N Nearest Occurrence: 460.09 KM 47.77758°N 106.92780 °E

Family: Perlodidae

Arcynopteryx compacta Within Known Range? N Nearest Occurrence: 489.17 KM 47.84324°N 107.55299 °E

Diura majuscula Within Known Range? N Nearest Occurrence: 500.78 KM 47.99158°N 107.46116 °E

Isoperla altaica Within Known Range? N Nearest Occurrence: 568.03 KM 48.87748°N 106.12370 °E

Isoperla kozlovi Within Known Range? N Nearest Occurrence: 457.85 KM 47.85250°N 105.25567 °E

Kaszabia nigricauda Within Known Range? N Nearest Occurrence: 457.85 KM 47.85250°N 105.25567 °E

Research funded by the National Science Foundation

DEB-BSI #0206674: A Survey of the Aquatic Insects of the Selenge River Basin. P.I.'s: JKGelhaus, JCMorse, BHayford.

DEB # 0743732: Aquatic Insects of the Altai and Hangai Mountain Drainages. P.I.'s: JKGelhaus, JCMorse, CRNelson.

<http://clade.ansp.org/entomology/mongolia/index.html>



**Basin:** Internal Drainage Basin

**Aimag:** Omnogovi

**Soum:** Tsogttsetsy

**Freshwater Ecoregion:** Inner Mongolia Endorheic Basins

**Terrestrial Ecoregion:** Eastern Gobi Desert Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

<b>LOE Rating:</b>	<b>Predicted</b>	<b>Total:</b>	20
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**Family:** Capniidae

Capnia khulsbagia	Within Known Range? N	Nearest Occurrence:	984.51 KM	50.98944 °N	100.71944 °E
Capnia nigra	Within Known Range? N	Nearest Occurrence:	963.45 KM	50.51003 °N	100.40375 °E
Mesocapnia variabilis	Within Known Range? N	Nearest Occurrence:	563.98 KM	48.42080 °N	107.91406 °E

**Family:** Chloroperlidae

Alaskaperla longidentata	Within Known Range? N	Nearest Occurrence:	517.06 KM	48.12416 °N	107.54780 °E
Alloperla deminuta	Within Known Range? N	Nearest Occurrence:	477.49 KM	47.82258 °N	107.33613 °E
Alloperla mediata	Within Known Range? N	Nearest Occurrence:	712.36 KM	49.77776 °N	103.60860 °E

**Family:** Leuctridae

Leuctra fusca	Within Known Range? N	Nearest Occurrence:	609.99 KM	49.08643 °N	107.28952 °E
Paraleuctra zapekinae	Within Known Range? N	Nearest Occurrence:	499.28 KM	47.97944 °N	107.47761 °E

**Family:** Nemouridae

Amphinemura standfussi	Within Known Range? N	Nearest Occurrence:	689.26 KM	49.73130 °N	107.63484 °E
Nemoura sahlbergi	Within Known Range? N	Nearest Occurrence:	527.52 KM	48.16668 °N	107.69548 °E

**Family:** Perlidae

Paragnetina flavotincta	Within Known Range? N	Nearest Occurrence:	603.00 KM	49.16354 °N	105.18880 °E
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**Family:** Perlodidae

Arcynopteryx polaris	Within Known Range? N	Nearest Occurrence:	563.98 KM	48.42080 °N	107.91406 °E
Isoperla asiatica	Within Known Range? N	Nearest Occurrence:	478.02 KM	47.82110 °N	107.35422 °E
Isoperla eximia	Within Known Range? N	Nearest Occurrence:	578.43 KM	48.60182 °N	107.84335 °E
Isoperla lunigera	Within Known Range? N	Nearest Occurrence:	478.02 KM	47.82110 °N	107.35422 °E
Isoperla mongolica	Within Known Range? N	Nearest Occurrence:	527.71 KM	48.09549 °N	107.84265 °E
Isoperla potanini	Within Known Range? N	Nearest Occurrence:	552.46 KM	46.73093 °N	101.88583 °E
Megarcys ochracea	Within Known Range? N	Nearest Occurrence:	499.11 KM	47.97108 °N	107.49534 °E
Skwala pusilla	Within Known Range? N	Nearest Occurrence:	1,998.28 KM	48.51277 °N	88.51107 °E

**Family:** Taeniopterygidae

Taenionema japonicum	Within Known Range? N	Nearest Occurrence:	605.98 KM	49.05411 °N	107.23175 °E
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<b>LOE Rating:</b>	<b>Unlikely</b>	<b>Total:</b>	2
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**Family:** Capniidae

Mesocapnia altaica	Within Known Range? N	Nearest Occurrence:	1,954.32 KM	48.43684 °N	88.90094 °E
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**Family:** Nemouridae

Nemurella pictetii	Within Known Range? N	Nearest Occurrence:	1,061.32 KM	51.07896 °N	99.70857 °E
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**Basin:** Internal Drainage Basin

**Aimags:** Ovorkhangai

**Soums:** Baruunbayan-ulaan

Freshwater Ecoregion: Western Mongolia

Terrestrial Ecoregion: Gobi Lakes Valley Desert Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Highly Likely Total: 4**

Family: Capniidae

Isocapnia guentheri Within Known Range? N Nearest Occurrence: 261.73 KM 47.48567°N 100.87875 °E

Isocapnia sibirica Within Known Range? N Nearest Occurrence: 230.28 KM 47.26999°N 101.80227 °E

Family: Nemouridae

Amphinemura borealis Within Known Range? N Nearest Occurrence: 173.09 KM 46.72826°N 101.89317 °E

Family: Perlidae

Agnentina brevipennis Within Known Range? N Nearest Occurrence: 181.35 KM 46.78742°N 101.96021 °E

**LOE Rating: Likely Total: 13**

Family: Capniidae

Isocapnia kudia Within Known Range? N Nearest Occurrence: 700.95 KM 51.25356°N 99.66687 °E

Family: Chloroperlidae

Alloperla joosti Within Known Range? N Nearest Occurrence: 181.35 KM 46.78742°N 101.96021 °E

Alloperla rostellata Within Known Range? N Nearest Occurrence: 217.86 KM 47.11192°N 101.01048 °E

Suwallia kerzhneri Within Known Range? N Nearest Occurrence: 261.73 KM 47.48567°N 100.87875 °E

Suwallia teleckojensis Within Known Range? N Nearest Occurrence: 181.67 KM 46.78742°N 101.96021 °E

Family: Nemouridae

Nemoura cinerea Within Known Range? N Nearest Occurrence: 261.73 KM 47.48567°N 100.87875 °E

Family: Perlidae

Agnentina extrema Within Known Range? N Nearest Occurrence: 230.28 KM 47.26999°N 101.80227 °E

Kamimuria exilis Within Known Range? N Nearest Occurrence: 625.34 KM 50.16278°N 98.84212 °E

Family: Perlodidae

Arcynopteryx sajanensis Within Known Range? N Nearest Occurrence: 718.78 KM 51.61397°N 100.59972 °E

Diura bicaudata Within Known Range? N Nearest Occurrence: 283.63 KM 47.21768°N 99.92824 °E

Diura majuscula Within Known Range? N Nearest Occurrence: 210.61 KM 46.89303°N 102.39457 °E

Pictetiella asiatica Within Known Range? N Nearest Occurrence: 723.48 KM 51.65822°N 100.53000 °E

Family: Pteronarcyidae

Pteronarcys reticulata Within Known Range? N Nearest Occurrence: 316.64 KM 47.80440°N 100.31810 °E

**LOE Rating: Probable Total: 6**

Family: Chloroperlidae

Alaskaperla longidentata Within Known Range? N Nearest Occurrence: 179.55 KM 46.82177°N 101.70479 °E

Alloperla deminuta Within Known Range? N Nearest Occurrence: 181.35 KM 46.78742°N 101.96021 °E

Haploperla lepnevae Within Known Range? N Nearest Occurrence: 484.35 KM 49.26170°N 99.88242 °E

Family: Perlidae

Agnentina cocandica Within Known Range? N Nearest Occurrence: 518.98 KM 49.62785°N 99.99523 °E

Family: Perlodidae

Arcynopteryx compacta Within Known Range? N Nearest Occurrence: 207.34 KM 46.88627°N 102.34304 °E

Isoperla potanini Within Known Range? N Nearest Occurrence: 173.49 KM 46.73093°N 101.88583 °E

**Basin:** Internal Drainage Basin  
**Aimag:** Ovorkhangai  
**Soum:** Baruunbayan-ulaan

**Freshwater Ecoregion:** Western Mongolia  
**Terrestrial Ecoregion:** Gobi Lakes Valley Desert Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

<b>LOE Rating:</b> Possible	<b>Total:</b> 8
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<b>Family:</b> Nemouridae					
Nemoura arctica	Within Known Range? N	Nearest Occurrence:	230.69 KM	47.26999 °N	101.80227 °E
<b>Family:</b> Perlodidae					
Arcynopteryx polaris	Within Known Range? N	Nearest Occurrence:	205.22 KM	47.04409 °N	101.76352 °E
Isoperla altaica	Within Known Range? N	Nearest Occurrence:	218.25 KM	47.11192 °N	101.01048 °E
Isoperla asiatica	Within Known Range? N	Nearest Occurrence:	316.64 KM	47.80440 °N	100.31810 °E
Isoperla kozlovi	Within Known Range? N	Nearest Occurrence:	230.28 KM	47.26999 °N	101.80227 °E
Kaszabia nigricauda	Within Known Range? N	Nearest Occurrence:	261.73 KM	47.48567 °N	100.87875 °E
Skwala pusilla	Within Known Range? N	Nearest Occurrence:	1,489.18 KM	48.51277 °N	88.51107 °E
<b>Family:</b> Taeniopterygidae					
Taenionema japonicum	Within Known Range? N	Nearest Occurrence:	218.25 KM	47.11192 °N	101.01048 °E

<b>LOE Rating:</b> Predicted	<b>Total:</b> 11
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<b>Family:</b> Capniidae					
Capnia nigra	Within Known Range? N	Nearest Occurrence:	541.83 KM	48.06257 °N	97.55064 °E
Mesocapnia variabilis	Within Known Range? N	Nearest Occurrence:	284.13 KM	47.21768 °N	99.92824 °E
<b>Family:</b> Chloroperlidae					
Alloperla mediata	Within Known Range? N	Nearest Occurrence:	528.77 KM	49.70678 °N	103.10288 °E
<b>Family:</b> Leuctridae					
Paraleuctra zapekinae	Within Known Range? N	Nearest Occurrence:	608.18 KM	49.71481 °N	104.64203 °E
<b>Family:</b> Nemouridae					
Amphinemura standfussi	Within Known Range? N	Nearest Occurrence:	485.07 KM	49.33339 °N	102.97786 °E
Nemoura sahlbergi	Within Known Range? N	Nearest Occurrence:	279.94 KM	47.42580 °N	100.30130 °E
<b>Family:</b> Perlidae					
Paragnetina flavotincta	Within Known Range? N	Nearest Occurrence:	456.20 KM	49.26765 °N	100.82998 °E
<b>Family:</b> Perlodidae					
Isoperla lunigera	Within Known Range? N	Nearest Occurrence:	481.78 KM	49.38617 °N	102.71667 °E
Isoperla mongolica	Within Known Range? N	Nearest Occurrence:	218.25 KM	47.11192 °N	101.01048 °E
Isoperla obscura	Within Known Range? N	Nearest Occurrence:	481.78 KM	49.38617 °N	102.71667 °E
Megarcys ochracea	Within Known Range? N	Nearest Occurrence:	557.18 KM	49.77776 °N	103.60860 °E

<b>LOE Rating:</b> Unlikely	<b>Total:</b> 5
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<b>Family:</b> Capniidae					
Capnia khulsbagia	Within Known Range? N	Nearest Occurrence:	646.99 KM	50.98944 °N	100.71944 °E
Mesocapnia altaica	Within Known Range? N	Nearest Occurrence:	1,445.16 KM	48.43684 °N	88.90094 °E
<b>Family:</b> Leuctridae					
Leuctra fusca	Within Known Range? N	Nearest Occurrence:	771.62 KM	49.08643 °N	107.28952 °E
<b>Family:</b> Nemouridae					
Nemurella pictetii	Within Known Range? N	Nearest Occurrence:	666.66 KM	50.81265 °N	99.33803 °E
<b>Family:</b> Perlodidae					
Isoperla eximia	Within Known Range? N	Nearest Occurrence:	791.23 KM	49.01829 °N	107.54453 °E



**Basin:** Internal Drainage Basin  
**Aimag:** Ovorkhangai  
**Soum:** Bayangol

**Freshwater Ecoregion:** Western Mongolia  
**Terrestrial Ecoregion:** Gobi Lakes Valley Desert Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Highly Likely Total: 5**

Family: Capniidae					
Isocapnia guentheri	Within Known Range? N	Nearest Occurrence:	329.83 KM	47.50523 °N	100.93208 °E
Isocapnia sibirica	Within Known Range? N	Nearest Occurrence:	238.79 KM	47.26999 °N	101.80227 °E
Family: Chloroperlidae					
Alloperla joosti	Within Known Range? N	Nearest Occurrence:	190.67 KM	46.78742 °N	101.96021 °E
Family: Nemouridae					
Amphinemura borealis	Within Known Range? N	Nearest Occurrence:	190.67 KM	46.78742 °N	101.96021 °E
Family: Perlidae					
Agnentina brevipennis	Within Known Range? N	Nearest Occurrence:	163.27 KM	46.89303 °N	102.39457 °E

**LOE Rating: Likely Total: 13**

Family: Capniidae					
Isocapnia kudia	Within Known Range? N	Nearest Occurrence:	732.91 KM	51.25356 °N	99.66687 °E
Family: Chloroperlidae					
Alloperla rostellata	Within Known Range? N	Nearest Occurrence:	298.80 KM	47.11192 °N	101.01048 °E
Suwallia kerzhneri	Within Known Range? N	Nearest Occurrence:	309.06 KM	47.59928 °N	101.24521 °E
Suwallia teleckojensis	Within Known Range? N	Nearest Occurrence:	191.01 KM	46.78742 °N	101.96021 °E
Family: Nemouridae					
Nemoura cinerea	Within Known Range? N	Nearest Occurrence:	333.40 KM	47.48567 °N	100.87875 °E
Family: Perlidae					
Agnentina extrema	Within Known Range? N	Nearest Occurrence:	238.79 KM	47.26999 °N	101.80227 °E
Kamimuria exilis	Within Known Range? N	Nearest Occurrence:	699.47 KM	50.16278 °N	98.84212 °E
Family: Perlodidae					
Arcynopteryx compacta	Within Known Range? N	Nearest Occurrence:	166.76 KM	46.88627 °N	102.34304 °E
Arcynopteryx sajanensis	Within Known Range? N	Nearest Occurrence:	717.99 KM	51.61397 °N	100.59972 °E
Diura bicaudata	Within Known Range? N	Nearest Occurrence:	411.79 KM	47.21768 °N	99.92824 °E
Diura majuscula	Within Known Range? N	Nearest Occurrence:	163.57 KM	46.89303 °N	102.39457 °E
Pictetiella asiatica	Within Known Range? N	Nearest Occurrence:	724.45 KM	51.65822 °N	100.53000 °E
Family: Pteronarcyidae					
Pteronarcys reticulata	Within Known Range? N	Nearest Occurrence:	404.74 KM	47.80440 °N	100.31810 °E

**LOE Rating: Probable Total: 5**

Family: Chloroperlidae					
Alloperla deminuta	Within Known Range? N	Nearest Occurrence:	190.67 KM	46.78742 °N	101.96021 °E
Haploperla lepnevae	Within Known Range? N	Nearest Occurrence:	425.69 KM	49.48086 °N	104.30864 °E
Family: Perlidae					
Agnentina cocandica	Within Known Range? N	Nearest Occurrence:	429.60 KM	49.16354 °N	105.18880 °E
Family: Perlodidae					
Isoperla kozlovi	Within Known Range? N	Nearest Occurrence:	238.79 KM	47.26999 °N	101.80227 °E
Isoperla potanini	Within Known Range? N	Nearest Occurrence:	194.21 KM	46.73093 °N	101.88583 °E



**Basin:** Internal Drainage Basin  
**Aimags:** Ovorkhangai  
**Soums:** Bayangol

**Freshwater Ecoregion:** Western Mongolia  
**Terrestrial Ecoregion:** Gobi Lakes Valley Desert Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

<b>LOE Rating:</b>	<b>Possible</b>	<b>Total:</b>	2
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<b>Family:</b> Chloroperlidae						
Alaskaperla longidentata	Within Known Range? N	Nearest Occurrence:	216.20 KM	46.82177°N	101.70479°E	
<b>Family:</b> Perlodidae						
Kaszabia nigricauda	Within Known Range? N	Nearest Occurrence:	309.06 KM	47.59928°N	101.24521°E	

<b>LOE Rating:</b>	<b>Predicted</b>	<b>Total:</b>	20
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<b>Family:</b> Capniidae						
Capnia khulsbagia	Within Known Range? N	Nearest Occurrence:	648.54 KM	50.98944°N	100.71944°E	
Capnia nigra	Within Known Range? N	Nearest Occurrence:	619.20 KM	50.51003°N	100.40375°E	
Mesocapnia variabilis	Within Known Range? N	Nearest Occurrence:	412.54 KM	47.21768°N	99.92824°E	
<b>Family:</b> Chloroperlidae						
Alloperla mediata	Within Known Range? N	Nearest Occurrence:	437.88 KM	49.70678°N	103.10288°E	
<b>Family:</b> Leuctridae						
Leuctra fusca	Within Known Range? N	Nearest Occurrence:	572.20 KM	49.08643°N	107.28952°E	
Paraleuctra zapekinae	Within Known Range? N	Nearest Occurrence:	461.06 KM	49.71481°N	104.64203°E	
<b>Family:</b> Nemouridae						
Amphinemura standfussi	Within Known Range? N	Nearest Occurrence:	397.70 KM	49.33339°N	102.97786°E	
Nemoura arctica	Within Known Range? N	Nearest Occurrence:	239.23 KM	47.26999°N	101.80227°E	
Nemoura sahlbergi	Within Known Range? N	Nearest Occurrence:	384.52 KM	47.42580°N	100.30130°E	
<b>Family:</b> Perlidae						
Paragnetina flavotincta	Within Known Range? N	Nearest Occurrence:	397.70 KM	49.33339°N	102.97786°E	
<b>Family:</b> Perlodidae						
Arcynopteryx polaris	Within Known Range? N	Nearest Occurrence:	225.77 KM	47.04409°N	101.76352°E	
Isoperla altaica	Within Known Range? N	Nearest Occurrence:	299.34 KM	47.11192°N	101.01048°E	
Isoperla asiatica	Within Known Range? N	Nearest Occurrence:	404.74 KM	47.80440°N	100.31810°E	
Isoperla eximia	Within Known Range? N	Nearest Occurrence:	589.49 KM	49.01829°N	107.54453°E	
Isoperla lunigera	Within Known Range? N	Nearest Occurrence:	407.47 KM	49.38617°N	102.71667°E	
Isoperla mongolica	Within Known Range? N	Nearest Occurrence:	239.23 KM	47.26999°N	101.80227°E	
Isoperla obscura	Within Known Range? N	Nearest Occurrence:	313.87 KM	47.85250°N	105.25567°E	
Megarcys ochracea	Within Known Range? N	Nearest Occurrence:	445.92 KM	49.77776°N	103.60860°E	
Skwala pusilla	Within Known Range? N	Nearest Occurrence:	1,674.34 KM	48.51277°N	88.51107°E	
<b>Family:</b> Taeniopterygidae						
Taenionema japonicum	Within Known Range? N	Nearest Occurrence:	292.88 KM	47.28244°N	101.18793°E	

<b>LOE Rating:</b>	<b>Unlikely</b>	<b>Total:</b>	2
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<b>Family:</b> Capniidae						
Mesocapnia altaica	Within Known Range? N	Nearest Occurrence:	1,630.26 KM	48.43684°N	88.90094°E	
<b>Family:</b> Nemouridae						
Nemurella pictetii	Within Known Range? N	Nearest Occurrence:	714.26 KM	51.07896°N	99.70857°E	



**Basin:** Internal Drainage Basin  
**Aimags:** Ovorkhangai  
**Soums:** Bogd

**Freshwater Ecoregion:** Western Mongolia  
**Terrestrial Ecoregion:** Gobi Lakes Valley Desert Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

<b>LOE Rating:</b>	<b>Highly Likely</b>	<b>Total:</b>	<b>4</b>
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<b>Family:</b> Capniidae			
Isocapnia guentheri	Within Known Range? N	Nearest Occurrence:	360.97 KM 47.50523°N 100.93208 °E
Isocapnia sibirica	Within Known Range? N	Nearest Occurrence:	306.35 KM 47.26999°N 101.80227 °E
<b>Family:</b> Nemouridae			
Amphinemura borealis	Within Known Range? N	Nearest Occurrence:	245.38 KM 46.72826°N 101.89317 °E
<b>Family:</b> Perlidae			
Agnentina brevipennis	Within Known Range? N	Nearest Occurrence:	250.61 KM 46.78742°N 101.96021 °E

<b>LOE Rating:</b>	<b>Likely</b>	<b>Total:</b>	<b>13</b>
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<b>Family:</b> Capniidae			
Isocapnia kudia	Within Known Range? N	Nearest Occurrence:	798.92 KM 51.25356°N 99.66687 °E
<b>Family:</b> Chloroperlidae			
Alloperla joosti	Within Known Range? N	Nearest Occurrence:	250.61 KM 46.78742°N 101.96021 °E
Alloperla rostellata	Within Known Range? N	Nearest Occurrence:	317.88 KM 47.11192°N 101.01048 °E
Suwallia kerzhneri	Within Known Range? N	Nearest Occurrence:	357.61 KM 47.59928°N 101.24521 °E
Suwallia teleckojensis	Within Known Range? N	Nearest Occurrence:	251.06 KM 46.78742°N 101.96021 °E
<b>Family:</b> Nemouridae			
Nemoura cinerea	Within Known Range? N	Nearest Occurrence:	361.55 KM 47.48567°N 100.87875 °E
<b>Family:</b> Perlidae			
Agnentina extrema	Within Known Range? N	Nearest Occurrence:	306.35 KM 47.26999°N 101.80227 °E
Kamimuria exilis	Within Known Range? N	Nearest Occurrence:	732.64 KM 50.16278°N 98.84212 °E
<b>Family:</b> Perlodidae			
Arcynopteryx sajanensis	Within Known Range? N	Nearest Occurrence:	807.38 KM 51.61397°N 100.59972 °E
Diura bicaudata	Within Known Range? N	Nearest Occurrence:	395.87 KM 47.21768°N 99.92824 °E
Diura majuscula	Within Known Range? N	Nearest Occurrence:	260.12 KM 46.89303°N 102.39457 °E
Isoperla potanini	Within Known Range? N	Nearest Occurrence:	246.27 KM 46.73093°N 101.88583 °E
Pictetiella asiatica	Within Known Range? N	Nearest Occurrence:	812.54 KM 51.65822°N 100.53000 °E

<b>LOE Rating:</b>	<b>Probable</b>	<b>Total:</b>	<b>4</b>
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<b>Family:</b> Chloroperlidae			
Alaskaperla longidentata	Within Known Range? N	Nearest Occurrence:	260.11 KM 46.82177°N 101.70479 °E
Alloperla deminuta	Within Known Range? N	Nearest Occurrence:	250.61 KM 46.78742°N 101.96021 °E
<b>Family:</b> Perlodidae			
Arcynopteryx compacta	Within Known Range? N	Nearest Occurrence:	259.21 KM 46.88627°N 102.34304 °E
<b>Family:</b> Pteronarcyidae			
Pteronarcys reticulata	Within Known Range? N	Nearest Occurrence:	422.51 KM 47.80440°N 100.31810 °E





**Basin:** Internal Drainage Basin  
**Aimags:** Ovorkhangai  
**Soums:** Bogd

**Freshwater Ecoregion:** Western Mongolia  
**Terrestrial Ecoregion:** Gobi Lakes Valley Desert Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

<b>LOE Rating:</b>	<b>Possible</b>	<b>Total:</b>	<b>8</b>
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<b>Family:</b> Chloroperlidae						
Haploperla lepnevae	Within Known Range?	N	Nearest Occurrence:	578.65 KM	49.70678 °N	103.10288 °E
<b>Family:</b> Nemouridae						
Nemoura arctica	Within Known Range?	N	Nearest Occurrence:	306.90 KM	47.26999 °N	101.80227 °E
<b>Family:</b> Perlidae						
Agnetina cocandica	Within Known Range?	N	Nearest Occurrence:	604.67 KM	49.16354 °N	105.18880 °E
<b>Family:</b> Perlodidae						
Arcynopteryx polaris	Within Known Range?	N	Nearest Occurrence:	283.11 KM	47.04409 °N	101.76352 °E
Isoperla altaica	Within Known Range?	N	Nearest Occurrence:	318.46 KM	47.11192 °N	101.01048 °E
Isoperla kozlovi	Within Known Range?	N	Nearest Occurrence:	306.35 KM	47.26999 °N	101.80227 °E
Kaszabia nigricauda	Within Known Range?	N	Nearest Occurrence:	357.61 KM	47.59928 °N	101.24521 °E
<b>Family:</b> Taeniopterygidae						
Taenionema japonicum	Within Known Range?	N	Nearest Occurrence:	318.46 KM	47.11192 °N	101.01048 °E

<b>LOE Rating:</b>	<b>Predicted</b>	<b>Total:</b>	<b>13</b>
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<b>Family:</b> Capniidae						
Capnia nigra	Within Known Range?	N	Nearest Occurrence:	655.46 KM	48.06257 °N	97.55064 °E
Mesocapnia variabilis	Within Known Range?	N	Nearest Occurrence:	396.58 KM	47.21768 °N	99.92824 °E
<b>Family:</b> Chloroperlidae						
Alloperla mediata	Within Known Range?	N	Nearest Occurrence:	578.65 KM	49.70678 °N	103.10288 °E
<b>Family:</b> Leuctridae						
Paraleuctra zapekinae	Within Known Range?	N	Nearest Occurrence:	628.84 KM	49.71481 °N	104.64203 °E
<b>Family:</b> Nemouridae						
Amphinemura standfussi	Within Known Range?	N	Nearest Occurrence:	535.61 KM	49.33339 °N	102.97786 °E
Nemoura sahlbergi	Within Known Range?	N	Nearest Occurrence:	388.32 KM	47.42580 °N	100.30130 °E
<b>Family:</b> Perlidae						
Paragnetina flavotincta	Within Known Range?	N	Nearest Occurrence:	535.61 KM	49.33339 °N	102.97786 °E
<b>Family:</b> Perlodidae						
Isoperla asiatica	Within Known Range?	N	Nearest Occurrence:	422.51 KM	47.80440 °N	100.31810 °E
Isoperla lunigera	Within Known Range?	N	Nearest Occurrence:	538.16 KM	49.38617 °N	102.71667 °E
Isoperla mongolica	Within Known Range?	N	Nearest Occurrence:	306.90 KM	47.26999 °N	101.80227 °E
Isoperla obscura	Within Known Range?	N	Nearest Occurrence:	491.37 KM	47.85250 °N	105.25567 °E
Megarcys ochracea	Within Known Range?	N	Nearest Occurrence:	597.53 KM	49.77776 °N	103.60860 °E
Skwala pusilla	Within Known Range?	N	Nearest Occurrence:	1,592.52 KM	48.51277 °N	88.51107 °E



**Basin:** Internal Drainage Basin  
**Aimag:** Ovorkhangai  
**Soum:** Bogd

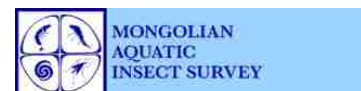
Freshwater Ecoregion: Western Mongolia  
 Terrestrial Ecoregion: Gobi Lakes Valley Desert Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

<b>LOE Rating:</b>	<b>Unlikely</b>	<b>Total:</b>	<b>5</b>
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<b>Family:</b> Capniidae					
Capnia khulsbagia	Within Known Range? N	Nearest Occurrence:	735.43 KM	50.98944 °N	100.71944 °E
Mesocapnia altaica	Within Known Range? N	Nearest Occurrence:	1,548.60 KM	48.43684 °N	88.90094 °E
<b>Family:</b> Leuctridae					
Leuctra fusca	Within Known Range? N	Nearest Occurrence:	747.97 KM	49.08643 °N	107.28952 °E
<b>Family:</b> Nemouridae					
Nemurella pictetii	Within Known Range? N	Nearest Occurrence:	768.49 KM	50.81265 °N	99.33803 °E
<b>Family:</b> Perlodidae					
Isoperla eximia	Within Known Range? N	Nearest Occurrence:	761.65 KM	48.60182 °N	107.84335 °E



**Basin:** Internal Drainage Basin  
**Aimag:** Ovorkhangai  
**Soum:** Guchin-us

**Freshwater Ecoregion:** Western Mongolia  
**Terrestrial Ecoregion:** Gobi Lakes Valley Desert Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Highly Likely Total: 5**

Family: Capniidae					
Isocapnia guentheri	Within Known Range? N	Nearest Occurrence:	296.94 KM	47.50523°N	100.93208 °E
Isocapnia sibirica	Within Known Range? N	Nearest Occurrence:	232.00 KM	47.26999°N	101.80227 °E
Family: Chloroperlidae					
Alloperla joosti	Within Known Range? N	Nearest Occurrence:	175.67 KM	46.78742°N	101.96021 °E
Family: Nemouridae					
Amphinemura borealis	Within Known Range? N	Nearest Occurrence:	171.64 KM	46.72826°N	101.89317 °E
Family: Perlidae					
Agnentina brevipennis	Within Known Range? N	Nearest Occurrence:	175.67 KM	46.78742°N	101.96021 °E

**LOE Rating: Likely Total: 13**

Family: Capniidae					
Isocapnia kudia	Within Known Range? N	Nearest Occurrence:	730.39 KM	51.25356°N	99.66687 °E
Family: Chloroperlidae					
Alloperla rostellata	Within Known Range? N	Nearest Occurrence:	256.17 KM	47.11192°N	101.01048 °E
Suwallia kerzhneri	Within Known Range? N	Nearest Occurrence:	288.77 KM	47.59928°N	101.24521 °E
Suwallia teleckojensis	Within Known Range? N	Nearest Occurrence:	175.98 KM	46.78742°N	101.96021 °E
Family: Nemouridae					
Nemoura cinerea	Within Known Range? N	Nearest Occurrence:	298.43 KM	47.48567°N	100.87875 °E
Family: Perlidae					
Agnentina extrema	Within Known Range? N	Nearest Occurrence:	232.00 KM	47.26999°N	101.80227 °E
Kamimuria exilis	Within Known Range? N	Nearest Occurrence:	672.80 KM	50.16278°N	98.84212 °E
Family: Perlodidae					
Arcynopteryx compacta	Within Known Range? N	Nearest Occurrence:	180.28 KM	46.88627°N	102.34304 °E
Arcynopteryx sajanensis	Within Known Range? N	Nearest Occurrence:	733.61 KM	51.61397°N	100.59972 °E
Diura bicaudata	Within Known Range? N	Nearest Occurrence:	349.20 KM	47.21768°N	99.92824 °E
Diura majuscula	Within Known Range? N	Nearest Occurrence:	180.94 KM	46.89303°N	102.39457 °E
Pictetiella asiatica	Within Known Range? N	Nearest Occurrence:	739.15 KM	51.65822°N	100.53000 °E
Family: Pteronarcyidae					
Pteronarcys reticulata	Within Known Range? N	Nearest Occurrence:	364.10 KM	47.80440°N	100.31810 °E

**LOE Rating: Probable Total: 5**

Family: Chloroperlidae					
Alaskaperla longidentata	Within Known Range? N	Nearest Occurrence:	188.96 KM	46.82177°N	101.70479 °E
Alloperla deminuta	Within Known Range? N	Nearest Occurrence:	175.67 KM	46.78742°N	101.96021 °E
Haploperla lepnevae	Within Known Range? N	Nearest Occurrence:	499.16 KM	49.70678°N	103.10288 °E
Family: Perlidae					
Agnentina cocandica	Within Known Range? N	Nearest Occurrence:	533.23 KM	49.16354°N	105.18880 °E
Family: Perlodidae					
Isoperla potanini	Within Known Range? N	Nearest Occurrence:	172.49 KM	46.73093°N	101.88583 °E



**Basin:** Internal Drainage Basin  
**Aimags:** Ovorkhangai  
**Soums:** Guchin-us

**Freshwater Ecoregion:** Western Mongolia  
**Terrestrial Ecoregion:** Gobi Lakes Valley Desert Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

<b>LOE Rating:</b>	<b>Possible</b>	<b>Total:</b>	<b>5</b>
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<b>Family:</b> Nemouridae			
Nemoura arctica	Within Known Range? N	Nearest Occurrence:	232.42 KM 47.26999°N 101.80227°E
<b>Family:</b> Perlodidae			
Arcynopteryx polaris	Within Known Range? N	Nearest Occurrence:	209.86 KM 47.04409°N 101.76352°E
Isoperla kozlovi	Within Known Range? N	Nearest Occurrence:	232.00 KM 47.26999°N 101.80227°E
Kaszabia nigricauda	Within Known Range? N	Nearest Occurrence:	288.77 KM 47.59928°N 101.24521°E
<b>Family:</b> Taeniopterygidae			
Taenionema japonicum	Within Known Range? N	Nearest Occurrence:	256.63 KM 47.11192°N 101.01048°E

<b>LOE Rating:</b>	<b>Predicted</b>	<b>Total:</b>	<b>15</b>
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<b>Family:</b> Capniidae			
Capnia khulsbagia	Within Known Range? N	Nearest Occurrence:	662.00 KM 50.98944°N 100.71944°E
Capnia nigra	Within Known Range? N	Nearest Occurrence:	620.95 KM 48.06257°N 97.55064°E
Mesocapnia variabilis	Within Known Range? N	Nearest Occurrence:	349.83 KM 47.21768°N 99.92824°E
<b>Family:</b> Chloroperlidae			
Alloperla mediata	Within Known Range? N	Nearest Occurrence:	499.16 KM 49.70678°N 103.10288°E
<b>Family:</b> Leuctridae			
Paraleuctra zapekinae	Within Known Range? N	Nearest Occurrence:	553.22 KM 49.71481°N 104.64203°E
<b>Family:</b> Nemouridae			
Amphinemura standfussi	Within Known Range? N	Nearest Occurrence:	456.10 KM 49.33339°N 102.97786°E
Nemoura sahlbergi	Within Known Range? N	Nearest Occurrence:	333.94 KM 47.42580°N 100.30130°E
<b>Family:</b> Perlidae			
Paragnetina flavotincta	Within Known Range? N	Nearest Occurrence:	456.10 KM 49.33339°N 102.97786°E
<b>Family:</b> Perlodidae			
Isoperla altaica	Within Known Range? N	Nearest Occurrence:	256.63 KM 47.11192°N 101.01048°E
Isoperla asiatica	Within Known Range? N	Nearest Occurrence:	364.10 KM 47.80440°N 100.31810°E
Isoperla lunigera	Within Known Range? N	Nearest Occurrence:	458.74 KM 49.38617°N 102.71667°E
Isoperla mongolica	Within Known Range? N	Nearest Occurrence:	232.42 KM 47.26999°N 101.80227°E
Isoperla obscura	Within Known Range? N	Nearest Occurrence:	428.05 KM 47.85250°N 105.25567°E
Megarcys ochracea	Within Known Range? N	Nearest Occurrence:	518.61 KM 49.77776°N 103.60860°E
Skwala pusilla	Within Known Range? N	Nearest Occurrence:	1,582.75 KM 48.51277°N 88.51107°E

<b>LOE Rating:</b>	<b>Unlikely</b>	<b>Total:</b>	<b>4</b>
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<b>Family:</b> Capniidae			
Mesocapnia altaica	Within Known Range? N	Nearest Occurrence:	1,538.70 KM 48.43684°N 88.90094°E
<b>Family:</b> Leuctridae			
Leuctra fusca	Within Known Range? N	Nearest Occurrence:	689.17 KM 49.08643°N 107.28952°E
<b>Family:</b> Nemouridae			
Nemurella pictetii	Within Known Range? N	Nearest Occurrence:	703.04 KM 50.81265°N 99.33803°E
<b>Family:</b> Perlodidae			
Isoperla eximia	Within Known Range? N	Nearest Occurrence:	707.21 KM 49.01829°N 107.54453°E



**Basin:** Internal Drainage Basin  
**Aimag:** Ovorkhangai  
**Soum:** Khairkhandulaan

**Freshwater Ecoregion:** Western Mongolia  
**Terrestrial Ecoregion:** Gobi Lakes Valley Desert Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Highly Likely Total: 2**

Family: Chloroperlidae					
Alloperla joosti	Within Known Range? N	Nearest Occurrence:	106.10 KM	46.78742 °N	101.96021 °E
Family: Nemouridae					
Amphinemura borealis	Within Known Range? N	Nearest Occurrence:	101.00 KM	46.72826 °N	101.89317 °E

**LOE Rating: Likely Total: 17**

Family: Capniidae					
Isocapnia guentheri	Within Known Range? N	Nearest Occurrence:	225.39 KM	47.50523 °N	100.93208 °E
Isocapnia kudia	Within Known Range? N	Nearest Occurrence:	658.50 KM	51.25356 °N	99.66687 °E
Isocapnia sibirica	Within Known Range? N	Nearest Occurrence:	161.91 KM	47.26999 °N	101.80227 °E
Family: Chloroperlidae					
Alloperla deminuta	Within Known Range? N	Nearest Occurrence:	106.10 KM	46.78742 °N	101.96021 °E
Alloperla rostellata	Within Known Range? N	Nearest Occurrence:	185.49 KM	47.11192 °N	101.01048 °E
Suwallia kerzhneri	Within Known Range? N	Nearest Occurrence:	216.79 KM	47.59928 °N	101.24521 °E
Suwallia teleckojensis	Within Known Range? N	Nearest Occurrence:	106.30 KM	46.78742 °N	101.96021 °E
Family: Nemouridae					
Nemoura cinerea	Within Known Range? N	Nearest Occurrence:	227.09 KM	47.48567 °N	100.87875 °E
Family: Perlidae					
Agnetina brevipennis	Within Known Range? N	Nearest Occurrence:	106.10 KM	46.78742 °N	101.96021 °E
Agnetina extrema	Within Known Range? N	Nearest Occurrence:	161.91 KM	47.26999 °N	101.80227 °E
Kamimuria exilis	Within Known Range? N	Nearest Occurrence:	601.54 KM	50.16278 °N	98.84212 °E
Family: Perlodidae					
Arcynopteryx sajanensis	Within Known Range? N	Nearest Occurrence:	663.14 KM	51.61397 °N	100.59972 °E
Diura bicaudata	Within Known Range? N	Nearest Occurrence:	285.01 KM	47.21768 °N	99.92824 °E
Diura majuscula	Within Known Range? N	Nearest Occurrence:	121.59 KM	46.89303 °N	102.39457 °E
Isoperla kozlovi	Within Known Range? N	Nearest Occurrence:	161.91 KM	47.26999 °N	101.80227 °E
Isoperla potanini	Within Known Range? N	Nearest Occurrence:	101.66 KM	46.73093 °N	101.88583 °E
Pictetiella asiatica	Within Known Range? N	Nearest Occurrence:	668.67 KM	51.65822 °N	100.53000 °E

**LOE Rating: Probable Total: 4**

Family: Chloroperlidae					
Alaskaperla longidentata	Within Known Range? N	Nearest Occurrence:	117.18 KM	46.82177 °N	101.70479 °E
Family: Perlodidae					
Arcynopteryx compacta	Within Known Range? N	Nearest Occurrence:	119.42 KM	46.88627 °N	102.34304 °E
Kaszabia nigricauda	Within Known Range? N	Nearest Occurrence:	216.79 KM	47.59928 °N	101.24521 °E
Family: Pteronarcyidae					
Pteronarcys reticulata	Within Known Range? N	Nearest Occurrence:	293.98 KM	47.80440 °N	100.31810 °E



**Basin:** Internal Drainage Basin  
**Aimag:** Ovorkhangai  
**Soum:** Khairkhandulaan

**Freshwater Ecoregion:** Western Mongolia  
**Terrestrial Ecoregion:** Gobi Lakes Valley Desert Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

<b>LOE Rating:</b>	<b>Possible</b>	<b>Total:</b>	<b>4</b>
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Family: Chloroperlidae					
Haploperla lepnevae	Within Known Range? N	Nearest Occurrence:	439.57 KM	49.45317 °N	100.47234 °E
Family: Nemouridae					
Nemoura arctica	Within Known Range? N	Nearest Occurrence:	162.20 KM	47.26999 °N	101.80227 °E
Family: Perlodidae					
Arcynopteryx polaris	Within Known Range? N	Nearest Occurrence:	138.77 KM	47.04409 °N	101.76352 °E
Family: Taeniopterygidae					
Taenionema japonicum	Within Known Range? N	Nearest Occurrence:	185.83 KM	47.11192 °N	101.01048 °E

<b>LOE Rating:</b>	<b>Predicted</b>	<b>Total:</b>	<b>15</b>
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Family: Capniidae					
Capnia nigra	Within Known Range? N	Nearest Occurrence:	551.23 KM	50.51003 °N	100.40375 °E
Mesocapnia variabilis	Within Known Range? N	Nearest Occurrence:	285.53 KM	47.21768 °N	99.92824 °E
Family: Chloroperlidae					
Alloperla mediata	Within Known Range? N	Nearest Occurrence:	443.40 KM	49.70678 °N	103.10288 °E
Family: Leuctridae					
Paraleuctra zapekinae	Within Known Range? N	Nearest Occurrence:	514.55 KM	49.71481 °N	104.64203 °E
Family: Nemouridae					
Amphinemura standfussi	Within Known Range? N	Nearest Occurrence:	399.81 KM	49.33339 °N	102.97786 °E
Nemoura sahlbergi	Within Known Range? N	Nearest Occurrence:	265.73 KM	47.42580 °N	100.30130 °E
Family: Perlidae					
Agnetina cocandica	Within Known Range? N	Nearest Occurrence:	481.53 KM	49.62785 °N	99.99523 °E
Paragnetina flavotincta	Within Known Range? N	Nearest Occurrence:	399.81 KM	49.33339 °N	102.97786 °E
Family: Perlodidae					
Isoperla altaica	Within Known Range? N	Nearest Occurrence:	185.83 KM	47.11192 °N	101.01048 °E
Isoperla asiatica	Within Known Range? N	Nearest Occurrence:	293.98 KM	47.80440 °N	100.31810 °E
Isoperla lunigera	Within Known Range? N	Nearest Occurrence:	399.48 KM	49.38617 °N	102.71667 °E
Isoperla mongolica	Within Known Range? N	Nearest Occurrence:	162.20 KM	47.26999 °N	101.80227 °E
Isoperla obscura	Within Known Range? N	Nearest Occurrence:	399.48 KM	49.38617 °N	102.71667 °E
Megarcys ochracea	Within Known Range? N	Nearest Occurrence:	468.12 KM	49.77776 °N	103.60860 °E
Skwala pusilla	Within Known Range? N	Nearest Occurrence:	1,536.79 KM	48.51277 °N	88.51107 °E

<b>LOE Rating:</b>	<b>Unlikely</b>	<b>Total:</b>	<b>5</b>
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Family: Capniidae					
Capnia khulsbagia	Within Known Range? N	Nearest Occurrence:	591.53 KM	50.98944 °N	100.71944 °E
Mesocapnia altaica	Within Known Range? N	Nearest Occurrence:	1,492.70 KM	48.43684 °N	88.90094 °E
Family: Leuctridae					
Leuctra fusca	Within Known Range? N	Nearest Occurrence:	679.79 KM	49.08643 °N	107.28952 °E
Family: Nemouridae					
Nemurella pictetii	Within Known Range? N	Nearest Occurrence:	631.05 KM	50.81265 °N	99.33803 °E
Family: Perlodidae					
Isoperla eximia	Within Known Range? N	Nearest Occurrence:	700.12 KM	49.01829 °N	107.54453 °E

Research funded by the National Science Foundation  
 DEB-BSI #0206674: A Survey of the Aquatic Insects of the Selenge River Basin. P.I.'s: JKGelhaus, JCMorse, BHayford.  
 DEB # 0743732: Aquatic Insects of the Altai and Hangai Mountain Drainages. P.I.'s: JKGelhaus, JCMorse, CRNelson.  
<http://clade.ansp.org/entomology/mongolia/index.html>



**Basin:** Internal Drainage Basin  
**Aimag:** Ovorkhangai  
**Soum:** Narynteel

Freshwater Ecoregion: Western Mongolia  
 Terrestrial Ecoregion: Gobi Lakes Valley Desert Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Highly Likely Total: 2**

Family: Chloroperlidae					
Alloperla joosti	Within Known Range? N	Nearest Occurrence:	114.19 KM	46.78742 °N	101.96021 °E
Family: Nemouridae					
Amphinemura borealis	Within Known Range? N	Nearest Occurrence:	105.29 KM	46.73093 °N	101.88583 °E

**LOE Rating: Likely Total: 16**

Family: Capniidae					
Isocapnia guentheri	Within Known Range? N	Nearest Occurrence:	196.90 KM	47.50523 °N	100.93208 °E
Isocapnia kudia	Within Known Range? N	Nearest Occurrence:	635.96 KM	51.25356 °N	99.66687 °E
Isocapnia sibirica	Within Known Range? N	Nearest Occurrence:	160.80 KM	47.26999 °N	101.80227 °E
Family: Chloroperlidae					
Alloperla deminuta	Within Known Range? N	Nearest Occurrence:	114.19 KM	46.78742 °N	101.96021 °E
Alloperla rostellata	Within Known Range? N	Nearest Occurrence:	153.12 KM	47.11192 °N	101.01048 °E
Suwallia kerzhneri	Within Known Range? N	Nearest Occurrence:	197.04 KM	47.48567 °N	100.87875 °E
Suwallia teleckojensis	Within Known Range? N	Nearest Occurrence:	114.39 KM	46.78742 °N	101.96021 °E
Family: Nemouridae					
Nemoura cinerea	Within Known Range? N	Nearest Occurrence:	197.04 KM	47.48567 °N	100.87875 °E
Family: Perlidae					
Agnetina brevipennis	Within Known Range? N	Nearest Occurrence:	114.19 KM	46.78742 °N	101.96021 °E
Agnetina extrema	Within Known Range? N	Nearest Occurrence:	160.80 KM	47.26999 °N	101.80227 °E
Kamimuria exilis	Within Known Range? N	Nearest Occurrence:	567.03 KM	50.16278 °N	98.84212 °E
Family: Perlodidae					
Arcynopteryx sajanensis	Within Known Range? N	Nearest Occurrence:	650.39 KM	51.61397 °N	100.59972 °E
Diura bicaudata	Within Known Range? N	Nearest Occurrence:	236.13 KM	47.21768 °N	99.92824 °E
Diura majuscula	Within Known Range? N	Nearest Occurrence:	149.70 KM	46.89303 °N	102.39457 °E
Isoperla potanini	Within Known Range? N	Nearest Occurrence:	105.47 KM	46.73093 °N	101.88583 °E
Pictetiella asiatica	Within Known Range? N	Nearest Occurrence:	655.36 KM	51.65822 °N	100.53000 °E

**LOE Rating: Probable Total: 4**

Family: Chloroperlidae					
Alaskaperla longidentata	Within Known Range? N	Nearest Occurrence:	109.95 KM	46.82177 °N	101.70479 °E
Family: Perlodidae					
Arcynopteryx compacta	Within Known Range? N	Nearest Occurrence:	145.58 KM	46.88627 °N	102.34304 °E
Isoperla kozlovi	Within Known Range? N	Nearest Occurrence:	160.80 KM	47.26999 °N	101.80227 °E
Family: Pteronarcyidae					
Pteronarcys reticulata	Within Known Range? N	Nearest Occurrence:	257.19 KM	47.80440 °N	100.31810 °E



**Basin:** Internal Drainage Basin  
**Aimags:** Ovorkhangai  
**Soums:** Naryn-teel

**Freshwater Ecoregion:** Western Mongolia  
**Terrestrial Ecoregion:** Gobi Lakes Valley Desert Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Possible Total: 6**

Family: Chloroperlidae					
Haploperla lepnevae	Within Known Range? N	Nearest Occurrence:	418.25 KM	49.45317°N	100.47234 °E
Family: Nemouridae					
Nemoura arctica	Within Known Range? N	Nearest Occurrence:	161.08 KM	47.26999°N	101.80227 °E
Family: Perlidae					
Agnetina cocandica	Within Known Range? N	Nearest Occurrence:	455.06 KM	49.62785°N	99.99523 °E
Family: Perlodidae					
Arcynopteryx polaris	Within Known Range? N	Nearest Occurrence:	135.60 KM	47.04409°N	101.76352 °E
Kaszabia nigricauda	Within Known Range? N	Nearest Occurrence:	197.04 KM	47.48567°N	100.87875 °E
Family: Taeniopterygidae					
Taenionema japonicum	Within Known Range? N	Nearest Occurrence:	153.39 KM	47.11192°N	101.01048 °E

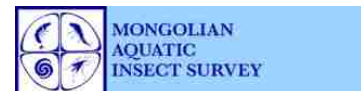
**LOE Rating: Predicted Total: 14**

Family: Capniidae					
Capnia nigra	Within Known Range? N	Nearest Occurrence:	507.89 KM	48.06257°N	97.55064 °E
Mesocapnia variabilis	Within Known Range? N	Nearest Occurrence:	236.56 KM	47.21768°N	99.92824 °E
Family: Chloroperlidae					
Alloperla mediata	Within Known Range? N	Nearest Occurrence:	462.13 KM	49.70678°N	103.10288 °E
Family: Leuctridae					
Paraleuctra zapekinae	Within Known Range? N	Nearest Occurrence:	549.86 KM	49.71481°N	104.64203 °E
Family: Nemouridae					
Amphinemura standfussi	Within Known Range? N	Nearest Occurrence:	418.50 KM	49.33339°N	102.97786 °E
Nemoura sahlbergi	Within Known Range? N	Nearest Occurrence:	223.90 KM	47.42580°N	100.30130 °E
Family: Perlidae					
Paragnetina flavotincta	Within Known Range? N	Nearest Occurrence:	388.47 KM	49.26765°N	100.82998 °E
Family: Perlodidae					
Isoperla altaica	Within Known Range? N	Nearest Occurrence:	153.39 KM	47.11192°N	101.01048 °E
Isoperla asiatica	Within Known Range? N	Nearest Occurrence:	257.19 KM	47.80440°N	100.31810 °E
Isoperla lunigera	Within Known Range? N	Nearest Occurrence:	413.98 KM	49.38617°N	102.71667 °E
Isoperla mongolica	Within Known Range? N	Nearest Occurrence:	153.39 KM	47.11192°N	101.01048 °E
Isoperla obscura	Within Known Range? N	Nearest Occurrence:	413.98 KM	49.38617°N	102.71667 °E
Megarcys ochracea	Within Known Range? N	Nearest Occurrence:	492.81 KM	49.77776°N	103.60860 °E
Skwala pusilla	Within Known Range? N	Nearest Occurrence:	1,477.55 KM	48.51277°N	88.51107 °E

**LOE Rating: Unlikely Total: 5**

Family: Capniidae					
Capnia khulsbagia	Within Known Range? N	Nearest Occurrence:	578.66 KM	50.98944°N	100.71944 °E
Mesocapnia altaica	Within Known Range? N	Nearest Occurrence:	1,433.46 KM	48.43684°N	88.90094 °E
Family: Leuctridae					
Leuctra fusca	Within Known Range? N	Nearest Occurrence:	731.59 KM	49.08643°N	107.28952 °E
Family: Nemouridae					
Nemurella pictetii	Within Known Range? N	Nearest Occurrence:	603.88 KM	50.81265°N	99.33803 °E
Family: Perlodidae					
Isoperla eximia	Within Known Range? N	Nearest Occurrence:	752.79 KM	49.01829°N	107.54453 °E

Research funded by the National Science Foundation  
 DEB-BSI #0206674: A Survey of the Aquatic Insects of the Selenge River Basin. P.I.'s: JKGelhaus, JCMorse, BHayford.  
 DEB # 0743732: Aquatic Insects of the Altai and Hangai Mountain Drainages. P.I.'s: JKGelhaus, JCMorse, CRNelson.  
<http://clade.ansp.org/entomology/mongolia/index.html>





**Basin:** Internal Drainage Basin  
**Aimags:** Ovorkhangai  
**Soums:** Sant

**Freshwater Ecoregion:** Western Mongolia  
**Terrestrial Ecoregion:** Mongolian-Manchurian Grassland

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Highly Likely Total: 6**

Family: Capniidae					
Isocapnia guentheri	Within Known Range? N	Nearest Occurrence:	363.12 KM	47.50523 °N	100.93208 °E
Isocapnia sibirica	Within Known Range? N	Nearest Occurrence:	266.02 KM	47.26999 °N	101.80227 °E
Family: Chloroperlidae					
Alloperla joosti	Within Known Range? N	Nearest Occurrence:	226.05 KM	46.78742 °N	101.96021 °E
Alloperla rostellata	Within Known Range? N	Nearest Occurrence:	337.33 KM	47.11192 °N	101.01048 °E
Family: Nemouridae					
Amphinemura borealis	Within Known Range? N	Nearest Occurrence:	226.05 KM	46.78742 °N	101.96021 °E
Family: Perlidae					
Agnatina brevipennis	Within Known Range? N	Nearest Occurrence:	188.11 KM	46.89303 °N	102.39457 °E

**LOE Rating: Likely Total: 13**

Family: Capniidae					
Isocapnia kudia	Within Known Range? N	Nearest Occurrence:	743.59 KM	51.25356 °N	99.66687 °E
Family: Chloroperlidae					
Haploperla lepnevae	Within Known Range? N	Nearest Occurrence:	387.83 KM	49.48086 °N	104.30864 °E
Suwallia kerzhneri	Within Known Range? N	Nearest Occurrence:	337.84 KM	47.59928 °N	101.24521 °E
Suwallia teleckojensis	Within Known Range? N	Nearest Occurrence:	226.46 KM	46.78742 °N	101.96021 °E
Family: Nemouridae					
Nemoura cinerea	Within Known Range? N	Nearest Occurrence:	367.43 KM	47.48567 °N	100.87875 °E
Family: Perlidae					
Agnatina cocandica	Within Known Range? N	Nearest Occurrence:	380.37 KM	49.16354 °N	105.18880 °E
Agnatina extrema	Within Known Range? N	Nearest Occurrence:	266.02 KM	47.26999 °N	101.80227 °E
Kamimuria exilis	Within Known Range? N	Nearest Occurrence:	722.52 KM	50.16278 °N	98.84212 °E
Family: Perlodidae					
Arcynopteryx sajanensis	Within Known Range? N	Nearest Occurrence:	719.41 KM	51.61397 °N	100.59972 °E
Diura bicaudata	Within Known Range? N	Nearest Occurrence:	454.78 KM	47.21768 °N	99.92824 °E
Diura majuscula	Within Known Range? N	Nearest Occurrence:	188.44 KM	46.89303 °N	102.39457 °E
Pictetiella asiatica	Within Known Range? N	Nearest Occurrence:	726.26 KM	51.65822 °N	100.53000 °E
Family: Pteronarcyidae					
Pteronarcys reticulata	Within Known Range? N	Nearest Occurrence:	422.89 KM	49.63453 °N	102.64845 °E

**LOE Rating: Probable Total: 5**

Family: Chloroperlidae					
Alloperla deminuta	Within Known Range? N	Nearest Occurrence:	226.05 KM	46.78742 °N	101.96021 °E
Family: Perlodidae					
Arcynopteryx compacta	Within Known Range? N	Nearest Occurrence:	193.00 KM	46.88627 °N	102.34304 °E
Isoperla kozlovi	Within Known Range? N	Nearest Occurrence:	256.85 KM	47.85250 °N	105.25567 °E
Isoperla potanini	Within Known Range? N	Nearest Occurrence:	231.91 KM	46.73093 °N	101.88583 °E
Kaszabia nigricauda	Within Known Range? N	Nearest Occurrence:	256.85 KM	47.85250 °N	105.25567 °E



**Basin:** Internal Drainage Basin  
**Aimag:** Ovorkhangai  
**Soum:** Sant

Freshwater Ecoregion: Western Mongolia  
 Terrestrial Ecoregion: Mongolian-Manchurian Grassland

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

<b>LOE Rating:</b>	<b>Possible</b>	<b>Total:</b>	<b>2</b>
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Family: Chloroperlidae					
Alaskaperla longidentata	Within Known Range? N	Nearest Occurrence:	253.84 KM	46.82177°N	101.70479 °E
Family: Perlodidae					
Isoperla asiatica	Within Known Range? N	Nearest Occurrence:	405.84 KM	48.87748°N	106.12370 °E

<b>LOE Rating:</b>	<b>Predicted</b>	<b>Total:</b>	<b>19</b>
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Family: Capniidae					
Capnia khulsbagia	Within Known Range? N	Nearest Occurrence:	651.90 KM	50.98944°N	100.71944 °E
Capnia nigra	Within Known Range? N	Nearest Occurrence:	628.18 KM	50.51003°N	100.40375 °E
Mesocapnia variabilis	Within Known Range? N	Nearest Occurrence:	455.60 KM	47.21768°N	99.92824 °E
Family: Chloroperlidae					
Alloperla mediata	Within Known Range? N	Nearest Occurrence:	417.70 KM	49.70678°N	103.10288 °E
Family: Leuctridae					
Leuctra fusca	Within Known Range? N	Nearest Occurrence:	512.01 KM	49.08643°N	107.28952 °E
Paraleuctra zapekinae	Within Known Range? N	Nearest Occurrence:	419.79 KM	49.71481°N	104.64203 °E
Family: Nemouridae					
Amphinemura standfussi	Within Known Range? N	Nearest Occurrence:	380.44 KM	49.33339°N	102.97786 °E
Nemoura arctica	Within Known Range? N	Nearest Occurrence:	266.50 KM	47.26999°N	101.80227 °E
Nemoura sahlbergi	Within Known Range? N	Nearest Occurrence:	408.97 KM	49.70184°N	103.80040 °E
Family: Perlidae					
Paragnetina flavotincta	Within Known Range? N	Nearest Occurrence:	379.68 KM	49.16354°N	105.18880 °E
Family: Perlodidae					
Arcynopteryx polaris	Within Known Range? N	Nearest Occurrence:	258.14 KM	47.04409°N	101.76352 °E
Isoperla altaica	Within Known Range? N	Nearest Occurrence:	337.94 KM	47.11192°N	101.01048 °E
Isoperla eximia	Within Known Range? N	Nearest Occurrence:	528.38 KM	48.60182°N	107.84335 °E
Isoperla lunigera	Within Known Range? N	Nearest Occurrence:	387.83 KM	49.48086°N	104.30864 °E
Isoperla mongolica	Within Known Range? N	Nearest Occurrence:	266.50 KM	47.26999°N	101.80227 °E
Isoperla obscura	Within Known Range? N	Nearest Occurrence:	256.85 KM	47.85250°N	105.25567 °E
Megarcys ochracea	Within Known Range? N	Nearest Occurrence:	418.19 KM	49.77776°N	103.60860 °E
Skwala pusilla	Within Known Range? N	Nearest Occurrence:	1,724.52 KM	48.51277°N	88.51107 °E
Family: Taeniopterygidae					
Taenionema japonicum	Within Known Range? N	Nearest Occurrence:	327.30 KM	47.28244°N	101.18793 °E

<b>LOE Rating:</b>	<b>Unlikely</b>	<b>Total:</b>	<b>2</b>
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Family: Capniidae					
Mesocapnia altaica	Within Known Range? N	Nearest Occurrence:	1,680.46 KM	48.43684°N	88.90094 °E
Family: Nemouridae					
Nemurella pictetii	Within Known Range? N	Nearest Occurrence:	725.60 KM	51.07896°N	99.70857 °E



**Basin:** Internal Drainage Basin  
**Aimag:** Ovorkhangai  
**Soum:** Taragt

**Freshwater Ecoregion:** Western Mongolia  
**Terrestrial Ecoregion:** Selenge-Orkhon Forest Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Highly Likely Total: 2**

<b>Family:</b> Chloroperlidae						
Alloperla joosti	Within Known Range? N	Nearest Occurrence:	110.42 KM	46.78742 °N	101.96021 °E	
<b>Family:</b> Nemouridae						
Amphinemura borealis	Within Known Range? N	Nearest Occurrence:	110.42 KM	46.78742 °N	101.96021 °E	

**LOE Rating: Likely Total: 16**

<b>Family:</b> Capniidae						
Isocapnia guentheri	Within Known Range? N	Nearest Occurrence:	249.12 KM	47.50523 °N	100.93208 °E	
Isocapnia kudia	Within Known Range? N	Nearest Occurrence:	661.74 KM	51.25356 °N	99.66687 °E	
Isocapnia sibirica	Within Known Range? N	Nearest Occurrence:	161.80 KM	47.26999 °N	101.80227 °E	
<b>Family:</b> Chloroperlidae						
Alloperla deminuta	Within Known Range? N	Nearest Occurrence:	110.42 KM	46.78742 °N	101.96021 °E	
Alloperla rostellata	Within Known Range? N	Nearest Occurrence:	217.26 KM	47.11192 °N	101.01048 °E	
Suwallia kerzhneri	Within Known Range? N	Nearest Occurrence:	230.14 KM	47.59928 °N	101.24521 °E	
Suwallia teleckojensis	Within Known Range? N	Nearest Occurrence:	110.62 KM	46.78742 °N	101.96021 °E	
<b>Family:</b> Nemouridae						
Nemoura cinerea	Within Known Range? N	Nearest Occurrence:	252.49 KM	47.48567 °N	100.87875 °E	
<b>Family:</b> Perlidae						
Agnetina brevipennis	Within Known Range? N	Nearest Occurrence:	92.18 KM	46.89303 °N	102.39457 °E	
Agnetina extrema	Within Known Range? N	Nearest Occurrence:	161.80 KM	47.26999 °N	101.80227 °E	
Kamimuria exilis	Within Known Range? N	Nearest Occurrence:	621.24 KM	50.16278 °N	98.84212 °E	
<b>Family:</b> Perlodidae						
Arcynopteryx sajanensis	Within Known Range? N	Nearest Occurrence:	653.97 KM	51.61397 °N	100.59972 °E	
Diura bicaudata	Within Known Range? N	Nearest Occurrence:	330.69 KM	47.21768 °N	99.92824 °E	
Diura majuscula	Within Known Range? Y	Nearest Occurrence:	92.35 KM	46.89303 °N	102.39457 °E	
Isoperla kozlovi	Within Known Range? N	Nearest Occurrence:	161.80 KM	47.26999 °N	101.80227 °E	
Pictetiella asiatica	Within Known Range? N	Nearest Occurrence:	660.17 KM	51.65822 °N	100.53000 °E	

**LOE Rating: Probable Total: 5**

<b>Family:</b> Chloroperlidae						
Alaskaperla longidentata	Within Known Range? N	Nearest Occurrence:	134.98 KM	46.82177 °N	101.70479 °E	
<b>Family:</b> Perlodidae						
Arcynopteryx compacta	Within Known Range? N	Nearest Occurrence:	93.91 KM	46.88627 °N	102.34304 °E	
Isoperla potanini	Within Known Range? N	Nearest Occurrence:	113.00 KM	46.73093 °N	101.88583 °E	
Kaszabia nigricauda	Within Known Range? N	Nearest Occurrence:	230.14 KM	47.59928 °N	101.24521 °E	
<b>Family:</b> Pteronarcyidae						
Pteronarcys reticulata	Within Known Range? N	Nearest Occurrence:	323.63 KM	47.80440 °N	100.31810 °E	



**Basin:** Internal Drainage Basin  
**Aimags:** Ovorkhangai  
**Soums:** Taragt

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

Freshwater Ecoregion: Western Mongolia  
 Terrestrial Ecoregion: Selenge-Orkhon Forest Steppe

<b>LOE Rating:</b>	<b>Possible</b>	<b>Total:</b>	<b>4</b>
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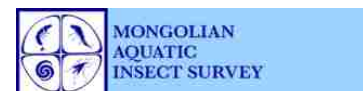
Family: Chloroperlidae						
Haploperla lepnevae	Within Known Range?	N	Nearest Occurrence:	400.67 KM	49.70678°N	103.10288°E
Family: Nemouridae						
Nemoura arctica	Within Known Range?	N	Nearest Occurrence:	162.09 KM	47.26999°N	101.80227°E
Family: Perlodidae						
Arcynopteryx polaris	Within Known Range?	N	Nearest Occurrence:	146.13 KM	47.04409°N	101.76352°E
Family: Taeniopterygidae						
Taenionema japonicum	Within Known Range?	N	Nearest Occurrence:	211.90 KM	47.28244°N	101.18793°E

<b>LOE Rating:</b>	<b>Predicted</b>	<b>Total:</b>	<b>16</b>
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Family: Capniidae						
Capnia khulsbagia	Within Known Range?	N	Nearest Occurrence:	583.42 KM	50.98944°N	100.71944°E
Capnia nigra	Within Known Range?	N	Nearest Occurrence:	549.82 KM	50.51003°N	100.40375°E
Mesocapnia variabilis	Within Known Range?	N	Nearest Occurrence:	331.29 KM	47.21768°N	99.92824°E
Family: Chloroperlidae						
Alloperla mediata	Within Known Range?	N	Nearest Occurrence:	400.67 KM	49.70678°N	103.10288°E
Family: Leuctridae						
Paraleuctra zapekinae	Within Known Range?	N	Nearest Occurrence:	453.65 KM	49.71481°N	104.64203°E
Family: Nemouridae						
Amphinemura standfussi	Within Known Range?	N	Nearest Occurrence:	358.05 KM	49.33339°N	102.97786°E
Nemoura sahlbergi	Within Known Range?	N	Nearest Occurrence:	302.94 KM	47.42580°N	100.30130°E
Family: Perlidae						
Agnetina cocandica	Within Known Range?	N	Nearest Occurrence:	437.35 KM	49.16354°N	105.18880°E
Paragnetina flavotincta	Within Known Range?	N	Nearest Occurrence:	358.05 KM	49.33339°N	102.97786°E
Family: Perlodidae						
Isoperla altaica	Within Known Range?	N	Nearest Occurrence:	217.66 KM	47.11192°N	101.01048°E
Isoperla asiatica	Within Known Range?	N	Nearest Occurrence:	323.63 KM	47.80440°N	100.31810°E
Isoperla lunigera	Within Known Range?	N	Nearest Occurrence:	362.56 KM	49.38617°N	102.71667°E
Isoperla mongolica	Within Known Range?	N	Nearest Occurrence:	162.09 KM	47.26999°N	101.80227°E
Isoperla obscura	Within Known Range?	N	Nearest Occurrence:	342.92 KM	47.85250°N	105.25567°E
Megarcys ochracea	Within Known Range?	N	Nearest Occurrence:	418.42 KM	49.77776°N	103.60860°E
Skwala pusilla	Within Known Range?	N	Nearest Occurrence:	1,596.97 KM	48.51277°N	88.51107°E

<b>LOE Rating:</b>	<b>Unlikely</b>	<b>Total:</b>	<b>4</b>
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Family: Capniidae						
Mesocapnia altaica	Within Known Range?	N	Nearest Occurrence:	1,552.90 KM	48.43684°N	88.90094°E
Family: Leuctridae						
Leuctra fusca	Within Known Range?	N	Nearest Occurrence:	606.80 KM	49.08643°N	107.28952°E
Family: Nemouridae						
Nemurella pictetii	Within Known Range?	N	Nearest Occurrence:	640.63 KM	50.81265°N	99.33803°E
Family: Perlodidae						
Isoperla eximia	Within Known Range?	N	Nearest Occurrence:	626.84 KM	49.01829°N	107.54453°E



**Basin:** Internal Drainage Basin  
**Aimags:** Ovorkhangai  
**Soums:** Togrog

**Freshwater Ecoregion:** Western Mongolia  
**Terrestrial Ecoregion:** Gobi Lakes Valley Desert Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Highly Likely Total: 5**

Family: Capniidae			
Isocapnia guentheri	Within Known Range? N	Nearest Occurrence: 351.39 KM	47.50523°N 100.93208°E
Isocapnia sibirica	Within Known Range? N	Nearest Occurrence: 269.51 KM	47.26999°N 101.80227°E
Family: Chloroperlidae			
Alloperla rostellata	Within Known Range? N	Nearest Occurrence: 315.23 KM	47.11192°N 101.01048°E
Family: Nemouridae			
Amphinemura borealis	Within Known Range? N	Nearest Occurrence: 215.54 KM	46.72826°N 101.89317°E
Family: Perlidae			
Agnentina brevipennis	Within Known Range? N	Nearest Occurrence: 200.43 KM	46.89303°N 102.39457°E

**LOE Rating: Likely Total: 13**

Family: Capniidae			
Isocapnia kudia	Within Known Range? N	Nearest Occurrence: 770.29 KM	51.25356°N 99.66687°E
Family: Chloroperlidae			
Alloperla joosti	Within Known Range? N	Nearest Occurrence: 215.87 KM	46.78742°N 101.96021°E
Suwallia kerzhneri	Within Known Range? N	Nearest Occurrence: 335.84 KM	47.59928°N 101.24521°E
Suwallia teleckojensis	Within Known Range? N	Nearest Occurrence: 216.26 KM	46.78742°N 101.96021°E
Family: Nemouridae			
Nemoura cinerea	Within Known Range? N	Nearest Occurrence: 354.06 KM	47.48567°N 100.87875°E
Family: Perlidae			
Agnentina cocandica	Within Known Range? N	Nearest Occurrence: 489.19 KM	49.16354°N 105.18880°E
Agnentina extrema	Within Known Range? N	Nearest Occurrence: 269.51 KM	47.26999°N 101.80227°E
Kamimuria exilis	Within Known Range? N	Nearest Occurrence: 726.76 KM	50.16278°N 98.84212°E
Family: Perlodidae			
Arcynopteryx sajanensis	Within Known Range? N	Nearest Occurrence: 761.99 KM	51.61397°N 100.59972°E
Diura bicaudata	Within Known Range? N	Nearest Occurrence: 419.72 KM	47.21768°N 99.92824°E
Diura majuscula	Within Known Range? N	Nearest Occurrence: 200.79 KM	46.89303°N 102.39457°E
Pictetiella asiatica	Within Known Range? N	Nearest Occurrence: 768.09 KM	51.65822°N 100.53000°E
Family: Pteronarcyidae			
Pteronarcys reticulata	Within Known Range? N	Nearest Occurrence: 423.71 KM	47.80440°N 100.31810°E

**LOE Rating: Probable Total: 5**

Family: Chloroperlidae			
Alaskaperla longidentata	Within Known Range? N	Nearest Occurrence: 237.23 KM	46.82177°N 101.70479°E
Alloperla deminuta	Within Known Range? N	Nearest Occurrence: 215.87 KM	46.78742°N 101.96021°E
Haploperla lepnevae	Within Known Range? N	Nearest Occurrence: 485.61 KM	49.48086°N 104.30864°E
Family: Perlodidae			
Arcynopteryx compacta	Within Known Range? N	Nearest Occurrence: 202.62 KM	46.88627°N 102.34304°E
Isoperla potanini	Within Known Range? N	Nearest Occurrence: 216.68 KM	46.73093°N 101.88583°E

**LOE Rating: Possible Total: 2**

Family: Perlodidae			
Isoperla kozlovi	Within Known Range? N	Nearest Occurrence: 269.51 KM	47.26999°N 101.80227°E
Kaszabia nigricauda	Within Known Range? N	Nearest Occurrence: 335.84 KM	47.59928°N 101.24521°E

Research funded by the National Science Foundation  
 DEB-BSI #0206674: A Survey of the Aquatic Insects of the Selenge River Basin. P.I.'s: JKGelhaus, JCMorse, BHayford.  
 DEB # 0743732: Aquatic Insects of the Altai and Hangai Mountain Drainages. P.I.'s: JKGelhaus, JCMorse, CRNelson.  
<http://clade.ansp.org/entomology/mongolia/index.html>



**Basin:** Internal Drainage Basin  
**Aimags:** Ovorkhangai  
**Soums:** Togrog

**Freshwater Ecoregion:** Western Mongolia  
**Terrestrial Ecoregion:** Gobi Lakes Valley Desert Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

<b>LOE Rating:</b>	<b>Predicted</b>	<b>Total:</b>	20
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**Family:** Capniidae

Capnia khulsbagia	Within Known Range? N	Nearest Occurrence:	691.50 KM	50.98944 °N	100.71944 °E
Capnia nigra	Within Known Range? N	Nearest Occurrence:	658.43 KM	50.51003 °N	100.40375 °E
Mesocapnia variabilis	Within Known Range? N	Nearest Occurrence:	420.47 KM	47.21768 °N	99.92824 °E

**Family:** Chloroperlidae

Alloperla mediata	Within Known Range? N	Nearest Occurrence:	493.77 KM	49.70678 °N	103.10288 °E
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**Family:** Leuctridae

Leuctra fusca	Within Known Range? N	Nearest Occurrence:	624.80 KM	49.08643 °N	107.28952 °E
Paraleuctra zapekinae	Within Known Range? N	Nearest Occurrence:	521.17 KM	49.71481 °N	104.64203 °E

**Family:** Nemouridae

Amphinemura standfussi	Within Known Range? N	Nearest Occurrence:	452.75 KM	49.33339 °N	102.97786 °E
Nemoura arctica	Within Known Range? N	Nearest Occurrence:	269.99 KM	47.26999 °N	101.80227 °E
Nemoura sahlbergi	Within Known Range? N	Nearest Occurrence:	398.40 KM	47.42580 °N	100.30130 °E

**Family:** Perlidae

Paragnetina flavotincta	Within Known Range? N	Nearest Occurrence:	452.75 KM	49.33339 °N	102.97786 °E
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**Family:** Perlodidae

Arcynopteryx polaris	Within Known Range? N	Nearest Occurrence:	252.22 KM	47.04409 °N	101.76352 °E
Isoperla altaica	Within Known Range? N	Nearest Occurrence:	315.80 KM	47.11192 °N	101.01048 °E
Isoperla asiatica	Within Known Range? N	Nearest Occurrence:	423.71 KM	47.80440 °N	100.31810 °E
Isoperla eximia	Within Known Range? N	Nearest Occurrence:	638.48 KM	48.60182 °N	107.84335 °E
Isoperla lunigera	Within Known Range? N	Nearest Occurrence:	460.81 KM	49.38617 °N	102.71667 °E
Isoperla mongolica	Within Known Range? N	Nearest Occurrence:	269.99 KM	47.26999 °N	101.80227 °E
Isoperla obscura	Within Known Range? N	Nearest Occurrence:	369.96 KM	47.85250 °N	105.25567 °E
Megarcys ochracea	Within Known Range? N	Nearest Occurrence:	504.05 KM	49.77776 °N	103.60860 °E
Skwala pusilla	Within Known Range? N	Nearest Occurrence:	1,665.93 KM	48.51277 °N	88.51107 °E

**Family:** Taeniopterygidae

Taenionema japonicum	Within Known Range? N	Nearest Occurrence:	314.40 KM	47.28244 °N	101.18793 °E
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<b>LOE Rating:</b>	<b>Unlikely</b>	<b>Total:</b>	2
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**Family:** Capniidae

Mesocapnia altaica	Within Known Range? N	Nearest Occurrence:	1,621.86 KM	48.43684 °N	88.90094 °E
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**Family:** Nemouridae

Nemurella pictetii	Within Known Range? N	Nearest Occurrence:	748.51 KM	50.81265 °N	99.33803 °E
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**Basin:** Internal Drainage Basin  
**Aimag:** Ovorkhangai  
**Soum:** Uyanga

**Freshwater Ecoregion:** Western Mongolia  
**Terrestrial Ecoregion:** Khangai Mountains Alpine Meadow

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

<b>LOE Rating:</b>	<b>Highly Likely</b>	<b>Total:</b>	<b>2</b>
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<b>Family:</b> Chloroperlidae						
Alloperla joosti	Within Known Range? Y	Nearest Occurrence:	40.84 KM	46.78742 °N	101.96021 °E	
<b>Family:</b> Nemouridae						
Amphinemura borealis	Within Known Range? Y	Nearest Occurrence:	34.52 KM	46.72826 °N	101.89317 °E	

<b>LOE Rating:</b>	<b>Likely</b>	<b>Total:</b>	<b>15</b>
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<b>Family:</b> Capniidae						
Isocapnia guentheri	Within Known Range? N	Nearest Occurrence:	164.11 KM	47.50523 °N	100.93208 °E	
Isocapnia kudia	Within Known Range? N	Nearest Occurrence:	592.70 KM	51.25356 °N	99.66687 °E	
Isocapnia sibirica	Within Known Range? N	Nearest Occurrence:	95.49 KM	47.26999 °N	101.80227 °E	
<b>Family:</b> Chloroperlidae						
Alloperla deminuta	Within Known Range? Y	Nearest Occurrence:	40.84 KM	46.78742 °N	101.96021 °E	
Alloperla rostellata	Within Known Range? N	Nearest Occurrence:	128.29 KM	47.11192 °N	101.01048 °E	
Suwallia kerzhneri	Within Known Range? N	Nearest Occurrence:	151.71 KM	47.59928 °N	101.24521 °E	
Suwallia teleckojensis	Within Known Range? Y	Nearest Occurrence:	40.91 KM	46.78742 °N	101.96021 °E	
<b>Family:</b> Nemouridae						
Nemoura cinerea	Within Known Range? N	Nearest Occurrence:	166.64 KM	47.48567 °N	100.87875 °E	
<b>Family:</b> Perlidae						
Agnetina brevipennis	Within Known Range? Y	Nearest Occurrence:	40.84 KM	46.78742 °N	101.96021 °E	
Agnetina extrema	Within Known Range? N	Nearest Occurrence:	95.49 KM	47.26999 °N	101.80227 °E	
Kamimuria exilis	Within Known Range? N	Nearest Occurrence:	540.00 KM	50.16278 °N	98.84212 °E	
<b>Family:</b> Perlodidae						
Arcynopteryx sajanensis	Within Known Range? N	Nearest Occurrence:	596.36 KM	51.61397 °N	100.59972 °E	
Diura bicaudata	Within Known Range? N	Nearest Occurrence:	239.85 KM	47.21768 °N	99.92824 °E	
Diura majuscula	Within Known Range? Y	Nearest Occurrence:	73.19 KM	46.89303 °N	102.39457 °E	
Pictetiella asiatica	Within Known Range? N	Nearest Occurrence:	602.01 KM	51.65822 °N	100.53000 °E	

<b>LOE Rating:</b>	<b>Probable</b>	<b>Total:</b>	<b>6</b>
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<b>Family:</b> Chloroperlidae						
Alaskaperla longidentata	Within Known Range? Y	Nearest Occurrence:	51.45 KM	46.82177 °N	101.70479 °E	
<b>Family:</b> Perlodidae						
Arcynopteryx compacta	Within Known Range? Y	Nearest Occurrence:	68.76 KM	46.88627 °N	102.34304 °E	
Arcynopteryx polaris	Within Known Range? Y	Nearest Occurrence:	71.98 KM	47.04409 °N	101.76352 °E	
Isoperla kozlovi	Within Known Range? N	Nearest Occurrence:	95.49 KM	47.26999 °N	101.80227 °E	
Isoperla potanini	Within Known Range? Y	Nearest Occurrence:	35.00 KM	46.73093 °N	101.88583 °E	
<b>Family:</b> Pteronarcyidae						
Pteronarcys reticulata	Within Known Range? N	Nearest Occurrence:	236.38 KM	47.80440 °N	100.31810 °E	



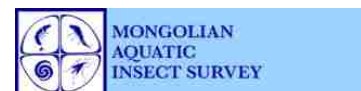
**Basin:** Internal Drainage Basin  
**Aimag:** Ovorkhangai  
**Soum:** Uyanga

**Freshwater Ecoregion:** Western Mongolia  
**Terrestrial Ecoregion:** Khangai Mountains Alpine Meadow

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

LOE Rating:	Possible	Total:				
Family: Chloroperlidae						
	Haploperla lepnevae	Within Known Range? N	Nearest Occurrence:	373.83 KM	49.45317 °N	100.47234 °E
Family: Nemouridae						
	Nemoura arctica	Within Known Range? N	Nearest Occurrence:	95.66 KM	47.26999 °N	101.80227 °E
Family: Perlodidae						
	Kaszabia nigricauda	Within Known Range? N	Nearest Occurrence:	151.71 KM	47.59928 °N	101.24521 °E
Family: Taeniopterygidae						
	Taenionema japonicum	Within Known Range? N	Nearest Occurrence:	126.97 KM	47.28244 °N	101.18793 °E
LOE Rating:	Predicted	Total:				
Family: Capniidae						
	Capnia nigra	Within Known Range? N	Nearest Occurrence:	484.80 KM	50.51003 °N	100.40375 °E
	Mesocapnia variabilis	Within Known Range? N	Nearest Occurrence:	240.28 KM	47.21768 °N	99.92824 °E
Family: Chloroperlidae						
	Alloperla mediata	Within Known Range? N	Nearest Occurrence:	387.09 KM	49.70678 °N	103.10288 °E
Family: Leuctridae						
	Paraleuctra zapekinae	Within Known Range? N	Nearest Occurrence:	473.20 KM	49.71481 °N	104.64203 °E
Family: Nemouridae						
	Amphinemura standfussi	Within Known Range? N	Nearest Occurrence:	343.39 KM	49.33339 °N	102.97786 °E
	Nemoura sahlbergi	Within Known Range? N	Nearest Occurrence:	213.08 KM	47.42580 °N	100.30130 °E
Family: Perlidae						
	Agnetina cocandica	Within Known Range? N	Nearest Occurrence:	416.92 KM	49.62785 °N	99.99523 °E
	Paragnetina flavotincta	Within Known Range? N	Nearest Occurrence:	339.08 KM	49.26765 °N	100.82998 °E
Family: Perlodidae						
	Isoperla altaica	Within Known Range? N	Nearest Occurrence:	128.53 KM	47.11192 °N	101.01048 °E
	Isoperla asiatica	Within Known Range? N	Nearest Occurrence:	236.38 KM	47.80440 °N	100.31810 °E
	Isoperla lunigera	Within Known Range? N	Nearest Occurrence:	340.41 KM	49.38617 °N	102.71667 °E
	Isoperla mongolica	Within Known Range? N	Nearest Occurrence:	95.66 KM	47.26999 °N	101.80227 °E
	Isoperla obscura	Within Known Range? N	Nearest Occurrence:	340.41 KM	49.38617 °N	102.71667 °E
	Megarcys ochracea	Within Known Range? N	Nearest Occurrence:	416.34 KM	49.77776 °N	103.60860 °E
	Skwala pusilla	Within Known Range? N	Nearest Occurrence:	1,508.22 KM	48.51277 °N	88.51107 °E
LOE Rating:	Unlikely	Total:				
Family: Capniidae						
	Capnia khulsbagia	Within Known Range? N	Nearest Occurrence:	524.86 KM	50.98944 °N	100.71944 °E
	Mesocapnia altaica	Within Known Range? N	Nearest Occurrence:	1,464.16 KM	48.43684 °N	88.90094 °E
Family: Leuctridae						
	Leuctra fusca	Within Known Range? N	Nearest Occurrence:	663.80 KM	49.08643 °N	107.28952 °E
Family: Nemouridae						
	Nemurella pictetii	Within Known Range? N	Nearest Occurrence:	566.48 KM	50.81265 °N	99.33803 °E
Family: Perlodidae						
	Isoperla eximia	Within Known Range? N	Nearest Occurrence:	686.04 KM	49.01829 °N	107.54453 °E





**Basin:** Internal Drainage Basin

**Aimag:** Ovorkhangai

**Soum:** Zuunbayan-ulaan

Freshwater Ecoregion: Western Mongolia

Terrestrial Ecoregion: Selenge-Orkhon Forest Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Highly Likely Total: 2**

Family: Chloroperlidae

Alloperla joosti Within Known Range? N Nearest Occurrence: 107.45 KM 46.78742°N 101.96021°E

Family: Nemouridae

Amphinemura borealis Within Known Range? Y Nearest Occurrence: 107.45 KM 46.78742°N 101.96021°E

**LOE Rating: Likely Total: 16**

Family: Capniidae

Isocapnia guentheri Within Known Range? N Nearest Occurrence: 244.04 KM 47.50523°N 100.93208°E

Isocapnia kudia Within Known Range? N Nearest Occurrence: 638.19 KM 51.25356°N 99.66687°E

Isocapnia sibirica Within Known Range? N Nearest Occurrence: 147.95 KM 47.26999°N 101.80227°E

Family: Chloroperlidae

Alloperla deminuta Within Known Range? Y Nearest Occurrence: 107.45 KM 46.78742°N 101.96021°E

Alloperla rostellata Within Known Range? N Nearest Occurrence: 218.84 KM 47.11192°N 101.01048°E

Suwallia kerzhneri Within Known Range? N Nearest Occurrence: 219.56 KM 47.59928°N 101.24521°E

Suwallia teleckojensis Within Known Range? N Nearest Occurrence: 107.64 KM 46.78742°N 101.96021°E

Family: Nemouridae

Nemoura cinerea Within Known Range? N Nearest Occurrence: 248.32 KM 47.48567°N 100.87875°E

Family: Perlidae

Agnetina brevipennis Within Known Range? Y Nearest Occurrence: 70.34 KM 46.89303°N 102.39457°E

Agnetina extrema Within Known Range? N Nearest Occurrence: 147.95 KM 47.26999°N 101.80227°E

Kamimuria exilis Within Known Range? N Nearest Occurrence: 607.29 KM 50.16278°N 98.84212°E

Family: Perlodidae

Arcynopteryx sajanensis Within Known Range? N Nearest Occurrence: 624.09 KM 51.61397°N 100.59972°E

Diura bicaudata Within Known Range? N Nearest Occurrence: 337.56 KM 47.21768°N 99.92824°E

Diura majuscula Within Known Range? Y Nearest Occurrence: 70.46 KM 46.89303°N 102.39457°E

Isoperla kozlovi Within Known Range? N Nearest Occurrence: 147.95 KM 47.26999°N 101.80227°E

Pictetiella asiatica Within Known Range? N Nearest Occurrence: 630.63 KM 51.65822°N 100.53000°E

**LOE Rating: Probable Total: 5**

Family: Chloroperlidae

Alaskaperla longidentata Within Known Range? Y Nearest Occurrence: 135.67 KM 46.82177°N 101.70479°E

Family: Perlodidae

Arcynopteryx compacta Within Known Range? Y Nearest Occurrence: 74.49 KM 46.88627°N 102.34304°E

Isoperla potanini Within Known Range? N Nearest Occurrence: 113.86 KM 46.73093°N 101.88583°E

Kaszabia nigricauda Within Known Range? N Nearest Occurrence: 219.56 KM 47.59928°N 101.24521°E

Family: Pteronarcyidae

Pteronarcys reticulata Within Known Range? N Nearest Occurrence: 319.83 KM 47.80440°N 100.31810°E

**Basin:** Internal Drainage Basin

**Aimag:** Ovorkhangai

**Soum:** Zuunbayan-ulaan

Freshwater Ecoregion: Western Mongolia

Terrestrial Ecoregion: Selenge-Orkhon Forest Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Possible Total: 4**

Family: Chloroperlidae						
Haploperla lepnevae	Within Known Range? N	Nearest Occurrence:	358.40 KM	49.70678 °N	103.10288 °E	
Family: Nemouridae						
Nemoura arctica	Within Known Range? N	Nearest Occurrence:	148.21 KM	47.26999 °N	101.80227 °E	
Family: Perlodidae						
Arcynopteryx polaris	Within Known Range? N	Nearest Occurrence:	138.81 KM	47.04409 °N	101.76352 °E	
Family: Taeniopterygidae						
Taenionema japonicum	Within Known Range? N	Nearest Occurrence:	207.97 KM	47.28244 °N	101.18793 °E	

**LOE Rating: Predicted Total: 17**

Family: Capniidae						
Capnia khulsbagia	Within Known Range? N	Nearest Occurrence:	554.46 KM	50.98944 °N	100.71944 °E	
Capnia nigra	Within Known Range? N	Nearest Occurrence:	524.49 KM	50.51003 °N	100.40375 °E	
Mesocapnia variabilis	Within Known Range? N	Nearest Occurrence:	338.17 KM	47.21768 °N	99.92824 °E	
Family: Chloroperlidae						
Alloperla mediata	Within Known Range? N	Nearest Occurrence:	358.40 KM	49.70678 °N	103.10288 °E	
Family: Leuctridae						
Leuctra fusca	Within Known Range? N	Nearest Occurrence:	568.25 KM	49.08643 °N	107.28952 °E	
Paraleuctra zapekinae	Within Known Range? N	Nearest Occurrence:	408.33 KM	49.71481 °N	104.64203 °E	
Family: Nemouridae						
Amphinemura standfussi	Within Known Range? N	Nearest Occurrence:	316.28 KM	49.33339 °N	102.97786 °E	
Nemoura sahlbergi	Within Known Range? N	Nearest Occurrence:	304.66 KM	47.42580 °N	100.30130 °E	
Family: Perlidae						
Agnetina cocandica	Within Known Range? N	Nearest Occurrence:	393.17 KM	49.16354 °N	105.18880 °E	
Paragnetina flavotincta	Within Known Range? N	Nearest Occurrence:	316.28 KM	49.33339 °N	102.97786 °E	
Family: Perlodidae						
Isoperla altaica	Within Known Range? N	Nearest Occurrence:	219.24 KM	47.11192 °N	101.01048 °E	
Isoperla asiatica	Within Known Range? N	Nearest Occurrence:	319.83 KM	47.80440 °N	100.31810 °E	
Isoperla lunigera	Within Known Range? N	Nearest Occurrence:	322.47 KM	49.38617 °N	102.71667 °E	
Isoperla mongolica	Within Known Range? N	Nearest Occurrence:	148.21 KM	47.26999 °N	101.80227 °E	
Isoperla obscura	Within Known Range? N	Nearest Occurrence:	304.23 KM	47.85250 °N	105.25567 °E	
Megarcys ochracea	Within Known Range? N	Nearest Occurrence:	374.27 KM	49.77776 °N	103.60860 °E	
Skwala pusilla	Within Known Range? N	Nearest Occurrence:	1,610.74 KM	48.51277 °N	88.51107 °E	

**LOE Rating: Unlikely Total: 3**

Family: Capniidae						
Mesocapnia altaica	Within Known Range? N	Nearest Occurrence:	1,566.71 KM	48.43684 °N	88.90094 °E	
Family: Nemouridae						
Nemurella pictetii	Within Known Range? N	Nearest Occurrence:	619.58 KM	51.07896 °N	99.70857 °E	
Family: Perlodidae						
Isoperla eximia	Within Known Range? N	Nearest Occurrence:	589.16 KM	49.01829 °N	107.54453 °E	

**Basin:** Internal Drainage Basin  
**Aimags:** Sukhbaatar  
**Soums:** Airag

**Freshwater Ecoregion:** Inner Mongolia Endorheic Basins  
**Terrestrial Ecoregion:** Eastern Gobi Desert Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

<b>LOE Rating:</b>	<b>Highly Likely</b>	<b>Total:</b>	<b>5</b>
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<b>Family:</b> Capniidae			
Isocapnia guentheri	Within Known Range? N	Nearest Occurrence:	335.82 KM 48.24734°N 107.90589°E
Isocapnia sibirica	Within Known Range? N	Nearest Occurrence:	324.52 KM 48.09549°N 107.84265°E
<b>Family:</b> Chloroperlidae			
Haploperla lepnevae	Within Known Range? N	Nearest Occurrence:	333.03 KM 47.82258°N 107.33613°E
<b>Family:</b> Perlidae			
Agnetina extrema	Within Known Range? N	Nearest Occurrence:	324.27 KM 48.09671°N 107.84928°E
<b>Family:</b> Pteronarcyidae			
Pteronarcys reticulata	Within Known Range? N	Nearest Occurrence:	449.47 KM 49.08636°N 107.30750°E

<b>LOE Rating:</b>	<b>Likely</b>	<b>Total:</b>	<b>15</b>
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<b>Family:</b> Capniidae			
Isocapnia kudia	Within Known Range? N	Nearest Occurrence:	1,243.46 KM 51.25356°N 99.66687°E
<b>Family:</b> Chloroperlidae			
Alloperla rostellata	Within Known Range? N	Nearest Occurrence:	787.41 KM 49.77776°N 103.60860°E
Suwallia kerzhneri	Within Known Range? N	Nearest Occurrence:	344.86 KM 48.12416°N 107.54780°E
<b>Family:</b> Nemouridae			
Amphinemura borealis	Within Known Range? N	Nearest Occurrence:	333.03 KM 47.82258°N 107.33613°E
Nemoura cinerea	Within Known Range? N	Nearest Occurrence:	327.82 KM 47.96783°N 107.59278°E
<b>Family:</b> Perlidae			
Agnetina brevipennis	Within Known Range? N	Nearest Occurrence:	449.47 KM 49.08636°N 107.30750°E
Agnetina cocandica	Within Known Range? N	Nearest Occurrence:	608.79 KM 49.16354°N 105.18880°E
Kamimuria exilis	Within Known Range? N	Nearest Occurrence:	1,272.26 KM 50.16278°N 98.84212°E
<b>Family:</b> Perlodidae			
Arcynopteryx sajanensis	Within Known Range? N	Nearest Occurrence:	1,179.82 KM 51.61397°N 100.59972°E
Diura bicaudata	Within Known Range? N	Nearest Occurrence:	1,058.63 KM 47.21768°N 99.92824°E
Isoperla asiatica	Within Known Range? N	Nearest Occurrence:	327.82 KM 47.96783°N 107.59278°E
Isoperla kozlovi	Within Known Range? N	Nearest Occurrence:	323.66 KM 48.13111°N 107.92120°E
Isoperla lunigera	Within Known Range? N	Nearest Occurrence:	324.52 KM 48.09549°N 107.84265°E
Isoperla obscura	Within Known Range? N	Nearest Occurrence:	517.46 KM 47.85250°N 105.25567°E
Pictetiella asiatica	Within Known Range? N	Nearest Occurrence:	1,186.86 KM 51.65822°N 100.53000°E

<b>LOE Rating:</b>	<b>Probable</b>	<b>Total:</b>	<b>1</b>
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<b>Family:</b> Taeniopterygidae			
Taenionema japonicum	Within Known Range? N	Nearest Occurrence:	451.45 KM 49.05411°N 107.23175°E



**Basin:** Internal Drainage Basin  
**Aimag:** Sukhbaatar  
**Soum:** Airag

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**Freshwater Ecoregion:** Inner Mongolia Endorheic Basins  
**Terrestrial Ecoregion:** Eastern Gobi Desert Steppe

<b>LOE Rating:</b>	<b>Possible</b>	<b>Total:</b>	<b>6</b>
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<b>Family:</b> Chloroperlidae			
Alloperla joosti	Within Known Range? N	Nearest Occurrence: 799.65 KM	49.21675 °N 103.10750 °E
Suwallia teleckojensis	Within Known Range? N	Nearest Occurrence: 340.37 KM	48.16668 °N 107.69548 °E
<b>Family:</b> Leuctridae			
Paraleuctra zapekinae	Within Known Range? N	Nearest Occurrence: 324.27 KM	48.09671 °N 107.84928 °E
<b>Family:</b> Perlodidae			
Isoperla altaica	Within Known Range? N	Nearest Occurrence: 374.71 KM	48.60182 °N 107.84335 °E
Kaszabia nigricauda	Within Known Range? N	Nearest Occurrence: 324.27 KM	48.09671 °N 107.84928 °E
Megarcys ochracea	Within Known Range? N	Nearest Occurrence: 334.56 KM	47.97108 °N 107.49534 °E

<b>LOE Rating:</b>	<b>Predicted</b>	<b>Total:</b>	<b>17</b>
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<b>Family:</b> Capniidae			
Capnia nigra	Within Known Range? N	Nearest Occurrence: 1,121.20 KM	50.92452 °N 100.75528 °E
Mesocapnia variabilis	Within Known Range? N	Nearest Occurrence: 353.18 KM	48.42080 °N 107.91406 °E
<b>Family:</b> Chloroperlidae			
Alaskaperla longidentata	Within Known Range? N	Nearest Occurrence: 325.80 KM	48.14846 °N 107.91267 °E
Alloperla deminuta	Within Known Range? N	Nearest Occurrence: 324.82 KM	48.09694 °N 107.83988 °E
Alloperla mediata	Within Known Range? N	Nearest Occurrence: 787.41 KM	49.77776 °N 103.60860 °E
<b>Family:</b> Leuctridae			
Leuctra fusca	Within Known Range? N	Nearest Occurrence: 450.47 KM	49.08643 °N 107.28952 °E
<b>Family:</b> Nemouridae			
Amphinemura standfussi	Within Known Range? N	Nearest Occurrence: 498.02 KM	49.73130 °N 107.63484 °E
Nemoura arctica	Within Known Range? N	Nearest Occurrence: 324.53 KM	48.13287 °N 107.91890 °E
Nemoura sahlbergi	Within Known Range? N	Nearest Occurrence: 333.03 KM	48.21780 °N 107.90392 °E
<b>Family:</b> Perlidae			
Paragnetina flavotincta	Within Known Range? N	Nearest Occurrence: 607.70 KM	49.16354 °N 105.18880 °E
<b>Family:</b> Perlodidae			
Arcynopteryx compacta	Within Known Range? N	Nearest Occurrence: 319.99 KM	47.84324 °N 107.55299 °E
Arcynopteryx polaris	Within Known Range? N	Nearest Occurrence: 353.18 KM	48.42080 °N 107.91406 °E
Diura majuscula	Within Known Range? N	Nearest Occurrence: 324.53 KM	48.13287 °N 107.91890 °E
Isoperla eximia	Within Known Range? N	Nearest Occurrence: 374.04 KM	48.60182 °N 107.84335 °E
Isoperla mongolica	Within Known Range? N	Nearest Occurrence: 325.10 KM	48.09549 °N 107.84265 °E
Isoperla potanini	Within Known Range? N	Nearest Occurrence: 836.94 KM	46.73093 °N 101.88583 °E
Skwala pusilla	Within Known Range? N	Nearest Occurrence: 2,333.02 KM	48.51277 °N 88.51107 °E

<b>LOE Rating:</b>	<b>Unlikely</b>	<b>Total:</b>	<b>3</b>
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<b>Family:</b> Capniidae			
Capnia khulsbagia	Within Known Range? N	Nearest Occurrence: 1,128.40 KM	50.98944 °N 100.71944 °E
Mesocapnia altaica	Within Known Range? N	Nearest Occurrence: 2,288.99 KM	48.43684 °N 88.90094 °E
<b>Family:</b> Nemouridae			
Nemurella pictetii	Within Known Range? N	Nearest Occurrence: 1,229.73 KM	51.07896 °N 99.70857 °E



**Basin:** Internal Drainage Basin  
**Aimags:** Sukhbaatar  
**Soums:** Altanshiree

**Freshwater Ecoregion:** Inner Mongolia Endorheic Basins  
**Terrestrial Ecoregion:** Eastern Gobi Desert Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

<b>LOE Rating:</b>	<b>Highly Likely</b>	<b>Total:</b>	<b>6</b>
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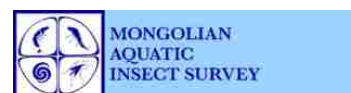
<b>Family:</b> Capniidae			
Isocapnia guentheri	Within Known Range? N	Nearest Occurrence:	418.72 KM 48.24734 °N 107.90589 °E
Isocapnia sibirica	Within Known Range? N	Nearest Occurrence:	411.44 KM 48.09549 °N 107.84265 °E
<b>Family:</b> Chloroperlidae			
Haploperla lepnevae	Within Known Range? N	Nearest Occurrence:	434.15 KM 47.82258 °N 107.33613 °E
<b>Family:</b> Perlidae			
Agnatina cocandica	Within Known Range? N	Nearest Occurrence:	701.67 KM 50.06476 °N 106.13388 °E
Agnatina extrema	Within Known Range? N	Nearest Occurrence:	411.01 KM 48.09671 °N 107.84928 °E
<b>Family:</b> Pteronarcyidae			
Pteronarcys reticulata	Within Known Range? N	Nearest Occurrence:	532.39 KM 49.08636 °N 107.30750 °E

<b>LOE Rating:</b>	<b>Likely</b>	<b>Total:</b>	<b>13</b>
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<b>Family:</b> Capniidae			
Isocapnia kudia	Within Known Range? N	Nearest Occurrence:	1,359.42 KM 51.25356 °N 99.66687 °E
<b>Family:</b> Chloroperlidae			
Alloperla rostellata	Within Known Range? N	Nearest Occurrence:	898.49 KM 49.77776 °N 103.60860 °E
Suwallia kerzhneri	Within Known Range? N	Nearest Occurrence:	437.35 KM 48.12416 °N 107.54780 °E
<b>Family:</b> Nemouridae			
Amphinemura borealis	Within Known Range? N	Nearest Occurrence:	434.15 KM 47.82258 °N 107.33613 °E
Nemoura cinerea	Within Known Range? N	Nearest Occurrence:	422.09 KM 47.96783 °N 107.59278 °E
<b>Family:</b> Perlidae			
Agnatina brevipennis	Within Known Range? N	Nearest Occurrence:	532.39 KM 49.08636 °N 107.30750 °E
Kamimuria exilis	Within Known Range? N	Nearest Occurrence:	1,393.64 KM 50.16278 °N 98.84212 °E
<b>Family:</b> Perlodidae			
Arcynopteryx sajanensis	Within Known Range? N	Nearest Occurrence:	1,292.06 KM 51.61397 °N 100.59972 °E
Diura bicaudata	Within Known Range? N	Nearest Occurrence:	1,185.53 KM 47.21768 °N 99.92824 °E
Isoperla asiatica	Within Known Range? N	Nearest Occurrence:	422.09 KM 47.96783 °N 107.59278 °E
Isoperla kozlovi	Within Known Range? N	Nearest Occurrence:	408.16 KM 48.13111 °N 107.92120 °E
Isoperla lunigera	Within Known Range? N	Nearest Occurrence:	411.44 KM 48.09549 °N 107.84265 °E
Pictetiella asiatica	Within Known Range? N	Nearest Occurrence:	1,298.90 KM 51.65822 °N 100.53000 °E

<b>LOE Rating:</b>	<b>Probable</b>	<b>Total:</b>	<b>3</b>
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<b>Family:</b> Leuctridae			
Paraleuctra zapekinae	Within Known Range? N	Nearest Occurrence:	410.21 KM 48.14846 °N 107.91267 °E
<b>Family:</b> Perlodidae			
Isoperla obscura	Within Known Range? N	Nearest Occurrence:	633.18 KM 49.72192 °N 106.65562 °E
Kaszabia nigricauda	Within Known Range? N	Nearest Occurrence:	411.01 KM 48.09671 °N 107.84928 °E



**Basin:** Internal Drainage Basin  
**Aimag:** Sukhbaatar  
**Soum:** Altanshiree

**Freshwater Ecoregion:** Inner Mongolia Endorheic Basins  
**Terrestrial Ecoregion:** Eastern Gobi Desert Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

<b>LOE Rating:</b> Possible	<b>Total:</b> 5
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<b>Family:</b> Chloroperlidae			
Alloperla joosti	Within Known Range? N	Nearest Occurrence: 916.22 KM	49.21675 °N 103.10750 °E
Suwallia teleckojensis	Within Known Range? N	Nearest Occurrence: 429.39 KM	48.16668 °N 107.69548 °E
<b>Family:</b> Perlodidae			
Isoperla altaica	Within Known Range? N	Nearest Occurrence: 453.66 KM	48.60182 °N 107.84335 °E
Megarcys ochracea	Within Known Range? N	Nearest Occurrence: 430.56 KM	47.97108 °N 107.49534 °E
<b>Family:</b> Taeniopterygidae			
Taenionema japonicum	Within Known Range? N	Nearest Occurrence: 536.27 KM	49.05411 °N 107.23175 °E

<b>LOE Rating:</b> Predicted	<b>Total:</b> 17
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<b>Family:</b> Capniidae			
Capnia nigra	Within Known Range? N	Nearest Occurrence: 1,235.91 KM	50.92452 °N 100.75528 °E
Mesocapnia variabilis	Within Known Range? N	Nearest Occurrence: 433.24 KM	48.42080 °N 107.91406 °E
<b>Family:</b> Chloroperlidae			
Alaskaperla longidentata	Within Known Range? N	Nearest Occurrence: 410.21 KM	48.14846 °N 107.91267 °E
Alloperla deminuta	Within Known Range? N	Nearest Occurrence: 410.21 KM	48.14846 °N 107.91267 °E
Alloperla mediata	Within Known Range? N	Nearest Occurrence: 898.49 KM	49.77776 °N 103.60860 °E
<b>Family:</b> Leuctridae			
Leuctra fusca	Within Known Range? N	Nearest Occurrence: 533.72 KM	49.08643 °N 107.28952 °E
<b>Family:</b> Nemouridae			
Amphinemura standfussi	Within Known Range? N	Nearest Occurrence: 567.26 KM	49.73130 °N 107.63484 °E
Nemoura arctica	Within Known Range? N	Nearest Occurrence: 409.21 KM	48.13287 °N 107.91890 °E
Nemoura sahlbergi	Within Known Range? N	Nearest Occurrence: 416.47 KM	48.21780 °N 107.90392 °E
<b>Family:</b> Perlidae			
Paragnetina flavotincta	Within Known Range? N	Nearest Occurrence: 700.41 KM	50.06476 °N 106.13388 °E
<b>Family:</b> Perlodidae			
Arcynopteryx compacta	Within Known Range? N	Nearest Occurrence: 417.33 KM	47.84324 °N 107.55299 °E
Arcynopteryx polaris	Within Known Range? N	Nearest Occurrence: 433.24 KM	48.42080 °N 107.91406 °E
Diura majuscula	Within Known Range? N	Nearest Occurrence: 409.21 KM	48.13287 °N 107.91890 °E
Isoperla eximia	Within Known Range? N	Nearest Occurrence: 452.85 KM	48.60182 °N 107.84335 °E
Isoperla mongolica	Within Known Range? N	Nearest Occurrence: 412.18 KM	48.09549 °N 107.84265 °E
Isoperla potanini	Within Known Range? N	Nearest Occurrence: 964.23 KM	46.73093 °N 101.88583 °E
Skwala pusilla	Within Known Range? N	Nearest Occurrence: 2,460.17 KM	48.51277 °N 88.51107 °E

<b>LOE Rating:</b> Unlikely	<b>Total:</b> 3
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<b>Family:</b> Capniidae			
Capnia khulsbagia	Within Known Range? N	Nearest Occurrence: 1,242.91 KM	50.98944 °N 100.71944 °E
Mesocapnia altaica	Within Known Range? N	Nearest Occurrence: 2,416.15 KM	48.43684 °N 88.90094 °E
<b>Family:</b> Nemouridae			
Nemurella pictetii	Within Known Range? N	Nearest Occurrence: 1,346.28 KM	51.07896 °N 99.70857 °E



**Basin:** Internal Drainage Basin  
**Aimags:** Sukhbaatar  
**Soums:** Bayandelger

**Freshwater Ecoregion:** Inner Mongolia Endorheic Basins  
**Terrestrial Ecoregion:** Mongolian-Manchurian Grassland

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Highly Likely Total: 6**

Family: Capniidae					
Isocapnia guentheri	Within Known Range? N	Nearest Occurrence:	570.75 KM	48.24734 °N	107.90589 °E
Isocapnia sibirica	Within Known Range? N	Nearest Occurrence:	568.54 KM	48.09549 °N	107.84265 °E
Family: Chloroperlidae					
Haploperla lepnevae	Within Known Range? N	Nearest Occurrence:	605.72 KM	47.82258 °N	107.33613 °E
Suwallia kerzhneri	Within Known Range? N	Nearest Occurrence:	598.92 KM	48.12416 °N	107.54780 °E
Family: Perlidae					
Agnentina extrema	Within Known Range? N	Nearest Occurrence:	567.96 KM	48.09671 °N	107.84928 °E
Family: Pteronarcyidae					
Pteronarcys reticulata	Within Known Range? N	Nearest Occurrence:	676.84 KM	49.08636 °N	107.30750 °E

**LOE Rating: Likely Total: 15**

Family: Capniidae					
Isocapnia kudia	Within Known Range? N	Nearest Occurrence:	1,538.30 KM	51.25356 °N	99.66687 °E
Family: Chloroperlidae					
Alloperla rostellata	Within Known Range? N	Nearest Occurrence:	1,072.26 KM	49.77776 °N	103.60860 °E
Family: Leuctridae					
Paraleuctra zapekinae	Within Known Range? N	Nearest Occurrence:	564.61 KM	48.14846 °N	107.91267 °E
Family: Nemouridae					
Amphinemura borealis	Within Known Range? N	Nearest Occurrence:	605.72 KM	47.82258 °N	107.33613 °E
Nemoura cinerea	Within Known Range? N	Nearest Occurrence:	586.65 KM	47.96783 °N	107.59278 °E
Family: Perlidae					
Agnentina brevipennis	Within Known Range? N	Nearest Occurrence:	676.84 KM	49.08636 °N	107.30750 °E
Agnentina cocandica	Within Known Range? N	Nearest Occurrence:	847.37 KM	50.06476 °N	106.13388 °E
Kamimuria exilis	Within Known Range? N	Nearest Occurrence:	1,582.71 KM	50.16278 °N	98.84212 °E
Family: Perlodidae					
Arcynopteryx sajanensis	Within Known Range? N	Nearest Occurrence:	1,464.58 KM	51.61397 °N	100.59972 °E
Diura bicaudata	Within Known Range? N	Nearest Occurrence:	1,388.48 KM	47.21768 °N	99.92824 °E
Isoperla asiatica	Within Known Range? N	Nearest Occurrence:	586.65 KM	47.96783 °N	107.59278 °E
Isoperla kozlovi	Within Known Range? N	Nearest Occurrence:	562.84 KM	48.13111 °N	107.92120 °E
Isoperla lunigera	Within Known Range? N	Nearest Occurrence:	568.54 KM	48.09549 °N	107.84265 °E
Isoperla obscura	Within Known Range? N	Nearest Occurrence:	776.61 KM	49.72192 °N	106.65562 °E
Pictetiella asiatica	Within Known Range? N	Nearest Occurrence:	1,471.07 KM	51.65822 °N	100.53000 °E

**LOE Rating: Probable Total: 3**

Family: Perlodidae					
Kaszabia nigricauda	Within Known Range? N	Nearest Occurrence:	567.96 KM	48.09671 °N	107.84928 °E
Megarcys ochracea	Within Known Range? N	Nearest Occurrence:	596.53 KM	47.97108 °N	107.49534 °E
Family: Taeniopterygidae					
Taenionema japonicum	Within Known Range? N	Nearest Occurrence:	683.03 KM	49.05411 °N	107.23175 °E



**Basin:** Internal Drainage Basin  
**Aimag:** Sukhbaatar  
**Soum:** Bayandelger

**Freshwater Ecoregion:** Inner Mongolia Endorheic Basins  
**Terrestrial Ecoregion:** Mongolian-Manchurian Grassland

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

<b>LOE Rating:</b>	<b>Possible</b>	<b>Total:</b>	<b>3</b>
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Family: Chloroperlidae

Alloperla joosti      **Within Known Range?** N      **Nearest Occurrence:** 1,098.76 KM      49.21675 °N      103.10750 °E

Suwallia teleckojensis      **Within Known Range?** N      **Nearest Occurrence:** 581.04 KM      48.42080 °N      107.91406 °E

Family: Perlodidae

Isoperla altaica      **Within Known Range?** N      **Nearest Occurrence:** 598.55 KM      48.60182 °N      107.84335 °E

<b>LOE Rating:</b>	<b>Predicted</b>	<b>Total:</b>	<b>17</b>
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Family: Capniidae

Capnia nigra      **Within Known Range?** N      **Nearest Occurrence:** 1,413.13 KM      50.92452 °N      100.75528 °E

Mesocapnia variabilis      **Within Known Range?** N      **Nearest Occurrence:** 581.04 KM      48.42080 °N      107.91406 °E

Family: Chloroperlidae

Alaskaperla longidentata      **Within Known Range?** N      **Nearest Occurrence:** 564.61 KM      48.14846 °N      107.91267 °E

Alloperla deminuta      **Within Known Range?** N      **Nearest Occurrence:** 564.61 KM      48.14846 °N      107.91267 °E

Alloperla mediata      **Within Known Range?** N      **Nearest Occurrence:** 1,072.26 KM      49.77776 °N      103.60860 °E

Family: Leuctridae

Leuctra fusca      **Within Known Range?** N      **Nearest Occurrence:** 678.50 KM      49.08643 °N      107.28952 °E

Family: Nemouridae

Amphinemura standfussi      **Within Known Range?** N      **Nearest Occurrence:** 691.94 KM      49.73130 °N      107.63484 °E

Nemoura arctica      **Within Known Range?** N      **Nearest Occurrence:** 564.17 KM      48.13287 °N      107.91890 °E

Nemoura sahlbergi      **Within Known Range?** N      **Nearest Occurrence:** 569.29 KM      48.21780 °N      107.90392 °E

Family: Perlidae

Paragnetina flavotincta      **Within Known Range?** N      **Nearest Occurrence:** 845.85 KM      50.06476 °N      106.13388 °E

Family: Perlodidae

Arcynopteryx compacta      **Within Known Range?** N      **Nearest Occurrence:** 585.75 KM      47.84324 °N      107.55299 °E

Arcynopteryx polaris      **Within Known Range?** N      **Nearest Occurrence:** 581.04 KM      48.42080 °N      107.91406 °E

Diura majuscula      **Within Known Range?** N      **Nearest Occurrence:** 564.17 KM      48.13287 °N      107.91890 °E

Isoperla eximia      **Within Known Range?** N      **Nearest Occurrence:** 597.47 KM      48.60182 °N      107.84335 °E

Isoperla mongolica      **Within Known Range?** N      **Nearest Occurrence:** 569.57 KM      48.09549 °N      107.84265 °E

Isoperla potanini      **Within Known Range?** N      **Nearest Occurrence:** 1,168.50 KM      46.73093 °N      101.88583 °E

Skwala pusilla      **Within Known Range?** N      **Nearest Occurrence:** 2,663.85 KM      48.51277 °N      88.51107 °E

<b>LOE Rating:</b>	<b>Unlikely</b>	<b>Total:</b>	<b>3</b>
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Family: Capniidae

Capnia khulsbagia      **Within Known Range?** N      **Nearest Occurrence:** 1,419.75 KM      50.98944 °N      100.71944 °E

Mesocapnia altaica      **Within Known Range?** N      **Nearest Occurrence:** 2,619.88 KM      48.43684 °N      88.90094 °E

Family: Nemouridae

Nemurella pictetii      **Within Known Range?** N      **Nearest Occurrence:** 1,526.29 KM      51.07896 °N      99.70857 °E





Basin: Internal Drainage Basin

Aimags: Sukhbaatar

Soums: Dalanjargalan

Freshwater Ecoregion: Inner Mongolia Endorheic Basins

Terrestrial Ecoregion: Eastern Gobi Desert Steppe

WQM Sites:

No current Asia Foundation WQM sites in this soum.

<b>LOE Rating:</b>	<b>Highly Likely</b>	<b>Total:</b>	<b>6</b>
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Family: Capniidae

Isocapnia guentheri	Within Known Range? N	Nearest Occurrence:	275.32 KM	48.24734°N	107.90589°E
Isocapnia guentheri	Within Known Range? N	Nearest Occurrence:	275.32 KM	48.24734°N	107.90589°E
Isocapnia sibirica	Within Known Range? N	Nearest Occurrence:	263.38 KM	48.09549°N	107.84265°E
Isocapnia sibirica	Within Known Range? N	Nearest Occurrence:	263.38 KM	48.09549°N	107.84265°E

Family: Perlidae

Agnetina extrema	Within Known Range? N	Nearest Occurrence:	263.15 KM	48.09671°N	107.84928°E
Agnetina extrema	Within Known Range? N	Nearest Occurrence:	263.15 KM	48.09671°N	107.84928°E

<b>LOE Rating:</b>	<b>Likely</b>	<b>Total:</b>	<b>28</b>
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Family: Capniidae

Isocapnia kudia	Within Known Range? N	Nearest Occurrence:	1,184.71 KM	51.25356°N	99.66687°E
Isocapnia kudia	Within Known Range? N	Nearest Occurrence:	1,184.71 KM	51.25356°N	99.66687°E

Family: Chloroperlidae

Alloperla rostellata	Within Known Range? N	Nearest Occurrence:	726.86 KM	49.77776°N	103.60860°E
Alloperla rostellata	Within Known Range? N	Nearest Occurrence:	726.86 KM	49.77776°N	103.60860°E
Haploperla lepnevae	Within Known Range? N	Nearest Occurrence:	270.72 KM	47.82258°N	107.33613°E
Haploperla lepnevae	Within Known Range? N	Nearest Occurrence:	270.72 KM	47.82258°N	107.33613°E
Suwallia kerzhneri	Within Known Range? N	Nearest Occurrence:	282.90 KM	48.12416°N	107.54780°E
Suwallia kerzhneri	Within Known Range? N	Nearest Occurrence:	282.90 KM	48.12416°N	107.54780°E

Family: Nemouridae

Amphinemura borealis	Within Known Range? N	Nearest Occurrence:	270.72 KM	47.82258°N	107.33613°E
Amphinemura borealis	Within Known Range? N	Nearest Occurrence:	270.72 KM	47.82258°N	107.33613°E
Nemoura cinerea	Within Known Range? N	Nearest Occurrence:	265.74 KM	47.96783°N	107.59278°E
Nemoura cinerea	Within Known Range? N	Nearest Occurrence:	265.74 KM	47.96783°N	107.59278°E

Family: Perlidae

Agnetina brevipennis	Within Known Range? N	Nearest Occurrence:	388.38 KM	49.08636°N	107.30750°E
Agnetina brevipennis	Within Known Range? N	Nearest Occurrence:	388.38 KM	49.08636°N	107.30750°E
Agnetina cocandica	Within Known Range? N	Nearest Occurrence:	547.12 KM	49.16354°N	105.18880°E
Agnetina cocandica	Within Known Range? N	Nearest Occurrence:	547.12 KM	49.16354°N	105.18880°E
Kamimuria exilis	Within Known Range? N	Nearest Occurrence:	1,216.37 KM	50.16278°N	98.84212°E

Family: Perlodidae

Arcynopteryx sajanensis	Within Known Range? N	Nearest Occurrence:	1,119.57 KM	51.61397°N	100.59972°E
Diura bicaudata	Within Known Range? N	Nearest Occurrence:	1,011.38 KM	47.21768°N	99.92824°E
Diura bicaudata	Within Known Range? N	Nearest Occurrence:	1,011.38 KM	47.21768°N	99.92824°E
Isoperla asiatica	Within Known Range? N	Nearest Occurrence:	265.74 KM	47.96783°N	107.59278°E
Isoperla asiatica	Within Known Range? N	Nearest Occurrence:	265.74 KM	47.96783°N	107.59278°E
Isoperla obscura	Within Known Range? N	Nearest Occurrence:	459.49 KM	47.85250°N	105.25567°E
Isoperla obscura	Within Known Range? N	Nearest Occurrence:	459.49 KM	47.85250°N	105.25567°E
Pictetiella asiatica	Within Known Range? N	Nearest Occurrence:	1,126.72 KM	51.65822°N	100.53000°E
Pictetiella asiatica	Within Known Range? N	Nearest Occurrence:	1,126.72 KM	51.65822°N	100.53000°E

Family: Pteronarcyidae

Pteronarcys reticulata	Within Known Range? N	Nearest Occurrence:	388.38 KM	49.08636°N	107.30750°E
Pteronarcys reticulata	Within Known Range? N	Nearest Occurrence:	388.38 KM	49.08636°N	107.30750°E

Research funded by the National Science Foundation  
DEB-BSI #0206674: A Survey of the Aquatic Insects of the Selenge River Basin. P.I.'s: JKGelhaus, JCMorse, BHayford.  
DEB # 0743732: Aquatic Insects of the Altai and Hangai Mountain Drainages. P.I.'s: JKGelhaus, JCMorse, CRNelson.  
<http://clade.ansp.org/entomology/mongolia/index.html>



**Basin:** Internal Drainage Basin

**Aimag:** Sukhbaatar

**Soum:** Dalanjargalan

**Freshwater Ecoregion:** Inner Mongolia Endorheic Basins

**Terrestrial Ecoregion:** Eastern Gobi Desert Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

<b>LOE Rating:</b> Probable	<b>Total:</b> 10
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**Family:** Leuctridae

Paraleuctra zapekinae	Within Known Range? N	Nearest Occurrence:	263.15 KM	48.09671 °N	107.84928 °E
Paraleuctra zapekinae	Within Known Range? N	Nearest Occurrence:	263.15 KM	48.09671 °N	107.84928 °E

**Family:** Perlodidae

Isoperla kozlovi	Within Known Range? N	Nearest Occurrence:	262.94 KM	48.13111 °N	107.92120 °E
Isoperla kozlovi	Within Known Range? N	Nearest Occurrence:	262.94 KM	48.13111 °N	107.92120 °E
Isoperla lunigera	Within Known Range? N	Nearest Occurrence:	263.38 KM	48.09549 °N	107.84265 °E
Isoperla lunigera	Within Known Range? N	Nearest Occurrence:	263.38 KM	48.09549 °N	107.84265 °E
Kaszabia nigricauda	Within Known Range? N	Nearest Occurrence:	263.15 KM	48.09671 °N	107.84928 °E
Kaszabia nigricauda	Within Known Range? N	Nearest Occurrence:	263.15 KM	48.09671 °N	107.84928 °E

**Family:** Taeniopterygidae

Taenionema japonicum	Within Known Range? N	Nearest Occurrence:	390.00 KM	49.05411 °N	107.23175 °E
Taenionema japonicum	Within Known Range? N	Nearest Occurrence:	390.00 KM	49.05411 °N	107.23175 °E

<b>LOE Rating:</b> Possible	<b>Total:</b> 8
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**Family:** Chloroperlidae

Alloperla joosti	Within Known Range? N	Nearest Occurrence:	741.04 KM	49.21675 °N	103.10750 °E
Alloperla joosti	Within Known Range? N	Nearest Occurrence:	741.04 KM	49.21675 °N	103.10750 °E
Suwallia teleckojensis	Within Known Range? N	Nearest Occurrence:	278.74 KM	48.16668 °N	107.69548 °E
Suwallia teleckojensis	Within Known Range? N	Nearest Occurrence:	278.74 KM	48.16668 °N	107.69548 °E

**Family:** Perlodidae

Isoperla altaica	Within Known Range? N	Nearest Occurrence:	314.63 KM	48.60182 °N	107.84335 °E
Isoperla altaica	Within Known Range? N	Nearest Occurrence:	314.63 KM	48.60182 °N	107.84335 °E
Megarcys ochracea	Within Known Range? N	Nearest Occurrence:	272.35 KM	47.97108 °N	107.49534 °E
Megarcys ochracea	Within Known Range? N	Nearest Occurrence:	272.35 KM	47.97108 °N	107.49534 °E

**Basin:** Internal Drainage Basin  
**Aimag:** Sukhbaatar  
**Soum:** Dalanjargalan

**Freshwater Ecoregion:** Inner Mongolia Endorheic Basins  
**Terrestrial Ecoregion:** Eastern Gobi Desert Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

<b>LOE Rating:</b>	<b>Predicted</b>	<b>Total:</b>	<b>34</b>
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**Family:** Capniidae

Capnia nigra	Within Known Range? N	Nearest Occurrence: 1,061.93 KM	50.92452 °N	100.75528 °E
Capnia nigra	Within Known Range? N	Nearest Occurrence: 1,061.93 KM	50.92452 °N	100.75528 °E
Mesocapnia variabilis	Within Known Range? N	Nearest Occurrence: 293.03 KM	48.42080 °N	107.91406 °E
Mesocapnia variabilis	Within Known Range? N	Nearest Occurrence: 293.03 KM	48.42080 °N	107.91406 °E

**Family:** Chloroperlidae

Alaskaperla longidentata	Within Known Range? N	Nearest Occurrence: 265.09 KM	48.14846 °N	107.91267 °E
Alaskaperla longidentata	Within Known Range? N	Nearest Occurrence: 265.09 KM	48.14846 °N	107.91267 °E
Alloperla deminuta	Within Known Range? N	Nearest Occurrence: 263.67 KM	48.09694 °N	107.83988 °E
Alloperla deminuta	Within Known Range? N	Nearest Occurrence: 263.67 KM	48.09694 °N	107.83988 °E
Alloperla mediata	Within Known Range? N	Nearest Occurrence: 726.86 KM	49.77776 °N	103.60860 °E
Alloperla mediata	Within Known Range? N	Nearest Occurrence: 726.86 KM	49.77776 °N	103.60860 °E

**Family:** Leuctridae

Leuctra fusca	Within Known Range? N	Nearest Occurrence: 389.33 KM	49.08643 °N	107.28952 °E
Leuctra fusca	Within Known Range? N	Nearest Occurrence: 389.33 KM	49.08643 °N	107.28952 °E

**Family:** Nemouridae

Amphinemura standfussi	Within Known Range? N	Nearest Occurrence: 439.32 KM	49.73130 °N	107.63484 °E
Amphinemura standfussi	Within Known Range? N	Nearest Occurrence: 439.32 KM	49.73130 °N	107.63484 °E
Nemoura arctica	Within Known Range? N	Nearest Occurrence: 263.70 KM	48.13287 °N	107.91890 °E
Nemoura arctica	Within Known Range? N	Nearest Occurrence: 263.70 KM	48.13287 °N	107.91890 °E
Nemoura sahlbergi	Within Known Range? N	Nearest Occurrence: 272.45 KM	48.21780 °N	107.90392 °E
Nemoura sahlbergi	Within Known Range? N	Nearest Occurrence: 272.45 KM	48.21780 °N	107.90392 °E

**Family:** Perlidae

Paragnetina flavotincta	Within Known Range? N	Nearest Occurrence: 546.14 KM	49.16354 °N	105.18880 °E
Paragnetina flavotincta	Within Known Range? N	Nearest Occurrence: 546.14 KM	49.16354 °N	105.18880 °E

**Family:** Perlodidae

Arcynopteryx compacta	Within Known Range? N	Nearest Occurrence: 257.62 KM	47.84324 °N	107.55299 °E
Arcynopteryx compacta	Within Known Range? N	Nearest Occurrence: 257.62 KM	47.84324 °N	107.55299 °E
Arcynopteryx polaris	Within Known Range? N	Nearest Occurrence: 293.03 KM	48.42080 °N	107.91406 °E
Arcynopteryx polaris	Within Known Range? N	Nearest Occurrence: 293.03 KM	48.42080 °N	107.91406 °E
Diura majuscula	Within Known Range? N	Nearest Occurrence: 263.63 KM	48.09671 °N	107.84928 °E
Diura majuscula	Within Known Range? N	Nearest Occurrence: 263.63 KM	48.09671 °N	107.84928 °E
Isoperla eximia	Within Known Range? N	Nearest Occurrence: 314.07 KM	48.60182 °N	107.84335 °E
Isoperla eximia	Within Known Range? N	Nearest Occurrence: 314.07 KM	48.60182 °N	107.84335 °E
Isoperla mongolica	Within Known Range? N	Nearest Occurrence: 263.85 KM	48.09549 °N	107.84265 °E
Isoperla mongolica	Within Known Range? N	Nearest Occurrence: 263.85 KM	48.09549 °N	107.84265 °E
Isoperla potanini	Within Known Range? N	Nearest Occurrence: 790.62 KM	46.73093 °N	101.88583 °E
Isoperla potanini	Within Known Range? N	Nearest Occurrence: 790.62 KM	46.73093 °N	101.88583 °E
Skwala pusilla	Within Known Range? N	Nearest Occurrence: 2,286.69 KM	48.51277 °N	88.51107 °E
Skwala pusilla	Within Known Range? N	Nearest Occurrence: 2,286.69 KM	48.51277 °N	88.51107 °E



**Basin:** Internal Drainage Basin

**Aimag:** Sukhbaatar

**Soum:** Dalanjargalan

Freshwater Ecoregion: Inner Mongolia Endorheic Basins

Terrestrial Ecoregion: Eastern Gobi Desert Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

<b>LOE Rating:</b> Unlikely	<b>Total:</b> 6
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Family: Capniidae

Capnia khulsbagia      **Within Known Range?** N      **Nearest Occurrence:** 1,069.05 KM      50.98944 °N      100.71944 °E

Capnia khulsbagia      **Within Known Range?** N      **Nearest Occurrence:** 1,069.05 KM      50.98944 °N      100.71944 °E

Mesocapnia altaica      **Within Known Range?** N      **Nearest Occurrence:** 2,242.71 KM      48.43684 °N      88.90094 °E

Mesocapnia altaica      **Within Known Range?** N      **Nearest Occurrence:** 2,242.71 KM      48.43684 °N      88.90094 °E

Family: Nouridae

Nemurella pictetii      **Within Known Range?** N      **Nearest Occurrence:** 1,171.24 KM      51.07896 °N      99.70857 °E

Nemurella pictetii      **Within Known Range?** N      **Nearest Occurrence:** 1,171.24 KM      51.07896 °N      99.70857 °E

**Basin:** Internal Drainage Basin  
**Aimag:** Sukhbaatar  
**Soum:** Daryganga

**Freshwater Ecoregion:** Inner Mongolia Endorheic Basins  
**Terrestrial Ecoregion:** Mongolian-Manchurian Grassland

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

<b>LOE Rating:</b>	<b>Highly Likely</b>	<b>Total:</b>	<b>6</b>
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<b>Family:</b> Capniidae			
Isocapnia guentheri	Within Known Range? N	Nearest Occurrence:	757.48 KM 48.24734 °N 107.90589 °E
Isocapnia sibirica	Within Known Range? N	Nearest Occurrence:	757.19 KM 48.09549 °N 107.84265 °E
<b>Family:</b> Chloroperlidae			
Haploperla lepnevae	Within Known Range? N	Nearest Occurrence:	798.81 KM 47.82258 °N 107.33613 °E
Suwallia kerzhneri	Within Known Range? N	Nearest Occurrence:	788.65 KM 48.12416 °N 107.54780 °E
<b>Family:</b> Perlidae			
Agnetina extrema	Within Known Range? N	Nearest Occurrence:	756.57 KM 48.09671 °N 107.84928 °E
<b>Family:</b> Pteronarcyidae			
Pteronarcys reticulata	Within Known Range? N	Nearest Occurrence:	858.19 KM 49.08636 °N 107.30750 °E

<b>LOE Rating:</b>	<b>Likely</b>	<b>Total:</b>	<b>16</b>
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<b>Family:</b> Capniidae			
Isocapnia kudia	Within Known Range? N	Nearest Occurrence:	1,729.86 KM 51.25356 °N 99.66687 °E
<b>Family:</b> Chloroperlidae			
Alloperla rostellata	Within Known Range? N	Nearest Occurrence:	1,262.85 KM 49.77776 °N 103.60860 °E
<b>Family:</b> Leuctridae			
Paraleuctra zapekinae	Within Known Range? N	Nearest Occurrence:	752.36 KM 48.14846 °N 107.91267 °E
<b>Family:</b> Nemouridae			
Amphinemura borealis	Within Known Range? N	Nearest Occurrence:	798.81 KM 47.82258 °N 107.33613 °E
Nemoura cinerea	Within Known Range? N	Nearest Occurrence:	777.62 KM 47.96783 °N 107.59278 °E
<b>Family:</b> Perlidae			
Agnetina brevipennis	Within Known Range? N	Nearest Occurrence:	858.19 KM 49.08636 °N 107.30750 °E
Agnetina cocandica	Within Known Range? N	Nearest Occurrence:	1,026.67 KM 50.06476 °N 106.13388 °E
Kamimuria exilis	Within Known Range? N	Nearest Occurrence:	1,778.98 KM 50.16278 °N 98.84212 °E
<b>Family:</b> Perlodidae			
Arcynopteryx sajanensis	Within Known Range? N	Nearest Occurrence:	1,653.38 KM 51.61397 °N 100.59972 °E
Diura bicaudata	Within Known Range? N	Nearest Occurrence:	1,588.56 KM 47.21768 °N 99.92824 °E
Isoperla asiatica	Within Known Range? N	Nearest Occurrence:	777.62 KM 47.96783 °N 107.59278 °E
Isoperla kozlovi	Within Known Range? N	Nearest Occurrence:	750.72 KM 48.13111 °N 107.92120 °E
Isoperla lunigera	Within Known Range? N	Nearest Occurrence:	757.19 KM 48.09549 °N 107.84265 °E
Kaszabia nigricauda	Within Known Range? N	Nearest Occurrence:	756.34 KM 48.21780 °N 107.90392 °E
Pictetiella asiatica	Within Known Range? N	Nearest Occurrence:	1,659.49 KM 51.65822 °N 100.53000 °E
<b>Family:</b> Taeniopterygidae			
Taenionema japonicum	Within Known Range? N	Nearest Occurrence:	865.52 KM 49.05411 °N 107.23175 °E

<b>LOE Rating:</b>	<b>Probable</b>	<b>Total:</b>	<b>3</b>
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<b>Family:</b> Chloroperlidae			
Suwallia teleckojensis	Within Known Range? N	Nearest Occurrence:	766.14 KM 48.42080 °N 107.91406 °E
<b>Family:</b> Perlodidae			
Isoperla obscura	Within Known Range? N	Nearest Occurrence:	955.65 KM 49.72192 °N 106.65562 °E
Megaracys ochracea	Within Known Range? N	Nearest Occurrence:	787.85 KM 47.97108 °N 107.49534 °E



**Basin:** Internal Drainage Basin

**Aimag:** Sukhbaatar

**Soum:** Darynganga

Freshwater Ecoregion: Inner Mongolia Endorheic Basins

Terrestrial Ecoregion: Mongolian-Manchurian Grassland

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Possible Total: 3**

Family: Chloroperlidae

Alloperla deminuta Within Known Range? N Nearest Occurrence: 752.36 KM 48.14846°N 107.91267°E

Alloperla joosti Within Known Range? N Nearest Occurrence: 1,292.99 KM 49.21675°N 103.10750°E

Family: Perlodidae

Isoperla altaica Within Known Range? N Nearest Occurrence: 782.06 KM 48.60182°N 107.84335°E

**LOE Rating: Predicted Total: 16**

Family: Capniidae

Capnia nigra Within Known Range? N Nearest Occurrence: 1,604.18 KM 50.92452°N 100.75528°E

Mesocapnia variabilis Within Known Range? N Nearest Occurrence: 766.14 KM 48.42080°N 107.91406°E

Family: Chloroperlidae

Alaskaperla longidentata Within Known Range? N Nearest Occurrence: 752.36 KM 48.14846°N 107.91267°E

Alloperla mediata Within Known Range? N Nearest Occurrence: 1,262.85 KM 49.77776°N 103.60860°E

Family: Leuctridae

Leuctra fusca Within Known Range? N Nearest Occurrence: 859.96 KM 49.08643°N 107.28952°E

Family: Nemouridae

Amphinemura standfussi Within Known Range? N Nearest Occurrence: 863.55 KM 49.73130°N 107.63484°E

Nemoura arctica Within Known Range? N Nearest Occurrence: 752.39 KM 48.13287°N 107.91890°E

Nemoura sahlbergi Within Known Range? N Nearest Occurrence: 756.34 KM 48.21780°N 107.90392°E

Family: Perlidae

Paragnetina flavotincta Within Known Range? N Nearest Occurrence: 1,024.82 KM 50.06476°N 106.13388°E

Family: Perlodidae

Arcynopteryx compacta Within Known Range? N Nearest Occurrence: 778.31 KM 47.84324°N 107.55299°E

Arcynopteryx polaris Within Known Range? N Nearest Occurrence: 766.14 KM 48.42080°N 107.91406°E

Diura majuscula Within Known Range? N Nearest Occurrence: 752.39 KM 48.13287°N 107.91890°E

Isoperla eximia Within Known Range? N Nearest Occurrence: 780.65 KM 48.60182°N 107.84335°E

Isoperla mongolica Within Known Range? N Nearest Occurrence: 758.56 KM 48.09549°N 107.84265°E

Isoperla potanini Within Known Range? N Nearest Occurrence: 1,368.98 KM 46.73093°N 101.88583°E

Skwala pusilla Within Known Range? N Nearest Occurrence: 2,863.95 KM 48.51277°N 88.51107°E

**LOE Rating: Unlikely Total: 3**

Family: Capniidae

Capnia khulsbagia Within Known Range? N Nearest Occurrence: 1,610.60 KM 50.98944°N 100.71944°E

Mesocapnia altaica Within Known Range? N Nearest Occurrence: 2,819.98 KM 48.43684°N 88.90094°E

Family: Nemouridae

Nemurella pictetii Within Known Range? N Nearest Occurrence: 1,718.43 KM 51.07896°N 99.70857°E

Research funded by the National Science Foundation

DEB-BSI #0206674: A Survey of the Aquatic Insects of the Selenge River Basin. P.I.'s: JKGelhaus, JCMorse, BHayford.

DEB # 0743732: Aquatic Insects of the Altai and Hangai Mountain Drainages. P.I.'s: JKGelhaus, JCMorse, CRNelson.

<http://clade.ansp.org/entomology/mongolia/index.html>



**Basin:** Internal Drainage Basin  
**Aimag:** Sukhbaatar  
**Soum:** Delgerekh

**Freshwater Ecoregion:** Inner Mongolia Endorheic Basins  
**Terrestrial Ecoregion:** Mongolian-Manchurian Grassland

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Highly Likely Total: 5**

Family: Capniidae					
Isocapnia guentheri	Within Known Range? N	Nearest Occurrence:	464.10 KM	48.24734 °N	107.90589 °E
Isocapnia sibirica	Within Known Range? N	Nearest Occurrence:	460.34 KM	48.09549 °N	107.84265 °E
Family: Chloroperlidae					
Suwallia kerzhneri	Within Known Range? N	Nearest Occurrence:	489.66 KM	48.12416 °N	107.54780 °E
Family: Perlidae					
Agnentina extrema	Within Known Range? N	Nearest Occurrence:	459.80 KM	48.09671 °N	107.84928 °E
Family: Pteronarcyidae					
Pteronarcys reticulata	Within Known Range? N	Nearest Occurrence:	573.52 KM	49.08636 °N	107.30750 °E

**LOE Rating: Likely Total: 15**

Family: Capniidae					
Isocapnia kudia	Within Known Range? N	Nearest Occurrence:	1,426.04 KM	51.25356 °N	99.66687 °E
Family: Chloroperlidae					
Alloperla rostellata	Within Known Range? N	Nearest Occurrence:	961.02 KM	49.77776 °N	103.60860 °E
Haploperla lepnevae	Within Known Range? N	Nearest Occurrence:	493.82 KM	47.82258 °N	107.33613 °E
Family: Leuctridae					
Paraleuctra zapekinae	Within Known Range? N	Nearest Occurrence:	457.18 KM	48.14846 °N	107.91267 °E
Family: Nemouridae					
Amphinemura borealis	Within Known Range? N	Nearest Occurrence:	493.82 KM	47.82258 °N	107.33613 °E
Nemoura cinerea	Within Known Range? N	Nearest Occurrence:	476.47 KM	47.96783 °N	107.59278 °E
Family: Perlidae					
Agnentina brevipennis	Within Known Range? N	Nearest Occurrence:	573.52 KM	49.08636 °N	107.30750 °E
Agnentina cocandica	Within Known Range? N	Nearest Occurrence:	744.46 KM	50.06476 °N	106.13388 °E
Kamimuria exilis	Within Known Range? N	Nearest Occurrence:	1,467.88 KM	50.16278 °N	98.84212 °E
Family: Perlodidae					
Arcynopteryx sajanensis	Within Known Range? N	Nearest Occurrence:	1,353.99 KM	51.61397 °N	100.59972 °E
Diura bicaudata	Within Known Range? N	Nearest Occurrence:	1,272.44 KM	47.21768 °N	99.92824 °E
Isoperla asiatica	Within Known Range? N	Nearest Occurrence:	476.47 KM	47.96783 °N	107.59278 °E
Isoperla kozlovi	Within Known Range? N	Nearest Occurrence:	455.31 KM	48.13111 °N	107.92120 °E
Isoperla lunigera	Within Known Range? N	Nearest Occurrence:	460.34 KM	48.09549 °N	107.84265 °E
Pictetiella asiatica	Within Known Range? N	Nearest Occurrence:	1,360.70 KM	51.65822 °N	100.53000 °E

**LOE Rating: Probable Total: 3**

Family: Perlodidae					
Isoperla obscura	Within Known Range? N	Nearest Occurrence:	674.26 KM	49.72192 °N	106.65562 °E
Kaszabia nigricauda	Within Known Range? N	Nearest Occurrence:	459.80 KM	48.09671 °N	107.84928 °E
Megarcys ochracea	Within Known Range? N	Nearest Occurrence:	486.03 KM	47.97108 °N	107.49534 °E



**Basin:** Internal Drainage Basin  
**Aimags:** Sukhbaatar  
**Soums:** Delgerekh

**Freshwater Ecoregion:** Inner Mongolia Endorheic Basins  
**Terrestrial Ecoregion:** Mongolian-Manchurian Grassland

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

<b>LOE Rating:</b>	<b>Possible</b>	<b>Total:</b>	<b>4</b>
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<b>Family:</b> Chloroperlidae			
Alloperla joosti	Within Known Range? N	Nearest Occurrence:	985.27 KM 49.21675 °N 103.10750 °E
Suwallia teleckojensis	Within Known Range? N	Nearest Occurrence:	475.70 KM 48.42080 °N 107.91406 °E
<b>Family:</b> Perlodidae			
Isoperla altaica	Within Known Range? N	Nearest Occurrence:	494.33 KM 48.60182 °N 107.84335 °E
<b>Family:</b> Taeniopterygidae			
Taenionema japonicum	Within Known Range? N	Nearest Occurrence:	578.86 KM 49.05411 °N 107.23175 °E

<b>LOE Rating:</b>	<b>Predicted</b>	<b>Total:</b>	<b>17</b>
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<b>Family:</b> Capniidae			
Capnia nigra	Within Known Range? N	Nearest Occurrence:	1,301.26 KM 50.92452 °N 100.75528 °E
Mesocapnia variabilis	Within Known Range? N	Nearest Occurrence:	475.70 KM 48.42080 °N 107.91406 °E
<b>Family:</b> Chloroperlidae			
Alaskaperla longidentata	Within Known Range? N	Nearest Occurrence:	457.18 KM 48.14846 °N 107.91267 °E
Alloperla deminuta	Within Known Range? N	Nearest Occurrence:	457.18 KM 48.14846 °N 107.91267 °E
Alloperla mediata	Within Known Range? N	Nearest Occurrence:	961.02 KM 49.77776 °N 103.60860 °E
<b>Family:</b> Leuctridae			
Leuctra fusca	Within Known Range? N	Nearest Occurrence:	575.07 KM 49.08643 °N 107.28952 °E
<b>Family:</b> Nemouridae			
Amphinemura standfussi	Within Known Range? N	Nearest Occurrence:	595.94 KM 49.73130 °N 107.63484 °E
Nemoura arctica	Within Known Range? N	Nearest Occurrence:	456.45 KM 48.13287 °N 107.91890 °E
Nemoura sahlbergi	Within Known Range? N	Nearest Occurrence:	462.38 KM 48.21780 °N 107.90392 °E
<b>Family:</b> Perlidae			
Paragnetina flavotincta	Within Known Range? N	Nearest Occurrence:	743.12 KM 50.06476 °N 106.13388 °E
<b>Family:</b> Perlodidae			
Arcynopteryx compacta	Within Known Range? N	Nearest Occurrence:	474.41 KM 47.84324 °N 107.55299 °E
Arcynopteryx polaris	Within Known Range? N	Nearest Occurrence:	475.70 KM 48.42080 °N 107.91406 °E
Diura majuscula	Within Known Range? N	Nearest Occurrence:	456.45 KM 48.13287 °N 107.91890 °E
Isoperla eximia	Within Known Range? N	Nearest Occurrence:	493.45 KM 48.60182 °N 107.84335 °E
Isoperla mongolica	Within Known Range? N	Nearest Occurrence:	461.17 KM 48.09549 °N 107.84265 °E
Isoperla potanini	Within Known Range? N	Nearest Occurrence:	1,052.41 KM 46.73093 °N 101.88583 °E
Skwala pusilla	Within Known Range? N	Nearest Occurrence:	2,547.84 KM 48.51277 °N 88.51107 °E

<b>LOE Rating:</b>	<b>Unlikely</b>	<b>Total:</b>	<b>3</b>
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<b>Family:</b> Capniidae			
Capnia khulsbagia	Within Known Range? N	Nearest Occurrence:	1,307.99 KM 50.98944 °N 100.71944 °E
Mesocapnia altaica	Within Known Range? N	Nearest Occurrence:	2,503.88 KM 48.43684 °N 88.90094 °E
<b>Family:</b> Nemouridae			
Nemurella pictetii	Within Known Range? N	Nearest Occurrence:	1,413.73 KM 51.07896 °N 99.70857 °E





**Basin:** Internal Drainage Basin  
**Aimags:** Sukhbaatar  
**Soums:** Erdene

**Freshwater Ecoregion:** Inner Mongolia Endorheic Basins  
**Terrestrial Ecoregion:** Eastern Gobi Desert Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Highly Likely Total: 3**

Family: Capniidae					
Isocapnia guentheri	Within Known Range? N	Nearest Occurrence:	572.57 KM	48.24734 °N	107.90589 °E
Isocapnia sibirica	Within Known Range? N	Nearest Occurrence:	564.06 KM	48.09549 °N	107.84265 °E
Family: Pteronarcyidae					
Pteronarcys reticulata	Within Known Range? N	Nearest Occurrence:	686.80 KM	49.08636 °N	107.30750 °E

**LOE Rating: Likely Total: 15**

Family: Capniidae					
Isocapnia kudia	Within Known Range? N	Nearest Occurrence:	1,493.16 KM	51.25356 °N	99.66687 °E
Family: Chloroperlidae					
Alloperla rostellata	Within Known Range? N	Nearest Occurrence:	1,038.30 KM	49.77776 °N	103.60860 °E
Haploperla lepnevae	Within Known Range? N	Nearest Occurrence:	580.82 KM	47.82258 °N	107.33613 °E
Suwallia kerzhneri	Within Known Range? N	Nearest Occurrence:	588.15 KM	48.12416 °N	107.54780 °E
Family: Nemouridae					
Amphinemura borealis	Within Known Range? N	Nearest Occurrence:	580.82 KM	47.82258 °N	107.33613 °E
Nemoura cinerea	Within Known Range? N	Nearest Occurrence:	572.06 KM	47.96783 °N	107.59278 °E
Family: Perlidae					
Agnetina brevipennis	Within Known Range? N	Nearest Occurrence:	686.80 KM	49.08636 °N	107.30750 °E
Agnetina cocandica	Within Known Range? N	Nearest Occurrence:	855.00 KM	50.06476 °N	106.13388 °E
Agnetina extrema	Within Known Range? N	Nearest Occurrence:	563.69 KM	48.09671 °N	107.84928 °E
Kamimuria exilis	Within Known Range? N	Nearest Occurrence:	1,518.26 KM	50.16278 °N	98.84212 °E
Family: Perlodidae					
Arcynopteryx sajanensis	Within Known Range? N	Nearest Occurrence:	1,431.06 KM	51.61397 °N	100.59972 °E
Diura bicaudata	Within Known Range? N	Nearest Occurrence:	1,287.78 KM	47.21768 °N	99.92824 °E
Isoperla kozlovi	Within Known Range? N	Nearest Occurrence:	561.49 KM	48.13111 °N	107.92120 °E
Isoperla lunigera	Within Known Range? N	Nearest Occurrence:	564.06 KM	48.09549 °N	107.84265 °E
Pictetiella asiatica	Within Known Range? N	Nearest Occurrence:	1,437.64 KM	51.65822 °N	100.53000 °E

**LOE Rating: Probable Total: 4**

Family: Chloroperlidae					
Alloperla joosti	Within Known Range? N	Nearest Occurrence:	1,049.42 KM	49.21675 °N	103.10750 °E
Family: Leuctridae					
Paraleuctra zapekinae	Within Known Range? N	Nearest Occurrence:	563.58 KM	48.14846 °N	107.91267 °E
Family: Perlodidae					
Isoperla asiatica	Within Known Range? N	Nearest Occurrence:	572.06 KM	47.96783 °N	107.59278 °E
Kaszabia nigricauda	Within Known Range? N	Nearest Occurrence:	563.69 KM	48.09671 °N	107.84928 °E



**Basin:** Internal Drainage Basin  
**Aimags:** Sukhbaatar  
**Soums:** Erdene

**Freshwater Ecoregion:** Inner Mongolia Endorheic Basins  
**Terrestrial Ecoregion:** Eastern Gobi Desert Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

<b>LOE Rating:</b> Possible	<b>Total:</b> 5
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<b>Family:</b> Chloroperlidae					
Suwallia teleckojensis	Within Known Range? N	Nearest Occurrence:	581.76 KM	48.16668°N	107.69548°E
<b>Family:</b> Perlodidae					
Isoperla altaica	Within Known Range? N	Nearest Occurrence:	608.98 KM	48.60182°N	107.84335°E
Isoperla obscura	Within Known Range? N	Nearest Occurrence:	766.97 KM	47.85250°N	105.25567°E
Megarcys ochracea	Within Known Range? N	Nearest Occurrence:	579.81 KM	47.97108°N	107.49534°E
<b>Family:</b> Taeniopterygidae					
Taenionema japonicum	Within Known Range? N	Nearest Occurrence:	690.49 KM	49.05411°N	107.23175°E

<b>LOE Rating:</b> Predicted	<b>Total:</b> 17
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<b>Family:</b> Capniidae					
Capnia nigra	Within Known Range? N	Nearest Occurrence:	1,371.43 KM	50.92452°N	100.75528°E
Mesocapnia variabilis	Within Known Range? N	Nearest Occurrence:	588.20 KM	48.42080°N	107.91406°E
<b>Family:</b> Chloroperlidae					
Alaskaperla longidentata	Within Known Range? N	Nearest Occurrence:	563.58 KM	48.14846°N	107.91267°E
Alloperla deminuta	Within Known Range? N	Nearest Occurrence:	563.58 KM	48.14846°N	107.91267°E
Alloperla mediata	Within Known Range? N	Nearest Occurrence:	1,038.30 KM	49.77776°N	103.60860°E
<b>Family:</b> Leuctridae					
Leuctra fusca	Within Known Range? N	Nearest Occurrence:	688.05 KM	49.08643°N	107.28952°E
<b>Family:</b> Nemouridae					
Amphinemura standfussi	Within Known Range? N	Nearest Occurrence:	724.21 KM	49.73130°N	107.63484°E
Nemoura arctica	Within Known Range? N	Nearest Occurrence:	562.81 KM	48.13287°N	107.91890°E
Nemoura sahlbergi	Within Known Range? N	Nearest Occurrence:	570.16 KM	48.21780°N	107.90392°E
<b>Family:</b> Perlidae					
Paragnetina flavotincta	Within Known Range? N	Nearest Occurrence:	853.46 KM	50.06476°N	106.13388°E
<b>Family:</b> Perlodidae					
Arcynopteryx compacta	Within Known Range? N	Nearest Occurrence:	566.22 KM	47.84324°N	107.55299°E
Arcynopteryx polaris	Within Known Range? N	Nearest Occurrence:	588.20 KM	48.42080°N	107.91406°E
Diura majuscula	Within Known Range? N	Nearest Occurrence:	562.81 KM	48.13287°N	107.91890°E
Isoperla eximia	Within Known Range? N	Nearest Occurrence:	607.89 KM	48.60182°N	107.84335°E
Isoperla mongolica	Within Known Range? N	Nearest Occurrence:	565.07 KM	48.09549°N	107.84265°E
Isoperla potanini	Within Known Range? N	Nearest Occurrence:	1,065.83 KM	46.73093°N	101.88583°E
Skwala pusilla	Within Known Range? N	Nearest Occurrence:	2,556.22 KM	48.51277°N	88.51107°E

<b>LOE Rating:</b> Unlikely	<b>Total:</b> 3
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<b>Family:</b> Capniidae					
Capnia khulsbagia	Within Known Range? N	Nearest Occurrence:	1,378.69 KM	50.98944°N	100.71944°E
Mesocapnia altaica	Within Known Range? N	Nearest Occurrence:	2,512.13 KM	48.43684°N	88.90094°E
<b>Family:</b> Nemouridae					
Nemurella pictetii	Within Known Range? N	Nearest Occurrence:	1,479.16 KM	51.07896°N	99.70857°E



**Basin:** Internal Drainage Basin  
**Aimag:** Sukhbaatar  
**Soum:** Ikhkhet

**Freshwater Ecoregion:** Inner Mongolia Endorheic Basins  
**Terrestrial Ecoregion:** Eastern Gobi Desert Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

<b>LOE Rating:</b>	<b>Highly Likely</b>	<b>Total:</b>	<b>5</b>
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<b>Family:</b> Capniidae			
Isocapnia guentheri	Within Known Range? N	Nearest Occurrence:	343.68 KM 48.24734 °N 107.90589 °E
Isocapnia sibirica	Within Known Range? N	Nearest Occurrence:	337.63 KM 48.09549 °N 107.84265 °E
<b>Family:</b> Chloroperlidae			
Haploperla lepnevae	Within Known Range? N	Nearest Occurrence:	365.59 KM 47.82258 °N 107.33613 °E
<b>Family:</b> Perlidae			
Agnetina extrema	Within Known Range? N	Nearest Occurrence:	337.16 KM 48.09671 °N 107.84928 °E
<b>Family:</b> Pteronarcyidae			
Pteronarcys reticulata	Within Known Range? N	Nearest Occurrence:	456.46 KM 49.08636 °N 107.30750 °E

<b>LOE Rating:</b>	<b>Likely</b>	<b>Total:</b>	<b>14</b>
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<b>Family:</b> Capniidae			
Isocapnia kudia	Within Known Range? N	Nearest Occurrence:	1,296.20 KM 51.25356 °N 99.66687 °E
<b>Family:</b> Chloroperlidae			
Alloperla rostellata	Within Known Range? N	Nearest Occurrence:	832.43 KM 49.77776 °N 103.60860 °E
Suwallia kerzhneri	Within Known Range? N	Nearest Occurrence:	365.07 KM 48.12416 °N 107.54780 °E
<b>Family:</b> Nemouridae			
Amphinemura borealis	Within Known Range? N	Nearest Occurrence:	365.59 KM 47.82258 °N 107.33613 °E
Nemoura cinerea	Within Known Range? N	Nearest Occurrence:	350.70 KM 47.96783 °N 107.59278 °E
<b>Family:</b> Perlidae			
Agnetina brevipennis	Within Known Range? N	Nearest Occurrence:	456.46 KM 49.08636 °N 107.30750 °E
Agnetina cocandica	Within Known Range? N	Nearest Occurrence:	626.43 KM 50.06476 °N 106.13388 °E
Kamimuria exilis	Within Known Range? N	Nearest Occurrence:	1,335.96 KM 50.16278 °N 98.84212 °E
<b>Family:</b> Perlodidae			
Arcynopteryx sajanensis	Within Known Range? N	Nearest Occurrence:	1,225.71 KM 51.61397 °N 100.59972 °E
Diura bicaudata	Within Known Range? N	Nearest Occurrence:	1,141.74 KM 47.21768 °N 99.92824 °E
Isoperla asiatica	Within Known Range? N	Nearest Occurrence:	350.70 KM 47.96783 °N 107.59278 °E
Isoperla kozlovi	Within Known Range? N	Nearest Occurrence:	333.68 KM 48.13111 °N 107.92120 °E
Isoperla lunigera	Within Known Range? N	Nearest Occurrence:	337.63 KM 48.09549 °N 107.84265 °E
Pictetiella asiatica	Within Known Range? N	Nearest Occurrence:	1,232.66 KM 51.65822 °N 100.53000 °E

<b>LOE Rating:</b>	<b>Probable</b>	<b>Total:</b>	<b>4</b>
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<b>Family:</b> Leuctridae			
Paraleuctra zapekinae	Within Known Range? N	Nearest Occurrence:	335.67 KM 48.14846 °N 107.91267 °E
<b>Family:</b> Perlodidae			
Isoperla obscura	Within Known Range? N	Nearest Occurrence:	557.47 KM 49.72192 °N 106.65562 °E
Kaszabia nigricauda	Within Known Range? N	Nearest Occurrence:	337.16 KM 48.09671 °N 107.84928 °E
Megaracys ochracea	Within Known Range? N	Nearest Occurrence:	359.73 KM 47.97108 °N 107.49534 °E



**Basin:** Internal Drainage Basin  
**Aimags:** Sukhbaatar  
**Soums:** Ikhkheth

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**Freshwater Ecoregion:** Inner Mongolia Endorheic Basins  
**Terrestrial Ecoregion:** Eastern Gobi Desert Steppe

**LOE Rating: Possible Total: 4**

<b>Family: Chloroperlidae</b>						
Alloperla joosti	Within Known Range? N	Nearest Occurrence:	854.51 KM	49.21675 °N	103.10750 °E	
Suwallia teleckojensis	Within Known Range? N	Nearest Occurrence:	355.86 KM	48.16668 °N	107.69548 °E	
<b>Family: Perlodidae</b>						
Isoperla altaica	Within Known Range? N	Nearest Occurrence:	377.19 KM	48.60182 °N	107.84335 °E	
<b>Family: Taeniopterygidae</b>						
Taenionema japonicum	Within Known Range? N	Nearest Occurrence:	460.61 KM	49.05411 °N	107.23175 °E	

**LOE Rating: Predicted Total: 17**

<b>Family: Capniidae</b>						
Capnia nigra	Within Known Range? N	Nearest Occurrence:	1,171.81 KM	50.92452 °N	100.75528 °E	
Mesocapnia variabilis	Within Known Range? N	Nearest Occurrence:	357.19 KM	48.42080 °N	107.91406 °E	
<b>Family: Chloroperlidae</b>						
Alaskaperla longidentata	Within Known Range? N	Nearest Occurrence:	335.67 KM	48.14846 °N	107.91267 °E	
Alloperla deminuta	Within Known Range? N	Nearest Occurrence:	335.67 KM	48.14846 °N	107.91267 °E	
Alloperla mediata	Within Known Range? N	Nearest Occurrence:	832.43 KM	49.77776 °N	103.60860 °E	
<b>Family: Leuctridae</b>						
Leuctra fusca	Within Known Range? N	Nearest Occurrence:	457.85 KM	49.08643 °N	107.28952 °E	
<b>Family: Nemouridae</b>						
Amphinemura standfussi	Within Known Range? N	Nearest Occurrence:	488.85 KM	49.73130 °N	107.63484 °E	
Nemoura arctica	Within Known Range? N	Nearest Occurrence:	334.61 KM	48.13287 °N	107.91890 °E	
Nemoura sahlbergi	Within Known Range? N	Nearest Occurrence:	341.60 KM	48.21780 °N	107.90392 °E	
<b>Family: Perlidae</b>						
Paragnetina flavotincta	Within Known Range? N	Nearest Occurrence:	625.31 KM	50.06476 °N	106.13388 °E	
<b>Family: Perlodidae</b>						
Arcynopteryx compacta	Within Known Range? N	Nearest Occurrence:	347.09 KM	47.84324 °N	107.55299 °E	
Arcynopteryx polaris	Within Known Range? N	Nearest Occurrence:	357.19 KM	48.42080 °N	107.91406 °E	
Diura majuscula	Within Known Range? N	Nearest Occurrence:	334.61 KM	48.13287 °N	107.91890 °E	
Isoperla eximia	Within Known Range? N	Nearest Occurrence:	376.51 KM	48.60182 °N	107.84335 °E	
Isoperla mongolica	Within Known Range? N	Nearest Occurrence:	338.24 KM	48.09549 °N	107.84265 °E	
Isoperla potanini	Within Known Range? N	Nearest Occurrence:	922.09 KM	46.73093 °N	101.88583 °E	
Skwala pusilla	Within Known Range? N	Nearest Occurrence:	2,417.16 KM	48.51277 °N	88.51107 °E	

**LOE Rating: Unlikely Total: 3**

<b>Family: Capniidae</b>						
Capnia khulsbagia	Within Known Range? N	Nearest Occurrence:	1,178.64 KM	50.98944 °N	100.71944 °E	
Mesocapnia altaica	Within Known Range? N	Nearest Occurrence:	2,373.22 KM	48.43684 °N	88.90094 °E	
<b>Family: Nemouridae</b>						
Nemurella pictetii	Within Known Range? N	Nearest Occurrence:	1,283.62 KM	51.07896 °N	99.70857 °E	

**Basin:** Internal Drainage Basin

**Aimag:** Sukhbaatar

**Soum:** Khalzan

Freshwater Ecoregion: Inner Mongolia Endorheic Basins

Terrestrial Ecoregion: Mongolian-Manchurian Grassland

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

<b>LOE Rating:</b>	<b>Highly Likely</b>	<b>Total:</b>	<b>12</b>
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Family: Capniidae

Isocapnia guentheri	Within Known Range? N	Nearest Occurrence:	604.78 KM	48.24734 °N	107.90589 °E
Isocapnia guentheri	Within Known Range? N	Nearest Occurrence:	604.78 KM	48.24734 °N	107.90589 °E
Isocapnia sibirica	Within Known Range? N	Nearest Occurrence:	605.53 KM	48.09549 °N	107.84265 °E
Isocapnia sibirica	Within Known Range? N	Nearest Occurrence:	605.53 KM	48.09549 °N	107.84265 °E

Family: Chloroperlidae

Haploperla lepnevae	Within Known Range? N	Nearest Occurrence:	650.22 KM	47.82258 °N	107.33613 °E
Haploperla lepnevae	Within Known Range? N	Nearest Occurrence:	650.22 KM	47.82258 °N	107.33613 °E
Suwallia kerzhneri	Within Known Range? N	Nearest Occurrence:	637.51 KM	48.12416 °N	107.54780 °E
Suwallia kerzhneri	Within Known Range? N	Nearest Occurrence:	637.51 KM	48.12416 °N	107.54780 °E

Family: Perlidae

Agnetina extrema	Within Known Range? N	Nearest Occurrence:	604.88 KM	48.09671 °N	107.84928 °E
Agnetina extrema	Within Known Range? N	Nearest Occurrence:	604.88 KM	48.09671 °N	107.84928 °E

Family: Pteronarcyidae

Pteronarcys reticulata	Within Known Range? N	Nearest Occurrence:	703.12 KM	49.08636 °N	107.30750 °E
Pteronarcys reticulata	Within Known Range? N	Nearest Occurrence:	703.12 KM	49.08636 °N	107.30750 °E

**Basin:** Internal Drainage Basin  
**Aimag:** Sukhbaatar  
**Soum:** Khalzan

**Freshwater Ecoregion:** Inner Mongolia Endorheic Basins  
**Terrestrial Ecoregion:** Mongolian-Manchurian Grassland

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

<b>LOE Rating:</b>	<b>Likely</b>	<b>Total:</b>	30
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<b>Family:</b> Capniidae			
Isocapnia kudia	Within Known Range? N	Nearest Occurrence: 1,578.22 KM	51.25356°N 99.66687°E
Isocapnia kudia	Within Known Range? N	Nearest Occurrence: 1,578.22 KM	51.25356°N 99.66687°E
<b>Family:</b> Chloroperlidae			
Alloperla rostellata	Within Known Range? N	Nearest Occurrence: 1,111.03 KM	49.77776°N 103.60860°E
Alloperla rostellata	Within Known Range? N	Nearest Occurrence: 1,111.03 KM	49.77776°N 103.60860°E
<b>Family:</b> Leuctridae			
Paraleuctra zapekinae	Within Known Range? N	Nearest Occurrence: 600.21 KM	48.14846°N 107.91267°E
Paraleuctra zapekinae	Within Known Range? N	Nearest Occurrence: 600.21 KM	48.14846°N 107.91267°E
<b>Family:</b> Nemouridae			
Amphinemura borealis	Within Known Range? N	Nearest Occurrence: 650.22 KM	47.82258°N 107.33613°E
Amphinemura borealis	Within Known Range? N	Nearest Occurrence: 650.22 KM	47.82258°N 107.33613°E
Nemoura cinerea	Within Known Range? N	Nearest Occurrence: 627.39 KM	47.96783°N 107.59278°E
Nemoura cinerea	Within Known Range? N	Nearest Occurrence: 627.39 KM	47.96783°N 107.59278°E
<b>Family:</b> Perlidae			
Agnatina brevipennis	Within Known Range? N	Nearest Occurrence: 703.12 KM	49.08636°N 107.30750°E
Agnatina brevipennis	Within Known Range? N	Nearest Occurrence: 703.12 KM	49.08636°N 107.30750°E
Agnatina cocandica	Within Known Range? N	Nearest Occurrence: 870.48 KM	50.06476°N 106.13388°E
Agnatina cocandica	Within Known Range? N	Nearest Occurrence: 870.48 KM	50.06476°N 106.13388°E
Kamimuria exilis	Within Known Range? N	Nearest Occurrence: 1,631.12 KM	50.16278°N 98.84212°E
<b>Family:</b> Perlodidae			
Arcynopteryx sajanensis	Within Known Range? N	Nearest Occurrence: 1,499.71 KM	51.61397°N 100.59972°E
Diura bicaudata	Within Known Range? N	Nearest Occurrence: 1,453.37 KM	47.21768°N 99.92824°E
Diura bicaudata	Within Known Range? N	Nearest Occurrence: 1,453.37 KM	47.21768°N 99.92824°E
Isoperla asiatica	Within Known Range? N	Nearest Occurrence: 627.39 KM	47.96783°N 107.59278°E
Isoperla asiatica	Within Known Range? N	Nearest Occurrence: 627.39 KM	47.96783°N 107.59278°E
Isoperla kozlovi	Within Known Range? N	Nearest Occurrence: 598.65 KM	48.13111°N 107.92120°E
Isoperla kozlovi	Within Known Range? N	Nearest Occurrence: 598.65 KM	48.13111°N 107.92120°E
Isoperla lunigera	Within Known Range? N	Nearest Occurrence: 605.53 KM	48.09549°N 107.84265°E
Isoperla lunigera	Within Known Range? N	Nearest Occurrence: 605.53 KM	48.09549°N 107.84265°E
Isoperla obscura	Within Known Range? N	Nearest Occurrence: 799.83 KM	49.72192°N 106.65562°E
Isoperla obscura	Within Known Range? N	Nearest Occurrence: 799.83 KM	49.72192°N 106.65562°E
Pictetiella asiatica	Within Known Range? N	Nearest Occurrence: 1,506.05 KM	51.65822°N 100.53000°E
Pictetiella asiatica	Within Known Range? N	Nearest Occurrence: 1,506.05 KM	51.65822°N 100.53000°E
<b>Family:</b> Taeniopterygidae			
Taenionema japonicum	Within Known Range? N	Nearest Occurrence: 710.40 KM	49.05411°N 107.23175°E
Taenionema japonicum	Within Known Range? N	Nearest Occurrence: 710.40 KM	49.05411°N 107.23175°E

<b>LOE Rating:</b>	<b>Probable</b>	<b>Total:</b>	4
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<b>Family:</b> Perlodidae			
Kaszabia nigricauda	Within Known Range? N	Nearest Occurrence: 603.81 KM	48.21780°N 107.90392°E
Kaszabia nigricauda	Within Known Range? N	Nearest Occurrence: 603.81 KM	48.21780°N 107.90392°E
Megarcys ochracea	Within Known Range? N	Nearest Occurrence: 637.83 KM	47.97108°N 107.49534°E
Megarcys ochracea	Within Known Range? N	Nearest Occurrence: 637.83 KM	47.97108°N 107.49534°E

Research funded by the National Science Foundation  
 DEB-BSI #0206674: A Survey of the Aquatic Insects of the Selenge River Basin. P.I.'s: JKGelhaus, JCMorse, BHayford.  
 DEB # 0743732: Aquatic Insects of the Altai and Hangai Mountain Drainages. P.I.'s: JKGelhaus, JCMorse, CRNelson.  
<http://clade.ansp.org/entomology/mongolia/index.html>



**Basin:** Internal Drainage Basin

**Aimag:** Sukhbaatar

**Soum:** Khalzan

Freshwater Ecoregion: Inner Mongolia Endorheic Basins

Terrestrial Ecoregion: Mongolian-Manchurian Grassland

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

<b>LOE Rating:</b>	<b>Possible</b>	<b>Total:</b>	<b>6</b>
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Family: Chloroperlidae

Alloperla joosti

Within Known Range? N Nearest Occurrence: 1,144.06 KM 49.21675 °N 103.10750 °E

Alloperla joosti

Within Known Range? N Nearest Occurrence: 1,144.06 KM 49.21675 °N 103.10750 °E

Suwallia teleckojensis

Within Known Range? N Nearest Occurrence: 612.25 KM 48.42080 °N 107.91406 °E

Suwallia teleckojensis

Within Known Range? N Nearest Occurrence: 612.25 KM 48.42080 °N 107.91406 °E

Family: Perlodidae

Isoperla altaica

Within Known Range? N Nearest Occurrence: 627.50 KM 48.60182 °N 107.84335 °E

Isoperla altaica

Within Known Range? N Nearest Occurrence: 627.50 KM 48.60182 °N 107.84335 °E

Research funded by the National Science Foundation

DEB-BSI #0206674: A Survey of the Aquatic Insects of the Selenge River Basin. P.I.'s: JKGelhaus, JCMorse, BHayford.

DEB # 0743732: Aquatic Insects of the Altai and Hangai Mountain Drainages. P.I.'s: JKGelhaus, JCMorse, CRNelson.

<http://clade.ansp.org/entomology/mongolia/index.html>



**Basin:** Internal Drainage Basin  
**Aimag:** Sukhbaatar  
**Soum:** Khalzan

**Freshwater Ecoregion:** Inner Mongolia Endorheic Basins  
**Terrestrial Ecoregion:** Mongolian-Manchurian Grassland

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

<b>LOE Rating:</b>	<b>Predicted</b>	<b>Total:</b>	34
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**Family:** Capniidae

Capnia nigra	Within Known Range? N	Nearest Occurrence: 1,452.28 KM	50.92452 °N	100.75528 °E
Capnia nigra	Within Known Range? N	Nearest Occurrence: 1,452.28 KM	50.92452 °N	100.75528 °E
Mesocapnia variabilis	Within Known Range? N	Nearest Occurrence: 612.25 KM	48.42080 °N	107.91406 °E
Mesocapnia variabilis	Within Known Range? N	Nearest Occurrence: 612.25 KM	48.42080 °N	107.91406 °E

**Family:** Chloroperlidae

Alaskaperla longidentata	Within Known Range? N	Nearest Occurrence: 600.21 KM	48.14846 °N	107.91267 °E
Alaskaperla longidentata	Within Known Range? N	Nearest Occurrence: 600.21 KM	48.14846 °N	107.91267 °E
Alloperla deminuta	Within Known Range? N	Nearest Occurrence: 600.21 KM	48.14846 °N	107.91267 °E
Alloperla deminuta	Within Known Range? N	Nearest Occurrence: 600.21 KM	48.14846 °N	107.91267 °E
Alloperla mediata	Within Known Range? N	Nearest Occurrence: 1,111.03 KM	49.77776 °N	103.60860 °E
Alloperla mediata	Within Known Range? N	Nearest Occurrence: 1,111.03 KM	49.77776 °N	103.60860 °E

**Family:** Leuctridae

Leuctra fusca	Within Known Range? N	Nearest Occurrence: 704.92 KM	49.08643 °N	107.28952 °E
Leuctra fusca	Within Known Range? N	Nearest Occurrence: 704.92 KM	49.08643 °N	107.28952 °E

**Family:** Nemouridae

Amphinemura standfussi	Within Known Range? N	Nearest Occurrence: 706.78 KM	49.73130 °N	107.63484 °E
Amphinemura standfussi	Within Known Range? N	Nearest Occurrence: 706.78 KM	49.73130 °N	107.63484 °E
Nemoura arctica	Within Known Range? N	Nearest Occurrence: 600.05 KM	48.13287 °N	107.91890 °E
Nemoura arctica	Within Known Range? N	Nearest Occurrence: 600.05 KM	48.13287 °N	107.91890 °E
Nemoura sahlbergi	Within Known Range? N	Nearest Occurrence: 603.81 KM	48.21780 °N	107.90392 °E
Nemoura sahlbergi	Within Known Range? N	Nearest Occurrence: 603.81 KM	48.21780 °N	107.90392 °E

**Family:** Perlidae

Paragnetina flavotincta	Within Known Range? N	Nearest Occurrence: 868.91 KM	50.06476 °N	106.13388 °E
Paragnetina flavotincta	Within Known Range? N	Nearest Occurrence: 868.91 KM	50.06476 °N	106.13388 °E

**Family:** Perlodidae

Arcynopteryx compacta	Within Known Range? N	Nearest Occurrence: 628.79 KM	47.84324 °N	107.55299 °E
Arcynopteryx compacta	Within Known Range? N	Nearest Occurrence: 628.79 KM	47.84324 °N	107.55299 °E
Arcynopteryx polaris	Within Known Range? N	Nearest Occurrence: 612.25 KM	48.42080 °N	107.91406 °E
Arcynopteryx polaris	Within Known Range? N	Nearest Occurrence: 612.25 KM	48.42080 °N	107.91406 °E
Diura majuscula	Within Known Range? N	Nearest Occurrence: 600.05 KM	48.13287 °N	107.91890 °E
Diura majuscula	Within Known Range? N	Nearest Occurrence: 600.05 KM	48.13287 °N	107.91890 °E
Isoperla eximia	Within Known Range? N	Nearest Occurrence: 626.37 KM	48.60182 °N	107.84335 °E
Isoperla eximia	Within Known Range? N	Nearest Occurrence: 626.37 KM	48.60182 °N	107.84335 °E
Isoperla mongolica	Within Known Range? N	Nearest Occurrence: 606.63 KM	48.09549 °N	107.84265 °E
Isoperla mongolica	Within Known Range? N	Nearest Occurrence: 606.63 KM	48.09549 °N	107.84265 °E
Isoperla potanini	Within Known Range? N	Nearest Occurrence: 1,235.60 KM	46.73093 °N	101.88583 °E
Isoperla potanini	Within Known Range? N	Nearest Occurrence: 1,235.60 KM	46.73093 °N	101.88583 °E
Skwala pusilla	Within Known Range? N	Nearest Occurrence: 2,728.21 KM	48.51277 °N	88.51107 °E
Skwala pusilla	Within Known Range? N	Nearest Occurrence: 2,728.21 KM	48.51277 °N	88.51107 °E

Research funded by the National Science Foundation  
 DEB-BSI #0206674: A Survey of the Aquatic Insects of the Selenge River Basin. P.I.'s: JKGelhaus, JCMorse, BHayford.  
 DEB # 0743732: Aquatic Insects of the Altai and Hangai Mountain Drainages. P.I.'s: JKGelhaus, JCMorse, CRNelson.  
<http://clade.ansp.org/entomology/mongolia/index.html>





**Basin:** Internal Drainage Basin

**Aimag:** Sukhbaatar

**Soum:** Khalzan

Freshwater Ecoregion: Inner Mongolia Endorheic Basins

Terrestrial Ecoregion: Mongolian-Manchurian Grassland

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

<b>LOE Rating:</b> Unlikely	<b>Total:</b> 6
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Family: Capniidae

Capnia khulsbagia

Within Known Range? N Nearest Occurrence: 1,458.57 KM 50.98944 °N 100.71944 °E

Capnia khulsbagia

Within Known Range? N Nearest Occurrence: 1,458.57 KM 50.98944 °N 100.71944 °E

Mesocapnia altaica

Within Known Range? N Nearest Occurrence: 2,684.35 KM 48.43684 °N 88.90094 °E

Mesocapnia altaica

Within Known Range? N Nearest Occurrence: 2,684.35 KM 48.43684 °N 88.90094 °E

Family: Nemouridae

Nemurella pictetii

Within Known Range? N Nearest Occurrence: 1,567.20 KM 51.07896 °N 99.70857 °E

Nemurella pictetii

Within Known Range? N Nearest Occurrence: 1,567.20 KM 51.07896 °N 99.70857 °E

Research funded by the National Science Foundation

DEB-BSI #0206674: A Survey of the Aquatic Insects of the Selenge River Basin. P.I.'s: JKGelhaus, JCMorse, BHayford.

DEB # 0743732: Aquatic Insects of the Altai and Hangai Mountain Drainages. P.I.'s: JKGelhaus, JCMorse, CRNelson.

<http://clade.ansp.org/entomology/mongolia/index.html>



**Basin:** Internal Drainage Basin  
**Aimag:** Sukhbaatar  
**Soum:** Khatanbulag

**Freshwater Ecoregion:** Inner Mongolia Endorheic Basins  
**Terrestrial Ecoregion:** Alashan Plateau Semi-Desert

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

<b>LOE Rating:</b>	<b>Highly Likely</b>	<b>Total:</b>	<b>3</b>
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<b>Family:</b> Capniidae			
Isocapnia guentheri	Within Known Range? N	Nearest Occurrence:	583.14 KM 47.99158°N 107.46116 °E
Isocapnia sibirica	Within Known Range? N	Nearest Occurrence:	583.33 KM 48.09549°N 107.84265 °E
<b>Family:</b> Perlidae			
Agnetina extrema	Within Known Range? N	Nearest Occurrence:	583.29 KM 48.09671°N 107.84928 °E

<b>LOE Rating:</b>	<b>Likely</b>	<b>Total:</b>	<b>13</b>
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<b>Family:</b> Capniidae			
Isocapnia kudia	Within Known Range? N	Nearest Occurrence:	1,385.93 KM 51.25356°N 99.66687 °E
<b>Family:</b> Chloroperlidae			
Alloperla rostellata	Within Known Range? N	Nearest Occurrence:	964.52 KM 49.77776°N 103.60860 °E
Haploperla lepnevae	Within Known Range? N	Nearest Occurrence:	569.62 KM 47.82258°N 107.33613 °E
Suwallia kerzhneri	Within Known Range? N	Nearest Occurrence:	594.52 KM 48.12416°N 107.54780 °E
<b>Family:</b> Nemouridae			
Amphinemura borealis	Within Known Range? N	Nearest Occurrence:	569.62 KM 47.82258°N 107.33613 °E
Nemoura cinerea	Within Known Range? N	Nearest Occurrence:	576.47 KM 47.96783°N 107.59278 °E
<b>Family:</b> Perlidae			
Agnetina cocandica	Within Known Range? N	Nearest Occurrence:	809.13 KM 49.16354°N 105.18880 °E
Kamimuria exilis	Within Known Range? N	Nearest Occurrence:	1,384.93 KM 50.16278°N 98.84212 °E
<b>Family:</b> Perlodidae			
Arcynopteryx sajanensis	Within Known Range? N	Nearest Occurrence:	1,341.03 KM 51.61397°N 100.59972 °E
Diura bicaudata	Within Known Range? N	Nearest Occurrence:	1,112.88 KM 47.21768°N 99.92824 °E
Isoperla kozlovi	Within Known Range? N	Nearest Occurrence:	585.32 KM 48.13111°N 107.92120 °E
Pictetiella asiatica	Within Known Range? N	Nearest Occurrence:	1,347.53 KM 51.65822°N 100.53000 °E
<b>Family:</b> Pteronarcyidae			
Pteronarcys reticulata	Within Known Range? N	Nearest Occurrence:	704.56 KM 49.08636°N 107.30750 °E

<b>LOE Rating:</b>	<b>Probable</b>	<b>Total:</b>	<b>5</b>
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<b>Family:</b> Chloroperlidae			
Alloperla joosti	Within Known Range? N	Nearest Occurrence:	889.87 KM 46.78742°N 101.96021 °E
<b>Family:</b> Perlidae			
Agnetina brevipennis	Within Known Range? N	Nearest Occurrence:	704.56 KM 49.08636°N 107.30750 °E
<b>Family:</b> Perlodidae			
Isoperla asiatica	Within Known Range? N	Nearest Occurrence:	568.82 KM 47.82110°N 107.35422 °E
Isoperla lunigera	Within Known Range? N	Nearest Occurrence:	568.82 KM 47.82110°N 107.35422 °E
Isoperla obscura	Within Known Range? N	Nearest Occurrence:	683.55 KM 47.85250°N 105.25567 °E



**Basin:** Internal Drainage Basin  
**Aimag:** Sukhbaatar  
**Soum:** Khatanbulag

**Freshwater Ecoregion:** Inner Mongolia Endorheic Basins  
**Terrestrial Ecoregion:** Alashan Plateau Semi-Desert

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Possible Total: 6**

Family: Chloroperlidae						
Suwallia teleckojensis	Within Known Range? N	Nearest Occurrence:	595.90 KM	48.16668°N	107.69548°E	
Family: Leuctridae						
Paraleuctra zapekinae	Within Known Range? N	Nearest Occurrence:	581.32 KM	47.97944°N	107.47761°E	
Family: Perlodidae						
Isoperla altaica	Within Known Range? N	Nearest Occurrence:	639.38 KM	48.60182°N	107.84335°E	
Kaszabia nigricauda	Within Known Range? N	Nearest Occurrence:	576.47 KM	47.96783°N	107.59278°E	
Megarcys ochracea	Within Known Range? N	Nearest Occurrence:	579.86 KM	47.97108°N	107.49534°E	
Family: Taeniopterygidae						
Taenionema japonicum	Within Known Range? N	Nearest Occurrence:	704.69 KM	49.05411°N	107.23175°E	

**LOE Rating: Predicted Total: 17**

Family: Capniidae						
Capnia nigra	Within Known Range? N	Nearest Occurrence:	1,270.00 KM	50.51003°N	100.40375°E	
Mesocapnia variabilis	Within Known Range? N	Nearest Occurrence:	618.08 KM	48.42080°N	107.91406°E	
Family: Chloroperlidae						
Alaskaperla longidentata	Within Known Range? N	Nearest Occurrence:	583.26 KM	48.07956°N	107.77729°E	
Alloperla deminuta	Within Known Range? N	Nearest Occurrence:	569.62 KM	47.82258°N	107.33613°E	
Alloperla mediata	Within Known Range? N	Nearest Occurrence:	964.52 KM	49.77776°N	103.60860°E	
Family: Leuctridae						
Leuctra fusca	Within Known Range? N	Nearest Occurrence:	705.11 KM	49.08643°N	107.28952°E	
Family: Nemouridae						
Amphinemura standfussi	Within Known Range? N	Nearest Occurrence:	765.69 KM	49.73130°N	107.63484°E	
Nemoura arctica	Within Known Range? N	Nearest Occurrence:	582.44 KM	47.77758°N	106.92780°E	
Nemoura sahlbergi	Within Known Range? N	Nearest Occurrence:	594.83 KM	48.16668°N	107.69548°E	
Family: Perlidae						
Paragnetina flavotincta	Within Known Range? N	Nearest Occurrence:	807.68 KM	49.16354°N	105.18880°E	
Family: Perlodidae						
Arcynopteryx compacta	Within Known Range? N	Nearest Occurrence:	565.44 KM	47.84324°N	107.55299°E	
Arcynopteryx polaris	Within Known Range? N	Nearest Occurrence:	618.08 KM	48.42080°N	107.91406°E	
Diura majuscula	Within Known Range? N	Nearest Occurrence:	584.19 KM	47.99158°N	107.46116°E	
Isoperla eximia	Within Known Range? N	Nearest Occurrence:	638.23 KM	48.60182°N	107.84335°E	
Isoperla mongolica	Within Known Range? N	Nearest Occurrence:	584.38 KM	48.09549°N	107.84265°E	
Isoperla potanini	Within Known Range? N	Nearest Occurrence:	895.81 KM	46.73093°N	101.88583°E	
Skwala pusilla	Within Known Range? N	Nearest Occurrence:	2,357.13 KM	48.51277°N	88.51107°E	

**LOE Rating: Unlikely Total: 3**

Family: Capniidae						
Capnia khulsbagia	Within Known Range? N	Nearest Occurrence:	1,280.25 KM	50.98944°N	100.71944°E	
Mesocapnia altaica	Within Known Range? N	Nearest Occurrence:	2,313.15 KM	48.43684°N	88.90094°E	
Family: Nemouridae						
Nemurella pictetii	Within Known Range? N	Nearest Occurrence:	1,369.66 KM	51.07896°N	99.70857°E	

**Basin:** Internal Drainage Basin  
**Aimags:** Sukhbaatar  
**Soums:** Khovsgol

**Freshwater Ecoregion:** Inner Mongolia Endorheic Basins  
**Terrestrial Ecoregion:** Eastern Gobi Desert Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

<b>LOE Rating:</b>	<b>Highly Likely</b>	<b>Total:</b>	<b>4</b>
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<b>Family:</b> Capniidae			
Isocapnia guentheri	Within Known Range? N	Nearest Occurrence:	573.36 KM 47.99158°N 107.46116 °E
Isocapnia sibirica	Within Known Range? N	Nearest Occurrence:	565.06 KM 48.09549°N 107.84265 °E
<b>Family:</b> Perlidae			
Agnetina extrema	Within Known Range? N	Nearest Occurrence:	564.89 KM 48.09671°N 107.84928 °E
<b>Family:</b> Pteronarcyidae			
Pteronarcys reticulata	Within Known Range? N	Nearest Occurrence:	689.76 KM 49.08636°N 107.30750 °E

<b>LOE Rating:</b>	<b>Likely</b>	<b>Total:</b>	<b>12</b>
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<b>Family:</b> Capniidae			
Isocapnia kudia	Within Known Range? N	Nearest Occurrence:	1,429.80 KM 51.25356°N 99.66687 °E
<b>Family:</b> Chloroperlidae			
Alloperla rostellata	Within Known Range? N	Nearest Occurrence:	991.77 KM 49.77776°N 103.60860 °E
Haploperla lepnevae	Within Known Range? N	Nearest Occurrence:	563.82 KM 47.82258°N 107.33613 °E
Suwallia kerzhneri	Within Known Range? N	Nearest Occurrence:	581.97 KM 48.12416°N 107.54780 °E
<b>Family:</b> Nemouridae			
Amphinemura borealis	Within Known Range? N	Nearest Occurrence:	563.82 KM 47.82258°N 107.33613 °E
Nemoura cinerea	Within Known Range? N	Nearest Occurrence:	564.24 KM 47.96783°N 107.59278 °E
<b>Family:</b> Perlidae			
Agnetina cocandica	Within Known Range? N	Nearest Occurrence:	824.76 KM 49.16354°N 105.18880 °E
Kamimuria exilis	Within Known Range? N	Nearest Occurrence:	1,439.83 KM 50.16278°N 98.84212 °E
<b>Family:</b> Perlodidae			
Arcynopteryx sajanensis	Within Known Range? N	Nearest Occurrence:	1,377.45 KM 51.61397°N 100.59972 °E
Diura bicaudata	Within Known Range? N	Nearest Occurrence:	1,184.56 KM 47.21768°N 99.92824 °E
Isoperla kozlovi	Within Known Range? N	Nearest Occurrence:	565.21 KM 48.13111°N 107.92120 °E
Pictetiella asiatica	Within Known Range? N	Nearest Occurrence:	1,384.03 KM 51.65822°N 100.53000 °E

<b>LOE Rating:</b>	<b>Probable</b>	<b>Total:</b>	<b>6</b>
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<b>Family:</b> Chloroperlidae			
Alloperla joosti	Within Known Range? N	Nearest Occurrence:	957.34 KM 46.78742°N 101.96021 °E
<b>Family:</b> Leuctridae			
Paraleuctra zapekinae	Within Known Range? N	Nearest Occurrence:	564.89 KM 48.09671°N 107.84928 °E
<b>Family:</b> Perlidae			
Agnetina brevipennis	Within Known Range? N	Nearest Occurrence:	689.76 KM 49.08636°N 107.30750 °E
<b>Family:</b> Perlodidae			
Isoperla asiatica	Within Known Range? N	Nearest Occurrence:	562.67 KM 47.82110°N 107.35422 °E
Isoperla lunigera	Within Known Range? N	Nearest Occurrence:	562.67 KM 47.82110°N 107.35422 °E
Isoperla obscura	Within Known Range? N	Nearest Occurrence:	711.64 KM 47.85250°N 105.25567 °E



**Basin:** Internal Drainage Basin  
**Aimags:** Sukhbaatar  
**Soums:** Khovsgol

**Freshwater Ecoregion:** Inner Mongolia Endorheic Basins  
**Terrestrial Ecoregion:** Eastern Gobi Desert Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

<b>LOE Rating:</b>	<b>Possible</b>	<b>Total:</b>	<b>5</b>
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<b>Family:</b> Chloroperlidae						
Suwallia teleckojensis	Within Known Range? N	Nearest Occurrence:	580.08 KM	48.16668 °N	107.69548 °E	
<b>Family:</b> Perlodidae						
Isoperla altaica	Within Known Range? N	Nearest Occurrence:	617.92 KM	48.60182 °N	107.84335 °E	
Kaszabia nigricauda	Within Known Range? N	Nearest Occurrence:	564.24 KM	47.96783 °N	107.59278 °E	
Megarcys ochracea	Within Known Range? N	Nearest Occurrence:	569.57 KM	47.97108 °N	107.49534 °E	
<b>Family:</b> Taeniopterygidae						
Taenionema japonicum	Within Known Range? N	Nearest Occurrence:	691.34 KM	49.05411 °N	107.23175 °E	

<b>LOE Rating:</b>	<b>Predicted</b>	<b>Total:</b>	<b>17</b>
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<b>Family:</b> Capniidae						
Capnia nigra	Within Known Range? N	Nearest Occurrence:	1,312.33 KM	50.92452 °N	100.75528 °E	
Mesocapnia variabilis	Within Known Range? N	Nearest Occurrence:	596.31 KM	48.42080 °N	107.91406 °E	
<b>Family:</b> Chloroperlidae						
Alaskaperla longidentata	Within Known Range? N	Nearest Occurrence:	566.44 KM	48.07956 °N	107.77729 °E	
Alloperla deminuta	Within Known Range? N	Nearest Occurrence:	563.82 KM	47.82258 °N	107.33613 °E	
Alloperla mediata	Within Known Range? N	Nearest Occurrence:	991.77 KM	49.77776 °N	103.60860 °E	
<b>Family:</b> Leuctridae						
Leuctra fusca	Within Known Range? N	Nearest Occurrence:	690.61 KM	49.08643 °N	107.28952 °E	
<b>Family:</b> Nemouridae						
Amphinemura standfussi	Within Known Range? N	Nearest Occurrence:	742.22 KM	49.73130 °N	107.63484 °E	
Nemoura arctica	Within Known Range? N	Nearest Occurrence:	566.08 KM	48.09549 °N	107.84265 °E	
Nemoura sahlbergi	Within Known Range? N	Nearest Occurrence:	574.82 KM	48.21780 °N	107.90392 °E	
<b>Family:</b> Perlidae						
Paragnetina flavotincta	Within Known Range? N	Nearest Occurrence:	823.27 KM	49.16354 °N	105.18880 °E	
<b>Family:</b> Perlodidae						
Arcynopteryx compacta	Within Known Range? N	Nearest Occurrence:	555.03 KM	47.84324 °N	107.55299 °E	
Arcynopteryx polaris	Within Known Range? N	Nearest Occurrence:	596.31 KM	48.42080 °N	107.91406 °E	
Diura majuscula	Within Known Range? N	Nearest Occurrence:	565.90 KM	48.09671 °N	107.84928 °E	
Isoperla eximia	Within Known Range? N	Nearest Occurrence:	616.81 KM	48.60182 °N	107.84335 °E	
Isoperla mongolica	Within Known Range? N	Nearest Occurrence:	566.08 KM	48.09549 °N	107.84265 °E	
Isoperla potanini	Within Known Range? N	Nearest Occurrence:	964.30 KM	46.73093 °N	101.88583 °E	
Skwala pusilla	Within Known Range? N	Nearest Occurrence:	2,441.05 KM	48.51277 °N	88.51107 °E	

<b>LOE Rating:</b>	<b>Unlikely</b>	<b>Total:</b>	<b>3</b>
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<b>Family:</b> Capniidae						
Capnia khulsbagia	Within Known Range? N	Nearest Occurrence:	1,319.97 KM	50.98944 °N	100.71944 °E	
Mesocapnia altaica	Within Known Range? N	Nearest Occurrence:	2,397.00 KM	48.43684 °N	88.90094 °E	
<b>Family:</b> Nemouridae						
Nemurella pictetii	Within Known Range? N	Nearest Occurrence:	1,414.43 KM	51.07896 °N	99.70857 °E	



**Basin:** Internal Drainage Basin  
**Aimag:** Sukhbaatar  
**Soum:** Mandakh

**Freshwater Ecoregion:** Inner Mongolia Endorheic Basins  
**Terrestrial Ecoregion:** Alashan Plateau Semi-Desert

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

<b>LOE Rating:</b>	<b>Highly Likely</b>	<b>Total:</b>	<b>2</b>
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**Family:** Capniidae

Isocapnia guentheri      **Within Known Range?** N      **Nearest Occurrence:** 434.93 KM      47.99158°N      107.46116 °E

Isocapnia sibirica      **Within Known Range?** N      **Nearest Occurrence:** 438.41 KM      48.09549°N      107.84265 °E

<b>LOE Rating:</b>	<b>Likely</b>	<b>Total:</b>	<b>17</b>
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**Family:** Capniidae

Isocapnia kudia      **Within Known Range?** N      **Nearest Occurrence:** 1,245.57 KM      51.25356°N      99.66687 °E

**Family:** Chloroperlidae

Alloperla rostellata      **Within Known Range?** N      **Nearest Occurrence:** 816.23 KM      49.77776°N      103.60860 °E

Haploperla lepnevae      **Within Known Range?** N      **Nearest Occurrence:** 420.33 KM      47.82258°N      107.33613 °E

Suwallia kerzhneri      **Within Known Range?** N      **Nearest Occurrence:** 447.16 KM      48.12416°N      107.54780 °E

**Family:** Nemouridae

Amphinemura borealis      **Within Known Range?** N      **Nearest Occurrence:** 420.33 KM      47.82258°N      107.33613 °E

Nemoura cinerea      **Within Known Range?** N      **Nearest Occurrence:** 429.15 KM      47.96783°N      107.59278 °E

Nemoura cinerea      **Within Known Range?** N      **Nearest Occurrence:** 429.15 KM      47.96783°N      107.59278 °E

Nemoura cinerea      **Within Known Range?** N      **Nearest Occurrence:** 429.15 KM      47.96783°N      107.59278 °E

Nemoura cinerea      **Within Known Range?** N      **Nearest Occurrence:** 429.15 KM      47.96783°N      107.59278 °E

**Family:** Perlidae

Agnetina cocandica      **Within Known Range?** N      **Nearest Occurrence:** 657.81 KM      49.16354°N      105.18880 °E

Agnetina extrema      **Within Known Range?** N      **Nearest Occurrence:** 438.44 KM      48.09671°N      107.84928 °E

Kamimuria exilis      **Within Known Range?** N      **Nearest Occurrence:** 1,251.85 KM      50.16278°N      98.84212 °E

**Family:** Perlodidae

Arcynopteryx sajanensis      **Within Known Range?** N      **Nearest Occurrence:** 1,196.42 KM      51.61397°N      100.59972 °E

Diura bicaudata      **Within Known Range?** N      **Nearest Occurrence:** 996.81 KM      47.21768°N      99.92824 °E

Isoperla obscura      **Within Known Range?** N      **Nearest Occurrence:** 534.99 KM      47.85250°N      105.25567 °E

Pictetiella asiatica      **Within Known Range?** N      **Nearest Occurrence:** 1,203.26 KM      51.65822°N      100.53000 °E

**Family:** Pteronarcyidae

Pteronarcys reticulata      **Within Known Range?** N      **Nearest Occurrence:** 557.18 KM      49.08636°N      107.30750 °E

<b>LOE Rating:</b>	<b>Probable</b>	<b>Total:</b>	<b>4</b>
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**Family:** Perlidae

Agnetina brevipennis      **Within Known Range?** N      **Nearest Occurrence:** 557.18 KM      49.08636°N      107.30750 °E

**Family:** Perlodidae

Isoperla asiatica      **Within Known Range?** N      **Nearest Occurrence:** 419.62 KM      47.82110°N      107.35422 °E

Isoperla kozlovi      **Within Known Range?** N      **Nearest Occurrence:** 441.23 KM      48.13111°N      107.92120 °E

Isoperla lunigera      **Within Known Range?** N      **Nearest Occurrence:** 419.62 KM      47.82110°N      107.35422 °E



**Basin:** Internal Drainage Basin  
**Aimag:** Sukhbaatar  
**Soum:** Mandakh

**Freshwater Ecoregion:** Inner Mongolia Endorheic Basins  
**Terrestrial Ecoregion:** Alashan Plateau Semi-Desert

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Possible Total: 6**

<b>Family: Chloroperlidae</b>					
Alloperla joosti	Within Known Range? N	Nearest Occurrence:	769.03 KM	46.78742 °N	101.96021 °E
Suwallia teleckojensis	Within Known Range? N	Nearest Occurrence:	449.52 KM	48.16668 °N	107.69548 °E
<b>Family: Leuctridae</b>					
Paraleuctra zapekinae	Within Known Range? N	Nearest Occurrence:	433.19 KM	47.97944 °N	107.47761 °E
<b>Family: Perlodidae</b>					
Isoperla altaica	Within Known Range? N	Nearest Occurrence:	495.03 KM	48.60182 °N	107.84335 °E
Kaszabia nigricauda	Within Known Range? N	Nearest Occurrence:	429.15 KM	47.96783 °N	107.59278 °E
Megarcys ochracea	Within Known Range? N	Nearest Occurrence:	431.84 KM	47.97108 °N	107.49534 °E

**LOE Rating: Predicted Total: 16**

<b>Family: Capniidae</b>					
Capnia nigra	Within Known Range? N	Nearest Occurrence:	1,129.76 KM	50.92452 °N	100.75528 °E
Mesocapnia variabilis	Within Known Range? N	Nearest Occurrence:	474.12 KM	48.42080 °N	107.91406 °E
<b>Family: Chloroperlidae</b>					
Alloperla deminuta	Within Known Range? N	Nearest Occurrence:	420.33 KM	47.82258 °N	107.33613 °E
Alloperla mediata	Within Known Range? N	Nearest Occurrence:	816.23 KM	49.77776 °N	103.60860 °E
<b>Family: Leuctridae</b>					
Leuctra fusca	Within Known Range? N	Nearest Occurrence:	557.62 KM	49.08643 °N	107.28952 °E
<b>Family: Nemouridae</b>					
Amphinemura standfussi	Within Known Range? N	Nearest Occurrence:	621.44 KM	49.73130 °N	107.63484 °E
Nemoura arctica	Within Known Range? N	Nearest Occurrence:	431.15 KM	47.77758 °N	106.92780 °E
Nemoura sahlbergi	Within Known Range? N	Nearest Occurrence:	448.71 KM	48.16668 °N	107.69548 °E
<b>Family: Perlidae</b>					
Paragnetina flavotincta	Within Known Range? N	Nearest Occurrence:	656.63 KM	49.16354 °N	105.18880 °E
<b>Family: Perlodidae</b>					
Arcynopteryx compacta	Within Known Range? N	Nearest Occurrence:	417.32 KM	47.84324 °N	107.55299 °E
Arcynopteryx polaris	Within Known Range? N	Nearest Occurrence:	474.12 KM	48.42080 °N	107.91406 °E
Diura majuscula	Within Known Range? N	Nearest Occurrence:	435.71 KM	47.99158 °N	107.46116 °E
Isoperla eximia	Within Known Range? N	Nearest Occurrence:	494.14 KM	48.60182 °N	107.84335 °E
Isoperla mongolica	Within Known Range? N	Nearest Occurrence:	439.20 KM	48.09549 °N	107.84265 °E
Isoperla potanini	Within Known Range? N	Nearest Occurrence:	775.77 KM	46.73093 °N	101.88583 °E
Skwala pusilla	Within Known Range? N	Nearest Occurrence:	2,257.23 KM	48.51277 °N	88.51107 °E

**LOE Rating: Unlikely Total: 6**

<b>Family: Capniidae</b>					
Capnia khulsbagia	Within Known Range? N	Nearest Occurrence:	1,137.51 KM	50.98944 °N	100.71944 °E
Mesocapnia altaica	Within Known Range? N	Nearest Occurrence:	2,213.15 KM	48.43684 °N	88.90094 °E
<b>Family: Nemouridae</b>					
Nemurella pictetii	Within Known Range? N	Nearest Occurrence:	1,229.82 KM	51.07896 °N	99.70857 °E
Nemurella pictetii	Within Known Range? N	Nearest Occurrence:	1,229.82 KM	51.07896 °N	99.70857 °E
Nemurella pictetii	Within Known Range? N	Nearest Occurrence:	1,229.82 KM	51.07896 °N	99.70857 °E
Nemurella pictetii	Within Known Range? N	Nearest Occurrence:	1,229.82 KM	51.07896 °N	99.70857 °E

**Basin:** Internal Drainage Basin  
**Aimags:** Sukhbaatar  
**Soums:** Monkhhkhaan

**Freshwater Ecoregion:** Inner Mongolia Endorheic Basins  
**Terrestrial Ecoregion:** Mongolian-Manchurian Grassland

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Highly Likely Total: 6**

Family: Capniidae					
Isocapnia guentheri	Within Known Range? N	Nearest Occurrence:	499.58 KM	48.24734 °N	107.90589 °E
Isocapnia sibirica	Within Known Range? N	Nearest Occurrence:	502.48 KM	48.09549 °N	107.84265 °E
Family: Chloroperlidae					
Haploperla lepnevae	Within Known Range? N	Nearest Occurrence:	552.44 KM	47.82258 °N	107.33613 °E
Suwallia kerzhneri	Within Known Range? N	Nearest Occurrence:	535.14 KM	48.12416 °N	107.54780 °E
Family: Perlidae					
Agnetina extrema	Within Known Range? N	Nearest Occurrence:	501.79 KM	48.09671 °N	107.84928 °E
Family: Pteronarcyidae					
Pteronarcys reticulata	Within Known Range? N	Nearest Occurrence:	591.78 KM	49.08636 °N	107.30750 °E

**LOE Rating: Likely Total: 15**

Family: Capniidae					
Isocapnia kudia	Within Known Range? N	Nearest Occurrence:	1,471.54 KM	51.25356 °N	99.66687 °E
Family: Chloroperlidae					
Alloperla rostellata	Within Known Range? N	Nearest Occurrence:	1,004.93 KM	49.77776 °N	103.60860 °E
Family: Leuctridae					
Paraleuctra zapekinae	Within Known Range? N	Nearest Occurrence:	496.21 KM	48.14846 °N	107.91267 °E
Family: Nemouridae					
Amphinemura borealis	Within Known Range? N	Nearest Occurrence:	552.44 KM	47.82258 °N	107.33613 °E
Nemoura cinerea	Within Known Range? N	Nearest Occurrence:	526.89 KM	47.96783 °N	107.59278 °E
Family: Perlidae					
Agnetina brevipennis	Within Known Range? N	Nearest Occurrence:	591.78 KM	49.08636 °N	107.30750 °E
Agnetina cocandica	Within Known Range? N	Nearest Occurrence:	756.14 KM	50.06476 °N	106.13388 °E
Kamimuria exilis	Within Known Range? N	Nearest Occurrence:	1,530.30 KM	50.16278 °N	98.84212 °E
Family: Perlodidae					
Arcynopteryx sajanensis	Within Known Range? N	Nearest Occurrence:	1,389.91 KM	51.61397 °N	100.59972 °E
Isoperla asiatica	Within Known Range? N	Nearest Occurrence:	526.89 KM	47.96783 °N	107.59278 °E
Isoperla kozlovi	Within Known Range? N	Nearest Occurrence:	494.85 KM	48.13111 °N	107.92120 °E
Isoperla lunigera	Within Known Range? N	Nearest Occurrence:	502.48 KM	48.09549 °N	107.84265 °E
Kaszabia nigricauda	Within Known Range? N	Nearest Occurrence:	498.98 KM	48.21780 °N	107.90392 °E
Pictetiella asiatica	Within Known Range? N	Nearest Occurrence:	1,396.39 KM	51.65822 °N	100.53000 °E
Family: Taeniopterygidae					
Taenionema japonicum	Within Known Range? N	Nearest Occurrence:	599.40 KM	49.05411 °N	107.23175 °E

**LOE Rating: Probable Total: 3**

Family: Perlodidae					
Diura bicaudata	Within Known Range? N	Nearest Occurrence:	1,369.24 KM	47.21768 °N	99.92824 °E
Isoperla obscura	Within Known Range? N	Nearest Occurrence:	686.15 KM	49.72192 °N	106.65562 °E
Megaracys ochracea	Within Known Range? N	Nearest Occurrence:	537.60 KM	47.97108 °N	107.49534 °E





**Basin:** Internal Drainage Basin  
**Aimag:** Sukhbaatar  
**Soum:** Monkhhkhaan

**Freshwater Ecoregion:** Inner Mongolia Endorheic Basins  
**Terrestrial Ecoregion:** Mongolian-Manchurian Grassland

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

<b>LOE Rating:</b> Possible	<b>Total:</b> 4
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**Family:** Chloroperlidae

Alloperla deminuta	Within Known Range? N	Nearest Occurrence: 496.21 KM	48.14846°N	107.91267°E
Alloperla joosti	Within Known Range? N	Nearest Occurrence: 1,042.59 KM	49.21675°N	103.10750°E
Suwallia teleckojensis	Within Known Range? N	Nearest Occurrence: 504.79 KM	48.42080°N	107.91406°E

**Family:** Perlodidae

Isoperla altaica	Within Known Range? N	Nearest Occurrence: 518.36 KM	48.60182°N	107.84335°E
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<b>LOE Rating:</b> Predicted	<b>Total:</b> 16
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**Family:** Capniidae

Capnia nigra	Within Known Range? N	Nearest Occurrence: 1,345.36 KM	50.92452°N	100.75528°E
Mesocapnia variabilis	Within Known Range? N	Nearest Occurrence: 504.79 KM	48.42080°N	107.91406°E

**Family:** Chloroperlidae

Alaskaperla longidentata	Within Known Range? N	Nearest Occurrence: 496.21 KM	48.14846°N	107.91267°E
Alloperla mediata	Within Known Range? N	Nearest Occurrence: 1,004.93 KM	49.77776°N	103.60860°E

**Family:** Leuctridae

Leuctra fusca	Within Known Range? N	Nearest Occurrence: 593.64 KM	49.08643°N	107.28952°E
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**Family:** Nemouridae

Amphinemura standfussi	Within Known Range? N	Nearest Occurrence: 589.84 KM	49.73130°N	107.63484°E
Nemoura arctica	Within Known Range? N	Nearest Occurrence: 496.04 KM	48.13287°N	107.91890°E
Nemoura sahlbergi	Within Known Range? N	Nearest Occurrence: 498.98 KM	48.21780°N	107.90392°E

**Family:** Perlidae

Paragnetina flavotincta	Within Known Range? N	Nearest Occurrence: 754.77 KM	50.06476°N	106.13388°E
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**Family:** Perlodidae

Arcynopteryx compacta	Within Known Range? N	Nearest Occurrence: 529.92 KM	47.84324°N	107.55299°E
Arcynopteryx polaris	Within Known Range? N	Nearest Occurrence: 504.79 KM	48.42080°N	107.91406°E
Diura majuscula	Within Known Range? N	Nearest Occurrence: 496.04 KM	48.13287°N	107.91890°E
Isoperla eximia	Within Known Range? N	Nearest Occurrence: 517.43 KM	48.60182°N	107.84335°E
Isoperla mongolica	Within Known Range? N	Nearest Occurrence: 503.39 KM	48.09549°N	107.84265°E
Isoperla potanini	Within Known Range? N	Nearest Occurrence: 1,154.81 KM	46.73093°N	101.88583°E
Skwala pusilla	Within Known Range? N	Nearest Occurrence: 2,641.03 KM	48.51277°N	88.51107°E

<b>LOE Rating:</b> Unlikely	<b>Total:</b> 3
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**Family:** Capniidae

Capnia khulsbagia	Within Known Range? N	Nearest Occurrence: 1,351.41 KM	50.98944°N	100.71944°E
Mesocapnia altaica	Within Known Range? N	Nearest Occurrence: 2,597.34 KM	48.43684°N	88.90094°E

**Family:** Nemouridae

Nemurella pictetii	Within Known Range? N	Nearest Occurrence: 1,461.20 KM	51.07896°N	99.70857°E
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**Basin:** Internal Drainage Basin  
**Aimags:** Sukhbaatar  
**Soums:** Naran

**Freshwater Ecoregion:** Inner Mongolia Endorheic Basins  
**Terrestrial Ecoregion:** Eastern Gobi Desert Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Highly Likely Total: 6**

Family: Capniidae					
Isocapnia guentheri	Within Known Range? N	Nearest Occurrence:	725.02 KM	48.24734 °N	107.90589 °E
Isocapnia sibirica	Within Known Range? N	Nearest Occurrence:	723.11 KM	48.09549 °N	107.84265 °E
Family: Chloroperlidae					
Haploperla lepnevae	Within Known Range? N	Nearest Occurrence:	760.47 KM	47.82258 °N	107.33613 °E
Suwallia kerzhneri	Within Known Range? N	Nearest Occurrence:	753.62 KM	48.12416 °N	107.54780 °E
Family: Perlidae					
Agnetina extrema	Within Known Range? N	Nearest Occurrence:	722.52 KM	48.09671 °N	107.84928 °E
Family: Pteronarcyidae					
Pteronarcys reticulata	Within Known Range? N	Nearest Occurrence:	829.99 KM	49.08636 °N	107.30750 °E

**LOE Rating: Likely Total: 15**

Family: Capniidae					
Isocapnia kudia	Within Known Range? N	Nearest Occurrence:	1,693.06 KM	51.25356 °N	99.66687 °E
Family: Chloroperlidae					
Alloperla rostellata	Within Known Range? N	Nearest Occurrence:	1,227.06 KM	49.77776 °N	103.60860 °E
Family: Leuctridae					
Paraleuctra zapekinae	Within Known Range? N	Nearest Occurrence:	719.05 KM	48.14846 °N	107.91267 °E
Family: Nemouridae					
Amphinemura borealis	Within Known Range? N	Nearest Occurrence:	760.47 KM	47.82258 °N	107.33613 °E
Nemoura cinerea	Within Known Range? N	Nearest Occurrence:	741.42 KM	47.96783 °N	107.59278 °E
Family: Perlidae					
Agnetina brevipennis	Within Known Range? N	Nearest Occurrence:	829.99 KM	49.08636 °N	107.30750 °E
Agnetina cocandica	Within Known Range? N	Nearest Occurrence:	1,000.31 KM	50.06476 °N	106.13388 °E
Kamimuria exilis	Within Known Range? N	Nearest Occurrence:	1,736.84 KM	50.16278 °N	98.84212 °E
Family: Perlodidae					
Arcynopteryx sajanensis	Within Known Range? N	Nearest Occurrence:	1,619.58 KM	51.61397 °N	100.59972 °E
Diura bicaudata	Within Known Range? N	Nearest Occurrence:	1,536.51 KM	47.21768 °N	99.92824 °E
Isoperla asiatica	Within Known Range? N	Nearest Occurrence:	741.42 KM	47.96783 °N	107.59278 °E
Isoperla kozlovi	Within Known Range? N	Nearest Occurrence:	717.30 KM	48.13111 °N	107.92120 °E
Isoperla lunigera	Within Known Range? N	Nearest Occurrence:	723.11 KM	48.09549 °N	107.84265 °E
Kaszabia nigricauda	Within Known Range? N	Nearest Occurrence:	722.52 KM	48.09671 °N	107.84928 °E
Pictetiella asiatica	Within Known Range? N	Nearest Occurrence:	1,625.79 KM	51.65822 °N	100.53000 °E

**LOE Rating: Probable Total: 3**

Family: Perlodidae					
Isoperla obscura	Within Known Range? N	Nearest Occurrence:	929.22 KM	49.72192 °N	106.65562 °E
Megarcys ochracea	Within Known Range? N	Nearest Occurrence:	751.32 KM	47.97108 °N	107.49534 °E
Family: Taeniopterygidae					
Taenionema japonicum	Within Known Range? N	Nearest Occurrence:	836.67 KM	49.05411 °N	107.23175 °E



**Basin:** Internal Drainage Basin  
**Aimag:** Sukhbaatar  
**Soum:** Naran

**Freshwater Ecoregion:** Inner Mongolia Endorheic Basins  
**Terrestrial Ecoregion:** Eastern Gobi Desert Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

<b>LOE Rating:</b>	<b>Possible</b>	<b>Total:</b>	<b>3</b>
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**Family:** Chloroperlidae

Alloperla joosti	Within Known Range? N	Nearest Occurrence:	1,253.23 KM	49.21675 °N	103.10750 °E
Suwallia teleckojensis	Within Known Range? N	Nearest Occurrence:	735.20 KM	48.42080 °N	107.91406 °E

**Family:** Perlodidae

Isoperla altaica	Within Known Range? N	Nearest Occurrence:	752.35 KM	48.60182 °N	107.84335 °E
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<b>LOE Rating:</b>	<b>Predicted</b>	<b>Total:</b>	<b>17</b>
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**Family:** Capniidae

Capnia nigra	Within Known Range? N	Nearest Occurrence:	1,567.92 KM	50.92452 °N	100.75528 °E
Mesocapnia variabilis	Within Known Range? N	Nearest Occurrence:	735.20 KM	48.42080 °N	107.91406 °E

**Family:** Chloroperlidae

Alaskaperla longidentata	Within Known Range? N	Nearest Occurrence:	719.05 KM	48.14846 °N	107.91267 °E
Alloperla deminuta	Within Known Range? N	Nearest Occurrence:	719.05 KM	48.14846 °N	107.91267 °E
Alloperla mediata	Within Known Range? N	Nearest Occurrence:	1,227.06 KM	49.77776 °N	103.60860 °E

**Family:** Leuctridae

Leuctra fusca	Within Known Range? N	Nearest Occurrence:	831.68 KM	49.08643 °N	107.28952 °E
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**Family:** Nemouridae

Amphinemura standfussi	Within Known Range? N	Nearest Occurrence:	841.90 KM	49.73130 °N	107.63484 °E
Nemoura arctica	Within Known Range? N	Nearest Occurrence:	718.91 KM	48.13287 °N	107.91890 °E
Nemoura sahlbergi	Within Known Range? N	Nearest Occurrence:	723.61 KM	48.21780 °N	107.90392 °E

**Family:** Perlidae

Paragnetina flavotincta	Within Known Range? N	Nearest Occurrence:	998.51 KM	50.06476 °N	106.13388 °E
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**Family:** Perlodidae

Arcynopteryx compacta	Within Known Range? N	Nearest Occurrence:	740.82 KM	47.84324 °N	107.55299 °E
Arcynopteryx polaris	Within Known Range? N	Nearest Occurrence:	735.20 KM	48.42080 °N	107.91406 °E
Diura majuscula	Within Known Range? N	Nearest Occurrence:	718.91 KM	48.13287 °N	107.91890 °E
Isoperla eximia	Within Known Range? N	Nearest Occurrence:	751.00 KM	48.60182 °N	107.84335 °E
Isoperla mongolica	Within Known Range? N	Nearest Occurrence:	724.41 KM	48.09549 °N	107.84265 °E
Isoperla potanini	Within Known Range? N	Nearest Occurrence:	1,315.94 KM	46.73093 °N	101.88583 °E
Skwala pusilla	Within Known Range? N	Nearest Occurrence:	2,811.25 KM	48.51277 °N	88.51107 °E

<b>LOE Rating:</b>	<b>Unlikely</b>	<b>Total:</b>	<b>3</b>
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**Family:** Capniidae

Capnia khulsbagia	Within Known Range? N	Nearest Occurrence:	1,574.54 KM	50.98944 °N	100.71944 °E
Mesocapnia altaica	Within Known Range? N	Nearest Occurrence:	2,767.23 KM	48.43684 °N	88.90094 °E

**Family:** Nemouridae

Nemurella pictetii	Within Known Range? N	Nearest Occurrence:	1,681.01 KM	51.07896 °N	99.70857 °E
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**Basin:** Internal Drainage Basin  
**Aimag:** Sukhbaatar  
**Soum:** Ongon

**Freshwater Ecoregion:** Inner Mongolia Endorheic Basins  
**Terrestrial Ecoregion:** Mongolian-Manchurian Grassland

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Highly Likely Total: 6**

Family: Capniidae					
Isocapnia guentheri	Within Known Range? N	Nearest Occurrence:	652.32 KM	48.24734 °N	107.90589 °E
Isocapnia sibirica	Within Known Range? N	Nearest Occurrence:	650.56 KM	48.09549 °N	107.84265 °E
Family: Chloroperlidae					
Haploperla lepnevae	Within Known Range? N	Nearest Occurrence:	688.61 KM	47.82258 °N	107.33613 °E
Suwallia kerzhneri	Within Known Range? N	Nearest Occurrence:	681.20 KM	48.12416 °N	107.54780 °E
Family: Perlidae					
Agnetina extrema	Within Known Range? N	Nearest Occurrence:	649.97 KM	48.09671 °N	107.84928 °E
Family: Pteronarcyidae					
Pteronarcys reticulata	Within Known Range? N	Nearest Occurrence:	757.12 KM	49.08636 °N	107.30750 °E

**LOE Rating: Likely Total: 14**

Family: Capniidae					
Isocapnia kudia	Within Known Range? N	Nearest Occurrence:	1,621.12 KM	51.25356 °N	99.66687 °E
Family: Chloroperlidae					
Alloperla rostellata	Within Known Range? N	Nearest Occurrence:	1,154.88 KM	49.77776 °N	103.60860 °E
Family: Leuctridae					
Paraleuctra zapekinae	Within Known Range? N	Nearest Occurrence:	646.41 KM	48.14846 °N	107.91267 °E
Family: Nemouridae					
Amphinemura borealis	Within Known Range? N	Nearest Occurrence:	688.61 KM	47.82258 °N	107.33613 °E
Nemoura cinerea	Within Known Range? N	Nearest Occurrence:	669.17 KM	47.96783 °N	107.59278 °E
Family: Perlidae					
Agnetina brevipennis	Within Known Range? N	Nearest Occurrence:	757.12 KM	49.08636 °N	107.30750 °E
Agnetina cocandica	Within Known Range? N	Nearest Occurrence:	927.32 KM	50.06476 °N	106.13388 °E
Kamimuria exilis	Within Known Range? N	Nearest Occurrence:	1,666.07 KM	50.16278 °N	98.84212 °E
Family: Perlodidae					
Arcynopteryx sajanensis	Within Known Range? N	Nearest Occurrence:	1,547.03 KM	51.61397 °N	100.59972 °E
Diura bicaudata	Within Known Range? N	Nearest Occurrence:	1,470.23 KM	47.21768 °N	99.92824 °E
Isoperla asiatica	Within Known Range? N	Nearest Occurrence:	669.17 KM	47.96783 °N	107.59278 °E
Isoperla kozlovi	Within Known Range? N	Nearest Occurrence:	644.67 KM	48.13111 °N	107.92120 °E
Isoperla lunigera	Within Known Range? N	Nearest Occurrence:	650.56 KM	48.09549 °N	107.84265 °E
Pictetiella asiatica	Within Known Range? N	Nearest Occurrence:	1,553.37 KM	51.65822 °N	100.53000 °E

**LOE Rating: Probable Total: 4**

Family: Perlodidae					
Isoperla obscura	Within Known Range? N	Nearest Occurrence:	856.36 KM	49.72192 °N	106.65562 °E
Kaszabia nigricauda	Within Known Range? N	Nearest Occurrence:	649.97 KM	48.09671 °N	107.84928 °E
Megarcys ochracea	Within Known Range? N	Nearest Occurrence:	679.12 KM	47.97108 °N	107.49534 °E
Family: Taeniopterygidae					
Taenionema japonicum	Within Known Range? N	Nearest Occurrence:	763.68 KM	49.05411 °N	107.23175 °E



**Basin:** Internal Drainage Basin  
**Aimag:** Sukhbaatar  
**Soum:** Ongon

**Freshwater Ecoregion:** Inner Mongolia Endorheic Basins  
**Terrestrial Ecoregion:** Mongolian-Manchurian Grassland

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

<b>LOE Rating:</b>	<b>Possible</b>	<b>Total:</b>	<b>3</b>
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**Family:** Chloroperlidae

Alloperla joosti	Within Known Range? N	Nearest Occurrence:	1,181.87 KM	49.21675 °N	103.10750 °E
Suwallia teleckojensis	Within Known Range? N	Nearest Occurrence:	662.26 KM	48.42080 °N	107.91406 °E

**Family:** Perlodidae

Isoperla altaica	Within Known Range? N	Nearest Occurrence:	679.37 KM	48.60182 °N	107.84335 °E
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<b>LOE Rating:</b>	<b>Predicted</b>	<b>Total:</b>	<b>17</b>
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**Family:** Capniidae

Capnia nigra	Within Known Range? N	Nearest Occurrence:	1,495.87 KM	50.92452 °N	100.75528 °E
Mesocapnia variabilis	Within Known Range? N	Nearest Occurrence:	662.26 KM	48.42080 °N	107.91406 °E

**Family:** Chloroperlidae

Alaskaperla longidentata	Within Known Range? N	Nearest Occurrence:	646.41 KM	48.14846 °N	107.91267 °E
Alloperla deminuta	Within Known Range? N	Nearest Occurrence:	646.41 KM	48.14846 °N	107.91267 °E
Alloperla mediata	Within Known Range? N	Nearest Occurrence:	1,154.88 KM	49.77776 °N	103.60860 °E

**Family:** Leuctridae

Leuctra fusca	Within Known Range? N	Nearest Occurrence:	758.81 KM	49.08643 °N	107.28952 °E
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**Family:** Nemouridae

Amphinemura standfussi	Within Known Range? N	Nearest Occurrence:	769.35 KM	49.73130 °N	107.63484 °E
Nemoura arctica	Within Known Range? N	Nearest Occurrence:	646.15 KM	48.13287 °N	107.91890 °E
Nemoura sahlbergi	Within Known Range? N	Nearest Occurrence:	650.93 KM	48.21780 °N	107.90392 °E

**Family:** Perlidae

Paragnetina flavotincta	Within Known Range? N	Nearest Occurrence:	925.65 KM	50.06476 °N	106.13388 °E
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**Family:** Perlodidae

Arcynopteryx compacta	Within Known Range? N	Nearest Occurrence:	668.64 KM	47.84324 °N	107.55299 °E
Arcynopteryx polaris	Within Known Range? N	Nearest Occurrence:	662.26 KM	48.42080 °N	107.91406 °E
Diura majuscula	Within Known Range? N	Nearest Occurrence:	646.15 KM	48.13287 °N	107.91890 °E
Isoperla eximia	Within Known Range? N	Nearest Occurrence:	678.15 KM	48.60182 °N	107.84335 °E
Isoperla mongolica	Within Known Range? N	Nearest Occurrence:	651.73 KM	48.09549 °N	107.84265 °E
Isoperla potanini	Within Known Range? N	Nearest Occurrence:	1,250.06 KM	46.73093 °N	101.88583 °E
Skwala pusilla	Within Known Range? N	Nearest Occurrence:	2,745.46 KM	48.51277 °N	88.51107 °E

<b>LOE Rating:</b>	<b>Unlikely</b>	<b>Total:</b>	<b>3</b>
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**Family:** Capniidae

Capnia khulsbagia	Within Known Range? N	Nearest Occurrence:	1,502.46 KM	50.98944 °N	100.71944 °E
Mesocapnia altaica	Within Known Range? N	Nearest Occurrence:	2,701.47 KM	48.43684 °N	88.90094 °E

**Family:** Nemouridae

Nemurella pictetii	Within Known Range? N	Nearest Occurrence:	1,609.20 KM	51.07896 °N	99.70857 °E
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**Basin:** Internal Drainage Basin  
**Aimag:** Sukhbaatar  
**Soum:** **Orgon**

**Freshwater Ecoregion:** Inner Mongolia Endorheic Basins  
**Terrestrial Ecoregion:** Eastern Gobi Desert Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

<b>LOE Rating:</b>	<b>Highly Likely</b>	<b>Total:</b>	<b>5</b>
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<b>Family:</b> Capniidae			
Isocapnia guentheri	Within Known Range? N	Nearest Occurrence:	504.06 KM 48.24734°N 107.90589°E
Isocapnia sibirica	Within Known Range? N	Nearest Occurrence:	497.46 KM 48.09549°N 107.84265°E
<b>Family:</b> Chloroperlidae			
Haploperla lepnevae	Within Known Range? N	Nearest Occurrence:	521.62 KM 47.82258°N 107.33613°E
<b>Family:</b> Perlidae			
Agnetina extrema	Within Known Range? N	Nearest Occurrence:	497.01 KM 48.09671°N 107.84928°E
<b>Family:</b> Pteronarcyidae			
Pteronarcys reticulata	Within Known Range? N	Nearest Occurrence:	617.11 KM 49.08636°N 107.30750°E

<b>LOE Rating:</b>	<b>Likely</b>	<b>Total:</b>	<b>13</b>
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<b>Family:</b> Capniidae			
Isocapnia kudia	Within Known Range? N	Nearest Occurrence:	1,446.79 KM 51.25356°N 99.66687°E
<b>Family:</b> Chloroperlidae			
Alloperla rostellata	Within Known Range? N	Nearest Occurrence:	986.13 KM 49.77776°N 103.60860°E
Suwallia kerzhneri	Within Known Range? N	Nearest Occurrence:	524.01 KM 48.12416°N 107.54780°E
<b>Family:</b> Nemouridae			
Amphinemura borealis	Within Known Range? N	Nearest Occurrence:	521.62 KM 47.82258°N 107.33613°E
Nemoura cinerea	Within Known Range? N	Nearest Occurrence:	509.01 KM 47.96783°N 107.59278°E
<b>Family:</b> Perlidae			
Agnetina brevipennis	Within Known Range? N	Nearest Occurrence:	617.11 KM 49.08636°N 107.30750°E
Agnetina cocandica	Within Known Range? N	Nearest Occurrence:	787.21 KM 50.06476°N 106.13388°E
Kamimuria exilis	Within Known Range? N	Nearest Occurrence:	1,479.97 KM 50.16278°N 98.84212°E
<b>Family:</b> Perlodidae			
Arcynopteryx sajanensis	Within Known Range? N	Nearest Occurrence:	1,379.85 KM 51.61397°N 100.59972°E
Diura bicaudata	Within Known Range? N	Nearest Occurrence:	1,266.43 KM 47.21768°N 99.92824°E
Isoperla kozlovi	Within Known Range? N	Nearest Occurrence:	493.83 KM 48.13111°N 107.92120°E
Isoperla lunigera	Within Known Range? N	Nearest Occurrence:	497.46 KM 48.09549°N 107.84265°E
Pictetiella asiatica	Within Known Range? N	Nearest Occurrence:	1,386.54 KM 51.65822°N 100.53000°E

<b>LOE Rating:</b>	<b>Probable</b>	<b>Total:</b>	<b>5</b>
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<b>Family:</b> Chloroperlidae			
Alloperla joosti	Within Known Range? N	Nearest Occurrence:	1,003.45 KM 49.21675°N 103.10750°E
<b>Family:</b> Leuctridae			
Paraleuctra zapekinae	Within Known Range? N	Nearest Occurrence:	495.85 KM 48.14846°N 107.91267°E
<b>Family:</b> Perlodidae			
Isoperla asiatica	Within Known Range? N	Nearest Occurrence:	509.01 KM 47.96783°N 107.59278°E
Isoperla obscura	Within Known Range? N	Nearest Occurrence:	718.10 KM 49.72192°N 106.65562°E
Kaszabia nigricauda	Within Known Range? N	Nearest Occurrence:	497.01 KM 48.09671°N 107.84928°E



**Basin:** Internal Drainage Basin  
**Aimags:** Sukhbaatar  
**Soums:** Orgon

**Freshwater Ecoregion:** Inner Mongolia Endorheic Basins  
**Terrestrial Ecoregion:** Eastern Gobi Desert Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

<b>LOE Rating:</b>	<b>Possible</b>	<b>Total:</b>	<b>4</b>
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Family: Chloroperlidae						
	Suwallia teleckojensis	Within Known Range? N	Nearest Occurrence:	515.77 KM	48.16668 °N	107.69548 °E
Family: Perlodidae						
	Isoperla altaica	Within Known Range? N	Nearest Occurrence:	538.17 KM	48.60182 °N	107.84335 °E
	Megarcys ochracea	Within Known Range? N	Nearest Occurrence:	517.63 KM	47.97108 °N	107.49534 °E
Family: Taeniopterygidae						
	Taenionema japonicum	Within Known Range? N	Nearest Occurrence:	621.47 KM	49.05411 °N	107.23175 °E

<b>LOE Rating:</b>	<b>Predicted</b>	<b>Total:</b>	<b>17</b>
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Family: Capniidae						
	Capnia nigra	Within Known Range? N	Nearest Occurrence:	1,323.40 KM	50.92452 °N	100.75528 °E
	Mesocapnia variabilis	Within Known Range? N	Nearest Occurrence:	518.11 KM	48.42080 °N	107.91406 °E
Family: Chloroperlidae						
	Alaskaperla longidentata	Within Known Range? N	Nearest Occurrence:	495.85 KM	48.14846 °N	107.91267 °E
	Alloperla deminuta	Within Known Range? N	Nearest Occurrence:	495.85 KM	48.14846 °N	107.91267 °E
	Alloperla mediata	Within Known Range? N	Nearest Occurrence:	986.13 KM	49.77776 °N	103.60860 °E
Family: Leuctridae						
	Leuctra fusca	Within Known Range? N	Nearest Occurrence:	618.49 KM	49.08643 °N	107.28952 °E
Family: Nemouridae						
	Amphinemura standfussi	Within Known Range? N	Nearest Occurrence:	648.54 KM	49.73130 °N	107.63484 °E
	Nemoura arctica	Within Known Range? N	Nearest Occurrence:	495.04 KM	48.13287 °N	107.91890 °E
	Nemoura sahlbergi	Within Known Range? N	Nearest Occurrence:	501.91 KM	48.21780 °N	107.90392 °E
Family: Perlidae						
	Paragnetina flavotincta	Within Known Range? N	Nearest Occurrence:	785.79 KM	50.06476 °N	106.13388 °E
Family: Perlodidae						
	Arcynopteryx compacta	Within Known Range? N	Nearest Occurrence:	504.70 KM	47.84324 °N	107.55299 °E
	Arcynopteryx polaris	Within Known Range? N	Nearest Occurrence:	518.11 KM	48.42080 °N	107.91406 °E
	Diura majuscula	Within Known Range? N	Nearest Occurrence:	495.04 KM	48.13287 °N	107.91890 °E
	Isoperla eximia	Within Known Range? N	Nearest Occurrence:	537.20 KM	48.60182 °N	107.84335 °E
	Isoperla mongolica	Within Known Range? N	Nearest Occurrence:	498.36 KM	48.09549 °N	107.84265 °E
	Isoperla potanini	Within Known Range? N	Nearest Occurrence:	1,044.78 KM	46.73093 °N	101.88583 °E
	Skwala pusilla	Within Known Range? N	Nearest Occurrence:	2,539.92 KM	48.51277 °N	88.51107 °E

<b>LOE Rating:</b>	<b>Unlikely</b>	<b>Total:</b>	<b>3</b>
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Family: Capniidae						
	Capnia khulsbagia	Within Known Range? N	Nearest Occurrence:	1,330.42 KM	50.98944 °N	100.71944 °E
	Mesocapnia altaica	Within Known Range? N	Nearest Occurrence:	2,495.87 KM	48.43684 °N	88.90094 °E
Family: Nemouridae						
	Nemurella pictetii	Within Known Range? N	Nearest Occurrence:	1,433.58 KM	51.07896 °N	99.70857 °E



**Basin:** Internal Drainage Basin

**Aimag:** Sukhbaatar

**Soum:** Saikhandulaan

**Freshwater Ecoregion:** Inner Mongolia Endorheic Basins

**Terrestrial Ecoregion:** Eastern Gobi Desert Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Highly Likely Total: 4**

**Family:** Capniidae

Isocapnia guentheri **Within Known Range?** N **Nearest Occurrence:** 400.97 KM 47.99158°N 107.46116 °E

Isocapnia sibirica **Within Known Range?** N **Nearest Occurrence:** 392.48 KM 48.09549°N 107.84265 °E

**Family:** Perlidae

Agnetina extrema **Within Known Range?** N **Nearest Occurrence:** 392.31 KM 48.09671°N 107.84928 °E

**Family:** Pteronarcyidae

Pteronarcys reticulata **Within Known Range?** N **Nearest Occurrence:** 517.10 KM 49.08636°N 107.30750 °E

**LOE Rating: Likely Total: 15**

**Family:** Capniidae

Isocapnia kudia **Within Known Range?** N **Nearest Occurrence:** 1,278.52 KM 51.25356°N 99.66687 °E

**Family:** Chloroperlidae

Alloperla rostellata **Within Known Range?** N **Nearest Occurrence:** 830.75 KM 49.77776°N 103.60860 °E

Haploperla lepnevae **Within Known Range?** N **Nearest Occurrence:** 392.05 KM 47.82258°N 107.33613 °E

Suwallia kerzhneri **Within Known Range?** N **Nearest Occurrence:** 409.34 KM 48.12416°N 107.54780 °E

**Family:** Nemouridae

Amphinemura borealis **Within Known Range?** N **Nearest Occurrence:** 392.05 KM 47.82258°N 107.33613 °E

Nemoura cinerea **Within Known Range?** N **Nearest Occurrence:** 391.65 KM 47.96783°N 107.59278 °E

**Family:** Perlidae

Agnetina brevipennis **Within Known Range?** N **Nearest Occurrence:** 517.10 KM 49.08636°N 107.30750 °E

Agnetina cocandica **Within Known Range?** N **Nearest Occurrence:** 658.21 KM 49.16354°N 105.18880 °E

Kamimuria exilis **Within Known Range?** N **Nearest Occurrence:** 1,298.48 KM 50.16278°N 98.84212 °E

**Family:** Perlodidae

Arcynopteryx sajanensis **Within Known Range?** N **Nearest Occurrence:** 1,220.31 KM 51.61397°N 100.59972 °E

Diura bicaudata **Within Known Range?** N **Nearest Occurrence:** 1,066.47 KM 47.21768°N 99.92824 °E

Isoperla kozlovi **Within Known Range?** N **Nearest Occurrence:** 392.78 KM 48.13111°N 107.92120 °E

Isoperla lunigera **Within Known Range?** N **Nearest Occurrence:** 390.83 KM 47.82110°N 107.35422 °E

Isoperla obscura **Within Known Range?** N **Nearest Occurrence:** 553.88 KM 47.85250°N 105.25567 °E

Pictetiella asiatica **Within Known Range?** N **Nearest Occurrence:** 1,227.23 KM 51.65822°N 100.53000 °E

**LOE Rating: Probable Total: 2**

**Family:** Chloroperlidae

Alloperla joosti **Within Known Range?** N **Nearest Occurrence:** 835.75 KM 49.21675°N 103.10750 °E

**Family:** Perlodidae

Isoperla asiatica **Within Known Range?** N **Nearest Occurrence:** 390.83 KM 47.82110°N 107.35422 °E



**Basin:** Internal Drainage Basin  
**Aimag:** Sukhbaatar  
**Soum:** Saikhandulaan

**Freshwater Ecoregion:** Inner Mongolia Endorheic Basins  
**Terrestrial Ecoregion:** Eastern Gobi Desert Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Possible Total: 6**

Family: Chloroperlidae						
Suwallia teleckojensis	Within Known Range? N	Nearest Occurrence:	407.09 KM	48.16668 °N	107.69548 °E	
Family: Leuctridae						
Paraleuctra zapekinae	Within Known Range? N	Nearest Occurrence:	392.31 KM	48.09671 °N	107.84928 °E	
Family: Perlodidae						
Isoperla altaica	Within Known Range? N	Nearest Occurrence:	445.44 KM	48.60182 °N	107.84335 °E	
Kaszabia nigricauda	Within Known Range? N	Nearest Occurrence:	391.65 KM	47.96783 °N	107.59278 °E	
Megarcys ochracea	Within Known Range? N	Nearest Occurrence:	397.12 KM	47.97108 °N	107.49534 °E	
Family: Taeniopterygidae						
Taenionema japonicum	Within Known Range? N	Nearest Occurrence:	518.34 KM	49.05411 °N	107.23175 °E	

**LOE Rating: Predicted Total: 17**

Family: Capniidae						
Capnia nigra	Within Known Range? N	Nearest Occurrence:	1,158.39 KM	50.92452 °N	100.75528 °E	
Mesocapnia variabilis	Within Known Range? N	Nearest Occurrence:	423.83 KM	48.42080 °N	107.91406 °E	
Family: Chloroperlidae						
Alaskaperla longidentata	Within Known Range? N	Nearest Occurrence:	393.79 KM	48.07956 °N	107.77729 °E	
Alloperla deminuta	Within Known Range? N	Nearest Occurrence:	391.65 KM	47.96783 °N	107.59278 °E	
Alloperla mediata	Within Known Range? N	Nearest Occurrence:	830.75 KM	49.77776 °N	103.60860 °E	
Family: Leuctridae						
Leuctra fusca	Within Known Range? N	Nearest Occurrence:	517.94 KM	49.08643 °N	107.28952 °E	
Family: Nemouridae						
Amphinemura standfussi	Within Known Range? N	Nearest Occurrence:	570.64 KM	49.73130 °N	107.63484 °E	
Nemoura arctica	Within Known Range? N	Nearest Occurrence:	393.18 KM	48.09549 °N	107.84265 °E	
Nemoura sahlbergi	Within Known Range? N	Nearest Occurrence:	402.43 KM	48.21780 °N	107.90392 °E	
Family: Perlidae						
Paragnetina flavotincta	Within Known Range? N	Nearest Occurrence:	657.02 KM	49.16354 °N	105.18880 °E	
Family: Perlodidae						
Arcynopteryx compacta	Within Known Range? N	Nearest Occurrence:	382.30 KM	47.84324 °N	107.55299 °E	
Arcynopteryx polaris	Within Known Range? N	Nearest Occurrence:	423.83 KM	48.42080 °N	107.91406 °E	
Diura majuscula	Within Known Range? N	Nearest Occurrence:	393.02 KM	48.09671 °N	107.84928 °E	
Isoperla eximia	Within Known Range? N	Nearest Occurrence:	444.64 KM	48.60182 °N	107.84335 °E	
Isoperla mongolica	Within Known Range? N	Nearest Occurrence:	393.18 KM	48.09549 °N	107.84265 °E	
Isoperla potanini	Within Known Range? N	Nearest Occurrence:	844.08 KM	46.73093 °N	101.88583 °E	
Skwala pusilla	Within Known Range? N	Nearest Occurrence:	2,336.50 KM	48.51277 °N	88.51107 °E	

**LOE Rating: Unlikely Total: 3**

Family: Capniidae						
Capnia khulsbagia	Within Known Range? N	Nearest Occurrence:	1,165.83 KM	50.98944 °N	100.71944 °E	
Mesocapnia altaica	Within Known Range? N	Nearest Occurrence:	2,292.42 KM	48.43684 °N	88.90094 °E	
Family: Nemouridae						
Nemurella pictetii	Within Known Range? N	Nearest Occurrence:	1,263.97 KM	51.07896 °N	99.70857 °E	

**Basin:** Internal Drainage Basin  
**Aimags:** Sukhbaatar  
**Soums:** Sainshand

**Freshwater Ecoregion:** Inner Mongolia Endorheic Basins  
**Terrestrial Ecoregion:** Alashan Plateau Semi-Desert

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Highly Likely Total: 4**

Family: Capniidae					
Isocapnia guentheri	Within Known Range? N	Nearest Occurrence:	462.73 KM	48.24734°N	107.90589°E
Isocapnia sibirica	Within Known Range? N	Nearest Occurrence:	451.63 KM	48.09549°N	107.84265°E
Family: Perlidae					
Agnetina extrema	Within Known Range? N	Nearest Occurrence:	451.37 KM	48.09671°N	107.84928°E
Family: Pteronarcyidae					
Pteronarcys reticulata	Within Known Range? N	Nearest Occurrence:	576.54 KM	49.08636°N	107.30750°E

**LOE Rating: Likely Total: 14**

Family: Capniidae					
Isocapnia kudia	Within Known Range? N	Nearest Occurrence:	1,357.48 KM	51.25356°N	99.66687°E
Family: Chloroperlidae					
Alloperla rostellata	Within Known Range? N	Nearest Occurrence:	906.80 KM	49.77776°N	103.60860°E
Haploperla lepnevae	Within Known Range? N	Nearest Occurrence:	458.93 KM	47.82258°N	107.33613°E
Suwallia kerzhneri	Within Known Range? N	Nearest Occurrence:	471.90 KM	48.12416°N	107.54780°E
Family: Nemouridae					
Amphinemura borealis	Within Known Range? N	Nearest Occurrence:	458.93 KM	47.82258°N	107.33613°E
Nemoura cinerea	Within Known Range? N	Nearest Occurrence:	454.76 KM	47.96783°N	107.59278°E
Family: Perlidae					
Agnetina brevipennis	Within Known Range? N	Nearest Occurrence:	576.54 KM	49.08636°N	107.30750°E
Agnetina cocandica	Within Known Range? N	Nearest Occurrence:	731.54 KM	49.16354°N	105.18880°E
Kamimuria exilis	Within Known Range? N	Nearest Occurrence:	1,379.29 KM	50.16278°N	98.84212°E
Family: Perlodidae					
Arcynopteryx sajanensis	Within Known Range? N	Nearest Occurrence:	1,297.79 KM	51.61397°N	100.59972°E
Diura bicaudata	Within Known Range? N	Nearest Occurrence:	1,147.50 KM	47.21768°N	99.92824°E
Isoperla kozlovi	Within Known Range? N	Nearest Occurrence:	450.65 KM	48.13111°N	107.92120°E
Isoperla lunigera	Within Known Range? N	Nearest Occurrence:	451.63 KM	48.09549°N	107.84265°E
Pictetiella asiatica	Within Known Range? N	Nearest Occurrence:	1,304.60 KM	51.65822°N	100.53000°E

**LOE Rating: Probable Total: 4**

Family: Chloroperlidae					
Alloperla joosti	Within Known Range? N	Nearest Occurrence:	914.20 KM	49.21675°N	103.10750°E
Family: Leuctridae					
Paraleuctra zapekinae	Within Known Range? N	Nearest Occurrence:	451.37 KM	48.09671°N	107.84928°E
Family: Perlodidae					
Isoperla asiatica	Within Known Range? N	Nearest Occurrence:	454.76 KM	47.96783°N	107.59278°E
Isoperla obscura	Within Known Range? N	Nearest Occurrence:	631.90 KM	47.85250°N	105.25567°E



**Basin:** Internal Drainage Basin  
**Aimags:** Sukhbaatar  
**Soums:** Sainshand

**Freshwater Ecoregion:** Inner Mongolia Endorheic Basins  
**Terrestrial Ecoregion:** Alashan Plateau Semi-Desert

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

<b>LOE Rating:</b>	<b>Possible</b>	<b>Total:</b>	5
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<b>Family:</b> Chloroperlidae			
Suwallia teleckojensis	Within Known Range? N	Nearest Occurrence:	467.74 KM 48.16668°N 107.69548°E
<b>Family:</b> Perlodidae			
Isoperla altaica	Within Known Range? N	Nearest Occurrence:	501.57 KM 48.60182°N 107.84335°E
Kaszabia nigricauda	Within Known Range? N	Nearest Occurrence:	451.37 KM 48.09671°N 107.84928°E
Megarcys ochracea	Within Known Range? N	Nearest Occurrence:	461.31 KM 47.97108°N 107.49534°E
<b>Family:</b> Taeniopterygidae			
Taenionema japonicum	Within Known Range? N	Nearest Occurrence:	578.81 KM 49.05411°N 107.23175°E

<b>LOE Rating:</b>	<b>Predicted</b>	<b>Total:</b>	17
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<b>Family:</b> Capniidae			
Capnia nigra	Within Known Range? N	Nearest Occurrence:	1,236.72 KM 50.92452°N 100.75528°E
Mesocapnia variabilis	Within Known Range? N	Nearest Occurrence:	480.10 KM 48.42080°N 107.91406°E
<b>Family:</b> Chloroperlidae			
Alaskaperla longidentata	Within Known Range? N	Nearest Occurrence:	452.80 KM 48.14846°N 107.91267°E
Alloperla deminuta	Within Known Range? N	Nearest Occurrence:	451.93 KM 48.09694°N 107.83988°E
Alloperla mediata	Within Known Range? N	Nearest Occurrence:	906.80 KM 49.77776°N 103.60860°E
<b>Family:</b> Leuctridae			
Leuctra fusca	Within Known Range? N	Nearest Occurrence:	577.56 KM 49.08643°N 107.28952°E
<b>Family:</b> Nemouridae			
Amphinemura standfussi	Within Known Range? N	Nearest Occurrence:	623.66 KM 49.73130°N 107.63484°E
Nemoura arctica	Within Known Range? N	Nearest Occurrence:	451.76 KM 48.13287°N 107.91890°E
Nemoura sahlbergi	Within Known Range? N	Nearest Occurrence:	459.97 KM 48.21780°N 107.90392°E
<b>Family:</b> Perlidae			
Paragnetina flavotincta	Within Known Range? N	Nearest Occurrence:	730.22 KM 49.16354°N 105.18880°E
<b>Family:</b> Perlodidae			
Arcynopteryx compacta	Within Known Range? N	Nearest Occurrence:	446.87 KM 47.84324°N 107.55299°E
Arcynopteryx polaris	Within Known Range? N	Nearest Occurrence:	480.10 KM 48.42080°N 107.91406°E
Diura majuscula	Within Known Range? N	Nearest Occurrence:	451.76 KM 48.13287°N 107.91890°E
Isoperla eximia	Within Known Range? N	Nearest Occurrence:	500.67 KM 48.60182°N 107.84335°E
Isoperla mongolica	Within Known Range? N	Nearest Occurrence:	452.45 KM 48.09549°N 107.84265°E
Isoperla potanini	Within Known Range? N	Nearest Occurrence:	925.27 KM 46.73093°N 101.88583°E
Skwala pusilla	Within Known Range? N	Nearest Occurrence:	2,416.78 KM 48.51277°N 88.51107°E

<b>LOE Rating:</b>	<b>Unlikely</b>	<b>Total:</b>	3
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<b>Family:</b> Capniidae			
Capnia khulsbagia	Within Known Range? N	Nearest Occurrence:	1,244.09 KM 50.98944°N 100.71944°E
Mesocapnia altaica	Within Known Range? N	Nearest Occurrence:	2,372.69 KM 48.43684°N 88.90094°E
<b>Family:</b> Nemouridae			
Nemurella pictetii	Within Known Range? N	Nearest Occurrence:	1,343.12 KM 51.07896°N 99.70857°E



**Basin:** Internal Drainage Basin

**Aimag:** Sukhbaatar

**Soum:** Tuvshinshiree

Freshwater Ecoregion: Inner Mongolia Endorheic Basins

Terrestrial Ecoregion: Mongolian-Manchurian Grassland

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

<b>LOE Rating:</b>	<b>Highly Likely</b>	<b>Total:</b>	<b>12</b>
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Family: Capniidae

Isocapnia guentheri

Within Known Range? N Nearest Occurrence: 471.41 KM 48.24734 °N 107.90589 °E

Isocapnia guentheri

Within Known Range? N Nearest Occurrence: 471.41 KM 48.24734 °N 107.90589 °E

Isocapnia sibirica

Within Known Range? N Nearest Occurrence: 470.38 KM 48.09549 °N 107.84265 °E

Isocapnia sibirica

Within Known Range? N Nearest Occurrence: 470.38 KM 48.09549 °N 107.84265 °E

Family: Chloroperlidae

Haploperla lepnevae

Within Known Range? N Nearest Occurrence: 511.33 KM 47.82258 °N 107.33613 °E

Haploperla lepnevae

Within Known Range? N Nearest Occurrence: 511.33 KM 47.82258 °N 107.33613 °E

Suwallia kerzhneri

Within Known Range? N Nearest Occurrence: 501.55 KM 48.12416 °N 107.54780 °E

Suwallia kerzhneri

Within Known Range? N Nearest Occurrence: 501.55 KM 48.12416 °N 107.54780 °E

Family: Perlidae

Agnetina extrema

Within Known Range? N Nearest Occurrence: 469.77 KM 48.09671 °N 107.84928 °E

Agnetina extrema

Within Known Range? N Nearest Occurrence: 469.77 KM 48.09671 °N 107.84928 °E

Family: Pteronarcyidae

Pteronarcys reticulata

Within Known Range? N Nearest Occurrence: 575.26 KM 49.08636 °N 107.30750 °E

Pteronarcys reticulata

Within Known Range? N Nearest Occurrence: 575.26 KM 49.08636 °N 107.30750 °E

Research funded by the National Science Foundation

DEB-BSI #0206674: A Survey of the Aquatic Insects of the Selenge River Basin. P.I.'s: JKGelhaus, JCMorse, BHayford.

DEB # 0743732: Aquatic Insects of the Altai and Hangai Mountain Drainages. P.I.'s: JKGelhaus, JCMorse, CRNelson.

<http://clade.ansp.org/entomology/mongolia/index.html>



**Basin:** Internal Drainage Basin  
**Aimag:** Sukhbaatar  
**Soum:** Tuvshinshiree

**Freshwater Ecoregion:** Inner Mongolia Endorheic Basins  
**Terrestrial Ecoregion:** Mongolian-Manchurian Grassland

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

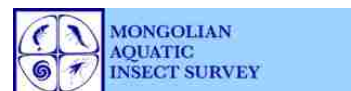
<b>LOE Rating:</b> Likely	<b>Total:</b> 26
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<b>Family:</b> Capniidae					
Isocapnia kudia	Within Known Range? N	Nearest Occurrence:	1,442.61 KM	51.25356 °N	99.66687 °E
Isocapnia kudia	Within Known Range? N	Nearest Occurrence:	1,442.61 KM	51.25356 °N	99.66687 °E
<b>Family:</b> Chloroperlidae					
Alloperla rostellata	Within Known Range? N	Nearest Occurrence:	975.75 KM	49.77776 °N	103.60860 °E
Alloperla rostellata	Within Known Range? N	Nearest Occurrence:	975.75 KM	49.77776 °N	103.60860 °E
<b>Family:</b> Leuctridae					
Paraleuctra zapekinae	Within Known Range? N	Nearest Occurrence:	465.86 KM	48.14846 °N	107.91267 °E
Paraleuctra zapekinae	Within Known Range? N	Nearest Occurrence:	465.86 KM	48.14846 °N	107.91267 °E
<b>Family:</b> Nemouridae					
Amphinemura borealis	Within Known Range? N	Nearest Occurrence:	511.33 KM	47.82258 °N	107.33613 °E
Amphinemura borealis	Within Known Range? N	Nearest Occurrence:	511.33 KM	47.82258 °N	107.33613 °E
Nemoura cinerea	Within Known Range? N	Nearest Occurrence:	490.26 KM	47.96783 °N	107.59278 °E
Nemoura cinerea	Within Known Range? N	Nearest Occurrence:	490.26 KM	47.96783 °N	107.59278 °E
<b>Family:</b> Perlidae					
Agnetina brevipennis	Within Known Range? N	Nearest Occurrence:	575.26 KM	49.08636 °N	107.30750 °E
Agnetina brevipennis	Within Known Range? N	Nearest Occurrence:	575.26 KM	49.08636 °N	107.30750 °E
Agnetina cocandica	Within Known Range? N	Nearest Occurrence:	745.05 KM	50.06476 °N	106.13388 °E
Agnetina cocandica	Within Known Range? N	Nearest Occurrence:	745.05 KM	50.06476 °N	106.13388 °E
Kamimuria exilis	Within Known Range? N	Nearest Occurrence:	1,491.31 KM	50.16278 °N	98.84212 °E
<b>Family:</b> Perlodidae					
Arcynopteryx sajanensis	Within Known Range? N	Nearest Occurrence:	1,366.58 KM	51.61397 °N	100.59972 °E
Diura bicaudata	Within Known Range? N	Nearest Occurrence:	1,309.52 KM	47.21768 °N	99.92824 °E
Diura bicaudata	Within Known Range? N	Nearest Occurrence:	1,309.52 KM	47.21768 °N	99.92824 °E
Isoperla asiatica	Within Known Range? N	Nearest Occurrence:	490.26 KM	47.96783 °N	107.59278 °E
Isoperla asiatica	Within Known Range? N	Nearest Occurrence:	490.26 KM	47.96783 °N	107.59278 °E
Isoperla kozlovi	Within Known Range? N	Nearest Occurrence:	464.17 KM	48.13111 °N	107.92120 °E
Isoperla kozlovi	Within Known Range? N	Nearest Occurrence:	464.17 KM	48.13111 °N	107.92120 °E
Isoperla lunigera	Within Known Range? N	Nearest Occurrence:	470.38 KM	48.09549 °N	107.84265 °E
Isoperla lunigera	Within Known Range? N	Nearest Occurrence:	470.38 KM	48.09549 °N	107.84265 °E
Pictetiella asiatica	Within Known Range? N	Nearest Occurrence:	1,373.22 KM	51.65822 °N	100.53000 °E
Pictetiella asiatica	Within Known Range? N	Nearest Occurrence:	1,373.22 KM	51.65822 °N	100.53000 °E

<b>LOE Rating:</b> Probable	<b>Total:</b> 8
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<b>Family:</b> Perlodidae					
Isoperla obscura	Within Known Range? N	Nearest Occurrence:	674.42 KM	49.72192 °N	106.65562 °E
Isoperla obscura	Within Known Range? N	Nearest Occurrence:	674.42 KM	49.72192 °N	106.65562 °E
Kaszabia nigricauda	Within Known Range? N	Nearest Occurrence:	469.77 KM	48.09671 °N	107.84928 °E
Kaszabia nigricauda	Within Known Range? N	Nearest Occurrence:	469.77 KM	48.09671 °N	107.84928 °E
Megarcys ochracea	Within Known Range? N	Nearest Occurrence:	500.44 KM	47.97108 °N	107.49534 °E
Megarcys ochracea	Within Known Range? N	Nearest Occurrence:	500.44 KM	47.97108 °N	107.49534 °E
<b>Family:</b> Taeniopterygidae					
Taenionema japonicum	Within Known Range? N	Nearest Occurrence:	581.56 KM	49.05411 °N	107.23175 °E
Taenionema japonicum	Within Known Range? N	Nearest Occurrence:	581.56 KM	49.05411 °N	107.23175 °E

Research funded by the National Science Foundation  
 DEB-BSI #0206674: A Survey of the Aquatic Insects of the Selenge River Basin. P.I.'s: JKGelhaus, JCMorse, BHayford.  
 DEB # 0743732: Aquatic Insects of the Altai and Hangai Mountain Drainages. P.I.'s: JKGelhaus, JCMorse, CRNelson.  
<http://clade.ansp.org/entomology/mongolia/index.html>



**Basin:** Internal Drainage Basin

**Aimag:** Sukhbaatar

**Soum:** Tuvshinshiree

Freshwater Ecoregion: Inner Mongolia Endorheic Basins

Terrestrial Ecoregion: Mongolian-Manchurian Grassland

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

<b>LOE Rating:</b>	<b>Possible</b>	<b>Total:</b>	<b>6</b>
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Family: Chloroperlidae

Alloperla joosti

Within Known Range? N Nearest Occurrence: 1,005.54 KM 49.21675 °N 103.10750 °E

Alloperla joosti

Within Known Range? N Nearest Occurrence: 1,005.54 KM 49.21675 °N 103.10750 °E

Suwallia teleckojensis

Within Known Range? N Nearest Occurrence: 480.51 KM 48.42080 °N 107.91406 °E

Suwallia teleckojensis

Within Known Range? N Nearest Occurrence: 480.51 KM 48.42080 °N 107.91406 °E

Family: Perlodidae

Isoperla altaica

Within Known Range? N Nearest Occurrence: 497.35 KM 48.60182 °N 107.84335 °E

Isoperla altaica

Within Known Range? N Nearest Occurrence: 497.35 KM 48.60182 °N 107.84335 °E

Research funded by the National Science Foundation

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<http://clade.ansp.org/entomology/mongolia/index.html>



**Basin:** Internal Drainage Basin  
**Aimag:** Sukhbaatar  
**Soum:** Tuvshinshiree

**Freshwater Ecoregion:** Inner Mongolia Endorheic Basins  
**Terrestrial Ecoregion:** Mongolian-Manchurian Grassland

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

<b>LOE Rating:</b>	<b>Predicted</b>	<b>Total:</b>	34
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**Family:** Capniidae

Capnia nigra	Within Known Range? N	Nearest Occurrence: 1,317.03 KM	50.92452 °N	100.75528 °E
Capnia nigra	Within Known Range? N	Nearest Occurrence: 1,317.03 KM	50.92452 °N	100.75528 °E
Mesocapnia variabilis	Within Known Range? N	Nearest Occurrence: 480.51 KM	48.42080 °N	107.91406 °E
Mesocapnia variabilis	Within Known Range? N	Nearest Occurrence: 480.51 KM	48.42080 °N	107.91406 °E

**Family:** Chloroperlidae

Alaskaperla longidentata	Within Known Range? N	Nearest Occurrence: 465.86 KM	48.14846 °N	107.91267 °E
Alaskaperla longidentata	Within Known Range? N	Nearest Occurrence: 465.86 KM	48.14846 °N	107.91267 °E
Alloperla deminuta	Within Known Range? N	Nearest Occurrence: 465.86 KM	48.14846 °N	107.91267 °E
Alloperla deminuta	Within Known Range? N	Nearest Occurrence: 465.86 KM	48.14846 °N	107.91267 °E
Alloperla mediata	Within Known Range? N	Nearest Occurrence: 975.75 KM	49.77776 °N	103.60860 °E
Alloperla mediata	Within Known Range? N	Nearest Occurrence: 975.75 KM	49.77776 °N	103.60860 °E

**Family:** Leuctridae

Leuctra fusca	Within Known Range? N	Nearest Occurrence: 576.95 KM	49.08643 °N	107.28952 °E
Leuctra fusca	Within Known Range? N	Nearest Occurrence: 576.95 KM	49.08643 °N	107.28952 °E

**Family:** Nemouridae

Amphinemura standfussi	Within Known Range? N	Nearest Occurrence: 588.15 KM	49.73130 °N	107.63484 °E
Amphinemura standfussi	Within Known Range? N	Nearest Occurrence: 588.15 KM	49.73130 °N	107.63484 °E
Nemoura arctica	Within Known Range? N	Nearest Occurrence: 465.32 KM	48.13287 °N	107.91890 °E
Nemoura arctica	Within Known Range? N	Nearest Occurrence: 465.32 KM	48.13287 °N	107.91890 °E
Nemoura sahlbergi	Within Known Range? N	Nearest Occurrence: 470.13 KM	48.21780 °N	107.90392 °E
Nemoura sahlbergi	Within Known Range? N	Nearest Occurrence: 470.13 KM	48.21780 °N	107.90392 °E

**Family:** Perlidae

Paragnetina flavotincta	Within Known Range? N	Nearest Occurrence: 743.71 KM	50.06476 °N	106.13388 °E
Paragnetina flavotincta	Within Known Range? N	Nearest Occurrence: 743.71 KM	50.06476 °N	106.13388 °E

**Family:** Perlodidae

Arcynopteryx compacta	Within Known Range? N	Nearest Occurrence: 490.30 KM	47.84324 °N	107.55299 °E
Arcynopteryx compacta	Within Known Range? N	Nearest Occurrence: 490.30 KM	47.84324 °N	107.55299 °E
Arcynopteryx polaris	Within Known Range? N	Nearest Occurrence: 480.51 KM	48.42080 °N	107.91406 °E
Arcynopteryx polaris	Within Known Range? N	Nearest Occurrence: 480.51 KM	48.42080 °N	107.91406 °E
Diura majuscula	Within Known Range? N	Nearest Occurrence: 465.32 KM	48.13287 °N	107.91890 °E
Diura majuscula	Within Known Range? N	Nearest Occurrence: 465.32 KM	48.13287 °N	107.91890 °E
Isoperla eximia	Within Known Range? N	Nearest Occurrence: 496.45 KM	48.60182 °N	107.84335 °E
Isoperla eximia	Within Known Range? N	Nearest Occurrence: 496.45 KM	48.60182 °N	107.84335 °E
Isoperla mongolica	Within Known Range? N	Nearest Occurrence: 471.23 KM	48.09549 °N	107.84265 °E
Isoperla mongolica	Within Known Range? N	Nearest Occurrence: 471.23 KM	48.09549 °N	107.84265 °E
Isoperla potanini	Within Known Range? N	Nearest Occurrence: 1,091.36 KM	46.73093 °N	101.88583 °E
Isoperla potanini	Within Known Range? N	Nearest Occurrence: 1,091.36 KM	46.73093 °N	101.88583 °E
Skwala pusilla	Within Known Range? N	Nearest Occurrence: 2,584.51 KM	48.51277 °N	88.51107 °E
Skwala pusilla	Within Known Range? N	Nearest Occurrence: 2,584.51 KM	48.51277 °N	88.51107 °E



**Basin:** Internal Drainage Basin

**Aimag:** Sukhbaatar

**Soum:** Tuvshinshiree

Freshwater Ecoregion: Inner Mongolia Endorheic Basins

Terrestrial Ecoregion: Mongolian-Manchurian Grassland

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

<b>LOE Rating:</b> Unlikely	<b>Total:</b> 6
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Family: Capniidae

Capnia khulsbagia

Within Known Range? N Nearest Occurrence: 1,323.50 KM 50.98944 °N 100.71944 °E

Capnia khulsbagia

Within Known Range? N Nearest Occurrence: 1,323.50 KM 50.98944 °N 100.71944 °E

Mesocapnia altaica

Within Known Range? N Nearest Occurrence: 2,540.64 KM 48.43684 °N 88.90094 °E

Mesocapnia altaica

Within Known Range? N Nearest Occurrence: 2,540.64 KM 48.43684 °N 88.90094 °E

Family: Nemouridae

Nemurella pictetii

Within Known Range? N Nearest Occurrence: 1,431.07 KM 51.07896 °N 99.70857 °E

Nemurella pictetii

Within Known Range? N Nearest Occurrence: 1,431.07 KM 51.07896 °N 99.70857 °E

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<http://clade.ansp.org/entomology/mongolia/index.html>





**Basin:** Internal Drainage Basin  
**Aimags:** Sukhbaatar  
**Soums:** Ulaanbadrakh

**Freshwater Ecoregion:** Inner Mongolia Endorheic Basins  
**Terrestrial Ecoregion:** Eastern Gobi Desert Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Highly Likely Total: 4**

Family: Capniidae					
Isocapnia guentheri	Within Known Range? N	Nearest Occurrence:	549.49 KM	48.24734 °N	107.90589 °E
Isocapnia sibirica	Within Known Range? N	Nearest Occurrence:	538.23 KM	48.09549 °N	107.84265 °E
Family: Perlidae					
Agnetina extrema	Within Known Range? N	Nearest Occurrence:	537.97 KM	48.09671 °N	107.84928 °E
Family: Pteronarcyidae					
Pteronarcys reticulata	Within Known Range? N	Nearest Occurrence:	663.18 KM	49.08636 °N	107.30750 °E

**LOE Rating: Likely Total: 13**

Family: Capniidae					
Isocapnia kudia	Within Known Range? N	Nearest Occurrence:	1,432.56 KM	51.25356 °N	99.66687 °E
Family: Chloroperlidae					
Alloperla rostellata	Within Known Range? N	Nearest Occurrence:	986.36 KM	49.77776 °N	103.60860 °E
Haploperla lepnevae	Within Known Range? N	Nearest Occurrence:	543.94 KM	47.82258 °N	107.33613 °E
Suwallia kerzhneri	Within Known Range? N	Nearest Occurrence:	558.02 KM	48.12416 °N	107.54780 °E
Family: Nemouridae					
Amphinemura borealis	Within Known Range? N	Nearest Occurrence:	543.94 KM	47.82258 °N	107.33613 °E
Nemoura cinerea	Within Known Range? N	Nearest Occurrence:	540.76 KM	47.96783 °N	107.59278 °E
Family: Perlidae					
Agnetina cocandica	Within Known Range? N	Nearest Occurrence:	813.77 KM	49.16354 °N	105.18880 °E
Kamimuria exilis	Within Known Range? N	Nearest Occurrence:	1,449.37 KM	50.16278 °N	98.84212 °E
Family: Perlodidae					
Arcynopteryx sajanensis	Within Known Range? N	Nearest Occurrence:	1,375.81 KM	51.61397 °N	100.59972 °E
Diura bicaudata	Within Known Range? N	Nearest Occurrence:	1,205.84 KM	47.21768 °N	99.92824 °E
Isoperla kozlovi	Within Known Range? N	Nearest Occurrence:	537.36 KM	48.13111 °N	107.92120 °E
Isoperla lunigera	Within Known Range? N	Nearest Occurrence:	538.23 KM	48.09549 °N	107.84265 °E
Pictetiella asiatica	Within Known Range? N	Nearest Occurrence:	1,382.45 KM	51.65822 °N	100.53000 °E

**LOE Rating: Probable Total: 5**

Family: Chloroperlidae					
Alloperla joosti	Within Known Range? N	Nearest Occurrence:	976.76 KM	46.78742 °N	101.96021 °E
Family: Leuctridae					
Paraleuctra zapekinae	Within Known Range? N	Nearest Occurrence:	537.97 KM	48.09671 °N	107.84928 °E
Family: Perlidae					
Agnetina brevipennis	Within Known Range? N	Nearest Occurrence:	663.18 KM	49.08636 °N	107.30750 °E
Family: Perlodidae					
Isoperla asiatica	Within Known Range? N	Nearest Occurrence:	540.76 KM	47.96783 °N	107.59278 °E
Isoperla obscura	Within Known Range? N	Nearest Occurrence:	708.97 KM	47.85250 °N	105.25567 °E



**Basin:** Internal Drainage Basin  
**Aimag:** Sukhbaatar  
**Soum:** Ulaanbadrakh

**Freshwater Ecoregion:** Inner Mongolia Endorheic Basins  
**Terrestrial Ecoregion:** Eastern Gobi Desert Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

<b>LOE Rating:</b> Possible	<b>Total:</b> 5
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<b>Family:</b> Chloroperlidae					
Suwallia teleckojensis	Within Known Range? N	Nearest Occurrence:	554.33 KM	48.16668 °N	107.69548 °E
<b>Family:</b> Perlodidae					
Isoperla altaica	Within Known Range? N	Nearest Occurrence:	588.55 KM	48.60182 °N	107.84335 °E
Kasabalia nigricauda	Within Known Range? N	Nearest Occurrence:	537.97 KM	48.09671 °N	107.84928 °E
Megarcys ochracea	Within Known Range? N	Nearest Occurrence:	547.08 KM	47.97108 °N	107.49534 °E
<b>Family:</b> Taeniopterygidae					
Taenionema japonicum	Within Known Range? N	Nearest Occurrence:	665.50 KM	49.05411 °N	107.23175 °E

<b>LOE Rating:</b> Predicted	<b>Total:</b> 17
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<b>Family:</b> Capniidae					
Capnia nigra	Within Known Range? N	Nearest Occurrence:	1,313.04 KM	50.92452 °N	100.75528 °E
Mesocapnia variabilis	Within Known Range? N	Nearest Occurrence:	567.07 KM	48.42080 °N	107.91406 °E
<b>Family:</b> Chloroperlidae					
Alaskaperla longidentata	Within Known Range? N	Nearest Occurrence:	539.51 KM	48.14846 °N	107.91267 °E
Alloperla deminuta	Within Known Range? N	Nearest Occurrence:	538.52 KM	48.09694 °N	107.83988 °E
Alloperla mediata	Within Known Range? N	Nearest Occurrence:	986.36 KM	49.77776 °N	103.60860 °E
<b>Family:</b> Leuctridae					
Leuctra fusca	Within Known Range? N	Nearest Occurrence:	664.18 KM	49.08643 °N	107.28952 °E
<b>Family:</b> Nemouridae					
Amphinemura standfussi	Within Known Range? N	Nearest Occurrence:	710.48 KM	49.73130 °N	107.63484 °E
Nemoura arctica	Within Known Range? N	Nearest Occurrence:	538.62 KM	48.13287 °N	107.91890 °E
Nemoura sahlbergi	Within Known Range? N	Nearest Occurrence:	546.71 KM	48.21780 °N	107.90392 °E
<b>Family:</b> Perlidae					
Paragnetina flavotincta	Within Known Range? N	Nearest Occurrence:	812.31 KM	49.16354 °N	105.18880 °E
<b>Family:</b> Perlodidae					
Arcynopteryx compacta	Within Known Range? N	Nearest Occurrence:	532.71 KM	47.84324 °N	107.55299 °E
Arcynopteryx polaris	Within Known Range? N	Nearest Occurrence:	567.07 KM	48.42080 °N	107.91406 °E
Diura majuscula	Within Known Range? N	Nearest Occurrence:	538.62 KM	48.13287 °N	107.91890 °E
Isoperla eximia	Within Known Range? N	Nearest Occurrence:	587.50 KM	48.60182 °N	107.84335 °E
Isoperla mongolica	Within Known Range? N	Nearest Occurrence:	539.19 KM	48.09549 °N	107.84265 °E
Isoperla potanini	Within Known Range? N	Nearest Occurrence:	984.31 KM	46.73093 °N	101.88583 °E
Skwala pusilla	Within Known Range? N	Nearest Occurrence:	2,469.20 KM	48.51277 °N	88.51107 °E

<b>LOE Rating:</b> Unlikely	<b>Total:</b> 3
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<b>Family:</b> Capniidae					
Capnia khulsbagia	Within Known Range? N	Nearest Occurrence:	1,320.52 KM	50.98944 °N	100.71944 °E
Mesocapnia altaica	Within Known Range? N	Nearest Occurrence:	2,425.11 KM	48.43684 °N	88.90094 °E
<b>Family:</b> Nemouridae					
Nemurella pictetii	Within Known Range? N	Nearest Occurrence:	1,417.77 KM	51.07896 °N	99.70857 °E



**Basin:** Internal Drainage Basin

**Aimag:** Sukhbaatar

**Soum:** Uulbayan

Freshwater Ecoregion: Inner Mongolia Endorheic Basins

Terrestrial Ecoregion: Mongolian-Manchurian Grassland

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

<b>LOE Rating:</b>	<b>Highly Likely</b>	<b>Total:</b>	<b>12</b>
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Family: Capniidae

Isocapnia guentheri	Within Known Range? N	Nearest Occurrence:	530.25 KM	48.24734 °N	107.90589 °E
Isocapnia guentheri	Within Known Range? N	Nearest Occurrence:	530.25 KM	48.24734 °N	107.90589 °E
Isocapnia sibirica	Within Known Range? N	Nearest Occurrence:	531.23 KM	48.09549 °N	107.84265 °E
Isocapnia sibirica	Within Known Range? N	Nearest Occurrence:	531.23 KM	48.09549 °N	107.84265 °E

Family: Chloroperlidae

Haploperla lepnevae	Within Known Range? N	Nearest Occurrence:	576.79 KM	47.82258 °N	107.33613 °E
Haploperla lepnevae	Within Known Range? N	Nearest Occurrence:	576.79 KM	47.82258 °N	107.33613 °E
Suwallia kerzhneri	Within Known Range? N	Nearest Occurrence:	563.32 KM	48.12416 °N	107.54780 °E
Suwallia kerzhneri	Within Known Range? N	Nearest Occurrence:	563.32 KM	48.12416 °N	107.54780 °E

Family: Perlidae

Agnetina extrema	Within Known Range? N	Nearest Occurrence:	530.57 KM	48.09671 °N	107.84928 °E
Agnetina extrema	Within Known Range? N	Nearest Occurrence:	530.57 KM	48.09671 °N	107.84928 °E

Family: Pteronarcyidae

Pteronarcys reticulata	Within Known Range? N	Nearest Occurrence:	628.35 KM	49.08636 °N	107.30750 °E
Pteronarcys reticulata	Within Known Range? N	Nearest Occurrence:	628.35 KM	49.08636 °N	107.30750 °E

**Basin:** Internal Drainage Basin  
**Aimag:** Sukhbaatar  
**Soum:** Uulbayan

**Freshwater Ecoregion:** Inner Mongolia Endorheic Basins  
**Terrestrial Ecoregion:** Mongolian-Manchurian Grassland

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

<b>LOE Rating:</b> Likely	<b>Total:</b> 28
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<b>Family:</b> Capniidae					
Isocapnia kudia	Within Known Range? N	Nearest Occurrence:	1,503.74 KM	51.25356°N	99.66687°E
Isocapnia kudia	Within Known Range? N	Nearest Occurrence:	1,503.74 KM	51.25356°N	99.66687°E
<b>Family:</b> Chloroperlidae					
Alloperla rostellata	Within Known Range? N	Nearest Occurrence:	1,036.56 KM	49.77776°N	103.60860°E
Alloperla rostellata	Within Known Range? N	Nearest Occurrence:	1,036.56 KM	49.77776°N	103.60860°E
<b>Family:</b> Leuctridae					
Paraleuctra zapekinae	Within Known Range? N	Nearest Occurrence:	525.79 KM	48.14846°N	107.91267°E
Paraleuctra zapekinae	Within Known Range? N	Nearest Occurrence:	525.79 KM	48.14846°N	107.91267°E
<b>Family:</b> Nemouridae					
Amphinemura borealis	Within Known Range? N	Nearest Occurrence:	576.79 KM	47.82258°N	107.33613°E
Amphinemura borealis	Within Known Range? N	Nearest Occurrence:	576.79 KM	47.82258°N	107.33613°E
Nemoura cinerea	Within Known Range? N	Nearest Occurrence:	553.47 KM	47.96783°N	107.59278°E
Nemoura cinerea	Within Known Range? N	Nearest Occurrence:	553.47 KM	47.96783°N	107.59278°E
<b>Family:</b> Perlidae					
Agnetina brevipennis	Within Known Range? N	Nearest Occurrence:	628.35 KM	49.08636°N	107.30750°E
Agnetina brevipennis	Within Known Range? N	Nearest Occurrence:	628.35 KM	49.08636°N	107.30750°E
Agnetina cocandica	Within Known Range? N	Nearest Occurrence:	795.70 KM	50.06476°N	106.13388°E
Agnetina cocandica	Within Known Range? N	Nearest Occurrence:	795.70 KM	50.06476°N	106.13388°E
Kamimuria exilis	Within Known Range? N	Nearest Occurrence:	1,557.43 KM	50.16278°N	98.84212°E
<b>Family:</b> Perlodidae					
Arcynopteryx sajanensis	Within Known Range? N	Nearest Occurrence:	1,424.84 KM	51.61397°N	100.59972°E
Diura bicaudata	Within Known Range? N	Nearest Occurrence:	1,384.01 KM	47.21768°N	99.92824°E
Diura bicaudata	Within Known Range? N	Nearest Occurrence:	1,384.01 KM	47.21768°N	99.92824°E
Isoperla asiatica	Within Known Range? N	Nearest Occurrence:	553.47 KM	47.96783°N	107.59278°E
Isoperla asiatica	Within Known Range? N	Nearest Occurrence:	553.47 KM	47.96783°N	107.59278°E
Isoperla kozlovi	Within Known Range? N	Nearest Occurrence:	524.26 KM	48.13111°N	107.92120°E
Isoperla kozlovi	Within Known Range? N	Nearest Occurrence:	524.26 KM	48.13111°N	107.92120°E
Isoperla lunigera	Within Known Range? N	Nearest Occurrence:	531.23 KM	48.09549°N	107.84265°E
Isoperla lunigera	Within Known Range? N	Nearest Occurrence:	531.23 KM	48.09549°N	107.84265°E
Isoperla obscura	Within Known Range? N	Nearest Occurrence:	725.17 KM	49.72192°N	106.65562°E
Isoperla obscura	Within Known Range? N	Nearest Occurrence:	725.17 KM	49.72192°N	106.65562°E
Pictetiella asiatica	Within Known Range? N	Nearest Occurrence:	1,431.33 KM	51.65822°N	100.53000°E
Pictetiella asiatica	Within Known Range? N	Nearest Occurrence:	1,431.33 KM	51.65822°N	100.53000°E

<b>LOE Rating:</b> Probable	<b>Total:</b> 6
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<b>Family:</b> Perlodidae					
Kaszabia nigricauda	Within Known Range? N	Nearest Occurrence:	529.31 KM	48.21780°N	107.90392°E
Kaszabia nigricauda	Within Known Range? N	Nearest Occurrence:	529.31 KM	48.21780°N	107.90392°E
Megarcys ochracea	Within Known Range? N	Nearest Occurrence:	563.96 KM	47.97108°N	107.49534°E
Megarcys ochracea	Within Known Range? N	Nearest Occurrence:	563.96 KM	47.97108°N	107.49534°E
<b>Family:</b> Taeniopterygidae					
Taenionema japonicum	Within Known Range? N	Nearest Occurrence:	635.47 KM	49.05411°N	107.23175°E
Taenionema japonicum	Within Known Range? N	Nearest Occurrence:	635.47 KM	49.05411°N	107.23175°E

Research funded by the National Science Foundation  
 DEB-BSI #0206674: A Survey of the Aquatic Insects of the Selenge River Basin. P.I.'s: JKGelhaus, JCMorse, BHayford.  
 DEB # 0743732: Aquatic Insects of the Altai and Hangai Mountain Drainages. P.I.'s: JKGelhaus, JCMorse, CRNelson.  
<http://clade.ansp.org/entomology/mongolia/index.html>



**Basin:** Internal Drainage Basin

**Aimag:** Sukhbaatar

**Soum:** Uulbayan

Freshwater Ecoregion: Inner Mongolia Endorheic Basins

Terrestrial Ecoregion: Mongolian-Manchurian Grassland

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

<b>LOE Rating:</b>	<b>Possible</b>	<b>Total:</b>	<b>8</b>
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Family: Chloroperlidae

Alloperla joosti

Within Known Range? N Nearest Occurrence: 1,070.25 KM 49.21675 °N 103.10750 °E

Alloperla joosti

Within Known Range? N Nearest Occurrence: 1,070.25 KM 49.21675 °N 103.10750 °E

Suwallia teleckojensis

Within Known Range? N Nearest Occurrence: 537.42 KM 48.42080 °N 107.91406 °E

Suwallia teleckojensis

Within Known Range? N Nearest Occurrence: 537.42 KM 48.42080 °N 107.91406 °E

Family: Perlidae

Paragnetina flavotincta

Within Known Range? N Nearest Occurrence: 794.27 KM 50.06476 °N 106.13388 °E

Paragnetina flavotincta

Within Known Range? N Nearest Occurrence: 794.27 KM 50.06476 °N 106.13388 °E

Family: Perlodidae

Isoperla altaica

Within Known Range? N Nearest Occurrence: 552.60 KM 48.60182 °N 107.84335 °E

Isoperla altaica

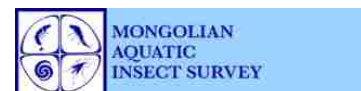
Within Known Range? N Nearest Occurrence: 552.60 KM 48.60182 °N 107.84335 °E

Research funded by the National Science Foundation

DEB-BSI #0206674: A Survey of the Aquatic Insects of the Selenge River Basin. P.I.'s: JKGelhaus, JCMorse, BHayford.

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<http://clade.ansp.org/entomology/mongolia/index.html>



**Basin:** Internal Drainage Basin  
**Aimag:** Sukhbaatar  
**Soum:** Uulbayan

**Freshwater Ecoregion:** Inner Mongolia Endorheic Basins  
**Terrestrial Ecoregion:** Mongolian-Manchurian Grassland

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

<b>LOE Rating:</b>	<b>Predicted</b>	<b>Total:</b>	32
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**Family:** Capniidae

Capnia nigra	Within Known Range? N	Nearest Occurrence: 1,377.77 KM	50.92452 °N	100.75528 °E
Capnia nigra	Within Known Range? N	Nearest Occurrence: 1,377.77 KM	50.92452 °N	100.75528 °E
Mesocapnia variabilis	Within Known Range? N	Nearest Occurrence: 537.42 KM	48.42080 °N	107.91406 °E
Mesocapnia variabilis	Within Known Range? N	Nearest Occurrence: 537.42 KM	48.42080 °N	107.91406 °E

**Family:** Chloroperlidae

Alaskaperla longidentata	Within Known Range? N	Nearest Occurrence: 525.79 KM	48.14846 °N	107.91267 °E
Alaskaperla longidentata	Within Known Range? N	Nearest Occurrence: 525.79 KM	48.14846 °N	107.91267 °E
Alloperla deminuta	Within Known Range? N	Nearest Occurrence: 525.79 KM	48.14846 °N	107.91267 °E
Alloperla deminuta	Within Known Range? N	Nearest Occurrence: 525.79 KM	48.14846 °N	107.91267 °E
Alloperla mediata	Within Known Range? N	Nearest Occurrence: 1,036.56 KM	49.77776 °N	103.60860 °E
Alloperla mediata	Within Known Range? N	Nearest Occurrence: 1,036.56 KM	49.77776 °N	103.60860 °E

**Family:** Leuctridae

Leuctra fusca	Within Known Range? N	Nearest Occurrence: 630.14 KM	49.08643 °N	107.28952 °E
Leuctra fusca	Within Known Range? N	Nearest Occurrence: 630.14 KM	49.08643 °N	107.28952 °E

**Family:** Nemouridae

Amphinemura standfussi	Within Known Range? N	Nearest Occurrence: 632.68 KM	49.73130 °N	107.63484 °E
Amphinemura standfussi	Within Known Range? N	Nearest Occurrence: 632.68 KM	49.73130 °N	107.63484 °E
Nemoura arctica	Within Known Range? N	Nearest Occurrence: 525.51 KM	48.13287 °N	107.91890 °E
Nemoura arctica	Within Known Range? N	Nearest Occurrence: 525.51 KM	48.13287 °N	107.91890 °E
Nemoura sahlbergi	Within Known Range? N	Nearest Occurrence: 529.31 KM	48.21780 °N	107.90392 °E
Nemoura sahlbergi	Within Known Range? N	Nearest Occurrence: 529.31 KM	48.21780 °N	107.90392 °E

**Family:** Perlodidae

Arcynopteryx compacta	Within Known Range? N	Nearest Occurrence: 555.03 KM	47.84324 °N	107.55299 °E
Arcynopteryx compacta	Within Known Range? N	Nearest Occurrence: 555.03 KM	47.84324 °N	107.55299 °E
Arcynopteryx polaris	Within Known Range? N	Nearest Occurrence: 537.42 KM	48.42080 °N	107.91406 °E
Arcynopteryx polaris	Within Known Range? N	Nearest Occurrence: 537.42 KM	48.42080 °N	107.91406 °E
Diura majuscula	Within Known Range? N	Nearest Occurrence: 525.51 KM	48.13287 °N	107.91890 °E
Diura majuscula	Within Known Range? N	Nearest Occurrence: 525.51 KM	48.13287 °N	107.91890 °E
Isoperla eximia	Within Known Range? N	Nearest Occurrence: 551.61 KM	48.60182 °N	107.84335 °E
Isoperla eximia	Within Known Range? N	Nearest Occurrence: 551.61 KM	48.60182 °N	107.84335 °E
Isoperla mongolica	Within Known Range? N	Nearest Occurrence: 532.19 KM	48.09549 °N	107.84265 °E
Isoperla mongolica	Within Known Range? N	Nearest Occurrence: 532.19 KM	48.09549 °N	107.84265 °E
Isoperla potanini	Within Known Range? N	Nearest Occurrence: 1,167.10 KM	46.73093 °N	101.88583 °E
Isoperla potanini	Within Known Range? N	Nearest Occurrence: 1,167.10 KM	46.73093 °N	101.88583 °E
Skwala pusilla	Within Known Range? N	Nearest Occurrence: 2,658.20 KM	48.51277 °N	88.51107 °E
Skwala pusilla	Within Known Range? N	Nearest Occurrence: 2,658.20 KM	48.51277 °N	88.51107 °E



**Basin:** Internal Drainage Basin

**Aimag:** Sukhbaatar

**Soum:** Uulbayan

Freshwater Ecoregion: Inner Mongolia Endorheic Basins

Terrestrial Ecoregion: Mongolian-Manchurian Grassland

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

<b>LOE Rating:</b> Unlikely	<b>Total:</b> 6
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Family: Capniidae

Capnia khulsbagia

Within Known Range? N Nearest Occurrence: 1,384.03 KM 50.98944 °N 100.71944 °E

Capnia khulsbagia

Within Known Range? N Nearest Occurrence: 1,384.03 KM 50.98944 °N 100.71944 °E

Mesocapnia altaica

Within Known Range? N Nearest Occurrence: 2,614.38 KM 48.43684 °N 88.90094 °E

Mesocapnia altaica

Within Known Range? N Nearest Occurrence: 2,614.38 KM 48.43684 °N 88.90094 °E

Family: Nemouridae

Nemurella pictetii

Within Known Range? N Nearest Occurrence: 1,492.79 KM 51.07896 °N 99.70857 °E

Nemurella pictetii

Within Known Range? N Nearest Occurrence: 1,492.79 KM 51.07896 °N 99.70857 °E

Research funded by the National Science Foundation

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<http://clade.ansp.org/entomology/mongolia/index.html>



**Basin:** Internal Drainage Basin  
**Aimags:** Sukhbaatar  
**Soums:** Zamyn-uud

**Freshwater Ecoregion:** Inner Mongolia Endorheic Basins  
**Terrestrial Ecoregion:** Eastern Gobi Desert Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Highly Likely Total: 6**

Family: Capniidae					
Isocapnia guentheri	Within Known Range? N	Nearest Occurrence: 658.87 KM	48.24734 °N	107.90589 °E	
Isocapnia sibirica	Within Known Range? N	Nearest Occurrence: 651.10 KM	48.09549 °N	107.84265 °E	
Family: Chloroperlidae					
Suwallia kerzhneri	Within Known Range? N	Nearest Occurrence: 676.07 KM	48.12416 °N	107.54780 °E	
Family: Perlidae					
Agnentina cocandica	Within Known Range? N	Nearest Occurrence: 942.08 KM	50.06476 °N	106.13388 °E	
Family: Perlodidae					
Isoperla kozlovi	Within Known Range? N	Nearest Occurrence: 648.12 KM	48.13111 °N	107.92120 °E	
Family: Pteronarcyidae					
Pteronarcys reticulata	Within Known Range? N	Nearest Occurrence: 772.73 KM	49.08636 °N	107.30750 °E	

**LOE Rating: Likely Total: 11**

Family: Capniidae					
Isocapnia kudia	Within Known Range? N	Nearest Occurrence: 1,584.15 KM	51.25356 °N	99.66687 °E	
Family: Chloroperlidae					
Alloperla rostellata	Within Known Range? N	Nearest Occurrence: 1,128.97 KM	49.77776 °N	103.60860 °E	
Haploperla lepnevae	Within Known Range? N	Nearest Occurrence: 670.07 KM	47.82258 °N	107.33613 °E	
Family: Nemouridae					
Amphinemura borealis	Within Known Range? N	Nearest Occurrence: 670.07 KM	47.82258 °N	107.33613 °E	
Nemoura cinerea	Within Known Range? N	Nearest Occurrence: 660.30 KM	47.96783 °N	107.59278 °E	
Family: Perlidae					
Agnentina brevipennis	Within Known Range? N	Nearest Occurrence: 772.73 KM	49.08636 °N	107.30750 °E	
Agnentina extrema	Within Known Range? N	Nearest Occurrence: 650.70 KM	48.09671 °N	107.84928 °E	
Kamimuria exilis	Within Known Range? N	Nearest Occurrence: 1,609.01 KM	50.16278 °N	98.84212 °E	
Family: Perlodidae					
Arcynopteryx sajanensis	Within Known Range? N	Nearest Occurrence: 1,522.03 KM	51.61397 °N	100.59972 °E	
Isoperla lunigera	Within Known Range? N	Nearest Occurrence: 651.10 KM	48.09549 °N	107.84265 °E	
Pictetiella asiatica	Within Known Range? N	Nearest Occurrence: 1,528.46 KM	51.65822 °N	100.53000 °E	

**LOE Rating: Probable Total: 5**

Family: Chloroperlidae					
Alloperla joosti	Within Known Range? N	Nearest Occurrence: 1,140.41 KM	49.21675 °N	103.10750 °E	
Family: Leuctridae					
Paraleuctra zapekinae	Within Known Range? N	Nearest Occurrence: 650.18 KM	48.14846 °N	107.91267 °E	
Family: Perlodidae					
Diura bicaudata	Within Known Range? N	Nearest Occurrence: 1,375.31 KM	47.21768 °N	99.92824 °E	
Isoperla asiatica	Within Known Range? N	Nearest Occurrence: 660.30 KM	47.96783 °N	107.59278 °E	
Isoperla obscura	Within Known Range? N	Nearest Occurrence: 857.96 KM	47.85250 °N	105.25567 °E	





**Basin:** Internal Drainage Basin  
**Aimag:** Sukhbaatar  
**Soum:** Zamyn-uud

**Freshwater Ecoregion:** Inner Mongolia Endorheic Basins  
**Terrestrial Ecoregion:** Eastern Gobi Desert Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

<b>LOE Rating:</b>	<b>Possible</b>	<b>Total:</b>	<b>4</b>
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<b>Family:</b> Chloroperlidae			
Suwallia teleckojensis	Within Known Range? N	Nearest Occurrence:	669.25 KM 48.16668°N 107.69548 °E
<b>Family:</b> Perlodidae			
Isoperla altaica	Within Known Range? N	Nearest Occurrence:	694.51 KM 48.60182°N 107.84335 °E
Kaszabia nigricauda	Within Known Range? N	Nearest Occurrence:	650.70 KM 48.09671°N 107.84928 °E
Megarcys ochracea	Within Known Range? N	Nearest Occurrence:	668.31 KM 47.97108°N 107.49534 °E

<b>LOE Rating:</b>	<b>Predicted</b>	<b>Total:</b>	<b>18</b>
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<b>Family:</b> Capniidae			
Capnia nigra	Within Known Range? N	Nearest Occurrence:	1,462.40 KM 50.92452°N 100.75528 °E
Mesocapnia variabilis	Within Known Range? N	Nearest Occurrence:	674.04 KM 48.42080°N 107.91406 °E
<b>Family:</b> Chloroperlidae			
Alaskaperla longidentata	Within Known Range? N	Nearest Occurrence:	650.18 KM 48.14846°N 107.91267 °E
Alloperla deminuta	Within Known Range? N	Nearest Occurrence:	650.18 KM 48.14846°N 107.91267 °E
Alloperla mediata	Within Known Range? N	Nearest Occurrence:	1,128.97 KM 49.77776°N 103.60860 °E
<b>Family:</b> Leuctridae			
Leuctra fusca	Within Known Range? N	Nearest Occurrence:	774.03 KM 49.08643°N 107.28952 °E
<b>Family:</b> Nemouridae			
Amphinemura standfussi	Within Known Range? N	Nearest Occurrence:	806.85 KM 49.73130°N 107.63484 °E
Nemoura arctica	Within Known Range? N	Nearest Occurrence:	649.60 KM 48.13287°N 107.91890 °E
Nemoura sahlbergi	Within Known Range? N	Nearest Occurrence:	656.56 KM 48.21780°N 107.90392 °E
<b>Family:</b> Perlidae			
Paragnetina flavotincta	Within Known Range? N	Nearest Occurrence:	940.39 KM 50.06476°N 106.13388 °E
<b>Family:</b> Perlodidae			
Arcynopteryx compacta	Within Known Range? N	Nearest Occurrence:	655.07 KM 47.84324°N 107.55299 °E
Arcynopteryx polaris	Within Known Range? N	Nearest Occurrence:	674.04 KM 48.42080°N 107.91406 °E
Diura majuscula	Within Known Range? N	Nearest Occurrence:	649.60 KM 48.13287°N 107.91890 °E
Isoperla eximia	Within Known Range? N	Nearest Occurrence:	693.26 KM 48.60182°N 107.84335 °E
Isoperla mongolica	Within Known Range? N	Nearest Occurrence:	652.27 KM 48.09549°N 107.84265 °E
Isoperla potanini	Within Known Range? N	Nearest Occurrence:	1,153.65 KM 46.73093°N 101.88583 °E
Skwala pusilla	Within Known Range? N	Nearest Occurrence:	2,641.58 KM 48.51277°N 88.51107 °E
<b>Family:</b> Taeniopterygidae			
Taenionema japonicum	Within Known Range? N	Nearest Occurrence:	776.93 KM 49.05411°N 107.23175 °E

<b>LOE Rating:</b>	<b>Unlikely</b>	<b>Total:</b>	<b>3</b>
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<b>Family:</b> Capniidae			
Capnia khulsbagia	Within Known Range? N	Nearest Occurrence:	1,469.64 KM 50.98944°N 100.71944 °E
Mesocapnia altaica	Within Known Range? N	Nearest Occurrence:	2,597.49 KM 48.43684°N 88.90094 °E
<b>Family:</b> Nemouridae			
Nemurella pictetii	Within Known Range? N	Nearest Occurrence:	1,570.15 KM 51.07896°N 99.70857 °E



**Basin:** Internal Drainage Basin  
**Aimags:** Tov  
**Soums:** Bayan

Freshwater Ecoregion: Argun  
 Terrestrial Ecoregion: Mongolian-Manchurian Grassland

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Highly Likely Total: 6**

Family: Capniidae					
Isocapnia guentheri	Within Known Range? N	Nearest Occurrence:	96.35 KM	47.99158°N	107.46116°E
Isocapnia sibirica	Within Known Range? N	Nearest Occurrence:	105.67 KM	48.09549°N	107.84265°E
Family: Chloroperlidae					
Suwallia kerzhneri	Within Known Range? N	Nearest Occurrence:	108.76 KM	48.12416°N	107.54780°E
Family: Perlidae					
Agnentina extrema	Within Known Range? N	Nearest Occurrence:	105.92 KM	48.09671°N	107.84928°E
Family: Perlodidae					
Isoperla kozlovi	Within Known Range? N	Nearest Occurrence:	111.23 KM	48.13111°N	107.92120°E
Kaszabia nigricauda	Within Known Range? N	Nearest Occurrence:	90.89 KM	47.96783°N	107.59278°E

**LOE Rating: Likely Total: 12**

Family: Chloroperlidae					
Alaskaperla longidentata	Within Known Range? N	Nearest Occurrence:	103.02 KM	48.07956°N	107.77729°E
Alloperla deminuta	Within Known Range? Y	Nearest Occurrence:	84.03 KM	47.82258°N	107.33613°E
Alloperla rostellata	Within Known Range? N	Nearest Occurrence:	538.83 KM	49.77776°N	103.60860°E
Haploperla lepnevae	Within Known Range? N	Nearest Occurrence:	84.03 KM	47.82258°N	107.33613°E
Suwallia teleckojensis	Within Known Range? N	Nearest Occurrence:	112.47 KM	48.16668°N	107.69548°E
Family: Leuctridae					
Paraleuctra zapekinae	Within Known Range? N	Nearest Occurrence:	94.57 KM	47.97944°N	107.47761°E
Family: Nemouridae					
Amphinemura borealis	Within Known Range? Y	Nearest Occurrence:	84.03 KM	47.82258°N	107.33613°E
Nemoura cinerea	Within Known Range? N	Nearest Occurrence:	90.89 KM	47.96783°N	107.59278°E
Family: Perlidae					
Agnentina brevipennis	Within Known Range? N	Nearest Occurrence:	218.59 KM	49.08636°N	107.30750°E
Family: Perlodidae					
Isoperla asiatica	Within Known Range? Y	Nearest Occurrence:	82.95 KM	47.82110°N	107.35422°E
Isoperla lunigera	Within Known Range? Y	Nearest Occurrence:	82.95 KM	47.82110°N	107.35422°E
Family: Pteronarcyidae					
Pteronarcys reticulata	Within Known Range? N	Nearest Occurrence:	218.59 KM	49.08636°N	107.30750°E

**LOE Rating: Probable Total: 7**

Family: Capniidae					
Isocapnia kudia	Within Known Range? N	Nearest Occurrence:	1,000.38 KM	51.25356°N	99.66687°E
Family: Nemouridae					
Nemoura arctica	Within Known Range? N	Nearest Occurrence:	105.86 KM	48.09549°N	107.84265°E
Family: Perlidae					
Kamimuria exilis	Within Known Range? N	Nearest Occurrence:	1,039.54 KM	50.16278°N	98.84212°E
Family: Perlodidae					
Arcynopteryx sajanensis	Within Known Range? N	Nearest Occurrence:	931.71 KM	51.61397°N	100.59972°E
Diura majuscula	Within Known Range? N	Nearest Occurrence:	96.52 KM	47.99158°N	107.46116°E
Megarcys ochracea	Within Known Range? N	Nearest Occurrence:	93.19 KM	47.97108°N	107.49534°E
Pictetiella asiatica	Within Known Range? N	Nearest Occurrence:	939.20 KM	51.65822°N	100.53000°E



Basin: Internal Drainage Basin

Aimags: Tov

Soums: Bayan

Freshwater Ecoregion: Argun

Terrestrial Ecoregion: Mongolian-Manchurian Grassland

WQM Sites:

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Possible Total: 4**

Family: Chloroperlidae						
Alloperla joosti	Within Known Range? N	Nearest Occurrence:	558.12 KM	49.21675 °N	103.10750 °E	
Family: Nemouridae						
Nemoura sahlbergi	Within Known Range? N	Nearest Occurrence:	112.27 KM	48.16668 °N	107.69548 °E	
Family: Perlidae						
Agnetina cocandica	Within Known Range? N	Nearest Occurrence:	357.00 KM	49.16354 °N	105.18880 °E	
Family: Taeniopterygidae						
Taenionema japonicum	Within Known Range? N	Nearest Occurrence:	217.30 KM	49.05411 °N	107.23175 °E	

**LOE Rating: Predicted Total: 15**

Family: Capniidae						
Capnia nigra	Within Known Range? N	Nearest Occurrence:	876.46 KM	50.92452 °N	100.75528 °E	
Mesocapnia variabilis	Within Known Range? N	Nearest Occurrence:	142.85 KM	48.42080 °N	107.91406 °E	
Family: Chloroperlidae						
Alloperla mediata	Within Known Range? N	Nearest Occurrence:	538.83 KM	49.77776 °N	103.60860 °E	
Family: Leuctridae						
Leuctra fusca	Within Known Range? N	Nearest Occurrence:	219.00 KM	49.08643 °N	107.28952 °E	
Family: Nemouridae						
Amphinemura standfussi	Within Known Range? N	Nearest Occurrence:	286.02 KM	49.73130 °N	107.63484 °E	
Family: Perlidae						
Paragnetina flavotincta	Within Known Range? N	Nearest Occurrence:	356.36 KM	49.16354 °N	105.18880 °E	
Family: Perlodidae						
Arcynopteryx compacta	Within Known Range? N	Nearest Occurrence:	78.08 KM	47.84324 °N	107.55299 °E	
Arcynopteryx polaris	Within Known Range? N	Nearest Occurrence:	142.85 KM	48.42080 °N	107.91406 °E	
Diura bicaudata	Within Known Range? N	Nearest Occurrence:	861.98 KM	47.21768 °N	99.92824 °E	
Isoperla altaica	Within Known Range? N	Nearest Occurrence:	161.72 KM	48.60182 °N	107.84335 °E	
Isoperla eximia	Within Known Range? N	Nearest Occurrence:	161.43 KM	48.60182 °N	107.84335 °E	
Isoperla mongolica	Within Known Range? N	Nearest Occurrence:	105.86 KM	48.09549 °N	107.84265 °E	
Isoperla obscura	Within Known Range? N	Nearest Occurrence:	281.46 KM	47.85250 °N	105.25567 °E	
Isoperla potanini	Within Known Range? N	Nearest Occurrence:	647.54 KM	46.73093 °N	101.88583 °E	
Skwala pusilla	Within Known Range? N	Nearest Occurrence:	2,134.58 KM	48.51277 °N	88.51107 °E	

**LOE Rating: Unlikely Total: 3**

Family: Capniidae						
Capnia khulsbagia	Within Known Range? N	Nearest Occurrence:	883.40 KM	50.98944 °N	100.71944 °E	
Mesocapnia altaica	Within Known Range? N	Nearest Occurrence:	2,090.83 KM	48.43684 °N	88.90094 °E	
Family: Nemouridae						
Nemurella pictetii	Within Known Range? N	Nearest Occurrence:	987.56 KM	51.07896 °N	99.70857 °E	

**Basin:** Internal Drainage Basin

**Aimag:** Tov

**Soum:** Bayantsagaan

**Freshwater Ecoregion:** Inner Mongolia Endorheic Basins

**Terrestrial Ecoregion:** Mongolian-Manchurian Grassland

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Highly Likely Total: 6**

**Family:** Capniidae

*Isocapnia guentheri*

**Within Known Range?** N **Nearest Occurrence:** 125.41 KM 47.88349°N 106.98829°E

*Isocapnia sibirica*

**Within Known Range?** N **Nearest Occurrence:** 164.14 KM 48.09549°N 107.84265°E

**Family:** Chloroperlidae

*Suwallia kerzhneri*

**Within Known Range?** N **Nearest Occurrence:** 155.50 KM 48.12416°N 107.54780°E

**Family:** Perlidae

*Agnetina extrema*

**Within Known Range?** N **Nearest Occurrence:** 164.59 KM 48.09671°N 107.84928°E

**Family:** Perlodidae

*Isoperla kozlovi*

**Within Known Range?** N **Nearest Occurrence:** 171.66 KM 48.13111°N 107.92120°E

*Kaszabia nigricauda*

**Within Known Range?** N **Nearest Occurrence:** 140.34 KM 47.96783°N 107.59278°E

**LOE Rating: Likely Total: 14**

**Family:** Chloroperlidae

*Alaskaperla longidentata*

**Within Known Range?** N **Nearest Occurrence:** 155.50 KM 48.12416°N 107.54780°E

*Alloperla deminuta*

**Within Known Range?** N **Nearest Occurrence:** 117.92 KM 47.82258°N 107.33613°E

*Alloperla rostellata*

**Within Known Range?** N **Nearest Occurrence:** 518.65 KM 49.77776°N 103.60860°E

*Haploperla lepnevae*

**Within Known Range?** N **Nearest Occurrence:** 117.92 KM 47.82258°N 107.33613°E

*Suwallia teleckojensis*

**Within Known Range?** N **Nearest Occurrence:** 165.24 KM 48.16668°N 107.69548°E

**Family:** Leuctridae

*Paraleuctra zapekinae*

**Within Known Range?** N **Nearest Occurrence:** 138.01 KM 47.97944°N 107.47761°E

**Family:** Nemouridae

*Amphinemura borealis*

**Within Known Range?** N **Nearest Occurrence:** 117.92 KM 47.82258°N 107.33613°E

*Nemoura cinerea*

**Within Known Range?** N **Nearest Occurrence:** 140.34 KM 47.96783°N 107.59278°E

**Family:** Perlidae

*Agnetina brevipennis*

**Within Known Range?** N **Nearest Occurrence:** 257.37 KM 49.08636°N 107.30750°E

**Family:** Perlodidae

*Arcynopteryx sajanensis*

**Within Known Range?** N **Nearest Occurrence:** 909.01 KM 51.61397°N 100.59972°E

*Isoperla asiatica*

**Within Known Range?** N **Nearest Occurrence:** 118.06 KM 47.82110°N 107.35422°E

*Isoperla lunigera*

**Within Known Range?** N **Nearest Occurrence:** 118.06 KM 47.82110°N 107.35422°E

*Pictetiella asiatica*

**Within Known Range?** N **Nearest Occurrence:** 916.52 KM 51.65822°N 100.53000°E

**Family:** Pteronarcyidae

*Pteronarcys reticulata*

**Within Known Range?** N **Nearest Occurrence:** 257.28 KM 49.08643°N 107.28952°E

Basin: Internal Drainage Basin

Aimags: Tov

Soums: Bayantsagaan

Freshwater Ecoregion: Inner Mongolia Endorheic Basins

Terrestrial Ecoregion: Mongolian-Manchurian Grassland

WQM Sites:

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Probable Total: 6**

Family: Capniidae					
Isocapnia kudia	Within Known Range? N	Nearest Occurrence:	971.61 KM	51.25356 °N	99.66687 °E
Family: Chloroperlidae					
Alloperla joosti	Within Known Range? N	Nearest Occurrence:	527.80 KM	49.21675 °N	103.10750 °E
Family: Nemouridae					
Nemoura arctica	Within Known Range? N	Nearest Occurrence:	115.54 KM	47.77758 °N	106.92780 °E
Family: Perlidae					
Agnatina cocandica	Within Known Range? N	Nearest Occurrence:	346.51 KM	49.16354 °N	105.18880 °E
Kamimuria exilis	Within Known Range? N	Nearest Occurrence:	1,001.49 KM	50.16278 °N	98.84212 °E
Family: Perlodidae					
Diura majuscula	Within Known Range? N	Nearest Occurrence:	139.15 KM	47.99158 °N	107.46116 °E

**LOE Rating: Possible Total: 3**

Family: Perlodidae					
Isoperla obscura	Within Known Range? N	Nearest Occurrence:	245.53 KM	47.85250 °N	105.25567 °E
Megarcys ochracea	Within Known Range? N	Nearest Occurrence:	137.59 KM	47.97108 °N	107.49534 °E
Family: Taeniopterygidae					
Taenionema japonicum	Within Known Range? N	Nearest Occurrence:	253.93 KM	49.05411 °N	107.23175 °E

**LOE Rating: Predicted Total: 15**

Family: Capniidae					
Capnia nigra	Within Known Range? N	Nearest Occurrence:	849.68 KM	50.92452 °N	100.75528 °E
Mesocapnia variabilis	Within Known Range? N	Nearest Occurrence:	200.56 KM	48.42080 °N	107.91406 °E
Family: Chloroperlidae					
Alloperla mediata	Within Known Range? N	Nearest Occurrence:	518.65 KM	49.77776 °N	103.60860 °E
Family: Leuctridae					
Leuctra fusca	Within Known Range? N	Nearest Occurrence:	257.28 KM	49.08643 °N	107.28952 °E
Family: Nemouridae					
Amphinemura standfussi	Within Known Range? N	Nearest Occurrence:	332.37 KM	49.73130 °N	107.63484 °E
Nemoura sahlbergi	Within Known Range? N	Nearest Occurrence:	164.95 KM	48.16668 °N	107.69548 °E
Family: Perlidae					
Paragnetina flavotincta	Within Known Range? N	Nearest Occurrence:	345.88 KM	49.16354 °N	105.18880 °E
Family: Perlodidae					
Arcynopteryx compacta	Within Known Range? N	Nearest Occurrence:	126.05 KM	47.84324 °N	107.55299 °E
Arcynopteryx polaris	Within Known Range? N	Nearest Occurrence:	200.56 KM	48.42080 °N	107.91406 °E
Diura bicaudata	Within Known Range? N	Nearest Occurrence:	807.05 KM	47.21768 °N	99.92824 °E
Isoperla altaica	Within Known Range? N	Nearest Occurrence:	216.34 KM	48.60182 °N	107.84335 °E
Isoperla eximia	Within Known Range? N	Nearest Occurrence:	215.96 KM	48.60182 °N	107.84335 °E
Isoperla mongolica	Within Known Range? N	Nearest Occurrence:	164.43 KM	48.09549 °N	107.84265 °E
Isoperla potanini	Within Known Range? N	Nearest Occurrence:	589.31 KM	46.73093 °N	101.88583 °E
Skwala pusilla	Within Known Range? N	Nearest Occurrence:	2,081.82 KM	48.51277 °N	88.51107 °E

**Basin:** Internal Drainage Basin

**Aimag:** Tov

**Soum:** Bayantsagaan

Freshwater Ecoregion: Inner Mongolia Endorheic Basins

Terrestrial Ecoregion: Mongolian-Manchurian Grassland

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

<b>LOE Rating:</b>	<b>Unlikely</b>	<b>Total:</b>	<b>3</b>
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Family: Capniidae

Capnia khulsbagia

Within Known Range? N Nearest Occurrence: 856.94 KM 50.98944 °N 100.71944 °E

Mesocapnia altaica

Within Known Range? N Nearest Occurrence: 2,037.96 KM 48.43684 °N 88.90094 °E

Family: Nemouridae

Nemurella pictetii

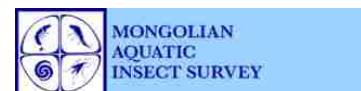
Within Known Range? N Nearest Occurrence: 957.81 KM 51.07896 °N 99.70857 °E

Research funded by the National Science Foundation

DEB-BSI #0206674: A Survey of the Aquatic Insects of the Selenge River Basin. P.I.'s: JKGelhaus, JCMorse, BHayford.

DEB # 0743732: Aquatic Insects of the Altai and Hangai Mountain Drainages. P.I.'s: JKGelhaus, JCMorse, CRNelson.

<http://clade.ansp.org/entomology/mongolia/index.html>



Basin: Internal Drainage Basin

Aimags: Tov

Soums: Buren

Freshwater Ecoregion: Lake Baikal

Terrestrial Ecoregion: Mongolian-Manchurian Grassland

WQM Sites:

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Highly Likely Total: 7**

Family: Capniidae

Isocapnia guentheri

Within Known Range? N Nearest Occurrence: 230.11 KM 47.88349°N 106.98829°E

Isocapnia sibirica

Within Known Range? N Nearest Occurrence: 325.24 KM 48.09549°N 107.84265°E

Family: Chloroperlidae

Alloperla rostellata

Within Known Range? N Nearest Occurrence: 368.46 KM 49.77776°N 103.60860°E

Suwallia kerzhneri

Within Known Range? N Nearest Occurrence: 297.39 KM 48.12416°N 107.54780°E

Family: Perlidae

Agnetina extrema

Within Known Range? N Nearest Occurrence: 254.34 KM 48.50028°N 106.78434°E

Family: Perlodidae

Isoperla kozlovi

Within Known Range? N Nearest Occurrence: 110.70 KM 47.85250°N 105.25567°E

Kaszabia nigricauda

Within Known Range? N Nearest Occurrence: 110.70 KM 47.85250°N 105.25567°E

**LOE Rating: Likely Total: 17**

Family: Capniidae

Isocapnia kudia

Within Known Range? N Nearest Occurrence: 783.28 KM 51.25356°N 99.66687°E

Family: Chloroperlidae

Alaskaperla longidentata

Within Known Range? Y Nearest Occurrence: 297.39 KM 48.12416°N 107.54780°E

Alloperla deminuta

Within Known Range? Y Nearest Occurrence: 261.51 KM 47.82258°N 107.33613°E

Alloperla joosti

Within Known Range? N Nearest Occurrence: 349.07 KM 49.21675°N 103.10750°E

Haploperla lepnevae

Within Known Range? N Nearest Occurrence: 247.15 KM 48.87748°N 106.12370°E

Suwallia teleckojensis

Within Known Range? N Nearest Occurrence: 254.80 KM 48.50028°N 106.78434°E

Family: Leuctridae

Paraleuctra zapekinae

Within Known Range? N Nearest Occurrence: 282.09 KM 47.99158°N 107.46116°E

Family: Nemouridae

Amphinemura borealis

Within Known Range? Y Nearest Occurrence: 261.51 KM 47.82258°N 107.33613°E

Nemoura cinerea

Within Known Range? N Nearest Occurrence: 294.12 KM 47.96783°N 107.59278°E

Family: Perlidae

Agnetina brevipennis

Within Known Range? N Nearest Occurrence: 298.00 KM 49.10740°N 106.65177°E

Agnetina cocandica

Within Known Range? N Nearest Occurrence: 256.43 KM 49.16354°N 105.18880°E

Kamimuria exilis

Within Known Range? N Nearest Occurrence: 795.53 KM 50.16278°N 98.84212°E

Family: Perlodidae

Arcynopteryx sajanensis

Within Known Range? N Nearest Occurrence: 734.81 KM 51.61397°N 100.59972°E

Isoperla asiatica

Within Known Range? N Nearest Occurrence: 247.15 KM 48.87748°N 106.12370°E

Isoperla lunigera

Within Known Range? N Nearest Occurrence: 247.15 KM 48.87748°N 106.12370°E

Pictetiella asiatica

Within Known Range? N Nearest Occurrence: 742.40 KM 51.65822°N 100.53000°E

Family: Pteronarcyidae

Pteronarcys reticulata

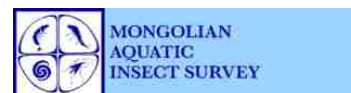
Within Known Range? N Nearest Occurrence: 340.12 KM 49.08643°N 107.28952°E

Research funded by the National Science Foundation

DEB-BSI #0206674: A Survey of the Aquatic Insects of the Selenge River Basin. P.I.'s: JKGelhaus, JCMorse, BHayford.

DEB # 0743732: Aquatic Insects of the Altai and Hangai Mountain Drainages. P.I.'s: JKGelhaus, JCMorse, CRNelson.

<http://clade.ansp.org/entomology/mongolia/index.html>



**Basin:** Internal Drainage Basin  
**Aimags:** Tov  
**Soums:** Buren

Freshwater Ecoregion: Lake Baikal  
 Terrestrial Ecoregion: Mongolian-Manchurian Grassland

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

<b>LOE Rating:</b> Possible	<b>Total:</b> 5
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Family: Nemouridae					
Nemoura arctica	Within Known Range? N	Nearest Occurrence:	218.96 KM	47.77758 °N	106.92780 °E
Family: Perlodidae					
Diura bicaudata	Within Known Range? N	Nearest Occurrence:	585.08 KM	47.21768 °N	99.92824 °E
Diura majuscula	Within Known Range? Y	Nearest Occurrence:	282.59 KM	47.99158 °N	107.46116 °E
Isoperla obscura	Within Known Range? N	Nearest Occurrence:	110.70 KM	47.85250 °N	105.25567 °E
Megarcys ochracea	Within Known Range? N	Nearest Occurrence:	282.09 KM	47.99158 °N	107.46116 °E

<b>LOE Rating:</b> Predicted	<b>Total:</b> 15
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Family: Capniidae					
Capnia nigra	Within Known Range? N	Nearest Occurrence:	667.66 KM	50.92452 °N	100.75528 °E
Mesocapnia variabilis	Within Known Range? N	Nearest Occurrence:	349.55 KM	48.42080 °N	107.91406 °E
Family: Chloroperlidae					
Alloperla mediata	Within Known Range? N	Nearest Occurrence:	368.46 KM	49.77776 °N	103.60860 °E
Family: Leuctridae					
Leuctra fusca	Within Known Range? N	Nearest Occurrence:	340.12 KM	49.08643 °N	107.28952 °E
Family: Nemouridae					
Amphinemura standfussi	Within Known Range? N	Nearest Occurrence:	368.31 KM	49.33339 °N	102.97786 °E
Nemoura sahlbergi	Within Known Range? N	Nearest Occurrence:	314.09 KM	48.16668 °N	107.69548 °E
Family: Perlidae					
Paragnetina flavotincta	Within Known Range? N	Nearest Occurrence:	255.97 KM	49.16354 °N	105.18880 °E
Family: Perlodidae					
Arcynopteryx compacta	Within Known Range? Y	Nearest Occurrence:	285.03 KM	47.84324 °N	107.55299 °E
Arcynopteryx polaris	Within Known Range? N	Nearest Occurrence:	349.55 KM	48.42080 °N	107.91406 °E
Isoperla altaica	Within Known Range? N	Nearest Occurrence:	247.60 KM	48.87748 °N	106.12370 °E
Isoperla eximia	Within Known Range? N	Nearest Occurrence:	352.75 KM	48.60182 °N	107.84335 °E
Isoperla mongolica	Within Known Range? N	Nearest Occurrence:	325.62 KM	48.09694 °N	107.83988 °E
Isoperla potanini	Within Known Range? N	Nearest Occurrence:	367.35 KM	46.73093 °N	101.88583 °E
Skwala pusilla	Within Known Range? N	Nearest Occurrence:	1,860.11 KM	48.51277 °N	88.51107 °E
Family: Taeniopterygidae					
Taenionema japonicum	Within Known Range? N	Nearest Occurrence:	333.72 KM	49.05411 °N	107.23175 °E

<b>LOE Rating:</b> Unlikely	<b>Total:</b> 3
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Family: Capniidae					
Capnia khulsbagia	Within Known Range? N	Nearest Occurrence:	675.47 KM	50.98944 °N	100.71944 °E
Mesocapnia altaica	Within Known Range? N	Nearest Occurrence:	1,816.22 KM	48.43684 °N	88.90094 °E
Family: Nemouridae					
Nemurella pictetii	Within Known Range? N	Nearest Occurrence:	767.69 KM	51.07896 °N	99.70857 °E





Basin: Internal Drainage Basin

Aimags: Tov

Soums: Sergelen

Freshwater Ecoregion: Inner Mongolia Endorheic Basins

Terrestrial Ecoregion: Daurian Forest Steppe

WQM Sites:

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Highly Likely Total: 8**

Family: Capniidae

Isocapnia guentheri

Within Known Range? Y Nearest Occurrence: 52.87 KM 47.88349°N 106.98829 °E

Isocapnia sibirica

Within Known Range? Y Nearest Occurrence: 117.97 KM 48.09549°N 107.84265 °E

Family: Chloroperlidae

Alaskaperla longidentata

Within Known Range? Y Nearest Occurrence: 97.92 KM 48.12416°N 107.54780 °E

Alloperla deminuta

Within Known Range? Y Nearest Occurrence: 57.03 KM 47.82258°N 107.33613 °E

Suwallia kerzhneri

Within Known Range? Y Nearest Occurrence: 97.92 KM 48.12416°N 107.54780 °E

Family: Perlidae

Agnetina extrema

Within Known Range? Y Nearest Occurrence: 118.62 KM 48.09671°N 107.84928 °E

Family: Perlodidae

Isoperla kozlovi

Within Known Range? Y Nearest Occurrence: 127.13 KM 48.13287°N 107.91890 °E

Kaszabia nigricauda

Within Known Range? Y Nearest Occurrence: 87.93 KM 47.96783°N 107.59278 °E

**LOE Rating: Likely Total: 13**

Family: Chloroperlidae

Alloperla rostellata

Within Known Range? N Nearest Occurrence: 462.02 KM 49.77776°N 103.60860 °E

Haploperla lepnevae

Within Known Range? Y Nearest Occurrence: 57.03 KM 47.82258°N 107.33613 °E

Suwallia teleckojensis

Within Known Range? N Nearest Occurrence: 112.03 KM 48.16668°N 107.69548 °E

Family: Leuctridae

Paraleuctra zapekinae

Within Known Range? Y Nearest Occurrence: 80.36 KM 47.99158°N 107.46116 °E

Family: Nemouridae

Amphinemura borealis

Within Known Range? Y Nearest Occurrence: 57.03 KM 47.82258°N 107.33613 °E

Nemoura arctica

Within Known Range? Y Nearest Occurrence: 42.56 KM 47.77758°N 106.92780 °E

Nemoura cinerea

Within Known Range? N Nearest Occurrence: 87.93 KM 47.96783°N 107.59278 °E

Family: Perlodidae

Arcynopteryx sajanensis

Within Known Range? N Nearest Occurrence: 854.48 KM 51.61397°N 100.59972 °E

Diura majuscula

Within Known Range? Y Nearest Occurrence: 80.50 KM 47.99158°N 107.46116 °E

Isoperla asiatica

Within Known Range? Y Nearest Occurrence: 58.11 KM 47.82110°N 107.35422 °E

Isoperla lunigera

Within Known Range? Y Nearest Occurrence: 58.11 KM 47.82110°N 107.35422 °E

Pictetiella asiatica

Within Known Range? N Nearest Occurrence: 862.10 KM 51.65822°N 100.53000 °E

Family: Pteronarcyidae

Pteronarcys reticulata

Within Known Range? N Nearest Occurrence: 188.38 KM 49.08643°N 107.28952 °E

**LOE Rating: Probable Total: 4**

Family: Capniidae

Isocapnia kudia

Within Known Range? N Nearest Occurrence: 922.13 KM 51.25356°N 99.66687 °E

Family: Perlidae

Agnetina brevipennis

Within Known Range? N Nearest Occurrence: 188.69 KM 49.08636°N 107.30750 °E

Kamimuria exilis

Within Known Range? N Nearest Occurrence: 960.74 KM 50.16278°N 98.84212 °E

Family: Perlodidae

Megaracys ochracea

Within Known Range? Y Nearest Occurrence: 80.36 KM 47.99158°N 107.46116 °E

Research funded by the National Science Foundation

DEB-BSI #0206674: A Survey of the Aquatic Insects of the Selenge River Basin. P.I.'s: JKGelhaus, JCMorse, BHayford.

DEB # 0743732: Aquatic Insects of the Altai and Hangai Mountain Drainages. P.I.'s: JKGelhaus, JCMorse, CRNelson.

<http://clade.ansp.org/entomology/mongolia/index.html>



Basin: Internal Drainage Basin

Aimags: Tov

Soums: Sergelen

Freshwater Ecoregion: Inner Mongolia Endorheic Basins

Terrestrial Ecoregion: Daurian Forest Steppe

WQM Sites:

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Possible Total: 5**

Family: Chloroperlidae					
Alloperla joosti	Within Known Range? N	Nearest Occurrence:	479.53 KM	49.21675 °N	103.10750 °E
Family: Nemouridae					
Nemoura sahlbergi	Within Known Range? N	Nearest Occurrence:	111.84 KM	48.16668 °N	107.69548 °E
Family: Perlidae					
Agnetina cocandica	Within Known Range? N	Nearest Occurrence:	282.91 KM	49.16354 °N	105.18880 °E
Family: Perlodidae					
Arcynopteryx polaris	Within Known Range? N	Nearest Occurrence:	149.30 KM	48.42080 °N	107.91406 °E
Family: Taeniopterygidae					
Taenionema japonicum	Within Known Range? N	Nearest Occurrence:	184.27 KM	49.05411 °N	107.23175 °E

**LOE Rating: Predicted Total: 14**

Family: Capniidae					
Capnia nigra	Within Known Range? N	Nearest Occurrence:	798.47 KM	50.92452 °N	100.75528 °E
Mesocapnia variabilis	Within Known Range? N	Nearest Occurrence:	149.30 KM	48.42080 °N	107.91406 °E
Family: Chloroperlidae					
Alloperla mediata	Within Known Range? N	Nearest Occurrence:	462.02 KM	49.77776 °N	103.60860 °E
Family: Leuctridae					
Leuctra fusca	Within Known Range? N	Nearest Occurrence:	188.38 KM	49.08643 °N	107.28952 °E
Family: Nemouridae					
Amphinemura standfussi	Within Known Range? N	Nearest Occurrence:	266.33 KM	49.73130 °N	107.63484 °E
Family: Perlidae					
Paragnetina flavotincta	Within Known Range? N	Nearest Occurrence:	282.40 KM	49.16354 °N	105.18880 °E
Family: Perlodidae					
Arcynopteryx compacta	Within Known Range? Y	Nearest Occurrence:	75.47 KM	47.84324 °N	107.55299 °E
Diura bicaudata	Within Known Range? N	Nearest Occurrence:	788.72 KM	47.21768 °N	99.92824 °E
Isoperla altaica	Within Known Range? N	Nearest Occurrence:	160.45 KM	48.60182 °N	107.84335 °E
Isoperla eximia	Within Known Range? N	Nearest Occurrence:	160.17 KM	48.60182 °N	107.84335 °E
Isoperla mongolica	Within Known Range? Y	Nearest Occurrence:	118.04 KM	48.09694 °N	107.83988 °E
Isoperla obscura	Within Known Range? N	Nearest Occurrence:	203.14 KM	47.85250 °N	105.25567 °E
Isoperla potanini	Within Known Range? N	Nearest Occurrence:	577.12 KM	46.73093 °N	101.88583 °E
Skwala pusilla	Within Known Range? N	Nearest Occurrence:	2,059.39 KM	48.51277 °N	88.51107 °E

**LOE Rating: Unlikely Total: 3**

Family: Capniidae					
Capnia khulsbagia	Within Known Range? N	Nearest Occurrence:	805.48 KM	50.98944 °N	100.71944 °E
Mesocapnia altaica	Within Known Range? N	Nearest Occurrence:	2,015.69 KM	48.43684 °N	88.90094 °E
Family: Nemouridae					
Nemurella pictetii	Within Known Range? N	Nearest Occurrence:	909.18 KM	51.07896 °N	99.70857 °E

Basin: Internal Drainage Basin

Aimags: Uvs

Soums: Baruunturuun

Freshwater Ecoregion: Western Mongolia

Terrestrial Ecoregion: Great Lakes Basin Desert Steppe

WQM Sites:

WQM Sites: # 146 (Baruun turuun River @ N 49.58587° E 94.38638°)

**LOE Rating: Highly Likely Total: 1**

Family: Perlodidae

Isoperla altaica Within Known Range? Y Nearest Occurrence: 351.94 KM 50.53472°N 91.79719°E

**LOE Rating: Likely Total: 21**

Family: Capniidae

Capnia nigra Within Known Range? Y Nearest Occurrence: 354.23 KM 48.06257°N 97.55064°E

Isocapnia guentheri Within Known Range? N Nearest Occurrence: 395.03 KM 48.61518°N 98.23096°E

Isocapnia kudia Within Known Range? N Nearest Occurrence: 555.50 KM 51.25356°N 99.66687°E

Isocapnia sibirica Within Known Range? N Nearest Occurrence: 754.41 KM 47.28244°N 101.18793°E

Family: Chloroperlidae

Alloperla rostellata Within Known Range? N Nearest Occurrence: 477.19 KM 48.36436°N 98.92737°E

Haploperla lepnevae Within Known Range? Y Nearest Occurrence: 554.51 KM 48.97819°N 89.94996°E

Suwallia kerzhneri Within Known Range? N Nearest Occurrence: 329.56 KM 48.24995°N 97.40627°E

Suwallia teleckojensis Within Known Range? Y Nearest Occurrence: 330.16 KM 48.24995°N 97.40627°E

Family: Nemouridae

Amphinemura standfussi Within Known Range? N Nearest Occurrence: 354.23 KM 48.06257°N 97.55064°E

Nemoura cinerea Within Known Range? N Nearest Occurrence: 354.23 KM 48.06257°N 97.55064°E

Family: Perlidae

Agnetina cocandica Within Known Range? Y Nearest Occurrence: 281.75 KM 48.33025°N 92.81616°E

Kamimuria exilis Within Known Range? N Nearest Occurrence: 442.74 KM 50.16278°N 98.84212°E

Family: Perlodidae

Arcynopteryx compacta Within Known Range? Y Nearest Occurrence: 454.89 KM 47.05445°N 91.84839°E

Arcynopteryx sajanensis Within Known Range? N Nearest Occurrence: 667.44 KM 51.61397°N 100.59972°E

Diura bicaudata Within Known Range? Y Nearest Occurrence: 569.14 KM 51.39852°N 99.75011°E

Isoperla asiatica Within Known Range? N Nearest Occurrence: 354.23 KM 48.06257°N 97.55064°E

Megarcys ochracea Within Known Range? N Nearest Occurrence: 513.93 KM 51.46205°N 99.19994°E

Pictetiella asiatica Within Known Range? N Nearest Occurrence: 660.38 KM 51.65822°N 100.53000°E

Skwala pusilla Within Known Range? N Nearest Occurrence: 720.99 KM 48.51277°N 88.51107°E

Family: Pteronarcyidae

Pteronarcys reticulata Within Known Range? N Nearest Occurrence: 496.33 KM 51.47065°N 99.02617°E

Family: Taeniopterygidae

Taenionema japonicum Within Known Range? Y Nearest Occurrence: 480.55 KM 50.61826°N 99.12094°E

**LOE Rating: Probable Total: 2**

Family: Nemouridae

Amphinemura borealis Within Known Range? Y Nearest Occurrence: 354.40 KM 48.05989°N 97.55073°E

Family: Perlodidae

Diura majuscula Within Known Range? Y Nearest Occurrence: 354.87 KM 48.06257°N 97.55064°E

Basin: Internal Drainage Basin

Aimags: Uvs

Soums: Baruunturuun

Freshwater Ecoregion: Western Mongolia

Terrestrial Ecoregion: Great Lakes Basin Desert Steppe

WQM Sites:

WQM Sites: # 146 (Baruun turuun River @ N 49.58587° E 94.38638°)

**LOE Rating: Possible Total: 6**

Family: Chloroperlidae

Alaskaperla longidentata Within Known Range? N Nearest Occurrence: 317.40 KM 48.15779°N 97.21441°E

Alloperla mediata Within Known Range? N Nearest Occurrence: 479.68 KM 50.61826°N 99.12094°E

Family: Nemouridae

Nemoura arctica Within Known Range? Y Nearest Occurrence: 472.83 KM 47.53132°N 91.28330°E

Family: Perlidae

Agnetina brevipennis Within Known Range? Y Nearest Occurrence: 435.99 KM 48.71968°N 98.65184°E

Family: Perlodidae

Isoperla kozlovi Within Known Range? N Nearest Occurrence: 496.55 KM 50.31066°N 99.32150°E

Isoperla lunigera Within Known Range? N Nearest Occurrence: 513.74 KM 51.09845°N 99.32051°E

**LOE Rating: Predicted Total: 13**

Family: Capniidae

Mesocapnia variabilis Within Known Range? Y Nearest Occurrence: 478.05 KM 48.36436°N 98.92737°E

Family: Chloroperlidae

Alloperla deminuta Within Known Range? N Nearest Occurrence: 496.33 KM 51.47065°N 99.02617°E

Alloperla joosti Within Known Range? N Nearest Occurrence: 329.56 KM 48.24995°N 97.40627°E

Family: Leuctridae

Paraleuctra zapekinae Within Known Range? N Nearest Occurrence: 1,083.99 KM 49.71481°N 104.64203°E

Family: Nemouridae

Nemoura sahlbergi Within Known Range? N Nearest Occurrence: 486.77 KM 50.42996°N 99.21727°E

Nemurella pictetii Within Known Range? N Nearest Occurrence: 507.69 KM 50.81265°N 99.33803°E

Family: Perlidae

Agnetina extrema Within Known Range? N Nearest Occurrence: 681.89 KM 47.50949°N 100.57510°E

Paragnetina flavotincta Within Known Range? N Nearest Occurrence: 558.88 KM 49.26170°N 99.88242°E

Family: Perlodidae

Arcynopteryx polaris Within Known Range? Y Nearest Occurrence: 460.49 KM 46.61982°N 92.22981°E

Isoperla mongolica Within Known Range? Y Nearest Occurrence: 330.16 KM 48.24995°N 97.40627°E

Isoperla obscura Within Known Range? Y Nearest Occurrence: 554.51 KM 48.97819°N 89.94996°E

Isoperla potanini Within Known Range? Y Nearest Occurrence: 317.97 KM 48.15779°N 97.21441°E

Kaszabia nigricauda Within Known Range? N Nearest Occurrence: 435.99 KM 48.71968°N 98.65184°E

**LOE Rating: Unlikely Total: 4**

Family: Capniidae

Capnia khulsbagia Within Known Range? N Nearest Occurrence: 661.74 KM 50.98944°N 100.71944°E

Mesocapnia altaica Within Known Range? N Nearest Occurrence: 680.47 KM 48.43684°N 88.90094°E

Family: Leuctridae

Leuctra fusca Within Known Range? N Nearest Occurrence: 1,380.12 KM 49.08643°N 107.28952°E

Family: Perlodidae

Isoperla eximia Within Known Range? N Nearest Occurrence: 1,408.83 KM 49.01829°N 107.54453°E

**Basin:** Internal Drainage Basin

**Aimag:** Uvs

**Soum:** Bokh moron

Freshwater Ecoregion: Western Mongolia

Terrestrial Ecoregion: Great Lakes Basin Desert Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Highly Likely Total: 2**

Family: Perlodidae

Diura bicaudata Within Known Range? Y Nearest Occurrence: 160.50 KM 49.04180°N 89.41675°E

Isoperla altaica Within Known Range? Y Nearest Occurrence: 151.79 KM 50.53472°N 91.79719°E

**LOE Rating: Likely Total: 18**

Family: Capniidae

Isocapnia guentheri Within Known Range? N Nearest Occurrence: 855.68 KM 48.61518°N 98.23096°E

Isocapnia kudia Within Known Range? N Nearest Occurrence: 1,016.28 KM 51.25356°N 99.66687°E

Isocapnia sibirica Within Known Range? N Nearest Occurrence: 1,206.93 KM 47.28244°N 101.18793°E

Family: Chloroperlidae

Haploperla lepnevae Within Known Range? Y Nearest Occurrence: 121.46 KM 48.97819°N 89.94996°E

Suwallia teleckojensis Within Known Range? Y Nearest Occurrence: 163.99 KM 48.84329°N 89.53623°E

Family: Nemouridae

Amphinemura borealis Within Known Range? Y Nearest Occurrence: 163.70 KM 48.84329°N 89.53623°E

Nemoura arctica Within Known Range? Y Nearest Occurrence: 221.38 KM 49.38138°N 88.68390°E

Nemoura cinerea Within Known Range? N Nearest Occurrence: 794.23 KM 48.06257°N 97.55064°E

Family: Perlidae

Agnetina cocandica Within Known Range? Y Nearest Occurrence: 202.40 KM 49.23285°N 88.90569°E

Kamimuria exilis Within Known Range? N Nearest Occurrence: 914.94 KM 50.16278°N 98.84212°E

Family: Perlodidae

Arcynopteryx compacta Within Known Range? Y Nearest Occurrence: 156.09 KM 48.64815°N 89.88378°E

Arcynopteryx polaris Within Known Range? Y Nearest Occurrence: 221.38 KM 49.38138°N 88.68390°E

Arcynopteryx sajanensis Within Known Range? N Nearest Occurrence: 1,127.03 KM 51.61397°N 100.59972°E

Diura majuscula Within Known Range? Y Nearest Occurrence: 194.00 KM 48.83461°N 89.19677°E

Isoperla obscura Within Known Range? Y Nearest Occurrence: 121.46 KM 48.97819°N 89.94996°E

Pictetiella asiatica Within Known Range? N Nearest Occurrence: 1,118.26 KM 51.65822°N 100.53000°E

Skwala pusilla Within Known Range? N Nearest Occurrence: 276.81 KM 48.51277°N 88.51107°E

Family: Taeniopterygidae

Taenionema japonicum Within Known Range? Y Nearest Occurrence: 202.40 KM 49.23285°N 88.90569°E

**LOE Rating: Probable Total: 3**

Family: Capniidae

Capnia nigra Within Known Range? Y Nearest Occurrence: 291.49 KM 49.09162°N 88.10423°E

Family: Perlidae

Agnetina brevipennis Within Known Range? N Nearest Occurrence: 121.46 KM 48.97819°N 89.94996°E

Family: Perlodidae

Isoperla potanini Within Known Range? Y Nearest Occurrence: 121.68 KM 48.97819°N 89.94996°E

**Basin:** Internal Drainage Basin

**Aimag:** Uvs

**Soum:** Bokhron

Freshwater Ecoregion: Western Mongolia

Terrestrial Ecoregion: Great Lakes Basin Desert Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Possible Total: 6**

Family: Chloroperlidae

Alloperla rostellata Within Known Range? N Nearest Occurrence: 936.56 KM 48.36436°N 98.92737 °E

Suwallia kerzhneri Within Known Range? N Nearest Occurrence: 773.70 KM 48.24995°N 97.40627 °E

Family: Perlodidae

Isoperla asiatica Within Known Range? N Nearest Occurrence: 794.23 KM 48.06257°N 97.55064 °E

Isoperla mongolica Within Known Range? N Nearest Occurrence: 163.99 KM 48.84329°N 89.53623 °E

Megarcys ochracea Within Known Range? N Nearest Occurrence: 969.13 KM 51.46205°N 99.19994 °E

Family: Pteronarcyidae

Pteronarcys reticulata Within Known Range? N Nearest Occurrence: 950.36 KM 51.47065°N 99.02617 °E

**LOE Rating: Predicted Total: 14**

Family: Capniidae

Mesocapnia altaica Within Known Range? N Nearest Occurrence: 246.56 KM 48.43684°N 88.90094 °E

Mesocapnia variabilis Within Known Range? N Nearest Occurrence: 277.84 KM 48.50631°N 88.50947 °E

Family: Chloroperlidae

Alaskaperla longidentata Within Known Range? N Nearest Occurrence: 755.45 KM 48.15779°N 97.21441 °E

Alloperla deminuta Within Known Range? N Nearest Occurrence: 950.36 KM 51.47065°N 99.02617 °E

Alloperla joosti Within Known Range? N Nearest Occurrence: 773.70 KM 48.24995°N 97.40627 °E

Alloperla mediata Within Known Range? N Nearest Occurrence: 947.47 KM 50.61826°N 99.12094 °E

Family: Leuctridae

Paraleuctra zapekinae Within Known Range? N Nearest Occurrence: 1,556.46 KM 49.71481°N 104.64203 °E

Family: Nemouridae

Amphinemura standfussi Within Known Range? N Nearest Occurrence: 794.23 KM 48.06257°N 97.55064 °E

Nemoura sahlbergi Within Known Range? N Nearest Occurrence: 956.46 KM 50.42996°N 99.21727 °E

Family: Perlidae

Agnetina extrema Within Known Range? N Nearest Occurrence: 1,134.91 KM 47.50949°N 100.57510 °E

Paragnetina flavotincta Within Known Range? N Nearest Occurrence: 1,030.10 KM 49.26170°N 99.88242 °E

Family: Perlodidae

Isoperla kozlovi Within Known Range? N Nearest Occurrence: 967.21 KM 50.31066°N 99.32150 °E

Isoperla lunigera Within Known Range? N Nearest Occurrence: 975.71 KM 51.09845°N 99.32051 °E

Kaszabia nigricauda Within Known Range? N Nearest Occurrence: 900.16 KM 48.71968°N 98.65184 °E

**LOE Rating: Unlikely Total: 4**

Family: Capniidae

Capnia khulsbagia Within Known Range? N Nearest Occurrence: 1,128.18 KM 50.98944°N 100.71944 °E

Family: Leuctridae

Leuctra fusca Within Known Range? N Nearest Occurrence: 1,852.17 KM 49.08643°N 107.28952 °E

Family: Nemouridae

Nemurella pictetii Within Known Range? N Nearest Occurrence: 973.61 KM 50.81265°N 99.33803 °E

Family: Perlodidae

Isoperla eximia Within Known Range? N Nearest Occurrence: 1,880.80 KM 49.01829°N 107.54453 °E

Research funded by the National Science Foundation

DEB-BSI #0206674: A Survey of the Aquatic Insects of the Selenge River Basin. P.I.'s: JKGelhaus, JCMorse, BHayford.

DEB # 0743732: Aquatic Insects of the Altai and Hangai Mountain Drainages. P.I.'s: JKGelhaus, JCMorse, CRNelson.

<http://clade.ansp.org/entomology/mongolia/index.html>



Basin: Internal Drainage Basin

Aimags: Uvs

Soums: Davst

Freshwater Ecoregion: Western Mongolia

Terrestrial Ecoregion: Great Lakes Basin Desert Steppe

WQM Sites:

WQM Sites: # 141 (Torhilog River @ N 50.69495° E 92.58472°)

**LOE Rating: Highly Likely Total: 1**

Family: Perlodidae

Isoperla altaica Within Known Range? Y Nearest Occurrence: 90.91 KM 50.53472°N 91.79719 °E

**LOE Rating: Likely Total: 16**

Family: Capniidae

Isocapnia guentheri Within Known Range? N Nearest Occurrence: 656.03 KM 48.61518°N 98.23096 °E

Isocapnia kudia Within Known Range? N Nearest Occurrence: 788.64 KM 51.25356°N 99.66687 °E

Family: Chloroperlidae

Haploperla lepnevae Within Known Range? N Nearest Occurrence: 336.71 KM 48.97819°N 89.94996 °E

Suwallia teleckojensis Within Known Range? Y Nearest Occurrence: 333.77 KM 47.55886°N 91.76095 °E

Family: Nemouridae

Nemoura cinerea Within Known Range? N Nearest Occurrence: 608.62 KM 48.06257°N 97.55064 °E

Family: Perlidae

Agnetina brevipennis Within Known Range? N Nearest Occurrence: 336.71 KM 48.97819°N 89.94996 °E

Agnetina cocandica Within Known Range? N Nearest Occurrence: 235.53 KM 48.33025°N 92.81616 °E

Kamimuria exilis Within Known Range? N Nearest Occurrence: 693.80 KM 50.16278°N 98.84212 °E

Family: Perlodidae

Arcynopteryx sajanensis Within Known Range? N Nearest Occurrence: 898.14 KM 51.61397°N 100.59972 °E

Diura bicaudata Within Known Range? Y Nearest Occurrence: 386.75 KM 49.04180°N 89.41675 °E

Isoperla asiatica Within Known Range? N Nearest Occurrence: 608.62 KM 48.06257°N 97.55064 °E

Isoperla mongolica Within Known Range? N Nearest Occurrence: 384.97 KM 48.84329°N 89.53623 °E

Pictetiella asiatica Within Known Range? N Nearest Occurrence: 889.61 KM 51.65822°N 100.53000 °E

Skwala pusilla Within Known Range? N Nearest Occurrence: 502.57 KM 48.51277°N 88.51107 °E

Family: Pteronarcyidae

Pteronarcys reticulata Within Known Range? N Nearest Occurrence: 721.48 KM 51.47065°N 99.02617 °E

Family: Taeniopterygidae

Taenionema japonicum Within Known Range? Y Nearest Occurrence: 367.52 KM 47.85391°N 90.54864 °E

**LOE Rating: Probable Total: 7**

Family: Capniidae

Isocapnia sibirica Within Known Range? N Nearest Occurrence: 1,014.65 KM 47.28244°N 101.18793 °E

Family: Chloroperlidae

Alloperla rostellata Within Known Range? N Nearest Occurrence: 723.11 KM 50.61826°N 99.12094 °E

Suwallia kerzhneri Within Known Range? N Nearest Occurrence: 585.28 KM 48.24995°N 97.40627 °E

Family: Nemouridae

Amphinemura borealis Within Known Range? N Nearest Occurrence: 384.27 KM 48.84329°N 89.53623 °E

Family: Perlodidae

Arcynopteryx compacta Within Known Range? Y Nearest Occurrence: 288.72 KM 48.42161°N 90.97337 °E

Isoperla obscura Within Known Range? Y Nearest Occurrence: 336.71 KM 48.97819°N 89.94996 °E

Megaracys ochracea Within Known Range? N Nearest Occurrence: 740.38 KM 51.46205°N 99.19994 °E



Basin: Internal Drainage Basin

Aimags: Uvs

Soums: Davst

Freshwater Ecoregion: Western Mongolia

Terrestrial Ecoregion: Great Lakes Basin Desert Steppe

WQM Sites:

WQM Sites: # 141 (Torhilog River @ N 50.69495° E 92.58472°)

**LOE Rating: Possible** **Total: 7**

Family: Capniidae						
<i>Capnia nigra</i>	Within Known Range? Y	Nearest Occurrence:	521.88 KM	49.09162°N	88.10423°E	
Family: Chloroperlidae						
<i>Alloperla mediata</i>	Within Known Range? N	Nearest Occurrence:	723.11 KM	50.61826°N	99.12094°E	
Family: Nemouridae						
<i>Amphinemura standfussi</i>	Within Known Range? N	Nearest Occurrence:	608.62 KM	48.06257°N	97.55064°E	
<i>Nemoura arctica</i>	Within Known Range? Y	Nearest Occurrence:	355.27 KM	47.53132°N	91.28330°E	
Family: Perlodidae						
<i>Arcynopteryx polaris</i>	Within Known Range? Y	Nearest Occurrence:	389.64 KM	47.34650°N	90.95982°E	
<i>Diura majuscula</i>	Within Known Range? Y	Nearest Occurrence:	354.75 KM	47.60884°N	91.13502°E	
<i>Isoperla lunigera</i>	Within Known Range? N	Nearest Occurrence:	748.58 KM	51.09845°N	99.32051°E	

**LOE Rating: Predicted** **Total: 13**

Family: Capniidae						
<i>Mesocapnia altaica</i>	Within Known Range? N	Nearest Occurrence:	467.71 KM	48.43684°N	88.90094°E	
<i>Mesocapnia variabilis</i>	Within Known Range? N	Nearest Occurrence:	503.94 KM	48.50631°N	88.50947°E	
Family: Chloroperlidae						
<i>Alaskaperla longidentata</i>	Within Known Range? N	Nearest Occurrence:	570.44 KM	48.15779°N	97.21441°E	
<i>Alloperla deminuta</i>	Within Known Range? N	Nearest Occurrence:	721.48 KM	51.47065°N	99.02617°E	
<i>Alloperla joosti</i>	Within Known Range? N	Nearest Occurrence:	585.28 KM	48.24995°N	97.40627°E	
Family: Leuctridae						
<i>Paraleuctra zapekinae</i>	Within Known Range? N	Nearest Occurrence:	1,338.09 KM	49.71481°N	104.64203°E	
Family: Nemouridae						
<i>Nemoura sahlbergi</i>	Within Known Range? N	Nearest Occurrence:	733.53 KM	50.42996°N	99.21727°E	
<i>Nemurella pictetii</i>	Within Known Range? N	Nearest Occurrence:	748.09 KM	50.81265°N	99.33803°E	
Family: Perlidae						
<i>Agnetina extrema</i>	Within Known Range? N	Nearest Occurrence:	942.11 KM	47.50949°N	100.57510°E	
<i>Paragnetina flavotincta</i>	Within Known Range? N	Nearest Occurrence:	817.85 KM	49.26170°N	99.88242°E	
Family: Perlodidae						
<i>Isoperla kozlovi</i>	Within Known Range? N	Nearest Occurrence:	745.23 KM	50.31066°N	99.32150°E	
<i>Isoperla potanini</i>	Within Known Range? Y	Nearest Occurrence:	288.72 KM	48.42161°N	90.97337°E	
<i>Kaszabia nigricauda</i>	Within Known Range? N	Nearest Occurrence:	697.36 KM	48.71968°N	98.65184°E	

**LOE Rating: Unlikely** **Total: 3**

Family: Capniidae						
<i>Capnia khulsbagia</i>	Within Known Range? N	Nearest Occurrence:	901.35 KM	51.51689°N	100.65717°E	
Family: Leuctridae						
<i>Leuctra fusca</i>	Within Known Range? N	Nearest Occurrence:	1,636.44 KM	49.08643°N	107.28952°E	
Family: Perlodidae						
<i>Isoperla eximia</i>	Within Known Range? N	Nearest Occurrence:	1,665.33 KM	49.01829°N	107.54453°E	



Basin: Internal Drainage Basin

Aimag: Uvs

Soum: Khovd

Freshwater Ecoregion: Western Mongolia

Terrestrial Ecoregion: Great Lakes Basin Desert Steppe

WQM Sites:

WQM Sites: # 139 (Shiver River @ N 49.23035° E 91.05523°)

**LOE Rating: Highly Likely Total: 2**

Family: Perlodidae

Diura bicaudata Within Known Range? Y Nearest Occurrence: 187.09 KM 49.04180°N 89.41675°E

Isoperla altaica Within Known Range? Y Nearest Occurrence: 149.03 KM 50.53472°N 91.79719°E

**LOE Rating: Likely Total: 17**

Family: Capniidae

Isocapnia guentheri Within Known Range? N Nearest Occurrence: 800.87 KM 48.61518°N 98.23096°E

Isocapnia kudia Within Known Range? N Nearest Occurrence: 976.87 KM 51.25356°N 99.66687°E

Isocapnia sibirica Within Known Range? N Nearest Occurrence: 1,148.81 KM 47.28244°N 101.18793°E

Family: Chloroperlidae

Haploperla lepnevae Within Known Range? Y Nearest Occurrence: 132.46 KM 48.97819°N 89.94996°E

Suwallia teleckojensis Within Known Range? Y Nearest Occurrence: 181.03 KM 48.84329°N 89.53623°E

Family: Nemouridae

Amphinemura borealis Within Known Range? Y Nearest Occurrence: 180.70 KM 48.84329°N 89.53623°E

Nemoura arctica Within Known Range? Y Nearest Occurrence: 203.88 KM 47.62355°N 90.67122°E

Nemoura cinerea Within Known Range? N Nearest Occurrence: 735.89 KM 48.06257°N 97.55064°E

Family: Perlidae

Agnetina cocandica Within Known Range? Y Nearest Occurrence: 160.20 KM 48.24533°N 91.90115°E

Kamimuria exilis Within Known Range? N Nearest Occurrence: 869.31 KM 50.16278°N 98.84212°E

Family: Perlodidae

Arcynopteryx compacta Within Known Range? Y Nearest Occurrence: 110.91 KM 48.42161°N 90.97337°E

Arcynopteryx polaris Within Known Range? Y Nearest Occurrence: 230.31 KM 47.34650°N 90.95982°E

Arcynopteryx sajanensis Within Known Range? N Nearest Occurrence: 1,088.58 KM 51.61397°N 100.59972°E

Diura majuscula Within Known Range? Y Nearest Occurrence: 198.50 KM 47.66326°N 90.71830°E

Pictetiella asiatica Within Known Range? N Nearest Occurrence: 1,080.21 KM 51.65822°N 100.53000°E

Skwala pusilla Within Known Range? N Nearest Occurrence: 300.18 KM 48.51277°N 88.51107°E

Family: Taeniopterygidae

Taenionema japonicum Within Known Range? Y Nearest Occurrence: 182.71 KM 47.85391°N 90.54864°E

**LOE Rating: Probable Total: 5**

Family: Capniidae

Capnia nigra Within Known Range? Y Nearest Occurrence: 330.09 KM 49.09162°N 88.10423°E

Family: Chloroperlidae

Alloperla rostellata Within Known Range? N Nearest Occurrence: 880.99 KM 48.36436°N 98.92737°E

Suwallia kerzhneri Within Known Range? N Nearest Occurrence: 716.17 KM 48.24995°N 97.40627°E

Family: Perlidae

Agnetina brevipennis Within Known Range? Y Nearest Occurrence: 132.46 KM 48.97819°N 89.94996°E

Family: Perlodidae

Isoperla obscura Within Known Range? Y Nearest Occurrence: 132.46 KM 48.97819°N 89.94996°E

**Basin:** Internal Drainage Basin  
**Aimag:** Uvs  
**Soum:** Khovd

**Freshwater Ecoregion:** Western Mongolia  
**Terrestrial Ecoregion:** Great Lakes Basin Desert Steppe

**WQM Sites:**

WQM Sites: # 139 (Shiver River @ N 49.23035° E 91.05523°)

<b>LOE Rating:</b> Possible	<b>Total:</b> 4
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<b>Family:</b> Perlodidae					
Isoperla asiatica	Within Known Range? N	Nearest Occurrence:	735.89 KM	48.06257°N	97.55064°E
Isoperla potanini	Within Known Range? Y	Nearest Occurrence:	110.91 KM	48.42161°N	90.97337°E
Megarcys ochracea	Within Known Range? N	Nearest Occurrence:	931.62 KM	51.46205°N	99.19994°E
<b>Family:</b> Pteronarcyidae					
Pteronarcys reticulata	Within Known Range? N	Nearest Occurrence:	913.16 KM	51.47065°N	99.02617°E

<b>LOE Rating:</b> Predicted	<b>Total:</b> 14
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<b>Family:</b> Capniidae					
Mesocapnia altaica	Within Known Range? N	Nearest Occurrence:	263.15 KM	48.43684°N	88.90094°E
Mesocapnia variabilis	Within Known Range? Y	Nearest Occurrence:	301.13 KM	48.50631°N	88.50947°E
<b>Family:</b> Chloroperlidae					
Alaskaperla longidentata	Within Known Range? N	Nearest Occurrence:	697.21 KM	48.15779°N	97.21441°E
Alloperla deminuta	Within Known Range? N	Nearest Occurrence:	913.16 KM	51.47065°N	99.02617°E
Alloperla joosti	Within Known Range? N	Nearest Occurrence:	716.17 KM	48.24995°N	97.40627°E
Alloperla mediata	Within Known Range? N	Nearest Occurrence:	904.63 KM	50.61826°N	99.12094°E
<b>Family:</b> Leuctridae					
Paraleuctra zapekinae	Within Known Range? N	Nearest Occurrence:	1,507.93 KM	49.71481°N	104.64203°E
<b>Family:</b> Nemouridae					
Amphinemura standfussi	Within Known Range? N	Nearest Occurrence:	735.89 KM	48.06257°N	97.55064°E
Nemoura sahlbergi	Within Known Range? N	Nearest Occurrence:	912.39 KM	50.42996°N	99.21727°E
<b>Family:</b> Perlidae					
Agnentina extrema	Within Known Range? N	Nearest Occurrence:	1,077.11 KM	47.50949°N	100.57510°E
<b>Family:</b> Perlodidae					
Isoperla kozlovi	Within Known Range? N	Nearest Occurrence:	922.35 KM	50.31066°N	99.32150°E
Isoperla lunigera	Within Known Range? N	Nearest Occurrence:	935.72 KM	51.09845°N	99.32051°E
Isoperla mongolica	Within Known Range? Y	Nearest Occurrence:	181.03 KM	48.84329°N	89.53623°E
Kaszabia nigricauda	Within Known Range? N	Nearest Occurrence:	846.18 KM	48.71968°N	98.65184°E

<b>LOE Rating:</b> Unlikely	<b>Total:</b> 5
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<b>Family:</b> Capniidae					
Capnia khulsbagia	Within Known Range? N	Nearest Occurrence:	1,086.30 KM	50.98944°N	100.71944°E
<b>Family:</b> Leuctridae					
Leuctra fusca	Within Known Range? N	Nearest Occurrence:	1,801.80 KM	49.08643°N	107.28952°E
<b>Family:</b> Nemouridae					
Nemurella pictetii	Within Known Range? N	Nearest Occurrence:	931.82 KM	50.81265°N	99.33803°E
<b>Family:</b> Perlidae					
Paragnetina flavotincta	Within Known Range? N	Nearest Occurrence:	979.39 KM	49.26170°N	99.88242°E
<b>Family:</b> Perlodidae					
Isoperla eximia	Within Known Range? N	Nearest Occurrence:	1,830.27 KM	49.01829°N	107.54453°E

Basin: Internal Drainage Basin

Aimag: Uvs

Soum: Khyargas

Freshwater Ecoregion: Western Mongolia

Terrestrial Ecoregion: Selenge-Orkhon Forest Steppe

WQM Sites:

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Highly Likely Total: 1**

Family: Perlodidae

Isoperla altaica Within Known Range? Y Nearest Occurrence: 253.11 KM 50.53472°N 91.79719°E

**LOE Rating: Likely Total: 19**

Family: Capniidae

Isocapnia guentheri Within Known Range? N Nearest Occurrence: 497.26 KM 48.61518°N 98.23096°E

Isocapnia kudia Within Known Range? N Nearest Occurrence: 672.72 KM 51.25356°N 99.66687°E

Isocapnia sibirica Within Known Range? N Nearest Occurrence: 852.56 KM 47.28244°N 101.18793°E

Family: Chloroperlidae

Alloperla rostellata Within Known Range? N Nearest Occurrence: 578.78 KM 48.36436°N 98.92737°E

Haploperla lepnevae Within Known Range? Y Nearest Occurrence: 437.58 KM 48.97819°N 89.94996°E

Suwallia kerzhneri Within Known Range? N Nearest Occurrence: 420.35 KM 48.24995°N 97.40627°E

Suwallia teleckojensis Within Known Range? Y Nearest Occurrence: 321.08 KM 47.55886°N 91.76095°E

Family: Nemouridae

Amphinemura borealis Within Known Range? Y Nearest Occurrence: 418.91 KM 47.03925°N 91.03419°E

Nemoura cinerea Within Known Range? N Nearest Occurrence: 442.77 KM 48.06257°N 97.55064°E

Family: Perlidae

Agnetina cocandica Within Known Range? Y Nearest Occurrence: 177.98 KM 48.33025°N 92.81616°E

Kamimuria exilis Within Known Range? N Nearest Occurrence: 559.24 KM 50.16278°N 98.84212°E

Family: Perlodidae

Arcynopteryx compacta Within Known Range? Y Nearest Occurrence: 343.71 KM 48.42161°N 90.97337°E

Arcynopteryx sajanensis Within Known Range? N Nearest Occurrence: 784.79 KM 51.61397°N 100.59972°E

Diura bicaudata Within Known Range? Y Nearest Occurrence: 495.35 KM 49.04180°N 89.41675°E

Diura majuscula Within Known Range? Y Nearest Occurrence: 347.02 KM 47.24104°N 91.75287°E

Isoperla asiatica Within Known Range? N Nearest Occurrence: 442.77 KM 48.06257°N 97.55064°E

Pictetiella asiatica Within Known Range? N Nearest Occurrence: 777.45 KM 51.65822°N 100.53000°E

Skwala pusilla Within Known Range? N Nearest Occurrence: 603.76 KM 48.51277°N 88.51107°E

Family: Taeniopterygidae

Taenionema japonicum Within Known Range? Y Nearest Occurrence: 412.84 KM 47.85391°N 90.54864°E

**LOE Rating: Probable Total: 5**

Family: Capniidae

Capnia nigra Within Known Range? Y Nearest Occurrence: 442.77 KM 48.06257°N 97.55064°E

Family: Nemouridae

Amphinemura standfussi Within Known Range? N Nearest Occurrence: 442.77 KM 48.06257°N 97.55064°E

Nemoura arctica Within Known Range? Y Nearest Occurrence: 363.26 KM 47.53132°N 91.28330°E

Family: Perlodidae

Megarcys ochracea Within Known Range? N Nearest Occurrence: 630.54 KM 51.46205°N 99.19994°E

Family: Pteronarcyidae

Pteronarcys reticulata Within Known Range? N Nearest Occurrence: 612.75 KM 51.47065°N 99.02617°E

Basin: Internal Drainage Basin

Aimag: Uvs

Soum: Khyargas

Freshwater Ecoregion: Western Mongolia

Terrestrial Ecoregion: Selenge-Orkhon Forest Steppe

WQM Sites:

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Possible** **Total: 5**

Family: Chloroperlidae

Alaskaperla longidentata Within Known Range? N Nearest Occurrence: 404.22 KM 48.15779°N 97.21441 °E

Alloperla mediata Within Known Range? N Nearest Occurrence: 596.91 KM 50.61826°N 99.12094 °E

Family: Perlidae

Agnetina brevipennis Within Known Range? Y Nearest Occurrence: 417.01 KM 46.76864°N 91.32673 °E

Family: Perlodidae

Arcynopteryx polaris Within Known Range? Y Nearest Occurrence: 372.52 KM 46.61982°N 92.22981 °E

Isoperla lunigera Within Known Range? N Nearest Occurrence: 631.01 KM 51.09845°N 99.32051 °E

**LOE Rating: Predicted** **Total: 14**

Family: Capniidae

Mesocapnia altaica Within Known Range? N Nearest Occurrence: 563.13 KM 48.43684°N 88.90094 °E

Mesocapnia variabilis Within Known Range? Y Nearest Occurrence: 579.82 KM 48.36436°N 98.92737 °E

Family: Chloroperlidae

Alloperla deminuta Within Known Range? N Nearest Occurrence: 612.75 KM 51.47065°N 99.02617 °E

Alloperla joosti Within Known Range? N Nearest Occurrence: 420.35 KM 48.24995°N 97.40627 °E

Family: Leuctridae

Paraleuctra zapekinae Within Known Range? N Nearest Occurrence: 1,198.03 KM 49.71481°N 104.64203 °E

Family: Nemouridae

Nemoura sahlbergi Within Known Range? N Nearest Occurrence: 603.67 KM 50.42996°N 99.21727 °E

Nemurella pictetii Within Known Range? N Nearest Occurrence: 625.02 KM 50.81265°N 99.33803 °E

Family: Perlidae

Agnetina extrema Within Known Range? N Nearest Occurrence: 780.13 KM 47.50949°N 100.57510 °E

Paragnetina flavotincta Within Known Range? N Nearest Occurrence: 670.35 KM 49.26170°N 99.88242 °E

Family: Perlodidae

Isoperla kozlovi Within Known Range? N Nearest Occurrence: 613.13 KM 50.31066°N 99.32150 °E

Isoperla mongolica Within Known Range? Y Nearest Occurrence: 416.83 KM 47.08782°N 91.02542 °E

Isoperla obscura Within Known Range? Y Nearest Occurrence: 437.58 KM 48.97819°N 89.94996 °E

Isoperla potanini Within Known Range? Y Nearest Occurrence: 343.71 KM 48.42161°N 90.97337 °E

Kaszabia nigricauda Within Known Range? N Nearest Occurrence: 540.93 KM 48.71968°N 98.65184 °E

**LOE Rating: Unlikely** **Total: 3**

Family: Capniidae

Capnia khulsbagia Within Known Range? N Nearest Occurrence: 779.01 KM 50.98944°N 100.71944 °E

Family: Leuctridae

Leuctra fusca Within Known Range? N Nearest Occurrence: 1,492.66 KM 49.08643°N 107.28952 °E

Family: Perlodidae

Isoperla eximia Within Known Range? N Nearest Occurrence: 1,521.23 KM 49.01829°N 107.54453 °E

**Basin:** Internal Drainage Basin

**Aimag:** Uvs

**Soum:** Malchin

Freshwater Ecoregion: Western Mongolia

Terrestrial Ecoregion: Selenge-Orkhon Forest Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Highly Likely Total: 1**

Family: Perlodidae

*Isoperla altaica* Within Known Range? Y Nearest Occurrence: 182.99 KM 50.53472°N 91.79719°E

**LOE Rating: Likely Total: 19**

Family: Capniidae

*Isocapnia guentheri* Within Known Range? N Nearest Occurrence: 569.20 KM 48.61518°N 98.23096°E

*Isocapnia kudia* Within Known Range? N Nearest Occurrence: 735.68 KM 51.25356°N 99.66687°E

*Isocapnia sibirica* Within Known Range? N Nearest Occurrence: 924.45 KM 47.28244°N 101.18793°E

Family: Chloroperlidae

*Alloperla rostellata* Within Known Range? N Nearest Occurrence: 650.75 KM 48.36436°N 98.92737°E

*Haploperla lepnevae* Within Known Range? Y Nearest Occurrence: 372.10 KM 48.97819°N 89.94996°E

*Suwallia kerzhneri* Within Known Range? N Nearest Occurrence: 492.00 KM 48.24995°N 97.40627°E

*Suwallia teleckojensis* Within Known Range? Y Nearest Occurrence: 289.14 KM 47.55886°N 91.76095°E

Family: Nemouridae

*Amphinemura borealis* Within Known Range? Y Nearest Occurrence: 383.19 KM 47.03925°N 91.03419°E

*Nemoura cinerea* Within Known Range? N Nearest Occurrence: 514.18 KM 48.06257°N 97.55064°E

Family: Perlidae

*Agnetina cocandica* Within Known Range? Y Nearest Occurrence: 159.93 KM 48.33025°N 92.81616°E

*Kamimuria exilis* Within Known Range? N Nearest Occurrence: 627.06 KM 50.16278°N 98.84212°E

Family: Perlodidae

*Arcynopteryx compacta* Within Known Range? Y Nearest Occurrence: 288.13 KM 48.42161°N 90.97337°E

*Arcynopteryx sajanensis* Within Known Range? N Nearest Occurrence: 847.35 KM 51.61397°N 100.59972°E

*Diura bicaudata* Within Known Range? Y Nearest Occurrence: 428.77 KM 49.04180°N 89.41675°E

*Diura majuscula* Within Known Range? Y Nearest Occurrence: 319.46 KM 47.24104°N 91.75287°E

*Isoperla asiatica* Within Known Range? N Nearest Occurrence: 514.18 KM 48.06257°N 97.55064°E

*Pictetiella asiatica* Within Known Range? N Nearest Occurrence: 839.59 KM 51.65822°N 100.53000°E

*Skwala pusilla* Within Known Range? N Nearest Occurrence: 539.47 KM 48.51277°N 88.51107°E

Family: Taeniopterygidae

*Taenionema japonicum* Within Known Range? Y Nearest Occurrence: 361.85 KM 47.85391°N 90.54864°E

**LOE Rating: Probable Total: 3**

Family: Perlidae

*Agnetina brevipennis* Within Known Range? Y Nearest Occurrence: 372.10 KM 48.97819°N 89.94996°E

Family: Perlodidae

*Megarcys ochracea* Within Known Range? N Nearest Occurrence: 691.53 KM 51.46205°N 99.19994°E

Family: Pteronarcyidae

*Pteronarcys reticulata* Within Known Range? N Nearest Occurrence: 673.32 KM 51.47065°N 99.02617°E

**Basin:** Internal Drainage Basin  
**Aimags:** Uvs  
**Soums:** Malchin

**Freshwater Ecoregion:** Western Mongolia  
**Terrestrial Ecoregion:** Selenge-Orkhon Forest Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Possible Total: 7**

Family: Capniidae					
Capnia nigra	Within Known Range? Y	Nearest Occurrence:	514.18 KM	48.06257°N	97.55064 °E
Family: Chloroperlidae					
Alloperla mediata	Within Known Range? N	Nearest Occurrence:	662.57 KM	50.61826°N	99.12094 °E
Family: Nemouridae					
Amphinemura standfussi	Within Known Range? N	Nearest Occurrence:	514.18 KM	48.06257°N	97.55064 °E
Nemoura arctica	Within Known Range? Y	Nearest Occurrence:	324.27 KM	47.53132°N	91.28330 °E
Family: Perlodidae					
Arcynopteryx polaris	Within Known Range? Y	Nearest Occurrence:	351.48 KM	46.91446°N	91.74682 °E
Isoperla lunigera	Within Known Range? N	Nearest Occurrence:	694.33 KM	51.09845°N	99.32051 °E
Isoperla obscura	Within Known Range? Y	Nearest Occurrence:	372.10 KM	48.97819°N	89.94996 °E

**LOE Rating: Predicted Total: 14**

Family: Capniidae					
Mesocapnia altaica	Within Known Range? N	Nearest Occurrence:	499.95 KM	48.43684°N	88.90094 °E
Mesocapnia variabilis	Within Known Range? Y	Nearest Occurrence:	540.79 KM	48.50631°N	88.50947 °E
Family: Chloroperlidae					
Alaskaperla longidentata	Within Known Range? N	Nearest Occurrence:	475.55 KM	48.15779°N	97.21441 °E
Alloperla deminuta	Within Known Range? N	Nearest Occurrence:	673.32 KM	51.47065°N	99.02617 °E
Alloperla joosti	Within Known Range? N	Nearest Occurrence:	492.00 KM	48.24995°N	97.40627 °E
Family: Leuctridae					
Paraleuctra zapekinae	Within Known Range? N	Nearest Occurrence:	1,267.70 KM	49.71481°N	104.64203 °E
Family: Nemouridae					
Nemoura sahlbergi	Within Known Range? N	Nearest Occurrence:	670.33 KM	50.42996°N	99.21727 °E
Nemurella pictetii	Within Known Range? N	Nearest Occurrence:	689.90 KM	50.81265°N	99.33803 °E
Family: Perlidae					
Agnetina extrema	Within Known Range? N	Nearest Occurrence:	852.04 KM	47.50949°N	100.57510 °E
Paragnetina flavotincta	Within Known Range? N	Nearest Occurrence:	741.06 KM	49.26170°N	99.88242 °E
Family: Perlodidae					
Isoperla kozlovi	Within Known Range? N	Nearest Occurrence:	680.40 KM	50.31066°N	99.32150 °E
Isoperla mongolica	Within Known Range? Y	Nearest Occurrence:	380.35 KM	47.08782°N	91.02542 °E
Isoperla potanini	Within Known Range? Y	Nearest Occurrence:	288.13 KM	48.42161°N	90.97337 °E
Kaszabia nigricauda	Within Known Range? N	Nearest Occurrence:	612.74 KM	48.71968°N	98.65184 °E

**LOE Rating: Unlikely Total: 3**

Family: Capniidae					
Capnia khulsbagia	Within Known Range? N	Nearest Occurrence:	844.32 KM	50.98944°N	100.71944 °E
Family: Leuctridae					
Leuctra fusca	Within Known Range? N	Nearest Occurrence:	1,563.11 KM	49.08643°N	107.28952 °E
Family: Perlodidae					
Isoperla eximia	Within Known Range? N	Nearest Occurrence:	1,591.73 KM	49.01829°N	107.54453 °E

Basin: Internal Drainage Basin

Aimag: Uvs

Soum: Naranbulag

Freshwater Ecoregion: Western Mongolia

Terrestrial Ecoregion: Great Lakes Basin Desert Steppe

WQM Sites:

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Highly Likely Total: 2**

Family: Perlodidae					
Isoperla altaica	Within Known Range? Y	Nearest Occurrence:	136.82 KM	50.53472 °N	91.79719 °E
Family: Taeniopterygidae					
Taenionema japonicum	Within Known Range? Y	Nearest Occurrence:	288.50 KM	47.85391 °N	90.54864 °E

**LOE Rating: Likely Total: 16**

Family: Capniidae					
Isocapnia guentheri	Within Known Range? N	Nearest Occurrence:	642.08 KM	48.61518 °N	98.23096 °E
Isocapnia kudia	Within Known Range? N	Nearest Occurrence:	815.71 KM	51.25356 °N	99.66687 °E
Isocapnia sibirica	Within Known Range? N	Nearest Occurrence:	994.14 KM	47.28244 °N	101.18793 °E
Family: Chloroperlidae					
Haploperla lepnevae	Within Known Range? Y	Nearest Occurrence:	292.09 KM	48.97819 °N	89.94996 °E
Suwallia teleckojensis	Within Known Range? Y	Nearest Occurrence:	235.91 KM	47.55886 °N	91.76095 °E
Family: Nemouridae					
Amphinemura borealis	Within Known Range? Y	Nearest Occurrence:	322.89 KM	47.03925 °N	91.03419 °E
Nemoura cinerea	Within Known Range? N	Nearest Occurrence:	581.88 KM	48.06257 °N	97.55064 °E
Family: Perlidae					
Agnetina cocandica	Within Known Range? Y	Nearest Occurrence:	138.43 KM	48.33025 °N	92.81616 °E
Kamimuria exilis	Within Known Range? N	Nearest Occurrence:	706.33 KM	50.16278 °N	98.84212 °E
Family: Perlodidae					
Arcynopteryx compacta	Within Known Range? Y	Nearest Occurrence:	212.29 KM	48.42161 °N	90.97337 °E
Arcynopteryx sajanensis	Within Known Range? N	Nearest Occurrence:	927.51 KM	51.61397 °N	100.59972 °E
Diura bicaudata	Within Known Range? Y	Nearest Occurrence:	348.96 KM	49.04180 °N	89.41675 °E
Diura majuscula	Within Known Range? Y	Nearest Occurrence:	264.28 KM	47.60884 °N	91.13502 °E
Isoperla asiatica	Within Known Range? N	Nearest Occurrence:	581.88 KM	48.06257 °N	97.55064 °E
Pictetiella asiatica	Within Known Range? N	Nearest Occurrence:	919.59 KM	51.65822 °N	100.53000 °E
Skwala pusilla	Within Known Range? N	Nearest Occurrence:	459.45 KM	48.51277 °N	88.51107 °E

**LOE Rating: Probable Total: 5**

Family: Capniidae					
Capnia nigra	Within Known Range? Y	Nearest Occurrence:	492.76 KM	49.09162 °N	88.10423 °E
Family: Chloroperlidae					
Alloperla rostellata	Within Known Range? N	Nearest Occurrence:	722.99 KM	48.36436 °N	98.92737 °E
Suwallia kerzhneri	Within Known Range? N	Nearest Occurrence:	560.86 KM	48.24995 °N	97.40627 °E
Family: Perlidae					
Agnetina brevipennis	Within Known Range? Y	Nearest Occurrence:	292.09 KM	48.97819 °N	89.94996 °E
Family: Pteronarcyidae					
Pteronarcys reticulata	Within Known Range? N	Nearest Occurrence:	753.23 KM	51.47065 °N	99.02617 °E

**Basin:** Internal Drainage Basin

**Aimags:** Uvs

**Soums:** Naranbulag

**Freshwater Ecoregion:** Western Mongolia

**Terrestrial Ecoregion:** Great Lakes Basin Desert Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Possible Total: 7**

**Family:** Nemouridae

Amphinemura standfussi	Within Known Range? N	Nearest Occurrence: 581.88 KM	48.06257°N	97.55064°E
Nemoura arctica	Within Known Range? Y	Nearest Occurrence: 262.32 KM	47.53132°N	91.28330°E

**Family:** Perlodidae

Arcynopteryx polaris	Within Known Range? Y	Nearest Occurrence: 299.34 KM	47.34650°N	90.95982°E
Isoperla mongolica	Within Known Range? Y	Nearest Occurrence: 319.35 KM	47.08782°N	91.02542°E
Isoperla obscura	Within Known Range? Y	Nearest Occurrence: 292.09 KM	48.97819°N	89.94996°E
Isoperla potanini	Within Known Range? Y	Nearest Occurrence: 212.29 KM	48.42161°N	90.97337°E
Megarcys ochracea	Within Known Range? N	Nearest Occurrence: 771.48 KM	51.46205°N	99.19994°E

**LOE Rating: Predicted Total: 14**

**Family:** Capniidae

Mesocapnia altaica	Within Known Range? N	Nearest Occurrence: 420.04 KM	48.43684°N	88.90094°E
Mesocapnia variabilis	Within Known Range? Y	Nearest Occurrence: 460.63 KM	48.50631°N	88.50947°E

**Family:** Chloroperlidae

Alaskaperla longidentata	Within Known Range? N	Nearest Occurrence: 543.10 KM	48.15779°N	97.21441°E
Alloperla deminuta	Within Known Range? N	Nearest Occurrence: 753.23 KM	51.47065°N	99.02617°E
Alloperla joosti	Within Known Range? N	Nearest Occurrence: 560.86 KM	48.24995°N	97.40627°E
Alloperla mediata	Within Known Range? N	Nearest Occurrence: 742.33 KM	50.61826°N	99.12094°E

**Family:** Leuctridae

Paraleuctra zapekinae	Within Known Range? N	Nearest Occurrence: 1,345.59 KM	49.71481°N	104.64203°E
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**Family:** Nemouridae

Nemoura sahlbergi	Within Known Range? N	Nearest Occurrence: 749.84 KM	50.42996°N	99.21727°E
Nemurella pictetii	Within Known Range? N	Nearest Occurrence: 769.79 KM	50.81265°N	99.33803°E

**Family:** Perlidae

Agnetina extrema	Within Known Range? N	Nearest Occurrence: 921.99 KM	47.50949°N	100.57510°E
Paragnetina flavotincta	Within Known Range? N	Nearest Occurrence: 817.72 KM	49.26170°N	99.88242°E

**Family:** Perlodidae

Isoperla kozlovi	Within Known Range? N	Nearest Occurrence: 759.71 KM	50.31066°N	99.32150°E
Isoperla lunigera	Within Known Range? N	Nearest Occurrence: 774.34 KM	51.09845°N	99.32051°E
Kaszabia nigricauda	Within Known Range? N	Nearest Occurrence: 686.60 KM	48.71968°N	98.65184°E

**LOE Rating: Unlikely Total: 3**

**Family:** Capniidae

Capnia khulsbagia	Within Known Range? N	Nearest Occurrence: 924.16 KM	50.98944°N	100.71944°E
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**Family:** Leuctridae

Leuctra fusca	Within Known Range? N	Nearest Occurrence: 1,640.09 KM	49.08643°N	107.28952°E
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**Family:** Perlodidae

Isoperla eximia	Within Known Range? N	Nearest Occurrence: 1,668.63 KM	49.01829°N	107.54453°E
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Basin: Internal Drainage Basin

Aimags: Uvs

Soums: Olgi

Freshwater Ecoregion: Western Mongolia

Terrestrial Ecoregion: Great Lakes Basin Desert Steppe

WQM Sites:

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Highly Likely Total: 1**

Family: Perlodidae

Isoperla altaica Within Known Range? Y Nearest Occurrence: 181.76 KM 47.33906°N 91.86288°E

**LOE Rating: Likely Total: 16**

Family: Capniidae

Isocapnia guentheri Within Known Range? N Nearest Occurrence: 667.86 KM 48.61518°N 98.23096°E

Isocapnia kudia Within Known Range? N Nearest Occurrence: 865.52 KM 51.25356°N 99.66687°E

Isocapnia sibirica Within Known Range? N Nearest Occurrence: 1,011.89 KM 47.28244°N 101.18793°E

Family: Chloroperlidae

Haploperla lepnevae Within Known Range? Y Nearest Occurrence: 252.31 KM 48.97819°N 89.94996°E

Suwallia teleckojensis Within Known Range? Y Nearest Occurrence: 161.25 KM 47.55886°N 91.76095°E

Family: Nemouridae

Amphinemura borealis Within Known Range? Y Nearest Occurrence: 248.21 KM 47.03925°N 91.03419°E

Nemoura cinerea Within Known Range? N Nearest Occurrence: 599.26 KM 48.06257°N 97.55064°E

Family: Perlidae

Agnetina cocandica Within Known Range? Y Nearest Occurrence: 84.46 KM 48.24533°N 91.90115°E

Kamimuria exilis Within Known Range? N Nearest Occurrence: 748.67 KM 50.16278°N 98.84212°E

Family: Perlodidae

Arcynopteryx compacta Within Known Range? Y Nearest Occurrence: 150.13 KM 48.42161°N 90.97337°E

Arcynopteryx sajanensis Within Known Range? N Nearest Occurrence: 978.06 KM 51.61397°N 100.59972°E

Diura bicaudata Within Known Range? Y Nearest Occurrence: 311.68 KM 49.04180°N 89.41675°E

Diura majuscula Within Known Range? Y Nearest Occurrence: 190.59 KM 47.60884°N 91.13502°E

Pictetiella asiatica Within Known Range? N Nearest Occurrence: 970.46 KM 51.65822°N 100.53000°E

Skwala pusilla Within Known Range? N Nearest Occurrence: 414.62 KM 48.51277°N 88.51107°E

Family: Taeniopterygidae

Taenionema japonicum Within Known Range? Y Nearest Occurrence: 221.50 KM 47.85391°N 90.54864°E

**LOE Rating: Probable Total: 6**

Family: Chloroperlidae

Alloperla rostellata Within Known Range? N Nearest Occurrence: 746.91 KM 48.36436°N 98.92737°E

Suwallia kerzhneri Within Known Range? N Nearest Occurrence: 580.37 KM 48.24995°N 97.40627°E

Family: Nemouridae

Nemoura arctica Within Known Range? Y Nearest Occurrence: 187.67 KM 47.53132°N 91.28330°E

Family: Perlidae

Agnetina brevipennis Within Known Range? Y Nearest Occurrence: 252.31 KM 48.97819°N 89.94996°E

Family: Perlodidae

Arcynopteryx polaris Within Known Range? Y Nearest Occurrence: 225.53 KM 47.34650°N 90.95982°E

Isoperla asiatica Within Known Range? N Nearest Occurrence: 599.26 KM 48.06257°N 97.55064°E

**Basin:** Internal Drainage Basin  
**Aimag:** Uvs  
**Soum:** Olgii

**Freshwater Ecoregion:** Western Mongolia  
**Terrestrial Ecoregion:** Great Lakes Basin Desert Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Possible Total: 5**

Family: Capniidae					
<i>Capnia nigra</i>	Within Known Range? Y	Nearest Occurrence:	457.47 KM	49.09162 °N	88.10423 °E
Family: Nemouridae					
<i>Amphinemura standfussi</i>	Within Known Range? N	Nearest Occurrence:	599.26 KM	48.06257 °N	97.55064 °E
Family: Perlodidae					
<i>Isoperla obscura</i>	Within Known Range? Y	Nearest Occurrence:	252.31 KM	48.97819 °N	89.94996 °E
<i>Isoperla potanini</i>	Within Known Range? Y	Nearest Occurrence:	150.13 KM	48.42161 °N	90.97337 °E
Family: Pteronarcyidae					
<i>Pteronarcys reticulata</i>	Within Known Range? N	Nearest Occurrence:	806.00 KM	51.47065 °N	99.02617 °E

**LOE Rating: Predicted Total: 16**

Family: Capniidae					
<i>Mesocapnia altaica</i>	Within Known Range? N	Nearest Occurrence:	372.80 KM	48.43684 °N	88.90094 °E
<i>Mesocapnia variabilis</i>	Within Known Range? Y	Nearest Occurrence:	415.63 KM	48.50631 °N	88.50947 °E
Family: Chloroperlidae					
<i>Alaskaperla longidentata</i>	Within Known Range? N	Nearest Occurrence:	560.74 KM	48.15779 °N	97.21441 °E
<i>Alloperla deminuta</i>	Within Known Range? N	Nearest Occurrence:	806.00 KM	51.47065 °N	99.02617 °E
<i>Alloperla joosti</i>	Within Known Range? N	Nearest Occurrence:	580.37 KM	48.24995 °N	97.40627 °E
<i>Alloperla mediata</i>	Within Known Range? N	Nearest Occurrence:	788.22 KM	50.61826 °N	99.12094 °E
Family: Leuctridae					
<i>Paraleuctra zapekinae</i>	Within Known Range? N	Nearest Occurrence:	1,381.28 KM	49.71481 °N	104.64203 °E
Family: Nemouridae					
<i>Nemoura sahlbergi</i>	Within Known Range? N	Nearest Occurrence:	793.98 KM	50.42996 °N	99.21727 °E
<i>Nemurella pictetii</i>	Within Known Range? N	Nearest Occurrence:	816.90 KM	50.81265 °N	99.33803 °E
Family: Perlidae					
<i>Agnetina extrema</i>	Within Known Range? N	Nearest Occurrence:	940.51 KM	47.50949 °N	100.57510 °E
<i>Paragnetina flavotincta</i>	Within Known Range? N	Nearest Occurrence:	851.02 KM	49.26170 °N	99.88242 °E
Family: Perlodidae					
<i>Isoperla kozlovi</i>	Within Known Range? N	Nearest Occurrence:	802.67 KM	50.31066 °N	99.32150 °E
<i>Isoperla lunigera</i>	Within Known Range? N	Nearest Occurrence:	823.71 KM	51.09845 °N	99.32051 °E
<i>Isoperla mongolica</i>	Within Known Range? Y	Nearest Occurrence:	244.63 KM	47.08782 °N	91.02542 °E
<i>Kaszabia nigricauda</i>	Within Known Range? N	Nearest Occurrence:	714.04 KM	48.71968 °N	98.65184 °E
<i>Megarcys ochracea</i>	Within Known Range? N	Nearest Occurrence:	823.78 KM	51.46205 °N	99.19994 °E

**LOE Rating: Unlikely Total: 3**

Family: Capniidae					
<i>Capnia khulsbagia</i>	Within Known Range? N	Nearest Occurrence:	970.37 KM	50.98944 °N	100.71944 °E
Family: Leuctridae					
<i>Leuctra fusca</i>	Within Known Range? N	Nearest Occurrence:	1,672.52 KM	49.08643 °N	107.28952 °E
Family: Perlodidae					
<i>Isoperla eximia</i>	Within Known Range? N	Nearest Occurrence:	1,700.76 KM	49.01829 °N	107.54453 °E

Basin: Internal Drainage Basin

Aimag: Uvs

Soum: Omnogovi

Freshwater Ecoregion: Western Mongolia

Terrestrial Ecoregion: Great Lakes Basin Desert Steppe

WQM Sites:

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Highly Likely Total: 1**

Family: Perlodidae

Isoperla altaica Within Known Range? Y Nearest Occurrence: 158.11 KM 50.53472°N 91.79719°E

**LOE Rating: Likely Total: 17**

Family: Capniidae

Isocapnia guentheri Within Known Range? N Nearest Occurrence: 736.81 KM 48.61518°N 98.23096°E

Isocapnia kudia Within Known Range? N Nearest Occurrence: 924.72 KM 51.25356°N 99.66687°E

Isocapnia sibirica Within Known Range? N Nearest Occurrence: 1,082.35 KM 47.28244°N 101.18793°E

Family: Chloroperlidae

Haploperla lepnevae Within Known Range? Y Nearest Occurrence: 185.27 KM 48.97819°N 89.94996°E

Suwallia teleckojensis Within Known Range? Y Nearest Occurrence: 174.92 KM 47.55886°N 91.76095°E

Family: Nemouridae

Amphinemura borealis Within Known Range? Y Nearest Occurrence: 232.59 KM 48.84329°N 89.53623°E

Nemoura arctica Within Known Range? Y Nearest Occurrence: 180.95 KM 47.53132°N 91.28330°E

Nemoura cinerea Within Known Range? N Nearest Occurrence: 669.58 KM 48.06257°N 97.55064°E

Family: Perlidae

Agnetina cocandica Within Known Range? Y Nearest Occurrence: 102.93 KM 48.24533°N 91.90115°E

Kamimuria exilis Within Known Range? N Nearest Occurrence: 812.15 KM 50.16278°N 98.84212°E

Family: Perlodidae

Arcynopteryx compacta Within Known Range? Y Nearest Occurrence: 105.69 KM 48.42161°N 90.97337°E

Arcynopteryx sajanensis Within Known Range? N Nearest Occurrence: 1,036.98 KM 51.61397°N 100.59972°E

Diura bicaudata Within Known Range? Y Nearest Occurrence: 243.92 KM 49.04180°N 89.41675°E

Diura majuscula Within Known Range? Y Nearest Occurrence: 176.76 KM 47.60884°N 91.13502°E

Pictetiella asiatica Within Known Range? N Nearest Occurrence: 1,029.00 KM 51.65822°N 100.53000°E

Skwala pusilla Within Known Range? N Nearest Occurrence: 350.91 KM 48.51277°N 88.51107°E

Family: Taeniopterygidae

Taenionema japonicum Within Known Range? Y Nearest Occurrence: 184.33 KM 47.85391°N 90.54864°E

**LOE Rating: Probable Total: 7**

Family: Capniidae

Capnia nigra Within Known Range? Y Nearest Occurrence: 389.45 KM 49.09162°N 88.10423°E

Family: Chloroperlidae

Alloperla rostellata Within Known Range? N Nearest Occurrence: 816.31 KM 48.36436°N 98.92737°E

Suwallia kerzhneri Within Known Range? N Nearest Occurrence: 650.39 KM 48.24995°N 97.40627°E

Family: Perlidae

Agnetina brevipennis Within Known Range? Y Nearest Occurrence: 185.27 KM 48.97819°N 89.94996°E

Family: Perlodidae

Arcynopteryx polaris Within Known Range? Y Nearest Occurrence: 210.66 KM 47.34650°N 90.95982°E

Isoperla asiatica Within Known Range? N Nearest Occurrence: 669.58 KM 48.06257°N 97.55064°E

Family: Pteronarcyidae

Pteronarcys reticulata Within Known Range? N Nearest Occurrence: 863.11 KM 51.47065°N 99.02617°E

Basin: Internal Drainage Basin

Aimag: Uvs

Soum: Omnogovi

Freshwater Ecoregion: Western Mongolia

Terrestrial Ecoregion: Great Lakes Basin Desert Steppe

WQM Sites:

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Possible Total: 2**

Family: Perlodidae

Isoperla obscura Within Known Range? Y Nearest Occurrence: 185.27 KM 48.97819°N 89.94996 °E

Isoperla potanini Within Known Range? Y Nearest Occurrence: 105.69 KM 48.42161°N 90.97337 °E

**LOE Rating: Predicted Total: 15**

Family: Capniidae

Mesocapnia altaica Within Known Range? N Nearest Occurrence: 310.54 KM 48.43684°N 88.90094 °E

Mesocapnia variabilis Within Known Range? Y Nearest Occurrence: 351.87 KM 48.50631°N 88.50947 °E

Family: Chloroperlidae

Alaskaperla longidentata Within Known Range? N Nearest Occurrence: 630.99 KM 48.15779°N 97.21441 °E

Alloperla deminuta Within Known Range? N Nearest Occurrence: 863.11 KM 51.47065°N 99.02617 °E

Alloperla joosti Within Known Range? N Nearest Occurrence: 650.39 KM 48.24995°N 97.40627 °E

Alloperla mediata Within Known Range? N Nearest Occurrence: 849.75 KM 50.61826°N 99.12094 °E

Family: Leuctridae

Paraleuctra zapekinae Within Known Range? N Nearest Occurrence: 1,447.74 KM 49.71481°N 104.64203 °E

Family: Nemouridae

Amphinemura standfussi Within Known Range? N Nearest Occurrence: 669.58 KM 48.06257°N 97.55064 °E

Nemoura sahlbergi Within Known Range? N Nearest Occurrence: 856.46 KM 50.42996°N 99.21727 °E

Family: Perlidae

Agnetina extrema Within Known Range? N Nearest Occurrence: 1,010.86 KM 47.50949°N 100.57510 °E

Family: Perlodidae

Isoperla kozlovi Within Known Range? N Nearest Occurrence: 865.75 KM 50.31066°N 99.32150 °E

Isoperla lunigera Within Known Range? N Nearest Occurrence: 883.17 KM 51.09845°N 99.32051 °E

Isoperla mongolica Within Known Range? Y Nearest Occurrence: 233.02 KM 48.84329°N 89.53623 °E

Kaszabia nigricauda Within Known Range? N Nearest Occurrence: 782.65 KM 48.71968°N 98.65184 °E

Megaracys ochracea Within Known Range? N Nearest Occurrence: 881.24 KM 51.46205°N 99.19994 °E

**LOE Rating: Unlikely Total: 5**

Family: Capniidae

Capnia khulsbagia Within Known Range? N Nearest Occurrence: 1,031.83 KM 50.98944°N 100.71944 °E

Family: Leuctridae

Leuctra fusca Within Known Range? N Nearest Occurrence: 1,740.14 KM 49.08643°N 107.28952 °E

Family: Nemouridae

Nemurella pictetii Within Known Range? N Nearest Occurrence: 877.75 KM 50.81265°N 99.33803 °E

Family: Perlidae

Paragnetina flavotincta Within Known Range? N Nearest Occurrence: 918.07 KM 49.26170°N 99.88242 °E

Family: Perlodidae

Isoperla eximia Within Known Range? N Nearest Occurrence: 1,768.48 KM 49.01829°N 107.54453 °E

Basin: Internal Drainage Basin

Aimag: Uvs

Soum: Ondorkhangai

Freshwater Ecoregion: Western Mongolia

Terrestrial Ecoregion: Great Lakes Basin Desert Steppe

WQM Sites:

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Highly Likely Total: 1**

Family: Perlodidae

Isoperla altaica Within Known Range? Y Nearest Occurrence: 372.73 KM 50.53472 °N 91.79719 °E

**LOE Rating: Likely Total: 19**

Family: Capniidae

Capnia nigra Within Known Range? Y Nearest Occurrence: 323.21 KM 48.06257 °N 97.55064 °E

Isocapnia guentheri Within Known Range? N Nearest Occurrence: 380.08 KM 48.61518 °N 98.23096 °E

Isocapnia kudia Within Known Range? N Nearest Occurrence: 583.72 KM 51.25356 °N 99.66687 °E

Isocapnia sibirica Within Known Range? N Nearest Occurrence: 733.50 KM 47.28244 °N 101.18793 °E

Family: Chloroperlidae

Alloperla rostellata Within Known Range? N Nearest Occurrence: 461.03 KM 48.36436 °N 98.92737 °E

Suwallia kerzhneri Within Known Range? N Nearest Occurrence: 300.89 KM 48.24995 °N 97.40627 °E

Suwallia teleckojensis Within Known Range? Y Nearest Occurrence: 301.43 KM 48.24995 °N 97.40627 °E

Family: Nemouridae

Amphinemura borealis Within Known Range? Y Nearest Occurrence: 323.33 KM 48.05989 °N 97.55073 °E

Nemoura cinerea Within Known Range? N Nearest Occurrence: 323.21 KM 48.06257 °N 97.55064 °E

Family: Perlidae

Agnetina cocandica Within Known Range? Y Nearest Occurrence: 243.57 KM 48.33025 °N 92.81616 °E

Kamimuria exilis Within Known Range? N Nearest Occurrence: 458.22 KM 50.16278 °N 98.84212 °E

Family: Perlodidae

Arcynopteryx compacta Within Known Range? Y Nearest Occurrence: 406.77 KM 47.05445 °N 91.84839 °E

Arcynopteryx sajanensis Within Known Range? N Nearest Occurrence: 695.88 KM 51.61397 °N 100.59972 °E

Diura bicaudata Within Known Range? Y Nearest Occurrence: 598.73 KM 51.39852 °N 99.75011 °E

Diura majuscula Within Known Range? Y Nearest Occurrence: 323.79 KM 48.06257 °N 97.55064 °E

Isoperla asiatica Within Known Range? N Nearest Occurrence: 323.21 KM 48.06257 °N 97.55064 °E

Pictetiella asiatica Within Known Range? N Nearest Occurrence: 689.50 KM 51.65822 °N 100.53000 °E

Skwala pusilla Within Known Range? N Nearest Occurrence: 706.96 KM 48.51277 °N 88.51107 °E

Family: Taeniopterygidae

Taenionema japonicum Within Known Range? Y Nearest Occurrence: 489.76 KM 47.11520 °N 90.94098 °E

**LOE Rating: Probable Total: 5**

Family: Chloroperlidae

Haploperla lepnevae Within Known Range? Y Nearest Occurrence: 544.05 KM 48.97819 °N 89.94996 °E

Family: Nemouridae

Amphinemura standfussi Within Known Range? N Nearest Occurrence: 323.21 KM 48.06257 °N 97.55064 °E

Nemoura arctica Within Known Range? Y Nearest Occurrence: 435.27 KM 47.53132 °N 91.28330 °E

Family: Perlodidae

Megarcys ochracea Within Known Range? N Nearest Occurrence: 547.11 KM 51.46205 °N 99.19994 °E

Family: Pteronarcyidae

Pteronarcys reticulata Within Known Range? N Nearest Occurrence: 530.62 KM 51.47065 °N 99.02617 °E

Basin: Internal Drainage Basin

Aimags: Uvs

Soums: Ondorkhangai

Freshwater Ecoregion: Western Mongolia

Terrestrial Ecoregion: Great Lakes Basin Desert Steppe

WQM Sites:

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Possible Total: 5**

Family: Chloroperlidae

*Alaskaperla longidentata*

Within Known Range? N Nearest Occurrence: 284.67 KM 48.15779°N 97.21441°E

*Alloperla mediata*

Within Known Range? N Nearest Occurrence: 501.57 KM 50.61826°N 99.12094°E

Family: Perlidae

*Agnetina brevipennis*

Within Known Range? Y Nearest Occurrence: 424.84 KM 48.71968°N 98.65184°E

Family: Perlodidae

*Arcynopteryx polaris*

Within Known Range? Y Nearest Occurrence: 404.71 KM 46.61982°N 92.22981°E

*Isoperla potanini*

Within Known Range? Y Nearest Occurrence: 285.18 KM 48.15779°N 97.21441°E

**LOE Rating: Predicted Total: 13**

Family: Capniidae

*Mesocapnia variabilis*

Within Known Range? Y Nearest Occurrence: 461.86 KM 48.36436°N 98.92737°E

Family: Chloroperlidae

*Alloperla deminuta*

Within Known Range? N Nearest Occurrence: 530.62 KM 51.47065°N 99.02617°E

*Alloperla joosti*

Within Known Range? N Nearest Occurrence: 300.89 KM 48.24995°N 97.40627°E

Family: Leuctridae

*Paraleuctra zapekinae*

Within Known Range? N Nearest Occurrence: 1,088.91 KM 49.71481°N 104.64203°E

Family: Nemouridae

*Nemoura sahlbergi*

Within Known Range? N Nearest Occurrence: 505.41 KM 50.42996°N 99.21727°E

*Nemurella pictetii*

Within Known Range? N Nearest Occurrence: 531.53 KM 50.81265°N 99.33803°E

Family: Perlidae

*Agnetina extrema*

Within Known Range? N Nearest Occurrence: 661.15 KM 47.50949°N 100.57510°E

*Paragnetina flavotincta*

Within Known Range? N Nearest Occurrence: 558.92 KM 49.26170°N 99.88242°E

Family: Perlodidae

*Isoperla kozlovi*

Within Known Range? N Nearest Occurrence: 513.03 KM 50.31066°N 99.32150°E

*Isoperla lunigera*

Within Known Range? N Nearest Occurrence: 541.59 KM 51.09845°N 99.32051°E

*Isoperla mongolica*

Within Known Range? Y Nearest Occurrence: 301.43 KM 48.24995°N 97.40627°E

*Isoperla obscura*

Within Known Range? Y Nearest Occurrence: 544.05 KM 48.97819°N 89.94996°E

*Kaszabia nigricauda*

Within Known Range? N Nearest Occurrence: 424.84 KM 48.71968°N 98.65184°E

**LOE Rating: Unlikely Total: 4**

Family: Capniidae

*Capnia khulsbagia*

Within Known Range? N Nearest Occurrence: 683.01 KM 50.98944°N 100.71944°E

*Mesocapnia altaica*

Within Known Range? N Nearest Occurrence: 664.86 KM 48.43684°N 88.90094°E

Family: Leuctridae

*Leuctra fusca*

Within Known Range? N Nearest Occurrence: 1,380.98 KM 49.08643°N 107.28952°E

Family: Perlodidae

*Isoperla eximia*

Within Known Range? N Nearest Occurrence: 1,409.34 KM 49.01829°N 107.54453°E

Research funded by the National Science Foundation

DEB-BSI #0206674: A Survey of the Aquatic Insects of the Selenge River Basin. P.I.'s: JKGelhaus, JCMorse, BHayford.

DEB # 0743732: Aquatic Insects of the Altai and Hangai Mountain Drainages. P.I.'s: JKGelhaus, JCMorse, CRNelson.

<http://clade.ansp.org/entomology/mongolia/index.html>



Basin: Internal Drainage Basin

Aimags: Uvs

Soums: Sagil

Freshwater Ecoregion: Western Mongolia

Terrestrial Ecoregion: Altai Montane Forest And Forest Steppe

WQM Sites:

WQM Sites: # 142 (Borshoo River @ N 50.53472° E 91.79733°)

**LOE Rating: Highly Likely Total: 1**

Family: Perlodidae

Isoperla altaica Within Known Range? Y Nearest Occurrence: 64.66 KM 50.53472°N 91.79719 °E

**LOE Rating: Likely Total: 15**

Family: Capniidae

Isocapnia guentheri Within Known Range? N Nearest Occurrence: 795.09 KM 48.61518°N 98.23096 °E

Isocapnia kudia Within Known Range? N Nearest Occurrence: 938.37 KM 51.25356°N 99.66687 °E

Family: Chloroperlidae

Haploperla lepnevae Within Known Range? N Nearest Occurrence: 206.75 KM 48.97819°N 89.94996 °E

Suwallia teleckojensis Within Known Range? Y Nearest Occurrence: 251.23 KM 48.84329°N 89.53623 °E

Family: Nemouridae

Amphinemura borealis Within Known Range? N Nearest Occurrence: 250.78 KM 48.84329°N 89.53623 °E

Nemoura arctica Within Known Range? Y Nearest Occurrence: 304.34 KM 47.62355°N 90.67122 °E

Nemoura cinerea Within Known Range? N Nearest Occurrence: 740.11 KM 48.06257°N 97.55064 °E

Family: Perlidae

Kamimuria exilis Within Known Range? N Nearest Occurrence: 842.41 KM 50.16278°N 98.84212 °E

Family: Perlodidae

Arcynopteryx compacta Within Known Range? Y Nearest Occurrence: 210.83 KM 48.42161°N 90.97337 °E

Arcynopteryx polaris Within Known Range? Y Nearest Occurrence: 304.73 KM 49.38138°N 88.68390 °E

Diura bicaudata Within Known Range? N Nearest Occurrence: 248.09 KM 49.04180°N 89.41675 °E

Diura majuscula Within Known Range? N Nearest Occurrence: 281.76 KM 48.83461°N 89.19677 °E

Pictetiella asiatica Within Known Range? N Nearest Occurrence: 1,039.20 KM 51.65822°N 100.53000 °E

Skwala pusilla Within Known Range? N Nearest Occurrence: 364.34 KM 48.51277°N 88.51107 °E

Family: Taeniopterygidae

Taenionema japonicum Within Known Range? Y Nearest Occurrence: 282.94 KM 47.85391°N 90.54864 °E

**LOE Rating: Probable Total: 7**

Family: Capniidae

Capnia nigra Within Known Range? Y Nearest Occurrence: 375.67 KM 49.09162°N 88.10423 °E

Isocapnia sibirica Within Known Range? N Nearest Occurrence: 1,150.79 KM 47.28244°N 101.18793 °E

Family: Chloroperlidae

Suwallia kerzhneri Within Known Range? N Nearest Occurrence: 718.19 KM 48.24995°N 97.40627 °E

Family: Perlidae

Agnentina brevipennis Within Known Range? N Nearest Occurrence: 206.75 KM 48.97819°N 89.94996 °E

Agnentina cocandica Within Known Range? N Nearest Occurrence: 238.52 KM 48.24533°N 91.90115 °E

Family: Perlodidae

Arcynopteryx sajanensis Within Known Range? N Nearest Occurrence: 1,048.05 KM 51.61397°N 100.59972 °E

Isoperla obscura Within Known Range? N Nearest Occurrence: 206.75 KM 48.97819°N 89.94996 °E

Basin: Internal Drainage Basin

Aimags: Uvs

Soums: Sagil

Freshwater Ecoregion: Western Mongolia

Terrestrial Ecoregion: Altai Montane Forest And Forest Steppe

WQM Sites:

WQM Sites: # 142 (Borshoo River @ N 50.53472° E 91.79733°)

**LOE Rating: Possible** **Total: 6**

Family: Chloroperlidae

Alloperla rostellata Within Known Range? N Nearest Occurrence: 872.46 KM 50.61826°N 99.12094 °E

Family: Perlodidae

Isoperla asiatica Within Known Range? N Nearest Occurrence: 740.11 KM 48.06257°N 97.55064 °E

Isoperla mongolica Within Known Range? N Nearest Occurrence: 251.23 KM 48.84329°N 89.53623 °E

Isoperla potanini Within Known Range? Y Nearest Occurrence: 207.12 KM 48.97819°N 89.94996 °E

Megarcys ochracea Within Known Range? N Nearest Occurrence: 889.97 KM 51.46205°N 99.19994 °E

Family: Pteronarcyidae

Pteronarcys reticulata Within Known Range? N Nearest Occurrence: 871.03 KM 51.47065°N 99.02617 °E

**LOE Rating: Predicted** **Total: 14**

Family: Capniidae

Mesocapnia altaica Within Known Range? N Nearest Occurrence: 333.97 KM 48.43684°N 88.90094 °E

Mesocapnia variabilis Within Known Range? N Nearest Occurrence: 365.53 KM 48.50631°N 88.50947 °E

Family: Chloroperlidae

Alaskaperla longidentata Within Known Range? N Nearest Occurrence: 701.41 KM 48.15779°N 97.21441 °E

Alloperla deminuta Within Known Range? N Nearest Occurrence: 871.03 KM 51.47065°N 99.02617 °E

Alloperla joosti Within Known Range? N Nearest Occurrence: 718.19 KM 48.24995°N 97.40627 °E

Alloperla mediata Within Known Range? N Nearest Occurrence: 872.46 KM 50.61826°N 99.12094 °E

Family: Leuctridae

Paraleuctra zapekinae Within Known Range? N Nearest Occurrence: 1,485.95 KM 49.71481°N 104.64203 °E

Family: Nemouridae

Amphinemura standfussi Within Known Range? N Nearest Occurrence: 740.11 KM 48.06257°N 97.55064 °E

Nemoura sahlbergi Within Known Range? N Nearest Occurrence: 882.54 KM 50.42996°N 99.21727 °E

Family: Perlidae

Agnetina extrema Within Known Range? N Nearest Occurrence: 1,078.39 KM 47.50949°N 100.57510 °E

Paragnetina flavotincta Within Known Range? N Nearest Occurrence: 963.09 KM 49.26170°N 99.88242 °E

Family: Perlodidae

Isoperla kozlovi Within Known Range? N Nearest Occurrence: 893.98 KM 50.31066°N 99.32150 °E

Isoperla lunigera Within Known Range? N Nearest Occurrence: 898.31 KM 51.09845°N 99.32051 °E

Kaszabia nigricauda Within Known Range? N Nearest Occurrence: 838.08 KM 48.71968°N 98.65184 °E

**LOE Rating: Unlikely** **Total: 4**

Family: Capniidae

Capnia khulsbagia Within Known Range? N Nearest Occurrence: 1,051.03 KM 51.51689°N 100.65717 °E

Family: Leuctridae

Leuctra fusca Within Known Range? N Nearest Occurrence: 1,783.48 KM 49.08643°N 107.28952 °E

Family: Nemouridae

Nemurella pictetii Within Known Range? N Nearest Occurrence: 897.66 KM 50.81265°N 99.33803 °E

Family: Perlodidae

Isoperla eximia Within Known Range? N Nearest Occurrence: 1,812.28 KM 49.01829°N 107.54453 °E



**Basin:** Internal Drainage Basin  
**Aimag:** Uvs  
**Soum:** Tarialan

**Freshwater Ecoregion:** Western Mongolia  
**Terrestrial Ecoregion:** Altai Montane Forest And Forest Steppe

**WQM Sites:**

WQM Sites: # 140 (Harhira River @ N 49.77975° E 91.86086°)

**LOE Rating: Highly Likely Total: 2**

Family: Perlodidae					
Isoperla altaica	Within Known Range? Y	Nearest Occurrence:	94.17 KM	50.53472°N	91.79719°E
Family: Taeniopterygidae					
Taenionema japonicum	Within Known Range? Y	Nearest Occurrence:	255.09 KM	47.85391°N	90.54864°E

**LOE Rating: Likely Total: 17**

Family: Capniidae					
Capnia nigra	Within Known Range? Y	Nearest Occurrence:	428.34 KM	49.09162°N	88.10423°E
Isocapnia guentheri	Within Known Range? N	Nearest Occurrence:	711.21 KM	48.61518°N	98.23096°E
Isocapnia kudia	Within Known Range? N	Nearest Occurrence:	877.60 KM	51.25356°N	99.66687°E
Isocapnia sibirica	Within Known Range? N	Nearest Occurrence:	1,063.54 KM	47.28244°N	101.18793°E
Family: Chloroperlidae					
Haploperla lepnevae	Within Known Range? Y	Nearest Occurrence:	232.27 KM	48.97819°N	89.94996°E
Suwallia teleckojensis	Within Known Range? Y	Nearest Occurrence:	238.29 KM	47.55886°N	91.76095°E
Family: Nemouridae					
Amphinemura borealis	Within Known Range? Y	Nearest Occurrence:	280.55 KM	48.84329°N	89.53623°E
Nemoura cinerea	Within Known Range? N	Nearest Occurrence:	651.26 KM	48.06257°N	97.55064°E
Family: Perlidae					
Agnetina cocandica	Within Known Range? Y	Nearest Occurrence:	161.35 KM	48.24533°N	91.90115°E
Kamimuria exilis	Within Known Range? N	Nearest Occurrence:	771.99 KM	50.16278°N	98.84212°E
Family: Perlodidae					
Arcynopteryx compacta	Within Known Range? Y	Nearest Occurrence:	176.25 KM	48.42161°N	90.97337°E
Arcynopteryx polaris	Within Known Range? Y	Nearest Occurrence:	282.07 KM	47.34650°N	90.95982°E
Arcynopteryx sajanensis	Within Known Range? N	Nearest Occurrence:	988.95 KM	51.61397°N	100.59972°E
Diura bicaudata	Within Known Range? Y	Nearest Occurrence:	286.71 KM	49.04180°N	89.41675°E
Diura majuscula	Within Known Range? Y	Nearest Occurrence:	247.81 KM	47.60884°N	91.13502°E
Pictetiella asiatica	Within Known Range? N	Nearest Occurrence:	980.70 KM	51.65822°N	100.53000°E
Skwala pusilla	Within Known Range? N	Nearest Occurrence:	400.07 KM	48.51277°N	88.51107°E

**LOE Rating: Probable Total: 4**

Family: Chloroperlidae					
Alloperla rostellata	Within Known Range? N	Nearest Occurrence:	792.24 KM	48.36436°N	98.92737°E
Suwallia kerzhneri	Within Known Range? N	Nearest Occurrence:	630.27 KM	48.24995°N	97.40627°E
Family: Nemouridae					
Nemoura arctica	Within Known Range? Y	Nearest Occurrence:	250.79 KM	47.53132°N	91.28330°E
Family: Perlidae					
Agnetina brevipennis	Within Known Range? Y	Nearest Occurrence:	232.27 KM	48.97819°N	89.94996°E



**Basin:** Internal Drainage Basin  
**Aimag:** Uvs  
**Soum:** Tarialan

**WQM Sites:**

WQM Sites: # 140 (Harhira River @ N 49.77975° E 91.86086°)

**Freshwater Ecoregion:** Western Mongolia  
**Terrestrial Ecoregion:** Altai Montane Forest And Forest Steppe

**LOE Rating: Possible Total: 6**

<b>Family: Nemouridae</b>						
Amphinemura standfussi	Within Known Range? N	Nearest Occurrence:	651.26 KM	48.06257°N	97.55064 °E	
<b>Family: Perlodidae</b>						
Isoperla asiatica	Within Known Range? N	Nearest Occurrence:	651.26 KM	48.06257°N	97.55064 °E	
Isoperla obscura	Within Known Range? Y	Nearest Occurrence:	232.27 KM	48.97819°N	89.94996 °E	
Isoperla potanini	Within Known Range? Y	Nearest Occurrence:	176.25 KM	48.42161°N	90.97337 °E	
Megarcys ochracea	Within Known Range? N	Nearest Occurrence:	831.99 KM	51.46205°N	99.19994 °E	
<b>Family: Pteronarcyidae</b>						
Pteronarcys reticulata	Within Known Range? N	Nearest Occurrence:	813.49 KM	51.47065°N	99.02617 °E	

**LOE Rating: Predicted Total: 15**

<b>Family: Capniidae</b>						
Mesocapnia altaica	Within Known Range? N	Nearest Occurrence:	362.64 KM	48.43684°N	88.90094 °E	
Mesocapnia variabilis	Within Known Range? Y	Nearest Occurrence:	401.20 KM	48.50631°N	88.50947 °E	
<b>Family: Chloroperlidae</b>						
Alaskaperla longidentata	Within Known Range? N	Nearest Occurrence:	612.47 KM	48.15779°N	97.21441 °E	
Alloperla deminuta	Within Known Range? N	Nearest Occurrence:	813.49 KM	51.47065°N	99.02617 °E	
Alloperla joosti	Within Known Range? N	Nearest Occurrence:	630.27 KM	48.24995°N	97.40627 °E	
Alloperla mediata	Within Known Range? N	Nearest Occurrence:	806.33 KM	50.61826°N	99.12094 °E	
<b>Family: Leuctridae</b>						
Paraleuctra zapekinae	Within Known Range? N	Nearest Occurrence:	1,412.65 KM	49.71481°N	104.64203 °E	
<b>Family: Nemouridae</b>						
Nemoura sahlbergi	Within Known Range? N	Nearest Occurrence:	814.58 KM	50.42996°N	99.21727 °E	
Nemurella pictetii	Within Known Range? N	Nearest Occurrence:	833.17 KM	50.81265°N	99.33803 °E	
<b>Family: Perlidae</b>						
Agnetina extrema	Within Known Range? N	Nearest Occurrence:	991.39 KM	47.50949°N	100.57510 °E	
Paragnetina flavotincta	Within Known Range? N	Nearest Occurrence:	885.64 KM	49.26170°N	99.88242 °E	
<b>Family: Perlodidae</b>						
Isoperla kozlovi	Within Known Range? N	Nearest Occurrence:	824.89 KM	50.31066°N	99.32150 °E	
Isoperla lunigera	Within Known Range? N	Nearest Occurrence:	836.57 KM	51.09845°N	99.32051 °E	
Isoperla mongolica	Within Known Range? Y	Nearest Occurrence:	281.06 KM	48.84329°N	89.53623 °E	
Kaszabia nigricauda	Within Known Range? N	Nearest Occurrence:	755.55 KM	48.71968°N	98.65184 °E	

**LOE Rating: Unlikely Total: 3**

<b>Family: Capniidae</b>						
Capnia khulsbagia	Within Known Range? N	Nearest Occurrence:	987.73 KM	50.98944°N	100.71944 °E	
<b>Family: Leuctridae</b>						
Leuctra fusca	Within Known Range? N	Nearest Occurrence:	1,707.86 KM	49.08643°N	107.28952 °E	
<b>Family: Perlodidae</b>						
Isoperla eximia	Within Known Range? N	Nearest Occurrence:	1,736.46 KM	49.01829°N	107.54453 °E	

**Basin:** Internal Drainage Basin  
**Aimags:** Uvs  
**Soums:** Tes

**Freshwater Ecoregion:** Western Mongolia  
**Terrestrial Ecoregion:** Great Lakes Basin Desert Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

<b>LOE Rating:</b>	<b>Highly Likely</b>	<b>Total:</b>	<b>1</b>
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**Family:** Perlodidae

<i>Isoperla altaica</i>	Within Known Range? Y	Nearest Occurrence:	204.28 KM	50.53472 °N	91.79719 °E
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<b>LOE Rating:</b>	<b>Likely</b>	<b>Total:</b>	<b>19</b>
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**Family:** Capniidae

<i>Isocapnia guentheri</i>	Within Known Range? N	Nearest Occurrence:	549.15 KM	48.61518 °N	98.23096 °E
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<i>Isocapnia kudia</i>	Within Known Range? N	Nearest Occurrence:	675.99 KM	51.25356 °N	99.66687 °E
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**Family:** Chloroperlidae

<i>Alloperla rostellata</i>	Within Known Range? N	Nearest Occurrence:	609.63 KM	50.61826 °N	99.12094 °E
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<i>Haploperla lepnevae</i>	Within Known Range? Y	Nearest Occurrence:	439.63 KM	48.97819 °N	89.94996 °E
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<i>Suwallia kerzhneri</i>	Within Known Range? N	Nearest Occurrence:	484.29 KM	48.24995 °N	97.40627 °E
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<i>Suwallia teleckojensis</i>	Within Known Range? Y	Nearest Occurrence:	381.82 KM	47.55886 °N	91.76095 °E
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**Family:** Nemouridae

<i>Nemoura cinerea</i>	Within Known Range? N	Nearest Occurrence:	508.68 KM	48.06257 °N	97.55064 °E
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**Family:** Perlidae

<i>Agnetina brevipennis</i>	Within Known Range? N	Nearest Occurrence:	439.63 KM	48.97819 °N	89.94996 °E
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<i>Agnetina cocandica</i>	Within Known Range? N	Nearest Occurrence:	251.33 KM	48.33025 °N	92.81616 °E
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<i>Kamimuria exilis</i>	Within Known Range? N	Nearest Occurrence:	580.21 KM	50.16278 °N	98.84212 °E
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**Family:** Perlodidae

<i>Arcynopteryx sajanensis</i>	Within Known Range? N	Nearest Occurrence:	785.80 KM	51.61397 °N	100.59972 °E
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<i>Diura bicaudata</i>	Within Known Range? Y	Nearest Occurrence:	492.87 KM	49.04180 °N	89.41675 °E
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<i>Isoperla asiatica</i>	Within Known Range? N	Nearest Occurrence:	508.68 KM	48.06257 °N	97.55064 °E
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<i>Isoperla obscura</i>	Within Known Range? Y	Nearest Occurrence:	439.63 KM	48.97819 °N	89.94996 °E
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<i>Megarcys ochracea</i>	Within Known Range? N	Nearest Occurrence:	628.44 KM	51.46205 °N	99.19994 °E
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<i>Pictetiella asiatica</i>	Within Known Range? N	Nearest Occurrence:	777.59 KM	51.65822 °N	100.53000 °E
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<i>Skwala pusilla</i>	Within Known Range? N	Nearest Occurrence:	607.24 KM	48.51277 °N	88.51107 °E
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**Family:** Pteronarcyidae

<i>Pteronarcys reticulata</i>	Within Known Range? N	Nearest Occurrence:	609.65 KM	51.47065 °N	99.02617 °E
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**Family:** Taeniopterygidae

<i>Taenionema japonicum</i>	Within Known Range? Y	Nearest Occurrence:	447.34 KM	47.85391 °N	90.54864 °E
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<b>LOE Rating:</b>	<b>Probable</b>	<b>Total:</b>	<b>4</b>
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**Family:** Capniidae

<i>Isocapnia sibirica</i>	Within Known Range? N	Nearest Occurrence:	908.94 KM	47.28244 °N	101.18793 °E
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**Family:** Chloroperlidae

<i>Alloperla mediata</i>	Within Known Range? N	Nearest Occurrence:	609.63 KM	50.61826 °N	99.12094 °E
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**Family:** Nemouridae

<i>Amphinemura borealis</i>	Within Known Range? Y	Nearest Occurrence:	474.83 KM	47.03925 °N	91.03419 °E
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**Family:** Perlodidae

<i>Arcynopteryx compacta</i>	Within Known Range? Y	Nearest Occurrence:	371.03 KM	48.42161 °N	90.97337 °E
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**Basin:** Internal Drainage Basin  
**Aimag:** Uvs  
**Soum:** Tes

**Freshwater Ecoregion:** Western Mongolia  
**Terrestrial Ecoregion:** Great Lakes Basin Desert Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

<b>LOE Rating:</b> Possible	<b>Total:</b> 6
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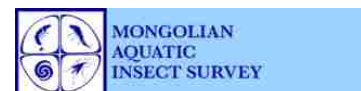
<b>Family:</b> Capniidae					
Capnia nigra	Within Known Range? Y	Nearest Occurrence:	508.68 KM	48.06257°N	97.55064 °E
<b>Family:</b> Nemouridae					
Amphinemura standfussi	Within Known Range? N	Nearest Occurrence:	508.68 KM	48.06257°N	97.55064 °E
Nemoura arctica	Within Known Range? Y	Nearest Occurrence:	415.54 KM	47.53132°N	91.28330 °E
<b>Family:</b> Perlodidae					
Diura majuscula	Within Known Range? Y	Nearest Occurrence:	412.36 KM	47.24104°N	91.75287 °E
Isoperla lunigera	Within Known Range? N	Nearest Occurrence:	635.70 KM	51.09845°N	99.32051 °E
Isoperla mongolica	Within Known Range? N	Nearest Occurrence:	472.01 KM	47.08782°N	91.02542 °E

<b>LOE Rating:</b> Predicted	<b>Total:</b> 14
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<b>Family:</b> Capniidae					
Mesocapnia altaica	Within Known Range? N	Nearest Occurrence:	570.17 KM	48.43684°N	88.90094 °E
Mesocapnia variabilis	Within Known Range? N	Nearest Occurrence:	608.75 KM	48.50631°N	88.50947 °E
<b>Family:</b> Chloroperlidae					
Alaskaperla longidentata	Within Known Range? N	Nearest Occurrence:	471.40 KM	48.15779°N	97.21441 °E
Alloperla deminuta	Within Known Range? N	Nearest Occurrence:	609.65 KM	51.47065°N	99.02617 °E
Alloperla joosti	Within Known Range? N	Nearest Occurrence:	484.29 KM	48.24995°N	97.40627 °E
<b>Family:</b> Leuctridae					
Paraleuctra zapekinae	Within Known Range? N	Nearest Occurrence:	1,224.78 KM	49.71481°N	104.64203 °E
<b>Family:</b> Nemouridae					
Nemoura sahlbergi	Within Known Range? N	Nearest Occurrence:	620.00 KM	50.42996°N	99.21727 °E
Nemurella pictetii	Within Known Range? N	Nearest Occurrence:	634.76 KM	50.81265°N	99.33803 °E
<b>Family:</b> Perlidae					
Aagnetina extrema	Within Known Range? N	Nearest Occurrence:	836.47 KM	47.50949°N	100.57510 °E
Paragnetina flavotincta	Within Known Range? N	Nearest Occurrence:	706.01 KM	49.26170°N	99.88242 °E
<b>Family:</b> Perlodidae					
Arcynopteryx polaris	Within Known Range? Y	Nearest Occurrence:	444.37 KM	46.91446°N	91.74682 °E
Isoperla kozlovi	Within Known Range? N	Nearest Occurrence:	631.72 KM	50.31066°N	99.32150 °E
Isoperla potanini	Within Known Range? Y	Nearest Occurrence:	371.03 KM	48.42161°N	90.97337 °E
Kaszabia nigricauda	Within Known Range? N	Nearest Occurrence:	588.98 KM	48.71968°N	98.65184 °E

<b>LOE Rating:</b> Unlikely	<b>Total:</b> 3
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<b>Family:</b> Capniidae					
Capnia khulsbagia	Within Known Range? N	Nearest Occurrence:	788.97 KM	51.51689°N	100.65717 °E
<b>Family:</b> Leuctridae					
Leuctra fusca	Within Known Range? N	Nearest Occurrence:	1,523.42 KM	49.08643°N	107.28952 °E
<b>Family:</b> Perlodidae					
Isoperla eximia	Within Known Range? N	Nearest Occurrence:	1,552.34 KM	49.01829°N	107.54453 °E



Basin: Internal Drainage Basin

Aimag: Uvs

Soum: Tsagaankhairkhan

Freshwater Ecoregion: Western Mongolia

Terrestrial Ecoregion: Great Lakes Basin Desert Steppe

WQM Sites:

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Highly Likely Total: 1**

Family: Perlodidae

Isoperla altaica Within Known Range? Y Nearest Occurrence: 311.46 KM 50.53472°N 91.79719°E

**LOE Rating: Likely Total: 18**

Family: Capniidae

Isocapnia guentheri Within Known Range? N Nearest Occurrence: 449.34 KM 48.61518°N 98.23096°E

Isocapnia kudia Within Known Range? N Nearest Occurrence: 649.92 KM 51.25356°N 99.66687°E

Isocapnia sibirica Within Known Range? N Nearest Occurrence: 800.47 KM 47.28244°N 101.18793°E

Family: Chloroperlidae

Alloperla rostellata Within Known Range? N Nearest Occurrence: 529.81 KM 48.36436°N 98.92737°E

Haploperla lepnevae Within Known Range? Y Nearest Occurrence: 473.61 KM 48.97819°N 89.94996°E

Suwallia kerzhneri Within Known Range? N Nearest Occurrence: 367.21 KM 48.24995°N 97.40627°E

Suwallia teleckojensis Within Known Range? Y Nearest Occurrence: 313.19 KM 46.32080°N 93.90083°E

Family: Nemouridae

Nemoura cinerea Within Known Range? N Nearest Occurrence: 388.47 KM 48.06257°N 97.55064°E

Family: Perlidae

Agnetina cocandica Within Known Range? Y Nearest Occurrence: 178.56 KM 48.33025°N 92.81616°E

Kamimuria exilis Within Known Range? N Nearest Occurrence: 527.51 KM 50.16278°N 98.84212°E

Family: Perlodidae

Arcynopteryx compacta Within Known Range? Y Nearest Occurrence: 349.24 KM 47.05445°N 91.84839°E

Arcynopteryx sajanensis Within Known Range? N Nearest Occurrence: 762.29 KM 51.61397°N 100.59972°E

Diura bicaudata Within Known Range? Y Nearest Occurrence: 532.61 KM 49.04180°N 89.41675°E

Diura majuscula Within Known Range? Y Nearest Occurrence: 344.34 KM 47.24104°N 91.75287°E

Isoperla asiatica Within Known Range? N Nearest Occurrence: 388.47 KM 48.06257°N 97.55064°E

Pictetiella asiatica Within Known Range? N Nearest Occurrence: 755.54 KM 51.65822°N 100.53000°E

Skwala pusilla Within Known Range? N Nearest Occurrence: 636.65 KM 48.51277°N 88.51107°E

Family: Taeniopterygidae

Taenionema japonicum Within Known Range? Y Nearest Occurrence: 426.84 KM 47.11520°N 90.94098°E

**LOE Rating: Probable Total: 4**

Family: Capniidae

Capnia nigra Within Known Range? Y Nearest Occurrence: 388.47 KM 48.06257°N 97.55064°E

Family: Nemouridae

Amphinemura borealis Within Known Range? Y Nearest Occurrence: 388.57 KM 48.05989°N 97.55073°E

Family: Perlodidae

Megarcys ochracea Within Known Range? N Nearest Occurrence: 611.43 KM 51.46205°N 99.19994°E

Family: Pteronarcyidae

Pteronarcys reticulata Within Known Range? N Nearest Occurrence: 594.45 KM 51.47065°N 99.02617°E

Basin: Internal Drainage Basin

Aimag: Uvs

Soum: Tsagaankhairkhan

Freshwater Ecoregion: Western Mongolia

Terrestrial Ecoregion: Great Lakes Basin Desert Steppe

WQM Sites:

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Possible Total: 6**

Family: Chloroperlidae

Alaskaperla longidentata Within Known Range? N Nearest Occurrence: 349.70 KM 48.15779°N 97.21441°E

Alloperla mediata Within Known Range? N Nearest Occurrence: 569.46 KM 50.61826°N 99.12094°E

Family: Nemouridae

Amphinemura standfussi Within Known Range? N Nearest Occurrence: 388.47 KM 48.06257°N 97.55064°E

Nemoura arctica Within Known Range? Y Nearest Occurrence: 370.73 KM 47.53132°N 91.28330°E

Family: Perlidae

Agnetina brevipennis Within Known Range? Y Nearest Occurrence: 413.33 KM 46.76864°N 91.32673°E

Family: Perlodidae

Arcynopteryx polaris Within Known Range? Y Nearest Occurrence: 354.94 KM 46.61982°N 92.22981°E

**LOE Rating: Predicted Total: 15**

Family: Capniidae

Mesocapnia altaica Within Known Range? N Nearest Occurrence: 594.65 KM 48.43684°N 88.90094°E

Mesocapnia variabilis Within Known Range? Y Nearest Occurrence: 530.77 KM 48.36436°N 98.92737°E

Family: Chloroperlidae

Alloperla deminuta Within Known Range? N Nearest Occurrence: 594.45 KM 51.47065°N 99.02617°E

Alloperla joosti Within Known Range? N Nearest Occurrence: 367.21 KM 48.24995°N 97.40627°E

Family: Leuctridae

Paraleuctra zapekinae Within Known Range? N Nearest Occurrence: 1,159.35 KM 49.71481°N 104.64203°E

Family: Nemouridae

Nemoura sahlbergi Within Known Range? N Nearest Occurrence: 574.05 KM 50.42996°N 99.21727°E

Nemurella pictetii Within Known Range? N Nearest Occurrence: 598.96 KM 50.81265°N 99.33803°E

Family: Perlidae

Agnetina extrema Within Known Range? N Nearest Occurrence: 728.31 KM 47.50949°N 100.57510°E

Paragnetina flavotincta Within Known Range? N Nearest Occurrence: 629.35 KM 49.26170°N 99.88242°E

Family: Perlodidae

Isoperla kozlovi Within Known Range? N Nearest Occurrence: 582.10 KM 50.31066°N 99.32150°E

Isoperla lunigera Within Known Range? N Nearest Occurrence: 607.85 KM 51.09845°N 99.32051°E

Isoperla mongolica Within Known Range? Y Nearest Occurrence: 367.87 KM 48.24995°N 97.40627°E

Isoperla obscura Within Known Range? Y Nearest Occurrence: 473.61 KM 48.97819°N 89.94996°E

Isoperla potanini Within Known Range? Y Nearest Occurrence: 313.19 KM 46.32080°N 93.90083°E

Kaszabia nigricauda Within Known Range? N Nearest Occurrence: 494.55 KM 48.71968°N 98.65184°E

**LOE Rating: Unlikely Total: 3**

Family: Capniidae

Capnia khulsbagia Within Known Range? N Nearest Occurrence: 751.29 KM 50.98944°N 100.71944°E

Family: Leuctridae

Leuctra fusca Within Known Range? N Nearest Occurrence: 1,451.34 KM 49.08643°N 107.28952°E

Family: Perlodidae

Isoperla eximia Within Known Range? N Nearest Occurrence: 1,479.69 KM 49.01829°N 107.54453°E

Basin: Internal Drainage Basin

Aimags: Uvs

Soums: Turgen

Freshwater Ecoregion: Western Mongolia

Terrestrial Ecoregion: Altai Montane Forest And Forest Steppe

WQM Sites:

WQM Sites: # 143 (Turgen River @ N 50.0732° E 91.60335°)

**LOE Rating: Highly Likely Total: 1**

Family: Perlodidae

Isoperla altaica Within Known Range? Y Nearest Occurrence: 63.78 KM 50.53472°N 91.79719°E

**LOE Rating: Likely Total: 18**

Family: Capniidae

Isocapnia guentheri Within Known Range? N Nearest Occurrence: 762.31 KM 48.61518°N 98.23096°E

Isocapnia kudia Within Known Range? N Nearest Occurrence: 915.19 KM 51.25356°N 99.66687°E

Isocapnia sibirica Within Known Range? N Nearest Occurrence: 1,116.69 KM 47.28244°N 101.18793°E

Family: Chloroperlidae

Haploperla lepnevae Within Known Range? Y Nearest Occurrence: 209.48 KM 48.97819°N 89.94996°E

Suwallia teleckojensis Within Known Range? Y Nearest Occurrence: 256.70 KM 48.84329°N 89.53623°E

Family: Nemouridae

Amphinemura borealis Within Known Range? Y Nearest Occurrence: 256.24 KM 48.84329°N 89.53623°E

Nemoura arctica Within Known Range? Y Nearest Occurrence: 279.79 KM 47.53132°N 91.28330°E

Nemoura cinerea Within Known Range? N Nearest Occurrence: 705.20 KM 48.06257°N 97.55064°E

Family: Perlidae

Agnetina cocandica Within Known Range? Y Nearest Occurrence: 203.88 KM 48.24533°N 91.90115°E

Kamimuria exilis Within Known Range? N Nearest Occurrence: 815.22 KM 50.16278°N 98.84212°E

Family: Perlodidae

Arcynopteryx compacta Within Known Range? Y Nearest Occurrence: 189.36 KM 48.42161°N 90.97337°E

Arcynopteryx polaris Within Known Range? Y Nearest Occurrence: 305.42 KM 47.34650°N 90.95982°E

Arcynopteryx sajanensis Within Known Range? N Nearest Occurrence: 1,025.64 KM 51.61397°N 100.59972°E

Diura bicaudata Within Known Range? Y Nearest Occurrence: 257.49 KM 49.04180°N 89.41675°E

Diura majuscula Within Known Range? Y Nearest Occurrence: 273.25 KM 47.60884°N 91.13502°E

Pictetiella asiatica Within Known Range? N Nearest Occurrence: 1,017.03 KM 51.65822°N 100.53000°E

Skwala pusilla Within Known Range? N Nearest Occurrence: 373.62 KM 48.51277°N 88.51107°E

Family: Taeniopterygidae

Taenionema japonicum Within Known Range? Y Nearest Occurrence: 265.35 KM 47.85391°N 90.54864°E

**LOE Rating: Probable Total: 4**

Family: Capniidae

Capnia nigra Within Known Range? Y Nearest Occurrence: 392.56 KM 49.09162°N 88.10423°E

Family: Chloroperlidae

Suwallia kerzhneri Within Known Range? N Nearest Occurrence: 683.66 KM 48.24995°N 97.40627°E

Family: Perlidae

Agnetina brevipennis Within Known Range? N Nearest Occurrence: 209.48 KM 48.97819°N 89.94996°E

Family: Perlodidae

Isoperla obscura Within Known Range? Y Nearest Occurrence: 209.48 KM 48.97819°N 89.94996°E

**Basin:** Internal Drainage Basin  
**Aimags:** Uvs  
**Soums:** Turgen

**WQM Sites:**

WQM Sites: # 143 (Turgen River @ N 50.0732° E 91.60335°)

**Freshwater Ecoregion:** Western Mongolia  
**Terrestrial Ecoregion:** Altai Montane Forest And Forest Steppe

<b>LOE Rating:</b> Possible	<b>Total:</b> 5
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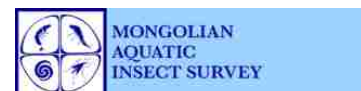
<b>Family:</b> Chloroperlidae					
Alloperla rostellata	Within Known Range? N	Nearest Occurrence:	843.77 KM	48.36436°N	98.92737 °E
<b>Family:</b> Perlodidae					
Isoperla asiatica	Within Known Range? N	Nearest Occurrence:	705.20 KM	48.06257°N	97.55064 °E
Isoperla potanini	Within Known Range? Y	Nearest Occurrence:	189.36 KM	48.42161°N	90.97337 °E
Megarcys ochracea	Within Known Range? N	Nearest Occurrence:	867.89 KM	51.46205°N	99.19994 °E
<b>Family:</b> Pteronarcyidae					
Pteronarcys reticulata	Within Known Range? N	Nearest Occurrence:	849.11 KM	51.47065°N	99.02617 °E

<b>LOE Rating:</b> Predicted	<b>Total:</b> 14
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<b>Family:</b> Capniidae					
Mesocapnia altaica	Within Known Range? N	Nearest Occurrence:	339.94 KM	48.43684°N	88.90094 °E
Mesocapnia variabilis	Within Known Range? N	Nearest Occurrence:	374.78 KM	48.50631°N	88.50947 °E
<b>Family:</b> Chloroperlidae					
Alaskaperla longidentata	Within Known Range? N	Nearest Occurrence:	666.44 KM	48.15779°N	97.21441 °E
Alloperla deminuta	Within Known Range? N	Nearest Occurrence:	849.11 KM	51.47065°N	99.02617 °E
Alloperla joosti	Within Known Range? N	Nearest Occurrence:	683.66 KM	48.24995°N	97.40627 °E
Alloperla mediata	Within Known Range? N	Nearest Occurrence:	847.04 KM	50.61826°N	99.12094 °E
<b>Family:</b> Leuctridae					
Paraleuctra zapekinae	Within Known Range? N	Nearest Occurrence:	1,457.86 KM	49.71481°N	104.64203 °E
<b>Family:</b> Nemouridae					
Amphinemura standfussi	Within Known Range? N	Nearest Occurrence:	705.20 KM	48.06257°N	97.55064 °E
Nemoura sahlbergi	Within Known Range? N	Nearest Occurrence:	856.38 KM	50.42996°N	99.21727 °E
<b>Family:</b> Perlidae					
Agnetina extrema	Within Known Range? N	Nearest Occurrence:	1,044.38 KM	47.50949°N	100.57510 °E
<b>Family:</b> Perlodidae					
Isoperla kozlovi	Within Known Range? N	Nearest Occurrence:	867.37 KM	50.31066°N	99.32150 °E
Isoperla lunigera	Within Known Range? N	Nearest Occurrence:	874.70 KM	51.09845°N	99.32051 °E
Isoperla mongolica	Within Known Range? N	Nearest Occurrence:	256.70 KM	48.84329°N	89.53623 °E
Kaszabia nigricauda	Within Known Range? N	Nearest Occurrence:	805.89 KM	48.71968°N	98.65184 °E

<b>LOE Rating:</b> Unlikely	<b>Total:</b> 5
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<b>Family:</b> Capniidae					
Capnia khulsbagia	Within Known Range? N	Nearest Occurrence:	1,027.47 KM	50.98944°N	100.71944 °E
<b>Family:</b> Leuctridae					
Leuctra fusca	Within Known Range? N	Nearest Occurrence:	1,754.47 KM	49.08643°N	107.28952 °E
<b>Family:</b> Nemouridae					
Nemurella pictetii	Within Known Range? N	Nearest Occurrence:	872.93 KM	50.81265°N	99.33803 °E
<b>Family:</b> Perlidae					
Paragnetina flavotincta	Within Known Range? N	Nearest Occurrence:	933.08 KM	49.26170°N	99.88242 °E
<b>Family:</b> Perlodidae					
Isoperla eximia	Within Known Range? N	Nearest Occurrence:	1,783.19 KM	49.01829°N	107.54453 °E





Basin: Internal Drainage Basin

Aimags: Uvs

Soums: Ulaangom

Freshwater Ecoregion: Western Mongolia

Terrestrial Ecoregion: Great Lakes Basin Desert Steppe

WQM Sites:

WQM Sites: # 144 (Gashuun River @ N 49.97092° E 92.09158°)

**LOE Rating: Highly Likely Total: 2**

Family: Perlodidae

Isoperla altaica Within Known Range? Y Nearest Occurrence: 52.09 KM 50.53472°N 91.79719°E

Family: Taeniopterygidae

Taenionema japonicum Within Known Range? Y Nearest Occurrence: 290.41 KM 47.85391°N 90.54864°E

**LOE Rating: Likely Total: 18**

Family: Capniidae

Capnia nigra Within Known Range? Y Nearest Occurrence: 452.17 KM 49.09162°N 88.10423°E

Isocapnia guentheri Within Known Range? N Nearest Occurrence: 702.78 KM 48.61518°N 98.23096°E

Isocapnia kudia Within Known Range? N Nearest Occurrence: 854.47 KM 51.25356°N 99.66687°E

Isocapnia sibirica Within Known Range? N Nearest Occurrence: 1,058.28 KM 47.28244°N 101.18793°E

Family: Chloroperlidae

Haploperla lepnevae Within Known Range? Y Nearest Occurrence: 263.00 KM 48.97819°N 89.94996°E

Suwallia kerzhneri Within Known Range? N Nearest Occurrence: 625.70 KM 48.24995°N 97.40627°E

Suwallia teleckojensis Within Known Range? Y Nearest Occurrence: 280.95 KM 47.55886°N 91.76095°E

Family: Nemouridae

Amphinemura borealis Within Known Range? Y Nearest Occurrence: 310.82 KM 48.84329°N 89.53623°E

Nemoura cinerea Within Known Range? N Nearest Occurrence: 647.68 KM 48.06257°N 97.55064°E

Family: Perlidae

Agnetina brevipennis Within Known Range? N Nearest Occurrence: 263.00 KM 48.97819°N 89.94996°E

Agnetina cocandica Within Known Range? Y Nearest Occurrence: 204.11 KM 48.24533°N 91.90115°E

Kamimuria exilis Within Known Range? N Nearest Occurrence: 770.57 KM 50.16278°N 98.84212°E

Family: Perlodidae

Arcynopteryx compacta Within Known Range? Y Nearest Occurrence: 212.03 KM 48.42161°N 90.97337°E

Arcynopteryx sajanensis Within Known Range? N Nearest Occurrence: 980.90 KM 51.61397°N 100.59972°E

Diura bicaudata Within Known Range? Y Nearest Occurrence: 314.36 KM 49.04180°N 89.41675°E

Isoperla asiatica Within Known Range? N Nearest Occurrence: 647.68 KM 48.06257°N 97.55064°E

Pictetiella asiatica Within Known Range? N Nearest Occurrence: 956.58 KM 51.65822°N 100.53000°E

Skwala pusilla Within Known Range? N Nearest Occurrence: 429.62 KM 48.51277°N 88.51107°E

**LOE Rating: Probable Total: 5**

Family: Chloroperlidae

Alloperla rostellata Within Known Range? N Nearest Occurrence: 784.44 KM 48.36436°N 98.92737°E

Family: Perlodidae

Diura majuscula Within Known Range? Y Nearest Occurrence: 288.17 KM 47.60884°N 91.13502°E

Isoperla obscura Within Known Range? Y Nearest Occurrence: 263.00 KM 48.97819°N 89.94996°E

Megarcys ochracea Within Known Range? N Nearest Occurrence: 807.49 KM 51.46205°N 99.19994°E

Family: Pteronarcyidae

Pteronarcys reticulata Within Known Range? N Nearest Occurrence: 788.77 KM 51.47065°N 99.02617°E

Basin: Internal Drainage Basin

Aimags: Uvs

Soums: Ulaangom

Freshwater Ecoregion: Western Mongolia

Terrestrial Ecoregion: Great Lakes Basin Desert Steppe

WQM Sites:

WQM Sites: # 144 (Gashuun River @ N 49.97092° E 92.09158°)

**LOE Rating: Possible Total: 4**

Family: Nemouridae

Amphinemura standfussi Within Known Range? N Nearest Occurrence: 647.68 KM 48.06257°N 97.55064 °E

Nemoura arctica Within Known Range? Y Nearest Occurrence: 292.02 KM 47.53132°N 91.28330 °E

Family: Perlodidae

Arcynopteryx polaris Within Known Range? Y Nearest Occurrence: 322.00 KM 47.34650°N 90.95982 °E

Isoperla lunigera Within Known Range? N Nearest Occurrence: 813.87 KM 51.09845°N 99.32051 °E

**LOE Rating: Predicted Total: 15**

Family: Capniidae

Mesocapnia altaica Within Known Range? N Nearest Occurrence: 394.03 KM 48.43684°N 88.90094 °E

Mesocapnia variabilis Within Known Range? N Nearest Occurrence: 417.00 KM 48.50631°N 88.50947 °E

Family: Chloroperlidae

Alaskaperla longidentata Within Known Range? N Nearest Occurrence: 609.00 KM 48.15779°N 97.21441 °E

Alloperla deminuta Within Known Range? N Nearest Occurrence: 788.77 KM 51.47065°N 99.02617 °E

Alloperla joosti Within Known Range? N Nearest Occurrence: 625.70 KM 48.24995°N 97.40627 °E

Alloperla mediata Within Known Range? N Nearest Occurrence: 785.88 KM 50.61826°N 99.12094 °E

Family: Leuctridae

Paraleuctra zapekinae Within Known Range? N Nearest Occurrence: 1,396.66 KM 49.71481°N 104.64203 °E

Family: Nemouridae

Nemoura sahlbergi Within Known Range? N Nearest Occurrence: 795.15 KM 50.42996°N 99.21727 °E

Nemurella pictetii Within Known Range? N Nearest Occurrence: 811.87 KM 50.81265°N 99.33803 °E

Family: Perlidae

Agnetina extrema Within Known Range? N Nearest Occurrence: 985.88 KM 47.50949°N 100.57510 °E

Paragnetina flavotincta Within Known Range? N Nearest Occurrence: 872.23 KM 49.26170°N 99.88242 °E

Family: Perlodidae

Isoperla kozlovi Within Known Range? N Nearest Occurrence: 806.12 KM 50.31066°N 99.32150 °E

Isoperla mongolica Within Known Range? N Nearest Occurrence: 297.97 KM 48.84329°N 89.53623 °E

Isoperla potanini Within Known Range? Y Nearest Occurrence: 212.03 KM 48.42161°N 90.97337 °E

Kaszabia nigricauda Within Known Range? N Nearest Occurrence: 745.98 KM 48.71968°N 98.65184 °E

**LOE Rating: Unlikely Total: 3**

Family: Capniidae

Capnia khulsbagia Within Known Range? N Nearest Occurrence: 966.43 KM 50.98944°N 100.71944 °E

Family: Leuctridae

Leuctra fusca Within Known Range? N Nearest Occurrence: 1,693.41 KM 49.08643°N 107.28952 °E

Family: Perlodidae

Isoperla eximia Within Known Range? N Nearest Occurrence: 1,722.15 KM 49.01829°N 107.54453 °E

**Basin:** Internal Drainage Basin  
**Aimag:** Uvs  
**Soum:** Zavkhan

**Freshwater Ecoregion:** Western Mongolia  
**Terrestrial Ecoregion:** Great Lakes Basin Desert Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

<b>LOE Rating:</b>	<b>Highly Likely</b>	<b>Total:</b>	<b>2</b>
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<b>Family:</b> Perlidae			
Agnentina cocandica	Within Known Range? Y	Nearest Occurrence:	78.22 KM 48.33025°N 92.81616°E
<b>Family:</b> Perlodidae			
Isoperla altaica	Within Known Range? Y	Nearest Occurrence:	230.33 KM 47.33906°N 91.86288°E

<b>LOE Rating:</b>	<b>Likely</b>	<b>Total:</b>	<b>16</b>
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<b>Family:</b> Capniidae			
Isocapnia guentheri	Within Known Range? N	Nearest Occurrence:	558.69 KM 48.61518°N 98.23096°E
Isocapnia kudia	Within Known Range? N	Nearest Occurrence:	762.61 KM 51.25356°N 99.66687°E
Isocapnia sibirica	Within Known Range? N	Nearest Occurrence:	904.27 KM 47.28244°N 101.18793°E
<b>Family:</b> Chloroperlidae			
Alloperla rostellata	Within Known Range? N	Nearest Occurrence:	637.93 KM 48.36436°N 98.92737°E
Haploperla lepnevae	Within Known Range? Y	Nearest Occurrence:	361.56 KM 48.97819°N 89.94996°E
Suwallia teleckojensis	Within Known Range? Y	Nearest Occurrence:	220.45 KM 47.55886°N 91.76095°E
<b>Family:</b> Nemouridae			
Nemoura cinerea	Within Known Range? N	Nearest Occurrence:	491.38 KM 48.06257°N 97.55064°E
<b>Family:</b> Perlidae			
Agnentina brevipennis	Within Known Range? Y	Nearest Occurrence:	316.73 KM 46.76864°N 91.32673°E
Kamimuria exilis	Within Known Range? N	Nearest Occurrence:	641.83 KM 50.16278°N 98.84212°E
<b>Family:</b> Perlodidae			
Arcynopteryx sajanensis	Within Known Range? N	Nearest Occurrence:	875.16 KM 51.61397°N 100.59972°E
Diura bicaudata	Within Known Range? Y	Nearest Occurrence:	420.92 KM 49.04180°N 89.41675°E
Isoperla asiatica	Within Known Range? N	Nearest Occurrence:	491.38 KM 48.06257°N 97.55064°E
Pictetiella asiatica	Within Known Range? N	Nearest Occurrence:	868.04 KM 51.65822°N 100.53000°E
Skwala pusilla	Within Known Range? N	Nearest Occurrence:	523.12 KM 48.51277°N 88.51107°E
<b>Family:</b> Pteronarcyidae			
Pteronarcys reticulata	Within Known Range? N	Nearest Occurrence:	705.50 KM 51.47065°N 99.02617°E
<b>Family:</b> Taeniopterygidae			
Taenionema japonicum	Within Known Range? Y	Nearest Occurrence:	318.27 KM 47.85391°N 90.54864°E

<b>LOE Rating:</b>	<b>Probable</b>	<b>Total:</b>	<b>4</b>
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<b>Family:</b> Chloroperlidae			
Suwallia kerzhneri	Within Known Range? N	Nearest Occurrence:	471.97 KM 48.24995°N 97.40627°E
<b>Family:</b> Nemouridae			
Amphinemura borealis	Within Known Range? Y	Nearest Occurrence:	318.61 KM 47.03925°N 91.03419°E
<b>Family:</b> Perlodidae			
Arcynopteryx compacta	Within Known Range? Y	Nearest Occurrence:	254.34 KM 48.42161°N 90.97337°E
Diura majuscula	Within Known Range? Y	Nearest Occurrence:	246.57 KM 47.24104°N 91.75287°E



**Basin:** Internal Drainage Basin  
**Aimags:** Uvs  
**Soums:** Zavkhan

**Freshwater Ecoregion:** Western Mongolia  
**Terrestrial Ecoregion:** Great Lakes Basin Desert Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Possible Total: 7**

<b>Family: Capniidae</b>					
Capnia nigra	Within Known Range? Y	Nearest Occurrence:	491.38 KM	48.06257°N	97.55064°E
<b>Family: Nemouridae</b>					
Amphinemura standfussi	Within Known Range? N	Nearest Occurrence:	491.38 KM	48.06257°N	97.55064°E
Nemoura arctica	Within Known Range? Y	Nearest Occurrence:	263.49 KM	47.53132°N	91.28330°E
<b>Family: Perlodidae</b>					
Arcynopteryx polaris	Within Known Range? Y	Nearest Occurrence:	275.42 KM	46.91446°N	91.74682°E
Isoperla mongolica	Within Known Range? Y	Nearest Occurrence:	316.43 KM	47.08782°N	91.02542°E
Isoperla obscura	Within Known Range? Y	Nearest Occurrence:	361.56 KM	48.97819°N	89.94996°E
Megarcys ochracea	Within Known Range? N	Nearest Occurrence:	722.83 KM	51.46205°N	99.19994°E

**LOE Rating: Predicted Total: 15**

<b>Family: Capniidae</b>					
Mesocapnia altaica	Within Known Range? N	Nearest Occurrence:	480.88 KM	48.43684°N	88.90094°E
Mesocapnia variabilis	Within Known Range? Y	Nearest Occurrence:	524.31 KM	48.50631°N	88.50947°E
<b>Family: Chloroperlidae</b>					
Alaskaperla longidentata	Within Known Range? N	Nearest Occurrence:	452.73 KM	48.15779°N	97.21441°E
Alloperla deminuta	Within Known Range? N	Nearest Occurrence:	705.50 KM	51.47065°N	99.02617°E
Alloperla joosti	Within Known Range? N	Nearest Occurrence:	471.97 KM	48.24995°N	97.40627°E
Alloperla mediata	Within Known Range? N	Nearest Occurrence:	683.16 KM	50.61826°N	99.12094°E
<b>Family: Leuctridae</b>					
Paraleuctra zapekinae	Within Known Range? N	Nearest Occurrence:	1,272.42 KM	49.71481°N	104.64203°E
<b>Family: Nemouridae</b>					
Nemoura sahlbergi	Within Known Range? N	Nearest Occurrence:	688.04 KM	50.42996°N	99.21727°E
Nemurella pictetii	Within Known Range? N	Nearest Occurrence:	712.43 KM	50.81265°N	99.33803°E
<b>Family: Perlidae</b>					
Agnetina extrema	Within Known Range? N	Nearest Occurrence:	832.64 KM	47.50949°N	100.57510°E
Paragnetina flavotincta	Within Known Range? N	Nearest Occurrence:	742.01 KM	49.26170°N	99.88242°E
<b>Family: Perlodidae</b>					
Isoperla kozlovi	Within Known Range? N	Nearest Occurrence:	696.20 KM	50.31066°N	99.32150°E
Isoperla lunigera	Within Known Range? N	Nearest Occurrence:	720.61 KM	51.09845°N	99.32051°E
Isoperla potanini	Within Known Range? Y	Nearest Occurrence:	254.34 KM	48.42161°N	90.97337°E
Kaszabia nigricauda	Within Known Range? N	Nearest Occurrence:	604.80 KM	48.71968°N	98.65184°E

**LOE Rating: Unlikely Total: 3**

<b>Family: Capniidae</b>					
Capnia khulsbagia	Within Known Range? N	Nearest Occurrence:	865.12 KM	50.98944°N	100.71944°E
<b>Family: Leuctridae</b>					
Leuctra fusca	Within Known Range? N	Nearest Occurrence:	1,563.31 KM	49.08643°N	107.28952°E
<b>Family: Perlodidae</b>					
Isoperla eximia	Within Known Range? N	Nearest Occurrence:	1,591.54 KM	49.01829°N	107.54453°E

Basin: Internal Drainage Basin

Aimag: Uvs

Soum: Zuunkhangai

Freshwater Ecoregion: Western Mongolia

Terrestrial Ecoregion: Selenge-Orkhon Forest Steppe

WQM Sites:

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Highly Likely Total: 1**

Family: Perlodidae

*Isoperla altaica* Within Known Range? Y Nearest Occurrence: 420.64 KM 50.53472°N 91.79719°E

**LOE Rating: Likely Total: 18**

Family: Capniidae

*Capnia nigra* Within Known Range? Y Nearest Occurrence: 277.21 KM 48.06257°N 97.55064°E

*Isocapnia guentheri* Within Known Range? N Nearest Occurrence: 326.80 KM 48.61518°N 98.23096°E

*Isocapnia kudia* Within Known Range? N Nearest Occurrence: 527.13 KM 51.25356°N 99.66687°E

*Isocapnia sibirica* Within Known Range? N Nearest Occurrence: 683.28 KM 47.28244°N 101.18793°E

Family: Chloroperlidae

*Alloperla rostellata* Within Known Range? N Nearest Occurrence: 408.44 KM 48.36436°N 98.92737°E

*Suwallia kerzhneri* Within Known Range? N Nearest Occurrence: 253.40 KM 48.24995°N 97.40627°E

*Suwallia teleckojensis* Within Known Range? Y Nearest Occurrence: 253.86 KM 48.24995°N 97.40627°E

Family: Nemouridae

*Amphinemura borealis* Within Known Range? Y Nearest Occurrence: 277.36 KM 48.05989°N 97.55073°E

*Amphinemura standfussi* Within Known Range? N Nearest Occurrence: 277.21 KM 48.06257°N 97.55064°E

*Nemoura cinerea* Within Known Range? N Nearest Occurrence: 277.21 KM 48.06257°N 97.55064°E

Family: Perlidae

*Kamimuria exilis* Within Known Range? N Nearest Occurrence: 400.31 KM 50.16278°N 98.84212°E

Family: Perlodidae

*Arcynopteryx compacta* Within Known Range? Y Nearest Occurrence: 444.97 KM 50.61826°N 99.12094°E

*Arcynopteryx sajanensis* Within Known Range? N Nearest Occurrence: 639.08 KM 51.61397°N 100.59972°E

*Diura bicaudata* Within Known Range? Y Nearest Occurrence: 542.38 KM 51.39852°N 99.75011°E

*Diura majuscula* Within Known Range? Y Nearest Occurrence: 277.70 KM 48.06257°N 97.55064°E

*Isoperla asiatica* Within Known Range? N Nearest Occurrence: 277.21 KM 48.06257°N 97.55064°E

*Pictetiella asiatica* Within Known Range? N Nearest Occurrence: 632.94 KM 51.65822°N 100.53000°E

Family: Taeniopterygidae

*Taenionema japonicum* Within Known Range? Y Nearest Occurrence: 444.97 KM 50.61826°N 99.12094°E

**LOE Rating: Probable Total: 4**

Family: Chloroperlidae

*Alaskaperla longidentata* Within Known Range? N Nearest Occurrence: 239.53 KM 48.15779°N 97.21441°E

Family: Perlodidae

*Megaracys ochracea* Within Known Range? N Nearest Occurrence: 491.69 KM 51.46205°N 99.19994°E

*Skwala pusilla* Within Known Range? N Nearest Occurrence: 764.47 KM 48.51277°N 88.51107°E

Family: Pteronarcyidae

*Pteronarcys reticulata* Within Known Range? N Nearest Occurrence: 475.55 KM 51.47065°N 99.02617°E

Basin: Internal Drainage Basin

Aimags: Uvs

Soums: Zuunkhangai

Freshwater Ecoregion: Western Mongolia

Terrestrial Ecoregion: Selenge-Orkhon Forest Steppe

WQM Sites:

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Possible** **Total: 8**

Family: Chloroperlidae

*Alloperla mediata*

Within Known Range? N Nearest Occurrence: 444.17 KM 50.61826°N 99.12094°E

*Haploperla lepnevae*

Within Known Range? Y Nearest Occurrence: 502.23 KM 49.26170°N 99.88242°E

Family: Nemouridae

*Nemoura arctica*

Within Known Range? Y Nearest Occurrence: 448.53 KM 50.42996°N 99.21727°E

Family: Perlidae

*Agnetina brevipennis*

Within Known Range? Y Nearest Occurrence: 370.48 KM 48.71968°N 98.65184°E

*Agnetina cocandica*

Within Known Range? Y Nearest Occurrence: 300.86 KM 48.33025°N 92.81616°E

Family: Perlodidae

*Arcynopteryx polaris*

Within Known Range? Y Nearest Occurrence: 409.17 KM 48.36436°N 98.92737°E

*Isoperla lunigera*

Within Known Range? N Nearest Occurrence: 485.00 KM 51.09845°N 99.32051°E

*Isoperla potanini*

Within Known Range? Y Nearest Occurrence: 239.96 KM 48.15779°N 97.21441°E

**LOE Rating: Predicted** **Total: 12**

Family: Capniidae

*Mesocapnia variabilis*

Within Known Range? Y Nearest Occurrence: 409.17 KM 48.36436°N 98.92737°E

Family: Chloroperlidae

*Alloperla deminuta*

Within Known Range? N Nearest Occurrence: 475.55 KM 51.47065°N 99.02617°E

*Alloperla joosti*

Within Known Range? N Nearest Occurrence: 253.40 KM 48.24995°N 97.40627°E

Family: Leuctridae

*Paraleuctra zapekinae*

Within Known Range? N Nearest Occurrence: 1,031.80 KM 49.71481°N 104.64203°E

Family: Nemouridae

*Nemoura sahlbergi*

Within Known Range? N Nearest Occurrence: 447.73 KM 50.42996°N 99.21727°E

*Nemurella pictetii*

Within Known Range? N Nearest Occurrence: 474.33 KM 50.81265°N 99.33803°E

Family: Perlidae

*Agnetina extrema*

Within Known Range? N Nearest Occurrence: 610.77 KM 47.50949°N 100.57510°E

*Paragnetina flavotincta*

Within Known Range? N Nearest Occurrence: 502.23 KM 49.26170°N 99.88242°E

Family: Perlodidae

*Isoperla kozlovi*

Within Known Range? N Nearest Occurrence: 455.23 KM 50.31066°N 99.32150°E

*Isoperla mongolica*

Within Known Range? Y Nearest Occurrence: 253.86 KM 48.24995°N 97.40627°E

*Isoperla obscura*

Within Known Range? Y Nearest Occurrence: 601.07 KM 48.97819°N 89.94996°E

*Kaszabia nigricauda*

Within Known Range? N Nearest Occurrence: 370.48 KM 48.71968°N 98.65184°E

**LOE Rating: Unlikely** **Total: 4**

Family: Capniidae

*Capnia khulsbagia*

Within Known Range? N Nearest Occurrence: 625.42 KM 50.98944°N 100.71944°E

*Mesocapnia altaica*

Within Known Range? N Nearest Occurrence: 722.48 KM 48.43684°N 88.90094°E

Family: Leuctridae

*Leuctra fusca*

Within Known Range? N Nearest Occurrence: 1,324.56 KM 49.08643°N 107.28952°E

Family: Perlodidae

*Isoperla eximia*

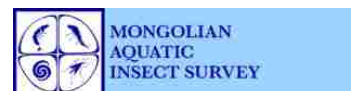
Within Known Range? N Nearest Occurrence: 1,352.99 KM 49.01829°N 107.54453°E

Research funded by the National Science Foundation

DEB-BSI #0206674: A Survey of the Aquatic Insects of the Selenge River Basin. P.I.'s: JKGelhaus, JCMorse, BHayford.

DEB # 0743732: Aquatic Insects of the Altai and Hangai Mountain Drainages. P.I.'s: JKGelhaus, JCMorse, CRNelson.

<http://clade.ansp.org/entomology/mongolia/index.html>



**Basin:** Internal Drainage Basin

**Aimag:** Zavkhan

**Soum:** Bayankhairkhan

Freshwater Ecoregion: Western Mongolia

Terrestrial Ecoregion: Selenge-Orkhon Forest Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Highly Likely Total: 6**

Family: Capniidae

Isocapnia guentheri Within Known Range? N Nearest Occurrence: 229.55 KM 48.61518°N 98.23096°E

Family: Chloroperlidae

Alloperla rostellata Within Known Range? N Nearest Occurrence: 311.70 KM 48.36436°N 98.92737°E

Suwallia kerzhneri Within Known Range? N Nearest Occurrence: 173.55 KM 48.24995°N 97.40627°E

Suwallia teleckojensis Within Known Range? Y Nearest Occurrence: 173.86 KM 48.24995°N 97.40627°E

Family: Nemouridae

Amphinemura standfussi Within Known Range? N Nearest Occurrence: 194.78 KM 48.62624°N 97.89617°E

Nemoura cinerea Within Known Range? N Nearest Occurrence: 199.61 KM 48.06257°N 97.55064°E

**LOE Rating: Likely Total: 12**

Family: Capniidae

Capnia nigra Within Known Range? Y Nearest Occurrence: 199.61 KM 48.06257°N 97.55064°E

Isocapnia kudia Within Known Range? N Nearest Occurrence: 429.12 KM 51.25356°N 99.66687°E

Isocapnia sibirica Within Known Range? N Nearest Occurrence: 589.33 KM 47.28244°N 101.18793°E

Family: Chloroperlidae

Alaskaperla longidentata Within Known Range? N Nearest Occurrence: 167.19 KM 48.15779°N 97.21441°E

Family: Nemouridae

Amphinemura borealis Within Known Range? Y Nearest Occurrence: 199.83 KM 48.05989°N 97.55073°E

Family: Perlidae

Kamimuria exilis Within Known Range? N Nearest Occurrence: 296.67 KM 50.16278°N 98.84212°E

Family: Perlodidae

Arcynopteryx sajanensis Within Known Range? N Nearest Occurrence: 540.17 KM 51.61397°N 100.59972°E

Diura majuscula Within Known Range? Y Nearest Occurrence: 199.97 KM 48.06257°N 97.55064°E

Isoperla asiatica Within Known Range? N Nearest Occurrence: 199.61 KM 48.06257°N 97.55064°E

Isoperla potanini Within Known Range? Y Nearest Occurrence: 167.49 KM 48.15779°N 97.21441°E

Pictetiella asiatica Within Known Range? N Nearest Occurrence: 534.69 KM 51.65822°N 100.53000°E

Family: Taeniopterygidae

Taenionema japonicum Within Known Range? Y Nearest Occurrence: 343.77 KM 50.61826°N 99.12094°E

**LOE Rating: Probable Total: 5**

Family: Chloroperlidae

Alloperla joosti Within Known Range? N Nearest Occurrence: 173.55 KM 48.24995°N 97.40627°E

Family: Perlodidae

Arcynopteryx compacta Within Known Range? Y Nearest Occurrence: 343.77 KM 50.61826°N 99.12094°E

Diura bicaudata Within Known Range? Y Nearest Occurrence: 445.17 KM 51.39852°N 99.75011°E

Isoperla altaica Within Known Range? Y Nearest Occurrence: 374.77 KM 50.81265°N 99.33803°E

Megarcys ochracea Within Known Range? N Nearest Occurrence: 397.96 KM 51.46205°N 99.19994°E

Basin: Internal Drainage Basin

Aimags: Zavkhan

Soums: Bayankhairkhan

Freshwater Ecoregion: Western Mongolia

Terrestrial Ecoregion: Selenge-Orkhon Forest Steppe

WQM Sites:

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Possible Total: 8**

Family: Chloroperlidae

*Alloperla mediata*

Within Known Range? N Nearest Occurrence: 343.15 KM 50.61826°N 99.12094 °E

*Haploperla lepnevae*

Within Known Range? Y Nearest Occurrence: 397.82 KM 49.26170°N 99.88242 °E

Family: Perlidae

*Agnetina brevipennis*

Within Known Range? Y Nearest Occurrence: 270.44 KM 48.71968°N 98.65184 °E

Family: Perlodidae

*Arcynopteryx polaris*

Within Known Range? Y Nearest Occurrence: 312.26 KM 48.36436°N 98.92737 °E

*Isoperla lunigera*

Within Known Range? N Nearest Occurrence: 387.19 KM 51.09845°N 99.32051 °E

*Kaszabia nigricauda*

Within Known Range? N Nearest Occurrence: 270.44 KM 48.71968°N 98.65184 °E

*Skwala pusilla*

Within Known Range? N Nearest Occurrence: 869.56 KM 48.51277°N 88.51107 °E

Family: Pteronarcyidae

*Pteronarcys reticulata*

Within Known Range? N Nearest Occurrence: 383.11 KM 51.47065°N 99.02617 °E

**LOE Rating: Predicted Total: 12**

Family: Capniidae

*Mesocapnia variabilis*

Within Known Range? Y Nearest Occurrence: 312.26 KM 48.36436°N 98.92737 °E

Family: Chloroperlidae

*Alloperla deminuta*

Within Known Range? N Nearest Occurrence: 383.11 KM 51.47065°N 99.02617 °E

Family: Leuctridae

*Paraleuctra zapekinae*

Within Known Range? N Nearest Occurrence: 926.87 KM 49.71481°N 104.64203 °E

Family: Nemouridae

*Nemoura arctica*

Within Known Range? Y Nearest Occurrence: 345.78 KM 50.42996°N 99.21727 °E

*Nemoura sahlbergi*

Within Known Range? N Nearest Occurrence: 345.16 KM 50.42996°N 99.21727 °E

*Nemurella pictetii*

Within Known Range? N Nearest Occurrence: 374.10 KM 50.81265°N 99.33803 °E

Family: Perlidae

*Agnetina cocandica*

Within Known Range? Y Nearest Occurrence: 398.73 KM 49.76390°N 99.86185 °E

*Agnetina extrema*

Within Known Range? N Nearest Occurrence: 516.88 KM 47.50949°N 100.57510 °E

*Paragnetina flavotincta*

Within Known Range? N Nearest Occurrence: 397.82 KM 49.26170°N 99.88242 °E

Family: Perlodidae

*Isoperla kozlovi*

Within Known Range? N Nearest Occurrence: 351.82 KM 50.31066°N 99.32150 °E

*Isoperla mongolica*

Within Known Range? Y Nearest Occurrence: 173.86 KM 48.24995°N 97.40627 °E

*Isoperla obscura*

Within Known Range? Y Nearest Occurrence: 533.95 KM 51.65045°N 100.52664 °E

**LOE Rating: Unlikely Total: 4**

Family: Capniidae

*Capnia khulsbagia*

Within Known Range? N Nearest Occurrence: 523.09 KM 50.98944°N 100.71944 °E

*Mesocapnia altaica*

Within Known Range? N Nearest Occurrence: 827.54 KM 48.43684°N 88.90094 °E

Family: Leuctridae

*Leuctra fusca*

Within Known Range? N Nearest Occurrence: 1,220.24 KM 49.08643°N 107.28952 °E

Family: Perlodidae

*Isoperla eximia*

Within Known Range? N Nearest Occurrence: 1,248.74 KM 49.01829°N 107.54453 °E

Research funded by the National Science Foundation

DEB-BSI #0206674: A Survey of the Aquatic Insects of the Selenge River Basin. P.I.'s: JKGelhaus, JCMorse, BHayford.

DEB # 0743732: Aquatic Insects of the Altai and Hangai Mountain Drainages. P.I.'s: JKGelhaus, JCMorse, CRNelson.

<http://clade.ansp.org/entomology/mongolia/index.html>





**Basin:** Internal Drainage Basin  
**Aimags:** Zavkhan  
**Soums:** Bayantes

**Freshwater Ecoregion:** Western Mongolia  
**Terrestrial Ecoregion:** Selenge-Orkhon Forest Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Highly Likely Total: 6**

<b>Family: Capniidae</b>					
Isocapnia guentheri	Within Known Range? N	Nearest Occurrence:	252.80 KM	48.61518 °N	98.23096 °E
<b>Family: Chloroperlidae</b>					
Alloperla rostellata	Within Known Range? N	Nearest Occurrence:	330.97 KM	50.61826 °N	99.12094 °E
Suwallia kerzhneri	Within Known Range? N	Nearest Occurrence:	210.48 KM	48.24995 °N	97.40627 °E
Suwallia teleckojensis	Within Known Range? Y	Nearest Occurrence:	210.86 KM	48.24995 °N	97.40627 °E
<b>Family: Nemouridae</b>					
Amphinemura standfussi	Within Known Range? N	Nearest Occurrence:	220.80 KM	48.62624 °N	97.89617 °E
Nemoura cinerea	Within Known Range? N	Nearest Occurrence:	236.74 KM	48.06257 °N	97.55064 °E

**LOE Rating: Likely Total: 11**

<b>Family: Capniidae</b>					
Capnia nigra	Within Known Range? Y	Nearest Occurrence:	236.74 KM	48.06257 °N	97.55064 °E
Isocapnia kudia	Within Known Range? N	Nearest Occurrence:	412.30 KM	51.25356 °N	99.66687 °E
<b>Family: Chloroperlidae</b>					
Alaskaperla longidentata	Within Known Range? N	Nearest Occurrence:	207.12 KM	48.15779 °N	97.21441 °E
<b>Family: Nemouridae</b>					
Amphinemura borealis	Within Known Range? Y	Nearest Occurrence:	236.98 KM	48.05989 °N	97.55073 °E
<b>Family: Perlidae</b>					
Kamimuria exilis	Within Known Range? N	Nearest Occurrence:	290.06 KM	50.16278 °N	98.84212 °E
<b>Family: Perlodidae</b>					
Arcynopteryx sajanensis	Within Known Range? N	Nearest Occurrence:	524.16 KM	51.61397 °N	100.59972 °E
Diura majuscula	Within Known Range? Y	Nearest Occurrence:	237.16 KM	48.06257 °N	97.55064 °E
Isoperla asiatica	Within Known Range? N	Nearest Occurrence:	236.74 KM	48.06257 °N	97.55064 °E
Isoperla potanini	Within Known Range? Y	Nearest Occurrence:	207.50 KM	48.15779 °N	97.21441 °E
Pictetiella asiatica	Within Known Range? N	Nearest Occurrence:	518.08 KM	51.65822 °N	100.53000 °E
<b>Family: Taeniopterygidae</b>					
Taenionema japonicum	Within Known Range? Y	Nearest Occurrence:	331.56 KM	50.61826 °N	99.12094 °E

**LOE Rating: Probable Total: 7**

<b>Family: Capniidae</b>					
Isocapnia sibirica	Within Known Range? N	Nearest Occurrence:	612.00 KM	47.28244 °N	101.18793 °E
<b>Family: Chloroperlidae</b>					
Alloperla joosti	Within Known Range? N	Nearest Occurrence:	210.48 KM	48.24995 °N	97.40627 °E
Alloperla mediata	Within Known Range? N	Nearest Occurrence:	330.97 KM	50.61826 °N	99.12094 °E
<b>Family: Perlodidae</b>					
Arcynopteryx compacta	Within Known Range? Y	Nearest Occurrence:	331.56 KM	50.61826 °N	99.12094 °E
Diura bicaudata	Within Known Range? Y	Nearest Occurrence:	427.36 KM	51.39852 °N	99.75011 °E
Isoperla altaica	Within Known Range? Y	Nearest Occurrence:	361.15 KM	50.81265 °N	99.33803 °E
Megaracys ochracea	Within Known Range? N	Nearest Occurrence:	376.45 KM	51.46205 °N	99.19994 °E

**Basin:** Internal Drainage Basin  
**Aimags:** Zavkhan  
**Soums:** Bayantes

**Freshwater Ecoregion:** Western Mongolia  
**Terrestrial Ecoregion:** Selenge-Orkhon Forest Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

<b>LOE Rating:</b>	<b>Possible</b>	<b>Total:</b>	<b>7</b>
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<b>Family:</b> Chloroperlidae						
	Haploperla lepnevae	Within Known Range? Y	Nearest Occurrence:	405.46 KM	49.26170 °N	99.88242 °E
<b>Family:</b> Perlidae						
	Agnentina brevipennis	Within Known Range? Y	Nearest Occurrence:	289.25 KM	48.71968 °N	98.65184 °E
<b>Family:</b> Perlodidae						
	Isoperla kozlovi	Within Known Range? N	Nearest Occurrence:	344.73 KM	50.31066 °N	99.32150 °E
	Isoperla lunigera	Within Known Range? N	Nearest Occurrence:	370.17 KM	51.09845 °N	99.32051 °E
	Kaszabia nigricauda	Within Known Range? N	Nearest Occurrence:	289.25 KM	48.71968 °N	98.65184 °E
	Skwala pusilla	Within Known Range? N	Nearest Occurrence:	871.74 KM	48.51277 °N	88.51107 °E
<b>Family:</b> Pteronarcyidae						
	Pteronarcys reticulata	Within Known Range? N	Nearest Occurrence:	360.38 KM	51.47065 °N	99.02617 °E

<b>LOE Rating:</b>	<b>Predicted</b>	<b>Total:</b>	<b>12</b>
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<b>Family:</b> Capniidae						
	Mesocapnia variabilis	Within Known Range? Y	Nearest Occurrence:	334.53 KM	48.36436 °N	98.92737 °E
<b>Family:</b> Chloroperlidae						
	Alloperla deminuta	Within Known Range? N	Nearest Occurrence:	360.38 KM	51.47065 °N	99.02617 °E
<b>Family:</b> Leuctridae						
	Paraleuctra zapekinae	Within Known Range? N	Nearest Occurrence:	929.94 KM	49.71481 °N	104.64203 °E
<b>Family:</b> Nemouridae						
	Nemoura arctica	Within Known Range? Y	Nearest Occurrence:	336.62 KM	50.42996 °N	99.21727 °E
	Nemoura sahlbergi	Within Known Range? N	Nearest Occurrence:	336.01 KM	50.42996 °N	99.21727 °E
	Nemurella pictetii	Within Known Range? N	Nearest Occurrence:	360.50 KM	50.81265 °N	99.33803 °E
<b>Family:</b> Perlidae						
	Agnentina cocandica	Within Known Range? Y	Nearest Occurrence:	400.04 KM	49.76390 °N	99.86185 °E
	Agnentina extrema	Within Known Range? N	Nearest Occurrence:	539.97 KM	47.50949 °N	100.57510 °E
	Paragnetina flavotincta	Within Known Range? N	Nearest Occurrence:	405.46 KM	49.26170 °N	99.88242 °E
<b>Family:</b> Perlodidae						
	Arcynopteryx polaris	Within Known Range? Y	Nearest Occurrence:	334.53 KM	48.36436 °N	98.92737 °E
	Isoperla mongolica	Within Known Range? Y	Nearest Occurrence:	210.86 KM	48.24995 °N	97.40627 °E
	Isoperla obscura	Within Known Range? Y	Nearest Occurrence:	517.39 KM	51.65045 °N	100.52664 °E

<b>LOE Rating:</b>	<b>Unlikely</b>	<b>Total:</b>	<b>4</b>
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<b>Family:</b> Capniidae						
	Capnia khulsbagia	Within Known Range? N	Nearest Occurrence:	512.89 KM	50.98944 °N	100.71944 °E
	Mesocapnia altaica	Within Known Range? N	Nearest Occurrence:	830.50 KM	48.43684 °N	88.90094 °E
<b>Family:</b> Leuctridae						
	Leuctra fusca	Within Known Range? N	Nearest Occurrence:	1,226.10 KM	49.08643 °N	107.28952 °E
<b>Family:</b> Perlodidae						
	Isoperla eximia	Within Known Range? N	Nearest Occurrence:	1,254.83 KM	49.01829 °N	107.54453 °E



**Basin:** Internal Drainage Basin

**Aimag:** Zavkhan

**Soum:** Dorvoljin

Freshwater Ecoregion: Western Mongolia

Terrestrial Ecoregion: Great Lakes Basin Desert Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Highly Likely Total: 4**

Family: Capniidae					
Isocapnia guentheri	Within Known Range? N	Nearest Occurrence:	463.62 KM	48.61518°N	98.23096 °E
Family: Chloroperlidae					
Suwallia teleckojensis	Within Known Range? Y	Nearest Occurrence:	184.19 KM	46.32080°N	93.90083 °E
Family: Nemouridae					
Nemoura cinerea	Within Known Range? N	Nearest Occurrence:	382.60 KM	48.06257°N	97.55064 °E
Family: Perlidae					
Agnatina cocandica	Within Known Range? Y	Nearest Occurrence:	149.01 KM	48.33025°N	92.81616 °E

**LOE Rating: Likely Total: 16**

Family: Capniidae					
Isocapnia kudia	Within Known Range? N	Nearest Occurrence:	717.22 KM	51.25356°N	99.66687 °E
Isocapnia sibirica	Within Known Range? N	Nearest Occurrence:	789.82 KM	47.28244°N	101.18793 °E
Family: Chloroperlidae					
Alloperla rostellata	Within Known Range? N	Nearest Occurrence:	537.10 KM	48.36436°N	98.92737 °E
Haploperla lepnevae	Within Known Range? Y	Nearest Occurrence:	474.76 KM	48.97819°N	89.94996 °E
Suwallia kerzhneri	Within Known Range? N	Nearest Occurrence:	367.79 KM	48.24995°N	97.40627 °E
Family: Nemouridae					
Amphinemura borealis	Within Known Range? Y	Nearest Occurrence:	356.02 KM	47.03925°N	91.03419 °E
Amphinemura standfussi	Within Known Range? N	Nearest Occurrence:	382.60 KM	48.06257°N	97.55064 °E
Family: Perlidae					
Kamimuria exilis	Within Known Range? N	Nearest Occurrence:	580.69 KM	50.16278°N	98.84212 °E
Family: Perlodidae					
Arcynopteryx sajanensis	Within Known Range? N	Nearest Occurrence:	828.39 KM	51.61397°N	100.59972 °E
Diura bicaudata	Within Known Range? Y	Nearest Occurrence:	533.98 KM	49.04180°N	89.41675 °E
Isoperla altaica	Within Known Range? Y	Nearest Occurrence:	258.87 KM	47.33906°N	91.86288 °E
Isoperla asiatica	Within Known Range? N	Nearest Occurrence:	382.60 KM	48.06257°N	97.55064 °E
Isoperla potanini	Within Known Range? Y	Nearest Occurrence:	184.19 KM	46.32080°N	93.90083 °E
Pictetiella asiatica	Within Known Range? N	Nearest Occurrence:	822.61 KM	51.65822°N	100.53000 °E
Skwala pusilla	Within Known Range? N	Nearest Occurrence:	623.92 KM	48.51277°N	88.51107 °E
Family: Taeniopterygidae					
Taenionema japonicum	Within Known Range? Y	Nearest Occurrence:	364.32 KM	47.11520°N	90.94098 °E

**LOE Rating: Probable Total: 4**

Family: Chloroperlidae					
Alaskaperla longidentata	Within Known Range? N	Nearest Occurrence:	345.79 KM	48.15779°N	97.21441 °E
Family: Perlidae					
Agnatina brevipennis	Within Known Range? Y	Nearest Occurrence:	335.76 KM	46.76864°N	91.32673 °E
Family: Perlodidae					
Arcynopteryx compacta	Within Known Range? Y	Nearest Occurrence:	270.24 KM	46.92107°N	91.91048 °E
Diura majuscula	Within Known Range? Y	Nearest Occurrence:	273.68 KM	47.24104°N	91.75287 °E

**Basin:** Internal Drainage Basin  
**Aimags:** Zavkhan  
**Soums:** Dorvoljin

**Freshwater Ecoregion:** Western Mongolia  
**Terrestrial Ecoregion:** Great Lakes Basin Desert Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

LOE Rating:	Possible	Total:	5				
Family:	Capniidae						
	Capnia nigra	Within Known Range?	Y	Nearest Occurrence:	382.60 KM	48.06257°N	97.55064°E
Family:	Chloroperlidae						
	Alloperla joosti	Within Known Range?	N	Nearest Occurrence:	367.79 KM	48.24995°N	97.40627°E
Family:	Nemouridae						
	Nemoura arctica	Within Known Range?	Y	Nearest Occurrence:	317.48 KM	47.53132°N	91.28330°E
Family:	Perlodidae						
	Arcynopteryx polaris	Within Known Range?	Y	Nearest Occurrence:	256.62 KM	46.61982°N	92.22981°E
Family:	Pteronarcyidae						
	Pteronarcys reticulata	Within Known Range?	N	Nearest Occurrence:	670.69 KM	51.47065°N	99.02617°E
LOE Rating:	Predicted	Total:	15				
Family:	Capniidae						
	Mesocapnia altaica	Within Known Range?	N	Nearest Occurrence:	580.05 KM	48.43684°N	88.90094°E
	Mesocapnia variabilis	Within Known Range?	Y	Nearest Occurrence:	538.06 KM	48.36436°N	98.92737°E
Family:	Chloroperlidae						
	Alloperla deminuta	Within Known Range?	N	Nearest Occurrence:	670.69 KM	51.47065°N	99.02617°E
	Alloperla mediata	Within Known Range?	N	Nearest Occurrence:	629.87 KM	50.61826°N	99.12094°E
Family:	Leuctridae						
	Paraleuctra zapekinae	Within Known Range?	N	Nearest Occurrence:	1,185.62 KM	49.71481°N	104.64203°E
Family:	Nemouridae						
	Nemoura sahlbergi	Within Known Range?	N	Nearest Occurrence:	629.99 KM	50.42996°N	99.21727°E
	Nemurella pictetii	Within Known Range?	N	Nearest Occurrence:	661.31 KM	50.81265°N	99.33803°E
Family:	Perlidae						
	Agnetina extrema	Within Known Range?	N	Nearest Occurrence:	719.93 KM	47.50949°N	100.57510°E
	Paragnetina flavotincta	Within Known Range?	N	Nearest Occurrence:	657.24 KM	49.26170°N	99.88242°E
Family:	Perlodidae						
	Isoperla kozlovi	Within Known Range?	N	Nearest Occurrence:	634.88 KM	50.31066°N	99.32150°E
	Isoperla lunigera	Within Known Range?	N	Nearest Occurrence:	675.38 KM	51.09845°N	99.32051°E
	Isoperla mongolica	Within Known Range?	Y	Nearest Occurrence:	336.38 KM	46.76864°N	91.32673°E
	Isoperla obscura	Within Known Range?	Y	Nearest Occurrence:	474.76 KM	48.97819°N	89.94996°E
	Kaszabia nigricauda	Within Known Range?	N	Nearest Occurrence:	511.59 KM	48.71968°N	98.65184°E
	Megarcys ochracea	Within Known Range?	N	Nearest Occurrence:	685.95 KM	51.46205°N	99.19994°E
LOE Rating:	Unlikely	Total:	3				
Family:	Capniidae						
	Capnia khulsbagia	Within Known Range?	N	Nearest Occurrence:	807.32 KM	50.98944°N	100.71944°E
Family:	Leuctridae						
	Leuctra fusca	Within Known Range?	N	Nearest Occurrence:	1,468.75 KM	49.08643°N	107.28952°E
Family:	Perlodidae						
	Isoperla eximia	Within Known Range?	N	Nearest Occurrence:	1,496.35 KM	49.01829°N	107.54453°E



**Basin:** Internal Drainage Basin

**Aimags:** Zavkhan

**Soums:** Erdenekhairkhan

Freshwater Ecoregion: Western Mongolia

Terrestrial Ecoregion: Great Lakes Basin Desert Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Highly Likely Total: 3**

Family: Capniidae

Isocapnia guentheri Within Known Range? N Nearest Occurrence: 274.37 KM 48.61518°N 98.23096 °E

Family: Chloroperlidae

Suwallia teleckojensis Within Known Range? Y Nearest Occurrence: 178.72 KM 48.24995°N 97.40627 °E

Family: Nemouridae

Nemoura cinerea Within Known Range? N Nearest Occurrence: 194.42 KM 48.06257°N 97.55064 °E

**LOE Rating: Likely Total: 17**

Family: Capniidae

Capnia nigra Within Known Range? Y Nearest Occurrence: 194.42 KM 48.06257°N 97.55064 °E

Isocapnia kudia Within Known Range? N Nearest Occurrence: 549.62 KM 51.25356°N 99.66687 °E

Isocapnia sibirica Within Known Range? N Nearest Occurrence: 605.73 KM 47.28244°N 101.18793 °E

Family: Chloroperlidae

Alaskaperla longidentata Within Known Range? N Nearest Occurrence: 156.81 KM 48.15779°N 97.21441 °E

Alloperla rostellata Within Known Range? N Nearest Occurrence: 347.70 KM 48.36436°N 98.92737 °E

Suwallia kerzhneri Within Known Range? N Nearest Occurrence: 178.39 KM 48.24995°N 97.40627 °E

Family: Nemouridae

Amphinemura borealis Within Known Range? Y Nearest Occurrence: 194.45 KM 48.05989°N 97.55073 °E

Amphinemura standfussi Within Known Range? N Nearest Occurrence: 194.42 KM 48.06257°N 97.55064 °E

Family: Perlidae

Kamimuria exilis Within Known Range? N Nearest Occurrence: 404.94 KM 50.16278°N 98.84212 °E

Family: Perlodidae

Arcynopteryx compacta Within Known Range? Y Nearest Occurrence: 454.06 KM 46.92107°N 91.91048 °E

Arcynopteryx sajanensis Within Known Range? N Nearest Occurrence: 657.50 KM 51.61397°N 100.59972 °E

Diura bicaudata Within Known Range? Y Nearest Occurrence: 469.80 KM 47.21768°N 99.92824 °E

Diura majuscula Within Known Range? Y Nearest Occurrence: 194.77 KM 48.06257°N 97.55064 °E

Isoperla asiatica Within Known Range? N Nearest Occurrence: 194.42 KM 48.06257°N 97.55064 °E

Isoperla potanini Within Known Range? Y Nearest Occurrence: 157.09 KM 48.15779°N 97.21441 °E

Pictetiella asiatica Within Known Range? N Nearest Occurrence: 652.96 KM 51.65822°N 100.53000 °E

Family: Taeniopterygidae

Taenionema japonicum Within Known Range? Y Nearest Occurrence: 459.39 KM 50.61826°N 99.12094 °E

**LOE Rating: Probable Total: 3**

Family: Chloroperlidae

Alloperla joosti Within Known Range? N Nearest Occurrence: 178.39 KM 48.24995°N 97.40627 °E

Family: Perlodidae

Arcynopteryx polaris Within Known Range? Y Nearest Occurrence: 348.33 KM 48.36436°N 98.92737 °E

Skwala pusilla Within Known Range? N Nearest Occurrence: 810.22 KM 48.51277°N 88.51107 °E

Basin: Internal Drainage Basin

Aimags: Zavkhan

Soums: Erdenekhairkhan

Freshwater Ecoregion: Western Mongolia

Terrestrial Ecoregion: Great Lakes Basin Desert Steppe

WQM Sites:

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Possible Total: 8**

Family: Chloroperlidae						
Haploperla lepnevae	Within Known Range? Y	Nearest Occurrence:	469.21 KM	49.26170 °N	99.88242 °E	
Family: Nemouridae						
Nemoura arctica	Within Known Range? Y	Nearest Occurrence:	456.12 KM	50.42996 °N	99.21727 °E	
Family: Perlidae						
Agnetina brevipennis	Within Known Range? Y	Nearest Occurrence:	322.43 KM	48.71968 °N	98.65184 °E	
Agnetina cocandica	Within Known Range? Y	Nearest Occurrence:	332.54 KM	48.33025 °N	92.81616 °E	
Family: Perlodidae						
Isoperla altaica	Within Known Range? Y	Nearest Occurrence:	447.38 KM	47.33906 °N	91.86288 °E	
Isoperla mongolica	Within Known Range? Y	Nearest Occurrence:	178.72 KM	48.24995 °N	97.40627 °E	
Kasabina nigricauda	Within Known Range? N	Nearest Occurrence:	322.43 KM	48.71968 °N	98.65184 °E	
Family: Pteronarcyidae						
Pteronarcys reticulata	Within Known Range? N	Nearest Occurrence:	502.86 KM	47.80440 °N	100.31810 °E	

**LOE Rating: Predicted Total: 12**

Family: Capniidae						
Mesocapnia variabilis	Within Known Range? Y	Nearest Occurrence:	348.33 KM	48.36436 °N	98.92737 °E	
Family: Chloroperlidae						
Alloperla deminuta	Within Known Range? N	Nearest Occurrence:	502.86 KM	47.80440 °N	100.31810 °E	
Alloperla mediata	Within Known Range? N	Nearest Occurrence:	458.57 KM	50.61826 °N	99.12094 °E	
Family: Leuctridae						
Paraleuctra zapekinae	Within Known Range? N	Nearest Occurrence:	996.36 KM	49.71481 °N	104.64203 °E	
Family: Nemouridae						
Nemoura sahlbergi	Within Known Range? N	Nearest Occurrence:	455.30 KM	50.42996 °N	99.21727 °E	
Nemurella pictetii	Within Known Range? N	Nearest Occurrence:	490.78 KM	50.81265 °N	99.33803 °E	
Family: Perlidae						
Agnetina extrema	Within Known Range? N	Nearest Occurrence:	534.72 KM	47.50949 °N	100.57510 °E	
Paragnetina flavotincta	Within Known Range? N	Nearest Occurrence:	469.21 KM	49.26170 °N	99.88242 °E	
Family: Perlodidae						
Isoperla kozlovi	Within Known Range? N	Nearest Occurrence:	457.93 KM	50.31066 °N	99.32150 °E	
Isoperla lunigera	Within Known Range? N	Nearest Occurrence:	493.22 KM	49.62785 °N	99.99523 °E	
Isoperla obscura	Within Known Range? Y	Nearest Occurrence:	652.14 KM	51.65045 °N	100.52664 °E	
Megarcys ochracea	Within Known Range? N	Nearest Occurrence:	526.06 KM	51.46205 °N	99.19994 °E	

**LOE Rating: Unlikely Total: 4**

Family: Capniidae						
Capnia khulsbagia	Within Known Range? N	Nearest Occurrence:	629.85 KM	50.98944 °N	100.71944 °E	
Mesocapnia altaica	Within Known Range? N	Nearest Occurrence:	766.61 KM	48.43684 °N	88.90094 °E	
Family: Leuctridae						
Leuctra fusca	Within Known Range? N	Nearest Occurrence:	1,279.30 KM	49.08643 °N	107.28952 °E	
Family: Perlodidae						
Isoperla eximia	Within Known Range? N	Nearest Occurrence:	1,306.94 KM	49.01829 °N	107.54453 °E	

**Basin:** Internal Drainage Basin  
**Aimags:** Zavkhan  
**Soums:** Nomrog

**Freshwater Ecoregion:** Western Mongolia  
**Terrestrial Ecoregion:** Selenge-Orkhon Forest Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Highly Likely Total: 5**

<b>Family: Capniidae</b>						
Isocapnia guentheri	Within Known Range? N	Nearest Occurrence:	140.35 KM	48.61518 °N	98.23096 °E	
<b>Family: Chloroperlidae</b>						
Suwallia kerzhneri	Within Known Range? Y	Nearest Occurrence:	83.25 KM	48.24995 °N	97.40627 °E	
Suwallia teleckojensis	Within Known Range? Y	Nearest Occurrence:	83.40 KM	48.24995 °N	97.40627 °E	
<b>Family: Nemouridae</b>						
Amphinemura standfussi	Within Known Range? Y	Nearest Occurrence:	103.94 KM	48.62624 °N	97.89617 °E	
Nemoura cinerea	Within Known Range? N	Nearest Occurrence:	109.45 KM	48.06257 °N	97.55064 °E	

**LOE Rating: Likely Total: 12**

<b>Family: Capniidae</b>						
Capnia nigra	Within Known Range? Y	Nearest Occurrence:	109.45 KM	48.06257 °N	97.55064 °E	
Isocapnia kudia	Within Known Range? N	Nearest Occurrence:	397.07 KM	51.25356 °N	99.66687 °E	
Isocapnia sibirica	Within Known Range? N	Nearest Occurrence:	498.03 KM	47.28244 °N	101.18793 °E	
<b>Family: Chloroperlidae</b>						
Alaskaperla longidentata	Within Known Range? Y	Nearest Occurrence:	83.43 KM	48.15779 °N	97.21441 °E	
Alloperla rostellata	Within Known Range? N	Nearest Occurrence:	222.02 KM	48.36436 °N	98.92737 °E	
<b>Family: Nemouridae</b>						
Amphinemura borealis	Within Known Range? Y	Nearest Occurrence:	109.70 KM	48.05989 °N	97.55073 °E	
<b>Family: Perlidae</b>						
Kamimuria exilis	Within Known Range? N	Nearest Occurrence:	250.41 KM	50.16278 °N	98.84212 °E	
<b>Family: Perlodidae</b>						
Arcynopteryx sajanensis	Within Known Range? N	Nearest Occurrence:	503.44 KM	51.61397 °N	100.59972 °E	
Diura majuscula	Within Known Range? Y	Nearest Occurrence:	109.65 KM	48.06257 °N	97.55064 °E	
Isoperla potanini	Within Known Range? Y	Nearest Occurrence:	83.40 KM	48.24995 °N	97.40627 °E	
Pictetiella asiatica	Within Known Range? N	Nearest Occurrence:	499.42 KM	51.65822 °N	100.53000 °E	
<b>Family: Taeniopterygidae</b>						
Taenionema japonicum	Within Known Range? Y	Nearest Occurrence:	305.72 KM	50.61826 °N	99.12094 °E	

**LOE Rating: Probable Total: 5**

<b>Family: Chloroperlidae</b>						
Alloperla joosti	Within Known Range? Y	Nearest Occurrence:	83.25 KM	48.24995 °N	97.40627 °E	
<b>Family: Perlodidae</b>						
Arcynopteryx compacta	Within Known Range? Y	Nearest Occurrence:	305.72 KM	50.61826 °N	99.12094 °E	
Arcynopteryx polaris	Within Known Range? Y	Nearest Occurrence:	222.42 KM	48.36436 °N	98.92737 °E	
Diura bicaudata	Within Known Range? Y	Nearest Occurrence:	374.16 KM	47.21768 °N	99.92824 °E	
Isoperla asiatica	Within Known Range? N	Nearest Occurrence:	109.45 KM	48.06257 °N	97.55064 °E	

**Basin:** Internal Drainage Basin  
**Aimags:** Zavkhan  
**Soums:** Nomrog

**Freshwater Ecoregion:** Western Mongolia  
**Terrestrial Ecoregion:** Selenge-Orkhon Forest Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Possible Total: 9**

Family: Capniidae						
Mesocapnia variabilis	Within Known Range? Y	Nearest Occurrence:	222.42 KM	48.36436 °N	98.92737 °E	
Family: Chloroperlidae						
Haploperla lepnevae	Within Known Range? Y	Nearest Occurrence:	323.48 KM	49.26170 °N	99.88242 °E	
Family: Nemouridae						
Nemoura arctica	Within Known Range? Y	Nearest Occurrence:	301.62 KM	50.42996 °N	99.21727 °E	
Family: Perlidae						
Agnetina brevipennis	Within Known Range? Y	Nearest Occurrence:	184.86 KM	48.71968 °N	98.65184 °E	
Family: Perlodidae						
Isoperla altaica	Within Known Range? Y	Nearest Occurrence:	338.10 KM	50.81265 °N	99.33803 °E	
Kaszabia nigricauda	Within Known Range? N	Nearest Occurrence:	184.86 KM	48.71968 °N	98.65184 °E	
Megarcys ochracea	Within Known Range? N	Nearest Occurrence:	377.29 KM	51.46205 °N	99.19994 °E	
Skwala pusilla	Within Known Range? N	Nearest Occurrence:	942.45 KM	48.51277 °N	88.51107 °E	
Family: Pteronarcyidae						
Pteronarcys reticulata	Within Known Range? N	Nearest Occurrence:	365.81 KM	51.47065 °N	99.02617 °E	

**LOE Rating: Predicted Total: 12**

Family: Chloroperlidae						
Alloperla deminuta	Within Known Range? N	Nearest Occurrence:	365.81 KM	51.47065 °N	99.02617 °E	
Alloperla mediata	Within Known Range? N	Nearest Occurrence:	305.18 KM	50.61826 °N	99.12094 °E	
Family: Leuctridae						
Paraleuctra zapekinae	Within Known Range? N	Nearest Occurrence:	854.04 KM	49.71481 °N	104.64203 °E	
Family: Nemouridae						
Nemoura sahlbergi	Within Known Range? N	Nearest Occurrence:	301.09 KM	50.42996 °N	99.21727 °E	
Nemurella pictetii	Within Known Range? N	Nearest Occurrence:	337.50 KM	50.81265 °N	99.33803 °E	
Family: Perlidae						
Agnetina cocandica	Within Known Range? Y	Nearest Occurrence:	333.84 KM	49.76390 °N	99.86185 °E	
Agnetina extrema	Within Known Range? N	Nearest Occurrence:	425.49 KM	47.50949 °N	100.57510 °E	
Paragnetina flavotincta	Within Known Range? N	Nearest Occurrence:	323.48 KM	49.26170 °N	99.88242 °E	
Family: Perlodidae						
Isoperla kozlovi	Within Known Range? Y	Nearest Occurrence:	303.49 KM	50.31066 °N	99.32150 °E	
Isoperla lunigera	Within Known Range? N	Nearest Occurrence:	343.44 KM	49.62785 °N	99.99523 °E	
Isoperla mongolica	Within Known Range? Y	Nearest Occurrence:	83.40 KM	48.24995 °N	97.40627 °E	
Isoperla obscura	Within Known Range? Y	Nearest Occurrence:	498.60 KM	51.65045 °N	100.52664 °E	

**LOE Rating: Unlikely Total: 4**

Family: Capniidae						
Capnia khulsbagia	Within Known Range? N	Nearest Occurrence:	475.44 KM	50.98944 °N	100.71944 °E	
Mesocapnia altaica	Within Known Range? N	Nearest Occurrence:	899.63 KM	48.43684 °N	88.90094 °E	
Family: Leuctridae						
Leuctra fusca	Within Known Range? N	Nearest Occurrence:	1,143.06 KM	49.08643 °N	107.28952 °E	
Family: Perlodidae						
Isoperla eximia	Within Known Range? N	Nearest Occurrence:	1,171.24 KM	49.01829 °N	107.54453 °E	



**Basin:** Internal Drainage Basin

**Aimag:** Zavkhan

**Soum:** Otgon

Freshwater Ecoregion: Western Mongolia

Terrestrial Ecoregion: Khangai Mountains Alpine Meadow

**WQM Sites:**

WQM Sites: # 88 (Buyant zbh River @ N 47.45115° E 97.77925°) #  
89 (Bogd otgontenge River @ N 47.56422° E 97.7039°) # 90  
(Bumbat River @ N 47.60858° E 98.05597°)

**LOE Rating: Highly Likely Total: 8**

Family: Capniidae

Capnia nigra	Within Known Range? Y	Nearest Occurrence: 82.25 KM	48.06257°N	97.55064°E
Isocapnia guentheri	Within Known Range? N	Nearest Occurrence: 144.19 KM	48.61518°N	98.23096°E

Family: Chloroperlidae

Alloperla rostellata	Within Known Range? N	Nearest Occurrence: 163.39 KM	48.36436°N	98.92737°E
Suwallia kerzhneri	Within Known Range? Y	Nearest Occurrence: 81.97 KM	48.05989°N	97.55073°E
Suwallia teleckojensis	Within Known Range? Y	Nearest Occurrence: 82.12 KM	48.05989°N	97.55073°E

Family: Nemouridae

Amphinemura standfussi	Within Known Range? Y	Nearest Occurrence: 81.97 KM	48.05989°N	97.55073°E
Nemoura cinerea	Within Known Range? N	Nearest Occurrence: 82.25 KM	48.06257°N	97.55064°E

Family: Perlodidae

Isoperla potanini	Within Known Range? Y	Nearest Occurrence: 82.40 KM	48.06257°N	97.55064°E
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**LOE Rating: Likely Total: 9**

Family: Capniidae

Isocapnia kudia	Within Known Range? N	Nearest Occurrence: 475.83 KM	51.25356°N	99.66687°E
Isocapnia sibirica	Within Known Range? N	Nearest Occurrence: 372.37 KM	47.28244°N	101.18793°E

Family: Chloroperlidae

Alloperla joosti	Within Known Range? Y	Nearest Occurrence: 107.82 KM	48.24995°N	97.40627°E
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Family: Nemouridae

Amphinemura borealis	Within Known Range? Y	Nearest Occurrence: 81.97 KM	48.05989°N	97.55073°E
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Family: Perlidae

Kamimuria exilis	Within Known Range? N	Nearest Occurrence: 329.29 KM	50.16278°N	98.84212°E
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Family: Perlodidae

Arcynopteryx sajanensis	Within Known Range? N	Nearest Occurrence: 562.50 KM	51.61397°N	100.59972°E
Diura bicaudata	Within Known Range? Y	Nearest Occurrence: 233.08 KM	47.21768°N	99.92824°E
Diura majuscula	Within Known Range? Y	Nearest Occurrence: 82.40 KM	48.06257°N	97.55064°E
Pictetiella asiatica	Within Known Range? N	Nearest Occurrence: 561.45 KM	51.65822°N	100.53000°E

**LOE Rating: Probable Total: 5**

Family: Chloroperlidae

Alaskaperla longidentata	Within Known Range? Y	Nearest Occurrence: 107.31 KM	48.34410°N	97.87312°E
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Family: Perlidae

Agnetina brevipennis	Within Known Range? Y	Nearest Occurrence: 174.37 KM	48.71968°N	98.65184°E
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Family: Perlodidae

Arcynopteryx polaris	Within Known Range? Y	Nearest Occurrence: 163.68 KM	48.36436°N	98.92737°E
Isoperla asiatica	Within Known Range? Y	Nearest Occurrence: 81.97 KM	48.05989°N	97.55073°E

Family: Taeniopterygidae

Taenionema japonicum	Within Known Range? Y	Nearest Occurrence: 354.39 KM	47.11192°N	101.01048°E
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**Basin:** Internal Drainage Basin  
**Aimags:** Zavkhan  
**Soum:** Otgon

**Freshwater Ecoregion:** Western Mongolia  
**Terrestrial Ecoregion:** Khangai Mountains Alpine Meadow

**WQM Sites:**

WQM Sites: # 88 (Buyant zbh River @ N 47.45115° E 97.77925°) # 89 (Bogd otgontenge River @ N 47.56422° E 97.7039°) # 90 (Bumbat River @ N 47.60858° E 98.05597°)

<b>LOE Rating:</b>	<b>Possible</b>	<b>Total:</b>	<b>8</b>
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<b>Family:</b> Capniidae			
Mesocapnia variabilis	Within Known Range? Y	Nearest Occurrence:	163.68 KM 48.36436°N 98.92737 °E
<b>Family:</b> Chloroperlidae			
Haploperla lepnevae	Within Known Range? N	Nearest Occurrence:	308.84 KM 49.26170°N 99.88242 °E
<b>Family:</b> Perlidae			
Agnetina extrema	Within Known Range? N	Nearest Occurrence:	304.55 KM 47.50949°N 100.57510 °E
<b>Family:</b> Perlodidae			
Arcynopteryx compacta	Within Known Range? Y	Nearest Occurrence:	354.39 KM 47.11192°N 101.01048 °E
Isoperla mongolica	Within Known Range? Y	Nearest Occurrence:	82.40 KM 48.06257°N 97.55064 °E
Kaszabia nigricauda	Within Known Range? N	Nearest Occurrence:	174.37 KM 48.71968°N 98.65184 °E
Skwala pusilla	Within Known Range? N	Nearest Occurrence:	1,042.55 KM 48.51277°N 88.51107 °E
<b>Family:</b> Pteronarcyidae			
Pteronarcys reticulata	Within Known Range? N	Nearest Occurrence:	279.70 KM 47.80440°N 100.31810 °E

<b>LOE Rating:</b>	<b>Predicted</b>	<b>Total:</b>	<b>13</b>
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<b>Family:</b> Chloroperlidae			
Alloperla deminuta	Within Known Range? N	Nearest Occurrence:	279.70 KM 47.80440°N 100.31810 °E
Alloperla mediata	Within Known Range? N	Nearest Occurrence:	386.96 KM 50.61826°N 99.12094 °E
<b>Family:</b> Leuctridae			
Paraleuctra zapekinae	Within Known Range? N	Nearest Occurrence:	798.90 KM 49.71481°N 104.64203 °E
<b>Family:</b> Nemouridae			
Nemoura arctica	Within Known Range? Y	Nearest Occurrence:	372.56 KM 50.42996°N 99.21727 °E
Nemoura sahlbergi	Within Known Range? N	Nearest Occurrence:	273.86 KM 47.42580°N 100.30130 °E
Nemurella pictetii	Within Known Range? N	Nearest Occurrence:	416.16 KM 50.81265°N 99.33803 °E
<b>Family:</b> Perlidae			
Agnetina cocandica	Within Known Range? Y	Nearest Occurrence:	346.85 KM 49.62785°N 99.99523 °E
Paragnetina flavotincta	Within Known Range? N	Nearest Occurrence:	308.84 KM 49.26170°N 99.88242 °E
<b>Family:</b> Perlodidae			
Isoperla altaica	Within Known Range? Y	Nearest Occurrence:	354.39 KM 47.11192°N 101.01048 °E
Isoperla kozlovi	Within Known Range? Y	Nearest Occurrence:	279.70 KM 47.80440°N 100.31810 °E
Isoperla lunigera	Within Known Range? N	Nearest Occurrence:	346.24 KM 49.62785°N 99.99523 °E
Isoperla obscura	Within Known Range? N	Nearest Occurrence:	543.71 KM 50.60031°N 101.52392 °E
Megarcys ochracea	Within Known Range? N	Nearest Occurrence:	476.21 KM 51.40978°N 99.30136 °E

<b>LOE Rating:</b>	<b>Unlikely</b>	<b>Total:</b>	<b>4</b>
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<b>Family:</b> Capniidae			
Capnia khulsbagia	Within Known Range? N	Nearest Occurrence:	513.06 KM 50.98944°N 100.71944 °E
Mesocapnia altaica	Within Known Range? N	Nearest Occurrence:	998.57 KM 48.43684°N 88.90094 °E
<b>Family:</b> Leuctridae			
Leuctra fusca	Within Known Range? N	Nearest Occurrence:	1,066.49 KM 49.08643°N 107.28952 °E
<b>Family:</b> Perlodidae			
Isoperla eximia	Within Known Range? N	Nearest Occurrence:	1,093.07 KM 49.01829°N 107.54453 °E



**Basin:** Internal Drainage Basin

**Aimag:** Zavkhan

**Soum:** Santmargats

Freshwater Ecoregion: Western Mongolia

Terrestrial Ecoregion: Great Lakes Basin Desert Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Highly Likely Total: 4**

Family: Capniidae

Isocapnia guentheri Within Known Range? N Nearest Occurrence: 343.44 KM 48.61518°N 98.23096 °E

Family: Chloroperlidae

Suwallia kerzhneri Within Known Range? N Nearest Occurrence: 254.45 KM 48.24995°N 97.40627 °E

Suwallia teleckojensis Within Known Range? Y Nearest Occurrence: 254.90 KM 48.24995°N 97.40627 °E

Family: Nemouridae

Nemoura cinerea Within Known Range? N Nearest Occurrence: 273.88 KM 48.06257°N 97.55064 °E

**LOE Rating: Likely Total: 18**

Family: Capniidae

Capnia nigra Within Known Range? Y Nearest Occurrence: 273.88 KM 48.06257°N 97.55064 °E

Isocapnia kudia Within Known Range? N Nearest Occurrence: 584.11 KM 51.25356°N 99.66687 °E

Isocapnia sibirica Within Known Range? N Nearest Occurrence: 686.80 KM 47.28244°N 101.18793 °E

Family: Chloroperlidae

Alaskaperla longidentata Within Known Range? N Nearest Occurrence: 235.19 KM 48.15779°N 97.21441 °E

Alloperla rostellata Within Known Range? N Nearest Occurrence: 421.37 KM 48.36436°N 98.92737 °E

Family: Nemouridae

Amphinemura borealis Within Known Range? Y Nearest Occurrence: 273.95 KM 48.05989°N 97.55073 °E

Amphinemura standfussi Within Known Range? N Nearest Occurrence: 273.88 KM 48.06257°N 97.55064 °E

Family: Perlidae

Agnetina cocandica Within Known Range? Y Nearest Occurrence: 259.54 KM 48.33025°N 92.81616 °E

Kamimuria exilis Within Known Range? N Nearest Occurrence: 448.21 KM 50.16278°N 98.84212 °E

Family: Perlodidae

Arcynopteryx compacta Within Known Range? Y Nearest Occurrence: 402.93 KM 47.05445°N 91.84839 °E

Arcynopteryx sajanensis Within Known Range? N Nearest Occurrence: 695.09 KM 51.61397°N 100.59972 °E

Diura bicaudata Within Known Range? Y Nearest Occurrence: 552.75 KM 47.21768°N 99.92824 °E

Diura majuscula Within Known Range? Y Nearest Occurrence: 274.36 KM 48.06257°N 97.55064 °E

Isoperla asiatica Within Known Range? N Nearest Occurrence: 273.88 KM 48.06257°N 97.55064 °E

Isoperla potanini Within Known Range? Y Nearest Occurrence: 235.61 KM 48.15779°N 97.21441 °E

Pictetiella asiatica Within Known Range? N Nearest Occurrence: 689.52 KM 51.65822°N 100.53000 °E

Skwala pusilla Within Known Range? N Nearest Occurrence: 735.53 KM 48.51277°N 88.51107 °E

Family: Taeniopterygidae

Taenionema japonicum Within Known Range? Y Nearest Occurrence: 494.06 KM 47.11520°N 90.94098 °E

**LOE Rating: Probable Total: 1**

Family: Perlodidae

Isoperla altaica Within Known Range? Y Nearest Occurrence: 389.19 KM 47.33906°N 91.86288 °E

Basin: Internal Drainage Basin

Aimags: Zavkhan

Soums: Santmargats

Freshwater Ecoregion: Western Mongolia

Terrestrial Ecoregion: Great Lakes Basin Desert Steppe

WQM Sites:

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Possible Total: 7**

Family: Chloroperlidae

*Alloperla joosti*

Within Known Range? N Nearest Occurrence: 254.45 KM 48.24995°N 97.40627°E

*Haploperla lepnevae*

Within Known Range? Y Nearest Occurrence: 532.21 KM 49.26170°N 99.88242°E

Family: Perlidae

*Agnetina brevipennis*

Within Known Range? Y Nearest Occurrence: 390.46 KM 48.71968°N 98.65184°E

Family: Perlodidae

*Arcynopteryx polaris*

Within Known Range? Y Nearest Occurrence: 389.63 KM 46.61982°N 92.22981°E

*Kaszabia nigricauda*

Within Known Range? N Nearest Occurrence: 390.46 KM 48.71968°N 98.65184°E

*Megarcys ochracea*

Within Known Range? N Nearest Occurrence: 553.22 KM 51.46205°N 99.19994°E

Family: Pteronarcyidae

*Pteronarcys reticulata*

Within Known Range? N Nearest Occurrence: 538.18 KM 51.47065°N 99.02617°E

**LOE Rating: Predicted Total: 13**

Family: Capniidae

*Mesocapnia variabilis*

Within Known Range? Y Nearest Occurrence: 422.12 KM 48.36436°N 98.92737°E

Family: Chloroperlidae

*Alloperla deminuta*

Within Known Range? N Nearest Occurrence: 538.18 KM 51.47065°N 99.02617°E

*Alloperla mediata*

Within Known Range? N Nearest Occurrence: 496.96 KM 50.61826°N 99.12094°E

Family: Leuctridae

*Paraleuctra zapekinae*

Within Known Range? N Nearest Occurrence: 1,062.60 KM 49.71481°N 104.64203°E

Family: Nemouridae

*Nemoura arctica*

Within Known Range? Y Nearest Occurrence: 444.00 KM 47.53132°N 91.28330°E

*Nemoura sahlbergi*

Within Known Range? N Nearest Occurrence: 497.49 KM 50.42996°N 99.21727°E

*Nemurella pictetii*

Within Known Range? N Nearest Occurrence: 528.31 KM 50.81265°N 99.33803°E

Family: Perlidae

*Agnetina extrema*

Within Known Range? N Nearest Occurrence: 615.10 KM 47.50949°N 100.57510°E

*Paragnetina flavotincta*

Within Known Range? N Nearest Occurrence: 532.21 KM 49.26170°N 99.88242°E

Family: Perlodidae

*Isoperla kozlovi*

Within Known Range? N Nearest Occurrence: 502.82 KM 50.31066°N 99.32150°E

*Isoperla lunigera*

Within Known Range? N Nearest Occurrence: 542.28 KM 51.09845°N 99.32051°E

*Isoperla mongolica*

Within Known Range? Y Nearest Occurrence: 254.90 KM 48.24995°N 97.40627°E

*Isoperla obscura*

Within Known Range? Y Nearest Occurrence: 577.51 KM 48.97819°N 89.94996°E

**LOE Rating: Unlikely Total: 4**

Family: Capniidae

*Capnia khulsbagia*

Within Known Range? N Nearest Occurrence: 675.10 KM 50.98944°N 100.71944°E

*Mesocapnia altaica*

Within Known Range? N Nearest Occurrence: 692.39 KM 48.43684°N 88.90094°E

Family: Leuctridae

*Leuctra fusca*

Within Known Range? N Nearest Occurrence: 1,350.11 KM 49.08643°N 107.28952°E

Family: Perlodidae

*Isoperla eximia*

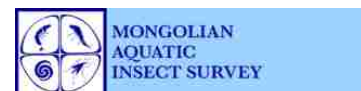
Within Known Range? N Nearest Occurrence: 1,378.10 KM 49.01829°N 107.54453°E

Research funded by the National Science Foundation

DEB-BSI #0206674: A Survey of the Aquatic Insects of the Selenge River Basin. P.I.'s: JKGelhaus, JCMorse, BHayford.

DEB # 0743732: Aquatic Insects of the Altai and Hangai Mountain Drainages. P.I.'s: JKGelhaus, JCMorse, CRNelson.

<http://clade.ansp.org/entomology/mongolia/index.html>



**Basin:** Internal Drainage Basin  
**Aimags:** Zavkhan  
**Soums:** Shiluuste

**Freshwater Ecoregion:** Western Mongolia  
**Terrestrial Ecoregion:** Gobi Lakes Valley Desert Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Highly Likely Total: 6**

Family: Capniidae						
	Isocapnia guentheri	Within Known Range? N	Nearest Occurrence: 218.72 KM	48.61518°N	98.23096°E	
Family: Chloroperlidae						
	Alloperla rostellata	Within Known Range? N	Nearest Occurrence: 248.43 KM	48.36436°N	98.92737°E	
	Suwallia kerzhneri	Within Known Range? N	Nearest Occurrence: 130.96 KM	48.05989°N	97.55073°E	
	Suwallia teleckojensis	Within Known Range? Y	Nearest Occurrence: 131.20 KM	48.05989°N	97.55073°E	
Family: Nemouridae						
	Nemoura cinerea	Within Known Range? N	Nearest Occurrence: 131.25 KM	48.06257°N	97.55064°E	
Family: Perlodidae						
	Isoperla potanini	Within Known Range? Y	Nearest Occurrence: 131.48 KM	48.06257°N	97.55064°E	

**LOE Rating: Likely Total: 12**

Family: Capniidae						
	Capnia nigra	Within Known Range? N	Nearest Occurrence: 131.25 KM	48.06257°N	97.55064°E	
	Isocapnia kudia	Within Known Range? N	Nearest Occurrence: 551.99 KM	51.25356°N	99.66687°E	
	Isocapnia sibirica	Within Known Range? N	Nearest Occurrence: 443.42 KM	47.28244°N	101.18793°E	
Family: Chloroperlidae						
	Alloperla joosti	Within Known Range? N	Nearest Occurrence: 148.07 KM	48.24995°N	97.40627°E	
Family: Nemouridae						
	Amphinemura borealis	Within Known Range? Y	Nearest Occurrence: 130.96 KM	48.05989°N	97.55073°E	
	Amphinemura standfussi	Within Known Range? N	Nearest Occurrence: 130.96 KM	48.05989°N	97.55073°E	
Family: Perlidae						
	Kamimuria exilis	Within Known Range? N	Nearest Occurrence: 402.69 KM	50.16278°N	98.84212°E	
Family: Perlodidae						
	Arcynopteryx polaris	Within Known Range? Y	Nearest Occurrence: 248.88 KM	48.36436°N	98.92737°E	
	Arcynopteryx sajanensis	Within Known Range? N	Nearest Occurrence: 642.96 KM	51.61397°N	100.59972°E	
	Diura bicaudata	Within Known Range? Y	Nearest Occurrence: 303.55 KM	47.21768°N	99.92824°E	
	Diura majuscula	Within Known Range? Y	Nearest Occurrence: 131.48 KM	48.06257°N	97.55064°E	
	Pictetiella asiatica	Within Known Range? N	Nearest Occurrence: 641.31 KM	51.65822°N	100.53000°E	

**LOE Rating: Probable Total: 3**

Family: Chloroperlidae						
	Alaskaperla longidentata	Within Known Range? N	Nearest Occurrence: 136.21 KM	48.15779°N	97.21441°E	
Family: Perlidae						
	Agnetina brevipennis	Within Known Range? Y	Nearest Occurrence: 255.13 KM	48.71968°N	98.65184°E	
Family: Perlodidae						
	Isoperla asiatica	Within Known Range? N	Nearest Occurrence: 130.96 KM	48.05989°N	97.55073°E	



**Basin:** Internal Drainage Basin  
**Aimags:** Zavkhan  
**Soums:** Shiluuste

**Freshwater Ecoregion:** Western Mongolia  
**Terrestrial Ecoregion:** Gobi Lakes Valley Desert Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Possible Total: 6**

<b>Family: Chloroperlidae</b>					
Haploperla lepnevae	Within Known Range?	N	Nearest Occurrence:	393.74 KM	49.26170°N 99.88242°E
<b>Family: Perlodidae</b>					
Arcynopteryx compacta	Within Known Range?	Y	Nearest Occurrence:	423.24 KM	47.11192°N 101.01048°E
Isoperla mongolica	Within Known Range?	Y	Nearest Occurrence:	131.48 KM	48.06257°N 97.55064°E
Skwala pusilla	Within Known Range?	N	Nearest Occurrence:	981.28 KM	48.51277°N 88.51107°E
<b>Family: Pteronarcyidae</b>					
Pteronarcys reticulata	Within Known Range?	N	Nearest Occurrence:	358.51 KM	47.80440°N 100.31810°E
<b>Family: Taeniopterygidae</b>					
Taenionema japonicum	Within Known Range?	Y	Nearest Occurrence:	423.24 KM	47.11192°N 101.01048°E

**LOE Rating: Predicted Total: 15**

<b>Family: Capniidae</b>					
Mesocapnia variabilis	Within Known Range?	Y	Nearest Occurrence:	248.88 KM	48.36436°N 98.92737°E
<b>Family: Chloroperlidae</b>					
Alloperla deminuta	Within Known Range?	N	Nearest Occurrence:	358.51 KM	47.80440°N 100.31810°E
Alloperla mediata	Within Known Range?	N	Nearest Occurrence:	461.08 KM	50.61826°N 99.12094°E
<b>Family: Leuctridae</b>					
Paraleuctra zapekinae	Within Known Range?	N	Nearest Occurrence:	881.08 KM	49.71481°N 104.64203°E
<b>Family: Nemouridae</b>					
Nemoura arctica	Within Known Range?	Y	Nearest Occurrence:	448.66 KM	50.42996°N 99.21727°E
Nemoura sahlbergi	Within Known Range?	N	Nearest Occurrence:	347.65 KM	47.42580°N 100.30130°E
<b>Family: Perlidae</b>					
Agnetina cocandica	Within Known Range?	Y	Nearest Occurrence:	431.24 KM	49.62785°N 99.99523°E
Agnetina extrema	Within Known Range?	N	Nearest Occurrence:	379.15 KM	47.50949°N 100.57510°E
Paragnetina flavotincta	Within Known Range?	N	Nearest Occurrence:	393.74 KM	49.26170°N 99.88242°E
<b>Family: Perlodidae</b>					
Isoperla altaica	Within Known Range?	Y	Nearest Occurrence:	423.24 KM	47.11192°N 101.01048°E
Isoperla kozlovi	Within Known Range?	N	Nearest Occurrence:	358.51 KM	47.80440°N 100.31810°E
Isoperla lunigera	Within Known Range?	N	Nearest Occurrence:	430.47 KM	49.62785°N 99.99523°E
Isoperla obscura	Within Known Range?	N	Nearest Occurrence:	628.77 KM	50.60031°N 101.52392°E
Kaszabia nigricauda	Within Known Range?	N	Nearest Occurrence:	255.13 KM	48.71968°N 98.65184°E
Megarcys ochracea	Within Known Range?	N	Nearest Occurrence:	548.77 KM	51.40978°N 99.30136°E

**LOE Rating: Unlikely Total: 5**

<b>Family: Capniidae</b>					
Capnia khulsbagia	Within Known Range?	N	Nearest Occurrence:	595.68 KM	50.98944°N 100.71944°E
Mesocapnia altaica	Within Known Range?	N	Nearest Occurrence:	937.19 KM	48.43684°N 88.90094°E
<b>Family: Leuctridae</b>					
Leuctra fusca	Within Known Range?	N	Nearest Occurrence:	1,144.27 KM	49.08643°N 107.28952°E
<b>Family: Nemouridae</b>					
Nemurella pictetii	Within Known Range?	N	Nearest Occurrence:	491.46 KM	50.81265°N 99.33803°E
<b>Family: Perlodidae</b>					
Isoperla eximia	Within Known Range?	N	Nearest Occurrence:	1,170.45 KM	49.01829°N 107.54453°E

Research funded by the National Science Foundation  
 DEB-BSI #0206674: A Survey of the Aquatic Insects of the Selenge River Basin. P.I.'s: JKGelhaus, JCMorse, BHayford.  
 DEB # 0743732: Aquatic Insects of the Altai and Hangai Mountain Drainages. P.I.'s: JKGelhaus, JCMorse, CRNelson.  
<http://clade.ansp.org/entomology/mongolia/index.html>



**Basin:** Internal Drainage Basin  
**Aimags:** Zavkhan  
**Soums:** Songino

**Freshwater Ecoregion:** Western Mongolia  
**Terrestrial Ecoregion:** Selenge-Orkhon Forest Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Highly Likely Total: 5**

Family: Capniidae						
	Isocapnia guentheri	Within Known Range? N	Nearest Occurrence:	267.51 KM	48.61518°N	98.23096°E
Family: Chloroperlidae						
	Suwallia kerzhneri	Within Known Range? N	Nearest Occurrence:	191.09 KM	48.24995°N	97.40627°E
	Suwallia teleckojensis	Within Known Range? Y	Nearest Occurrence:	191.44 KM	48.24995°N	97.40627°E
Family: Nemouridae						
	Amphinemura standfussi	Within Known Range? N	Nearest Occurrence:	214.80 KM	48.06257°N	97.55064°E
	Nemoura cinerea	Within Known Range? N	Nearest Occurrence:	214.80 KM	48.06257°N	97.55064°E

**LOE Rating: Likely Total: 14**

Family: Capniidae						
	Capnia nigra	Within Known Range? Y	Nearest Occurrence:	214.80 KM	48.06257°N	97.55064°E
	Isocapnia kudia	Within Known Range? N	Nearest Occurrence:	492.91 KM	51.25356°N	99.66687°E
	Isocapnia sibirica	Within Known Range? N	Nearest Occurrence:	621.97 KM	47.28244°N	101.18793°E
Family: Chloroperlidae						
	Alaskaperla longidentata	Within Known Range? N	Nearest Occurrence:	177.15 KM	48.15779°N	97.21441°E
	Alloperla rostellata	Within Known Range? N	Nearest Occurrence:	348.52 KM	48.36436°N	98.92737°E
Family: Nemouridae						
	Amphinemura borealis	Within Known Range? Y	Nearest Occurrence:	214.95 KM	48.05989°N	97.55073°E
Family: Perlidae						
	Kamimuria exilis	Within Known Range? N	Nearest Occurrence:	357.63 KM	50.16278°N	98.84212°E
Family: Perlodidae						
	Arcynopteryx compacta	Within Known Range? Y	Nearest Occurrence:	406.61 KM	50.61826°N	99.12094°E
	Arcynopteryx sajanensis	Within Known Range? N	Nearest Occurrence:	603.73 KM	51.61397°N	100.59972°E
	Diura majuscula	Within Known Range? Y	Nearest Occurrence:	215.18 KM	48.06257°N	97.55064°E
	Isoperla asiatica	Within Known Range? N	Nearest Occurrence:	214.80 KM	48.06257°N	97.55064°E
	Isoperla potanini	Within Known Range? Y	Nearest Occurrence:	177.47 KM	48.15779°N	97.21441°E
	Pictetiella asiatica	Within Known Range? N	Nearest Occurrence:	598.31 KM	51.65822°N	100.53000°E
Family: Taeniopterygidae						
	Taenionema japonicum	Within Known Range? Y	Nearest Occurrence:	406.61 KM	50.61826°N	99.12094°E

**LOE Rating: Probable Total: 4**

Family: Chloroperlidae						
	Alloperla joosti	Within Known Range? N	Nearest Occurrence:	191.09 KM	48.24995°N	97.40627°E
Family: Perlodidae						
	Diura bicaudata	Within Known Range? Y	Nearest Occurrence:	493.41 KM	47.21768°N	99.92824°E
	Isoperla altaica	Within Known Range? Y	Nearest Occurrence:	437.94 KM	50.81265°N	99.33803°E
	Skwala pusilla	Within Known Range? N	Nearest Occurrence:	816.25 KM	48.51277°N	88.51107°E



**Basin:** Internal Drainage Basin  
**Aimags:** Zavkhan  
**Soums:** Songino

**Freshwater Ecoregion:** Western Mongolia  
**Terrestrial Ecoregion:** Selenge-Orkhon Forest Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Possible Total: 7**

Family: Chloroperlidae					
Haploperla lepnevae	Within Known Range? Y	Nearest Occurrence:	448.71 KM	49.26170 °N	99.88242 °E
Family: Nemouridae					
Nemoura arctica	Within Known Range? Y	Nearest Occurrence:	407.52 KM	50.42996 °N	99.21727 °E
Family: Perlidae					
Agnetina brevipennis	Within Known Range? Y	Nearest Occurrence:	312.45 KM	48.71968 °N	98.65184 °E
Family: Perlodidae					
Arcynopteryx polaris	Within Known Range? Y	Nearest Occurrence:	349.15 KM	48.36436 °N	98.92737 °E
Kaszabia nigricauda	Within Known Range? N	Nearest Occurrence:	312.45 KM	48.71968 °N	98.65184 °E
Megarcys ochracea	Within Known Range? N	Nearest Occurrence:	462.51 KM	51.46205 °N	99.19994 °E
Family: Pteronarcyidae					
Pteronarcys reticulata	Within Known Range? N	Nearest Occurrence:	447.73 KM	51.47065 °N	99.02617 °E

**LOE Rating: Predicted Total: 13**

Family: Capniidae					
Mesocapnia variabilis	Within Known Range? Y	Nearest Occurrence:	349.15 KM	48.36436 °N	98.92737 °E
Family: Chloroperlidae					
Alloperla deminuta	Within Known Range? N	Nearest Occurrence:	447.73 KM	51.47065 °N	99.02617 °E
Alloperla mediata	Within Known Range? N	Nearest Occurrence:	405.88 KM	50.61826 °N	99.12094 °E
Family: Leuctridae					
Paraleuctra zapekinae	Within Known Range? N	Nearest Occurrence:	979.33 KM	49.71481 °N	104.64203 °E
Family: Nemouridae					
Nemoura sahlbergi	Within Known Range? N	Nearest Occurrence:	406.78 KM	50.42996 °N	99.21727 °E
Nemurella pictetii	Within Known Range? N	Nearest Occurrence:	437.16 KM	50.81265 °N	99.33803 °E
Family: Perlidae					
Agnetina cocandica	Within Known Range? Y	Nearest Occurrence:	345.07 KM	48.33025 °N	92.81616 °E
Agnetina extrema	Within Known Range? N	Nearest Occurrence:	549.52 KM	47.50949 °N	100.57510 °E
Paragnetina flavotincta	Within Known Range? N	Nearest Occurrence:	448.71 KM	49.26170 °N	99.88242 °E
Family: Perlodidae					
Isoperla kozlovi	Within Known Range? N	Nearest Occurrence:	412.53 KM	50.31066 °N	99.32150 °E
Isoperla lunigera	Within Known Range? N	Nearest Occurrence:	451.09 KM	51.09845 °N	99.32051 °E
Isoperla mongolica	Within Known Range? Y	Nearest Occurrence:	191.44 KM	48.24995 °N	97.40627 °E
Isoperla obscura	Within Known Range? Y	Nearest Occurrence:	597.56 KM	51.65045 °N	100.52664 °E

**LOE Rating: Unlikely Total: 4**

Family: Capniidae					
Capnia khulsbagia	Within Known Range? N	Nearest Occurrence:	584.57 KM	50.98944 °N	100.71944 °E
Mesocapnia altaica	Within Known Range? N	Nearest Occurrence:	773.68 KM	48.43684 °N	88.90094 °E
Family: Leuctridae					
Leuctra fusca	Within Known Range? N	Nearest Occurrence:	1,269.89 KM	49.08643 °N	107.28952 °E
Family: Perlodidae					
Isoperla eximia	Within Known Range? N	Nearest Occurrence:	1,298.16 KM	49.01829 °N	107.54453 °E



**Basin:** Internal Drainage Basin  
**Aimag:** Zavkhan  
**Soum:** Tes

**Freshwater Ecoregion:** Western Mongolia  
**Terrestrial Ecoregion:** Selenge-Orkhon Forest Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Highly Likely Total: 6**

<b>Family: Capniidae</b>						
Isocapnia guentheri	Within Known Range? N	Nearest Occurrence:	311.51 KM	48.61518 °N	98.23096 °E	
<b>Family: Chloroperlidae</b>						
Alloperla rostellata	Within Known Range? N	Nearest Occurrence:	393.67 KM	48.36436 °N	98.92737 °E	
Suwallia kerzhneri	Within Known Range? N	Nearest Occurrence:	250.23 KM	48.24995 °N	97.40627 °E	
Suwallia teleckojensis	Within Known Range? Y	Nearest Occurrence:	250.68 KM	48.24995 °N	97.40627 °E	
<b>Family: Nemouridae</b>						
Amphinemura standfussi	Within Known Range? N	Nearest Occurrence:	275.63 KM	48.06257 °N	97.55064 °E	
Nemoura cinerea	Within Known Range? N	Nearest Occurrence:	275.63 KM	48.06257 °N	97.55064 °E	

**LOE Rating: Likely Total: 13**

<b>Family: Capniidae</b>						
Capnia nigra	Within Known Range? Y	Nearest Occurrence:	275.63 KM	48.06257 °N	97.55064 °E	
Isocapnia kudia	Within Known Range? N	Nearest Occurrence:	486.54 KM	51.25356 °N	99.66687 °E	
Isocapnia sibirica	Within Known Range? N	Nearest Occurrence:	671.20 KM	47.28244 °N	101.18793 °E	
<b>Family: Chloroperlidae</b>						
Alaskaperla longidentata	Within Known Range? N	Nearest Occurrence:	240.29 KM	48.15779 °N	97.21441 °E	
<b>Family: Nemouridae</b>						
Amphinemura borealis	Within Known Range? Y	Nearest Occurrence:	275.83 KM	48.05989 °N	97.55073 °E	
<b>Family: Perlidae</b>						
Kamimuria exilis	Within Known Range? N	Nearest Occurrence:	365.23 KM	50.16278 °N	98.84212 °E	
<b>Family: Perlodidae</b>						
Arcynopteryx compacta	Within Known Range? Y	Nearest Occurrence:	406.84 KM	50.61826 °N	99.12094 °E	
Arcynopteryx sajanensis	Within Known Range? N	Nearest Occurrence:	598.60 KM	51.61397 °N	100.59972 °E	
Diura majuscula	Within Known Range? Y	Nearest Occurrence:	276.13 KM	48.06257 °N	97.55064 °E	
Isoperla asiatica	Within Known Range? N	Nearest Occurrence:	275.63 KM	48.06257 °N	97.55064 °E	
Isoperla potanini	Within Known Range? Y	Nearest Occurrence:	240.72 KM	48.15779 °N	97.21441 °E	
Pictetiella asiatica	Within Known Range? N	Nearest Occurrence:	592.23 KM	51.65822 °N	100.53000 °E	
<b>Family: Taeniopterygidae</b>						
Taenionema japonicum	Within Known Range? Y	Nearest Occurrence:	406.84 KM	50.61826 °N	99.12094 °E	

**LOE Rating: Probable Total: 7**

<b>Family: Chloroperlidae</b>						
Alloperla joosti	Within Known Range? N	Nearest Occurrence:	250.23 KM	48.24995 °N	97.40627 °E	
Haploperla lepnevae	Within Known Range? Y	Nearest Occurrence:	476.31 KM	49.26170 °N	99.88242 °E	
<b>Family: Perlodidae</b>						
Diura bicaudata	Within Known Range? Y	Nearest Occurrence:	501.28 KM	51.39852 °N	99.75011 °E	
Isoperla altaica	Within Known Range? Y	Nearest Occurrence:	435.87 KM	50.53472 °N	91.79719 °E	
Isoperla lunigera	Within Known Range? N	Nearest Occurrence:	444.44 KM	51.09845 °N	99.32051 °E	
Skwala pusilla	Within Known Range? N	Nearest Occurrence:	796.74 KM	48.51277 °N	88.51107 °E	
<b>Family: Pteronarcyidae</b>						
Pteronarcys reticulata	Within Known Range? N	Nearest Occurrence:	432.49 KM	51.47065 °N	99.02617 °E	



**Basin:** Internal Drainage Basin  
**Aimags:** Zavkhan  
**Soums:** Tes

**Freshwater Ecoregion:** Western Mongolia  
**Terrestrial Ecoregion:** Selenge-Orkhon Forest Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

<b>LOE Rating:</b>	<b>Possible</b>	<b>Total:</b>	<b>6</b>
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<b>Family:</b> Chloroperlidae			
Alloperla mediata	Within Known Range? N	Nearest Occurrence:	406.11 KM 50.61826°N 99.12094 °E
<b>Family:</b> Perlidae			
Agnentina brevipennis	Within Known Range? Y	Nearest Occurrence:	352.19 KM 48.71968°N 98.65184 °E
Agnentina cocandica	Within Known Range? Y	Nearest Occurrence:	341.04 KM 48.33025°N 92.81616 °E
<b>Family:</b> Perlodidae			
Isoperla kozlovi	Within Known Range? N	Nearest Occurrence:	419.87 KM 50.31066°N 99.32150 °E
Kaszabia nigricauda	Within Known Range? N	Nearest Occurrence:	352.19 KM 48.71968°N 98.65184 °E
Megarcys ochracea	Within Known Range? N	Nearest Occurrence:	449.08 KM 51.46205°N 99.19994 °E

<b>LOE Rating:</b>	<b>Predicted</b>	<b>Total:</b>	<b>11</b>
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<b>Family:</b> Capniidae			
Mesocapnia variabilis	Within Known Range? Y	Nearest Occurrence:	394.37 KM 48.36436°N 98.92737 °E
<b>Family:</b> Chloroperlidae			
Alloperla deminuta	Within Known Range? N	Nearest Occurrence:	432.49 KM 51.47065°N 99.02617 °E
<b>Family:</b> Leuctridae			
Paraleuctra zapekinae	Within Known Range? N	Nearest Occurrence:	1,003.16 KM 49.71481°N 104.64203 °E
<b>Family:</b> Nemouridae			
Nemoura arctica	Within Known Range? Y	Nearest Occurrence:	411.98 KM 50.42996°N 99.21727 °E
Nemoura sahlbergi	Within Known Range? N	Nearest Occurrence:	411.25 KM 50.42996°N 99.21727 °E
Nemurella pictetii	Within Known Range? N	Nearest Occurrence:	435.47 KM 50.81265°N 99.33803 °E
<b>Family:</b> Perlidae			
Agnentina extrema	Within Known Range? N	Nearest Occurrence:	598.73 KM 47.50949°N 100.57510 °E
Paragnetina flavotincta	Within Known Range? N	Nearest Occurrence:	476.31 KM 49.26170°N 99.88242 °E
<b>Family:</b> Perlodidae			
Arcynopteryx polaris	Within Known Range? Y	Nearest Occurrence:	394.37 KM 48.36436°N 98.92737 °E
Isoperla mongolica	Within Known Range? Y	Nearest Occurrence:	250.68 KM 48.24995°N 97.40627 °E
Isoperla obscura	Within Known Range? Y	Nearest Occurrence:	591.55 KM 51.65045°N 100.52664 °E

<b>LOE Rating:</b>	<b>Unlikely</b>	<b>Total:</b>	<b>4</b>
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<b>Family:</b> Capniidae			
Capnia khulsbagia	Within Known Range? N	Nearest Occurrence:	588.09 KM 50.98944°N 100.71944 °E
Mesocapnia altaica	Within Known Range? N	Nearest Occurrence:	755.40 KM 48.43684°N 88.90094 °E
<b>Family:</b> Leuctridae			
Leuctra fusca	Within Known Range? N	Nearest Occurrence:	1,298.24 KM 49.08643°N 107.28952 °E
<b>Family:</b> Perlodidae			
Isoperla eximia	Within Known Range? N	Nearest Occurrence:	1,326.87 KM 49.01829°N 107.54453 °E



Basin: Internal Drainage Basin

Aimag: Zavkhan

Soum: Tsagaanchuluut

Freshwater Ecoregion: Western Mongolia

Terrestrial Ecoregion: Great Lakes Basin Desert Steppe

WQM Sites:

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Highly Likely Total: 5**

Family: Capniidae

Isocapnia guentheri Within Known Range? N Nearest Occurrence: 237.11 KM 48.61518°N 98.23096°E

Family: Chloroperlidae

Suwallia kerzhneri Within Known Range? N Nearest Occurrence: 140.28 KM 48.05989°N 97.55073°E

Suwallia teleckojensis Within Known Range? Y Nearest Occurrence: 140.53 KM 48.05989°N 97.55073°E

Family: Nemouridae

Nemoura cinerea Within Known Range? N Nearest Occurrence: 140.49 KM 48.06257°N 97.55064°E

Family: Perlodidae

Isoperla potanini Within Known Range? Y Nearest Occurrence: 128.30 KM 48.15779°N 97.21441°E

**LOE Rating: Likely Total: 13**

Family: Capniidae

Capnia nigra Within Known Range? N Nearest Occurrence: 140.49 KM 48.06257°N 97.55064°E

Isocapnia kudia Within Known Range? N Nearest Occurrence: 564.31 KM 51.25356°N 99.66687°E

Isocapnia sibirica Within Known Range? N Nearest Occurrence: 498.38 KM 47.28244°N 101.18793°E

Family: Chloroperlidae

Alloperla joosti Within Known Range? N Nearest Occurrence: 147.43 KM 48.24995°N 97.40627°E

Alloperla rostellata Within Known Range? N Nearest Occurrence: 282.88 KM 48.36436°N 98.92737°E

Family: Nemouridae

Amphinemura borealis Within Known Range? Y Nearest Occurrence: 140.28 KM 48.05989°N 97.55073°E

Amphinemura standfussi Within Known Range? N Nearest Occurrence: 140.28 KM 48.05989°N 97.55073°E

Family: Perlidae

Kamimuria exilis Within Known Range? N Nearest Occurrence: 413.32 KM 50.16278°N 98.84212°E

Family: Perlodidae

Arcynopteryx polaris Within Known Range? Y Nearest Occurrence: 283.38 KM 48.36436°N 98.92737°E

Arcynopteryx sajanensis Within Known Range? N Nearest Occurrence: 661.20 KM 51.61397°N 100.59972°E

Diura bicaudata Within Known Range? Y Nearest Occurrence: 358.40 KM 47.21768°N 99.92824°E

Diura majuscula Within Known Range? Y Nearest Occurrence: 140.74 KM 48.06257°N 97.55064°E

Pictetiella asiatica Within Known Range? N Nearest Occurrence: 658.71 KM 51.65822°N 100.53000°E

**LOE Rating: Probable Total: 5**

Family: Chloroperlidae

Alaskaperla longidentata Within Known Range? N Nearest Occurrence: 128.07 KM 48.15779°N 97.21441°E

Family: Perlidae

Agnetina brevipennis Within Known Range? Y Nearest Occurrence: 279.73 KM 48.71968°N 98.65184°E

Family: Perlodidae

Arcynopteryx compacta Within Known Range? Y Nearest Occurrence: 472.60 KM 50.61826°N 99.12094°E

Isoperla asiatica Within Known Range? N Nearest Occurrence: 140.28 KM 48.05989°N 97.55073°E

Skwala pusilla Within Known Range? N Nearest Occurrence: 922.02 KM 48.51277°N 88.51107°E

**Basin:** Internal Drainage Basin  
**Aimags:** Zavkhan  
**Soums:** Tsagaanchuluut

**Freshwater Ecoregion:** Western Mongolia  
**Terrestrial Ecoregion:** Great Lakes Basin Desert Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

<b>LOE Rating:</b>	<b>Possible</b>	<b>Total:</b>	<b>4</b>
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Family: Chloroperlidae						
Haploperla lepnevae	Within Known Range?	N	Nearest Occurrence:	425.43 KM	49.26170 °N	99.88242 °E
Family: Perlidae						
Agnetina extrema	Within Known Range?	N	Nearest Occurrence:	432.17 KM	47.50949 °N	100.57510 °E
Family: Pteronarcyidae						
Pteronarcys reticulata	Within Known Range?	N	Nearest Occurrence:	408.55 KM	47.80440 °N	100.31810 °E
Family: Taeniopterygidae						
Taenionema japonicum	Within Known Range?	Y	Nearest Occurrence:	472.60 KM	50.61826 °N	99.12094 °E

<b>LOE Rating:</b>	<b>Predicted</b>	<b>Total:</b>	<b>16</b>
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Family: Capniidae						
Mesocapnia variabilis	Within Known Range?	Y	Nearest Occurrence:	283.38 KM	48.36436 °N	98.92737 °E
Family: Chloroperlidae						
Alloperla deminuta	Within Known Range?	N	Nearest Occurrence:	408.55 KM	47.80440 °N	100.31810 °E
Alloperla mediata	Within Known Range?	N	Nearest Occurrence:	471.75 KM	50.61826 °N	99.12094 °E
Family: Leuctridae						
Paraleuctra zapekinae	Within Known Range?	N	Nearest Occurrence:	927.18 KM	49.71481 °N	104.64203 °E
Family: Nemouridae						
Nemoura arctica	Within Known Range?	Y	Nearest Occurrence:	461.95 KM	50.42996 °N	99.21727 °E
Nemoura sahlbergi	Within Known Range?	N	Nearest Occurrence:	401.05 KM	47.42580 °N	100.30130 °E
Nemurella pictetii	Within Known Range?	N	Nearest Occurrence:	503.27 KM	50.81265 °N	99.33803 °E
Family: Perlidae						
Agnetina cocandica	Within Known Range?	Y	Nearest Occurrence:	452.30 KM	48.33025 °N	92.81616 °E
Paragnetina flavotincta	Within Known Range?	N	Nearest Occurrence:	425.43 KM	49.26170 °N	99.88242 °E
Family: Perlodidae						
Isoperla altaica	Within Known Range?	Y	Nearest Occurrence:	479.24 KM	47.11192 °N	101.01048 °E
Isoperla kozlovi	Within Known Range?	N	Nearest Occurrence:	408.55 KM	47.80440 °N	100.31810 °E
Isoperla lunigera	Within Known Range?	N	Nearest Occurrence:	459.27 KM	49.62785 °N	99.99523 °E
Isoperla mongolica	Within Known Range?	Y	Nearest Occurrence:	140.74 KM	48.06257 °N	97.55064 °E
Isoperla obscura	Within Known Range?	N	Nearest Occurrence:	657.81 KM	51.65045 °N	100.52664 °E
Kaszabia nigricauda	Within Known Range?	N	Nearest Occurrence:	279.73 KM	48.71968 °N	98.65184 °E
Megarcys ochracea	Within Known Range?	N	Nearest Occurrence:	555.65 KM	51.46205 °N	99.19994 °E

<b>LOE Rating:</b>	<b>Unlikely</b>	<b>Total:</b>	<b>4</b>
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Family: Capniidae						
Capnia khulsbagia	Within Known Range?	N	Nearest Occurrence:	618.88 KM	50.98944 °N	100.71944 °E
Mesocapnia altaica	Within Known Range?	N	Nearest Occurrence:	877.95 KM	48.43684 °N	88.90094 °E
Family: Leuctridae						
Leuctra fusca	Within Known Range?	N	Nearest Occurrence:	1,195.35 KM	49.08643 °N	107.28952 °E
Family: Perlodidae						
Isoperla eximia	Within Known Range?	N	Nearest Occurrence:	1,221.87 KM	49.01829 °N	107.54453 °E

Research funded by the National Science Foundation  
 DEB-BSI #0206674: A Survey of the Aquatic Insects of the Selenge River Basin. P.I.'s: JKGelhaus, JCMorse, BHayford.  
 DEB # 0743732: Aquatic Insects of the Altai and Hangai Mountain Drainages. P.I.'s: JKGelhaus, JCMorse, CRNelson.  
<http://clade.ansp.org/entomology/mongolia/index.html>



Basin: Internal Drainage Basin

Aimag: Zavkhan

Soum: Tsagaankhairkhan

Freshwater Ecoregion: Western Mongolia

Terrestrial Ecoregion: Great Lakes Basin Desert Steppe

WQM Sites:

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Highly Likely Total: 5**

Family: Capniidae						
Isocapnia guentheri	Within Known Range? N	Nearest Occurrence:	206.37 KM	48.61518 °N	98.23096 °E	
Family: Chloroperlidae						
Suwallia kerzhneri	Within Known Range? N	Nearest Occurrence:	108.91 KM	48.05989 °N	97.55073 °E	
Suwallia teleckojensis	Within Known Range? Y	Nearest Occurrence:	109.10 KM	48.05989 °N	97.55073 °E	
Family: Nemouridae						
Nemoura cinerea	Within Known Range? N	Nearest Occurrence:	109.09 KM	48.06257 °N	97.55064 °E	
Family: Perlodidae						
Isoperla potanini	Within Known Range? Y	Nearest Occurrence:	93.07 KM	48.15779 °N	97.21441 °E	

**LOE Rating: Likely Total: 13**

Family: Capniidae						
Capnia nigra	Within Known Range? Y	Nearest Occurrence:	109.09 KM	48.06257 °N	97.55064 °E	
Isocapnia kudia	Within Known Range? N	Nearest Occurrence:	530.48 KM	51.25356 °N	99.66687 °E	
Isocapnia sibirica	Within Known Range? N	Nearest Occurrence:	487.76 KM	47.28244 °N	101.18793 °E	
Family: Chloroperlidae						
Alaskaperla longidentata	Within Known Range? N	Nearest Occurrence:	92.91 KM	48.15779 °N	97.21441 °E	
Alloperla joosti	Within Known Range? N	Nearest Occurrence:	113.20 KM	48.24995 °N	97.40627 °E	
Alloperla rostellata	Within Known Range? N	Nearest Occurrence:	258.17 KM	48.36436 °N	98.92737 °E	
Family: Nemouridae						
Amphinemura borealis	Within Known Range? Y	Nearest Occurrence:	108.91 KM	48.05989 °N	97.55073 °E	
Amphinemura standfussi	Within Known Range? N	Nearest Occurrence:	108.91 KM	48.05989 °N	97.55073 °E	
Family: Perlidae						
Kamimuria exilis	Within Known Range? N	Nearest Occurrence:	379.36 KM	50.16278 °N	98.84212 °E	
Family: Perlodidae						
Arcynopteryx sajanensis	Within Known Range? N	Nearest Occurrence:	628.54 KM	51.61397 °N	100.59972 °E	
Diura bicaudata	Within Known Range? Y	Nearest Occurrence:	348.47 KM	47.21768 °N	99.92824 °E	
Diura majuscula	Within Known Range? Y	Nearest Occurrence:	109.28 KM	48.06257 °N	97.55064 °E	
Pictetiella asiatica	Within Known Range? N	Nearest Occurrence:	625.91 KM	51.65822 °N	100.53000 °E	

**LOE Rating: Probable Total: 5**

Family: Perlidae						
Agnentina brevipennis	Within Known Range? Y	Nearest Occurrence:	250.66 KM	48.71968 °N	98.65184 °E	
Family: Perlodidae						
Arcynopteryx compacta	Within Known Range? Y	Nearest Occurrence:	438.52 KM	50.61826 °N	99.12094 °E	
Arcynopteryx polaris	Within Known Range? Y	Nearest Occurrence:	258.64 KM	48.36436 °N	98.92737 °E	
Isoperla asiatica	Within Known Range? N	Nearest Occurrence:	108.91 KM	48.05989 °N	97.55073 °E	
Skwala pusilla	Within Known Range? N	Nearest Occurrence:	927.43 KM	48.51277 °N	88.51107 °E	

**Basin:** Internal Drainage Basin  
**Aimags:** Zavkhan  
**Soums:** Tsagaankhairkhan

**Freshwater Ecoregion:** Western Mongolia  
**Terrestrial Ecoregion:** Great Lakes Basin Desert Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Possible Total: 5**

Family: Chloroperlidae						
Haploperla lepnevae	Within Known Range?	N	Nearest Occurrence:	398.21 KM	49.26170 °N	99.88242 °E
Family: Perlidae						
Agnentina extrema	Within Known Range?	N	Nearest Occurrence:	419.54 KM	47.50949 °N	100.57510 °E
Family: Perlodidae						
Kaszabia nigricauda	Within Known Range?	N	Nearest Occurrence:	250.66 KM	48.71968 °N	98.65184 °E
Family: Pteronarcyidae						
Pteronarcys reticulata	Within Known Range?	N	Nearest Occurrence:	393.10 KM	47.80440 °N	100.31810 °E
Family: Taeniopterygidae						
Taenionema japonicum	Within Known Range?	Y	Nearest Occurrence:	438.52 KM	50.61826 °N	99.12094 °E

**LOE Rating: Predicted Total: 15**

Family: Capniidae						
Mesocapnia variabilis	Within Known Range?	Y	Nearest Occurrence:	258.64 KM	48.36436 °N	98.92737 °E
Family: Chloroperlidae						
Alloperla deminuta	Within Known Range?	N	Nearest Occurrence:	393.10 KM	47.80440 °N	100.31810 °E
Alloperla mediata	Within Known Range?	N	Nearest Occurrence:	437.74 KM	50.61826 °N	99.12094 °E
Family: Leuctridae						
Paraleuctra zapekinae	Within Known Range?	N	Nearest Occurrence:	906.98 KM	49.71481 °N	104.64203 °E
Family: Nemouridae						
Nemoura arctica	Within Known Range?	Y	Nearest Occurrence:	428.44 KM	50.42996 °N	99.21727 °E
Nemoura sahlbergi	Within Known Range?	N	Nearest Occurrence:	389.06 KM	47.42580 °N	100.30130 °E
Nemurella pictetii	Within Known Range?	N	Nearest Occurrence:	469.42 KM	50.81265 °N	99.33803 °E
Family: Perlidae						
Agnentina cocandica	Within Known Range?	Y	Nearest Occurrence:	428.26 KM	49.76390 °N	99.86185 °E
Paragnetina flavotincta	Within Known Range?	N	Nearest Occurrence:	398.21 KM	49.26170 °N	99.88242 °E
Family: Perlodidae						
Isoperla altaica	Within Known Range?	Y	Nearest Occurrence:	469.98 KM	47.11192 °N	101.01048 °E
Isoperla kozlovi	Within Known Range?	N	Nearest Occurrence:	393.10 KM	47.80440 °N	100.31810 °E
Isoperla lunigera	Within Known Range?	N	Nearest Occurrence:	430.65 KM	49.62785 °N	99.99523 °E
Isoperla mongolica	Within Known Range?	Y	Nearest Occurrence:	109.28 KM	48.06257 °N	97.55064 °E
Isoperla obscura	Within Known Range?	N	Nearest Occurrence:	625.01 KM	51.65045 °N	100.52664 °E
Megarcys ochracea	Within Known Range?	N	Nearest Occurrence:	520.79 KM	51.46205 °N	99.19994 °E

**LOE Rating: Unlikely Total: 4**

Family: Capniidae						
Capnia khulsbagia	Within Known Range?	N	Nearest Occurrence:	587.80 KM	50.98944 °N	100.71944 °E
Mesocapnia altaica	Within Known Range?	N	Nearest Occurrence:	883.44 KM	48.43684 °N	88.90094 °E
Family: Leuctridae						
Leuctra fusca	Within Known Range?	N	Nearest Occurrence:	1,179.13 KM	49.08643 °N	107.28952 °E
Family: Perlodidae						
Isoperla eximia	Within Known Range?	N	Nearest Occurrence:	1,205.97 KM	49.01829 °N	107.54453 °E

**Basin:** Internal Drainage Basin  
**Aimag:** Zavkhan  
**Soum:** Tsetsen-uul

**Freshwater Ecoregion:** Western Mongolia  
**Terrestrial Ecoregion:** Selenge-Orkhon Forest Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Highly Likely Total: 4**

Family: Capniidae						
	Isocapnia guentheri	Within Known Range? N	Nearest Occurrence: 260.87 KM	48.61518°N	98.23096°E	
Family: Chloroperlidae						
	Suwallia kerzhneri	Within Known Range? N	Nearest Occurrence: 173.24 KM	48.24995°N	97.40627°E	
	Suwallia teleckojensis	Within Known Range? Y	Nearest Occurrence: 173.54 KM	48.24995°N	97.40627°E	
Family: Nemouridae						
	Nemoura cinerea	Within Known Range? N	Nearest Occurrence: 194.05 KM	48.06257°N	97.55064°E	

**LOE Rating: Likely Total: 16**

Family: Capniidae						
	Capnia nigra	Within Known Range? Y	Nearest Occurrence: 194.05 KM	48.06257°N	97.55064°E	
	Isocapnia kudia	Within Known Range? N	Nearest Occurrence: 514.40 KM	51.25356°N	99.66687°E	
	Isocapnia sibirica	Within Known Range? N	Nearest Occurrence: 606.44 KM	47.28244°N	101.18793°E	
Family: Chloroperlidae						
	Alaskaperla longidentata	Within Known Range? N	Nearest Occurrence: 155.27 KM	48.15779°N	97.21441°E	
	Alloperla rostellata	Within Known Range? N	Nearest Occurrence: 338.99 KM	48.36436°N	98.92737°E	
Family: Nemouridae						
	Amphinemura borealis	Within Known Range? Y	Nearest Occurrence: 194.14 KM	48.05989°N	97.55073°E	
	Amphinemura standfussi	Within Known Range? N	Nearest Occurrence: 194.05 KM	48.06257°N	97.55064°E	
Family: Perlidae						
	Kamimuria exilis	Within Known Range? N	Nearest Occurrence: 373.31 KM	50.16278°N	98.84212°E	
Family: Perlodidae						
	Arcynopteryx compacta	Within Known Range? Y	Nearest Occurrence: 425.59 KM	50.61826°N	99.12094°E	
	Arcynopteryx sajanensis	Within Known Range? N	Nearest Occurrence: 623.76 KM	51.61397°N	100.59972°E	
	Diura bicaudata	Within Known Range? Y	Nearest Occurrence: 474.03 KM	47.21768°N	99.92824°E	
	Diura majuscula	Within Known Range? Y	Nearest Occurrence: 194.39 KM	48.06257°N	97.55064°E	
	Isoperla asiatica	Within Known Range? N	Nearest Occurrence: 194.05 KM	48.06257°N	97.55064°E	
	Isoperla potanini	Within Known Range? Y	Nearest Occurrence: 155.55 KM	48.15779°N	97.21441°E	
	Pictetiella asiatica	Within Known Range? N	Nearest Occurrence: 618.85 KM	51.65822°N	100.53000°E	
Family: Taeniopterygidae						
	Taenionema japonicum	Within Known Range? Y	Nearest Occurrence: 425.59 KM	50.61826°N	99.12094°E	

**LOE Rating: Probable Total: 3**

Family: Chloroperlidae						
	Alloperla joosti	Within Known Range? N	Nearest Occurrence: 173.24 KM	48.24995°N	97.40627°E	
Family: Perlodidae						
	Arcynopteryx polaris	Within Known Range? Y	Nearest Occurrence: 339.60 KM	48.36436°N	98.92737°E	
	Skwala pusilla	Within Known Range? N	Nearest Occurrence: 818.10 KM	48.51277°N	88.51107°E	



**Basin:** Internal Drainage Basin  
**Aimags:** Zavkhan  
**Soums:** Tsetsen-uul

**Freshwater Ecoregion:** Western Mongolia  
**Terrestrial Ecoregion:** Selenge-Orkhon Forest Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Possible Total: 7**

Family: Chloroperlidae					
Haploperla lepnevae	Within Known Range? Y	Nearest Occurrence:	450.53 KM	49.26170 °N	99.88242 °E
Family: Nemouridae					
Nemoura arctica	Within Known Range? Y	Nearest Occurrence:	424.16 KM	50.42996 °N	99.21727 °E
Family: Perlidae					
Agnetina brevipennis	Within Known Range? Y	Nearest Occurrence:	307.94 KM	48.71968 °N	98.65184 °E
Family: Perlodidae					
Isoperla altaica	Within Known Range? Y	Nearest Occurrence:	457.56 KM	50.81265 °N	99.33803 °E
Kaszabia nigricauda	Within Known Range? N	Nearest Occurrence:	307.94 KM	48.71968 °N	98.65184 °E
Megarcys ochracea	Within Known Range? N	Nearest Occurrence:	487.85 KM	51.46205 °N	99.19994 °E
Family: Pteronarcyidae					
Pteronarcys reticulata	Within Known Range? N	Nearest Occurrence:	474.10 KM	51.47065 °N	99.02617 °E

**LOE Rating: Predicted Total: 13**

Family: Capniidae					
Mesocapnia variabilis	Within Known Range? Y	Nearest Occurrence:	339.60 KM	48.36436 °N	98.92737 °E
Family: Chloroperlidae					
Alloperla deminuta	Within Known Range? N	Nearest Occurrence:	474.10 KM	51.47065 °N	99.02617 °E
Alloperla mediata	Within Known Range? N	Nearest Occurrence:	424.83 KM	50.61826 °N	99.12094 °E
Family: Leuctridae					
Paraleuctra zapekinae	Within Known Range? N	Nearest Occurrence:	980.58 KM	49.71481 °N	104.64203 °E
Family: Nemouridae					
Nemoura sahlbergi	Within Known Range? N	Nearest Occurrence:	423.40 KM	50.42996 °N	99.21727 °E
Nemurella pictetii	Within Known Range? N	Nearest Occurrence:	456.74 KM	50.81265 °N	99.33803 °E
Family: Perlidae					
Agnetina cocandica	Within Known Range? Y	Nearest Occurrence:	341.96 KM	48.33025 °N	92.81616 °E
Agnetina extrema	Within Known Range? N	Nearest Occurrence:	534.44 KM	47.50949 °N	100.57510 °E
Paragnetina flavotincta	Within Known Range? N	Nearest Occurrence:	450.53 KM	49.26170 °N	99.88242 °E
Family: Perlodidae					
Isoperla kozlovi	Within Known Range? N	Nearest Occurrence:	427.44 KM	50.31066 °N	99.32150 °E
Isoperla lunigera	Within Known Range? N	Nearest Occurrence:	471.23 KM	49.62785 °N	99.99523 °E
Isoperla mongolica	Within Known Range? Y	Nearest Occurrence:	173.54 KM	48.24995 °N	97.40627 °E
Isoperla obscura	Within Known Range? Y	Nearest Occurrence:	618.06 KM	51.65045 °N	100.52664 °E

**LOE Rating: Unlikely Total: 4**

Family: Capniidae					
Capnia khulsbagia	Within Known Range? N	Nearest Occurrence:	599.93 KM	50.98944 °N	100.71944 °E
Mesocapnia altaica	Within Known Range? N	Nearest Occurrence:	774.96 KM	48.43684 °N	88.90094 °E
Family: Leuctridae					
Leuctra fusca	Within Known Range? N	Nearest Occurrence:	1,267.58 KM	49.08643 °N	107.28952 °E
Family: Perlodidae					
Isoperla eximia	Within Known Range? N	Nearest Occurrence:	1,295.56 KM	49.01829 °N	107.54453 °E



**Basin:** Internal Drainage Basin  
**Aimags:** Zavkhan  
**Soums:** Tudevtei

**Freshwater Ecoregion:** Western Mongolia  
**Terrestrial Ecoregion:** Selenge-Orkhon Forest Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Highly Likely Total: 5**

Family: Capniidae					
Isocapnia guentheri	Within Known Range? N	Nearest Occurrence:	197.81 KM	48.61518 °N	98.23096 °E
Family: Chloroperlidae					
Suwallia kerzhneri	Within Known Range? N	Nearest Occurrence:	128.84 KM	48.24995 °N	97.40627 °E
Suwallia teleckojensis	Within Known Range? Y	Nearest Occurrence:	129.07 KM	48.24995 °N	97.40627 °E
Family: Nemouridae					
Amphinemura standfussi	Within Known Range? N	Nearest Occurrence:	154.33 KM	48.06257 °N	97.55064 °E
Nemoura cinerea	Within Known Range? N	Nearest Occurrence:	154.33 KM	48.06257 °N	97.55064 °E

**LOE Rating: Likely Total: 12**

Family: Capniidae					
Capnia nigra	Within Known Range? Y	Nearest Occurrence:	154.33 KM	48.06257 °N	97.55064 °E
Isocapnia kudia	Within Known Range? N	Nearest Occurrence:	436.39 KM	51.25356 °N	99.66687 °E
Isocapnia sibirica	Within Known Range? N	Nearest Occurrence:	554.34 KM	47.28244 °N	101.18793 °E
Family: Chloroperlidae					
Alaskaperla longidentata	Within Known Range? N	Nearest Occurrence:	119.89 KM	48.15779 °N	97.21441 °E
Alloperla rostellata	Within Known Range? N	Nearest Occurrence:	279.27 KM	48.36436 °N	98.92737 °E
Family: Nemouridae					
Amphinemura borealis	Within Known Range? Y	Nearest Occurrence:	154.53 KM	48.05989 °N	97.55073 °E
Family: Perlidae					
Kamimuria exilis	Within Known Range? N	Nearest Occurrence:	295.18 KM	50.16278 °N	98.84212 °E
Family: Perlodidae					
Arcynopteryx sajanensis	Within Known Range? N	Nearest Occurrence:	545.46 KM	51.61397 °N	100.59972 °E
Diura majuscula	Within Known Range? Y	Nearest Occurrence:	154.61 KM	48.06257 °N	97.55064 °E
Isoperla potanini	Within Known Range? Y	Nearest Occurrence:	120.10 KM	48.15779 °N	97.21441 °E
Pictetiella asiatica	Within Known Range? N	Nearest Occurrence:	540.71 KM	51.65822 °N	100.53000 °E
Family: Taeniopterygidae					
Taenionema japonicum	Within Known Range? Y	Nearest Occurrence:	347.27 KM	50.61826 °N	99.12094 °E

**LOE Rating: Probable Total: 4**

Family: Chloroperlidae					
Alloperla joosti	Within Known Range? N	Nearest Occurrence:	128.84 KM	48.24995 °N	97.40627 °E
Family: Perlodidae					
Arcynopteryx compacta	Within Known Range? Y	Nearest Occurrence:	347.27 KM	50.61826 °N	99.12094 °E
Diura bicaudata	Within Known Range? Y	Nearest Occurrence:	428.29 KM	47.21768 °N	99.92824 °E
Isoperla asiatica	Within Known Range? N	Nearest Occurrence:	154.33 KM	48.06257 °N	97.55064 °E



**Basin:** Internal Drainage Basin  
**Aimags:** Zavkhan  
**Soums:** Tudevtei

**Freshwater Ecoregion:** Western Mongolia  
**Terrestrial Ecoregion:** Selenge-Orkhon Forest Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

<b>LOE Rating:</b>	<b>Possible</b>	<b>Total:</b>	10
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<b>Family:</b> Capniidae						
	Mesocapnia variabilis	Within Known Range? Y	Nearest Occurrence:	279.77 KM	48.36436°N	98.92737°E
<b>Family:</b> Chloroperlidae						
	Haploperla lepnevae	Within Known Range? Y	Nearest Occurrence:	379.17 KM	49.26170°N	99.88242°E
<b>Family:</b> Nemouridae						
	Nemoura arctica	Within Known Range? Y	Nearest Occurrence:	345.94 KM	50.42996°N	99.21727°E
<b>Family:</b> Perlidae						
	Agnetina brevipennis	Within Known Range? Y	Nearest Occurrence:	242.36 KM	48.71968°N	98.65184°E
<b>Family:</b> Perlodidae						
	Arcynopteryx polaris	Within Known Range? Y	Nearest Occurrence:	279.77 KM	48.36436°N	98.92737°E
	Isoperla altaica	Within Known Range? Y	Nearest Occurrence:	379.26 KM	50.81265°N	99.33803°E
	Kaszabia nigricauda	Within Known Range? N	Nearest Occurrence:	242.36 KM	48.71968°N	98.65184°E
	Megarcys ochracea	Within Known Range? N	Nearest Occurrence:	410.89 KM	51.46205°N	99.19994°E
	Skwala pusilla	Within Known Range? N	Nearest Occurrence:	885.96 KM	48.51277°N	88.51107°E
<b>Family:</b> Pteronarcyidae						
	Pteronarcys reticulata	Within Known Range? N	Nearest Occurrence:	397.61 KM	51.47065°N	99.02617°E

<b>LOE Rating:</b>	<b>Predicted</b>	<b>Total:</b>	12
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<b>Family:</b> Chloroperlidae						
	Alloperla deminuta	Within Known Range? N	Nearest Occurrence:	397.61 KM	51.47065°N	99.02617°E
	Alloperla mediata	Within Known Range? N	Nearest Occurrence:	346.65 KM	50.61826°N	99.12094°E
<b>Family:</b> Leuctridae						
	Paraleuctra zapekinae	Within Known Range? N	Nearest Occurrence:	909.88 KM	49.71481°N	104.64203°E
<b>Family:</b> Nemouridae						
	Nemoura sahlbergi	Within Known Range? N	Nearest Occurrence:	345.32 KM	50.42996°N	99.21727°E
	Nemurella pictetii	Within Known Range? N	Nearest Occurrence:	378.58 KM	50.81265°N	99.33803°E
<b>Family:</b> Perlidae						
	Agnetina cocandica	Within Known Range? Y	Nearest Occurrence:	386.71 KM	49.76390°N	99.86185°E
	Agnetina extrema	Within Known Range? N	Nearest Occurrence:	481.80 KM	47.50949°N	100.57510°E
	Paragnetina flavotincta	Within Known Range? N	Nearest Occurrence:	379.17 KM	49.26170°N	99.88242°E
<b>Family:</b> Perlodidae						
	Isoperla kozlovi	Within Known Range? N	Nearest Occurrence:	349.62 KM	50.31066°N	99.32150°E
	Isoperla lunigera	Within Known Range? N	Nearest Occurrence:	395.24 KM	51.09845°N	99.32051°E
	Isoperla mongolica	Within Known Range? Y	Nearest Occurrence:	129.07 KM	48.24995°N	97.40627°E
	Isoperla obscura	Within Known Range? Y	Nearest Occurrence:	539.92 KM	51.65045°N	100.52664°E

<b>LOE Rating:</b>	<b>Unlikely</b>	<b>Total:</b>	4
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<b>Family:</b> Capniidae						
	Capnia khulsbagia	Within Known Range? N	Nearest Occurrence:	522.11 KM	50.98944°N	100.71944°E
	Mesocapnia altaica	Within Known Range? N	Nearest Occurrence:	843.28 KM	48.43684°N	88.90094°E
<b>Family:</b> Leuctridae						
	Leuctra fusca	Within Known Range? N	Nearest Occurrence:	1,199.88 KM	49.08643°N	107.28952°E
<b>Family:</b> Perlodidae						
	Isoperla eximia	Within Known Range? N	Nearest Occurrence:	1,228.11 KM	49.01829°N	107.54453°E

Research funded by the National Science Foundation  
 DEB-BSI #0206674: A Survey of the Aquatic Insects of the Selenge River Basin. P.I.'s: JKGelhaus, JCMorse, BHayford.  
 DEB # 0743732: Aquatic Insects of the Altai and Hangai Mountain Drainages. P.I.'s: JKGelhaus, JCMorse, CRNelson.  
<http://clade.ansp.org/entomology/mongolia/index.html>



**Basin:** Internal Drainage Basin  
**Aimags:** Zavkhan  
**Soums:** Urgamal

**Freshwater Ecoregion:** Western Mongolia  
**Terrestrial Ecoregion:** Great Lakes Basin Desert Steppe

**WQM Sites:**

WQM Sites: # 147 (Hungui River @ N 48.5185° E 94.29315°)

**LOE Rating: Highly Likely Total: 3**

Family: Capniidae					
Isocapnia guentheri	Within Known Range? N	Nearest Occurrence:	447.14 KM	48.61518°N	98.23096 °E
Family: Chloroperlidae					
Suwallia teleckojensis	Within Known Range? Y	Nearest Occurrence:	245.47 KM	46.32080°N	93.90083 °E
Family: Nemouridae					
Nemoura cinerea	Within Known Range? N	Nearest Occurrence:	374.73 KM	48.06257°N	97.55064 °E

**LOE Rating: Likely Total: 18**

Family: Capniidae					
Isocapnia kudia	Within Known Range? N	Nearest Occurrence:	678.67 KM	51.25356°N	99.66687 °E
Isocapnia sibirica	Within Known Range? N	Nearest Occurrence:	787.03 KM	47.28244°N	101.18793 °E
Family: Chloroperlidae					
Alloperla rostellata	Within Known Range? N	Nearest Occurrence:	524.52 KM	48.36436°N	98.92737 °E
Suwallia kerzhneri	Within Known Range? N	Nearest Occurrence:	356.58 KM	48.24995°N	97.40627 °E
Family: Nemouridae					
Amphinemura borealis	Within Known Range? Y	Nearest Occurrence:	374.78 KM	48.05989°N	97.55073 °E
Amphinemura standfussi	Within Known Range? N	Nearest Occurrence:	374.73 KM	48.06257°N	97.55064 °E
Family: Perlidae					
Agnetina cocandica	Within Known Range? Y	Nearest Occurrence:	155.59 KM	48.33025°N	92.81616 °E
Kamimuria exilis	Within Known Range? N	Nearest Occurrence:	547.61 KM	50.16278°N	98.84212 °E
Family: Perlodidae					
Arcynopteryx compacta	Within Known Range? Y	Nearest Occurrence:	307.77 KM	47.05445°N	91.84839 °E
Arcynopteryx sajanensis	Within Known Range? N	Nearest Occurrence:	790.65 KM	51.61397°N	100.59972 °E
Diura bicaudata	Within Known Range? Y	Nearest Occurrence:	534.70 KM	49.04180°N	89.41675 °E
Diura majuscula	Within Known Range? Y	Nearest Occurrence:	306.80 KM	47.24104°N	91.75287 °E
Isoperla altaica	Within Known Range? Y	Nearest Occurrence:	290.96 KM	47.33906°N	91.86288 °E
Isoperla asiatica	Within Known Range? N	Nearest Occurrence:	374.73 KM	48.06257°N	97.55064 °E
Isoperla potanini	Within Known Range? Y	Nearest Occurrence:	245.47 KM	46.32080°N	93.90083 °E
Pictetiella asiatica	Within Known Range? N	Nearest Occurrence:	784.45 KM	51.65822°N	100.53000 °E
Skwala pusilla	Within Known Range? N	Nearest Occurrence:	631.93 KM	48.51277°N	88.51107 °E
Family: Taeniopterygidae					
Taenionema japonicum	Within Known Range? Y	Nearest Occurrence:	394.50 KM	47.11520°N	90.94098 °E

**LOE Rating: Probable Total: 4**

Family: Capniidae					
Capnia nigra	Within Known Range? Y	Nearest Occurrence:	374.73 KM	48.06257°N	97.55064 °E
Family: Chloroperlidae					
Alaskaperla longidentata	Within Known Range? N	Nearest Occurrence:	336.38 KM	48.15779°N	97.21441 °E
Haploperla lepnevae	Within Known Range? Y	Nearest Occurrence:	475.10 KM	48.97819°N	89.94996 °E
Family: Perlidae					
Agnetina brevipennis	Within Known Range? Y	Nearest Occurrence:	373.17 KM	46.76864°N	91.32673 °E

**Basin:** Internal Drainage Basin  
**Aimags:** Zavkhan  
**Soums:** Urgamal

**Freshwater Ecoregion:** Western Mongolia  
**Terrestrial Ecoregion:** Great Lakes Basin Desert Steppe

**WQM Sites:**

WQM Sites: # 147 (Hungui River @ N 48.5185° E 94.29315°)

**LOE Rating: Possible Total: 5**

Family: Chloroperlidae						
Alloperla joosti	Within Known Range? N	Nearest Occurrence:	356.58 KM	48.24995°N	97.40627°E	
Family: Nemouridae						
Nemoura arctica	Within Known Range? Y	Nearest Occurrence:	342.45 KM	47.53132°N	91.28330°E	
Family: Perlodidae						
Arcynopteryx polaris	Within Known Range? Y	Nearest Occurrence:	303.73 KM	46.61982°N	92.22981°E	
Isoperla mongolica	Within Known Range? Y	Nearest Occurrence:	357.22 KM	48.24995°N	97.40627°E	
Family: Pteronarcyidae						
Pteronarcys reticulata	Within Known Range? N	Nearest Occurrence:	628.24 KM	51.47065°N	99.02617°E	

**LOE Rating: Predicted Total: 14**

Family: Capniidae						
Mesocapnia altaica	Within Known Range? N	Nearest Occurrence:	588.71 KM	48.43684°N	88.90094°E	
Mesocapnia variabilis	Within Known Range? Y	Nearest Occurrence:	525.46 KM	48.36436°N	98.92737°E	
Family: Chloroperlidae						
Alloperla deminuta	Within Known Range? N	Nearest Occurrence:	628.24 KM	51.47065°N	99.02617°E	
Alloperla mediata	Within Known Range? N	Nearest Occurrence:	593.94 KM	50.61826°N	99.12094°E	
Family: Leuctridae						
Paraleuctra zapekinae	Within Known Range? N	Nearest Occurrence:	1,166.33 KM	49.71481°N	104.64203°E	
Family: Nemouridae						
Nemoura sahlbergi	Within Known Range? N	Nearest Occurrence:	595.98 KM	50.42996°N	99.21727°E	
Nemurella pictetii	Within Known Range? N	Nearest Occurrence:	624.68 KM	50.81265°N	99.33803°E	
Family: Perlidae						
Agnetina extrema	Within Known Range? N	Nearest Occurrence:	715.80 KM	47.50949°N	100.57510°E	
Paragnetina flavotincta	Within Known Range? N	Nearest Occurrence:	635.83 KM	49.26170°N	99.88242°E	
Family: Perlodidae						
Isoperla kozlovi	Within Known Range? N	Nearest Occurrence:	602.26 KM	50.31066°N	99.32150°E	
Isoperla lunigera	Within Known Range? N	Nearest Occurrence:	636.59 KM	51.09845°N	99.32051°E	
Isoperla obscura	Within Known Range? Y	Nearest Occurrence:	475.10 KM	48.97819°N	89.94996°E	
Kaszabia nigricauda	Within Known Range? N	Nearest Occurrence:	494.26 KM	48.71968°N	98.65184°E	
Megarcys ochracea	Within Known Range? N	Nearest Occurrence:	644.26 KM	51.46205°N	99.19994°E	

**LOE Rating: Unlikely Total: 3**

Family: Capniidae						
Capnia khulsbagia	Within Known Range? N	Nearest Occurrence:	773.90 KM	50.98944°N	100.71944°E	
Family: Leuctridae						
Leuctra fusca	Within Known Range? N	Nearest Occurrence:	1,453.90 KM	49.08643°N	107.28952°E	
Family: Perlodidae						
Isoperla eximia	Within Known Range? N	Nearest Occurrence:	1,481.87 KM	49.01829°N	107.54453°E	

**Basin:** Internal Drainage Basin

**Aimag:** Zavkhan

**Soum:** Zavkhanmandal

Freshwater Ecoregion: Western Mongolia

Terrestrial Ecoregion: Great Lakes Basin Desert Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Highly Likely Total: 2**

Family: Capniidae

Isocapnia guentheri Within Known Range? N Nearest Occurrence: 373.56 KM 48.61518°N 98.23096 °E

Family: Chloroperlidae

Suwallia teleckojensis Within Known Range? Y Nearest Occurrence: 232.24 KM 46.32080°N 93.90083 °E

**LOE Rating: Likely Total: 21**

Family: Capniidae

Capnia nigra Within Known Range? Y Nearest Occurrence: 294.74 KM 48.06257°N 97.55064 °E

Isocapnia kudia Within Known Range? N Nearest Occurrence: 631.29 KM 51.25356°N 99.66687 °E

Isocapnia sibirica Within Known Range? N Nearest Occurrence: 705.00 KM 47.28244°N 101.18793 °E

Family: Chloroperlidae

Alaskaperla longidentata Within Known Range? N Nearest Occurrence: 257.23 KM 48.15779°N 97.21441 °E

Alloperla rostellata Within Known Range? N Nearest Occurrence: 447.97 KM 48.36436°N 98.92737 °E

Suwallia kerzhneri Within Known Range? N Nearest Occurrence: 278.72 KM 48.24995°N 97.40627 °E

Family: Nemouridae

Amphinemura borealis Within Known Range? Y Nearest Occurrence: 294.76 KM 48.05989°N 97.55073 °E

Amphinemura standfussi Within Known Range? N Nearest Occurrence: 294.74 KM 48.06257°N 97.55064 °E

Nemoura cinerea Within Known Range? N Nearest Occurrence: 294.74 KM 48.06257°N 97.55064 °E

Family: Perlidae

Agnetina cocandica Within Known Range? Y Nearest Occurrence: 232.20 KM 48.33025°N 92.81616 °E

Kamimuria exilis Within Known Range? N Nearest Occurrence: 492.17 KM 50.16278°N 98.84212 °E

Family: Perlodidae

Arcynopteryx compacta Within Known Range? Y Nearest Occurrence: 359.39 KM 46.92107°N 91.91048 °E

Arcynopteryx sajanensis Within Known Range? N Nearest Occurrence: 741.59 KM 51.61397°N 100.59972 °E

Diura bicaudata Within Known Range? Y Nearest Occurrence: 568.10 KM 47.21768°N 99.92824 °E

Diura majuscula Within Known Range? Y Nearest Occurrence: 295.26 KM 48.06257°N 97.55064 °E

Isoperla altaica Within Known Range? Y Nearest Occurrence: 349.42 KM 47.33906°N 91.86288 °E

Isoperla asiatica Within Known Range? N Nearest Occurrence: 294.74 KM 48.06257°N 97.55064 °E

Isoperla potanini Within Known Range? Y Nearest Occurrence: 232.24 KM 46.32080°N 93.90083 °E

Pictetiella asiatica Within Known Range? N Nearest Occurrence: 736.24 KM 51.65822°N 100.53000 °E

Skwala pusilla Within Known Range? N Nearest Occurrence: 709.94 KM 48.51277°N 88.51107 °E

Family: Taeniopterygidae

Taenionema japonicum Within Known Range? Y Nearest Occurrence: 454.89 KM 47.11520°N 90.94098 °E

Basin: Internal Drainage Basin

Aimags: Zavkhan

Soums: Zavkhanmandal

Freshwater Ecoregion: Western Mongolia

Terrestrial Ecoregion: Great Lakes Basin Desert Steppe

WQM Sites:

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Possible Total: 8**

Family: Chloroperlidae

*Alloperla joosti*

Within Known Range? N Nearest Occurrence: 278.72 KM 48.24995°N 97.40627°E

*Haploperla lepnevae*

Within Known Range? Y Nearest Occurrence: 556.65 KM 48.97819°N 89.94996°E

Family: Nemouridae

*Nemoura arctica*

Within Known Range? Y Nearest Occurrence: 407.81 KM 47.53132°N 91.28330°E

Family: Perlidae

*Agnetina brevipennis*

Within Known Range? Y Nearest Occurrence: 421.45 KM 48.71968°N 98.65184°E

Family: Perlodidae

*Arcynopteryx polaris*

Within Known Range? Y Nearest Occurrence: 342.29 KM 46.61982°N 92.22981°E

*Isoperla mongolica*

Within Known Range? Y Nearest Occurrence: 279.22 KM 48.24995°N 97.40627°E

*Kaszabia nigricauda*

Within Known Range? N Nearest Occurrence: 421.45 KM 48.71968°N 98.65184°E

Family: Pteronarcyidae

*Pteronarcys reticulata*

Within Known Range? N Nearest Occurrence: 587.73 KM 51.47065°N 99.02617°E

**LOE Rating: Predicted Total: 12**

Family: Capniidae

*Mesocapnia variabilis*

Within Known Range? Y Nearest Occurrence: 448.77 KM 48.36436°N 98.92737°E

Family: Chloroperlidae

*Alloperla deminuta*

Within Known Range? N Nearest Occurrence: 587.73 KM 51.47065°N 99.02617°E

*Alloperla mediata*

Within Known Range? N Nearest Occurrence: 542.69 KM 50.61826°N 99.12094°E

Family: Leuctridae

*Paraleuctra zapekinae*

Within Known Range? N Nearest Occurrence: 1,095.45 KM 49.71481°N 104.64203°E

Family: Nemouridae

*Nemoura sahlbergi*

Within Known Range? N Nearest Occurrence: 541.91 KM 50.42996°N 99.21727°E

*Nemurella pictetii*

Within Known Range? N Nearest Occurrence: 574.41 KM 50.81265°N 99.33803°E

Family: Perlidae

*Agnetina extrema*

Within Known Range? N Nearest Occurrence: 634.34 KM 47.50949°N 100.57510°E

*Paragnetina flavotincta*

Within Known Range? N Nearest Occurrence: 566.82 KM 49.26170°N 99.88242°E

Family: Perlodidae

*Isoperla kozlovi*

Within Known Range? N Nearest Occurrence: 546.25 KM 50.31066°N 99.32150°E

*Isoperla lunigera*

Within Known Range? N Nearest Occurrence: 589.01 KM 49.62785°N 99.99523°E

*Isoperla obscura*

Within Known Range? Y Nearest Occurrence: 556.65 KM 48.97819°N 89.94996°E

*Megarcys ochracea*

Within Known Range? N Nearest Occurrence: 602.31 KM 51.46205°N 99.19994°E

**LOE Rating: Unlikely Total: 4**

Family: Capniidae

*Capnia khulsbagia*

Within Known Range? N Nearest Occurrence: 718.74 KM 50.98944°N 100.71944°E

*Mesocapnia altaica*

Within Known Range? N Nearest Occurrence: 666.29 KM 48.43684°N 88.90094°E

Family: Leuctridae

*Leuctra fusca*

Within Known Range? N Nearest Occurrence: 1,379.44 KM 49.08643°N 107.28952°E

Family: Perlodidae

*Isoperla eximia*

Within Known Range? N Nearest Occurrence: 1,407.13 KM 49.01829°N 107.54453°E

Research funded by the National Science Foundation

DEB-BSI #0206674: A Survey of the Aquatic Insects of the Selenge River Basin. P.I.'s: JKGelhaus, JCMorse, BHayford.

DEB # 0743732: Aquatic Insects of the Altai and Hangai Mountain Drainages. P.I.'s: JKGelhaus, JCMorse, CRNelson.

<http://clade.ansp.org/entomology/mongolia/index.html>



**Basin:** Pacific Ocean Basin

**Aimags:** Dornod

**Soums:** Bayandun

Freshwater Ecoregion: Shilka (Amur)

Terrestrial Ecoregion: Mongolian-Manchurian Grassland

LOE Ranking Based on Predicted ENM Maps Only

**LOE Rating: Highly Likely Total: 11**

Family: Capniidae

Isocapnia guentheri

Within Known Range? N Nearest Occurrence: 623.82 KM 48.24734 °N 107.90589 °E

Isocapnia sibirica

Within Known Range? N Nearest Occurrence: 634.13 KM 48.09549 °N 107.84265 °E

Family: Chloroperlidae

Haploperla lepnevae

Within Known Range? N Nearest Occurrence: 679.13 KM 49.08636 °N 107.30750 °E

Suwallia kerzhneri

Within Known Range? N Nearest Occurrence: 659.60 KM 49.73695 °N 107.49285 °E

Family: Leuctridae

Paraleuctra zapekinae

Within Known Range? N Nearest Occurrence: 625.28 KM 48.14846 °N 107.91267 °E

Family: Perlidae

Agnetina cocandica

Within Known Range? N Nearest Occurrence: 814.47 KM 50.06476 °N 106.13388 °E

Agnetina extrema

Within Known Range? N Nearest Occurrence: 633.38 KM 48.09671 °N 107.84928 °E

Family: Perlodidae

Isoperla asiatica

Within Known Range? N Nearest Occurrence: 653.20 KM 49.01829 °N 107.54453 °E

Isoperla kozlovi

Within Known Range? N Nearest Occurrence: 623.95 KM 48.25861 °N 107.90251 °E

Isoperla lunigera

Within Known Range? N Nearest Occurrence: 634.13 KM 48.09549 °N 107.84265 °E

Family: Pteronarcyidae

Pteronarcys reticulata

Within Known Range? N Nearest Occurrence: 679.13 KM 49.08636 °N 107.30750 °E

**LOE Rating: Likely Total: 11**

Family: Capniidae

Isocapnia kudia

Within Known Range? N Nearest Occurrence: 1,541.61 KM 51.25356 °N 99.66687 °E

Family: Chloroperlidae

Alloperla rostellata

Within Known Range? N Nearest Occurrence: 1,090.33 KM 49.77776 °N 103.60860 °E

Family: Nemouridae

Amphinemura borealis

Within Known Range? N Nearest Occurrence: 643.83 KM 49.73130 °N 107.63484 °E

Nemoura cinerea

Within Known Range? N Nearest Occurrence: 664.31 KM 47.96783 °N 107.59278 °E

Family: Perlidae

Agnetina brevipennis

Within Known Range? N Nearest Occurrence: 660.28 KM 49.73720 °N 107.48668 °E

Kamimuria exilis

Within Known Range? N Nearest Occurrence: 1,623.84 KM 50.16278 °N 98.84212 °E

Paragnetina flavotincta

Within Known Range? N Nearest Occurrence: 813.01 KM 50.06476 °N 106.13388 °E

Family: Perlodidae

Arcynopteryx sajanensis

Within Known Range? N Nearest Occurrence: 1,448.23 KM 51.61397 °N 100.59972 °E

Isoperla obscura

Within Known Range? N Nearest Occurrence: 752.24 KM 49.72192 °N 106.65562 °E

Megarcys ochracea

Within Known Range? N Nearest Occurrence: 674.77 KM 47.97108 °N 107.49534 °E

Pictetiella asiatica

Within Known Range? N Nearest Occurrence: 1,454.11 KM 51.65822 °N 100.53000 °E

**LOE Rating: Probable Total: 3**

Family: Chloroperlidae

Alloperla mediata

Within Known Range? N Nearest Occurrence: 1,090.33 KM 49.77776 °N 103.60860 °E

Family: Perlodidae

Kaszabia nigricauda

Within Known Range? N Nearest Occurrence: 623.95 KM 48.25861 °N 107.90251 °E

Family: Taeniopterygidae

Taenionema japonicum

Within Known Range? N Nearest Occurrence: 688.92 KM 49.05411 °N 107.23175 °E

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**Basin:** Pacific Ocean Basin

**Aimags:** Dornod

**Soums:** Bayandun

Freshwater Ecoregion: Shilka (Amur)

Terrestrial Ecoregion: Mongolian-Manchurian Grassland

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

LOE Ranking Based on Predicted ENM Maps Only

**LOE Rating: Possible Total: 3**

Family: Chloroperlidae

Alloperla joosti Within Known Range? N Nearest Occurrence: 1,144.87 KM 49.21675°N 103.10750°E

Family: Nemouridae

Amphinemura standfussi Within Known Range? N Nearest Occurrence: 643.83 KM 49.73130°N 107.63484°E

Family: Perlodidae

Isoperla altaica Within Known Range? N Nearest Occurrence: 625.47 KM 48.60182°N 107.84335°E

**LOE Rating: Predicted Total: 16**

Family: Capniidae

Capnia nigra Within Known Range? N Nearest Occurrence: 1,417.03 KM 50.92452°N 100.75528°E

Mesocapnia variabilis Within Known Range? N Nearest Occurrence: 620.63 KM 48.42080°N 107.91406°E

Family: Chloroperlidae

Alaskaperla longidentata Within Known Range? N Nearest Occurrence: 623.82 KM 48.24734°N 107.90589°E

Alloperla deminuta Within Known Range? N Nearest Occurrence: 624.67 KM 48.21780°N 107.90392°E

Suwallia teleckojensis Within Known Range? N Nearest Occurrence: 620.63 KM 48.42080°N 107.91406°E

Family: Leuctridae

Leuctra fusca Within Known Range? N Nearest Occurrence: 656.05 KM 49.75393°N 107.52609°E

Family: Nemouridae

Nemoura arctica Within Known Range? N Nearest Occurrence: 625.07 KM 48.25861°N 107.90251°E

Nemoura sahlbergi Within Known Range? N Nearest Occurrence: 624.67 KM 48.21780°N 107.90392°E

Family: Perlodidae

Arcynopteryx compacta Within Known Range? N Nearest Occurrence: 673.08 KM 47.84324°N 107.55299°E

Arcynopteryx polaris Within Known Range? N Nearest Occurrence: 620.63 KM 48.42080°N 107.91406°E

Diura bicaudata Within Known Range? N Nearest Occurrence: 1,515.91 KM 47.21768°N 99.92824°E

Diura majuscula Within Known Range? N Nearest Occurrence: 626.10 KM 48.13287°N 107.91890°E

Isoperla eximia Within Known Range? N Nearest Occurrence: 624.35 KM 48.60182°N 107.84335°E

Isoperla mongolica Within Known Range? N Nearest Occurrence: 635.27 KM 48.09549°N 107.84265°E

Isoperla potanini Within Known Range? N Nearest Occurrence: 1,292.08 KM 50.62324°N 101.87412°E

Skwala pusilla Within Known Range? N Nearest Occurrence: 2,766.49 KM 48.51277°N 88.51107°E

**LOE Rating: Unlikely Total: 3**

Family: Capniidae

Capnia khulsbagia Within Known Range? N Nearest Occurrence: 1,420.44 KM 51.16116°N 100.75636°E

Mesocapnia altaica Within Known Range? N Nearest Occurrence: 2,723.53 KM 48.43684°N 88.90094°E

Family: Nemouridae

Nemurella pictetii Within Known Range? N Nearest Occurrence: 1,534.45 KM 51.07896°N 99.70857°E



**Basin:** Pacific Ocean Basin  
**Aimags:** Dornod  
**Soums:** Bayantumen

Freshwater Ecoregion: Argun

Terrestrial Ecoregion: Mongolian-Manchurian Grassland

LOE Ranking Based on Predicted ENM Maps Only

**WQM Sites:**

WQM Sites: # 127 (Herlen River @ N 48.05632° E 114.52465°)

<b>LOE Rating:</b>	<b>Highly Likely</b>	<b>Total:</b>	<b>9</b>
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Family: Capniidae

Isocapnia guentheri

Within Known Range? N Nearest Occurrence: 785.10 KM 48.24734°N 107.90589°E

Isocapnia sibirica

Within Known Range? N Nearest Occurrence: 791.88 KM 48.09549°N 107.84265°E

Family: Chloroperlidae

Haploperla lepnevae

Within Known Range? N Nearest Occurrence: 848.56 KM 47.82258°N 107.33613°E

Suwallia kerzhneri

Within Known Range? N Nearest Occurrence: 824.63 KM 48.12416°N 107.54780°E

Family: Perlidae

Agnetina cocandica

Within Known Range? N Nearest Occurrence: 1,007.95 KM 50.06476°N 106.13388°E

Paragnetina flavotincta

Within Known Range? N Nearest Occurrence: 1,006.14 KM 50.06476°N 106.13388°E

Family: Perlodidae

Isoperla lunigera

Within Known Range? N Nearest Occurrence: 791.88 KM 48.09549°N 107.84265°E

Isoperla obscura

Within Known Range? N Nearest Occurrence: 941.59 KM 49.72192°N 106.65562°E

Family: Pteronarcyidae

Pteronarcys reticulata

Within Known Range? N Nearest Occurrence: 858.68 KM 49.08636°N 107.30750°E

<b>LOE Rating:</b>	<b>Likely</b>	<b>Total:</b>	<b>15</b>
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Family: Capniidae

Isocapnia kudia

Within Known Range? N Nearest Occurrence: 1,735.67 KM 51.25356°N 99.66687°E

Family: Chloroperlidae

Alloperla mediata

Within Known Range? N Nearest Occurrence: 1,275.96 KM 49.77776°N 103.60860°E

Alloperla rostellata

Within Known Range? N Nearest Occurrence: 1,275.96 KM 49.77776°N 103.60860°E

Family: Leuctridae

Paraleuctra zapekinae

Within Known Range? N Nearest Occurrence: 784.15 KM 48.14846°N 107.91267°E

Family: Nemouridae

Amphinemura borealis

Within Known Range? N Nearest Occurrence: 835.47 KM 49.73130°N 107.63484°E

Nemoura cinerea

Within Known Range? N Nearest Occurrence: 819.70 KM 47.96783°N 107.59278°E

Family: Perlidae

Agnetina brevipennis

Within Known Range? N Nearest Occurrence: 851.66 KM 49.73720°N 107.48668°E

Agnetina extrema

Within Known Range? N Nearest Occurrence: 791.15 KM 48.09671°N 107.84928°E

Kamimuria exilis

Within Known Range? N Nearest Occurrence: 1,809.15 KM 50.16278°N 98.84212°E

Family: Perlodidae

Arcynopteryx sajanensis

Within Known Range? N Nearest Occurrence: 1,646.49 KM 51.61397°N 100.59972°E

Isoperla asiatica

Within Known Range? N Nearest Occurrence: 819.70 KM 47.96783°N 107.59278°E

Isoperla kozlovi

Within Known Range? N Nearest Occurrence: 783.19 KM 48.13111°N 107.92120°E

Megarcys ochracea

Within Known Range? N Nearest Occurrence: 830.51 KM 47.97108°N 107.49534°E

Pictetiella asiatica

Within Known Range? N Nearest Occurrence: 1,652.22 KM 51.65822°N 100.53000°E

Family: Taeniopterygidae

Taenionema japonicum

Within Known Range? N Nearest Occurrence: 868.12 KM 49.05411°N 107.23175°E



**Basin:** Pacific Ocean Basin

**Aimags:** Dornod

**Soums:** Bayantumen

Freshwater Ecoregion: Argun

Terrestrial Ecoregion: Mongolian-Manchurian Grassland

LOE Ranking Based on Predicted ENM Maps Only

**WQM Sites:**

WQM Sites: # 127 (Herlen River @ N 48.05632° E 114.52465°)

**LOE Rating: Possible Total: 4**

Family: Chloroperlidae

Alloperla joosti Within Known Range? N Nearest Occurrence: 1,323.58 KM 49.21675°N 103.10750°E

Family: Perlodidae

Diura bicaudata Within Known Range? N Nearest Occurrence: 1,673.07 KM 47.21768°N 99.92824°E

Isoperla altaica Within Known Range? N Nearest Occurrence: 795.40 KM 48.60182°N 107.84335°E

Kaszabia nigricauda Within Known Range? N Nearest Occurrence: 785.24 KM 48.21780°N 107.90392°E

**LOE Rating: Predicted Total: 17**

Family: Capniidae

Capnia khulsbagia Within Known Range? N Nearest Occurrence: 1,615.24 KM 51.16116°N 100.75636°E

Capnia nigra Within Known Range? N Nearest Occurrence: 1,609.99 KM 50.92452°N 100.75528°E

Mesocapnia variabilis Within Known Range? N Nearest Occurrence: 786.32 KM 48.42080°N 107.91406°E

Family: Chloroperlidae

Alaskaperla longidentata Within Known Range? N Nearest Occurrence: 784.15 KM 48.14846°N 107.91267°E

Alloperla deminuta Within Known Range? N Nearest Occurrence: 784.15 KM 48.14846°N 107.91267°E

Suwallia teleckojensis Within Known Range? N Nearest Occurrence: 786.32 KM 48.42080°N 107.91406°E

Family: Leuctridae

Leuctra fusca Within Known Range? N Nearest Occurrence: 847.80 KM 49.75393°N 107.52609°E

Family: Nemouridae

Amphinemura standfussi Within Known Range? N Nearest Occurrence: 835.47 KM 49.73130°N 107.63484°E

Nemoura arctica Within Known Range? N Nearest Occurrence: 784.86 KM 48.13287°N 107.91890°E

Nemoura sahlbergi Within Known Range? N Nearest Occurrence: 785.24 KM 48.21780°N 107.90392°E

Family: Perlodidae

Arcynopteryx compacta Within Known Range? N Nearest Occurrence: 825.91 KM 47.84324°N 107.55299°E

Arcynopteryx polaris Within Known Range? N Nearest Occurrence: 786.32 KM 48.42080°N 107.91406°E

Diura majuscula Within Known Range? N Nearest Occurrence: 784.86 KM 48.13287°N 107.91890°E

Isoperla eximia Within Known Range? N Nearest Occurrence: 793.97 KM 48.60182°N 107.84335°E

Isoperla mongolica Within Known Range? N Nearest Occurrence: 793.31 KM 48.09549°N 107.84265°E

Isoperla potanini Within Known Range? N Nearest Occurrence: 1,463.34 KM 46.73093°N 101.88583°E

Skwala pusilla Within Known Range? N Nearest Occurrence: 2,938.09 KM 48.51277°N 88.51107°E

**LOE Rating: Unlikely Total: 2**

Family: Capniidae

Mesocapnia altaica Within Known Range? N Nearest Occurrence: 2,894.69 KM 48.43684°N 88.90094°E

Family: Nemouridae

Nemurella pictetii Within Known Range? N Nearest Occurrence: 1,727.29 KM 51.07896°N 99.70857°E

**Basin:** Pacific Ocean Basin  
**Aimags:** Dornod  
**Soums:** Bayan-uul

**Freshwater Ecoregion:** Shilka (Amur)

**Terrestrial Ecoregion:** Daurian Forest Steppe

LOE Ranking Based on Predicted ENM Maps Only

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Highly Likely Total: 12**

<b>Family: Capniidae</b>					
Isocapnia guentheri	Within Known Range? N	Nearest Occurrence:	534.07 KM	48.24734 °N	107.90589 °E
Isocapnia sibirica	Within Known Range? N	Nearest Occurrence:	544.09 KM	48.09549 °N	107.84265 °E
<b>Family: Chloroperlidae</b>					
Alloperla rostellata	Within Known Range? N	Nearest Occurrence:	1,006.24 KM	49.77776 °N	103.60860 °E
Haploperla lepnevae	Within Known Range? N	Nearest Occurrence:	592.61 KM	49.08636 °N	107.30750 °E
Suwallia kerzhneri	Within Known Range? N	Nearest Occurrence:	575.61 KM	48.12416 °N	107.54780 °E
<b>Family: Leuctridae</b>					
Paraleuctra zapekinae	Within Known Range? N	Nearest Occurrence:	535.32 KM	48.14846 °N	107.91267 °E
<b>Family: Perlidae</b>					
Agnetina cocandica	Within Known Range? N	Nearest Occurrence:	732.56 KM	50.06476 °N	106.13388 °E
Agnetina extrema	Within Known Range? N	Nearest Occurrence:	543.34 KM	48.09671 °N	107.84928 °E
<b>Family: Perlodidae</b>					
Isoperla asiatica	Within Known Range? N	Nearest Occurrence:	566.32 KM	49.01829 °N	107.54453 °E
Isoperla kozlovi	Within Known Range? N	Nearest Occurrence:	534.23 KM	48.25861 °N	107.90251 °E
Isoperla lunigera	Within Known Range? N	Nearest Occurrence:	544.09 KM	48.09549 °N	107.84265 °E
<b>Family: Pteronarcyidae</b>					
Pteronarcys reticulata	Within Known Range? N	Nearest Occurrence:	592.61 KM	49.08636 °N	107.30750 °E

**LOE Rating: Likely Total: 10**

<b>Family: Capniidae</b>					
Isocapnia kudia	Within Known Range? N	Nearest Occurrence:	1,460.93 KM	51.25356 °N	99.66687 °E
<b>Family: Nemouridae</b>					
Amphinemura borealis	Within Known Range? N	Nearest Occurrence:	561.07 KM	49.73130 °N	107.63484 °E
Nemoura cinerea	Within Known Range? N	Nearest Occurrence:	574.16 KM	47.96783 °N	107.59278 °E
<b>Family: Perlidae</b>					
Agnetina brevipennis	Within Known Range? N	Nearest Occurrence:	577.46 KM	49.73720 °N	107.48668 °E
Kamimuria exilis	Within Known Range? N	Nearest Occurrence:	1,539.82 KM	50.16278 °N	98.84212 °E
Paragnetina flavotincta	Within Known Range? N	Nearest Occurrence:	731.24 KM	50.06476 °N	106.13388 °E
<b>Family: Perlodidae</b>					
Arcynopteryx sajanensis	Within Known Range? N	Nearest Occurrence:	1,369.09 KM	51.61397 °N	100.59972 °E
Isoperla obscura	Within Known Range? N	Nearest Occurrence:	668.87 KM	49.72192 °N	106.65562 °E
Megarcys ochracea	Within Known Range? N	Nearest Occurrence:	584.65 KM	47.97108 °N	107.49534 °E
Pictetiella asiatica	Within Known Range? N	Nearest Occurrence:	1,375.22 KM	51.65822 °N	100.53000 °E

**LOE Rating: Probable Total: 2**

<b>Family: Chloroperlidae</b>					
Alloperla mediata	Within Known Range? N	Nearest Occurrence:	1,006.24 KM	49.77776 °N	103.60860 °E
<b>Family: Perlodidae</b>					
Kaszabia nigricauda	Within Known Range? N	Nearest Occurrence:	534.23 KM	48.25861 °N	107.90251 °E



**Basin:** Pacific Ocean Basin  
**Aimags:** Dornod  
**Soums:** Bayan-uul

**Freshwater Ecoregion:** Shilka (Amur)

**Terrestrial Ecoregion:** Daurian Forest Steppe

LOE Ranking Based on Predicted ENM Maps Only

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

<b>LOE Rating:</b> Possible	<b>Total:</b> 4
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<b>Family:</b> Chloroperlidae					
Alloperla joosti	Within Known Range? N	Nearest Occurrence:	1,058.93 KM	49.21675 °N	103.10750 °E
<b>Family:</b> Nemouridae					
Amphinemura standfussi	Within Known Range? N	Nearest Occurrence:	561.07 KM	49.73130 °N	107.63484 °E
<b>Family:</b> Perlodidae					
Isoperla altaica	Within Known Range? N	Nearest Occurrence:	536.64 KM	48.60182 °N	107.84335 °E
<b>Family:</b> Taeniopterygidae					
Taenionema japonicum	Within Known Range? N	Nearest Occurrence:	602.10 KM	49.05411 °N	107.23175 °E

<b>LOE Rating:</b> Predicted	<b>Total:</b> 16
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<b>Family:</b> Capniidae					
Capnia nigra	Within Known Range? N	Nearest Occurrence:	1,335.83 KM	50.92452 °N	100.75528 °E
Mesocapnia variabilis	Within Known Range? N	Nearest Occurrence:	531.18 KM	48.42080 °N	107.91406 °E
<b>Family:</b> Chloroperlidae					
Alaskaperla longidentata	Within Known Range? N	Nearest Occurrence:	534.07 KM	48.24734 °N	107.90589 °E
Alloperla deminuta	Within Known Range? N	Nearest Occurrence:	534.86 KM	48.21780 °N	107.90392 °E
Suwallia teleckojensis	Within Known Range? N	Nearest Occurrence:	531.18 KM	48.42080 °N	107.91406 °E
<b>Family:</b> Leuctridae					
Leuctra fusca	Within Known Range? N	Nearest Occurrence:	573.37 KM	49.75393 °N	107.52609 °E
<b>Family:</b> Nemouridae					
Nemoura arctica	Within Known Range? N	Nearest Occurrence:	535.20 KM	48.25861 °N	107.90251 °E
Nemoura sahlbergi	Within Known Range? N	Nearest Occurrence:	534.86 KM	48.21780 °N	107.90392 °E
<b>Family:</b> Perlodidae					
Arcynopteryx compacta	Within Known Range? N	Nearest Occurrence:	582.61 KM	47.84324 °N	107.55299 °E
Arcynopteryx polaris	Within Known Range? N	Nearest Occurrence:	531.18 KM	48.42080 °N	107.91406 °E
Diura bicaudata	Within Known Range? N	Nearest Occurrence:	1,426.62 KM	47.21768 °N	99.92824 °E
Diura majuscula	Within Known Range? N	Nearest Occurrence:	535.95 KM	48.13287 °N	107.91890 °E
Isoperla eximia	Within Known Range? N	Nearest Occurrence:	535.66 KM	48.60182 °N	107.84335 °E
Isoperla mongolica	Within Known Range? N	Nearest Occurrence:	545.08 KM	48.09549 °N	107.84265 °E
Isoperla potanini	Within Known Range? N	Nearest Occurrence:	1,210.23 KM	50.62324 °N	101.87412 °E
Skwala pusilla	Within Known Range? N	Nearest Occurrence:	2,679.72 KM	48.51277 °N	88.51107 °E

<b>LOE Rating:</b> Unlikely	<b>Total:</b> 3
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<b>Family:</b> Capniidae					
Capnia khulsbagia	Within Known Range? N	Nearest Occurrence:	1,340.01 KM	51.16116 °N	100.75636 °E
Mesocapnia altaica	Within Known Range? N	Nearest Occurrence:	2,636.67 KM	48.43684 °N	88.90094 °E
<b>Family:</b> Nemouridae					
Nemurella pictetii	Within Known Range? N	Nearest Occurrence:	1,453.27 KM	51.07896 °N	99.70857 °E



**Basin:** Pacific Ocean Basin  
**Aimags:** Dornod  
**Soums:** Bulgan

Freshwater Ecoregion: Argun

Terrestrial Ecoregion: Mongolian-Manchurian Grassland

LOE Ranking Based on Predicted ENM Maps Only

<b>LOE Rating:</b>	<b>Highly Likely</b>	<b>Total:</b>	<b>9</b>
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Family: Capniidae

Isocapnia guentheri

Within Known Range? N Nearest Occurrence: 703.02 KM 48.24734 °N 107.90589 °E

Isocapnia sibirica

Within Known Range? N Nearest Occurrence: 708.69 KM 48.09549 °N 107.84265 °E

Family: Chloroperlidae

Haploperla lepnevae

Within Known Range? N Nearest Occurrence: 763.53 KM 47.82258 °N 107.33613 °E

Suwallia kerzhneri

Within Known Range? N Nearest Occurrence: 741.56 KM 48.12416 °N 107.54780 °E

Family: Perlidae

Agnetina cocandica

Within Known Range? N Nearest Occurrence: 937.00 KM 50.06476 °N 106.13388 °E

Paragnetina flavotincta

Within Known Range? N Nearest Occurrence: 935.31 KM 50.06476 °N 106.13388 °E

Family: Perlodidae

Isoperla lunigera

Within Known Range? N Nearest Occurrence: 708.69 KM 48.09549 °N 107.84265 °E

Isoperla obscura

Within Known Range? N Nearest Occurrence: 869.21 KM 49.72192 °N 106.65562 °E

Family: Pteronarcyidae

Pteronarcys reticulata

Within Known Range? N Nearest Occurrence: 782.45 KM 49.08636 °N 107.30750 °E

<b>LOE Rating:</b>	<b>Likely</b>	<b>Total:</b>	<b>14</b>
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Family: Capniidae

Isocapnia kudia

Within Known Range? N Nearest Occurrence: 1,662.87 KM 51.25356 °N 99.66687 °E

Family: Chloroperlidae

Alloperla rostellata

Within Known Range? N Nearest Occurrence: 1,200.10 KM 49.77776 °N 103.60860 °E

Family: Leuctridae

Paraleuctra zapekinae

Within Known Range? N Nearest Occurrence: 701.35 KM 48.14846 °N 107.91267 °E

Family: Nemouridae

Amphinemura borealis

Within Known Range? N Nearest Occurrence: 763.53 KM 47.82258 °N 107.33613 °E

Nemoura cinerea

Within Known Range? N Nearest Occurrence: 735.60 KM 47.96783 °N 107.59278 °E

Family: Perlidae

Agnetina brevipennis

Within Known Range? N Nearest Occurrence: 781.05 KM 49.73720 °N 107.48668 °E

Agnetina extrema

Within Known Range? N Nearest Occurrence: 707.96 KM 48.09671 °N 107.84928 °E

Kamimuria exilis

Within Known Range? N Nearest Occurrence: 1,731.56 KM 50.16278 °N 98.84212 °E

Family: Perlodidae

Arcynopteryx sajanensis

Within Known Range? N Nearest Occurrence: 1,576.01 KM 51.61397 °N 100.59972 °E

Isoperla asiatica

Within Known Range? N Nearest Occurrence: 735.60 KM 47.96783 °N 107.59278 °E

Isoperla kozlovi

Within Known Range? N Nearest Occurrence: 700.27 KM 48.13111 °N 107.92120 °E

Megarcys ochracea

Within Known Range? N Nearest Occurrence: 746.42 KM 47.97108 °N 107.49534 °E

Pictetiella asiatica

Within Known Range? N Nearest Occurrence: 1,581.98 KM 51.65822 °N 100.53000 °E

Family: Taeniopterygidae

Taenionema japonicum

Within Known Range? N Nearest Occurrence: 791.41 KM 49.05411 °N 107.23175 °E

<b>LOE Rating:</b>	<b>Probable</b>	<b>Total:</b>	<b>1</b>
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Family: Chloroperlidae

Alloperla mediata

Within Known Range? N Nearest Occurrence: 1,200.10 KM 49.77776 °N 103.60860 °E

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

Research funded by the National Science Foundation

DEB-BSI #0206674: A Survey of the Aquatic Insects of the Selenge River Basin. P.I.'s: JKGelhaus, JCMorse, BHayford.

DEB # 0743732: Aquatic Insects of the Altai and Hangai Mountain Drainages. P.I.'s: JKGelhaus, JCMorse, CRNelson.

<http://clade.ansp.org/entomology/mongolia/index.html>



**Basin:** Pacific Ocean Basin

**Aimags:** Dornod

**Soums:** Bulgan

Freshwater Ecoregion: Argun

Terrestrial Ecoregion: Mongolian-Manchurian Grassland

LOE Ranking Based on Predicted ENM Maps Only

**LOE Rating: Possible Total: 4**

Family: Chloroperlidae

Alloperla joosti Within Known Range? N Nearest Occurrence: 1,244.60 KM 49.21675°N 103.10750°E

Family: Perlodidae

Diura bicaudata Within Known Range? N Nearest Occurrence: 1,586.43 KM 47.21768°N 99.92824°E

Isoperla altaica Within Known Range? N Nearest Occurrence: 715.83 KM 48.60182°N 107.84335°E

Kaszabia nigricauda Within Known Range? N Nearest Occurrence: 702.94 KM 48.21780°N 107.90392°E

**LOE Rating: Predicted Total: 16**

Family: Capniidae

Capnia nigra Within Known Range? N Nearest Occurrence: 1,536.84 KM 50.92452°N 100.75528°E

Mesocapnia variabilis Within Known Range? N Nearest Occurrence: 705.40 KM 48.42080°N 107.91406°E

Family: Chloroperlidae

Alaskaperla longidentata Within Known Range? N Nearest Occurrence: 701.35 KM 48.14846°N 107.91267°E

Alloperla deminuta Within Known Range? N Nearest Occurrence: 701.35 KM 48.14846°N 107.91267°E

Suwallia teleckojensis Within Known Range? N Nearest Occurrence: 705.40 KM 48.42080°N 107.91406°E

Family: Leuctridae

Leuctra fusca Within Known Range? N Nearest Occurrence: 777.42 KM 49.75393°N 107.52609°E

Family: Nemouridae

Amphinemura standfussi Within Known Range? N Nearest Occurrence: 765.15 KM 49.73130°N 107.63484°E

Nemoura arctica Within Known Range? N Nearest Occurrence: 701.80 KM 48.13287°N 107.91890°E

Nemoura sahlbergi Within Known Range? N Nearest Occurrence: 702.94 KM 48.21780°N 107.90392°E

Family: Perlodidae

Arcynopteryx compacta Within Known Range? N Nearest Occurrence: 740.86 KM 47.84324°N 107.55299°E

Arcynopteryx polaris Within Known Range? N Nearest Occurrence: 705.40 KM 48.42080°N 107.91406°E

Diura majuscula Within Known Range? N Nearest Occurrence: 701.80 KM 48.13287°N 107.91890°E

Isoperla eximia Within Known Range? N Nearest Occurrence: 714.55 KM 48.60182°N 107.84335°E

Isoperla mongolica Within Known Range? N Nearest Occurrence: 709.97 KM 48.09549°N 107.84265°E

Isoperla potanini Within Known Range? N Nearest Occurrence: 1,374.79 KM 46.73093°N 101.88583°E

Skwala pusilla Within Known Range? N Nearest Occurrence: 2,854.46 KM 48.51277°N 88.51107°E

**LOE Rating: Unlikely Total: 3**

Family: Capniidae

Capnia khulsbagia Within Known Range? N Nearest Occurrence: 1,542.41 KM 50.98944°N 100.71944°E

Mesocapnia altaica Within Known Range? N Nearest Occurrence: 2,810.94 KM 48.43684°N 88.90094°E

Family: Nemouridae

Nemurella pictetii Within Known Range? N Nearest Occurrence: 1,653.84 KM 51.07896°N 99.70857°E

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**Basin:** Pacific Ocean Basin  
**Aimags:** Dornod  
**Soums:** Choibalsan

Freshwater Ecoregion: Argun

Terrestrial Ecoregion: Mongolian-Manchurian Grassland

LOE Ranking Based on Predicted ENM Maps Only

**LOE Rating: Highly Likely Total: 11**

Family: Capniidae

Isocapnia guentheri

Within Known Range? N Nearest Occurrence: 845.63 KM 48.24734°N 107.90589°E

Isocapnia sibirica

Within Known Range? N Nearest Occurrence: 854.28 KM 48.09549°N 107.84265°E

Family: Chloroperlidae

Haploperla lepnevae

Within Known Range? N Nearest Occurrence: 908.81 KM 49.08636°N 107.30750°E

Suwallia kerzhneri

Within Known Range? N Nearest Occurrence: 886.50 KM 48.12416°N 107.54780°E

Family: Perlidae

Agnetina cocandica

Within Known Range? N Nearest Occurrence: 1,048.40 KM 50.06476°N 106.13388°E

Agnetina extrema

Within Known Range? N Nearest Occurrence: 853.53 KM 48.09671°N 107.84928°E

Paragnetina flavotincta

Within Known Range? N Nearest Occurrence: 1,046.52 KM 50.06476°N 106.13388°E

Family: Perlodidae

Isoperla asiatica

Within Known Range? N Nearest Occurrence: 882.38 KM 49.01829°N 107.54453°E

Isoperla lunigera

Within Known Range? N Nearest Occurrence: 854.28 KM 48.09549°N 107.84265°E

Isoperla obscura

Within Known Range? N Nearest Occurrence: 984.93 KM 49.72192°N 106.65562°E

Family: Pteronarcyidae

Pteronarcys reticulata

Within Known Range? N Nearest Occurrence: 908.81 KM 49.08636°N 107.30750°E

**LOE Rating: Likely Total: 12**

Family: Capniidae

Isocapnia kudia

Within Known Range? N Nearest Occurrence: 1,775.58 KM 51.25356°N 99.66687°E

Family: Chloroperlidae

Alloperla mediata

Within Known Range? N Nearest Occurrence: 1,322.57 KM 49.77776°N 103.60860°E

Alloperla rostellata

Within Known Range? N Nearest Occurrence: 1,322.57 KM 49.77776°N 103.60860°E

Family: Leuctridae

Paraleuctra zapekinae

Within Known Range? N Nearest Occurrence: 845.93 KM 48.14846°N 107.91267°E

Family: Nemouridae

Amphinemura borealis

Within Known Range? N Nearest Occurrence: 876.83 KM 49.73130°N 107.63484°E

Nemoura cinerea

Within Known Range? N Nearest Occurrence: 883.46 KM 47.96783°N 107.59278°E

Family: Perlidae

Kamimuria exilis

Within Known Range? N Nearest Occurrence: 1,856.70 KM 50.16278°N 98.84212°E

Family: Perlodidae

Arcynopteryx sajanensis

Within Known Range? N Nearest Occurrence: 1,682.86 KM 51.61397°N 100.59972°E

Isoperla kozlovi

Within Known Range? N Nearest Occurrence: 845.19 KM 48.13111°N 107.92120°E

Megarcys ochracea

Within Known Range? N Nearest Occurrence: 894.15 KM 47.97108°N 107.49534°E

Pictetiella asiatica

Within Known Range? N Nearest Occurrence: 1,688.32 KM 51.65822°N 100.53000°E

Family: Taeniopterygidae

Taenionema japonicum

Within Known Range? N Nearest Occurrence: 918.81 KM 49.05411°N 107.23175°E

**LOE Rating: Probable Total: 1**

Family: Perlidae

Agnetina brevipennis

Within Known Range? N Nearest Occurrence: 893.25 KM 49.73720°N 107.48668°E

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.



**Basin:** Pacific Ocean Basin  
**Aimags:** Dornod  
**Soums:** Choibalsan

Freshwater Ecoregion: Argun

Terrestrial Ecoregion: Mongolian-Manchurian Grassland

LOE Ranking Based on Predicted ENM Maps Only

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

<b>LOE Rating:</b> Possible	<b>Total:</b> 3
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Family: Nemouridae

Amphinemura standfussi Within Known Range? N Nearest Occurrence: 876.83 KM 49.73130°N 107.63484°E

Family: Perlodidae

Diura bicaudata Within Known Range? N Nearest Occurrence: 1,738.17 KM 47.21768°N 99.92824°E

Kaszabia nigricauda Within Known Range? N Nearest Occurrence: 845.89 KM 48.25861°N 107.90251°E

<b>LOE Rating:</b> Predicted	<b>Total:</b> 18
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Family: Capniidae

Capnia khulsbagia Within Known Range? N Nearest Occurrence: 1,654.45 KM 51.16116°N 100.75636°E

Capnia nigra Within Known Range? N Nearest Occurrence: 1,650.85 KM 50.92452°N 100.75528°E

Mesocapnia variabilis Within Known Range? N Nearest Occurrence: 844.73 KM 48.42080°N 107.91406°E

Family: Chloroperlidae

Alaskaperla longidentata Within Known Range? N Nearest Occurrence: 845.63 KM 48.24734°N 107.90589°E

Alloperla deminuta Within Known Range? N Nearest Occurrence: 845.93 KM 48.14846°N 107.91267°E

Alloperla joosti Within Known Range? N Nearest Occurrence: 1,375.21 KM 49.21675°N 103.10750°E

Suwallia teleckojensis Within Known Range? N Nearest Occurrence: 844.73 KM 48.42080°N 107.91406°E

Family: Leuctridae

Leuctra fusca Within Known Range? N Nearest Occurrence: 889.09 KM 49.75393°N 107.52609°E

Family: Nemouridae

Nemoura arctica Within Known Range? N Nearest Occurrence: 846.95 KM 48.13287°N 107.91890°E

Nemoura sahlbergi Within Known Range? N Nearest Occurrence: 846.14 KM 48.21780°N 107.90392°E

Family: Perlodidae

Arcynopteryx compacta Within Known Range? N Nearest Occurrence: 891.22 KM 47.84324°N 107.55299°E

Arcynopteryx polaris Within Known Range? N Nearest Occurrence: 844.73 KM 48.42080°N 107.91406°E

Diura majuscula Within Known Range? N Nearest Occurrence: 846.95 KM 48.13287°N 107.91890°E

Isoperla altaica Within Known Range? N Nearest Occurrence: 851.48 KM 48.60182°N 107.84335°E

Isoperla eximia Within Known Range? N Nearest Occurrence: 849.94 KM 48.60182°N 107.84335°E

Isoperla mongolica Within Known Range? N Nearest Occurrence: 855.82 KM 48.09549°N 107.84265°E

Isoperla potanini Within Known Range? N Nearest Occurrence: 1,526.13 KM 50.62324°N 101.87412°E

Skwala pusilla Within Known Range? N Nearest Occurrence: 2,995.40 KM 48.51277°N 88.51107°E

<b>LOE Rating:</b> Unlikely	<b>Total:</b> 2
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Family: Capniidae

Mesocapnia altaica Within Known Range? N Nearest Occurrence: 2,952.28 KM 48.43684°N 88.90094°E

Family: Nemouridae

Nemurella pictetii Within Known Range? N Nearest Occurrence: 1,768.28 KM 51.07896°N 99.70857°E





**Basin:** Pacific Ocean Basin

**Aimags:** Dornod

**Soums:** Chuluunkhoroot

Freshwater Ecoregion: Shilka (Amur)

Terrestrial Ecoregion: Mongolian-Manchurian Grassland

LOE Ranking Based on Predicted ENM Maps Only

**LOE Rating: Highly Likely Total: 13**

Family: Capniidae

Isocapnia guentheri

Within Known Range? N Nearest Occurrence: 869.82 KM 48.24734 °N 107.90589 °E

Isocapnia sibirica

Within Known Range? N Nearest Occurrence: 880.23 KM 48.09549 °N 107.84265 °E

Family: Chloroperlidae

Haploperla lepnevae

Within Known Range? N Nearest Occurrence: 921.97 KM 49.08636 °N 107.30750 °E

Suwallia kerzhneri

Within Known Range? N Nearest Occurrence: 897.72 KM 49.73695 °N 107.49285 °E

Family: Leuctridae

Paraleuctra zapekinae

Within Known Range? N Nearest Occurrence: 871.37 KM 48.14846 °N 107.91267 °E

Family: Perlidae

Agnatina cocandica

Within Known Range? N Nearest Occurrence: 1,050.70 KM 50.06476 °N 106.13388 °E

Agnatina extrema

Within Known Range? N Nearest Occurrence: 879.49 KM 48.09671 °N 107.84928 °E

Paragnetina flavotincta

Within Known Range? N Nearest Occurrence: 1,048.81 KM 50.06476 °N 106.13388 °E

Family: Perlodidae

Isoperla asiatica

Within Known Range? N Nearest Occurrence: 896.50 KM 49.01829 °N 107.54453 °E

Isoperla kozlovi

Within Known Range? N Nearest Occurrence: 869.93 KM 48.25861 °N 107.90251 °E

Isoperla lunigera

Within Known Range? N Nearest Occurrence: 880.23 KM 48.09549 °N 107.84265 °E

Isoperla obscura

Within Known Range? N Nearest Occurrence: 990.66 KM 49.72192 °N 106.65562 °E

Family: Pteronarcyidae

Pteronarcys reticulata

Within Known Range? N Nearest Occurrence: 921.97 KM 49.08636 °N 107.30750 °E

**LOE Rating: Likely Total: 3**

Family: Chloroperlidae

Alloperla rostellata

Within Known Range? N Nearest Occurrence: 1,328.82 KM 49.77776 °N 103.60860 °E

Family: Nemouridae

Nemoura cinerea

Within Known Range? N Nearest Occurrence: 910.43 KM 47.96783 °N 107.59278 °E

Family: Perlodidae

Megaracys ochracea

Within Known Range? N Nearest Occurrence: 920.89 KM 47.97108 °N 107.49534 °E

**LOE Rating: Probable Total: 9**

Family: Capniidae

Isocapnia kudia

Within Known Range? N Nearest Occurrence: 1,773.35 KM 51.25356 °N 99.66687 °E

Family: Chloroperlidae

Alloperla mediata

Within Known Range? N Nearest Occurrence: 1,328.82 KM 49.77776 °N 103.60860 °E

Family: Nemouridae

Amphinemura borealis

Within Known Range? N Nearest Occurrence: 881.96 KM 49.73130 °N 107.63484 °E

Family: Perlidae

Agnatina brevipennis

Within Known Range? N Nearest Occurrence: 898.40 KM 49.73720 °N 107.48668 °E

Kamimuria exilis

Within Known Range? N Nearest Occurrence: 1,861.59 KM 50.16278 °N 98.84212 °E

Family: Perlodidae

Arcynopteryx sajanensis

Within Known Range? N Nearest Occurrence: 1,677.50 KM 51.61397 °N 100.59972 °E

Kaszabia nigricauda

Within Known Range? N Nearest Occurrence: 869.93 KM 48.25861 °N 107.90251 °E

Pictetiella asiatica

Within Known Range? N Nearest Occurrence: 1,682.76 KM 51.65822 °N 100.53000 °E

Family: Taeniopterygidae

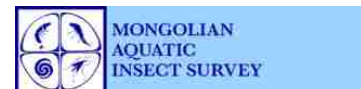
Taenionema japonicum

Within Known Range? N Nearest Occurrence: 932.34 KM 49.05411 °N 107.23175 °E

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

Research funded by the National Science Foundation  
DEB-BSI #0206674: A Survey of the Aquatic Insects of the Selenge River Basin. P.I.'s: JKGelhaus, JCMorse, BHayford.  
DEB # 0743732: Aquatic Insects of the Altai and Hangai Mountain Drainages. P.I.'s: JKGelhaus, JCMorse, CRNelson.  
<http://clade.ansp.org/entomology/mongolia/index.html>



**Basin:** Pacific Ocean Basin

**Aimags:** Dornod

**Soums:** Chuluunkhoroot

Freshwater Ecoregion: Shilka (Amur)

Terrestrial Ecoregion: Mongolian-Manchurian Grassland

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

LOE Ranking Based on Predicted ENM Maps Only

**LOE Rating: Possible Total: 2**

Family: Chloroperlidae

Alaskaperla longidentata Within Known Range? N Nearest Occurrence: 869.82 KM 48.24734°N 107.90589°E

Family: Nemouridae

Amphinemura standfussi Within Known Range? N Nearest Occurrence: 881.96 KM 49.73130°N 107.63484°E

**LOE Rating: Predicted Total: 19**

Family: Capniidae

Capnia khulsbagia Within Known Range? N Nearest Occurrence: 1,651.98 KM 51.16116°N 100.75636°E

Capnia nigra Within Known Range? N Nearest Occurrence: 1,649.97 KM 50.92452°N 100.75528°E

Mesocapnia variabilis Within Known Range? N Nearest Occurrence: 866.79 KM 48.42080°N 107.91406°E

Family: Chloroperlidae

Alloperla deminuta Within Known Range? N Nearest Occurrence: 870.70 KM 48.21780°N 107.90392°E

Alloperla joosti Within Known Range? N Nearest Occurrence: 1,385.01 KM 49.70678°N 103.10288°E

Suwallia teleckojensis Within Known Range? N Nearest Occurrence: 866.79 KM 48.42080°N 107.91406°E

Family: Leuctridae

Leuctra fusca Within Known Range? N Nearest Occurrence: 894.00 KM 49.75393°N 107.52609°E

Family: Nemouridae

Nemoura arctica Within Known Range? N Nearest Occurrence: 871.50 KM 48.25861°N 107.90251°E

Nemoura sahlbergi Within Known Range? N Nearest Occurrence: 870.70 KM 48.21780°N 107.90392°E

Nemurella pictetii Within Known Range? N Nearest Occurrence: 1,767.12 KM 51.07896°N 99.70857°E

Family: Perlodidae

Arcynopteryx compacta Within Known Range? N Nearest Occurrence: 919.62 KM 47.84324°N 107.55299°E

Arcynopteryx polaris Within Known Range? N Nearest Occurrence: 866.79 KM 48.42080°N 107.91406°E

Diura bicaudata Within Known Range? N Nearest Occurrence: 1,761.43 KM 47.21768°N 99.92824°E

Diura majuscula Within Known Range? N Nearest Occurrence: 872.64 KM 48.13287°N 107.91890°E

Isoperla altaica Within Known Range? N Nearest Occurrence: 871.13 KM 48.60182°N 107.84335°E

Isoperla eximia Within Known Range? N Nearest Occurrence: 869.57 KM 48.60182°N 107.84335°E

Isoperla mongolica Within Known Range? N Nearest Occurrence: 881.82 KM 48.09549°N 107.84265°E

Isoperla potanini Within Known Range? N Nearest Occurrence: 1,526.59 KM 50.62324°N 101.87412°E

Skwala pusilla Within Known Range? N Nearest Occurrence: 3,008.20 KM 48.51277°N 88.51107°E

**LOE Rating: Unlikely Total: 1**

Family: Capniidae

Mesocapnia altaica Within Known Range? N Nearest Occurrence: 2,965.41 KM 48.43684°N 88.90094°E

**Basin:** Pacific Ocean Basin

**Aimags:** Dornod

**Soums:** Dashbalbar

Freshwater Ecoregion: Shilka (Amur)

Terrestrial Ecoregion: Daurian Forest Steppe

**WQM Sites:**

WQM Sites: # 128 (Ulz River @ N 49.55857° E 114.40028°)

LOE Ranking Based on Predicted ENM Maps Only

**LOE Rating: Highly Likely Total: 12**

Family: Capniidae

Isocapnia guentheri

Within Known Range? N Nearest Occurrence: 719.81 KM 48.24734°N 107.90589 °E

Isocapnia sibirica

Within Known Range? N Nearest Occurrence: 730.51 KM 48.09549°N 107.84265 °E

Family: Chloroperlidae

Haploperla lepnevae

Within Known Range? N Nearest Occurrence: 771.40 KM 49.08636°N 107.30750 °E

Suwallia kerzhneri

Within Known Range? N Nearest Occurrence: 748.13 KM 49.73695°N 107.49285 °E

Family: Leuctridae

Paraleuctra zapekinae

Within Known Range? N Nearest Occurrence: 721.56 KM 48.14846°N 107.91267 °E

Family: Perlidae

Agnetina cocandica

Within Known Range? N Nearest Occurrence: 901.63 KM 50.06476°N 106.13388 °E

Agnetina extrema

Within Known Range? N Nearest Occurrence: 729.76 KM 48.09671°N 107.84928 °E

Paragnetina flavotincta

Within Known Range? N Nearest Occurrence: 900.00 KM 50.06476°N 106.13388 °E

Family: Perlodidae

Isoperla asiatica

Within Known Range? N Nearest Occurrence: 745.88 KM 49.01829°N 107.54453 °E

Isoperla kozlovi

Within Known Range? N Nearest Occurrence: 719.90 KM 48.25861°N 107.90251 °E

Isoperla lunigera

Within Known Range? N Nearest Occurrence: 730.51 KM 48.09549°N 107.84265 °E

Family: Pteronarcyidae

Pteronarcys reticulata

Within Known Range? N Nearest Occurrence: 771.40 KM 49.08636°N 107.30750 °E

**LOE Rating: Likely Total: 9**

Family: Chloroperlidae

Alloperla rostellata

Within Known Range? N Nearest Occurrence: 1,179.31 KM 49.77776°N 103.60860 °E

Family: Nemouridae

Amphinemura borealis

Within Known Range? N Nearest Occurrence: 732.36 KM 49.73130°N 107.63484 °E

Nemoura cinerea

Within Known Range? N Nearest Occurrence: 760.86 KM 47.96783°N 107.59278 °E

Family: Perlidae

Agnetina brevipennis

Within Known Range? N Nearest Occurrence: 748.82 KM 49.73720°N 107.48668 °E

Family: Perlodidae

Arcynopteryx sajanensis

Within Known Range? N Nearest Occurrence: 1,531.28 KM 51.61397°N 100.59972 °E

Isoperla obscura

Within Known Range? N Nearest Occurrence: 841.05 KM 49.72192°N 106.65562 °E

Kaszabia nigricauda

Within Known Range? N Nearest Occurrence: 719.90 KM 48.25861°N 107.90251 °E

Megarcys ochracea

Within Known Range? N Nearest Occurrence: 771.25 KM 47.97108°N 107.49534 °E

Pictetiella asiatica

Within Known Range? N Nearest Occurrence: 1,536.89 KM 51.65822°N 100.53000 °E

**LOE Rating: Probable Total: 4**

Family: Capniidae

Isocapnia kudia

Within Known Range? N Nearest Occurrence: 1,626.30 KM 51.25356°N 99.66687 °E

Family: Chloroperlidae

Alloperla mediata

Within Known Range? N Nearest Occurrence: 1,179.31 KM 49.77776°N 103.60860 °E

Family: Perlidae

Kamimuria exilis

Within Known Range? N Nearest Occurrence: 1,712.28 KM 50.16278°N 98.84212 °E

Family: Taeniopterygidae

Taenionema japonicum

Within Known Range? N Nearest Occurrence: 781.49 KM 49.05411°N 107.23175 °E

Research funded by the National Science Foundation

DEB-BSI #0206674: A Survey of the Aquatic Insects of the Selenge River Basin. P.I.'s: JKGelhaus, JCMorse, BHayford.

DEB # 0743732: Aquatic Insects of the Altai and Hangai Mountain Drainages. P.I.'s: JKGelhaus, JCMorse, CRNelson.

<http://clade.ansp.org/entomology/mongolia/index.html>



**Basin:** Pacific Ocean Basin

**Aimags:** Dornod

**Soums:** Dashbalbar

Freshwater Ecoregion: Shilka (Amur)

Terrestrial Ecoregion: Daurian Forest Steppe

**WQM Sites:**

WQM Sites: # 128 (Ulz River @ N 49.55857° E 114.40028°)

LOE Ranking Based on Predicted ENM Maps Only

**LOE Rating: Possible Total: 3**

Family: Chloroperlidae

Alloperla joosti Within Known Range? N Nearest Occurrence: 1,235.39 KM 49.70678°N 103.10288°E

Family: Nemouridae

Amphinemura standfussi Within Known Range? N Nearest Occurrence: 732.36 KM 49.73130°N 107.63484°E

Nemoura sahlbergi Within Known Range? N Nearest Occurrence: 720.75 KM 48.21780°N 107.90392°E

**LOE Rating: Predicted Total: 17**

Family: Capniidae

Capnia khulsbagia Within Known Range? N Nearest Occurrence: 1,504.96 KM 51.16116°N 100.75636°E

Capnia nigra Within Known Range? N Nearest Occurrence: 1,502.42 KM 50.92452°N 100.75528°E

Mesocapnia variabilis Within Known Range? N Nearest Occurrence: 716.22 KM 48.42080°N 107.91406°E

Family: Chloroperlidae

Alaskaperla longidentata Within Known Range? N Nearest Occurrence: 719.81 KM 48.24734°N 107.90589°E

Alloperla deminuta Within Known Range? N Nearest Occurrence: 720.75 KM 48.21780°N 107.90392°E

Suwallia teleckojensis Within Known Range? N Nearest Occurrence: 716.22 KM 48.42080°N 107.91406°E

Family: Leuctridae

Leuctra fusca Within Known Range? N Nearest Occurrence: 744.46 KM 49.75393°N 107.52609°E

Family: Nemouridae

Nemoura arctica Within Known Range? N Nearest Occurrence: 721.20 KM 48.25861°N 107.90251°E

Family: Perlodidae

Arcynopteryx compacta Within Known Range? N Nearest Occurrence: 770.06 KM 47.84324°N 107.55299°E

Arcynopteryx polaris Within Known Range? N Nearest Occurrence: 716.22 KM 48.42080°N 107.91406°E

Diura bicaudata Within Known Range? N Nearest Occurrence: 1,610.95 KM 47.21768°N 99.92824°E

Diura majuscula Within Known Range? N Nearest Occurrence: 722.60 KM 48.13287°N 107.91890°E

Isoperla altaica Within Known Range? N Nearest Occurrence: 720.35 KM 48.60182°N 107.84335°E

Isoperla eximia Within Known Range? N Nearest Occurrence: 719.05 KM 48.60182°N 107.84335°E

Isoperla mongolica Within Known Range? N Nearest Occurrence: 731.82 KM 48.09549°N 107.84265°E

Isoperla potanini Within Known Range? N Nearest Occurrence: 1,378.32 KM 50.62324°N 101.87412°E

Skwala pusilla Within Known Range? N Nearest Occurrence: 2,857.97 KM 48.51277°N 88.51107°E

**LOE Rating: Unlikely Total: 2**

Family: Capniidae

Mesocapnia altaica Within Known Range? N Nearest Occurrence: 2,815.13 KM 48.43684°N 88.90094°E

Family: Nemouridae

Nemurella pictetii Within Known Range? N Nearest Occurrence: 1,619.71 KM 51.07896°N 99.70857°E

**Basin:** Pacific Ocean Basin

**Aimags:** Dornod

**Soums:** Gurvanzagal

Freshwater Ecoregion: Argun

Terrestrial Ecoregion: Mongolian-Manchurian Grassland

LOE Ranking Based on Predicted ENM Maps Only

**LOE Rating: Highly Likely Total: 11**

Family: Capniidae

Isocapnia guentheri

Within Known Range? N Nearest Occurrence: 791.67 KM 48.24734 °N 107.90589 °E

Isocapnia sibirica

Within Known Range? N Nearest Occurrence: 801.05 KM 48.09549 °N 107.84265 °E

Family: Chloroperlidae

Haploperla lepnevae

Within Known Range? N Nearest Occurrence: 851.02 KM 49.08636 °N 107.30750 °E

Suwallia kerzhneri

Within Known Range? N Nearest Occurrence: 832.43 KM 49.73695 °N 107.49285 °E

Family: Perlidae

Agnetina cocandica

Within Known Range? N Nearest Occurrence: 987.58 KM 50.06476 °N 106.13388 °E

Agnetina extrema

Within Known Range? N Nearest Occurrence: 800.30 KM 48.09671 °N 107.84928 °E

Paragnetina flavotincta

Within Known Range? N Nearest Occurrence: 985.81 KM 50.06476 °N 106.13388 °E

Family: Perlodidae

Isoperla asiatica

Within Known Range? N Nearest Occurrence: 824.86 KM 49.01829 °N 107.54453 °E

Isoperla lunigera

Within Known Range? N Nearest Occurrence: 801.05 KM 48.09549 °N 107.84265 °E

Isoperla obscura

Within Known Range? N Nearest Occurrence: 925.05 KM 49.72192 °N 106.65562 °E

Family: Pteronarcyidae

Pteronarcys reticulata

Within Known Range? N Nearest Occurrence: 851.02 KM 49.08636 °N 107.30750 °E

**LOE Rating: Likely Total: 8**

Family: Chloroperlidae

Alloperla rostellata

Within Known Range? N Nearest Occurrence: 1,263.09 KM 49.77776 °N 103.60860 °E

Family: Leuctridae

Paraleuctra zapekinae

Within Known Range? N Nearest Occurrence: 792.48 KM 48.14846 °N 107.91267 °E

Family: Nemouridae

Amphinemura borealis

Within Known Range? N Nearest Occurrence: 816.67 KM 49.73130 °N 107.63484 °E

Nemoura cinerea

Within Known Range? N Nearest Occurrence: 830.69 KM 47.96783 °N 107.59278 °E

Family: Perlodidae

Arcynopteryx sajanensis

Within Known Range? N Nearest Occurrence: 1,620.63 KM 51.61397 °N 100.59972 °E

Isoperla kozlovi

Within Known Range? N Nearest Occurrence: 791.83 KM 48.13111 °N 107.92120 °E

Megarcys ochracea

Within Known Range? N Nearest Occurrence: 841.30 KM 47.97108 °N 107.49534 °E

Pictetiella asiatica

Within Known Range? N Nearest Occurrence: 1,626.16 KM 51.65822 °N 100.53000 °E

**LOE Rating: Probable Total: 5**

Family: Capniidae

Isocapnia kudia

Within Known Range? N Nearest Occurrence: 1,714.16 KM 51.25356 °N 99.66687 °E

Family: Chloroperlidae

Alloperla mediata

Within Known Range? N Nearest Occurrence: 1,263.09 KM 49.77776 °N 103.60860 °E

Family: Perlidae

Agnetina brevipennis

Within Known Range? N Nearest Occurrence: 833.12 KM 49.73720 °N 107.48668 °E

Kamimuria exilis

Within Known Range? N Nearest Occurrence: 1,796.95 KM 50.16278 °N 98.84212 °E

Family: Taeniopterygidae

Taenionema japonicum

Within Known Range? N Nearest Occurrence: 861.03 KM 49.05411 °N 107.23175 °E

**WQM Sites:**

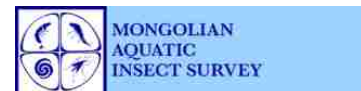
No current Asia Foundation WQM sites in this soum.

Research funded by the National Science Foundation

DEB-BSI #0206674: A Survey of the Aquatic Insects of the Selenge River Basin. P.I.'s: JKGelhaus, JCMorse, BHayford.

DEB # 0743732: Aquatic Insects of the Altai and Hangai Mountain Drainages. P.I.'s: JKGelhaus, JCMorse, CRNelson.

<http://clade.ansp.org/entomology/mongolia/index.html>



**Basin:** Pacific Ocean Basin

**Aimags:** Dornod

**Soums:** Gurvanzagal

Freshwater Ecoregion: Argun

Terrestrial Ecoregion: Mongolian-Manchurian Grassland

LOE Ranking Based on Predicted ENM Maps Only

**LOE Rating: Possible Total: 2**

Family: Nemouridae

Amphinemura standfussi Within Known Range? N Nearest Occurrence: 816.67 KM 49.73130°N 107.63484°E

Family: Perlodidae

Kaszabia nigricauda Within Known Range? N Nearest Occurrence: 791.88 KM 48.25861°N 107.90251°E

**LOE Rating: Predicted Total: 19**

Family: Capniidae

Capnia khulsbagia Within Known Range? N Nearest Occurrence: 1,592.95 KM 51.16116°N 100.75636°E

Capnia nigra Within Known Range? N Nearest Occurrence: 1,589.70 KM 50.92452°N 100.75528°E

Mesocapnia variabilis Within Known Range? N Nearest Occurrence: 789.83 KM 48.42080°N 107.91406°E

Family: Chloroperlidae

Alaskaperla longidentata Within Known Range? N Nearest Occurrence: 791.67 KM 48.24734°N 107.90589°E

Alloperla deminuta Within Known Range? N Nearest Occurrence: 792.33 KM 48.21780°N 107.90392°E

Alloperla joosti Within Known Range? N Nearest Occurrence: 1,317.11 KM 49.21675°N 103.10750°E

Suwallia teleckojensis Within Known Range? N Nearest Occurrence: 789.83 KM 48.42080°N 107.91406°E

Family: Leuctridae

Leuctra fusca Within Known Range? N Nearest Occurrence: 828.89 KM 49.75393°N 107.52609°E

Family: Nemouridae

Nemoura arctica Within Known Range? N Nearest Occurrence: 793.30 KM 48.25861°N 107.90251°E

Nemoura sahlbergi Within Known Range? N Nearest Occurrence: 792.33 KM 48.21780°N 107.90392°E

Family: Perlodidae

Arcynopteryx compacta Within Known Range? N Nearest Occurrence: 838.94 KM 47.84324°N 107.55299°E

Arcynopteryx polaris Within Known Range? N Nearest Occurrence: 789.83 KM 48.42080°N 107.91406°E

Diura bicaudata Within Known Range? N Nearest Occurrence: 1,684.53 KM 47.21768°N 99.92824°E

Diura majuscula Within Known Range? N Nearest Occurrence: 793.48 KM 48.13287°N 107.91890°E

Isoperla altaica Within Known Range? N Nearest Occurrence: 795.70 KM 48.60182°N 107.84335°E

Isoperla eximia Within Known Range? N Nearest Occurrence: 794.27 KM 48.60182°N 107.84335°E

Isoperla mongolica Within Known Range? N Nearest Occurrence: 802.49 KM 48.09549°N 107.84265°E

Isoperla potanini Within Known Range? N Nearest Occurrence: 1,465.14 KM 50.62324°N 101.87412°E

Skwala pusilla Within Known Range? N Nearest Occurrence: 2,938.32 KM 48.51277°N 88.51107°E

**LOE Rating: Unlikely Total: 2**

Family: Capniidae

Mesocapnia altaica Within Known Range? N Nearest Occurrence: 2,895.30 KM 48.43684°N 88.90094°E

Family: Nemouridae

Nemurella pictetii Within Known Range? N Nearest Occurrence: 1,707.11 KM 51.07896°N 99.70857°E

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

Research funded by the National Science Foundation

DEB-BSI #0206674: A Survey of the Aquatic Insects of the Selenge River Basin. P.I.'s: JKGelhaus, JCMorse, BHayford.

DEB # 0743732: Aquatic Insects of the Altai and Hangai Mountain Drainages. P.I.'s: JKGelhaus, JCMorse, CRNelson.

<http://clade.ansp.org/entomology/mongolia/index.html>



**Basin:** Pacific Ocean Basin  
**Aimags:** Dornod  
**Soums:** Khalkhgol

**Freshwater Ecoregion:** Argun

**Terrestrial Ecoregion:** Mongolian-Manchurian Grassland

LOE Ranking Based on Predicted ENM Maps Only

**LOE Rating: Highly Likely Total: 10**

**Family:** Capniidae

Isocapnia guentheri

Within Known Range? N Nearest Occurrence: 1,147.72 KM 48.24734°N 107.90589°E

Isocapnia sibirica

Within Known Range? N Nearest Occurrence: 1,153.13 KM 48.09549°N 107.84265°E

**Family:** Chloroperlidae

Haploperla lepnevae

Within Known Range? N Nearest Occurrence: 1,207.04 KM 47.82258°N 107.33613°E

Suwallia kerzhneri

Within Known Range? N Nearest Occurrence: 1,186.01 KM 48.12416°N 107.54780°E

**Family:** Leuctridae

Paraleuctra zapekinae

Within Known Range? N Nearest Occurrence: 1,145.91 KM 48.14846°N 107.91267°E

**Family:** Perlidae

Agnatina cocandica

Within Known Range? N Nearest Occurrence: 1,378.24 KM 50.06476°N 106.13388°E

Agnatina extrema

Within Known Range? N Nearest Occurrence: 1,152.40 KM 48.09671°N 107.84928°E

**Family:** Perlodidae

Isoperla asiatica

Within Known Range? N Nearest Occurrence: 1,179.65 KM 47.96783°N 107.59278°E

Isoperla lunigera

Within Known Range? N Nearest Occurrence: 1,153.13 KM 48.09549°N 107.84265°E

**Family:** Pteronarcyidae

Pteronarcys reticulata

Within Known Range? N Nearest Occurrence: 1,226.24 KM 49.08636°N 107.30750°E

**LOE Rating: Likely Total: 9**

**Family:** Chloroperlidae

Alloperla mediata

Within Known Range? N Nearest Occurrence: 1,643.90 KM 49.77776°N 103.60860°E

Alloperla rostellata

Within Known Range? N Nearest Occurrence: 1,643.90 KM 49.77776°N 103.60860°E

**Family:** Nemouridae

Nemoura cinerea

Within Known Range? N Nearest Occurrence: 1,179.65 KM 47.96783°N 107.59278°E

**Family:** Perlidae

Paragnetina flavotincta

Within Known Range? N Nearest Occurrence: 1,375.76 KM 50.06476°N 106.13388°E

**Family:** Perlodidae

Arcynopteryx sajanensis

Within Known Range? N Nearest Occurrence: 2,016.95 KM 51.61397°N 100.59972°E

Isoperla kozlovi

Within Known Range? N Nearest Occurrence: 1,144.79 KM 48.13111°N 107.92120°E

Isoperla obscura

Within Known Range? N Nearest Occurrence: 1,310.83 KM 49.72192°N 106.65562°E

Megarcys ochracea

Within Known Range? N Nearest Occurrence: 1,190.47 KM 47.97108°N 107.49534°E

Pictetiella asiatica

Within Known Range? N Nearest Occurrence: 2,022.02 KM 51.65822°N 100.53000°E

**LOE Rating: Probable Total: 5**

**Family:** Capniidae

Isocapnia kudia

Within Known Range? N Nearest Occurrence: 2,104.99 KM 51.25356°N 99.66687°E

**Family:** Nemouridae

Amphinemura borealis

Within Known Range? N Nearest Occurrence: 1,205.11 KM 49.73130°N 107.63484°E

**Family:** Perlidae

Agnatina brevipennis

Within Known Range? N Nearest Occurrence: 1,221.26 KM 49.73720°N 107.48668°E

Kamimuria exilis

Within Known Range? N Nearest Occurrence: 2,176.84 KM 50.16278°N 98.84212°E

**Family:** Taeniopterygidae

Taenionema japonicum

Within Known Range? N Nearest Occurrence: 1,236.15 KM 49.05411°N 107.23175°E

**WQM Sites:**

WQM Sites: # 123 (Nomrog River @ N 46.97625° E 119.35768°) # 124 (Gurvan goliin b River @ N 46.9387° E 119.50595°) # 125 (Degee River @ N 47.10373° E 119.15832°) # 126 (Halh gol River @ N 47.61937° E 118.66873°)



**Basin:** Pacific Ocean Basin  
**Aimags:** Dornod  
**Soums:** Khalkhgol

**Freshwater Ecoregion:** Argun

**Terrestrial Ecoregion:** Mongolian-Manchurian Grassland

LOE Ranking Based on Predicted ENM Maps Only

<b>LOE Rating:</b>	<b>Possible</b>	<b>Total:</b>	<b>2</b>
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**Family:** Nemouridae

*Amphinemura standfussi*      **Within Known Range?** N      **Nearest Occurrence:** 1,205.11 KM      49.73130°N      107.63484 °E

**Family:** Perlodidae

*Kaszabia nigricauda*      **Within Known Range?** N      **Nearest Occurrence:** 1,147.61 KM      48.21780°N      107.90392 °E

<b>LOE Rating:</b>	<b>Predicted</b>	<b>Total:</b>	<b>18</b>
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**Family:** Capniidae

*Capnia nigra*      **Within Known Range?** N      **Nearest Occurrence:** 1,979.19 KM      50.92452°N      100.75528 °E

*Mesocapnia variabilis*      **Within Known Range?** N      **Nearest Occurrence:** 1,151.00 KM      48.42080°N      107.91406 °E

**Family:** Chloroperlidae

*Alaskaperla longidentata*      **Within Known Range?** N      **Nearest Occurrence:** 1,145.91 KM      48.14846°N      107.91267 °E

*Alloperla deminuta*      **Within Known Range?** N      **Nearest Occurrence:** 1,145.91 KM      48.14846°N      107.91267 °E

*Alloperla joosti*      **Within Known Range?** N      **Nearest Occurrence:** 1,689.33 KM      49.21675°N      103.10750 °E

*Suwallia teleckojensis*      **Within Known Range?** N      **Nearest Occurrence:** 1,151.00 KM      48.42080°N      107.91406 °E

**Family:** Leuctridae

*Leuctra fusca*      **Within Known Range?** N      **Nearest Occurrence:** 1,217.43 KM      49.75393°N      107.52609 °E

**Family:** Nemouridae

*Nemoura arctica*      **Within Known Range?** N      **Nearest Occurrence:** 1,147.12 KM      48.13287°N      107.91890 °E

*Nemoura sahlbergi*      **Within Known Range?** N      **Nearest Occurrence:** 1,147.61 KM      48.21780°N      107.90392 °E

**Family:** Perlodidae

*Arcynopteryx compacta*      **Within Known Range?** N      **Nearest Occurrence:** 1,185.28 KM      47.84324°N      107.55299 °E

*Arcynopteryx polaris*      **Within Known Range?** N      **Nearest Occurrence:** 1,151.00 KM      48.42080°N      107.91406 °E

*Diura bicaudata*      **Within Known Range?** N      **Nearest Occurrence:** 2,027.34 KM      47.21768°N      99.92824 °E

*Diura majuscula*      **Within Known Range?** N      **Nearest Occurrence:** 1,147.12 KM      48.13287°N      107.91890 °E

*Isoperla altaica*      **Within Known Range?** N      **Nearest Occurrence:** 1,161.33 KM      48.60182°N      107.84335 °E

*Isoperla eximia*      **Within Known Range?** N      **Nearest Occurrence:** 1,159.25 KM      48.60182°N      107.84335 °E

*Isoperla mongolica*      **Within Known Range?** N      **Nearest Occurrence:** 1,155.20 KM      48.09549°N      107.84265 °E

*Isoperla potanini*      **Within Known Range?** N      **Nearest Occurrence:** 1,814.06 KM      46.73093°N      101.88583 °E

*Skwala pusilla*      **Within Known Range?** N      **Nearest Occurrence:** 3,297.86 KM      48.51277°N      88.51107 °E

<b>LOE Rating:</b>	<b>Unlikely</b>	<b>Total:</b>	<b>3</b>
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**Family:** Capniidae

*Capnia khulsbagia*      **Within Known Range?** N      **Nearest Occurrence:** 1,984.59 KM      50.98944°N      100.71944 °E

*Mesocapnia altaica*      **Within Known Range?** N      **Nearest Occurrence:** 3,254.26 KM      48.43684°N      88.90094 °E

**Family:** Nemouridae

*Nemurella pictetii*      **Within Known Range?** N      **Nearest Occurrence:** 2,096.40 KM      51.07896°N      99.70857 °E





**Basin:** Pacific Ocean Basin  
**Aimags:** Dornod  
**Soums:** Kholonbuir

Freshwater Ecoregion: Argun

Terrestrial Ecoregion: Mongolian-Manchurian Grassland

LOE Ranking Based on Predicted ENM Maps Only

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Highly Likely Total: 9**

Family: Capniidae

Isocapnia guentheri

Within Known Range? N Nearest Occurrence: 571.68 KM 48.24734 °N 107.90589 °E

Isocapnia sibirica

Within Known Range? N Nearest Occurrence: 577.71 KM 48.09549 °N 107.84265 °E

Family: Chloroperlidae

Haploperla lepnevae

Within Known Range? N Nearest Occurrence: 633.42 KM 47.82258 °N 107.33613 °E

Suwallia kerzhneri

Within Known Range? N Nearest Occurrence: 610.54 KM 48.12416 °N 107.54780 °E

Family: Perlidae

Agnetina cocandica

Within Known Range? N Nearest Occurrence: 806.01 KM 50.06476 °N 106.13388 °E

Agnetina extrema

Within Known Range? N Nearest Occurrence: 576.98 KM 48.09671 °N 107.84928 °E

Family: Perlodidae

Isoperla asiatica

Within Known Range? N Nearest Occurrence: 605.00 KM 47.96783 °N 107.59278 °E

Isoperla lunigera

Within Known Range? N Nearest Occurrence: 577.71 KM 48.09549 °N 107.84265 °E

Family: Pteronarcyidae

Pteronarcys reticulata

Within Known Range? N Nearest Occurrence: 650.70 KM 49.08636 °N 107.30750 °E

**LOE Rating: Likely Total: 13**

Family: Capniidae

Isocapnia kudia

Within Known Range? N Nearest Occurrence: 1,531.41 KM 51.25356 °N 99.66687 °E

Family: Chloroperlidae

Alloperla rostellata

Within Known Range? N Nearest Occurrence: 1,068.31 KM 49.77776 °N 103.60860 °E

Family: Leuctridae

Paraleuctra zapekinae

Within Known Range? N Nearest Occurrence: 570.23 KM 48.14846 °N 107.91267 °E

Family: Nemouridae

Amphinemura borealis

Within Known Range? N Nearest Occurrence: 633.42 KM 47.82258 °N 107.33613 °E

Nemoura cinerea

Within Known Range? N Nearest Occurrence: 605.00 KM 47.96783 °N 107.59278 °E

Family: Perlidae

Agnetina brevipennis

Within Known Range? N Nearest Occurrence: 650.52 KM 49.73720 °N 107.48668 °E

Kamimuria exilis

Within Known Range? N Nearest Occurrence: 1,599.50 KM 50.16278 °N 98.84212 °E

Paragnetina flavotincta

Within Known Range? N Nearest Occurrence: 804.56 KM 50.06476 °N 106.13388 °E

Family: Perlodidae

Arcynopteryx sajanensis

Within Known Range? N Nearest Occurrence: 1,444.86 KM 51.61397 °N 100.59972 °E

Isoperla kozlovi

Within Known Range? N Nearest Occurrence: 569.18 KM 48.13111 °N 107.92120 °E

Isoperla obscura

Within Known Range? N Nearest Occurrence: 738.08 KM 49.72192 °N 106.65562 °E

Megarcys ochracea

Within Known Range? N Nearest Occurrence: 615.82 KM 47.97108 °N 107.49534 °E

Pictetiella asiatica

Within Known Range? N Nearest Occurrence: 1,451.08 KM 51.65822 °N 100.53000 °E

**LOE Rating: Probable Total: 2**

Family: Chloroperlidae

Alloperla mediata

Within Known Range? N Nearest Occurrence: 1,068.31 KM 49.77776 °N 103.60860 °E

Family: Taeniopterygidae

Taenionema japonicum

Within Known Range? N Nearest Occurrence: 659.39 KM 49.05411 °N 107.23175 °E

Research funded by the National Science Foundation

DEB-BSI #0206674: A Survey of the Aquatic Insects of the Selenge River Basin. P.I.'s: JKGelhaus, JCMorse, BHayford.

DEB # 0743732: Aquatic Insects of the Altai and Hangai Mountain Drainages. P.I.'s: JKGelhaus, JCMorse, CRNelson.

<http://clade.ansp.org/entomology/mongolia/index.html>



**Basin:** Pacific Ocean Basin  
**Aimags:** Dornod  
**Soums:** Kholonbuir

Freshwater Ecoregion: Argun

Terrestrial Ecoregion: Mongolian-Manchurian Grassland

LOE Ranking Based on Predicted ENM Maps Only

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

<b>LOE Rating:</b> Possible	<b>Total:</b> 5
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Family: Chloroperlidae					
Alloperla joosti	Within Known Range? N	Nearest Occurrence: 1,112.83 KM	49.21675 °N	103.10750 °E	
Family: Nemouridae					
Amphinemura standfussi	Within Known Range? N	Nearest Occurrence: 634.74 KM	49.73130 °N	107.63484 °E	
Family: Perlodidae					
Diura bicaudata	Within Known Range? N	Nearest Occurrence: 1,457.48 KM	47.21768 °N	99.92824 °E	
Isoperla altaica	Within Known Range? N	Nearest Occurrence: 583.81 KM	48.60182 °N	107.84335 °E	
Kaszabia nigricauda	Within Known Range? N	Nearest Occurrence: 571.66 KM	48.21780 °N	107.90392 °E	

<b>LOE Rating:</b> Predicted	<b>Total:</b> 15
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Family: Capniidae					
Capnia nigra	Within Known Range? N	Nearest Occurrence: 1,405.34 KM	50.92452 °N	100.75528 °E	
Mesocapnia variabilis	Within Known Range? N	Nearest Occurrence: 573.54 KM	48.42080 °N	107.91406 °E	
Family: Chloroperlidae					
Alaskaperla longidentata	Within Known Range? N	Nearest Occurrence: 570.23 KM	48.14846 °N	107.91267 °E	
Alloperla deminuta	Within Known Range? N	Nearest Occurrence: 570.23 KM	48.14846 °N	107.91267 °E	
Suwallia teleckojensis	Within Known Range? N	Nearest Occurrence: 573.54 KM	48.42080 °N	107.91406 °E	
Family: Leuctridae					
Leuctra fusca	Within Known Range? N	Nearest Occurrence: 646.97 KM	49.75393 °N	107.52609 °E	
Family: Nemouridae					
Nemoura arctica	Within Known Range? N	Nearest Occurrence: 570.48 KM	48.13287 °N	107.91890 °E	
Nemoura sahlbergi	Within Known Range? N	Nearest Occurrence: 571.66 KM	48.21780 °N	107.90392 °E	
Family: Perlodidae					
Arcynopteryx compacta	Within Known Range? N	Nearest Occurrence: 610.44 KM	47.84324 °N	107.55299 °E	
Arcynopteryx polaris	Within Known Range? N	Nearest Occurrence: 573.54 KM	48.42080 °N	107.91406 °E	
Diura majuscula	Within Known Range? N	Nearest Occurrence: 570.48 KM	48.13287 °N	107.91890 °E	
Isoperla eximia	Within Known Range? N	Nearest Occurrence: 582.76 KM	48.60182 °N	107.84335 °E	
Isoperla mongolica	Within Known Range? N	Nearest Occurrence: 578.75 KM	48.09549 °N	107.84265 °E	
Isoperla potanini	Within Known Range? N	Nearest Occurrence: 1,247.09 KM	46.73093 °N	101.88583 °E	
Skwala pusilla	Within Known Range? N	Nearest Occurrence: 2,723.91 KM	48.51277 °N	88.51107 °E	

<b>LOE Rating:</b> Unlikely	<b>Total:</b> 3
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Family: Capniidae					
Capnia khulsbagia	Within Known Range? N	Nearest Occurrence: 1,410.95 KM	50.98944 °N	100.71944 °E	
Mesocapnia altaica	Within Known Range? N	Nearest Occurrence: 2,680.44 KM	48.43684 °N	88.90094 °E	
Family: Nemouridae					
Nemurella pictetii	Within Known Range? N	Nearest Occurrence: 1,522.27 KM	51.07896 °N	99.70857 °E	



**Basin:** Pacific Ocean Basin  
**Aimags:** Dornod  
**Soums:** Matad

**Freshwater Ecoregion:** Inner Mongolia Endorheic Basins

**Terrestrial Ecoregion:** Mongolian-Manchurian Grassland

LOE Ranking Based on Predicted ENM Maps Only

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Highly Likely Total: 10**

**Family:** Capniidae

Isocapnia guentheri **Within Known Range?** N **Nearest Occurrence:** 895.23 KM 48.24734 °N 107.90589 °E

Isocapnia sibirica **Within Known Range?** N **Nearest Occurrence:** 900.01 KM 48.09549 °N 107.84265 °E

**Family:** Chloroperlidae

Haploperla lepnevae **Within Known Range?** N **Nearest Occurrence:** 952.94 KM 47.82258 °N 107.33613 °E

Suwallia kerzhneri **Within Known Range?** N **Nearest Occurrence:** 932.89 KM 48.12416 °N 107.54780 °E

**Family:** Perlidae

Agnetina cocandica **Within Known Range?** N **Nearest Occurrence:** 1,133.27 KM 50.06476 °N 106.13388 °E

Agnetina extrema **Within Known Range?** N **Nearest Occurrence:** 899.30 KM 48.09671 °N 107.84928 °E

**Family:** Perlodidae

Isoperla asiatica **Within Known Range?** N **Nearest Occurrence:** 926.03 KM 47.96783 °N 107.59278 °E

Isoperla kozlovi **Within Known Range?** N **Nearest Occurrence:** 891.84 KM 48.13111 °N 107.92120 °E

Isoperla lunigera **Within Known Range?** N **Nearest Occurrence:** 900.01 KM 48.09549 °N 107.84265 °E

Isoperla obscura **Within Known Range?** N **Nearest Occurrence:** 1,064.99 KM 49.72192 °N 106.65562 °E

**LOE Rating: Likely Total: 8**

**Family:** Capniidae

Isocapnia kudia **Within Known Range?** N **Nearest Occurrence:** 1,858.39 KM 51.25356 °N 99.66687 °E

**Family:** Chloroperlidae

Alloperla rostellata **Within Known Range?** N **Nearest Occurrence:** 1,394.92 KM 49.77776 °N 103.60860 °E

**Family:** Nemouridae

Amphinemura borealis **Within Known Range?** N **Nearest Occurrence:** 952.94 KM 47.82258 °N 107.33613 °E

**Family:** Perlidae

Agnetina brevipennis **Within Known Range?** N **Nearest Occurrence:** 976.99 KM 49.73720 °N 107.48668 °E

Kamimuria exilis **Within Known Range?** N **Nearest Occurrence:** 1,925.85 KM 50.16278 °N 98.84212 °E

**Family:** Perlodidae

Arcynopteryx sajanensis **Within Known Range?** N **Nearest Occurrence:** 1,772.25 KM 51.61397 °N 100.59972 °E

Megarcys ochracea **Within Known Range?** N **Nearest Occurrence:** 936.82 KM 47.97108 °N 107.49534 °E

**Family:** Taeniopterygidae

Taenionema japonicum **Within Known Range?** N **Nearest Occurrence:** 986.65 KM 49.05411 °N 107.23175 °E

**LOE Rating: Probable Total: 1**

**Family:** Chloroperlidae

Alloperla mediata **Within Known Range?** N **Nearest Occurrence:** 1,394.92 KM 49.77776 °N 103.60860 °E

**LOE Rating: Possible Total: 4**

**Family:** Chloroperlidae

Alloperla joosti **Within Known Range?** N **Nearest Occurrence:** 1,438.00 KM 49.21675 °N 103.10750 °E

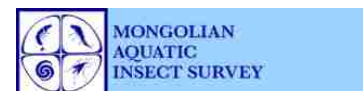
**Family:** Perlodidae

Diura bicaudata **Within Known Range?** N **Nearest Occurrence:** 1,772.12 KM 47.21768 °N 99.92824 °E

Isoperla altaica **Within Known Range?** N **Nearest Occurrence:** 909.99 KM 48.60182 °N 107.84335 °E

Kaszabia nigricauda **Within Known Range?** N **Nearest Occurrence:** 895.00 KM 48.21780 °N 107.90392 °E

Research funded by the National Science Foundation  
 DEB-BSI #0206674: A Survey of the Aquatic Insects of the Selenge River Basin. P.I.'s: JKGelhaus, JCMorse, BHayford.  
 DEB # 0743732: Aquatic Insects of the Altai and Hangai Mountain Drainages. P.I.'s: JKGelhaus, JCMorse, CRNelson.  
<http://clade.ansp.org/entomology/mongolia/index.html>



**Basin:** Pacific Ocean Basin  
**Aimags:** Dornod  
**Soums:** Matad

**Freshwater Ecoregion:** Inner Mongolia Endorheic Basins

**Terrestrial Ecoregion:** Mongolian-Manchurian Grassland

LOE Ranking Based on Predicted ENM Maps Only

<b>LOE Rating:</b>	<b>Predicted</b>	<b>Total:</b>	<b>14</b>
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**Family:** Capniidae

Capnia nigra      **Within Known Range?** N      **Nearest Occurrence:** 1,732.31 KM      50.92452 °N      100.75528 °E

Mesocapnia variabilis      **Within Known Range?** N      **Nearest Occurrence:** 898.82 KM      48.42080 °N      107.91406 °E

**Family:** Chloroperlidae

Alloperla deminuta      **Within Known Range?** N      **Nearest Occurrence:** 893.02 KM      48.14846 °N      107.91267 °E

Suwallia teleckojensis      **Within Known Range?** N      **Nearest Occurrence:** 898.82 KM      48.42080 °N      107.91406 °E

**Family:** Leuctridae

Leuctra fusca      **Within Known Range?** N      **Nearest Occurrence:** 973.37 KM      49.75393 °N      107.52609 °E

**Family:** Nemouridae

Amphinemura standfussi      **Within Known Range?** N      **Nearest Occurrence:** 961.10 KM      49.73130 °N      107.63484 °E

Nemoura arctica      **Within Known Range?** N      **Nearest Occurrence:** 893.73 KM      48.13287 °N      107.91890 °E

**Family:** Perlodidae

Arcynopteryx compacta      **Within Known Range?** N      **Nearest Occurrence:** 930.81 KM      47.84324 °N      107.55299 °E

Arcynopteryx polaris      **Within Known Range?** N      **Nearest Occurrence:** 898.82 KM      48.42080 °N      107.91406 °E

Diura majuscula      **Within Known Range?** N      **Nearest Occurrence:** 893.73 KM      48.13287 °N      107.91890 °E

Isoperla eximia      **Within Known Range?** N      **Nearest Occurrence:** 908.35 KM      48.60182 °N      107.84335 °E

Isoperla mongolica      **Within Known Range?** N      **Nearest Occurrence:** 901.64 KM      48.09549 °N      107.84265 °E

Isoperla potanini      **Within Known Range?** N      **Nearest Occurrence:** 1,558.24 KM      46.73093 °N      101.88583 °E

Skwala pusilla      **Within Known Range?** N      **Nearest Occurrence:** 3,043.28 KM      48.51277 °N      88.51107 °E

<b>LOE Rating:</b>	<b>Unlikely</b>	<b>Total:</b>	<b>2</b>
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**Family:** Capniidae

Capnia khulsbagia      **Within Known Range?** N      **Nearest Occurrence:** 1,737.93 KM      50.98944 °N      100.71944 °E

Mesocapnia altaica      **Within Known Range?** N      **Nearest Occurrence:** 2,999.64 KM      48.43684 °N      88.90094 °E



**Basin:** Pacific Ocean Basin  
**Aimags:** Dornod  
**Soums:** Sergelen

Freshwater Ecoregion: Argun

Terrestrial Ecoregion: Mongolian-Manchurian Grassland

LOE Ranking Based on Predicted ENM Maps Only

<b>LOE Rating:</b>	<b>Highly Likely</b>	<b>Total:</b>	<b>11</b>
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Family: Capniidae

Isocapnia guentheri

Within Known Range? N Nearest Occurrence: 690.33 KM 48.24734 °N 107.90589 °E

Isocapnia sibirica

Within Known Range? N Nearest Occurrence: 698.59 KM 48.09549 °N 107.84265 °E

Family: Chloroperlidae

Haploperla lepnevae

Within Known Range? N Nearest Occurrence: 757.00 KM 49.08636 °N 107.30750 °E

Suwallia kerzhneri

Within Known Range? N Nearest Occurrence: 730.94 KM 48.12416 °N 107.54780 °E

Family: Perlidae

Agnetina cocandica

Within Known Range? N Nearest Occurrence: 901.29 KM 50.06476 °N 106.13388 °E

Agnetina extrema

Within Known Range? N Nearest Occurrence: 697.84 KM 48.09671 °N 107.84928 °E

Paragnetina flavotincta

Within Known Range? N Nearest Occurrence: 899.66 KM 50.06476 °N 106.13388 °E

Family: Perlodidae

Isoperla asiatica

Within Known Range? N Nearest Occurrence: 727.54 KM 47.96783 °N 107.59278 °E

Isoperla lunigera

Within Known Range? N Nearest Occurrence: 698.59 KM 48.09549 °N 107.84265 °E

Isoperla obscura

Within Known Range? N Nearest Occurrence: 836.41 KM 49.72192 °N 106.65562 °E

Family: Pteronarcyidae

Pteronarcys reticulata

Within Known Range? N Nearest Occurrence: 757.00 KM 49.08636 °N 107.30750 °E

<b>LOE Rating:</b>	<b>Likely</b>	<b>Total:</b>	<b>13</b>
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Family: Capniidae

Isocapnia kudia

Within Known Range? N Nearest Occurrence: 1,629.52 KM 51.25356 °N 99.66687 °E

Family: Chloroperlidae

Alloperla mediata

Within Known Range? N Nearest Occurrence: 1,172.78 KM 49.77776 °N 103.60860 °E

Alloperla rostellata

Within Known Range? N Nearest Occurrence: 1,172.78 KM 49.77776 °N 103.60860 °E

Family: Leuctridae

Paraleuctra zapekinae

Within Known Range? N Nearest Occurrence: 690.36 KM 48.14846 °N 107.91267 °E

Family: Nemouridae

Amphinemura borealis

Within Known Range? N Nearest Occurrence: 729.18 KM 49.73130 °N 107.63484 °E

Nemoura cinerea

Within Known Range? N Nearest Occurrence: 727.54 KM 47.96783 °N 107.59278 °E

Family: Perlidae

Agnetina brevipennis

Within Known Range? N Nearest Occurrence: 745.51 KM 49.73720 °N 107.48668 °E

Kamimuria exilis

Within Known Range? N Nearest Occurrence: 1,706.52 KM 50.16278 °N 98.84212 °E

Family: Perlodidae

Arcynopteryx sajanensis

Within Known Range? N Nearest Occurrence: 1,538.62 KM 51.61397 °N 100.59972 °E

Isoperla kozlovi

Within Known Range? N Nearest Occurrence: 689.57 KM 48.13111 °N 107.92120 °E

Megarcys ochracea

Within Known Range? N Nearest Occurrence: 738.26 KM 47.97108 °N 107.49534 °E

Pictetiella asiatica

Within Known Range? N Nearest Occurrence: 1,544.46 KM 51.65822 °N 100.53000 °E

Family: Taeniopterygidae

Taenionema japonicum

Within Known Range? N Nearest Occurrence: 766.55 KM 49.05411 °N 107.23175 °E

Research funded by the National Science Foundation

DEB-BSI #0206674: A Survey of the Aquatic Insects of the Selenge River Basin. P.I.'s: JKGelhaus, JCMorse, BHayford.

DEB # 0743732: Aquatic Insects of the Altai and Hangai Mountain Drainages. P.I.'s: JKGelhaus, JCMorse, CRNelson.

<http://clade.ansp.org/entomology/mongolia/index.html>



**Basin:** Pacific Ocean Basin  
**Aimags:** Dornod  
**Soums:** Sergelen

Freshwater Ecoregion: Argun

Terrestrial Ecoregion: Mongolian-Manchurian Grassland

LOE Ranking Based on Predicted ENM Maps Only

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

<b>LOE Rating:</b>	<b>Possible</b>	<b>Total:</b>	<b>5</b>
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Family: Chloroperlidae					
Alloperla joosti	Within Known Range? N	Nearest Occurrence:	1,223.25 KM	49.21675 °N	103.10750 °E
Family: Nemouridae					
Amphinemura standfussi	Within Known Range? N	Nearest Occurrence:	729.18 KM	49.73130 °N	107.63484 °E
Family: Perlodidae					
Diura bicaudata	Within Known Range? N	Nearest Occurrence:	1,582.36 KM	47.21768 °N	99.92824 °E
Isoperla altaica	Within Known Range? N	Nearest Occurrence:	697.17 KM	48.60182 °N	107.84335 °E
Kaszabia nigricauda	Within Known Range? N	Nearest Occurrence:	690.62 KM	48.25861 °N	107.90251 °E

<b>LOE Rating:</b>	<b>Predicted</b>	<b>Total:</b>	<b>16</b>
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Family: Capniidae					
Capnia khulsbagia	Within Known Range? N	Nearest Occurrence:	1,508.74 KM	51.16116 °N	100.75636 °E
Capnia nigra	Within Known Range? N	Nearest Occurrence:	1,504.21 KM	50.92452 °N	100.75528 °E
Mesocapnia variabilis	Within Known Range? N	Nearest Occurrence:	689.72 KM	48.42080 °N	107.91406 °E
Family: Chloroperlidae					
Alaskaperla longidentata	Within Known Range? N	Nearest Occurrence:	690.33 KM	48.24734 °N	107.90589 °E
Alloperla deminuta	Within Known Range? N	Nearest Occurrence:	690.36 KM	48.14846 °N	107.91267 °E
Suwallia teleckojensis	Within Known Range? N	Nearest Occurrence:	689.72 KM	48.42080 °N	107.91406 °E
Family: Leuctridae					
Leuctra fusca	Within Known Range? N	Nearest Occurrence:	741.50 KM	49.75393 °N	107.52609 °E
Family: Nemouridae					
Nemoura arctica	Within Known Range? N	Nearest Occurrence:	691.06 KM	48.13287 °N	107.91890 °E
Nemoura sahlbergi	Within Known Range? N	Nearest Occurrence:	690.76 KM	48.21780 °N	107.90392 °E
Family: Perlodidae					
Arcynopteryx compacta	Within Known Range? N	Nearest Occurrence:	734.80 KM	47.84324 °N	107.55299 °E
Arcynopteryx polaris	Within Known Range? N	Nearest Occurrence:	689.72 KM	48.42080 °N	107.91406 °E
Diura majuscula	Within Known Range? N	Nearest Occurrence:	691.06 KM	48.13287 °N	107.91890 °E
Isoperla eximia	Within Known Range? N	Nearest Occurrence:	695.91 KM	48.60182 °N	107.84335 °E
Isoperla mongolica	Within Known Range? N	Nearest Occurrence:	699.86 KM	48.09549 °N	107.84265 °E
Isoperla potanini	Within Known Range? N	Nearest Occurrence:	1,376.10 KM	46.73093 °N	101.88583 °E
Skwala pusilla	Within Known Range? N	Nearest Occurrence:	2,841.81 KM	48.51277 °N	88.51107 °E

<b>LOE Rating:</b>	<b>Unlikely</b>	<b>Total:</b>	<b>2</b>
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Family: Capniidae					
Mesocapnia altaica	Within Known Range? N	Nearest Occurrence:	2,798.59 KM	48.43684 °N	88.90094 °E
Family: Nemouridae					
Nemurella pictetii	Within Known Range? N	Nearest Occurrence:	1,621.62 KM	51.07896 °N	99.70857 °E



**Basin:** Pacific Ocean Basin

**Aimags:** Dornod

**Soums:** Tsagaan-ovoo

Freshwater Ecoregion: Argun

Terrestrial Ecoregion: Mongolian-Manchurian Grassland

LOE Ranking Based on Predicted ENM Maps Only

**LOE Rating: Highly Likely Total: 11**

Family: Capniidae

Isocapnia guentheri

Within Known Range? N Nearest Occurrence: 591.89 KM 48.24734°N 107.90589°E

Isocapnia sibirica

Within Known Range? N Nearest Occurrence: 599.73 KM 48.09549°N 107.84265°E

Family: Chloroperlidae

Haploperla lepnevae

Within Known Range? N Nearest Occurrence: 658.29 KM 47.82258°N 107.33613°E

Suwallia kerzhneri

Within Known Range? N Nearest Occurrence: 632.22 KM 48.12416°N 107.54780°E

Family: Perlidae

Agnetina cocandica

Within Known Range? N Nearest Occurrence: 810.16 KM 50.06476°N 106.13388°E

Agnetina extrema

Within Known Range? N Nearest Occurrence: 598.99 KM 48.09671°N 107.84928°E

Paragnetina flavotincta

Within Known Range? N Nearest Occurrence: 808.70 KM 50.06476°N 106.13388°E

Family: Perlodidae

Isoperla asiatica

Within Known Range? N Nearest Occurrence: 628.43 KM 47.96783°N 107.59278°E

Isoperla kozlovi

Within Known Range? N Nearest Occurrence: 590.79 KM 48.13111°N 107.92120°E

Isoperla lunigera

Within Known Range? N Nearest Occurrence: 599.73 KM 48.09549°N 107.84265°E

Family: Pteronarcyidae

Pteronarcys reticulata

Within Known Range? N Nearest Occurrence: 661.90 KM 49.08636°N 107.30750°E

**LOE Rating: Likely Total: 11**

Family: Capniidae

Isocapnia kudia

Within Known Range? N Nearest Occurrence: 1,538.20 KM 51.25356°N 99.66687°E

Family: Chloroperlidae

Alloperla rostellata

Within Known Range? N Nearest Occurrence: 1,078.86 KM 49.77776°N 103.60860°E

Family: Leuctridae

Paraleuctra zapekinae

Within Known Range? N Nearest Occurrence: 591.63 KM 48.14846°N 107.91267°E

Family: Nemouridae

Amphinemura borealis

Within Known Range? N Nearest Occurrence: 638.04 KM 49.73130°N 107.63484°E

Nemoura cinerea

Within Known Range? N Nearest Occurrence: 628.43 KM 47.96783°N 107.59278°E

Family: Perlidae

Agnetina brevipennis

Within Known Range? N Nearest Occurrence: 654.21 KM 49.73720°N 107.48668°E

Kamimuria exilis

Within Known Range? N Nearest Occurrence: 1,611.97 KM 50.16278°N 98.84212°E

Family: Perlodidae

Arcynopteryx sajanensis

Within Known Range? N Nearest Occurrence: 1,448.82 KM 51.61397°N 100.59972°E

Isoperla obscura

Within Known Range? N Nearest Occurrence: 744.14 KM 49.72192°N 106.65562°E

Megarcys ochracea

Within Known Range? N Nearest Occurrence: 639.18 KM 47.97108°N 107.49534°E

Pictetiella asiatica

Within Known Range? N Nearest Occurrence: 1,454.91 KM 51.65822°N 100.53000°E

**LOE Rating: Probable Total: 2**

Family: Chloroperlidae

Alloperla mediata

Within Known Range? N Nearest Occurrence: 1,078.86 KM 49.77776°N 103.60860°E

Family: Taeniopterygidae

Taenionema japonicum

Within Known Range? N Nearest Occurrence: 671.10 KM 49.05411°N 107.23175°E

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

Research funded by the National Science Foundation

DEB-BSI #0206674: A Survey of the Aquatic Insects of the Selenge River Basin. P.I.'s: JKGelhaus, JCMorse, BHayford.

DEB # 0743732: Aquatic Insects of the Altai and Hangai Mountain Drainages. P.I.'s: JKGelhaus, JCMorse, CRNelson.

<http://clade.ansp.org/entomology/mongolia/index.html>



**Basin:** Pacific Ocean Basin

**Aimags:** Dornod

**Soums:** Tsagaan-ovoo

Freshwater Ecoregion: Argun

Terrestrial Ecoregion: Mongolian-Manchurian Grassland

LOE Ranking Based on Predicted ENM Maps Only

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Possible Total: 4**

Family: Chloroperlidae

Alloperla joosti Within Known Range? N Nearest Occurrence: 1,127.49 KM 49.21675 °N 103.10750 °E

Family: Nemouridae

Amphinemura standfussi Within Known Range? N Nearest Occurrence: 638.04 KM 49.73130 °N 107.63484 °E

Family: Perlodidae

Diura bicaudata Within Known Range? N Nearest Occurrence: 1,483.22 KM 47.21768 °N 99.92824 °E

Kaszabia nigricauda Within Known Range? N Nearest Occurrence: 592.23 KM 48.25861 °N 107.90251 °E

**LOE Rating: Predicted Total: 16**

Family: Capniidae

Capnia nigra Within Known Range? N Nearest Occurrence: 1,412.53 KM 50.92452 °N 100.75528 °E

Mesocapnia variabilis Within Known Range? N Nearest Occurrence: 591.69 KM 48.42080 °N 107.91406 °E

Family: Chloroperlidae

Alaskaperla longidentata Within Known Range? N Nearest Occurrence: 591.63 KM 48.14846 °N 107.91267 °E

Alloperla deminuta Within Known Range? N Nearest Occurrence: 591.63 KM 48.14846 °N 107.91267 °E

Suwallia teleckojensis Within Known Range? N Nearest Occurrence: 591.69 KM 48.42080 °N 107.91406 °E

Family: Leuctridae

Leuctra fusca Within Known Range? N Nearest Occurrence: 650.36 KM 49.75393 °N 107.52609 °E

Family: Nemouridae

Nemoura arctica Within Known Range? N Nearest Occurrence: 592.11 KM 48.13287 °N 107.91890 °E

Nemoura sahlbergi Within Known Range? N Nearest Occurrence: 592.24 KM 48.21780 °N 107.90392 °E

Family: Perlodidae

Arcynopteryx compacta Within Known Range? N Nearest Occurrence: 635.26 KM 47.84324 °N 107.55299 °E

Arcynopteryx polaris Within Known Range? N Nearest Occurrence: 591.69 KM 48.42080 °N 107.91406 °E

Diura majuscula Within Known Range? N Nearest Occurrence: 592.11 KM 48.13287 °N 107.91890 °E

Isoperla altaica Within Known Range? N Nearest Occurrence: 599.84 KM 48.60182 °N 107.84335 °E

Isoperla eximia Within Known Range? N Nearest Occurrence: 598.75 KM 48.60182 °N 107.84335 °E

Isoperla mongolica Within Known Range? N Nearest Occurrence: 600.82 KM 48.09549 °N 107.84265 °E

Isoperla potanini Within Known Range? N Nearest Occurrence: 1,276.18 KM 46.73093 °N 101.88583 °E

Skwala pusilla Within Known Range? N Nearest Occurrence: 2,744.36 KM 48.51277 °N 88.51107 °E

**LOE Rating: Unlikely Total: 3**

Family: Capniidae

Capnia khulsbagia Within Known Range? N Nearest Occurrence: 1,417.78 KM 51.16116 °N 100.75636 °E

Mesocapnia altaica Within Known Range? N Nearest Occurrence: 2,701.07 KM 48.43684 °N 88.90094 °E

Family: Nemouridae

Nemurella pictetii Within Known Range? N Nearest Occurrence: 1,529.83 KM 51.07896 °N 99.70857 °E



**Basin:** Pacific Ocean Basin  
**Aimags:** Govisumber  
**Soums:** Bayantal

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**Freshwater Ecoregion:** Inner Mongolia Endorheic Basins

**Terrestrial Ecoregion:** Mongolian-Manchurian Grassland

LOE Ranking Based on Predicted ENM Maps Only

**LOE Rating: Highly Likely Total: 6**

**Family:** Capniidae

Isocapnia guentheri **Within Known Range?** N **Nearest Occurrence:** 168.14 KM 47.99158°N 107.46116 °E

Isocapnia sibirica **Within Known Range?** N **Nearest Occurrence:** 161.17 KM 48.09549°N 107.84265 °E

**Family:** Chloroperlidae

Haploperla lepnevae **Within Known Range?** N **Nearest Occurrence:** 161.00 KM 47.82258°N 107.33613 °E

Suwallia kerzhneri **Within Known Range?** N **Nearest Occurrence:** 176.29 KM 48.12416°N 107.54780 °E

**Family:** Perlidae

Agnetina extrema **Within Known Range?** N **Nearest Occurrence:** 161.09 KM 48.09671°N 107.84928 °E

**Family:** Pteronarcyidae

Pteronarcys reticulata **Within Known Range?** N **Nearest Occurrence:** 284.72 KM 49.08636°N 107.30750 °E

**LOE Rating: Likely Total: 15**

**Family:** Capniidae

Isocapnia kudia **Within Known Range?** N **Nearest Occurrence:** 1,079.29 KM 51.25356°N 99.66687 °E

**Family:** Chloroperlidae

Alloperla rostellata **Within Known Range?** N **Nearest Occurrence:** 618.86 KM 49.77776°N 103.60860 °E

**Family:** Leuctridae

Paraleuctra zapekinae **Within Known Range?** N **Nearest Occurrence:** 161.09 KM 48.09671°N 107.84928 °E

**Family:** Nemouridae

Amphinemura borealis **Within Known Range?** N **Nearest Occurrence:** 161.00 KM 47.82258°N 107.33613 °E

Nemoura cinerea **Within Known Range?** N **Nearest Occurrence:** 158.57 KM 47.96783°N 107.59278 °E

**Family:** Perlidae

Agnetina cocandica **Within Known Range?** N **Nearest Occurrence:** 437.53 KM 49.16354°N 105.18880 °E

Kamimuria exilis **Within Known Range?** N **Nearest Occurrence:** 1,115.70 KM 50.16278°N 98.84212 °E

**Family:** Perlodidae

Arcynopteryx sajanensis **Within Known Range?** N **Nearest Occurrence:** 1,011.79 KM 51.61397°N 100.59972 °E

Isoperla asiatica **Within Known Range?** N **Nearest Occurrence:** 158.57 KM 47.96783°N 107.59278 °E

Isoperla kozlovi **Within Known Range?** N **Nearest Occurrence:** 162.72 KM 48.13111°N 107.92120 °E

Isoperla lunigera **Within Known Range?** N **Nearest Occurrence:** 159.60 KM 47.82110°N 107.35422 °E

Kaszabia nigricauda **Within Known Range?** N **Nearest Occurrence:** 158.57 KM 47.96783°N 107.59278 °E

Megarcys ochracea **Within Known Range?** N **Nearest Occurrence:** 164.22 KM 47.97108°N 107.49534 °E

Pictetiella asiatica **Within Known Range?** N **Nearest Occurrence:** 1,019.14 KM 51.65822°N 100.53000 °E

**Family:** Taeniopterygidae

Taenionema japonicum **Within Known Range?** N **Nearest Occurrence:** 285.19 KM 49.05411°N 107.23175 °E

**LOE Rating: Probable Total: 3**

**Family:** Perlidae

Agnetina brevipennis **Within Known Range?** N **Nearest Occurrence:** 284.72 KM 49.08636°N 107.30750 °E

**Family:** Perlodidae

Diura bicaudata **Within Known Range?** N **Nearest Occurrence:** 926.65 KM 47.21768°N 99.92824 °E

Isoperla obscura **Within Known Range?** N **Nearest Occurrence:** 357.05 KM 47.85250°N 105.25567 °E

Research funded by the National Science Foundation  
 DEB-BSI #0206674: A Survey of the Aquatic Insects of the Selenge River Basin. P.I.'s: JKGelhaus, JCMorse, BHayford.  
 DEB # 0743732: Aquatic Insects of the Altai and Hangai Mountain Drainages. P.I.'s: JKGelhaus, JCMorse, CRNelson.  
<http://clade.ansp.org/entomology/mongolia/index.html>



**Basin:** Pacific Ocean Basin  
**Aimags:** Govisumber  
**Soums:** Bayantal

**Freshwater Ecoregion:** Inner Mongolia Endorheic Basins

**Terrestrial Ecoregion:** Mongolian-Manchurian Grassland

LOE Ranking Based on Predicted ENM Maps Only

<b>LOE Rating:</b>	<b>Possible</b>	<b>Total:</b>	<b>2</b>
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**Family:** Chloroperlidae

Alloperla joosti      **Within Known Range?** N      **Nearest Occurrence:** 636.34 KM      49.21675 °N      103.10750 °E

Alloperla mediata      **Within Known Range?** N      **Nearest Occurrence:** 618.86 KM      49.77776 °N      103.60860 °E

<b>LOE Rating:</b>	<b>Predicted</b>	<b>Total:</b>	<b>18</b>
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**Family:** Capniidae

Capnia nigra      **Within Known Range?** N      **Nearest Occurrence:** 955.73 KM      50.92452 °N      100.75528 °E

Mesocapnia variabilis      **Within Known Range?** N      **Nearest Occurrence:** 194.66 KM      48.42080 °N      107.91406 °E

**Family:** Chloroperlidae

Alaskaperla longidentata      **Within Known Range?** N      **Nearest Occurrence:** 161.74 KM      48.07956 °N      107.77729 °E

Alloperla deminuta      **Within Known Range?** N      **Nearest Occurrence:** 158.57 KM      47.96783 °N      107.59278 °E

Suwallia teleckojensis      **Within Known Range?** N      **Nearest Occurrence:** 174.27 KM      48.16668 °N      107.69548 °E

**Family:** Leuctridae

Leuctra fusca      **Within Known Range?** N      **Nearest Occurrence:** 285.48 KM      49.08643 °N      107.28952 °E

**Family:** Nemouridae

Amphinemura standfussi      **Within Known Range?** N      **Nearest Occurrence:** 343.03 KM      49.73130 °N      107.63484 °E

Nemoura arctica      **Within Known Range?** N      **Nearest Occurrence:** 161.46 KM      48.09549 °N      107.84265 °E

Nemoura sahlbergi      **Within Known Range?** N      **Nearest Occurrence:** 172.53 KM      48.21780 °N      107.90392 °E

**Family:** Perlidae

Paragnetina flavotincta      **Within Known Range?** N      **Nearest Occurrence:** 436.74 KM      49.16354 °N      105.18880 °E

**Family:** Perlodidae

Arcynopteryx compacta      **Within Known Range?** N      **Nearest Occurrence:** 149.05 KM      47.84324 °N      107.55299 °E

Arcynopteryx polaris      **Within Known Range?** N      **Nearest Occurrence:** 194.66 KM      48.42080 °N      107.91406 °E

Diura majuscula      **Within Known Range?** N      **Nearest Occurrence:** 161.38 KM      48.09671 °N      107.84928 °E

Isoperla altaica      **Within Known Range?** N      **Nearest Occurrence:** 215.98 KM      48.60182 °N      107.84335 °E

Isoperla eximia      **Within Known Range?** N      **Nearest Occurrence:** 215.58 KM      48.60182 °N      107.84335 °E

Isoperla mongolica      **Within Known Range?** N      **Nearest Occurrence:** 161.46 KM      48.09549 °N      107.84265 °E

Isoperla potanini      **Within Known Range?** N      **Nearest Occurrence:** 708.90 KM      46.73093 °N      101.88583 °E

Skwala pusilla      **Within Known Range?** N      **Nearest Occurrence:** 2,201.37 KM      48.51277 °N      88.51107 °E

<b>LOE Rating:</b>	<b>Unlikely</b>	<b>Total:</b>	<b>3</b>
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**Family:** Capniidae

Capnia khulsbagia      **Within Known Range?** N      **Nearest Occurrence:** 962.74 KM      50.98944 °N      100.71944 °E

Mesocapnia altaica      **Within Known Range?** N      **Nearest Occurrence:** 2,157.51 KM      48.43684 °N      88.90094 °E

**Family:** Nemouridae

Nemurella pictetii      **Within Known Range?** N      **Nearest Occurrence:** 1,066.24 KM      51.07896 °N      99.70857 °E

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.



**Basin:** Pacific Ocean Basin  
**Aimags:** Khentii  
**Soums:** Batnorov

**Freshwater Ecoregion:** Argun  
**Terrestrial Ecoregion:** Daurian Forest Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

LOE Ranking Based on Predicted ENM Maps Only

**LOE Rating: Highly Likely Total: 11**

<b>Family: Capniidae</b>					
Isocapnia guentheri	Within Known Range? N	Nearest Occurrence:	395.20 KM	48.24734 °N	107.90589 °E
Isocapnia sibirica	Within Known Range? N	Nearest Occurrence:	401.18 KM	48.09549 °N	107.84265 °E
<b>Family: Chloroperlidae</b>					
Alloperla rostellata	Within Known Range? N	Nearest Occurrence:	894.09 KM	49.77776 °N	103.60860 °E
Haploperla lepnevae	Within Known Range? N	Nearest Occurrence:	457.33 KM	47.82258 °N	107.33613 °E
Suwallia kerzhneri	Within Known Range? N	Nearest Occurrence:	434.01 KM	48.12416 °N	107.54780 °E
<b>Family: Leuctridae</b>					
Paraleuctra zapekinae	Within Known Range? N	Nearest Occurrence:	393.70 KM	48.14846 °N	107.91267 °E
<b>Family: Perlidae</b>					
Agnetina extrema	Within Known Range? N	Nearest Occurrence:	400.45 KM	48.09671 °N	107.84928 °E
<b>Family: Perlodidae</b>					
Isoperla asiatica	Within Known Range? N	Nearest Occurrence:	428.61 KM	47.96783 °N	107.59278 °E
Isoperla kozlovi	Within Known Range? N	Nearest Occurrence:	392.65 KM	48.13111 °N	107.92120 °E
Isoperla lunigera	Within Known Range? N	Nearest Occurrence:	401.18 KM	48.09549 °N	107.84265 °E
<b>Family: Pteronarcyidae</b>					
Pteronarcys reticulata	Within Known Range? N	Nearest Occurrence:	477.15 KM	49.08636 °N	107.30750 °E

**LOE Rating: Likely Total: 10**

<b>Family: Capniidae</b>					
Isocapnia kudia	Within Known Range? N	Nearest Occurrence:	1,358.70 KM	51.25356 °N	99.66687 °E
<b>Family: Nemouridae</b>					
Amphinemura borealis	Within Known Range? N	Nearest Occurrence:	457.33 KM	47.82258 °N	107.33613 °E
Nemoura cinerea	Within Known Range? N	Nearest Occurrence:	428.61 KM	47.96783 °N	107.59278 °E
<b>Family: Perlidae</b>					
Agnetina brevipennis	Within Known Range? N	Nearest Occurrence:	477.15 KM	49.08636 °N	107.30750 °E
Agnetina cocandica	Within Known Range? N	Nearest Occurrence:	636.50 KM	50.06476 °N	106.13388 °E
Kamimuria exilis	Within Known Range? N	Nearest Occurrence:	1,423.81 KM	50.16278 °N	98.84212 °E
<b>Family: Perlodidae</b>					
Arcynopteryx sajanensis	Within Known Range? N	Nearest Occurrence:	1,273.80 KM	51.61397 °N	100.59972 °E
Kaszabia nigricauda	Within Known Range? N	Nearest Occurrence:	395.16 KM	48.21780 °N	107.90392 °E
Megarcys ochracea	Within Known Range? N	Nearest Occurrence:	439.43 KM	47.97108 °N	107.49534 °E
Pictetiella asiatica	Within Known Range? N	Nearest Occurrence:	1,280.41 KM	51.65822 °N	100.53000 °E

**LOE Rating: Probable Total: 3**

<b>Family: Chloroperlidae</b>					
Alloperla mediata	Within Known Range? N	Nearest Occurrence:	894.09 KM	49.77776 °N	103.60860 °E
<b>Family: Perlodidae</b>					
Isoperla obscura	Within Known Range? N	Nearest Occurrence:	567.66 KM	49.72192 °N	106.65562 °E
<b>Family: Taeniopterygidae</b>					
Taenionema japonicum	Within Known Range? N	Nearest Occurrence:	485.22 KM	49.05411 °N	107.23175 °E



**Basin:** Pacific Ocean Basin  
**Aimags:** Khentii  
**Soums:** Batnorov

Freshwater Ecoregion: Argun  
 Terrestrial Ecoregion: Daurian Forest Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

LOE Ranking Based on Predicted ENM Maps Only

**LOE Rating: Possible Total: 4**

Family: Chloroperlidae					
Alloperla joosti	Within Known Range? N	Nearest Occurrence:	937.03 KM	49.21675 °N	103.10750 °E
Family: Nemouridae					
Amphinemura standfussi	Within Known Range? N	Nearest Occurrence:	467.62 KM	49.73130 °N	107.63484 °E
Nemoura sahlbergi	Within Known Range? N	Nearest Occurrence:	395.16 KM	48.21780 °N	107.90392 °E
Family: Perlidae					
Paragnetina flavotincta	Within Known Range? N	Nearest Occurrence:	635.35 KM	50.06476 °N	106.13388 °E

**LOE Rating: Predicted Total: 16**

Family: Capniidae					
Capnia nigra	Within Known Range? N	Nearest Occurrence:	1,232.51 KM	50.92452 °N	100.75528 °E
Mesocapnia variabilis	Within Known Range? N	Nearest Occurrence:	397.07 KM	48.42080 °N	107.91406 °E
Family: Chloroperlidae					
Alaskaperla longidentata	Within Known Range? N	Nearest Occurrence:	393.70 KM	48.14846 °N	107.91267 °E
Alloperla deminuta	Within Known Range? N	Nearest Occurrence:	393.70 KM	48.14846 °N	107.91267 °E
Suwallia teleckojensis	Within Known Range? N	Nearest Occurrence:	397.07 KM	48.42080 °N	107.91406 °E
Family: Leuctridae					
Leuctra fusca	Within Known Range? N	Nearest Occurrence:	479.07 KM	49.08643 °N	107.28952 °E
Family: Nemouridae					
Nemoura arctica	Within Known Range? N	Nearest Occurrence:	393.62 KM	48.13287 °N	107.91890 °E
Family: Perlodidae					
Arcynopteryx compacta	Within Known Range? N	Nearest Occurrence:	433.98 KM	47.84324 °N	107.55299 °E
Arcynopteryx polaris	Within Known Range? N	Nearest Occurrence:	397.07 KM	48.42080 °N	107.91406 °E
Diura bicaudata	Within Known Range? N	Nearest Occurrence:	1,281.98 KM	47.21768 °N	99.92824 °E
Diura majuscula	Within Known Range? N	Nearest Occurrence:	393.62 KM	48.13287 °N	107.91890 °E
Isoperla altaica	Within Known Range? N	Nearest Occurrence:	407.94 KM	48.60182 °N	107.84335 °E
Isoperla eximia	Within Known Range? N	Nearest Occurrence:	407.21 KM	48.60182 °N	107.84335 °E
Isoperla mongolica	Within Known Range? N	Nearest Occurrence:	401.91 KM	48.09549 °N	107.84265 °E
Isoperla potanini	Within Known Range? N	Nearest Occurrence:	1,072.64 KM	46.73093 °N	101.88583 °E
Skwala pusilla	Within Known Range? N	Nearest Occurrence:	2,547.44 KM	48.51277 °N	88.51107 °E

**LOE Rating: Unlikely Total: 3**

Family: Capniidae					
Capnia khulsbagia	Within Known Range? N	Nearest Occurrence:	1,238.29 KM	50.98944 °N	100.71944 °E
Mesocapnia altaica	Within Known Range? N	Nearest Occurrence:	2,503.98 KM	48.43684 °N	88.90094 °E
Family: Nemouridae					
Nemurella pictetii	Within Known Range? N	Nearest Occurrence:	1,349.13 KM	51.07896 °N	99.70857 °E



**Basin:** Pacific Ocean Basin

**Aimags:** Khentii

**Soums:** Batshireet

**Freshwater Ecoregion:** Shilka (Amur)

**Terrestrial Ecoregion:** Trans-Baikal Conifer Forests

LOE Ranking Based on Predicted ENM Maps Only

**WQM Sites:**

WQM Sites: # 38 (Onon River @ N 48.80747° E 110.17172°) # 39 (Onon River @ N 48.74272° E 110.21472°) # 62 (Onon River @ N 48.75823° E 110.19852°) # 63 (Eg hentii River @ N 48.7004° E 110.21947°) # 64 (Eg hentii River @ N 48.68058° E 110.14447°) # 65

**LOE Rating: Highly Likely Total: 8**

**Family:** Capniidae

Isocapnia guentheri

**Within Known Range?** N **Nearest Occurrence:** 222.32 KM 48.24734°N 107.90589°E

Isocapnia sibirica

**Within Known Range?** N **Nearest Occurrence:** 234.45 KM 48.09549°N 107.84265°E

**Family:** Chloroperlidae

Alloperla rostellata

**Within Known Range?** N **Nearest Occurrence:** 697.05 KM 49.77776°N 103.60860°E

Suwallia kerzhneri

**Within Known Range?** N **Nearest Occurrence:** 264.34 KM 48.12416°N 107.54780°E

**Family:** Leuctridae

Paraleuctra zapekinae

**Within Known Range?** N **Nearest Occurrence:** 225.12 KM 48.14846°N 107.91267°E

**Family:** Nemouridae

Nemoura cinerea

**Within Known Range?** N **Nearest Occurrence:** 265.43 KM 47.96783°N 107.59278°E

**Family:** Perlidae

Agnatina extrema

**Within Known Range?** N **Nearest Occurrence:** 233.72 KM 48.09671°N 107.84928°E

**Family:** Perlodidae

Kaszabia nigricauda

**Within Known Range?** N **Nearest Occurrence:** 222.31 KM 48.25861°N 107.90251°E

**LOE Rating: Likely Total: 13**

**Family:** Capniidae

Isocapnia kudia

**Within Known Range?** N **Nearest Occurrence:** 1,158.15 KM 51.25356°N 99.66687°E

**Family:** Chloroperlidae

Alloperla mediata

**Within Known Range?** N **Nearest Occurrence:** 697.05 KM 49.77776°N 103.60860°E

Haploperla lepnevae

**Within Known Range?** N **Nearest Occurrence:** 280.01 KM 49.08636°N 107.30750°E

**Family:** Nemouridae

Amphinemura borealis

**Within Known Range?** N **Nearest Occurrence:** 261.67 KM 49.73130°N 107.63484°E

Amphinemura standfussi

**Within Known Range?** N **Nearest Occurrence:** 261.67 KM 49.73130°N 107.63484°E

**Family:** Perlodidae

Arcynopteryx sajanensis

**Within Known Range?** N **Nearest Occurrence:** 1,070.43 KM 51.61397°N 100.59972°E

Isoperla asiatica

**Within Known Range?** N **Nearest Occurrence:** 253.14 KM 49.01829°N 107.54453°E

Isoperla kozlovi

**Within Known Range?** N **Nearest Occurrence:** 222.31 KM 48.25861°N 107.90251°E

Isoperla lunigera

**Within Known Range?** N **Nearest Occurrence:** 234.45 KM 48.09549°N 107.84265°E

Megarcys ochracea

**Within Known Range?** N **Nearest Occurrence:** 275.40 KM 47.97108°N 107.49534°E

Pictetiella asiatica

**Within Known Range?** N **Nearest Occurrence:** 1,077.33 KM 51.65822°N 100.53000°E

**Family:** Pteronarcyidae

Pteronarcys reticulata

**Within Known Range?** N **Nearest Occurrence:** 280.01 KM 49.08636°N 107.30750°E

**Family:** Taeniopterygidae

Taenionema japonicum

**Within Known Range?** N **Nearest Occurrence:** 288.59 KM 49.05411°N 107.23175°E

**LOE Rating: Probable Total: 3**

**Family:** Chloroperlidae

Alaskaperla longidentata

**Within Known Range?** N **Nearest Occurrence:** 222.31 KM 48.25861°N 107.90251°E

**Family:** Perlidae

Agnatina brevipennis

**Within Known Range?** N **Nearest Occurrence:** 277.21 KM 49.73720°N 107.48668°E

Kamimuria exilis

**Within Known Range?** N **Nearest Occurrence:** 1,229.35 KM 50.16278°N 98.84212°E

**Basin:** Pacific Ocean Basin

**Aimags:** Khentii

**Soums:** Batshireet

**Freshwater Ecoregion:** Shilka (Amur)

**Terrestrial Ecoregion:** Trans-Baikal Conifer Forests

**WQM Sites:**

WQM Sites: # 38 (Onon River @ N 48.80747° E 110.17172°) # 39 (Onon River @ N 48.74272° E 110.21472°) # 62 (Onon River @ N 48.75823° E 110.19852°) # 63 (Eg hentii River @ N 48.7004° E 110.21947°) # 64 (Eg hentii River @ N 48.68058° E 110.14447°) # 65

LOE Ranking Based on Predicted ENM Maps Only

**LOE Rating: Possible Total: 3**

Family: Capniidae

Mesocapnia variabilis Within Known Range? N Nearest Occurrence: 216.89 KM 48.42080°N 107.91406 °E

Family: Nemouridae

Nemoura sahlbergi Within Known Range? N Nearest Occurrence: 223.53 KM 48.21780°N 107.90392 °E

Family: Perlidae

Agnetina cocandica Within Known Range? N Nearest Occurrence: 431.66 KM 50.06476°N 106.13388 °E

**LOE Rating: Predicted Total: 17**

Family: Capniidae

Capnia nigra Within Known Range? N Nearest Occurrence: 1,032.20 KM 50.92452°N 100.75528 °E

Family: Chloroperlidae

Alloperla deminuta Within Known Range? N Nearest Occurrence: 223.53 KM 48.21780°N 107.90392 °E

Alloperla joosti Within Known Range? N Nearest Occurrence: 746.06 KM 49.21675°N 103.10750 °E

Suwallia teleckojensis Within Known Range? N Nearest Occurrence: 216.89 KM 48.42080°N 107.91406 °E

Family: Leuctridae

Leuctra fusca Within Known Range? N Nearest Occurrence: 273.81 KM 49.75393°N 107.52609 °E

Family: Nemouridae

Nemoura arctica Within Known Range? N Nearest Occurrence: 222.72 KM 48.25861°N 107.90251 °E

Family: Perlidae

Paragnetina flavotincta Within Known Range? N Nearest Occurrence: 430.89 KM 50.06476°N 106.13388 °E

Family: Perlodidae

Arcynopteryx compacta Within Known Range? N Nearest Occurrence: 275.33 KM 47.84324°N 107.55299 °E

Arcynopteryx polaris Within Known Range? N Nearest Occurrence: 216.89 KM 48.42080°N 107.91406 °E

Diura bicaudata Within Known Range? N Nearest Occurrence: 1,112.52 KM 47.21768°N 99.92824 °E

Diura majuscula Within Known Range? N Nearest Occurrence: 225.48 KM 48.13287°N 107.91890 °E

Isoperla altaica Within Known Range? N Nearest Occurrence: 221.24 KM 48.60182°N 107.84335 °E

Isoperla eximia Within Known Range? N Nearest Occurrence: 220.84 KM 48.60182°N 107.84335 °E

Isoperla mongolica Within Known Range? N Nearest Occurrence: 234.88 KM 48.09549°N 107.84265 °E

Isoperla obscura Within Known Range? N Nearest Occurrence: 364.38 KM 49.72192°N 106.65562 °E

Isoperla potanini Within Known Range? N Nearest Occurrence: 905.31 KM 50.62324°N 101.87412 °E

Skwala pusilla Within Known Range? N Nearest Occurrence: 2,365.39 KM 48.51277°N 88.51107 °E

**LOE Rating: Unlikely Total: 3**

Family: Capniidae

Capnia khulsbagia Within Known Range? N Nearest Occurrence: 1,037.71 KM 50.98944°N 100.71944 °E

Mesocapnia altaica Within Known Range? N Nearest Occurrence: 2,322.27 KM 48.43684°N 88.90094 °E

Family: Nemouridae

Nemurella pictetii Within Known Range? N Nearest Occurrence: 1,149.31 KM 51.07896°N 99.70857 °E

**Basin:** Pacific Ocean Basin

**Aimags:** Khentii

**Soums:** Bayan-adraga

Freshwater Ecoregion: Shilka (Amur)

Terrestrial Ecoregion: Daurian Forest Steppe

**WQM Sites:**

WQM Sites: # 42 (Onon River @ N 48.66632° E 111.0411°) # 56 (Onon River @ N 48.69482° E 111.25733°) # 57 (Shuus River @ N 48.41172° E 111.1168°)

LOE Ranking Based on Predicted ENM Maps Only

**LOE Rating: Highly Likely Total: 11**

Family: Capniidae

Isocapnia guentheri

Within Known Range? N Nearest Occurrence: 367.75 KM 48.24734°N 107.90589°E

Isocapnia sibirica

Within Known Range? N Nearest Occurrence: 376.32 KM 48.09549°N 107.84265°E

Family: Chloroperlidae

Alloperla rostellata

Within Known Range? N Nearest Occurrence: 855.86 KM 49.77776°N 103.60860°E

Haploperla lepnevae

Within Known Range? N Nearest Occurrence: 436.31 KM 47.82258°N 107.33613°E

Suwallia kerzhneri

Within Known Range? N Nearest Occurrence: 408.52 KM 48.12416°N 107.54780°E

Family: Leuctridae

Paraleuctra zapekinae

Within Known Range? N Nearest Occurrence: 367.96 KM 48.14846°N 107.91267°E

Family: Perlidae

Agnetina extrema

Within Known Range? N Nearest Occurrence: 375.57 KM 48.09671°N 107.84928°E

Family: Perlodidae

Isoperla asiatica

Within Known Range? N Nearest Occurrence: 405.65 KM 47.96783°N 107.59278°E

Isoperla lunigera

Within Known Range? N Nearest Occurrence: 376.32 KM 48.09549°N 107.84265°E

Kaszabia nigricauda

Within Known Range? N Nearest Occurrence: 368.03 KM 48.25861°N 107.90251°E

Family: Pteronarcyidae

Pteronarcys reticulata

Within Known Range? N Nearest Occurrence: 438.28 KM 49.08636°N 107.30750°E

**LOE Rating: Likely Total: 11**

Family: Capniidae

Isocapnia kudia

Within Known Range? N Nearest Occurrence: 1,317.60 KM 51.25356°N 99.66687°E

Family: Chloroperlidae

Alloperla mediata

Within Known Range? N Nearest Occurrence: 855.86 KM 49.77776°N 103.60860°E

Family: Nemouridae

Amphinemura borealis

Within Known Range? N Nearest Occurrence: 420.21 KM 49.73130°N 107.63484°E

Nemoura cinerea

Within Known Range? N Nearest Occurrence: 405.65 KM 47.96783°N 107.59278°E

Family: Perlidae

Agnetina brevipennis

Within Known Range? N Nearest Occurrence: 435.99 KM 49.73720°N 107.48668°E

Agnetina cocandica

Within Known Range? N Nearest Occurrence: 591.13 KM 50.06476°N 106.13388°E

Kamimuria exilis

Within Known Range? N Nearest Occurrence: 1,387.90 KM 50.16278°N 98.84212°E

Family: Perlodidae

Arcynopteryx sajanensis

Within Known Range? N Nearest Occurrence: 1,230.06 KM 51.61397°N 100.59972°E

Isoperla kozlovi

Within Known Range? N Nearest Occurrence: 367.22 KM 48.13111°N 107.92120°E

Megarcys ochracea

Within Known Range? N Nearest Occurrence: 416.31 KM 47.97108°N 107.49534°E

Pictetiella asiatica

Within Known Range? N Nearest Occurrence: 1,236.66 KM 51.65822°N 100.53000°E

**LOE Rating: Probable Total: 3**

Family: Chloroperlidae

Alloperla joosti

Within Known Range? N Nearest Occurrence: 903.04 KM 49.21675°N 103.10750°E

Family: Nemouridae

Amphinemura standfussi

Within Known Range? N Nearest Occurrence: 420.21 KM 49.73130°N 107.63484°E

Family: Perlodidae

Isoperla obscura

Within Known Range? N Nearest Occurrence: 523.81 KM 49.72192°N 106.65562°E

Research funded by the National Science Foundation

DEB-BSI #0206674: A Survey of the Aquatic Insects of the Selenge River Basin. P.I.'s: JKGelhaus, JCMorse, BHayford.

DEB # 0743732: Aquatic Insects of the Altai and Hangai Mountain Drainages. P.I.'s: JKGelhaus, JCMorse, CRNelson.

<http://clade.ansp.org/entomology/mongolia/index.html>



**Basin:** Pacific Ocean Basin

**Aimags:** Khentii

**Soums:** Bayan-adraga

**Freshwater Ecoregion:** Shilka (Amur)

**Terrestrial Ecoregion:** Daurian Forest Steppe

**WQM Sites:**

WQM Sites: # 42 (Onon River @ N 48.66632° E 111.0411°) # 56 (Onon River @ N 48.69482° E 111.25733°) # 57 (Shuus River @ N 48.41172° E 111.1168°)

LOE Ranking Based on Predicted ENM Maps Only

**LOE Rating: Possible Total: 3**

Family: Nemouridae

Nemoura sahlbergi Within Known Range? N Nearest Occurrence: 368.22 KM 48.21780°N 107.90392°E

Family: Perlidae

Paragnetina flavotincta Within Known Range? N Nearest Occurrence: 590.06 KM 50.06476°N 106.13388°E

Family: Taeniopterygidae

Taenionema japonicum Within Known Range? N Nearest Occurrence: 446.88 KM 49.05411°N 107.23175°E

**LOE Rating: Predicted Total: 17**

Family: Capniidae

Capnia khulsbagia Within Known Range? N Nearest Occurrence: 1,197.15 KM 50.98944°N 100.71944°E

Capnia nigra Within Known Range? N Nearest Occurrence: 1,191.62 KM 50.92452°N 100.75528°E

Mesocapnia variabilis Within Known Range? N Nearest Occurrence: 366.61 KM 48.42080°N 107.91406°E

Family: Chloroperlidae

Alaskaperla longidentata Within Known Range? N Nearest Occurrence: 367.75 KM 48.24734°N 107.90589°E

Alloperla deminuta Within Known Range? N Nearest Occurrence: 367.96 KM 48.14846°N 107.91267°E

Suwallia teleckojensis Within Known Range? N Nearest Occurrence: 366.61 KM 48.42080°N 107.91406°E

Family: Leuctridae

Leuctra fusca Within Known Range? N Nearest Occurrence: 432.44 KM 49.75393°N 107.52609°E

Family: Nemouridae

Nemoura arctica Within Known Range? N Nearest Occurrence: 368.11 KM 48.13287°N 107.91890°E

Family: Perlodidae

Arcynopteryx compacta Within Known Range? N Nearest Occurrence: 412.94 KM 47.84324°N 107.55299°E

Arcynopteryx polaris Within Known Range? N Nearest Occurrence: 366.61 KM 48.42080°N 107.91406°E

Diura bicaudata Within Known Range? N Nearest Occurrence: 1,260.20 KM 47.21768°N 99.92824°E

Diura majuscula Within Known Range? N Nearest Occurrence: 368.11 KM 48.13287°N 107.91890°E

Isoperla altaica Within Known Range? N Nearest Occurrence: 374.62 KM 48.60182°N 107.84335°E

Isoperla eximia Within Known Range? N Nearest Occurrence: 373.94 KM 48.60182°N 107.84335°E

Isoperla mongolica Within Known Range? N Nearest Occurrence: 377.00 KM 48.09549°N 107.84265°E

Isoperla potanini Within Known Range? N Nearest Occurrence: 1,054.88 KM 47.26999°N 101.80227°E

Skwala pusilla Within Known Range? N Nearest Occurrence: 2,519.61 KM 48.51277°N 88.51107°E

**LOE Rating: Unlikely Total: 2**

Family: Capniidae

Mesocapnia altaica Within Known Range? N Nearest Occurrence: 2,476.34 KM 48.43684°N 88.90094°E

Family: Nemouridae

Nemurella pictetii Within Known Range? N Nearest Occurrence: 1,308.70 KM 51.07896°N 99.70857°E



**Basin:** Pacific Ocean Basin

**Aimags:** Khentii

**Soums:** Bayankhutag

Freshwater Ecoregion: Argun

Terrestrial Ecoregion: Mongolian-Manchurian Grassland

LOE Ranking Based on Predicted ENM Maps Only

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Highly Likely Total: 11**

Family: Capniidae

Isocapnia guentheri

Within Known Range? N Nearest Occurrence: 362.14 KM 48.24734 °N 107.90589 °E

Isocapnia sibirica

Within Known Range? N Nearest Occurrence: 363.67 KM 48.09549 °N 107.84265 °E

Family: Chloroperlidae

Alloperla rostellata

Within Known Range? N Nearest Occurrence: 868.48 KM 49.77776 °N 103.60860 °E

Haploperla lepnevae

Within Known Range? N Nearest Occurrence: 411.54 KM 47.82258 °N 107.33613 °E

Suwallia kerzhneri

Within Known Range? N Nearest Occurrence: 396.02 KM 48.12416 °N 107.54780 °E

Family: Leuctridae

Paraleuctra zapekinae

Within Known Range? N Nearest Occurrence: 357.95 KM 48.14846 °N 107.91267 °E

Family: Perlidae

Agnetina extrema

Within Known Range? N Nearest Occurrence: 363.00 KM 48.09671 °N 107.84928 °E

Family: Perlodidae

Isoperla asiatica

Within Known Range? N Nearest Occurrence: 386.88 KM 47.96783 °N 107.59278 °E

Isoperla kozlovi

Within Known Range? N Nearest Occurrence: 356.47 KM 48.13111 °N 107.92120 °E

Isoperla lunigera

Within Known Range? N Nearest Occurrence: 363.67 KM 48.09549 °N 107.84265 °E

Family: Pteronarcyidae

Pteronarcys reticulata

Within Known Range? N Nearest Occurrence: 460.29 KM 49.08636 °N 107.30750 °E

**LOE Rating: Likely Total: 10**

Family: Capniidae

Isocapnia kudia

Within Known Range? N Nearest Occurrence: 1,335.62 KM 51.25356 °N 99.66687 °E

Family: Nemouridae

Amphinemura borealis

Within Known Range? N Nearest Occurrence: 411.54 KM 47.82258 °N 107.33613 °E

Nemoura cinerea

Within Known Range? N Nearest Occurrence: 386.88 KM 47.96783 °N 107.59278 °E

Family: Perlidae

Agnetina brevipennis

Within Known Range? N Nearest Occurrence: 460.29 KM 49.08636 °N 107.30750 °E

Agnetina cocandica

Within Known Range? N Nearest Occurrence: 628.16 KM 50.06476 °N 106.13388 °E

Kamimuria exilis

Within Known Range? N Nearest Occurrence: 1,390.76 KM 50.16278 °N 98.84212 °E

Family: Perlodidae

Arcynopteryx sajanensis

Within Known Range? N Nearest Occurrence: 1,256.15 KM 51.61397 °N 100.59972 °E

Kaszabia nigricauda

Within Known Range? N Nearest Occurrence: 361.28 KM 48.21780 °N 107.90392 °E

Megarcys ochracea

Within Known Range? N Nearest Occurrence: 397.50 KM 47.97108 °N 107.49534 °E

Pictetiella asiatica

Within Known Range? N Nearest Occurrence: 1,262.94 KM 51.65822 °N 100.53000 °E

**LOE Rating: Probable Total: 3**

Family: Chloroperlidae

Alloperla mediata

Within Known Range? N Nearest Occurrence: 868.48 KM 49.77776 °N 103.60860 °E

Family: Perlodidae

Isoperla obscura

Within Known Range? N Nearest Occurrence: 557.81 KM 49.72192 °N 106.65562 °E

Family: Taeniopterygidae

Taenionema japonicum

Within Known Range? N Nearest Occurrence: 466.99 KM 49.05411 °N 107.23175 °E

Research funded by the National Science Foundation

DEB-BSI #0206674: A Survey of the Aquatic Insects of the Selenge River Basin. P.I.'s: JKGelhaus, JCMorse, BHayford.

DEB # 0743732: Aquatic Insects of the Altai and Hangai Mountain Drainages. P.I.'s: JKGelhaus, JCMorse, CRNelson.

<http://clade.ansp.org/entomology/mongolia/index.html>



**Basin:** Pacific Ocean Basin

**Aimags:** Khentii

**Soums:** Bayankhutag

Freshwater Ecoregion: Argun

Terrestrial Ecoregion: Mongolian-Manchurian Grassland

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

LOE Ranking Based on Predicted ENM Maps Only

**LOE Rating: Possible Total: 3**

Family: Chloroperlidae

Alloperla joosti Within Known Range? N Nearest Occurrence: 903.50 KM 49.21675°N 103.10750°E

Family: Nemouridae

Amphinemura standfussi Within Known Range? N Nearest Occurrence: 468.03 KM 49.73130°N 107.63484°E

Family: Perlidae

Paragnetina flavotincta Within Known Range? N Nearest Occurrence: 627.03 KM 50.06476°N 106.13388°E

**LOE Rating: Predicted Total: 17**

Family: Capniidae

Capnia nigra Within Known Range? N Nearest Occurrence: 1,209.60 KM 50.92452°N 100.75528°E

Mesocapnia variabilis Within Known Range? N Nearest Occurrence: 368.75 KM 48.42080°N 107.91406°E

Family: Chloroperlidae

Alaskaperla longidentata Within Known Range? N Nearest Occurrence: 357.95 KM 48.14846°N 107.91267°E

Alloperla deminuta Within Known Range? N Nearest Occurrence: 357.95 KM 48.14846°N 107.91267°E

Suwallia teleckojensis Within Known Range? N Nearest Occurrence: 368.75 KM 48.42080°N 107.91406°E

Family: Leuctridae

Leuctra fusca Within Known Range? N Nearest Occurrence: 462.07 KM 49.08643°N 107.28952°E

Family: Nemouridae

Nemoura arctica Within Known Range? N Nearest Occurrence: 357.42 KM 48.13287°N 107.91890°E

Nemoura sahlbergi Within Known Range? N Nearest Occurrence: 361.28 KM 48.21780°N 107.90392°E

Family: Perlodidae

Arcynopteryx compacta Within Known Range? N Nearest Occurrence: 389.00 KM 47.84324°N 107.55299°E

Arcynopteryx polaris Within Known Range? N Nearest Occurrence: 368.75 KM 48.42080°N 107.91406°E

Diura bicaudata Within Known Range? N Nearest Occurrence: 1,227.45 KM 47.21768°N 99.92824°E

Diura majuscula Within Known Range? N Nearest Occurrence: 357.42 KM 48.13287°N 107.91890°E

Isoperla altaica Within Known Range? N Nearest Occurrence: 383.93 KM 48.60182°N 107.84335°E

Isoperla eximia Within Known Range? N Nearest Occurrence: 383.24 KM 48.60182°N 107.84335°E

Isoperla mongolica Within Known Range? N Nearest Occurrence: 364.32 KM 48.09549°N 107.84265°E

Isoperla potanini Within Known Range? N Nearest Occurrence: 1,013.16 KM 46.73093°N 101.88583°E

Skwala pusilla Within Known Range? N Nearest Occurrence: 2,499.18 KM 48.51277°N 88.51107°E

**LOE Rating: Unlikely Total: 3**

Family: Capniidae

Capnia khulsbagia Within Known Range? N Nearest Occurrence: 1,215.82 KM 50.98944°N 100.71944°E

Mesocapnia altaica Within Known Range? N Nearest Occurrence: 2,455.49 KM 48.43684°N 88.90094°E

Family: Nemouridae

Nemurella pictetii Within Known Range? N Nearest Occurrence: 1,324.79 KM 51.07896°N 99.70857°E

**Basin:** Pacific Ocean Basin  
**Aimags:** Khentii  
**Soums:** Bayanmonkh

Freshwater Ecoregion: Argun

Terrestrial Ecoregion: Mongolian-Manchurian Grassland

LOE Ranking Based on Predicted ENM Maps Only

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Highly Likely Total: 11**

Family: Capniidae					
Isocapnia guentheri	Within Known Range? N	Nearest Occurrence:	253.28 KM	48.24734 °N	107.90589 °E
Isocapnia sibirica	Within Known Range? N	Nearest Occurrence:	249.57 KM	48.09549 °N	107.84265 °E
Family: Chloroperlidae					
Alloperla rostellata	Within Known Range? N	Nearest Occurrence:	752.42 KM	49.77776 °N	103.60860 °E
Haploperla lepnevae	Within Known Range? N	Nearest Occurrence:	286.37 KM	47.82258 °N	107.33613 °E
Suwallia kerzhneri	Within Known Range? N	Nearest Occurrence:	279.33 KM	48.12416 °N	107.54780 °E
Family: Leuctridae					
Paraleuctra zapekinae	Within Known Range? N	Nearest Occurrence:	246.31 KM	48.14846 °N	107.91267 °E
Family: Nemouridae					
Nemoura cinerea	Within Known Range? N	Nearest Occurrence:	266.79 KM	47.96783 °N	107.59278 °E
Family: Perlidae					
Agnestina extrema	Within Known Range? N	Nearest Occurrence:	249.02 KM	48.09671 °N	107.84928 °E
Family: Perlodidae					
Isoperla asiatica	Within Known Range? N	Nearest Occurrence:	266.79 KM	47.96783 °N	107.59278 °E
Isoperla lunigera	Within Known Range? N	Nearest Occurrence:	249.57 KM	48.09549 °N	107.84265 °E
Family: Pteronarcyidae					
Pteronarcys reticulata	Within Known Range? N	Nearest Occurrence:	363.73 KM	49.08636 °N	107.30750 °E

**LOE Rating: Likely Total: 10**

Family: Capniidae					
Isocapnia kudia	Within Known Range? N	Nearest Occurrence:	1,218.66 KM	51.25356 °N	99.66687 °E
Family: Nemouridae					
Amphinemura borealis	Within Known Range? N	Nearest Occurrence:	286.37 KM	47.82258 °N	107.33613 °E
Family: Perlidae					
Agnestina brevipennis	Within Known Range? N	Nearest Occurrence:	363.73 KM	49.08636 °N	107.30750 °E
Agnestina cocandica	Within Known Range? N	Nearest Occurrence:	534.21 KM	50.06476 °N	106.13388 °E
Kamimuria exilis	Within Known Range? N	Nearest Occurrence:	1,265.53 KM	50.16278 °N	98.84212 °E
Family: Perlodidae					
Arcynopteryx sajanensis	Within Known Range? N	Nearest Occurrence:	1,144.22 KM	51.61397 °N	100.59972 °E
Isoperla kozlovi	Within Known Range? N	Nearest Occurrence:	244.44 KM	48.13111 °N	107.92120 °E
Kaszabia nigricauda	Within Known Range? N	Nearest Occurrence:	249.02 KM	48.09671 °N	107.84928 °E
Megarcys ochracea	Within Known Range? N	Nearest Occurrence:	276.67 KM	47.97108 °N	107.49534 °E
Pictetiella asiatica	Within Known Range? N	Nearest Occurrence:	1,151.30 KM	51.65822 °N	100.53000 °E

**LOE Rating: Probable Total: 3**

Family: Chloroperlidae					
Alloperla mediata	Within Known Range? N	Nearest Occurrence:	752.42 KM	49.77776 °N	103.60860 °E
Family: Perlodidae					
Isoperla obscura	Within Known Range? N	Nearest Occurrence:	464.72 KM	49.72192 °N	106.65562 °E
Family: Taeniopterygidae					
Taenionema japonicum	Within Known Range? N	Nearest Occurrence:	368.34 KM	49.05411 °N	107.23175 °E



**Basin:** Pacific Ocean Basin  
**Aimags:** Khentii  
**Soums:** Bayanmonkh

Freshwater Ecoregion: Argun

Terrestrial Ecoregion: Mongolian-Manchurian Grassland

LOE Ranking Based on Predicted ENM Maps Only

<b>LOE Rating:</b> Possible	<b>Total:</b> 3
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Family: Chloroperlidae					
Alloperla joosti	Within Known Range? N	Nearest Occurrence:	780.38 KM	49.21675 °N	103.10750 °E
Family: Nemouridae					
Amphinemura standfussi	Within Known Range? N	Nearest Occurrence:	392.34 KM	49.73130 °N	107.63484 °E
Family: Perlodidae					
Diura bicaudata	Within Known Range? N	Nearest Occurrence:	1,090.07 KM	47.21768 °N	99.92824 °E

<b>LOE Rating:</b> Predicted	<b>Total:</b> 17
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Family: Capniidae					
Capnia nigra	Within Known Range? N	Nearest Occurrence:	1,093.37 KM	50.92452 °N	100.75528 °E
Mesocapnia variabilis	Within Known Range? N	Nearest Occurrence:	264.92 KM	48.42080 °N	107.91406 °E
Family: Chloroperlidae					
Alaskaperla longidentata	Within Known Range? N	Nearest Occurrence:	246.31 KM	48.14846 °N	107.91267 °E
Alloperla deminuta	Within Known Range? N	Nearest Occurrence:	246.31 KM	48.14846 °N	107.91267 °E
Suwallia teleckojensis	Within Known Range? N	Nearest Occurrence:	264.92 KM	48.42080 °N	107.91406 °E
Family: Leuctridae					
Leuctra fusca	Within Known Range? N	Nearest Occurrence:	365.22 KM	49.08643 °N	107.28952 °E
Family: Nemouridae					
Nemoura arctica	Within Known Range? N	Nearest Occurrence:	245.20 KM	48.13287 °N	107.91890 °E
Nemoura sahlbergi	Within Known Range? N	Nearest Occurrence:	251.52 KM	48.21780 °N	107.90392 °E
Family: Perlidae					
Paragnetina flavotincta	Within Known Range? N	Nearest Occurrence:	533.25 KM	50.06476 °N	106.13388 °E
Family: Perlodidae					
Arcynopteryx compacta	Within Known Range? N	Nearest Occurrence:	265.44 KM	47.84324 °N	107.55299 °E
Arcynopteryx polaris	Within Known Range? N	Nearest Occurrence:	264.92 KM	48.42080 °N	107.91406 °E
Diura majuscula	Within Known Range? N	Nearest Occurrence:	245.20 KM	48.13287 °N	107.91890 °E
Isoperla altaica	Within Known Range? N	Nearest Occurrence:	284.05 KM	48.60182 °N	107.84335 °E
Isoperla eximia	Within Known Range? N	Nearest Occurrence:	283.54 KM	48.60182 °N	107.84335 °E
Isoperla mongolica	Within Known Range? N	Nearest Occurrence:	250.02 KM	48.09549 °N	107.84265 °E
Isoperla potanini	Within Known Range? N	Nearest Occurrence:	873.95 KM	46.73093 °N	101.88583 °E
Skwala pusilla	Within Known Range? N	Nearest Occurrence:	2,363.62 KM	48.51277 °N	88.51107 °E

<b>LOE Rating:</b> Unlikely	<b>Total:</b> 3
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Family: Capniidae					
Capnia khulsbagia	Within Known Range? N	Nearest Occurrence:	1,099.96 KM	50.98944 °N	100.71944 °E
Mesocapnia altaica	Within Known Range? N	Nearest Occurrence:	2,319.84 KM	48.43684 °N	88.90094 °E
Family: Nemouridae					
Nemurella pictetii	Within Known Range? N	Nearest Occurrence:	1,206.83 KM	51.07896 °N	99.70857 °E

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.



**Basin:** Pacific Ocean Basin

**Aimags:** Khentii

**Soums:** Bayan-ovoo

Freshwater Ecoregion: Argun

Terrestrial Ecoregion: Mongolian-Manchurian Grassland

LOE Ranking Based on Predicted ENM Maps Only

**LOE Rating: Highly Likely Total: 11**

Family: Capniidae

Isocapnia guentheri

Within Known Range? N Nearest Occurrence: 469.84 KM 48.24734 °N 107.90589 °E

Isocapnia sibirica

Within Known Range? N Nearest Occurrence: 475.28 KM 48.09549 °N 107.84265 °E

Family: Chloroperlidae

Alloperla rostellata

Within Known Range? N Nearest Occurrence: 969.64 KM 49.77776 °N 103.60860 °E

Haploperla lepnevae

Within Known Range? N Nearest Occurrence: 530.25 KM 47.82258 °N 107.33613 °E

Suwallia kerzhneri

Within Known Range? N Nearest Occurrence: 508.16 KM 48.12416 °N 107.54780 °E

Family: Leuctridae

Paraleuctra zapekinae

Within Known Range? N Nearest Occurrence: 468.01 KM 48.14846 °N 107.91267 °E

Family: Perlidae

Agnetina extrema

Within Known Range? N Nearest Occurrence: 474.56 KM 48.09671 °N 107.84928 °E

Family: Perlodidae

Isoperla asiatica

Within Known Range? N Nearest Occurrence: 502.17 KM 47.96783 °N 107.59278 °E

Isoperla kozlovi

Within Known Range? N Nearest Occurrence: 466.90 KM 48.13111 °N 107.92120 °E

Isoperla lunigera

Within Known Range? N Nearest Occurrence: 475.28 KM 48.09549 °N 107.84265 °E

Family: Pteronarcyidae

Pteronarcys reticulata

Within Known Range? N Nearest Occurrence: 552.71 KM 49.08636 °N 107.30750 °E

**LOE Rating: Likely Total: 11**

Family: Capniidae

Isocapnia kudia

Within Known Range? N Nearest Occurrence: 1,434.26 KM 51.25356 °N 99.66687 °E

Family: Nemouridae

Amphinemura borealis

Within Known Range? N Nearest Occurrence: 530.25 KM 47.82258 °N 107.33613 °E

Nemoura cinerea

Within Known Range? N Nearest Occurrence: 502.17 KM 47.96783 °N 107.59278 °E

Family: Perlidae

Agnetina brevipennis

Within Known Range? N Nearest Occurrence: 552.71 KM 49.08636 °N 107.30750 °E

Agnetina cocandica

Within Known Range? N Nearest Occurrence: 711.69 KM 50.06476 °N 106.13388 °E

Kamimuria exilis

Within Known Range? N Nearest Occurrence: 1,499.28 KM 50.16278 °N 98.84212 °E

Family: Perlodidae

Arcynopteryx sajanensis

Within Known Range? N Nearest Occurrence: 1,349.33 KM 51.61397 °N 100.59972 °E

Isoperla obscura

Within Known Range? N Nearest Occurrence: 642.91 KM 49.72192 °N 106.65562 °E

Kaszabia nigricauda

Within Known Range? N Nearest Occurrence: 469.70 KM 48.21780 °N 107.90392 °E

Megarcys ochracea

Within Known Range? N Nearest Occurrence: 512.99 KM 47.97108 °N 107.49534 °E

Pictetiella asiatica

Within Known Range? N Nearest Occurrence: 1,355.80 KM 51.65822 °N 100.53000 °E

**LOE Rating: Probable Total: 3**

Family: Chloroperlidae

Alloperla mediata

Within Known Range? N Nearest Occurrence: 969.64 KM 49.77776 °N 103.60860 °E

Family: Perlidae

Paragnetina flavotincta

Within Known Range? N Nearest Occurrence: 710.41 KM 50.06476 °N 106.13388 °E

Family: Taeniopterygidae

Taenionema japonicum

Within Known Range? N Nearest Occurrence: 560.93 KM 49.05411 °N 107.23175 °E

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

Research funded by the National Science Foundation

DEB-BSI #0206674: A Survey of the Aquatic Insects of the Selenge River Basin. P.I.'s: JKGelhaus, JCMorse, BHayford.

DEB # 0743732: Aquatic Insects of the Altai and Hangai Mountain Drainages. P.I.'s: JKGelhaus, JCMorse, CRNelson.

<http://clade.ansp.org/entomology/mongolia/index.html>



**Basin:** Pacific Ocean Basin

**Aimags:** Khentii

**Soums:** Bayan-ovoo

Freshwater Ecoregion: Argun

Terrestrial Ecoregion: Mongolian-Manchurian Grassland

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

LOE Ranking Based on Predicted ENM Maps Only

**LOE Rating: Possible Total: 3**

Family: Chloroperlidae

*Alloperla deminuta*

Within Known Range? N Nearest Occurrence: 468.01 KM 48.14846°N 107.91267°E

*Alloperla joosti*

Within Known Range? N Nearest Occurrence: 1,012.22 KM 49.21675°N 103.10750°E

Family: Nemouridae

*Amphinemura standfussi*

Within Known Range? N Nearest Occurrence: 542.13 KM 49.73130°N 107.63484°E

**LOE Rating: Predicted Total: 16**

Family: Capniidae

*Capnia nigra*

Within Known Range? N Nearest Occurrence: 1,308.08 KM 50.92452°N 100.75528°E

*Mesocapnia variabilis*

Within Known Range? N Nearest Occurrence: 472.29 KM 48.42080°N 107.91406°E

Family: Chloroperlidae

*Alaskaperla longidentata*

Within Known Range? N Nearest Occurrence: 468.01 KM 48.14846°N 107.91267°E

*Suwallia teleckojensis*

Within Known Range? N Nearest Occurrence: 472.29 KM 48.42080°N 107.91406°E

Family: Leuctridae

*Leuctra fusca*

Within Known Range? N Nearest Occurrence: 554.21 KM 49.75393°N 107.52609°E

Family: Nemouridae

*Nemoura arctica*

Within Known Range? N Nearest Occurrence: 468.01 KM 48.13287°N 107.91890°E

*Nemoura sahlbergi*

Within Known Range? N Nearest Occurrence: 469.70 KM 48.21780°N 107.90392°E

Family: Perlodidae

*Arcynopteryx compacta*

Within Known Range? N Nearest Occurrence: 507.12 KM 47.84324°N 107.55299°E

*Arcynopteryx polaris*

Within Known Range? N Nearest Occurrence: 472.29 KM 48.42080°N 107.91406°E

*Diura bicaudata*

Within Known Range? N Nearest Occurrence: 1,353.95 KM 47.21768°N 99.92824°E

*Diura majuscula*

Within Known Range? N Nearest Occurrence: 468.01 KM 48.13287°N 107.91890°E

*Isoperla altaica*

Within Known Range? N Nearest Occurrence: 483.46 KM 48.60182°N 107.84335°E

*Isoperla eximia*

Within Known Range? N Nearest Occurrence: 482.59 KM 48.60182°N 107.84335°E

*Isoperla mongolica*

Within Known Range? N Nearest Occurrence: 476.14 KM 48.09549°N 107.84265°E

*Isoperla potanini*

Within Known Range? N Nearest Occurrence: 1,143.25 KM 46.73093°N 101.88583°E

*Skwala pusilla*

Within Known Range? N Nearest Occurrence: 2,621.07 KM 48.51277°N 88.51107°E

**LOE Rating: Unlikely Total: 3**

Family: Capniidae

*Capnia khulsbagia*

Within Known Range? N Nearest Occurrence: 1,313.85 KM 50.98944°N 100.71944°E

*Mesocapnia altaica*

Within Known Range? N Nearest Occurrence: 2,577.56 KM 48.43684°N 88.90094°E

Family: Nemouridae

*Nemurella pictetii*

Within Known Range? N Nearest Occurrence: 1,424.70 KM 51.07896°N 99.70857°E

**Basin:** Pacific Ocean Basin  
**Aimags:** Khentii  
**Soums:** Binder

**Freshwater Ecoregion:** Shilka (Amur)

**Terrestrial Ecoregion:** Daurian Forest Steppe

**WQM Sites:**

WQM Sites: # 40 (Onon River @ N 48.48352° E 110.73685°) # 41 (Onon River @ N 48.5988° E 110.77827°) # 58 (Hurb River @ N 48.58203° E 110.67457°) # 59 (Balj River @ N 48.96425° E 110.62512°) # 60 (Homol River @ N 48.98527° E 110.60277°) # 61 (Amgalant)

LOE Ranking Based on Predicted ENM Maps Only

**LOE Rating: Highly Likely Total: 12**

<b>Family: Capniidae</b>					
Isocapnia guentheri	Within Known Range? N	Nearest Occurrence:	306.81 KM	48.24734°N	107.90589°E
Isocapnia sibirica	Within Known Range? N	Nearest Occurrence:	316.26 KM	48.09549°N	107.84265°E
<b>Family: Chloroperlidae</b>					
Alloperla rostellata	Within Known Range? N	Nearest Occurrence:	792.47 KM	49.77776°N	103.60860°E
Haploperla lepnevae	Within Known Range? N	Nearest Occurrence:	374.92 KM	49.08636°N	107.30750°E
Suwallia kerzhneri	Within Known Range? N	Nearest Occurrence:	348.05 KM	48.12416°N	107.54780°E
<b>Family: Leuctridae</b>					
Paraleuctra zapekinae	Within Known Range? N	Nearest Occurrence:	307.62 KM	48.14846°N	107.91267°E
<b>Family: Nemouridae</b>					
Nemoura cinerea	Within Known Range? N	Nearest Occurrence:	346.16 KM	47.96783°N	107.59278°E
<b>Family: Perlidae</b>					
Agnetina extrema	Within Known Range? N	Nearest Occurrence:	315.51 KM	48.09671°N	107.84928°E
<b>Family: Perlodidae</b>					
Isoperla asiatica	Within Known Range? N	Nearest Occurrence:	346.16 KM	47.96783°N	107.59278°E
Isoperla lunigera	Within Known Range? N	Nearest Occurrence:	316.26 KM	48.09549°N	107.84265°E
Kaszabia nigricauda	Within Known Range? N	Nearest Occurrence:	307.03 KM	48.25861°N	107.90251°E
<b>Family: Pteronarcyidae</b>					
Pteronarcys reticulata	Within Known Range? N	Nearest Occurrence:	374.92 KM	49.08636°N	107.30750°E

**LOE Rating: Likely Total: 9**

<b>Family: Capniidae</b>					
Isocapnia kudia	Within Known Range? N	Nearest Occurrence:	1,254.30 KM	51.25356°N	99.66687°E
<b>Family: Chloroperlidae</b>					
Alloperla mediata	Within Known Range? N	Nearest Occurrence:	792.47 KM	49.77776°N	103.60860°E
<b>Family: Nemouridae</b>					
Amphinemura borealis	Within Known Range? N	Nearest Occurrence:	357.69 KM	49.73130°N	107.63484°E
Amphinemura standfussi	Within Known Range? N	Nearest Occurrence:	357.69 KM	49.73130°N	107.63484°E
<b>Family: Perlidae</b>					
Agnetina brevipennis	Within Known Range? N	Nearest Occurrence:	373.34 KM	49.73720°N	107.48668°E
<b>Family: Perlodidae</b>					
Arcynopteryx sajanensis	Within Known Range? N	Nearest Occurrence:	1,166.92 KM	51.61397°N	100.59972°E
Isoperla kozlovi	Within Known Range? N	Nearest Occurrence:	307.00 KM	48.13111°N	107.92120°E
Megarcys ochracea	Within Known Range? N	Nearest Occurrence:	356.69 KM	47.97108°N	107.49534°E
Pictetiella asiatica	Within Known Range? N	Nearest Occurrence:	1,173.65 KM	51.65822°N	100.53000°E

**LOE Rating: Probable Total: 3**

<b>Family: Perlidae</b>					
Agnetina cocandica	Within Known Range? N	Nearest Occurrence:	528.12 KM	50.06476°N	106.13388°E
Kamimuria exilis	Within Known Range? N	Nearest Occurrence:	1,324.47 KM	50.16278°N	98.84212°E
<b>Family: Taeniopterygidae</b>					
Taenionema japonicum	Within Known Range? N	Nearest Occurrence:	383.43 KM	49.05411°N	107.23175°E

Research funded by the National Science Foundation  
 DEB-BSI #0206674: A Survey of the Aquatic Insects of the Selenge River Basin. P.I.'s: JKGelhaus, JCMorse, BHayford.  
 DEB # 0743732: Aquatic Insects of the Altai and Hangai Mountain Drainages. P.I.'s: JKGelhaus, JCMorse, CRNelson.  
<http://clade.ansp.org/entomology/mongolia/index.html>



**Basin:** Pacific Ocean Basin

**Aimags:** Khentii

**Soums:** Binder

**Freshwater Ecoregion:** Shilka (Amur)

**Terrestrial Ecoregion:** Daurian Forest Steppe

**WQM Sites:**

WQM Sites: # 40 (Onon River @ N 48.48352° E 110.73685°) # 41 (Onon River @ N 48.5988° E 110.77827°) # 58 (Hurl River @ N 48.58203° E 110.67457°) # 59 (Balj River @ N 48.96425° E 110.62512°) # 60 (Homol River @ N 48.98527° E 110.60277°) # 61 (Amgalant)

LOE Ranking Based on Predicted ENM Maps Only

**LOE Rating: Possible Total: 4**

**Family:** Chloroperlidae

Alaskaperla longidentata Within Known Range? N Nearest Occurrence: 306.81 KM 48.24734°N 107.90589 °E

Alloperla joosti Within Known Range? N Nearest Occurrence: 839.94 KM 49.21675°N 103.10750 °E

**Family:** Nemouridae

Nemoura sahlbergi Within Known Range? N Nearest Occurrence: 307.45 KM 48.21780°N 107.90392 °E

**Family:** Perlodidae

Isoperla obscura Within Known Range? N Nearest Occurrence: 460.67 KM 49.72192°N 106.65562 °E

**LOE Rating: Predicted Total: 17**

**Family:** Capniidae

Capnia khulsbagia Within Known Range? N Nearest Occurrence: 1,133.85 KM 50.98944°N 100.71944 °E

Capnia nigra Within Known Range? N Nearest Occurrence: 1,128.30 KM 50.92452°N 100.75528 °E

Mesocapnia variabilis Within Known Range? N Nearest Occurrence: 304.66 KM 48.42080°N 107.91406 °E

**Family:** Chloroperlidae

Alloperla deminuta Within Known Range? N Nearest Occurrence: 307.45 KM 48.21780°N 107.90392 °E

Suwallia teleckojensis Within Known Range? N Nearest Occurrence: 304.66 KM 48.42080°N 107.91406 °E

**Family:** Leuctridae

Leuctra fusca Within Known Range? N Nearest Occurrence: 369.87 KM 49.75393°N 107.52609 °E

**Family:** Nemouridae

Nemoura arctica Within Known Range? N Nearest Occurrence: 307.58 KM 48.25861°N 107.90251 °E

**Family:** Perlidae

Paragnetina flavotincta Within Known Range? N Nearest Occurrence: 527.17 KM 50.06476°N 106.13388 °E

**Family:** Perlodidae

Arcynopteryx compacta Within Known Range? N Nearest Occurrence: 354.11 KM 47.84324°N 107.55299 °E

Arcynopteryx polaris Within Known Range? N Nearest Occurrence: 304.66 KM 48.42080°N 107.91406 °E

Diura bicaudata Within Known Range? N Nearest Occurrence: 1,199.67 KM 47.21768°N 99.92824 °E

Diura majuscula Within Known Range? N Nearest Occurrence: 307.77 KM 48.13287°N 107.91890 °E

Isoperla altaica Within Known Range? N Nearest Occurrence: 311.94 KM 48.60182°N 107.84335 °E

Isoperla eximia Within Known Range? N Nearest Occurrence: 311.38 KM 48.60182°N 107.84335 °E

Isoperla mongolica Within Known Range? N Nearest Occurrence: 316.83 KM 48.09549°N 107.84265 °E

Isoperla potanini Within Known Range? N Nearest Occurrence: 994.60 KM 47.26999°N 101.80227 °E

Skwala pusilla Within Known Range? N Nearest Occurrence: 2,457.28 KM 48.51277°N 88.51107 °E

**LOE Rating: Unlikely Total: 2**

**Family:** Capniidae

Mesocapnia altaica Within Known Range? N Nearest Occurrence: 2,414.04 KM 48.43684°N 88.90094 °E

**Family:** Nemouridae

Nemurella pictetii Within Known Range? N Nearest Occurrence: 1,245.36 KM 51.07896°N 99.70857 °E





**Basin:** Pacific Ocean Basin  
**Aimags:** Khentii  
**Soums:** Dadal

**WQM Sites:**

WQM Sites: # 55 (Balj River @ N 49.06883° E 111.61282°)

**Freshwater Ecoregion:** Shilka (Amur)

**Terrestrial Ecoregion:** Trans-Baikal Conifer Forests

LOE Ranking Based on Predicted ENM Maps Only

**LOE Rating: Highly Likely Total: 11**

<b>Family: Capniidae</b>						
Isocapnia guentheri	Within Known Range? N	Nearest Occurrence:	412.24 KM	48.24734 °N	107.90589 °E	
Isocapnia sibirica	Within Known Range? N	Nearest Occurrence:	423.15 KM	48.09549 °N	107.84265 °E	
<b>Family: Chloroperlidae</b>						
Alloperla rostellata	Within Known Range? N	Nearest Occurrence:	881.87 KM	49.77776 °N	103.60860 °E	
Haploperla lepnevae	Within Known Range? N	Nearest Occurrence:	467.96 KM	49.08636 °N	107.30750 °E	
Suwallia kerzhneri	Within Known Range? N	Nearest Occurrence:	453.16 KM	49.73695 °N	107.49285 °E	
<b>Family: Leuctridae</b>						
Paraleuctra zapekinae	Within Known Range? N	Nearest Occurrence:	414.13 KM	48.14846 °N	107.91267 °E	
<b>Family: Perlidae</b>						
Agnetina extrema	Within Known Range? N	Nearest Occurrence:	422.40 KM	48.09671 °N	107.84928 °E	
<b>Family: Perlodidae</b>						
Isoperla asiatica	Within Known Range? N	Nearest Occurrence:	441.72 KM	49.01829 °N	107.54453 °E	
Isoperla kozlovi	Within Known Range? N	Nearest Occurrence:	412.32 KM	48.25861 °N	107.90251 °E	
Isoperla lunigera	Within Known Range? N	Nearest Occurrence:	423.15 KM	48.09549 °N	107.84265 °E	
<b>Family: Pteronarcyidae</b>						
Pteronarcys reticulata	Within Known Range? N	Nearest Occurrence:	467.96 KM	49.08636 °N	107.30750 °E	

**LOE Rating: Likely Total: 10**

<b>Family: Capniidae</b>						
Isocapnia kudia	Within Known Range? N	Nearest Occurrence:	1,337.85 KM	51.25356 °N	99.66687 °E	
<b>Family: Chloroperlidae</b>						
Alloperla mediata	Within Known Range? N	Nearest Occurrence:	881.87 KM	49.77776 °N	103.60860 °E	
<b>Family: Nemouridae</b>						
Amphinemura borealis	Within Known Range? N	Nearest Occurrence:	437.50 KM	49.73130 °N	107.63484 °E	
Nemoura cinerea	Within Known Range? N	Nearest Occurrence:	453.66 KM	47.96783 °N	107.59278 °E	
<b>Family: Perlidae</b>						
Agnetina brevipennis	Within Known Range? N	Nearest Occurrence:	453.84 KM	49.73720 °N	107.48668 °E	
Agnetina cocandica	Within Known Range? N	Nearest Occurrence:	609.08 KM	50.06476 °N	106.13388 °E	
<b>Family: Perlodidae</b>						
Arcynopteryx sajanensis	Within Known Range? N	Nearest Occurrence:	1,246.77 KM	51.61397 °N	100.59972 °E	
Kaszabia nigricauda	Within Known Range? N	Nearest Occurrence:	412.32 KM	48.25861 °N	107.90251 °E	
Megarcys ochracea	Within Known Range? N	Nearest Occurrence:	463.98 KM	47.97108 °N	107.49534 °E	
Pictetiella asiatica	Within Known Range? N	Nearest Occurrence:	1,253.18 KM	51.65822 °N	100.53000 °E	

**LOE Rating: Probable Total: 2**

<b>Family: Perlidae</b>						
Kamimuria exilis	Within Known Range? N	Nearest Occurrence:	1,415.22 KM	50.16278 °N	98.84212 °E	
<b>Family: Perlodidae</b>						
Isoperla obscura	Within Known Range? N	Nearest Occurrence:	544.89 KM	49.72192 °N	106.65562 °E	

**Basin:** Pacific Ocean Basin  
**Aimags:** Khentii  
**Soums:** Dadal

Freshwater Ecoregion: Shilka (Amur)

Terrestrial Ecoregion: Trans-Baikal Conifer Forests

**WQM Sites:**

WQM Sites: # 55 (Balj River @ N 49.06883° E 111.61282°)

LOE Ranking Based on Predicted ENM Maps Only

**LOE Rating: Possible Total: 5**

Family: Chloroperlidae					
Alloperla joosti	Within Known Range? N	Nearest Occurrence:	934.27 KM	49.21675°N	103.10750°E
Family: Nemouridae					
Amphinemura standfussi	Within Known Range? N	Nearest Occurrence:	437.50 KM	49.73130°N	107.63484°E
Nemoura sahlbergi	Within Known Range? N	Nearest Occurrence:	413.20 KM	48.21780°N	107.90392°E
Family: Perlidae					
Paragnetina flavotincta	Within Known Range? N	Nearest Occurrence:	607.99 KM	50.06476°N	106.13388°E
Family: Taeniopterygidae					
Taenionema japonicum	Within Known Range? N	Nearest Occurrence:	477.24 KM	49.05411°N	107.23175°E

**LOE Rating: Predicted Total: 16**

Family: Capniidae					
Capnia nigra	Within Known Range? N	Nearest Occurrence:	1,212.52 KM	50.92452°N	100.75528°E
Mesocapnia variabilis	Within Known Range? N	Nearest Occurrence:	408.15 KM	48.42080°N	107.91406°E
Family: Chloroperlidae					
Alaskaperla longidentata	Within Known Range? N	Nearest Occurrence:	412.24 KM	48.24734°N	107.90589°E
Alloperla deminuta	Within Known Range? N	Nearest Occurrence:	413.20 KM	48.21780°N	107.90392°E
Suwallia teleckojensis	Within Known Range? N	Nearest Occurrence:	408.15 KM	48.42080°N	107.91406°E
Family: Leuctridae					
Leuctra fusca	Within Known Range? N	Nearest Occurrence:	449.82 KM	49.75393°N	107.52609°E
Family: Nemouridae					
Nemoura arctica	Within Known Range? N	Nearest Occurrence:	413.06 KM	48.25861°N	107.90251°E
Family: Perlodidae					
Arcynopteryx compacta	Within Known Range? N	Nearest Occurrence:	462.69 KM	47.84324°N	107.55299°E
Arcynopteryx polaris	Within Known Range? N	Nearest Occurrence:	408.15 KM	48.42080°N	107.91406°E
Diura bicaudata	Within Known Range? N	Nearest Occurrence:	1,303.69 KM	47.21768°N	99.92824°E
Diura majuscula	Within Known Range? N	Nearest Occurrence:	414.64 KM	48.13287°N	107.91890°E
Isoperla altaica	Within Known Range? N	Nearest Occurrence:	412.77 KM	48.60182°N	107.84335°E
Isoperla eximia	Within Known Range? N	Nearest Occurrence:	412.03 KM	48.60182°N	107.84335°E
Isoperla mongolica	Within Known Range? N	Nearest Occurrence:	423.91 KM	48.09549°N	107.84265°E
Isoperla potanini	Within Known Range? N	Nearest Occurrence:	1,086.50 KM	50.62324°N	101.87412°E
Skwala pusilla	Within Known Range? N	Nearest Occurrence:	2,555.16 KM	48.51277°N	88.51107°E

**LOE Rating: Unlikely Total: 3**

Family: Capniidae					
Capnia khulsbagia	Within Known Range? N	Nearest Occurrence:	1,217.10 KM	51.16116°N	100.75636°E
Mesocapnia altaica	Within Known Range? N	Nearest Occurrence:	2,512.13 KM	48.43684°N	88.90094°E
Family: Nemouridae					
Nemurella pictetii	Within Known Range? N	Nearest Occurrence:	1,329.94 KM	51.07896°N	99.70857°E



**Basin:** Pacific Ocean Basin  
**Aimags:** Khentii  
**Soums:** Darkhan

Freshwater Ecoregion: Argun

Terrestrial Ecoregion: Mongolian-Manchurian Grassland

LOE Ranking Based on Predicted ENM Maps Only

**LOE Rating: Highly Likely Total: 9**

Family: Capniidae

Isocapnia guentheri

Within Known Range? N Nearest Occurrence: 258.40 KM 48.24734 °N 107.90589 °E

Isocapnia sibirica

Within Known Range? N Nearest Occurrence: 251.23 KM 48.09549 °N 107.84265 °E

Family: Chloroperlidae

Alloperla rostellata

Within Known Range? N Nearest Occurrence: 744.48 KM 49.77776 °N 103.60860 °E

Haploperla lepnevae

Within Known Range? N Nearest Occurrence: 277.58 KM 47.82258 °N 107.33613 °E

Suwallia kerzhneri

Within Known Range? N Nearest Occurrence: 277.81 KM 48.12416 °N 107.54780 °E

Family: Leuctridae

Paraleuctra zapekinae

Within Known Range? N Nearest Occurrence: 249.88 KM 48.14846 °N 107.91267 °E

Family: Nemouridae

Nemoura cinerea

Within Known Range? N Nearest Occurrence: 263.09 KM 47.96783 °N 107.59278 °E

Family: Perlidae

Agnetina extrema

Within Known Range? N Nearest Occurrence: 250.80 KM 48.09671 °N 107.84928 °E

Family: Pteronarcyidae

Pteronarcys reticulata

Within Known Range? N Nearest Occurrence: 372.21 KM 49.08636 °N 107.30750 °E

**LOE Rating: Likely Total: 13**

Family: Capniidae

Isocapnia kudia

Within Known Range? N Nearest Occurrence: 1,208.55 KM 51.25356 °N 99.66687 °E

Family: Nemouridae

Amphinemura borealis

Within Known Range? N Nearest Occurrence: 277.58 KM 47.82258 °N 107.33613 °E

Family: Perlidae

Agnetina brevipennis

Within Known Range? N Nearest Occurrence: 372.21 KM 49.08636 °N 107.30750 °E

Agnetina cocandica

Within Known Range? N Nearest Occurrence: 541.05 KM 50.06476 °N 106.13388 °E

Kamimuria exilis

Within Known Range? N Nearest Occurrence: 1,249.65 KM 50.16278 °N 98.84212 °E

Family: Perlodidae

Arcynopteryx sajanensis

Within Known Range? N Nearest Occurrence: 1,137.56 KM 51.61397 °N 100.59972 °E

Isoperla asiatica

Within Known Range? N Nearest Occurrence: 263.09 KM 47.96783 °N 107.59278 °E

Isoperla kozlovi

Within Known Range? N Nearest Occurrence: 247.84 KM 48.13111 °N 107.92120 °E

Isoperla lunigera

Within Known Range? N Nearest Occurrence: 251.23 KM 48.09549 °N 107.84265 °E

Kaszabia nigricauda

Within Known Range? N Nearest Occurrence: 250.80 KM 48.09671 °N 107.84928 °E

Megarcys ochracea

Within Known Range? N Nearest Occurrence: 271.98 KM 47.97108 °N 107.49534 °E

Pictetiella asiatica

Within Known Range? N Nearest Occurrence: 1,144.67 KM 51.65822 °N 100.53000 °E

Family: Taeniopterygidae

Taenionema japonicum

Within Known Range? N Nearest Occurrence: 375.69 KM 49.05411 °N 107.23175 °E

**LOE Rating: Probable Total: 1**

Family: Chloroperlidae

Alloperla joosti

Within Known Range? N Nearest Occurrence: 767.31 KM 49.21675 °N 103.10750 °E

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.



**Basin:** Pacific Ocean Basin  
**Aimags:** Khentii  
**Soums:** Darkhan

Freshwater Ecoregion: Argun

Terrestrial Ecoregion: Mongolian-Manchurian Grassland

LOE Ranking Based on Predicted ENM Maps Only

**LOE Rating: Possible Total: 3**

Family: Chloroperlidae

*Alloperla mediata* Within Known Range? N Nearest Occurrence: 744.48 KM 49.77776°N 103.60860°E

Family: Perlodidae

*Diura bicaudata* Within Known Range? N Nearest Occurrence: 1,062.58 KM 47.21768°N 99.92824°E

*Isoperla obscura* Within Known Range? N Nearest Occurrence: 472.91 KM 49.72192°N 106.65562°E

**LOE Rating: Predicted Total: 18**

Family: Capniidae

*Capnia nigra* Within Known Range? N Nearest Occurrence: 1,084.04 KM 50.92452°N 100.75528°E

*Mesocapnia variabilis* Within Known Range? N Nearest Occurrence: 272.83 KM 48.42080°N 107.91406°E

Family: Chloroperlidae

*Alaskaperla longidentata* Within Known Range? N Nearest Occurrence: 249.88 KM 48.14846°N 107.91267°E

*Alloperla deminuta* Within Known Range? N Nearest Occurrence: 249.88 KM 48.14846°N 107.91267°E

*Suwallia teleckojensis* Within Known Range? N Nearest Occurrence: 269.04 KM 48.16668°N 107.69548°E

Family: Leuctridae

*Leuctra fusca* Within Known Range? N Nearest Occurrence: 373.51 KM 49.08643°N 107.28952°E

Family: Nemouridae

*Amphinemura standfussi* Within Known Range? N Nearest Occurrence: 410.04 KM 49.73130°N 107.63484°E

*Nemoura arctica* Within Known Range? N Nearest Occurrence: 248.60 KM 48.13287°N 107.91890°E

*Nemoura sahlbergi* Within Known Range? N Nearest Occurrence: 256.13 KM 48.21780°N 107.90392°E

Family: Perlidae

*Paragnetina flavotincta* Within Known Range? N Nearest Occurrence: 540.08 KM 50.06476°N 106.13388°E

Family: Perlodidae

*Arcynopteryx compacta* Within Known Range? N Nearest Occurrence: 259.04 KM 47.84324°N 107.55299°E

*Arcynopteryx polaris* Within Known Range? N Nearest Occurrence: 272.83 KM 48.42080°N 107.91406°E

*Diura majuscula* Within Known Range? N Nearest Occurrence: 248.60 KM 48.13287°N 107.91890°E

*Isoperla altaica* Within Known Range? N Nearest Occurrence: 293.44 KM 48.60182°N 107.84335°E

*Isoperla eximia* Within Known Range? N Nearest Occurrence: 292.91 KM 48.60182°N 107.84335°E

*Isoperla mongolica* Within Known Range? N Nearest Occurrence: 251.69 KM 48.09549°N 107.84265°E

*Isoperla potanini* Within Known Range? N Nearest Occurrence: 844.35 KM 46.73093°N 101.88583°E

*Skwala pusilla* Within Known Range? N Nearest Occurrence: 2,337.53 KM 48.51277°N 88.51107°E

**LOE Rating: Unlikely Total: 3**

Family: Capniidae

*Capnia khulsbagia* Within Known Range? N Nearest Occurrence: 1,090.84 KM 50.98944°N 100.71944°E

*Mesocapnia altaica* Within Known Range? N Nearest Occurrence: 2,293.65 KM 48.43684°N 88.90094°E

Family: Nemouridae

*Nemurella pictetii* Within Known Range? N Nearest Occurrence: 1,196.07 KM 51.07896°N 99.70857°E

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.



**Basin:** Pacific Ocean Basin  
**Aimags:** Khentii  
**Soums:** Delgerkhaan

Freshwater Ecoregion: Argun

Terrestrial Ecoregion: Mongolian-Manchurian Grassland

LOE Ranking Based on Predicted ENM Maps Only

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Highly Likely Total: 12**

Family: Capniidae					
Isocapnia guentheri	Within Known Range? N	Nearest Occurrence:	170.93 KM	48.24734 °N	107.90589 °E
Isocapnia sibirica	Within Known Range? N	Nearest Occurrence:	165.63 KM	48.09549 °N	107.84265 °E
Family: Chloroperlidae					
Alloperla rostellata	Within Known Range? N	Nearest Occurrence:	667.19 KM	49.77776 °N	103.60860 °E
Haploperla lepnevae	Within Known Range? N	Nearest Occurrence:	201.30 KM	47.82258 °N	107.33613 °E
Suwallia kerzhneri	Within Known Range? N	Nearest Occurrence:	194.57 KM	48.12416 °N	107.54780 °E
Family: Leuctridae					
Paraleuctra zapekinae	Within Known Range? N	Nearest Occurrence:	163.15 KM	48.14846 °N	107.91267 °E
Family: Nemouridae					
Nemoura cinerea	Within Known Range? N	Nearest Occurrence:	181.66 KM	47.96783 °N	107.59278 °E
Family: Perlidae					
Agnetina extrema	Within Known Range? N	Nearest Occurrence:	165.12 KM	48.09671 °N	107.84928 °E
Family: Perlodidae					
Isoperla asiatica	Within Known Range? N	Nearest Occurrence:	181.66 KM	47.96783 °N	107.59278 °E
Isoperla lunigera	Within Known Range? N	Nearest Occurrence:	165.63 KM	48.09549 °N	107.84265 °E
Kaszabia nigricauda	Within Known Range? N	Nearest Occurrence:	165.12 KM	48.09671 °N	107.84928 °E
Family: Pteronarcyidae					
Pteronarcys reticulata	Within Known Range? N	Nearest Occurrence:	283.81 KM	49.08636 °N	107.30750 °E

**LOE Rating: Likely Total: 9**

Family: Capniidae					
Isocapnia kudia	Within Known Range? N	Nearest Occurrence:	1,133.42 KM	51.25356 °N	99.66687 °E
Family: Nemouridae					
Amphinemura borealis	Within Known Range? N	Nearest Occurrence:	201.30 KM	47.82258 °N	107.33613 °E
Family: Perlidae					
Agnetina cocandica	Within Known Range? N	Nearest Occurrence:	453.33 KM	50.06476 °N	106.13388 °E
Kamimuria exilis	Within Known Range? N	Nearest Occurrence:	1,180.90 KM	50.16278 °N	98.84212 °E
Family: Perlodidae					
Arcynopteryx sajanensis	Within Known Range? N	Nearest Occurrence:	1,058.97 KM	51.61397 °N	100.59972 °E
Isoperla kozlovi	Within Known Range? N	Nearest Occurrence:	161.19 KM	48.13111 °N	107.92120 °E
Megarcys ochracea	Within Known Range? N	Nearest Occurrence:	191.46 KM	47.97108 °N	107.49534 °E
Pictetiella asiatica	Within Known Range? N	Nearest Occurrence:	1,066.20 KM	51.65822 °N	100.53000 °E
Family: Taeniopterygidae					
Taenionema japonicum	Within Known Range? N	Nearest Occurrence:	287.53 KM	49.05411 °N	107.23175 °E

**LOE Rating: Probable Total: 2**

Family: Chloroperlidae					
Alloperla mediata	Within Known Range? N	Nearest Occurrence:	667.19 KM	49.77776 °N	103.60860 °E
Family: Perlidae					
Agnetina brevipennis	Within Known Range? N	Nearest Occurrence:	283.81 KM	49.08636 °N	107.30750 °E



**Basin:** Pacific Ocean Basin

**Aimags:** Khentii

**Soums:** Delgerkhaan

Freshwater Ecoregion: Argun

Terrestrial Ecoregion: Mongolian-Manchurian Grassland

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

LOE Ranking Based on Predicted ENM Maps Only

**LOE Rating: Possible Total: 4**

Family: Chloroperlidae

Alaskaperla longidentata Within Known Range? N Nearest Occurrence: 163.15 KM 48.14846°N 107.91267°E

Alloperla deminuta Within Known Range? N Nearest Occurrence: 163.15 KM 48.14846°N 107.91267°E

Alloperla joosti Within Known Range? N Nearest Occurrence: 695.48 KM 49.21675°N 103.10750°E

Family: Nemouridae

Amphinemura standfussi Within Known Range? N Nearest Occurrence: 320.70 KM 49.73130°N 107.63484°E

**LOE Rating: Predicted Total: 17**

Family: Capniidae

Capnia nigra Within Known Range? N Nearest Occurrence: 1,008.13 KM 50.92452°N 100.75528°E

Mesocapnia variabilis Within Known Range? N Nearest Occurrence: 184.18 KM 48.42080°N 107.91406°E

Family: Chloroperlidae

Suwallia teleckojensis Within Known Range? N Nearest Occurrence: 183.83 KM 48.16668°N 107.69548°E

Family: Leuctridae

Leuctra fusca Within Known Range? N Nearest Occurrence: 285.17 KM 49.08643°N 107.28952°E

Family: Nemouridae

Nemoura arctica Within Known Range? N Nearest Occurrence: 161.80 KM 48.13287°N 107.91890°E

Nemoura sahlbergi Within Known Range? N Nearest Occurrence: 168.90 KM 48.21780°N 107.90392°E

Family: Perlidae

Paragnetina flavotincta Within Known Range? N Nearest Occurrence: 452.51 KM 50.06476°N 106.13388°E

Family: Perlodidae

Arcynopteryx compacta Within Known Range? N Nearest Occurrence: 180.05 KM 47.84324°N 107.55299°E

Arcynopteryx polaris Within Known Range? N Nearest Occurrence: 184.18 KM 48.42080°N 107.91406°E

Diura bicaudata Within Known Range? N Nearest Occurrence: 1,011.67 KM 47.21768°N 99.92824°E

Diura majuscula Within Known Range? N Nearest Occurrence: 161.80 KM 48.13287°N 107.91890°E

Isoperla altaica Within Known Range? N Nearest Occurrence: 204.43 KM 48.60182°N 107.84335°E

Isoperla eximia Within Known Range? N Nearest Occurrence: 204.07 KM 48.60182°N 107.84335°E

Isoperla mongolica Within Known Range? N Nearest Occurrence: 165.93 KM 48.09549°N 107.84265°E

Isoperla obscura Within Known Range? N Nearest Occurrence: 384.76 KM 49.72192°N 106.65562°E

Isoperla potanini Within Known Range? N Nearest Occurrence: 797.58 KM 46.73093°N 101.88583°E

Skwala pusilla Within Known Range? N Nearest Occurrence: 2,283.57 KM 48.51277°N 88.51107°E

**LOE Rating: Unlikely Total: 3**

Family: Capniidae

Capnia khulsbagia Within Known Range? N Nearest Occurrence: 1,014.72 KM 50.98944°N 100.71944°E

Mesocapnia altaica Within Known Range? N Nearest Occurrence: 2,239.85 KM 48.43684°N 88.90094°E

Family: Nemouridae

Nemurella pictetii Within Known Range? N Nearest Occurrence: 1,121.61 KM 51.07896°N 99.70857°E

**Basin:** Pacific Ocean Basin  
**Aimags:** Khentii  
**Soums:** Jargaltkhaan

Freshwater Ecoregion: Argun

Terrestrial Ecoregion: Mongolian-Manchurian Grassland

LOE Ranking Based on Predicted ENM Maps Only

**LOE Rating: Highly Likely Total: 12**

Family: Capniidae

Isocapnia guentheri

Within Known Range? N Nearest Occurrence: 196.70 KM 48.24734°N 107.90589°E

Isocapnia sibirica

Within Known Range? N Nearest Occurrence: 196.52 KM 48.09549°N 107.84265°E

Family: Chloroperlidae

Alloperla rostellata

Within Known Range? N Nearest Occurrence: 702.21 KM 49.77776°N 103.60860°E

Haploperla lepnevae

Within Known Range? N Nearest Occurrence: 243.36 KM 47.82258°N 107.33613°E

Suwallia kerzhneri

Within Known Range? N Nearest Occurrence: 228.45 KM 48.12416°N 107.54780°E

Family: Leuctridae

Paraleuctra zapekinae

Within Known Range? N Nearest Occurrence: 191.48 KM 48.14846°N 107.91267°E

Family: Nemouridae

Nemoura cinerea

Within Known Range? N Nearest Occurrence: 218.75 KM 47.96783°N 107.59278°E

Family: Perlidae

Agnatina extrema

Within Known Range? N Nearest Occurrence: 195.88 KM 48.09671°N 107.84928°E

Family: Perlodidae

Isoperla asiatica

Within Known Range? N Nearest Occurrence: 218.75 KM 47.96783°N 107.59278°E

Isoperla lunigera

Within Known Range? N Nearest Occurrence: 196.52 KM 48.09549°N 107.84265°E

Kaszabia nigricauda

Within Known Range? N Nearest Occurrence: 195.49 KM 48.21780°N 107.90392°E

Family: Pteronarcyidae

Pteronarcys reticulata

Within Known Range? N Nearest Occurrence: 302.09 KM 49.08636°N 107.30750°E

**LOE Rating: Likely Total: 8**

Family: Capniidae

Isocapnia kudia

Within Known Range? N Nearest Occurrence: 1,169.37 KM 51.25356°N 99.66687°E

Family: Nemouridae

Amphinemura borealis

Within Known Range? N Nearest Occurrence: 243.36 KM 47.82258°N 107.33613°E

Family: Perlidae

Kamimuria exilis

Within Known Range? N Nearest Occurrence: 1,222.35 KM 50.16278°N 98.84212°E

Family: Perlodidae

Arcynopteryx sajanensis

Within Known Range? N Nearest Occurrence: 1,091.57 KM 51.61397°N 100.59972°E

Isoperla kozlovi

Within Known Range? N Nearest Occurrence: 189.86 KM 48.13111°N 107.92120°E

Megarcys ochracea

Within Known Range? N Nearest Occurrence: 229.32 KM 47.97108°N 107.49534°E

Pictetiella asiatica

Within Known Range? N Nearest Occurrence: 1,098.70 KM 51.65822°N 100.53000°E

Family: Taeniopterygidae

Taenionema japonicum

Within Known Range? N Nearest Occurrence: 307.40 KM 49.05411°N 107.23175°E

**LOE Rating: Probable Total: 3**

Family: Chloroperlidae

Alloperla mediata

Within Known Range? N Nearest Occurrence: 702.21 KM 49.77776°N 103.60860°E

Family: Perlidae

Agnatina brevipennis

Within Known Range? N Nearest Occurrence: 302.09 KM 49.08636°N 107.30750°E

Agnatina cocandica

Within Known Range? N Nearest Occurrence: 472.33 KM 50.06476°N 106.13388°E



**Basin:** Pacific Ocean Basin  
**Aimags:** Khentii  
**Soums:** Jargaltkhaan

Freshwater Ecoregion: Argun

Terrestrial Ecoregion: Mongolian-Manchurian Grassland

LOE Ranking Based on Predicted ENM Maps Only

<b>LOE Rating:</b> Possible	<b>Total:</b> 4
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Family: Chloroperlidae

Alaskaperla longidentata	Within Known Range? N	Nearest Occurrence: 191.48 KM	48.14846°N	107.91267°E
Alloperla deminuta	Within Known Range? N	Nearest Occurrence: 191.48 KM	48.14846°N	107.91267°E
Alloperla joosti	Within Known Range? N	Nearest Occurrence: 735.52 KM	49.21675°N	103.10750°E

Family: Nemouridae

Amphinemura standfussi	Within Known Range? N	Nearest Occurrence: 324.98 KM	49.73130°N	107.63484°E
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<b>LOE Rating:</b> Predicted	<b>Total:</b> 17
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Family: Capniidae

Capnia nigra	Within Known Range? N	Nearest Occurrence: 1,043.54 KM	50.92452°N	100.75528°E
Mesocapnia variabilis	Within Known Range? N	Nearest Occurrence: 205.41 KM	48.42080°N	107.91406°E

Family: Chloroperlidae

Suwallia teleckojensis	Within Known Range? N	Nearest Occurrence: 205.41 KM	48.42080°N	107.91406°E
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Family: Leuctridae

Leuctra fusca	Within Known Range? N	Nearest Occurrence: 303.70 KM	49.08643°N	107.28952°E
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Family: Nemouridae

Nemoura arctica	Within Known Range? N	Nearest Occurrence: 190.51 KM	48.13287°N	107.91890°E
Nemoura sahlbergi	Within Known Range? N	Nearest Occurrence: 195.49 KM	48.21780°N	107.90392°E

Family: Perlidae

Paragnetina flavotincta	Within Known Range? N	Nearest Occurrence: 471.48 KM	50.06476°N	106.13388°E
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Family: Perlodidae

Arcynopteryx compacta	Within Known Range? N	Nearest Occurrence: 220.44 KM	47.84324°N	107.55299°E
Arcynopteryx polaris	Within Known Range? N	Nearest Occurrence: 205.41 KM	48.42080°N	107.91406°E
Diura bicaudata	Within Known Range? N	Nearest Occurrence: 1,062.95 KM	47.21768°N	99.92824°E
Diura majuscula	Within Known Range? N	Nearest Occurrence: 190.51 KM	48.13287°N	107.91890°E
Isoperla altaica	Within Known Range? N	Nearest Occurrence: 222.86 KM	48.60182°N	107.84335°E
Isoperla eximia	Within Known Range? N	Nearest Occurrence: 222.46 KM	48.60182°N	107.84335°E
Isoperla mongolica	Within Known Range? N	Nearest Occurrence: 196.87 KM	48.09549°N	107.84265°E
Isoperla obscura	Within Known Range? N	Nearest Occurrence: 402.41 KM	49.72192°N	106.65562°E
Isoperla potanini	Within Known Range? N	Nearest Occurrence: 850.83 KM	46.73093°N	101.88583°E
Skwala pusilla	Within Known Range? N	Nearest Occurrence: 2,332.72 KM	48.51277°N	88.51107°E

<b>LOE Rating:</b> Unlikely	<b>Total:</b> 3
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Family: Capniidae

Capnia khulsbagia	Within Known Range? N	Nearest Occurrence: 1,049.89 KM	50.98944°N	100.71944°E
Mesocapnia altaica	Within Known Range? N	Nearest Occurrence: 2,289.09 KM	48.43684°N	88.90094°E

Family: Nemouridae

Nemurella pictetii	Within Known Range? N	Nearest Occurrence: 1,158.22 KM	51.07896°N	99.70857°E
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**Basin:** Pacific Ocean Basin  
**Aimags:** Khentii  
**Soums:** Kherlen

Freshwater Ecoregion: Argun

Terrestrial Ecoregion: Mongolian-Manchurian Grassland

LOE Ranking Based on Predicted ENM Maps Only

**LOE Rating: Highly Likely Total: 11**

Family: Capniidae

Isocapnia guentheri

Within Known Range? N Nearest Occurrence: 300.27 KM 48.24734 °N 107.90589 °E

Isocapnia sibirica

Within Known Range? N Nearest Occurrence: 303.80 KM 48.09549 °N 107.84265 °E

Family: Chloroperlidae

Alloperla rostellata

Within Known Range? N Nearest Occurrence: 805.44 KM 49.77776 °N 103.60860 °E

Haploperla lepnevae

Within Known Range? N Nearest Occurrence: 356.24 KM 47.82258 °N 107.33613 °E

Suwallia kerzhneri

Within Known Range? N Nearest Occurrence: 336.60 KM 48.12416 °N 107.54780 °E

Family: Leuctridae

Paraleuctra zapekinae

Within Known Range? N Nearest Occurrence: 297.22 KM 48.14846 °N 107.91267 °E

Family: Nemouridae

Nemoura cinerea

Within Known Range? N Nearest Occurrence: 329.25 KM 47.96783 °N 107.59278 °E

Family: Perlidae

Agnetina extrema

Within Known Range? N Nearest Occurrence: 303.09 KM 48.09671 °N 107.84928 °E

Family: Perlodidae

Isoperla asiatica

Within Known Range? N Nearest Occurrence: 329.25 KM 47.96783 °N 107.59278 °E

Isoperla lunigera

Within Known Range? N Nearest Occurrence: 303.80 KM 48.09549 °N 107.84265 °E

Family: Pteronarcyidae

Pteronarcys reticulata

Within Known Range? N Nearest Occurrence: 393.51 KM 49.08636 °N 107.30750 °E

**LOE Rating: Likely Total: 11**

Family: Capniidae

Isocapnia kudia

Within Known Range? N Nearest Occurrence: 1,272.14 KM 51.25356 °N 99.66687 °E

Family: Chloroperlidae

Alloperla mediata

Within Known Range? N Nearest Occurrence: 805.44 KM 49.77776 °N 103.60860 °E

Family: Nemouridae

Amphinemura borealis

Within Known Range? N Nearest Occurrence: 356.24 KM 47.82258 °N 107.33613 °E

Family: Perlidae

Agnetina brevipennis

Within Known Range? N Nearest Occurrence: 393.51 KM 49.08636 °N 107.30750 °E

Agnetina cocandica

Within Known Range? N Nearest Occurrence: 559.76 KM 50.06476 °N 106.13388 °E

Kamimuria exilis

Within Known Range? N Nearest Occurrence: 1,330.91 KM 50.16278 °N 98.84212 °E

Family: Perlodidae

Arcynopteryx sajanensis

Within Known Range? N Nearest Occurrence: 1,190.80 KM 51.61397 °N 100.59972 °E

Isoperla kozlovi

Within Known Range? N Nearest Occurrence: 295.93 KM 48.13111 °N 107.92120 °E

Kaszabia nigricauda

Within Known Range? N Nearest Occurrence: 299.76 KM 48.21780 °N 107.90392 °E

Megarcys ochracea

Within Known Range? N Nearest Occurrence: 340.04 KM 47.97108 °N 107.49534 °E

Pictetiella asiatica

Within Known Range? N Nearest Occurrence: 1,197.67 KM 51.65822 °N 100.53000 °E

**LOE Rating: Probable Total: 2**

Family: Perlodidae

Isoperla obscura

Within Known Range? N Nearest Occurrence: 489.68 KM 49.72192 °N 106.65562 °E

Family: Taeniopterygidae

Taenionema japonicum

Within Known Range? N Nearest Occurrence: 400.48 KM 49.05411 °N 107.23175 °E

**Basin:** Pacific Ocean Basin  
**Aimags:** Khentii  
**Soums:** Kherlen

Freshwater Ecoregion: Argun

Terrestrial Ecoregion: Mongolian-Manchurian Grassland

LOE Ranking Based on Predicted ENM Maps Only

<b>LOE Rating:</b>	<b>Possible</b>	<b>Total:</b>	<b>2</b>
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Family: Chloroperlidae

Alloperla joosti Within Known Range? N Nearest Occurrence: 843.56 KM 49.21675°N 103.10750°E

Family: Nemouridae

Amphinemura standfussi Within Known Range? N Nearest Occurrence: 397.96 KM 49.73130°N 107.63484°E

<b>LOE Rating:</b>	<b>Predicted</b>	<b>Total:</b>	<b>18</b>
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Family: Capniidae

Capnia nigra Within Known Range? N Nearest Occurrence: 1,145.98 KM 50.92452°N 100.75528°E

Mesocapnia variabilis Within Known Range? N Nearest Occurrence: 304.92 KM 48.42080°N 107.91406°E

Family: Chloroperlidae

Alaskaperla longidentata Within Known Range? N Nearest Occurrence: 297.22 KM 48.14846°N 107.91267°E

Alloperla deminuta Within Known Range? N Nearest Occurrence: 297.22 KM 48.14846°N 107.91267°E

Suwallia teleckojensis Within Known Range? N Nearest Occurrence: 304.92 KM 48.42080°N 107.91406°E

Family: Leuctridae

Leuctra fusca Within Known Range? N Nearest Occurrence: 395.33 KM 49.08643°N 107.28952°E

Family: Nemouridae

Nemoura arctica Within Known Range? N Nearest Occurrence: 296.75 KM 48.13287°N 107.91890°E

Nemoura sahlbergi Within Known Range? N Nearest Occurrence: 299.76 KM 48.21780°N 107.90392°E

Family: Perlidae

Paragnetina flavotincta Within Known Range? N Nearest Occurrence: 558.75 KM 50.06476°N 106.13388°E

Family: Perlodidae

Arcynopteryx compacta Within Known Range? N Nearest Occurrence: 332.96 KM 47.84324°N 107.55299°E

Arcynopteryx polaris Within Known Range? N Nearest Occurrence: 304.92 KM 48.42080°N 107.91406°E

Diura bicaudata Within Known Range? N Nearest Occurrence: 1,178.76 KM 47.21768°N 99.92824°E

Diura majuscula Within Known Range? N Nearest Occurrence: 296.75 KM 48.13287°N 107.91890°E

Isoperla altaica Within Known Range? N Nearest Occurrence: 318.71 KM 48.60182°N 107.84335°E

Isoperla eximia Within Known Range? N Nearest Occurrence: 318.14 KM 48.60182°N 107.84335°E

Isoperla mongolica Within Known Range? N Nearest Occurrence: 304.34 KM 48.09549°N 107.84265°E

Isoperla potanini Within Known Range? N Nearest Occurrence: 967.49 KM 46.73093°N 101.88583°E

Skwala pusilla Within Known Range? N Nearest Occurrence: 2,447.14 KM 48.51277°N 88.51107°E

<b>LOE Rating:</b>	<b>Unlikely</b>	<b>Total:</b>	<b>3</b>
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Family: Capniidae

Capnia khulsbagia Within Known Range? N Nearest Occurrence: 1,152.06 KM 50.98944°N 100.71944°E

Mesocapnia altaica Within Known Range? N Nearest Occurrence: 2,403.57 KM 48.43684°N 88.90094°E

Family: Nemouridae

Nemurella pictetii Within Known Range? N Nearest Occurrence: 1,261.73 KM 51.07896°N 99.70857°E



**Basin:** Pacific Ocean Basin  
**Aimags:** Khentii  
**Soums:** Moron

Freshwater Ecoregion: Argun

Terrestrial Ecoregion: Mongolian-Manchurian Grassland

LOE Ranking Based on Predicted ENM Maps Only

**LOE Rating: Highly Likely Total: 11**

Family: Capniidae

Isocapnia guentheri

Within Known Range? N Nearest Occurrence: 280.20 KM 48.24734 °N 107.90589 °E

Isocapnia sibirica

Within Known Range? N Nearest Occurrence: 280.99 KM 48.09549 °N 107.84265 °E

Family: Chloroperlidae

Alloperla rostellata

Within Known Range? N Nearest Occurrence: 786.39 KM 49.77776 °N 103.60860 °E

Haploperla lepnevae

Within Known Range? N Nearest Occurrence: 328.17 KM 47.82258 °N 107.33613 °E

Suwallia kerzhneri

Within Known Range? N Nearest Occurrence: 313.15 KM 48.12416 °N 107.54780 °E

Family: Leuctridae

Paraleuctra zapekinae

Within Known Range? N Nearest Occurrence: 275.57 KM 48.14846 °N 107.91267 °E

Family: Nemouridae

Nemoura cinerea

Within Known Range? N Nearest Occurrence: 303.69 KM 47.96783 °N 107.59278 °E

Family: Perlidae

Agnetina extrema

Within Known Range? N Nearest Occurrence: 280.33 KM 48.09671 °N 107.84928 °E

Family: Perlodidae

Isoperla asiatica

Within Known Range? N Nearest Occurrence: 303.69 KM 47.96783 °N 107.59278 °E

Isoperla lunigera

Within Known Range? N Nearest Occurrence: 280.99 KM 48.09549 °N 107.84265 °E

Family: Pteronarcyidae

Pteronarcys reticulata

Within Known Range? N Nearest Occurrence: 381.67 KM 49.08636 °N 107.30750 °E

**LOE Rating: Likely Total: 10**

Family: Capniidae

Isocapnia kudia

Within Known Range? N Nearest Occurrence: 1,253.58 KM 51.25356 °N 99.66687 °E

Family: Nemouridae

Amphinemura borealis

Within Known Range? N Nearest Occurrence: 328.17 KM 47.82258 °N 107.33613 °E

Family: Perlidae

Agnetina brevipennis

Within Known Range? N Nearest Occurrence: 381.67 KM 49.08636 °N 107.30750 °E

Agnetina cocandica

Within Known Range? N Nearest Occurrence: 550.96 KM 50.06476 °N 106.13388 °E

Kamimuria exilis

Within Known Range? N Nearest Occurrence: 1,307.45 KM 50.16278 °N 98.84212 °E

Family: Perlodidae

Arcynopteryx sajanensis

Within Known Range? N Nearest Occurrence: 1,175.02 KM 51.61397 °N 100.59972 °E

Isoperla kozlovi

Within Known Range? N Nearest Occurrence: 274.03 KM 48.13111 °N 107.92120 °E

Kaszabia nigricauda

Within Known Range? N Nearest Occurrence: 279.20 KM 48.21780 °N 107.90392 °E

Megarcys ochracea

Within Known Range? N Nearest Occurrence: 314.27 KM 47.97108 °N 107.49534 °E

Pictetiella asiatica

Within Known Range? N Nearest Occurrence: 1,181.97 KM 51.65822 °N 100.53000 °E

**LOE Rating: Probable Total: 3**

Family: Chloroperlidae

Alloperla mediata

Within Known Range? N Nearest Occurrence: 786.39 KM 49.77776 °N 103.60860 °E

Family: Perlodidae

Isoperla obscura

Within Known Range? N Nearest Occurrence: 480.67 KM 49.72192 °N 106.65562 °E

Family: Taeniopterygidae

Taenionema japonicum

Within Known Range? N Nearest Occurrence: 387.76 KM 49.05411 °N 107.23175 °E

**Basin:** Pacific Ocean Basin  
**Aimags:** Khentii  
**Soums:** Moron

Freshwater Ecoregion: Argun

Terrestrial Ecoregion: Mongolian-Manchurian Grassland

LOE Ranking Based on Predicted ENM Maps Only

**LOE Rating: Possible Total: 2**

Family: Chloroperlidae

Alloperla joosti Within Known Range? N Nearest Occurrence: 820.43 KM 49.21675°N 103.10750°E

Family: Nemouridae

Amphinemura standfussi Within Known Range? N Nearest Occurrence: 395.95 KM 49.73130°N 107.63484°E

**LOE Rating: Predicted Total: 18**

Family: Capniidae

Capnia nigra Within Known Range? N Nearest Occurrence: 1,127.66 KM 50.92452°N 100.75528°E

Mesocapnia variabilis Within Known Range? N Nearest Occurrence: 287.67 KM 48.42080°N 107.91406°E

Family: Chloroperlidae

Alaskaperla longidentata Within Known Range? N Nearest Occurrence: 275.57 KM 48.14846°N 107.91267°E

Alloperla deminuta Within Known Range? N Nearest Occurrence: 275.57 KM 48.14846°N 107.91267°E

Suwallia teleckojensis Within Known Range? N Nearest Occurrence: 287.67 KM 48.42080°N 107.91406°E

Family: Leuctridae

Leuctra fusca Within Known Range? N Nearest Occurrence: 383.38 KM 49.08643°N 107.28952°E

Family: Nemouridae

Nemoura arctica Within Known Range? N Nearest Occurrence: 274.83 KM 48.13287°N 107.91890°E

Nemoura sahlbergi Within Known Range? N Nearest Occurrence: 279.20 KM 48.21780°N 107.90392°E

Family: Perlidae

Paragnetina flavotincta Within Known Range? N Nearest Occurrence: 549.97 KM 50.06476°N 106.13388°E

Family: Perlodidae

Arcynopteryx compacta Within Known Range? N Nearest Occurrence: 305.49 KM 47.84324°N 107.55299°E

Arcynopteryx polaris Within Known Range? N Nearest Occurrence: 287.67 KM 48.42080°N 107.91406°E

Diura bicaudata Within Known Range? N Nearest Occurrence: 1,145.34 KM 47.21768°N 99.92824°E

Diura majuscula Within Known Range? N Nearest Occurrence: 274.83 KM 48.13287°N 107.91890°E

Isoperla altaica Within Known Range? N Nearest Occurrence: 303.83 KM 48.60182°N 107.84335°E

Isoperla eximia Within Known Range? N Nearest Occurrence: 303.28 KM 48.60182°N 107.84335°E

Isoperla mongolica Within Known Range? N Nearest Occurrence: 281.49 KM 48.09549°N 107.84265°E

Isoperla potanini Within Known Range? N Nearest Occurrence: 931.84 KM 46.73093°N 101.88583°E

Skwala pusilla Within Known Range? N Nearest Occurrence: 2,416.35 KM 48.51277°N 88.51107°E

**LOE Rating: Unlikely Total: 3**

Family: Capniidae

Capnia khulsbagia Within Known Range? N Nearest Occurrence: 1,133.96 KM 50.98944°N 100.71944°E

Mesocapnia altaica Within Known Range? N Nearest Occurrence: 2,372.68 KM 48.43684°N 88.90094°E

Family: Nemouridae

Nemurella pictetii Within Known Range? N Nearest Occurrence: 1,242.57 KM 51.07896°N 99.70857°E

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.



**Basin:** Pacific Ocean Basin  
**Aimags:** Khentii  
**Soums:** Norovlin

**Freshwater Ecoregion:** Shilka (Amur)

**Terrestrial Ecoregion:** Daurian Forest Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

LOE Ranking Based on Predicted ENM Maps Only

**LOE Rating: Highly Likely Total: 11**

<b>Family: Capniidae</b>					
Isocapnia guentheri	Within Known Range? N	Nearest Occurrence:	464.42 KM	48.24734 °N	107.90589 °E
Isocapnia sibirica	Within Known Range? N	Nearest Occurrence:	472.86 KM	48.09549 °N	107.84265 °E
<b>Family: Chloroperlidae</b>					
Alloperla rostellata	Within Known Range? N	Nearest Occurrence:	950.38 KM	49.77776 °N	103.60860 °E
Haploperla lepnevae	Within Known Range? N	Nearest Occurrence:	532.47 KM	47.82258 °N	107.33613 °E
Suwallia kerzhneri	Within Known Range? N	Nearest Occurrence:	505.13 KM	48.12416 °N	107.54780 °E
<b>Family: Leuctridae</b>					
Paraleuctra zapekinae	Within Known Range? N	Nearest Occurrence:	464.55 KM	48.14846 °N	107.91267 °E
<b>Family: Perlidae</b>					
Agnetina extrema	Within Known Range? N	Nearest Occurrence:	472.12 KM	48.09671 °N	107.84928 °E
<b>Family: Perlodidae</b>					
Isoperla asiatica	Within Known Range? N	Nearest Occurrence:	502.04 KM	47.96783 °N	107.59278 °E
Isoperla kozlovi	Within Known Range? N	Nearest Occurrence:	463.79 KM	48.13111 °N	107.92120 °E
Isoperla lunigera	Within Known Range? N	Nearest Occurrence:	472.86 KM	48.09549 °N	107.84265 °E
<b>Family: Pteronarcyidae</b>					
Pteronarcys reticulata	Within Known Range? N	Nearest Occurrence:	533.26 KM	49.08636 °N	107.30750 °E

**LOE Rating: Likely Total: 10**

<b>Family: Capniidae</b>					
Isocapnia kudia	Within Known Range? N	Nearest Occurrence:	1,410.50 KM	51.25356 °N	99.66687 °E
<b>Family: Nemouridae</b>					
Amphinemura borealis	Within Known Range? N	Nearest Occurrence:	510.95 KM	49.73130 °N	107.63484 °E
Nemoura cinerea	Within Known Range? N	Nearest Occurrence:	502.04 KM	47.96783 °N	107.59278 °E
<b>Family: Perlidae</b>					
Agnetina brevipennis	Within Known Range? N	Nearest Occurrence:	527.02 KM	49.73720 °N	107.48668 °E
Agnetina cocandica	Within Known Range? N	Nearest Occurrence:	682.72 KM	50.06476 °N	106.13388 °E
Kamimuria exilis	Within Known Range? N	Nearest Occurrence:	1,483.13 KM	50.16278 °N	98.84212 °E
<b>Family: Perlodidae</b>					
Arcynopteryx sajanensis	Within Known Range? N	Nearest Occurrence:	1,321.71 KM	51.61397 °N	100.59972 °E
Kaszabia nigricauda	Within Known Range? N	Nearest Occurrence:	464.71 KM	48.25861 °N	107.90251 °E
Megarcys ochracea	Within Known Range? N	Nearest Occurrence:	512.73 KM	47.97108 °N	107.49534 °E
Pictetiella asiatica	Within Known Range? N	Nearest Occurrence:	1,328.08 KM	51.65822 °N	100.53000 °E

**LOE Rating: Probable Total: 2**

<b>Family: Chloroperlidae</b>					
Alloperla mediata	Within Known Range? N	Nearest Occurrence:	950.38 KM	49.77776 °N	103.60860 °E
<b>Family: Perlodidae</b>					
Isoperla obscura	Within Known Range? N	Nearest Occurrence:	616.34 KM	49.72192 °N	106.65562 °E



**Basin:** Pacific Ocean Basin  
**Aimags:** Khentii  
**Soums:** Norovlin

**Freshwater Ecoregion:** Shilka (Amur)

**Terrestrial Ecoregion:** Daurian Forest Steppe

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

LOE Ranking Based on Predicted ENM Maps Only

**LOE Rating: Possible Total: 5**

<b>Family: Chloroperlidae</b>			
Alloperla deminuta	Within Known Range? N	Nearest Occurrence: 464.55 KM	48.14846°N 107.91267°E
Alloperla joosti	Within Known Range? N	Nearest Occurrence: 998.81 KM	49.21675°N 103.10750°E
<b>Family: Nemouridae</b>			
Amphinemura standfussi	Within Known Range? N	Nearest Occurrence: 510.95 KM	49.73130°N 107.63484°E
<b>Family: Perlidae</b>			
Paragnetina flavotincta	Within Known Range? N	Nearest Occurrence: 681.50 KM	50.06476°N 106.13388°E
<b>Family: Taeniopterygidae</b>			
Taenionema japonicum	Within Known Range? N	Nearest Occurrence: 542.19 KM	49.05411°N 107.23175°E

**LOE Rating: Predicted Total: 16**

<b>Family: Capniidae</b>			
Capnia nigra	Within Known Range? N	Nearest Occurrence: 1,284.71 KM	50.92452°N 100.75528°E
Mesocapnia variabilis	Within Known Range? N	Nearest Occurrence: 463.42 KM	48.42080°N 107.91406°E
<b>Family: Chloroperlidae</b>			
Alaskaperla longidentata	Within Known Range? N	Nearest Occurrence: 464.42 KM	48.24734°N 107.90589°E
Suwallia teleckojensis	Within Known Range? N	Nearest Occurrence: 463.42 KM	48.42080°N 107.91406°E
<b>Family: Leuctridae</b>			
Leuctra fusca	Within Known Range? N	Nearest Occurrence: 523.26 KM	49.75393°N 107.52609°E
<b>Family: Nemouridae</b>			
Nemoura arctica	Within Known Range? N	Nearest Occurrence: 464.86 KM	48.13287°N 107.91890°E
Nemoura sahlbergi	Within Known Range? N	Nearest Occurrence: 464.87 KM	48.21780°N 107.90392°E
<b>Family: Perlodidae</b>			
Arcynopteryx compacta	Within Known Range? N	Nearest Occurrence: 509.24 KM	47.84324°N 107.55299°E
Arcynopteryx polaris	Within Known Range? N	Nearest Occurrence: 463.42 KM	48.42080°N 107.91406°E
Diura bicaudata	Within Known Range? N	Nearest Occurrence: 1,356.74 KM	47.21768°N 99.92824°E
Diura majuscula	Within Known Range? N	Nearest Occurrence: 464.86 KM	48.13287°N 107.91890°E
Isoperla altaica	Within Known Range? N	Nearest Occurrence: 471.16 KM	48.60182°N 107.84335°E
Isoperla eximia	Within Known Range? N	Nearest Occurrence: 470.32 KM	48.60182°N 107.84335°E
Isoperla mongolica	Within Known Range? N	Nearest Occurrence: 473.71 KM	48.09549°N 107.84265°E
Isoperla potanini	Within Known Range? N	Nearest Occurrence: 1,151.20 KM	46.73093°N 101.88583°E
Skwala pusilla	Within Known Range? N	Nearest Occurrence: 2,616.14 KM	48.51277°N 88.51107°E

**LOE Rating: Unlikely Total: 3**

<b>Family: Capniidae</b>			
Capnia khulsbagia	Within Known Range? N	Nearest Occurrence: 1,290.10 KM	50.98944°N 100.71944°E
Mesocapnia altaica	Within Known Range? N	Nearest Occurrence: 2,572.89 KM	48.43684°N 88.90094°E
<b>Family: Nemouridae</b>			
Nemurella pictetii	Within Known Range? N	Nearest Occurrence: 1,401.95 KM	51.07896°N 99.70857°E

**Basin:** Pacific Ocean Basin

**Aimags:** Khentii

**Soums:** Omnodelger

Freshwater Ecoregion: Shilka (Amur)

Terrestrial Ecoregion: Trans-Baikal Conifer Forests

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

LOE Ranking Based on Predicted ENM Maps Only

**LOE Rating: Highly Likely Total: 8**

Family: Capniidae

Isocapnia guentheri

Within Known Range? N Nearest Occurrence: 182.78 KM 48.24734°N 107.90589°E

Isocapnia sibirica

Within Known Range? N Nearest Occurrence: 191.68 KM 48.09549°N 107.84265°E

Family: Chloroperlidae

Alloperla rostellata

Within Known Range? N Nearest Occurrence: 677.73 KM 49.77776°N 103.60860°E

Suwallia kerzhneri

Within Known Range? N Nearest Occurrence: 223.67 KM 48.12416°N 107.54780°E

Family: Leuctridae

Paraleuctra zapekinae

Within Known Range? N Nearest Occurrence: 183.14 KM 48.14846°N 107.91267°E

Family: Nemouridae

Nemoura cinerea

Within Known Range? N Nearest Occurrence: 221.50 KM 47.96783°N 107.59278°E

Family: Perlidae

Agnestina extrema

Within Known Range? N Nearest Occurrence: 190.93 KM 48.09671°N 107.84928°E

Family: Perlodidae

Kaszabia nigricauda

Within Known Range? N Nearest Occurrence: 183.07 KM 48.25861°N 107.90251°E

**LOE Rating: Likely Total: 11**

Family: Chloroperlidae

Alaskaperla longidentata

Within Known Range? N Nearest Occurrence: 182.78 KM 48.24734°N 107.90589°E

Haploperla lepnevae

Within Known Range? N Nearest Occurrence: 252.82 KM 47.82258°N 107.33613°E

Family: Nemouridae

Amphinemura borealis

Within Known Range? N Nearest Occurrence: 252.82 KM 47.82258°N 107.33613°E

Family: Perlodidae

Arcynopteryx sajanensis

Within Known Range? N Nearest Occurrence: 1,058.67 KM 51.61397°N 100.59972°E

Isoperla asiatica

Within Known Range? N Nearest Occurrence: 221.50 KM 47.96783°N 107.59278°E

Isoperla kozlovi

Within Known Range? N Nearest Occurrence: 182.47 KM 48.13111°N 107.92120°E

Isoperla lunigera

Within Known Range? N Nearest Occurrence: 191.68 KM 48.09549°N 107.84265°E

Megarcys ochracea

Within Known Range? N Nearest Occurrence: 232.04 KM 47.97108°N 107.49534°E

Pictetiella asiatica

Within Known Range? N Nearest Occurrence: 1,065.72 KM 51.65822°N 100.53000°E

Family: Pteronarcyidae

Pteronarcys reticulata

Within Known Range? N Nearest Occurrence: 261.33 KM 49.08636°N 107.30750°E

Family: Taeniopterygidae

Taenionema japonicum

Within Known Range? N Nearest Occurrence: 268.79 KM 49.05411°N 107.23175°E

**LOE Rating: Probable Total: 6**

Family: Capniidae

Isocapnia kudia

Within Known Range? N Nearest Occurrence: 1,142.77 KM 51.25356°N 99.66687°E

Mesocapnia variabilis

Within Known Range? N Nearest Occurrence: 181.85 KM 48.42080°N 107.91406°E

Family: Chloroperlidae

Alloperla mediata

Within Known Range? N Nearest Occurrence: 677.73 KM 49.77776°N 103.60860°E

Family: Nemouridae

Amphinemura standfussi

Within Known Range? N Nearest Occurrence: 261.03 KM 49.73130°N 107.63484°E

Family: Perlidae

Agnestina brevipennis

Within Known Range? N Nearest Occurrence: 261.33 KM 49.08636°N 107.30750°E

Kamimuria exilis

Within Known Range? N Nearest Occurrence: 1,207.22 KM 50.16278°N 98.84212°E

Research funded by the National Science Foundation

DEB-BSI #0206674: A Survey of the Aquatic Insects of the Selenge River Basin. P.I.'s: JKGelhaus, JCMorse, BHayford.

DEB # 0743732: Aquatic Insects of the Altai and Hangai Mountain Drainages. P.I.'s: JKGelhaus, JCMorse, CRNelson.

<http://clade.ansp.org/entomology/mongolia/index.html>



**MONGOLIAN  
AQUATIC  
INSECT SURVEY**

Basin: Pacific Ocean Basin

Aimags: Khentii

Soums: Omnodelger

Freshwater Ecoregion: Shilka (Amur)

Terrestrial Ecoregion: Trans-Baikal Conifer Forests

WQM Sites:

No current Asia Foundation WQM sites in this soum.

LOE Ranking Based on Predicted ENM Maps Only

**LOE Rating: Possible Total: 4**

Family: Chloroperlidae						
Alloperla deminuta	Within Known Range? N	Nearest Occurrence:	183.14 KM	48.14846°N	107.91267°E	
Family: Nemouridae						
Nemoura sahlbergi	Within Known Range? N	Nearest Occurrence:	183.26 KM	48.21780°N	107.90392°E	
Family: Perlidae						
Agnetina cocandica	Within Known Range? N	Nearest Occurrence:	424.17 KM	50.06476°N	106.13388°E	
Family: Perlodidae						
Isoperla altaica	Within Known Range? N	Nearest Occurrence:	191.44 KM	48.60182°N	107.84335°E	

**LOE Rating: Predicted Total: 15**

Family: Capniidae						
Capnia nigra	Within Known Range? N	Nearest Occurrence:	1,016.56 KM	50.92452°N	100.75528°E	
Family: Chloroperlidae						
Alloperla joosti	Within Known Range? N	Nearest Occurrence:	721.17 KM	49.21675°N	103.10750°E	
Suwallia teleckojensis	Within Known Range? N	Nearest Occurrence:	181.85 KM	48.42080°N	107.91406°E	
Family: Leuctridae						
Leuctra fusca	Within Known Range? N	Nearest Occurrence:	263.23 KM	49.08643°N	107.28952°E	
Family: Nemouridae						
Nemoura arctica	Within Known Range? N	Nearest Occurrence:	183.03 KM	48.13287°N	107.91890°E	
Family: Perlidae						
Paragnetina flavotincta	Within Known Range? N	Nearest Occurrence:	423.40 KM	50.06476°N	106.13388°E	
Family: Perlodidae						
Arcynopteryx compacta	Within Known Range? N	Nearest Occurrence:	229.34 KM	47.84324°N	107.55299°E	
Arcynopteryx polaris	Within Known Range? N	Nearest Occurrence:	181.85 KM	48.42080°N	107.91406°E	
Diura bicaudata	Within Known Range? N	Nearest Occurrence:	1,075.40 KM	47.21768°N	99.92824°E	
Diura majuscula	Within Known Range? N	Nearest Occurrence:	183.03 KM	48.13287°N	107.91890°E	
Isoperla eximia	Within Known Range? N	Nearest Occurrence:	191.09 KM	48.60182°N	107.84335°E	
Isoperla mongolica	Within Known Range? N	Nearest Occurrence:	192.03 KM	48.09549°N	107.84265°E	
Isoperla obscura	Within Known Range? N	Nearest Occurrence:	354.69 KM	49.72192°N	106.65562°E	
Isoperla potanini	Within Known Range? N	Nearest Occurrence:	869.93 KM	47.26999°N	101.80227°E	
Skwala pusilla	Within Known Range? N	Nearest Occurrence:	2,335.20 KM	48.51277°N	88.51107°E	

**LOE Rating: Unlikely Total: 3**

Family: Capniidae						
Capnia khulsbagia	Within Known Range? N	Nearest Occurrence:	1,022.41 KM	50.98944°N	100.71944°E	
Mesocapnia altaica	Within Known Range? N	Nearest Occurrence:	2,291.88 KM	48.43684°N	88.90094°E	
Family: Nemouridae						
Nemurella pictetii	Within Known Range? N	Nearest Occurrence:	1,133.02 KM	51.07896°N	99.70857°E	



**Basin:** Pacific Ocean Basin  
**Aimags:** Khentii  
**Soums:** Tsenkhermandal

Freshwater Ecoregion: Argun

Terrestrial Ecoregion: Daurian Forest Steppe

LOE Ranking Based on Predicted ENM Maps Only

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Highly Likely Total: 6**

Family: Capniidae

Isocapnia guentheri

Within Known Range? N Nearest Occurrence: 120.51 KM 48.24734°N 107.90589°E

Isocapnia sibirica

Within Known Range? N Nearest Occurrence: 120.84 KM 48.09549°N 107.84265°E

Family: Chloroperlidae

Suwallia kerzhneri

Within Known Range? N Nearest Occurrence: 153.18 KM 48.12416°N 107.54780°E

Family: Leuctridae

Paraleuctra zapekinae

Within Known Range? N Nearest Occurrence: 115.43 KM 48.14846°N 107.91267°E

Family: Perlidae

Agnetina extrema

Within Known Range? N Nearest Occurrence: 120.18 KM 48.09671°N 107.84928°E

Family: Perlodidae

Kaszabia nigricauda

Within Known Range? N Nearest Occurrence: 119.31 KM 48.21780°N 107.90392°E

**LOE Rating: Likely Total: 15**

Family: Capniidae

Mesocapnia variabilis

Within Known Range? N Nearest Occurrence: 129.57 KM 48.42080°N 107.91406°E

Family: Chloroperlidae

Alaskaperla longidentata

Within Known Range? N Nearest Occurrence: 115.43 KM 48.14846°N 107.91267°E

Alloperla deminuta

Within Known Range? N Nearest Occurrence: 115.43 KM 48.14846°N 107.91267°E

Alloperla rostellata

Within Known Range? N Nearest Occurrence: 626.27 KM 49.77776°N 103.60860°E

Haploperla lepnevae

Within Known Range? N Nearest Occurrence: 171.72 KM 47.82258°N 107.33613°E

Family: Nemouridae

Amphinemura borealis

Within Known Range? N Nearest Occurrence: 171.72 KM 47.82258°N 107.33613°E

Nemoura cinerea

Within Known Range? N Nearest Occurrence: 144.77 KM 47.96783°N 107.59278°E

Family: Perlodidae

Arcynopteryx sajanensis

Within Known Range? N Nearest Occurrence: 1,015.26 KM 51.61397°N 100.59972°E

Isoperla asiatica

Within Known Range? N Nearest Occurrence: 144.77 KM 47.96783°N 107.59278°E

Isoperla kozlovi

Within Known Range? Y Nearest Occurrence: 113.86 KM 48.13111°N 107.92120°E

Isoperla lunigera

Within Known Range? N Nearest Occurrence: 120.84 KM 48.09549°N 107.84265°E

Megarcys ochracea

Within Known Range? N Nearest Occurrence: 155.52 KM 47.97108°N 107.49534°E

Pictetiella asiatica

Within Known Range? N Nearest Occurrence: 1,022.52 KM 51.65822°N 100.53000°E

Family: Pteronarcyidae

Pteronarcys reticulata

Within Known Range? N Nearest Occurrence: 227.64 KM 49.08636°N 107.30750°E

Family: Taeniopterygidae

Taenionema japonicum

Within Known Range? N Nearest Occurrence: 232.36 KM 49.05411°N 107.23175°E

**LOE Rating: Probable Total: 3**

Family: Capniidae

Isocapnia kudia

Within Known Range? N Nearest Occurrence: 1,093.45 KM 51.25356°N 99.66687°E

Family: Perlidae

Agnetina brevipennis

Within Known Range? N Nearest Occurrence: 227.64 KM 49.08636°N 107.30750°E

Kamimuria exilis

Within Known Range? N Nearest Occurrence: 1,147.67 KM 50.16278°N 98.84212°E

Research funded by the National Science Foundation

DEB-BSI #0206674: A Survey of the Aquatic Insects of the Selenge River Basin. P.I.'s: JKGelhaus, JCMorse, BHayford.

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<http://clade.ansp.org/entomology/mongolia/index.html>



**Basin:** Pacific Ocean Basin  
**Aimags:** Khentii  
**Soums:** Tsenkhermandal

Freshwater Ecoregion: Argun

Terrestrial Ecoregion: Daurian Forest Steppe

LOE Ranking Based on Predicted ENM Maps Only

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Possible Total: 7**

Family: Chloroperlidae					
Alloperla mediata	Within Known Range? N	Nearest Occurrence:	626.27 KM	49.77776 °N	103.60860 °E
Family: Nemouridae					
Amphinemura standfussi	Within Known Range? N	Nearest Occurrence:	257.76 KM	49.73130 °N	107.63484 °E
Nemoura arctica	Within Known Range? N	Nearest Occurrence:	114.38 KM	48.13287 °N	107.91890 °E
Nemoura sahlbergi	Within Known Range? N	Nearest Occurrence:	119.31 KM	48.21780 °N	107.90392 °E
Family: Perlidae					
Agnetina cocandica	Within Known Range? N	Nearest Occurrence:	397.96 KM	50.06476 °N	106.13388 °E
Family: Perlodidae					
Diura majuscula	Within Known Range? N	Nearest Occurrence:	114.38 KM	48.13287 °N	107.91890 °E
Isoperla altaica	Within Known Range? N	Nearest Occurrence:	147.81 KM	48.60182 °N	107.84335 °E

**LOE Rating: Predicted Total: 13**

Family: Capniidae					
Capnia nigra	Within Known Range? N	Nearest Occurrence:	967.57 KM	50.92452 °N	100.75528 °E
Family: Chloroperlidae					
Alloperla joosti	Within Known Range? N	Nearest Occurrence:	660.74 KM	49.21675 °N	103.10750 °E
Suwallia teleckojensis	Within Known Range? N	Nearest Occurrence:	129.57 KM	48.42080 °N	107.91406 °E
Family: Leuctridae					
Leuctra fusca	Within Known Range? N	Nearest Occurrence:	229.18 KM	49.08643 °N	107.28952 °E
Family: Perlidae					
Paragnetina flavotincta	Within Known Range? N	Nearest Occurrence:	397.24 KM	50.06476 °N	106.13388 °E
Family: Perlodidae					
Arcynopteryx compacta	Within Known Range? N	Nearest Occurrence:	148.03 KM	47.84324 °N	107.55299 °E
Arcynopteryx polaris	Within Known Range? N	Nearest Occurrence:	129.57 KM	48.42080 °N	107.91406 °E
Diura bicaudata	Within Known Range? N	Nearest Occurrence:	995.81 KM	47.21768 °N	99.92824 °E
Isoperla eximia	Within Known Range? N	Nearest Occurrence:	147.55 KM	48.60182 °N	107.84335 °E
Isoperla mongolica	Within Known Range? N	Nearest Occurrence:	121.06 KM	48.09549 °N	107.84265 °E
Isoperla obscura	Within Known Range? N	Nearest Occurrence:	328.49 KM	49.72192 °N	106.65562 °E
Isoperla potanini	Within Known Range? N	Nearest Occurrence:	786.59 KM	46.73093 °N	101.88583 °E
Skwala pusilla	Within Known Range? N	Nearest Occurrence:	2,262.70 KM	48.51277 °N	88.51107 °E

**LOE Rating: Unlikely Total: 3**

Family: Capniidae					
Capnia khulsbagia	Within Known Range? N	Nearest Occurrence:	973.90 KM	50.98944 °N	100.71944 °E
Mesocapnia altaica	Within Known Range? N	Nearest Occurrence:	2,219.16 KM	48.43684 °N	88.90094 °E
Family: Nemouridae					
Nemurella pictetii	Within Known Range? N	Nearest Occurrence:	1,082.40 KM	51.07896 °N	99.70857 °E

**Basin:** Pacific Ocean Basin  
**Aimags:** Sukhbaatar  
**Soums:** Asgat

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**Freshwater Ecoregion:** Inner Mongolia Endorheic Basins

**Terrestrial Ecoregion:** Mongolian-Manchurian Grassland

LOE Ranking Based on Predicted ENM Maps Only

**LOE Rating: Highly Likely Total: 7**

<b>Family: Capniidae</b>					
Isocapnia guentheri	Within Known Range?	N	Nearest Occurrence:	707.38 KM	48.24734 °N 107.90589 °E
Isocapnia sibirica	Within Known Range?	N	Nearest Occurrence:	708.60 KM	48.09549 °N 107.84265 °E
<b>Family: Chloroperlidae</b>					
Haploperla lepnevae	Within Known Range?	N	Nearest Occurrence:	754.10 KM	47.82258 °N 107.33613 °E
Suwallia kerzhneri	Within Known Range?	N	Nearest Occurrence:	740.74 KM	48.12416 °N 107.54780 °E
<b>Family: Perlidae</b>					
Agnetina extrema	Within Known Range?	N	Nearest Occurrence:	707.95 KM	48.09671 °N 107.84928 °E
<b>Family: Perlodidae</b>					
Isoperla lunigera	Within Known Range?	N	Nearest Occurrence:	708.60 KM	48.09549 °N 107.84265 °E
<b>Family: Pteronarcyidae</b>					
Pteronarcys reticulata	Within Known Range?	N	Nearest Occurrence:	803.78 KM	49.08636 °N 107.30750 °E

**LOE Rating: Likely Total: 15**

<b>Family: Capniidae</b>					
Isocapnia kudia	Within Known Range?	N	Nearest Occurrence:	1,680.87 KM	51.25356 °N 99.66687 °E
<b>Family: Chloroperlidae</b>					
Alloperla rostellata	Within Known Range?	N	Nearest Occurrence:	1,213.73 KM	49.77776 °N 103.60860 °E
<b>Family: Leuctridae</b>					
Paraleuctra zapekinae	Within Known Range?	N	Nearest Occurrence:	703.08 KM	48.14846 °N 107.91267 °E
<b>Family: Nemouridae</b>					
Amphinemura borealis	Within Known Range?	N	Nearest Occurrence:	754.10 KM	47.82258 °N 107.33613 °E
Nemoura cinerea	Within Known Range?	N	Nearest Occurrence:	730.92 KM	47.96783 °N 107.59278 °E
<b>Family: Perlidae</b>					
Agnetina cocandica	Within Known Range?	N	Nearest Occurrence:	969.95 KM	50.06476 °N 106.13388 °E
Kamimuria exilis	Within Known Range?	N	Nearest Occurrence:	1,735.14 KM	50.16278 °N 98.84212 °E
<b>Family: Perlodidae</b>					
Arcynopteryx sajanensis	Within Known Range?	N	Nearest Occurrence:	1,601.57 KM	51.61397 °N 100.59972 °E
Diura bicaudata	Within Known Range?	N	Nearest Occurrence:	1,557.05 KM	47.21768 °N 99.92824 °E
Isoperla asiatica	Within Known Range?	N	Nearest Occurrence:	730.92 KM	47.96783 °N 107.59278 °E
Isoperla kozlovi	Within Known Range?	N	Nearest Occurrence:	701.57 KM	48.13111 °N 107.92120 °E
Isoperla obscura	Within Known Range?	N	Nearest Occurrence:	899.37 KM	49.72192 °N 106.65562 °E
Megarcys ochracea	Within Known Range?	N	Nearest Occurrence:	741.41 KM	47.97108 °N 107.49534 °E
Pictetiella asiatica	Within Known Range?	N	Nearest Occurrence:	1,607.71 KM	51.65822 °N 100.53000 °E
<b>Family: Taeniopterygidae</b>					
Taenionema japonicum	Within Known Range?	N	Nearest Occurrence:	811.48 KM	49.05411 °N 107.23175 °E

**LOE Rating: Probable Total: 2**

<b>Family: Perlidae</b>					
Agnetina brevipennis	Within Known Range?	N	Nearest Occurrence:	803.78 KM	49.08636 °N 107.30750 °E
<b>Family: Perlodidae</b>					
Kasabia nigricauda	Within Known Range?	N	Nearest Occurrence:	706.50 KM	48.21780 °N 107.90392 °E

**Basin:** Pacific Ocean Basin  
**Aimags:** Sukhbaatar  
**Soums:** Asgat

**Freshwater Ecoregion:** Inner Mongolia Endorheic Basins

**Terrestrial Ecoregion:** Mongolian-Manchurian Grassland

LOE Ranking Based on Predicted ENM Maps Only

**LOE Rating: Possible Total: 4**

**Family:** Chloroperlidae

Alloperla joosti **Within Known Range?** N **Nearest Occurrence:** 1,247.70 KM 49.21675°N 103.10750°E

Alloperla mediata **Within Known Range?** N **Nearest Occurrence:** 1,213.73 KM 49.77776°N 103.60860°E

**Family:** Perlidae

Paragnetina flavotincta **Within Known Range?** N **Nearest Occurrence:** 968.20 KM 50.06476°N 106.13388°E

**Family:** Perlodidae

Isoperla altaica **Within Known Range?** N **Nearest Occurrence:** 729.22 KM 48.60182°N 107.84335°E

**LOE Rating: Predicted Total: 16**

**Family:** Capniidae

Capnia nigra **Within Known Range?** N **Nearest Occurrence:** 1,554.85 KM 50.92452°N 100.75528°E

Mesocapnia variabilis **Within Known Range?** N **Nearest Occurrence:** 714.49 KM 48.42080°N 107.91406°E

**Family:** Chloroperlidae

Alaskaperla longidentata **Within Known Range?** N **Nearest Occurrence:** 703.08 KM 48.14846°N 107.91267°E

Alloperla deminuta **Within Known Range?** N **Nearest Occurrence:** 703.08 KM 48.14846°N 107.91267°E

Suwallia teleckojensis **Within Known Range?** N **Nearest Occurrence:** 714.49 KM 48.42080°N 107.91406°E

**Family:** Leuctridae

Leuctra fusca **Within Known Range?** N **Nearest Occurrence:** 805.61 KM 49.08643°N 107.28952°E

**Family:** Nemouridae

Amphinemura standfussi **Within Known Range?** N **Nearest Occurrence:** 803.99 KM 49.73130°N 107.63484°E

Nemoura arctica **Within Known Range?** N **Nearest Occurrence:** 703.14 KM 48.13287°N 107.91890°E

Nemoura sahlbergi **Within Known Range?** N **Nearest Occurrence:** 706.50 KM 48.21780°N 107.90392°E

**Family:** Perlodidae

Arcynopteryx compacta **Within Known Range?** N **Nearest Occurrence:** 732.74 KM 47.84324°N 107.55299°E

Arcynopteryx polaris **Within Known Range?** N **Nearest Occurrence:** 714.49 KM 48.42080°N 107.91406°E

Diura majuscula **Within Known Range?** N **Nearest Occurrence:** 703.14 KM 48.13287°N 107.91890°E

Isoperla eximia **Within Known Range?** N **Nearest Occurrence:** 727.90 KM 48.60182°N 107.84335°E

Isoperla mongolica **Within Known Range?** N **Nearest Occurrence:** 709.88 KM 48.09549°N 107.84265°E

Isoperla potanini **Within Known Range?** N **Nearest Occurrence:** 1,339.11 KM 46.73093°N 101.88583°E

Skwala pusilla **Within Known Range?** N **Nearest Occurrence:** 2,832.07 KM 48.51277°N 88.51107°E

**LOE Rating: Unlikely Total: 3**

**Family:** Capniidae

Capnia khulsbagia **Within Known Range?** N **Nearest Occurrence:** 1,561.07 KM 50.98944°N 100.71944°E

Mesocapnia altaica **Within Known Range?** N **Nearest Occurrence:** 2,788.19 KM 48.43684°N 88.90094°E

**Family:** Nemouridae

Nemurella pictetii **Within Known Range?** N **Nearest Occurrence:** 1,670.03 KM 51.07896°N 99.70857°E



**Basin:** Pacific Ocean Basin  
**Aimags:** Sukhbaatar  
**Soums:** Erdenetsagaan

**Freshwater Ecoregion:** Inner Mongolia Endorheic Basins

**Terrestrial Ecoregion:** Mongolian-Manchurian Grassland

LOE Ranking Based on Predicted ENM Maps Only

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Highly Likely Total: 7**

Family: Capniidae					
Isocapnia guentheri	Within Known Range? N	Nearest Occurrence:	869.97 KM	48.24734 °N	107.90589 °E
Isocapnia sibirica	Within Known Range? N	Nearest Occurrence:	872.16 KM	48.09549 °N	107.84265 °E
Family: Chloroperlidae					
Haploperla lepnevae	Within Known Range? N	Nearest Occurrence:	919.58 KM	47.82258 °N	107.33613 °E
Suwallia kerzhneri	Within Known Range? N	Nearest Occurrence:	904.60 KM	48.12416 °N	107.54780 °E
Family: Perlidae					
Agnentina extrema	Within Known Range? N	Nearest Occurrence:	871.49 KM	48.09671 °N	107.84928 °E
Family: Perlodidae					
Isoperla lunigera	Within Known Range? N	Nearest Occurrence:	872.16 KM	48.09549 °N	107.84265 °E
Family: Pteronarcyidae					
Pteronarcys reticulata	Within Known Range? N	Nearest Occurrence:	962.49 KM	49.08636 °N	107.30750 °E

**LOE Rating: Likely Total: 13**

Family: Capniidae					
Isocapnia kudia	Within Known Range? N	Nearest Occurrence:	1,842.51 KM	51.25356 °N	99.66687 °E
Family: Chloroperlidae					
Alloperla rostellata	Within Known Range? N	Nearest Occurrence:	1,375.80 KM	49.77776 °N	103.60860 °E
Family: Leuctridae					
Paraleuctra zapekinae	Within Known Range? N	Nearest Occurrence:	866.23 KM	48.14846 °N	107.91267 °E
Family: Nemouridae					
Amphinemura borealis	Within Known Range? N	Nearest Occurrence:	919.58 KM	47.82258 °N	107.33613 °E
Nemoura cinerea	Within Known Range? N	Nearest Occurrence:	895.48 KM	47.96783 °N	107.59278 °E
Family: Perlidae					
Agnentina cocandica	Within Known Range? N	Nearest Occurrence:	1,126.01 KM	50.06476 °N	106.13388 °E
Kamimuria exilis	Within Known Range? N	Nearest Occurrence:	1,900.31 KM	50.16278 °N	98.84212 °E
Family: Perlodidae					
Arcynopteryx sajanensis	Within Known Range? N	Nearest Occurrence:	1,761.33 KM	51.61397 °N	100.59972 °E
Isoperla asiatica	Within Known Range? N	Nearest Occurrence:	895.48 KM	47.96783 °N	107.59278 °E
Isoperla kozlovi	Within Known Range? N	Nearest Occurrence:	864.80 KM	48.13111 °N	107.92120 °E
Isoperla obscura	Within Known Range? N	Nearest Occurrence:	1,055.79 KM	49.72192 °N	106.65562 °E
Megarcys ochracea	Within Known Range? N	Nearest Occurrence:	906.07 KM	47.97108 °N	107.49534 °E
Pictetiella asiatica	Within Known Range? N	Nearest Occurrence:	1,767.14 KM	51.65822 °N	100.53000 °E

**LOE Rating: Probable Total: 4**

Family: Perlidae					
Agnentina brevipennis	Within Known Range? N	Nearest Occurrence:	962.49 KM	49.08636 °N	107.30750 °E
Paragnetina flavotincta	Within Known Range? N	Nearest Occurrence:	1,123.98 KM	50.06476 °N	106.13388 °E
Family: Perlodidae					
Diura bicaudata	Within Known Range? N	Nearest Occurrence:	1,725.34 KM	47.21768 °N	99.92824 °E
Family: Taeniopterygidae					
Taenionema japonicum	Within Known Range? N	Nearest Occurrence:	970.88 KM	49.05411 °N	107.23175 °E

Research funded by the National Science Foundation  
 DEB-BSI #0206674: A Survey of the Aquatic Insects of the Selenge River Basin. P.I.'s: JKGelhaus, JCMorse, BHayford.  
 DEB # 0743732: Aquatic Insects of the Altai and Hangai Mountain Drainages. P.I.'s: JKGelhaus, JCMorse, CRNelson.  
<http://clade.ansp.org/entomology/mongolia/index.html>



**Basin:** Pacific Ocean Basin  
**Aimag:** Sukhbaatar  
**Soum:** Erdenetsagaan

**Freshwater Ecoregion:** Inner Mongolia Endorheic Basins

**Terrestrial Ecoregion:** Mongolian-Manchurian Grassland

LOE Ranking Based on Predicted ENM Maps Only

**LOE Rating: Possible Total: 5**

**Family:** Chloroperlidae

Alloperla deminuta	Within Known Range? N	Nearest Occurrence: 866.23 KM	48.14846°N	107.91267°E
Alloperla joosti	Within Known Range? N	Nearest Occurrence: 1,412.13 KM	49.21675°N	103.10750°E
Alloperla mediata	Within Known Range? N	Nearest Occurrence: 1,375.80 KM	49.77776°N	103.60860°E

**Family:** Perlodidae

Isoperla altaica	Within Known Range? N	Nearest Occurrence: 890.02 KM	48.60182°N	107.84335°E
Kaszabia nigricauda	Within Known Range? N	Nearest Occurrence: 869.27 KM	48.21780°N	107.90392°E

**LOE Rating: Predicted Total: 15**

**Family:** Capniidae

Capnia nigra	Within Known Range? N	Nearest Occurrence: 1,716.34 KM	50.92452°N	100.75528°E
Mesocapnia variabilis	Within Known Range? N	Nearest Occurrence: 876.29 KM	48.42080°N	107.91406°E

**Family:** Chloroperlidae

Alaskaperla longidentata	Within Known Range? N	Nearest Occurrence: 866.23 KM	48.14846°N	107.91267°E
Suwallia teleckojensis	Within Known Range? N	Nearest Occurrence: 876.29 KM	48.42080°N	107.91406°E

**Family:** Leuctridae

Leuctra fusca	Within Known Range? N	Nearest Occurrence: 964.37 KM	49.08643°N	107.28952°E
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**Family:** Nemouridae

Amphinemura standfussi	Within Known Range? N	Nearest Occurrence: 956.92 KM	49.73130°N	107.63484°E
Nemoura arctica	Within Known Range? N	Nearest Occurrence: 866.66 KM	48.13287°N	107.91890°E
Nemoura sahlbergi	Within Known Range? N	Nearest Occurrence: 869.27 KM	48.21780°N	107.90392°E

**Family:** Perlodidae

Arcynopteryx compacta	Within Known Range? N	Nearest Occurrence: 898.21 KM	47.84324°N	107.55299°E
Arcynopteryx polaris	Within Known Range? N	Nearest Occurrence: 876.29 KM	48.42080°N	107.91406°E
Diura majuscula	Within Known Range? N	Nearest Occurrence: 866.66 KM	48.13287°N	107.91890°E
Isoperla eximia	Within Known Range? N	Nearest Occurrence: 888.42 KM	48.60182°N	107.84335°E
Isoperla mongolica	Within Known Range? N	Nearest Occurrence: 873.73 KM	48.09549°N	107.84265°E
Isoperla potanini	Within Known Range? N	Nearest Occurrence: 1,507.77 KM	46.73093°N	101.88583°E
Skwala pusilla	Within Known Range? N	Nearest Occurrence: 3,000.26 KM	48.51277°N	88.51107°E

**LOE Rating: Unlikely Total: 3**

**Family:** Capniidae

Capnia khulsbagia	Within Known Range? N	Nearest Occurrence: 1,722.40 KM	50.98944°N	100.71944°E
Mesocapnia altaica	Within Known Range? N	Nearest Occurrence: 2,956.40 KM	48.43684°N	88.90094°E

**Family:** Nemouridae

Nemurella pictetii	Within Known Range? N	Nearest Occurrence: 1,832.11 KM	51.07896°N	99.70857°E
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**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**Basin:** Pacific Ocean Basin  
**Aimags:** Sukhbaatar  
**Soums:** Sukhbaatar

**Freshwater Ecoregion:** Inner Mongolia Endorheic Basins

**Terrestrial Ecoregion:** Mongolian-Manchurian Grassland

LOE Ranking Based on Predicted ENM Maps Only

**LOE Rating: Highly Likely Total: 8**

**Family:** Capniidae

Isocapnia guentheri

Within Known Range? N Nearest Occurrence: 666.61 KM 48.24734 °N 107.90589 °E

Isocapnia sibirica

Within Known Range? N Nearest Occurrence: 670.11 KM 48.09549 °N 107.84265 °E

**Family:** Chloroperlidae

Haploperla lepnevae

Within Known Range? N Nearest Occurrence: 720.78 KM 47.82258 °N 107.33613 °E

Suwallia kerzhneri

Within Known Range? N Nearest Occurrence: 702.86 KM 48.12416 °N 107.54780 °E

**Family:** Perlidae

Agnetina cocandica

Within Known Range? N Nearest Occurrence: 916.76 KM 50.06476 °N 106.13388 °E

Agnetina extrema

Within Known Range? N Nearest Occurrence: 669.41 KM 48.09671 °N 107.84928 °E

**Family:** Perlodidae

Isoperla lunigera

Within Known Range? N Nearest Occurrence: 670.11 KM 48.09549 °N 107.84265 °E

**Family:** Pteronarcyidae

Pteronarcys reticulata

Within Known Range? N Nearest Occurrence: 755.32 KM 49.08636 °N 107.30750 °E

**LOE Rating: Likely Total: 14**

**Family:** Capniidae

Isocapnia kudia

Within Known Range? N Nearest Occurrence: 1,636.55 KM 51.25356 °N 99.66687 °E

**Family:** Chloroperlidae

Alloperla rostellata

Within Known Range? N Nearest Occurrence: 1,170.65 KM 49.77776 °N 103.60860 °E

**Family:** Leuctridae

Paraleuctra zapekinae

Within Known Range? N Nearest Occurrence: 663.62 KM 48.14846 °N 107.91267 °E

**Family:** Nemouridae

Amphinemura borealis

Within Known Range? N Nearest Occurrence: 720.78 KM 47.82258 °N 107.33613 °E

Nemoura cinerea

Within Known Range? N Nearest Occurrence: 694.96 KM 47.96783 °N 107.59278 °E

**Family:** Perlidae

Kamimuria exilis

Within Known Range? N Nearest Occurrence: 1,697.96 KM 50.16278 °N 98.84212 °E

**Family:** Perlodidae

Arcynopteryx sajanensis

Within Known Range? N Nearest Occurrence: 1,553.43 KM 51.61397 °N 100.59972 °E

Diura bicaudata

Within Known Range? N Nearest Occurrence: 1,536.98 KM 47.21768 °N 99.92824 °E

Isoperla asiatica

Within Known Range? N Nearest Occurrence: 694.96 KM 47.96783 °N 107.59278 °E

Isoperla kozlovi

Within Known Range? N Nearest Occurrence: 662.31 KM 48.13111 °N 107.92120 °E

Isoperla obscura

Within Known Range? N Nearest Occurrence: 847.24 KM 49.72192 °N 106.65562 °E

Megarcys ochracea

Within Known Range? N Nearest Occurrence: 705.69 KM 47.97108 °N 107.49534 °E

Pictetiella asiatica

Within Known Range? N Nearest Occurrence: 1,559.56 KM 51.65822 °N 100.53000 °E

**Family:** Taeniopterygidae

Taenionema japonicum

Within Known Range? N Nearest Occurrence: 763.59 KM 49.05411 °N 107.23175 °E

**LOE Rating: Probable Total: 2**

**Family:** Perlidae

Agnetina brevipennis

Within Known Range? N Nearest Occurrence: 755.32 KM 49.08636 °N 107.30750 °E

Paragnetina flavotincta

Within Known Range? N Nearest Occurrence: 915.11 KM 50.06476 °N 106.13388 °E

**Basin:** Pacific Ocean Basin  
**Aimags:** Sukhbaatar  
**Soums:** Sukhbaatar

**Freshwater Ecoregion:** Inner Mongolia Endorheic Basins

**Terrestrial Ecoregion:** Mongolian-Manchurian Grassland

LOE Ranking Based on Predicted ENM Maps Only

**LOE Rating: Possible Total: 4**

**Family:** Chloroperlidae

Alloperla joosti **Within Known Range?** N **Nearest Occurrence:** 1,209.96 KM 49.21675°N 103.10750°E

Alloperla mediata **Within Known Range?** N **Nearest Occurrence:** 1,170.65 KM 49.77776°N 103.60860°E

**Family:** Perlodidae

Isoperla altaica **Within Known Range?** N **Nearest Occurrence:** 684.04 KM 48.60182°N 107.84335°E

Kaszabia nigricauda **Within Known Range?** N **Nearest Occurrence:** 666.13 KM 48.21780°N 107.90392°E

**LOE Rating: Predicted Total: 15**

**Family:** Capniidae

Capnia nigra **Within Known Range?** N **Nearest Occurrence:** 1,510.33 KM 50.92452°N 100.75528°E

Mesocapnia variabilis **Within Known Range?** N **Nearest Occurrence:** 671.32 KM 48.42080°N 107.91406°E

**Family:** Chloroperlidae

Alaskaperla longidentata **Within Known Range?** N **Nearest Occurrence:** 663.62 KM 48.14846°N 107.91267°E

Alloperla deminuta **Within Known Range?** N **Nearest Occurrence:** 663.62 KM 48.14846°N 107.91267°E

Suwallia teleckojensis **Within Known Range?** N **Nearest Occurrence:** 671.32 KM 48.42080°N 107.91406°E

**Family:** Leuctridae

Leuctra fusca **Within Known Range?** N **Nearest Occurrence:** 757.22 KM 49.08643°N 107.28952°E

**Family:** Nemouridae

Amphinemura standfussi **Within Known Range?** N **Nearest Occurrence:** 747.36 KM 49.73130°N 107.63484°E

Nemoura arctica **Within Known Range?** N **Nearest Occurrence:** 663.79 KM 48.13287°N 107.91890°E

Nemoura sahlbergi **Within Known Range?** N **Nearest Occurrence:** 666.13 KM 48.21780°N 107.90392°E

**Family:** Perlodidae

Arcynopteryx compacta **Within Known Range?** N **Nearest Occurrence:** 698.51 KM 47.84324°N 107.55299°E

Arcynopteryx polaris **Within Known Range?** N **Nearest Occurrence:** 671.32 KM 48.42080°N 107.91406°E

Diura majuscula **Within Known Range?** N **Nearest Occurrence:** 663.79 KM 48.13287°N 107.91890°E

Isoperla eximia **Within Known Range?** N **Nearest Occurrence:** 682.81 KM 48.60182°N 107.84335°E

Isoperla mongolica **Within Known Range?** N **Nearest Occurrence:** 671.32 KM 48.09549°N 107.84265°E

Isoperla potanini **Within Known Range?** N **Nearest Occurrence:** 1,322.07 KM 46.73093°N 101.88583°E

**LOE Rating: Unlikely Total: 3**

**Family:** Capniidae

Capnia khulsbagia **Within Known Range?** N **Nearest Occurrence:** 1,516.25 KM 50.98944°N 100.71944°E

Mesocapnia altaica **Within Known Range?** N **Nearest Occurrence:** 2,765.59 KM 48.43684°N 88.90094°E

**Family:** Nemouridae

Nemurella pictetii **Within Known Range?** N **Nearest Occurrence:** 1,626.57 KM 51.07896°N 99.70857°E





**Basin:** Pacific Ocean Basin  
**Aimags:** Sukhbaatar  
**Soums:** Tumentsogt

**Freshwater Ecoregion:** Argun

**Terrestrial Ecoregion:** Mongolian-Manchurian Grassland

LOE Ranking Based on Predicted ENM Maps Only

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Highly Likely Total: 7**

**Family:** Capniidae

Isocapnia guentheri

Within Known Range? N Nearest Occurrence: 506.42 KM 48.24734°N 107.90589°E

Isocapnia sibirica

Within Known Range? N Nearest Occurrence: 511.09 KM 48.09549°N 107.84265°E

**Family:** Chloroperlidae

Alloperla rostellata

Within Known Range? N Nearest Occurrence: 1,008.27 KM 49.77776°N 103.60860°E

Haploperla lepnevae

Within Known Range? N Nearest Occurrence: 564.52 KM 47.82258°N 107.33613°E

Suwallia kerzhneri

Within Known Range? N Nearest Occurrence: 543.97 KM 48.12416°N 107.54780°E

**Family:** Perlidae

Agnetina extrema

Within Known Range? N Nearest Occurrence: 510.38 KM 48.09671°N 107.84928°E

**Family:** Pteronarcyidae

Pteronarcys reticulata

Within Known Range? N Nearest Occurrence: 591.99 KM 49.08636°N 107.30750°E

**LOE Rating: Likely Total: 14**

**Family:** Capniidae

Isocapnia kudia

Within Known Range? N Nearest Occurrence: 1,473.52 KM 51.25356°N 99.66687°E

**Family:** Leuctridae

Paraleuctra zapekinae

Within Known Range? N Nearest Occurrence: 504.12 KM 48.14846°N 107.91267°E

**Family:** Nemouridae

Amphinemura borealis

Within Known Range? N Nearest Occurrence: 564.52 KM 47.82258°N 107.33613°E

Nemoura cinerea

Within Known Range? N Nearest Occurrence: 537.23 KM 47.96783°N 107.59278°E

**Family:** Perlidae

Agnetina brevipennis

Within Known Range? N Nearest Occurrence: 591.99 KM 49.08636°N 107.30750°E

Agnetina cocandica

Within Known Range? N Nearest Occurrence: 752.33 KM 50.06476°N 106.13388°E

Kamimuria exilis

Within Known Range? N Nearest Occurrence: 1,536.98 KM 50.16278°N 98.84212°E

**Family:** Perlodidae

Arcynopteryx sajanensis

Within Known Range? N Nearest Occurrence: 1,389.38 KM 51.61397°N 100.59972°E

Isoperla asiatica

Within Known Range? N Nearest Occurrence: 537.23 KM 47.96783°N 107.59278°E

Isoperla kozlovi

Within Known Range? N Nearest Occurrence: 502.93 KM 48.13111°N 107.92120°E

Isoperla lunigera

Within Known Range? N Nearest Occurrence: 511.09 KM 48.09549°N 107.84265°E

Isoperla obscura

Within Known Range? N Nearest Occurrence: 683.21 KM 49.72192°N 106.65562°E

Kaszabia nigricauda

Within Known Range? N Nearest Occurrence: 506.15 KM 48.21780°N 107.90392°E

Pictetiella asiatica

Within Known Range? N Nearest Occurrence: 1,395.80 KM 51.65822°N 100.53000°E

**LOE Rating: Probable Total: 3**

**Family:** Perlidae

Paragnetina flavotincta

Within Known Range? N Nearest Occurrence: 750.98 KM 50.06476°N 106.13388°E

**Family:** Perlodidae

Megarcys ochracea

Within Known Range? N Nearest Occurrence: 548.04 KM 47.97108°N 107.49534°E

**Family:** Taeniopterygidae

Taenionema japonicum

Within Known Range? N Nearest Occurrence: 600.12 KM 49.05411°N 107.23175°E

Research funded by the National Science Foundation

DEB-BSI #0206674: A Survey of the Aquatic Insects of the Selenge River Basin. P.I.'s: JKGelhaus, JCMorse, BHayford.

DEB # 0743732: Aquatic Insects of the Altai and Hangai Mountain Drainages. P.I.'s: JKGelhaus, JCMorse, CRNelson.

<http://clade.ansp.org/entomology/mongolia/index.html>



**Basin:** Pacific Ocean Basin  
**Aimag:** Sukhbaatar  
**Soum:** Tumentsogt

Freshwater Ecoregion: Argun

Terrestrial Ecoregion: Mongolian-Manchurian Grassland

LOE Ranking Based on Predicted ENM Maps Only

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

<b>LOE Rating:</b> Possible	<b>Total:</b> 5
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Family: Chloroperlidae

Alloperla deminuta	Within Known Range? N	Nearest Occurrence: 504.12 KM	48.14846°N	107.91267°E
Alloperla joosti	Within Known Range? N	Nearest Occurrence: 1,049.53 KM	49.21675°N	103.10750°E
Alloperla mediata	Within Known Range? N	Nearest Occurrence: 1,008.27 KM	49.77776°N	103.60860°E

Family: Perlodidae

Diura bicaudata	Within Known Range? N	Nearest Occurrence: 1,386.48 KM	47.21768°N	99.92824°E
Isoperla altaica	Within Known Range? N	Nearest Occurrence: 521.61 KM	48.60182°N	107.84335°E

<b>LOE Rating:</b> Predicted	<b>Total:</b> 15
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Family: Capniidae

Capnia nigra	Within Known Range? N	Nearest Occurrence: 1,347.31 KM	50.92452°N	100.75528°E
Mesocapnia variabilis	Within Known Range? N	Nearest Occurrence: 509.75 KM	48.42080°N	107.91406°E

Family: Chloroperlidae

Alaskaperla longidentata	Within Known Range? N	Nearest Occurrence: 504.12 KM	48.14846°N	107.91267°E
Suwallia teleckojensis	Within Known Range? N	Nearest Occurrence: 509.75 KM	48.42080°N	107.91406°E

Family: Leuctridae

Leuctra fusca	Within Known Range? N	Nearest Occurrence: 593.91 KM	49.08643°N	107.28952°E
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Family: Nemouridae

Amphinemura standfussi	Within Known Range? N	Nearest Occurrence: 583.20 KM	49.73130°N	107.63484°E
Nemoura arctica	Within Known Range? N	Nearest Occurrence: 504.11 KM	48.13287°N	107.91890°E
Nemoura sahlbergi	Within Known Range? N	Nearest Occurrence: 506.15 KM	48.21780°N	107.90392°E

Family: Perlodidae

Arcynopteryx compacta	Within Known Range? N	Nearest Occurrence: 541.60 KM	47.84324°N	107.55299°E
Arcynopteryx polaris	Within Known Range? N	Nearest Occurrence: 509.75 KM	48.42080°N	107.91406°E
Diura majuscula	Within Known Range? N	Nearest Occurrence: 504.11 KM	48.13287°N	107.91890°E
Isoperla eximia	Within Known Range? N	Nearest Occurrence: 520.68 KM	48.60182°N	107.84335°E
Isoperla mongolica	Within Known Range? N	Nearest Occurrence: 512.01 KM	48.09549°N	107.84265°E
Isoperla potanini	Within Known Range? N	Nearest Occurrence: 1,174.33 KM	46.73093°N	101.88583°E
Skwala pusilla	Within Known Range? N	Nearest Occurrence: 2,655.45 KM	48.51277°N	88.51107°E

<b>LOE Rating:</b> Unlikely	<b>Total:</b> 3
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Family: Capniidae

Capnia khulsbagia	Within Known Range? N	Nearest Occurrence: 1,353.15 KM	50.98944°N	100.71944°E
Mesocapnia altaica	Within Known Range? N	Nearest Occurrence: 2,611.87 KM	48.43684°N	88.90094°E

Family: Nemouridae

Nemurella pictetii	Within Known Range? N	Nearest Occurrence: 1,463.77 KM	51.07896°N	99.70857°E
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**Basin:** Pacific Ocean Basin  
**Aimags:** Tov  
**Soums:** Arkhust

Freshwater Ecoregion: Argun  
 Terrestrial Ecoregion: Mongolian-Manchurian Grassland

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Highly Likely Total: 6**

Family: Capniidae					
Isocapnia guentheri	Within Known Range? Y	Nearest Occurrence:	79.22 KM	47.99158°N	107.46116 °E
Isocapnia sibirica	Within Known Range? Y	Nearest Occurrence:	68.87 KM	48.09549°N	107.84265 °E
Family: Leuctridae					
Paraleuctra zapekinae	Within Known Range? Y	Nearest Occurrence:	68.86 KM	48.09671°N	107.84928 °E
Family: Perlidae					
Agnetina extrema	Within Known Range? Y	Nearest Occurrence:	68.86 KM	48.09671°N	107.84928 °E
Family: Perlodidae					
Isoperla kozlovi	Within Known Range? Y	Nearest Occurrence:	71.62 KM	48.13111°N	107.92120 °E
Kaszabia nigricauda	Within Known Range? Y	Nearest Occurrence:	67.54 KM	47.96783°N	107.59278 °E

**LOE Rating: Likely Total: 11**

Family: Chloroperlidae					
Alloperla deminuta	Within Known Range? Y	Nearest Occurrence:	67.54 KM	47.96783°N	107.59278 °E
Alloperla rostellata	Within Known Range? N	Nearest Occurrence:	546.44 KM	49.77776°N	103.60860 °E
Haploperla lepnevae	Within Known Range? Y	Nearest Occurrence:	79.23 KM	47.82258°N	107.33613 °E
Family: Nemouridae					
Amphinemura borealis	Within Known Range? Y	Nearest Occurrence:	79.23 KM	47.82258°N	107.33613 °E
Nemoura cinerea	Within Known Range? N	Nearest Occurrence:	67.54 KM	47.96783°N	107.59278 °E
Family: Perlodidae					
Arcynopteryx sajanensis	Within Known Range? N	Nearest Occurrence:	938.93 KM	51.61397°N	100.59972 °E
Isoperla asiatica	Within Known Range? Y	Nearest Occurrence:	67.54 KM	47.96783°N	107.59278 °E
Isoperla lunigera	Within Known Range? Y	Nearest Occurrence:	68.87 KM	48.09549°N	107.84265 °E
Megarcys ochracea	Within Known Range? Y	Nearest Occurrence:	74.93 KM	47.97108°N	107.49534 °E
Pictetiella asiatica	Within Known Range? N	Nearest Occurrence:	946.39 KM	51.65822°N	100.53000 °E
Family: Pteronarcyidae					
Pteronarcys reticulata	Within Known Range? N	Nearest Occurrence:	191.95 KM	49.08636°N	107.30750 °E

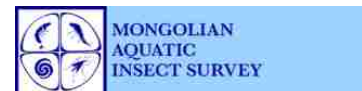
**LOE Rating: Probable Total: 6**

Family: Capniidae					
Isocapnia kudia	Within Known Range? N	Nearest Occurrence:	1,011.65 KM	51.25356°N	99.66687 °E
Mesocapnia variabilis	Within Known Range? N	Nearest Occurrence:	103.95 KM	48.42080°N	107.91406 °E
Family: Perlidae					
Agnetina brevipennis	Within Known Range? N	Nearest Occurrence:	191.95 KM	49.08636°N	107.30750 °E
Agnetina cocandica	Within Known Range? N	Nearest Occurrence:	351.65 KM	50.06476°N	106.13388 °E
Kamimuria exilis	Within Known Range? N	Nearest Occurrence:	1,057.33 KM	50.16278°N	98.84212 °E
Family: Perlodidae					
Diura majuscula	Within Known Range? Y	Nearest Occurrence:	68.98 KM	48.09671°N	107.84928 °E

**LOE Rating: Possible Total: 3**

Family: Chloroperlidae					
Alloperla joosti	Within Known Range? N	Nearest Occurrence:	572.47 KM	49.21675°N	103.10750 °E
Family: Nemouridae					
Nemoura arctica	Within Known Range? Y	Nearest Occurrence:	68.99 KM	48.09549°N	107.84265 °E
Nemoura sahlbergi	Within Known Range? N	Nearest Occurrence:	81.16 KM	48.16668°N	107.69548 °E

Research funded by the National Science Foundation  
 DEB-BSI #0206674: A Survey of the Aquatic Insects of the Selenge River Basin. P.I.'s: JKGelhaus, JCMorse, BHayford.  
 DEB # 0743732: Aquatic Insects of the Altai and Hangai Mountain Drainages. P.I.'s: JKGelhaus, JCMorse, CRNelson.  
<http://clade.ansp.org/entomology/mongolia/index.html>



**Basin:** Pacific Ocean Basin

**Aimag:** Tov

**Soum:** Arkhust

Freshwater Ecoregion: Argun

Terrestrial Ecoregion: Mongolian-Manchurian Grassland

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

<b>LOE Rating:</b>	<b>Predicted</b>	<b>Total:</b>	<b>14</b>
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Family: Capniidae					
<i>Capnia nigra</i>	Within Known Range?	N	Nearest Occurrence:	886.70 KM	50.92452 °N 100.75528 °E
Family: Chloroperlidae					
<i>Alloperla mediata</i>	Within Known Range?	N	Nearest Occurrence:	546.44 KM	49.77776 °N 103.60860 °E
Family: Leuctridae					
<i>Leuctra fusca</i>	Within Known Range?	N	Nearest Occurrence:	192.73 KM	49.08643 °N 107.28952 °E
Family: Nemouridae					
<i>Amphinemura standfussi</i>	Within Known Range?	N	Nearest Occurrence:	251.77 KM	49.73130 °N 107.63484 °E
Family: Perlidae					
<i>Paragnetina flavotincta</i>	Within Known Range?	N	Nearest Occurrence:	351.02 KM	50.06476 °N 106.13388 °E
Family: Perlodidae					
<i>Arcynopteryx compacta</i>	Within Known Range?	Y	Nearest Occurrence:	60.64 KM	47.84324 °N 107.55299 °E
<i>Arcynopteryx polaris</i>	Within Known Range?	N	Nearest Occurrence:	103.95 KM	48.42080 °N 107.91406 °E
<i>Diura bicaudata</i>	Within Known Range?	N	Nearest Occurrence:	892.73 KM	47.21768 °N 99.92824 °E
<i>Isoperla altaica</i>	Within Known Range?	N	Nearest Occurrence:	124.67 KM	48.60182 °N 107.84335 °E
<i>Isoperla eximia</i>	Within Known Range?	N	Nearest Occurrence:	124.44 KM	48.60182 °N 107.84335 °E
<i>Isoperla mongolica</i>	Within Known Range?	Y	Nearest Occurrence:	68.99 KM	48.09549 °N 107.84265 °E
<i>Isoperla obscura</i>	Within Known Range?	N	Nearest Occurrence:	287.54 KM	49.72192 °N 106.65562 °E
<i>Isoperla potanini</i>	Within Known Range?	N	Nearest Occurrence:	681.37 KM	46.73093 °N 101.88583 °E
<i>Skwala pusilla</i>	Within Known Range?	N	Nearest Occurrence:	2,162.53 KM	48.51277 °N 88.51107 °E

<b>LOE Rating:</b>	<b>Unlikely</b>	<b>Total:</b>	<b>3</b>
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Family: Capniidae					
<i>Capnia khulsbagia</i>	Within Known Range?	N	Nearest Occurrence:	893.40 KM	50.98944 °N 100.71944 °E
<i>Mesocapnia altaica</i>	Within Known Range?	N	Nearest Occurrence:	2,118.88 KM	48.43684 °N 88.90094 °E
Family: Nemouridae					
<i>Nemurella pictetii</i>	Within Known Range?	N	Nearest Occurrence:	999.55 KM	51.07896 °N 99.70857 °E

Basin: Pacific Ocean Basin

Aimags: Tov

Soums: Bayandelger

Freshwater Ecoregion: Argun

Terrestrial Ecoregion: Daurian Forest Steppe

WQM Sites:

WQM Sites: # 67 (Herlen River @ N 47.71458° E 108.48753°)

**LOE Rating: Highly Likely Total: 9**

Family: Capniidae

Isocapnia guentheri Within Known Range? Y Nearest Occurrence: 72.75 KM 48.24734°N 107.90589°E

Isocapnia sibirica Within Known Range? Y Nearest Occurrence: 64.45 KM 48.09549°N 107.84265°E

Family: Chloroperlidae

Alaskaperla longidentata Within Known Range? Y Nearest Occurrence: 63.44 KM 48.14846°N 107.91267°E

Alloperla deminuta Within Known Range? Y Nearest Occurrence: 63.44 KM 48.14846°N 107.91267°E

Suwallia kerzhneri Within Known Range? Y Nearest Occurrence: 92.83 KM 48.12416°N 107.54780°E

Family: Leuctridae

Paraleuctra zapekinae Within Known Range? Y Nearest Occurrence: 63.44 KM 48.14846°N 107.91267°E

Family: Perlidae

Agnetina extrema Within Known Range? Y Nearest Occurrence: 64.00 KM 48.09671°N 107.84928°E

Family: Perlodidae

Isoperla kozlovi Within Known Range? Y Nearest Occurrence: 61.35 KM 48.13111°N 107.92120°E

Kaszabia nigricauda Within Known Range? Y Nearest Occurrence: 64.00 KM 48.09671°N 107.84928°E

**LOE Rating: Likely Total: 8**

Family: Chloroperlidae

Alloperla rostellata Within Known Range? N Nearest Occurrence: 566.38 KM 49.77776°N 103.60860°E

Haploperla lepnevae Within Known Range? Y Nearest Occurrence: 104.51 KM 47.82258°N 107.33613°E

Family: Nemouridae

Amphinemura borealis Within Known Range? Y Nearest Occurrence: 104.51 KM 47.82258°N 107.33613°E

Nemoura cinerea Within Known Range? N Nearest Occurrence: 80.73 KM 47.96783°N 107.59278°E

Family: Perlodidae

Isoperla asiatica Within Known Range? Y Nearest Occurrence: 80.73 KM 47.96783°N 107.59278°E

Isoperla lunigera Within Known Range? Y Nearest Occurrence: 64.45 KM 48.09549°N 107.84265°E

Megarcys ochracea Within Known Range? Y Nearest Occurrence: 91.01 KM 47.97108°N 107.49534°E

Family: Pteronarcyidae

Pteronarcys reticulata Within Known Range? N Nearest Occurrence: 187.12 KM 49.08636°N 107.30750°E

**LOE Rating: Probable Total: 9**

Family: Capniidae

Isocapnia kudia Within Known Range? N Nearest Occurrence: 1,033.10 KM 51.25356°N 99.66687°E

Mesocapnia variabilis Within Known Range? N Nearest Occurrence: 89.16 KM 48.42080°N 107.91406°E

Family: Chloroperlidae

Suwallia teleckojensis Within Known Range? N Nearest Occurrence: 82.14 KM 48.16668°N 107.69548°E

Family: Perlidae

Agnetina brevipennis Within Known Range? N Nearest Occurrence: 187.12 KM 49.08636°N 107.30750°E

Kamimuria exilis Within Known Range? N Nearest Occurrence: 1,083.49 KM 50.16278°N 98.84212°E

Family: Perlodidae

Arcynopteryx sajanensis Within Known Range? N Nearest Occurrence: 957.44 KM 51.61397°N 100.59972°E

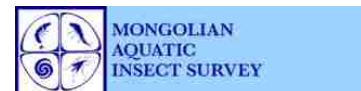
Diura majuscula Within Known Range? Y Nearest Occurrence: 61.77 KM 48.13287°N 107.91890°E

Pictetiella asiatica Within Known Range? N Nearest Occurrence: 964.84 KM 51.65822°N 100.53000°E

Family: Taeniopterygidae

Taenionema japonicum Within Known Range? N Nearest Occurrence: 189.54 KM 49.05411°N 107.23175°E

Research funded by the National Science Foundation  
DEB-BSI #0206674: A Survey of the Aquatic Insects of the Selenge River Basin. P.I.'s: JKGelhaus, JCMorse, BHayford.  
DEB # 0743732: Aquatic Insects of the Altai and Hangai Mountain Drainages. P.I.'s: JKGelhaus, JCMorse, CRNelson.  
<http://clade.ansp.org/entomology/mongolia/index.html>



Basin: Pacific Ocean Basin

Aimag: Tov

Soum: Bayandelger

Freshwater Ecoregion: Argun

Terrestrial Ecoregion: Daurian Forest Steppe

WQM Sites:

WQM Sites: # 67 (Herlen River @ N 47.71458° E 108.48753°)

**LOE Rating: Possible Total: 4**

Family: Nemouridae

Nemoura arctica Within Known Range? Y Nearest Occurrence: 61.77 KM 48.13287°N 107.91890°E

Nemoura sahlbergi Within Known Range? Y Nearest Occurrence: 70.17 KM 48.21780°N 107.90392°E

Family: Perlidae

Agnetina cocandica Within Known Range? N Nearest Occurrence: 354.17 KM 50.06476°N 106.13388°E

Family: Perlodidae

Isoperla altaica Within Known Range? N Nearest Occurrence: 110.70 KM 48.60182°N 107.84335°E

**LOE Rating: Predicted Total: 14**

Family: Capniidae

Capnia nigra Within Known Range? N Nearest Occurrence: 907.57 KM 50.92452°N 100.75528°E

Family: Chloroperlidae

Alloperla joosti Within Known Range? N Nearest Occurrence: 597.18 KM 49.21675°N 103.10750°E

Alloperla mediata Within Known Range? N Nearest Occurrence: 566.38 KM 49.77776°N 103.60860°E

Family: Leuctridae

Leuctra fusca Within Known Range? N Nearest Occurrence: 188.27 KM 49.08643°N 107.28952°E

Family: Nemouridae

Amphinemura standfussi Within Known Range? N Nearest Occurrence: 235.99 KM 49.73130°N 107.63484°E

Family: Perlidae

Paragnetina flavotincta Within Known Range? N Nearest Occurrence: 353.53 KM 50.06476°N 106.13388°E

Family: Perlodidae

Arcynopteryx compacta Within Known Range? Y Nearest Occurrence: 81.25 KM 47.84324°N 107.55299°E

Arcynopteryx polaris Within Known Range? N Nearest Occurrence: 89.16 KM 48.42080°N 107.91406°E

Diura bicaudata Within Known Range? N Nearest Occurrence: 927.49 KM 47.21768°N 99.92824°E

Isoperla eximia Within Known Range? N Nearest Occurrence: 110.50 KM 48.60182°N 107.84335°E

Isoperla mongolica Within Known Range? Y Nearest Occurrence: 64.57 KM 48.09549°N 107.84265°E

Isoperla obscura Within Known Range? N Nearest Occurrence: 286.99 KM 49.72192°N 106.65562°E

Isoperla potanini Within Known Range? N Nearest Occurrence: 718.09 KM 46.73093°N 101.88583°E

Skwala pusilla Within Known Range? N Nearest Occurrence: 2,195.08 KM 48.51277°N 88.51107°E

**LOE Rating: Unlikely Total: 3**

Family: Capniidae

Capnia khulsbagia Within Known Range? N Nearest Occurrence: 914.08 KM 50.98944°N 100.71944°E

Mesocapnia altaica Within Known Range? N Nearest Occurrence: 2,151.50 KM 48.43684°N 88.90094°E

Family: Nemouridae

Nemurella pictetii Within Known Range? N Nearest Occurrence: 1,021.55 KM 51.07896°N 99.70857°E

Basin: Pacific Ocean Basin

Aimags: Tov

Soums: Bayanjargalan

Freshwater Ecoregion: Argun

Terrestrial Ecoregion: Mongolian-Manchurian Grassland

WQM Sites:

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Highly Likely Total: 7**

Family: Capniidae

Isocapnia guentheri

Within Known Range? N Nearest Occurrence: 139.00 KM 48.24734°N 107.90589°E

Isocapnia sibirica

Within Known Range? N Nearest Occurrence: 126.52 KM 48.09549°N 107.84265°E

Family: Chloroperlidae

Suwallia kerzhneri

Within Known Range? N Nearest Occurrence: 146.96 KM 48.12416°N 107.54780°E

Family: Leuctridae

Paraleuctra zapekinae

Within Known Range? N Nearest Occurrence: 126.31 KM 48.09671°N 107.84928°E

Family: Perlidae

Agnetina extrema

Within Known Range? N Nearest Occurrence: 126.31 KM 48.09671°N 107.84928°E

Family: Perlodidae

Isoperla kozlovi

Within Known Range? N Nearest Occurrence: 126.41 KM 48.13111°N 107.92120°E

Kaszabia nigricauda

Within Known Range? N Nearest Occurrence: 126.31 KM 48.09671°N 107.84928°E

**LOE Rating: Likely Total: 11**

Family: Chloroperlidae

Alaskaperla longidentata

Within Known Range? N Nearest Occurrence: 128.48 KM 48.07956°N 107.77729°E

Alloperla deminuta

Within Known Range? N Nearest Occurrence: 126.81 KM 48.09694°N 107.83988°E

Alloperla rostellata

Within Known Range? N Nearest Occurrence: 606.81 KM 49.77776°N 103.60860°E

Haploperla lepnevae

Within Known Range? N Nearest Occurrence: 140.67 KM 47.82258°N 107.33613°E

Family: Nemouridae

Nemoura cinerea

Within Known Range? N Nearest Occurrence: 130.40 KM 47.96783°N 107.59278°E

Family: Perlodidae

Arcynopteryx sajanensis

Within Known Range? N Nearest Occurrence: 999.75 KM 51.61397°N 100.59972°E

Isoperla asiatica

Within Known Range? N Nearest Occurrence: 130.40 KM 47.96783°N 107.59278°E

Isoperla lunigera

Within Known Range? N Nearest Occurrence: 126.52 KM 48.09549°N 107.84265°E

Megarcys ochracea

Within Known Range? N Nearest Occurrence: 138.00 KM 47.97108°N 107.49534°E

Pictetiella asiatica

Within Known Range? N Nearest Occurrence: 1,007.11 KM 51.65822°N 100.53000°E

Family: Pteronarcyidae

Pteronarcys reticulata

Within Known Range? N Nearest Occurrence: 251.51 KM 49.08636°N 107.30750°E

**LOE Rating: Probable Total: 6**

Family: Capniidae

Isocapnia kudia

Within Known Range? N Nearest Occurrence: 1,070.74 KM 51.25356°N 99.66687°E

Family: Nemouridae

Amphinemura borealis

Within Known Range? N Nearest Occurrence: 140.67 KM 47.82258°N 107.33613°E

Family: Perlidae

Agnetina brevipennis

Within Known Range? N Nearest Occurrence: 251.51 KM 49.08636°N 107.30750°E

Agnetina cocandica

Within Known Range? N Nearest Occurrence: 414.17 KM 50.06476°N 106.13388°E

Kamimuria exilis

Within Known Range? N Nearest Occurrence: 1,112.93 KM 50.16278°N 98.84212°E

Family: Taeniopterygidae

Taenionema japonicum

Within Known Range? N Nearest Occurrence: 252.89 KM 49.05411°N 107.23175°E

Research funded by the National Science Foundation

DEB-BSI #0206674: A Survey of the Aquatic Insects of the Selenge River Basin. P.I.'s: JKGelhaus, JCMorse, BHayford.

DEB # 0743732: Aquatic Insects of the Altai and Hangai Mountain Drainages. P.I.'s: JKGelhaus, JCMorse, CRNelson.

<http://clade.ansp.org/entomology/mongolia/index.html>



**Basin:** Pacific Ocean Basin

**Aimags:** Tov

**Soums:** Bayanjargalan

Freshwater Ecoregion: Argun

Terrestrial Ecoregion: Mongolian-Manchurian Grassland

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Possible Total: 2**

Family: Chloroperlidae

Suwallia teleckojensis Within Known Range? N Nearest Occurrence: 141.70 KM 48.16668°N 107.69548°E

Family: Perlodidae

Diura majuscula Within Known Range? N Nearest Occurrence: 126.54 KM 48.09671°N 107.84928°E

**LOE Rating: Predicted Total: 18**

Family: Capniidae

Capnia nigra Within Known Range? N Nearest Occurrence: 946.21 KM 50.92452°N 100.75528°E

Mesocapnia variabilis Within Known Range? N Nearest Occurrence: 157.06 KM 48.42080°N 107.91406°E

Family: Chloroperlidae

Alloperla joosti Within Known Range? N Nearest Occurrence: 629.81 KM 49.21675°N 103.10750°E

Alloperla mediata Within Known Range? N Nearest Occurrence: 606.81 KM 49.77776°N 103.60860°E

Family: Leuctridae

Leuctra fusca Within Known Range? N Nearest Occurrence: 252.46 KM 49.08643°N 107.28952°E

Family: Nemouridae

Amphinemura standfussi Within Known Range? N Nearest Occurrence: 305.01 KM 49.73130°N 107.63484°E

Nemoura arctica Within Known Range? N Nearest Occurrence: 126.75 KM 48.09549°N 107.84265°E

Nemoura sahlbergi Within Known Range? N Nearest Occurrence: 136.03 KM 48.21780°N 107.90392°E

Family: Perlidae

Paragnetina flavotincta Within Known Range? N Nearest Occurrence: 413.42 KM 50.06476°N 106.13388°E

Family: Perlodidae

Arcynopteryx compacta Within Known Range? N Nearest Occurrence: 123.73 KM 47.84324°N 107.55299°E

Arcynopteryx polaris Within Known Range? N Nearest Occurrence: 157.06 KM 48.42080°N 107.91406°E

Diura bicaudata Within Known Range? N Nearest Occurrence: 936.56 KM 47.21768°N 99.92824°E

Isoperla altaica Within Known Range? N Nearest Occurrence: 178.65 KM 48.60182°N 107.84335°E

Isoperla eximia Within Known Range? N Nearest Occurrence: 178.33 KM 48.60182°N 107.84335°E

Isoperla mongolica Within Known Range? N Nearest Occurrence: 126.75 KM 48.09549°N 107.84265°E

Isoperla obscura Within Known Range? N Nearest Occurrence: 349.06 KM 49.72192°N 106.65562°E

Isoperla potanini Within Known Range? N Nearest Occurrence: 721.50 KM 46.73093°N 101.88583°E

Skwala pusilla Within Known Range? N Nearest Occurrence: 2,209.45 KM 48.51277°N 88.51107°E

**LOE Rating: Unlikely Total: 3**

Family: Capniidae

Capnia khulsbagia Within Known Range? N Nearest Occurrence: 953.02 KM 50.98944°N 100.71944°E

Mesocapnia altaica Within Known Range? N Nearest Occurrence: 2,165.69 KM 48.43684°N 88.90094°E

Family: Nemouridae

Nemurella pictetii Within Known Range? N Nearest Occurrence: 1,058.30 KM 51.07896°N 99.70857°E



**Basin:** Pacific Ocean Basin

**Aimags:** Tov

**Soums:** Mongonmoryt

Freshwater Ecoregion: Argun

Terrestrial Ecoregion: Trans-Baikal Conifer Forests

**WQM Sites:**

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Highly Likely Total: 8**

Family: Capniidae

Isocapnia guentheri Within Known Range? Y Nearest Occurrence: 79.80 KM 48.24734 °N 107.90589 °E

Isocapnia sibirica Within Known Range? Y Nearest Occurrence: 93.86 KM 48.09549 °N 107.84265 °E

Family: Chloroperlidae

Alaskaperla longidentata Within Known Range? Y Nearest Occurrence: 79.65 KM 48.25861 °N 107.90251 °E

Alloperla deminuta Within Known Range? Y Nearest Occurrence: 81.37 KM 48.21780 °N 107.90392 °E

Suwallia kerzhneri Within Known Range? Y Nearest Occurrence: 121.74 KM 48.12416 °N 107.54780 °E

Family: Leuctridae

Paraleuctra zapekinae Within Known Range? Y Nearest Occurrence: 84.17 KM 48.14846 °N 107.91267 °E

Family: Perlidae

Agnatina extrema Within Known Range? Y Nearest Occurrence: 93.16 KM 48.09671 °N 107.84928 °E

Family: Perlodidae

Kaszabia nigricauda Within Known Range? Y Nearest Occurrence: 79.65 KM 48.25861 °N 107.90251 °E

**LOE Rating: Likely Total: 13**

Family: Capniidae

Mesocapnia variabilis Within Known Range? Y Nearest Occurrence: 73.41 KM 48.42080 °N 107.91406 °E

Family: Chloroperlidae

Alloperla rostellata Within Known Range? N Nearest Occurrence: 567.03 KM 49.77776 °N 103.60860 °E

Haploperla lepnevae Within Known Range? N Nearest Occurrence: 152.22 KM 49.08636 °N 107.30750 °E

Suwallia teleckojensis Within Known Range? Y Nearest Occurrence: 73.41 KM 48.42080 °N 107.91406 °E

Family: Nemouridae

Amphinemura borealis Within Known Range? N Nearest Occurrence: 152.22 KM 49.08636 °N 107.30750 °E

Nemoura cinerea Within Known Range? N Nearest Occurrence: 124.94 KM 47.96783 °N 107.59278 °E

Family: Perlodidae

Diura majuscula Within Known Range? Y Nearest Occurrence: 84.64 KM 48.13287 °N 107.91890 °E

Isoperla asiatica Within Known Range? Y Nearest Occurrence: 124.94 KM 47.96783 °N 107.59278 °E

Isoperla kozlovi Within Known Range? Y Nearest Occurrence: 79.65 KM 48.25861 °N 107.90251 °E

Isoperla lunigera Within Known Range? Y Nearest Occurrence: 93.86 KM 48.09549 °N 107.84265 °E

Megarcys ochracea Within Known Range? N Nearest Occurrence: 134.21 KM 47.97108 °N 107.49534 °E

Family: Pteronarcyidae

Pteronarcys reticulata Within Known Range? N Nearest Occurrence: 152.22 KM 49.08636 °N 107.30750 °E

Family: Taeniopterygidae

Taenionema japonicum Within Known Range? N Nearest Occurrence: 158.92 KM 49.05411 °N 107.23175 °E

**LOE Rating: Probable Total: 4**

Family: Capniidae

Isocapnia kudia Within Known Range? N Nearest Occurrence: 1,032.59 KM 51.25356 °N 99.66687 °E

Family: Nemouridae

Nemoura arctica Within Known Range? Y Nearest Occurrence: 79.80 KM 48.25861 °N 107.90251 °E

Family: Perlodidae

Arcynopteryx sajanensis Within Known Range? N Nearest Occurrence: 949.43 KM 51.61397 °N 100.59972 °E

Pictetiella asiatica Within Known Range? N Nearest Occurrence: 956.71 KM 51.65822 °N 100.53000 °E

Research funded by the National Science Foundation  
DEB-BSI #0206674: A Survey of the Aquatic Insects of the Selenge River Basin. P.I.'s: JKGelhaus, JCMorse, BHayford.  
DEB # 0743732: Aquatic Insects of the Altai and Hangai Mountain Drainages. P.I.'s: JKGelhaus, JCMorse, CRNelson.  
<http://clade.ansp.org/entomology/mongolia/index.html>



Basin: Pacific Ocean Basin

Aimag: Tov

Soum: Mongonmoryt

Freshwater Ecoregion: Argun

Terrestrial Ecoregion: Trans-Baikal Conifer Forests

WQM Sites:

No current Asia Foundation WQM sites in this soum.

**LOE Rating: Possible Total: 6**

Family: Nemouridae

Amphinemura standfussi Within Known Range? N Nearest Occurrence: 167.97 KM 49.73130°N 107.63484°E

Nemoura sahlbergi Within Known Range? Y Nearest Occurrence: 81.37 KM 48.21780°N 107.90392°E

Family: Perlidae

Agnetina brevipennis Within Known Range? N Nearest Occurrence: 152.22 KM 49.08636°N 107.30750°E

Kamimuria exilis Within Known Range? N Nearest Occurrence: 1,096.09 KM 50.16278°N 98.84212°E

Family: Perlodidae

Arcynopteryx polaris Within Known Range? Y Nearest Occurrence: 73.41 KM 48.42080°N 107.91406°E

Isoperla altaica Within Known Range? Y Nearest Occurrence: 80.46 KM 48.60182°N 107.84335°E

**LOE Rating: Predicted Total: 13**

Family: Capniidae

Capnia nigra Within Known Range? N Nearest Occurrence: 906.38 KM 50.92452°N 100.75528°E

Family: Chloroperlidae

Alloperla joosti Within Known Range? N Nearest Occurrence: 610.35 KM 49.21675°N 103.10750°E

Alloperla mediata Within Known Range? N Nearest Occurrence: 567.03 KM 49.77776°N 103.60860°E

Family: Leuctridae

Leuctra fusca Within Known Range? N Nearest Occurrence: 154.06 KM 49.08643°N 107.28952°E

Family: Perlidae

Agnetina cocandica Within Known Range? N Nearest Occurrence: 319.20 KM 50.06476°N 106.13388°E

Paragnetina flavotincta Within Known Range? N Nearest Occurrence: 318.63 KM 50.06476°N 106.13388°E

Family: Perlodidae

Arcynopteryx compacta Within Known Range? Y Nearest Occurrence: 136.34 KM 47.84324°N 107.55299°E

Diura bicaudata Within Known Range? N Nearest Occurrence: 969.68 KM 47.21768°N 99.92824°E

Isoperla eximia Within Known Range? Y Nearest Occurrence: 80.31 KM 48.60182°N 107.84335°E

Isoperla mongolica Within Known Range? Y Nearest Occurrence: 94.04 KM 48.09549°N 107.84265°E

Isoperla obscura Within Known Range? N Nearest Occurrence: 249.35 KM 49.72192°N 106.65562°E

Isoperla potanini Within Known Range? N Nearest Occurrence: 764.99 KM 47.26999°N 101.80227°E

Skwala pusilla Within Known Range? N Nearest Occurrence: 2,225.87 KM 48.51277°N 88.51107°E

**LOE Rating: Unlikely Total: 3**

Family: Capniidae

Capnia khulsbagia Within Known Range? N Nearest Occurrence: 912.31 KM 50.98944°N 100.71944°E

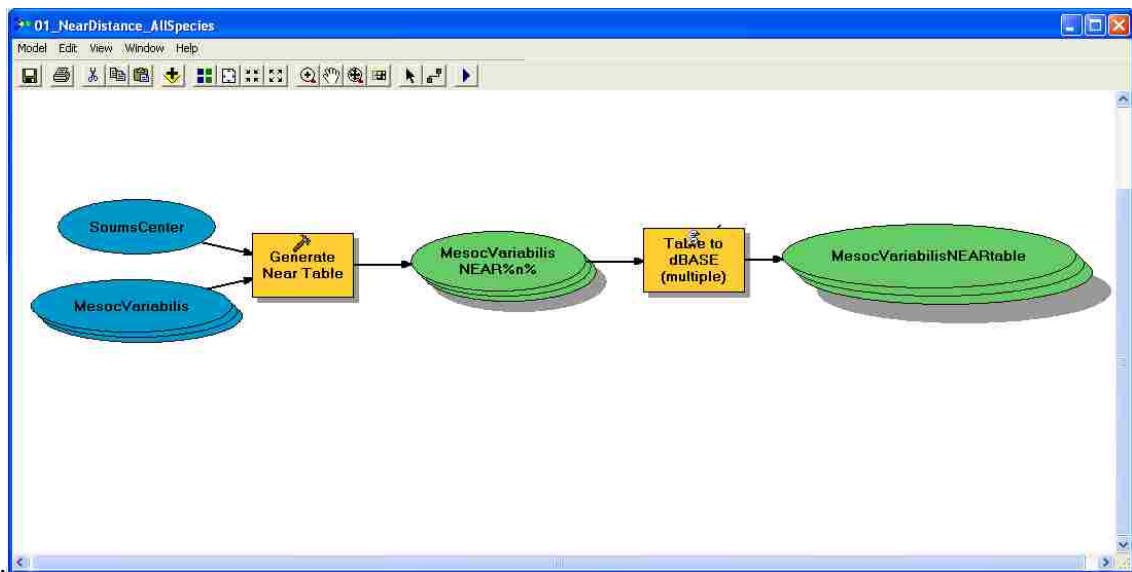
Mesocapnia altaica Within Known Range? N Nearest Occurrence: 2,182.62 KM 48.43684°N 88.90094°E

Family: Nemouridae

Nemurella pictetii Within Known Range? N Nearest Occurrence: 1,022.65 KM 51.07896°N 99.70857°E

## APPENDIX E. LEVELS OF EXPECTEDNESS FORMULAS.

Guided by a conceptual framework to rank proximity, frequency, and predictive maps Table 2, a series of calculations were computed to assign a “Level of Expectedness” (LOE) rating to each species at each site. All raw data was derived from .dbf files from Zonal Statistics and Shapefile outputs for soums, aimags, and basins (referred to as “areas of interest” below) as stipulated under the Level of Expectedness heading in the Materials and Methods. The following screenshots illustrate the analysis process.



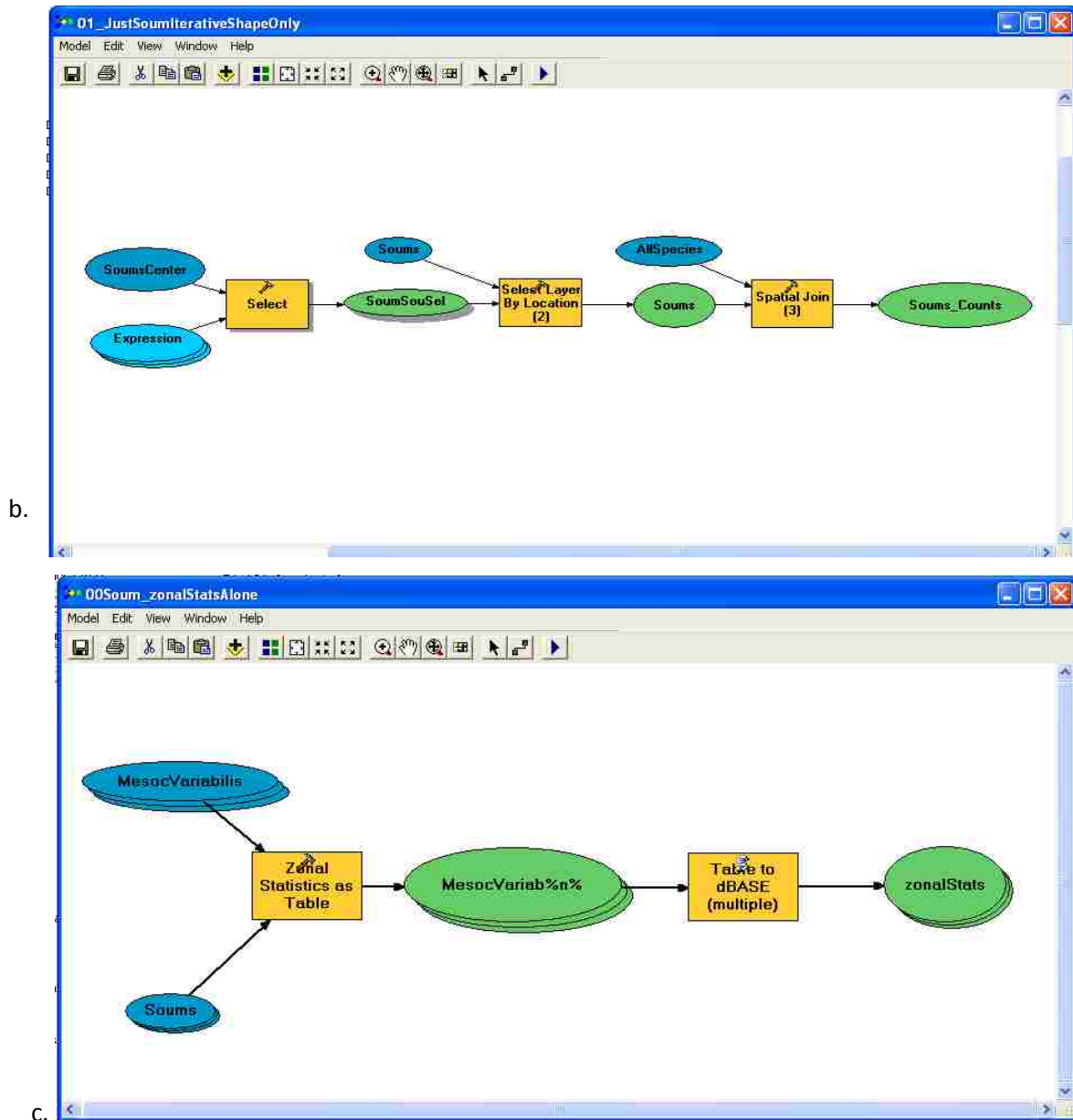


Figure E1 a-c. Component analyses in ArcGIS Model Builder. To acquire the proximity and frequency data from the georeferenced species occurrences and ENM maps, a series of custom analyses were constructed using ArcGIS Model Builder. First, near distance measure were taken from each soum center. This was performed iteratively for each species as indicated by the stacked ovals labeled with the abbreviated name (*MesocVariabilis*) of the first species for which the model was performed (Fig. E1a). The near distance was calculated in degrees and was converted to kilometers externally in Excel. The near distance table also included corresponding XY coordinates of the nearest species occurrence from each soum center. Next, each soum center was used to select the intersecting area of interest for the frequency count analysis (Fig. E1b). The resulting shapefile was joined through a Spatial Join to the All Species table (Fig. E1b) which held all georeferenced species occurrences. This yielded a table with the species occurrence data for that particular area of interest only which was tabulated using CountIf formulas in Excel to summarize the frequency of occurrence of each species within each area of interest. Finally, Zonal statistics were performed (Fig. E1c), again iteratively for each species and each area of interest.

SpeciesCode	Aimag_Code	Aimag_count	StdevIF	AvgIF	SSFreqAA
AB	186	0	0	0.25	2.909796
AB	34	5	1.456217	1.083333	2.689618
AB	15	9	4.476842	4.479167	1.009827
AB	85	2	1.528541	0.5625	0.94044
AB	25	2	1.199882	0.916667	0.902867
AB	149	2	2.191214	1.583333	0.190153
AB	14	1	1.477971	0.833333	0.112767
AB	9	3	5.340863	2.833333	0.031206
AB	1	0	0.144338	0.020833	-0.14434
AB	221	0	0.144338	0.020833	-0.14434
AB	104	0	0.201941	0.041667	-0.20633
AB	171	0	0.201941	0.041667	-0.20633
AB	259	0	0.472187	0.229167	-0.48533
AB	240	0	1.997228	1.270833	-0.6363
Abo	186	3	0.601417	0.25	4.572536
Abo	149	8	2.191214	1.583333	2.928362
Abo	34	4	1.456217	1.083333	2.002907
Abo	259	1	0.472187	0.229167	1.632473
Abo	14	2	1.477971	0.833333	0.789371
Abo	25	1	1.199882	0.916667	0.069451
Abo	15	4	4.476842	4.479167	-0.10703
Abo	1	0	0.144338	0.020833	-0.14434
Abo	221	0	0.144338	0.020833	-0.14434
Abo	9	2	5.340863	2.833333	-0.15603
Abo	104	0	0.201941	0.041667	-0.20633
Abo	171	0	0.201941	0.041667	-0.20633
Abo	85	0	1.528541	0.5625	-0.368
Abo	240	0	1.997228	1.270833	-0.6363
Abo	#N/A	#N/A			

Figure E2. Component computation with Excel arrays. Array functions, which are analogous to a “Group By” query in Access, allow a calculation to be performed according to a certain set criteria specified in the IF function. For example in the formula depicted in the screenshot (`{=STDEV(IF($B$2:$B$1052=B2,$C$2:$C$1052))}`), the standard deviation is computed only for numbers in column B (numerically coded for each aimag) that correspond to the aimag of interest (in this case, B2 which equals Aimag #186). Note that the standard deviation and average are the same for the species in row 16. The Excel formula used for the area-specific average is:

`{=AVG(IF($B$2:$B$1052=B2,$C$2:$C$1052))}`

, with the outer brackets indicating an array function. Then for each species, the standard score ( $z=(x-\mu)/\sigma$ ) is computed using the actual count (or Maxent mean, etc.) and the standard deviation and average for the area where the species is from. This is recorded in Column F (SSFreqAA) and could also be computed in Access using queries. Note how the standard score differs for the species in row 2 and that in row 16 even though they have the same standard deviation and average. The Excel formula used for the standard score in the pictured spreadsheet is: `=(C2-E2)/E2`.

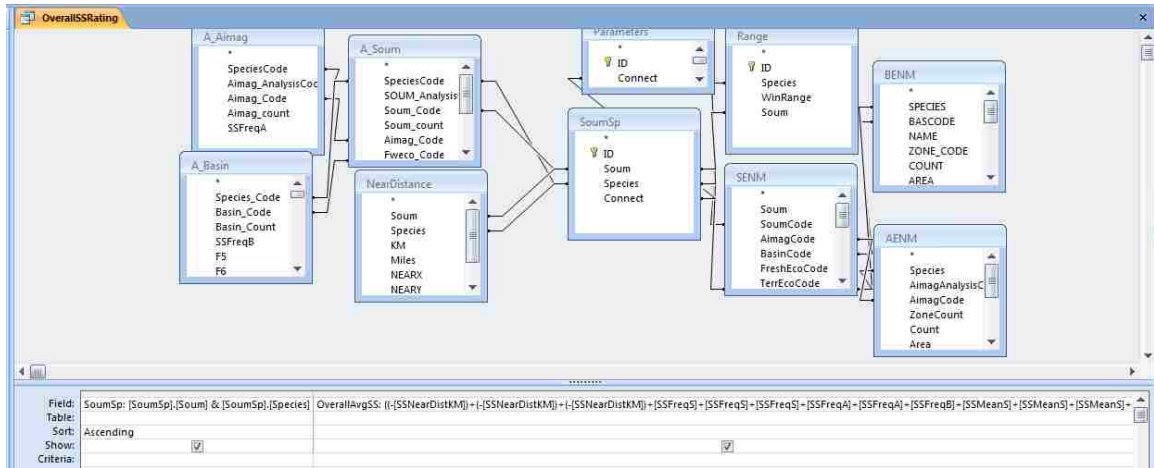


Figure E3. Overall Weighted Average in Microsoft Access. To compute the overall rating from the standard scores of the frequency and proximity components, a weighted average was computed. This average weights near distance, soum frequency and Maxent mean more heavily than aimag, and aimag more heavily than basin as follows: OverallAvgSS:  $((-[\text{SSNearDistKM}] * 3) + ([\text{SSFreqS}] * 3) + ([\text{SSFreqA}] * 2) + [\text{SSFreqB}] + ([\text{SSMeanS}] * 3) + ([\text{SSMeanA}] * 2) + [\text{SSMeanB}] / 15$ . The field [SoumSp] (column 1) prompts the query and calculation to be performed for each species at each site. The SS abbreviation for each field indicates that it is a standard score component as described in Figure E2. NearDist is an abbreviation for Near Distance, the raw data coming from the analysis described in Figure E1a. Freq is an abbreviation for Frequency, meaning the count analysis described in Figure E1b. Mean is an abbreviation for the Maxent Mean from the Zonal statistics analysis described in Figure E1c. This overall average is then calibrated to the normal distribution (Fig. E4) and categorized to LOE categories according to the quartiles (Fig. E5).

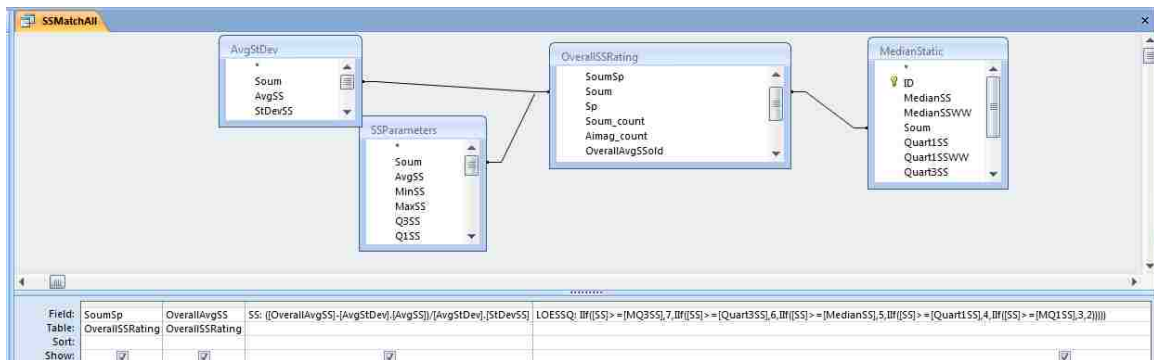


Figure E4. Overall standard score computation in Microsoft Access. A standard score was computed for each species at each site relative to other species as the same site. The standard score was computed according to the formula:  $SS: ([\text{OverallAvgSS}] - [\text{AvgStDev}].[AvgSS]) / [\text{AvgStDev}].[StDevSS]$  which utilizes the average and standard deviation (Query AvgStDev, top left; Fig. E4) of the overall weighted average (Fig. E3), similar to the array functions used for the components (Fig. E2). The quartile parameters (Fig. E5) are used to assign the standard score to an LOE category relative to the other species at the same site. LOE categorization was computed with the following formula in which 7 represents “Highly Likely” to 3 which equates to “Unlikely”:

LOESSQ:  $\text{IIf}([SS] \geq [\text{MQ3SS}], 7, \text{IIf}([SS] \geq [\text{Quart3SS}], 6, \text{IIf}([SS] \geq [\text{MedianSS}], 5, \text{IIf}([SS] \geq [\text{Quart1SS}], 4, \text{IIf}([SS] \geq [\text{MQ1SS}], 3, 2))))$ .

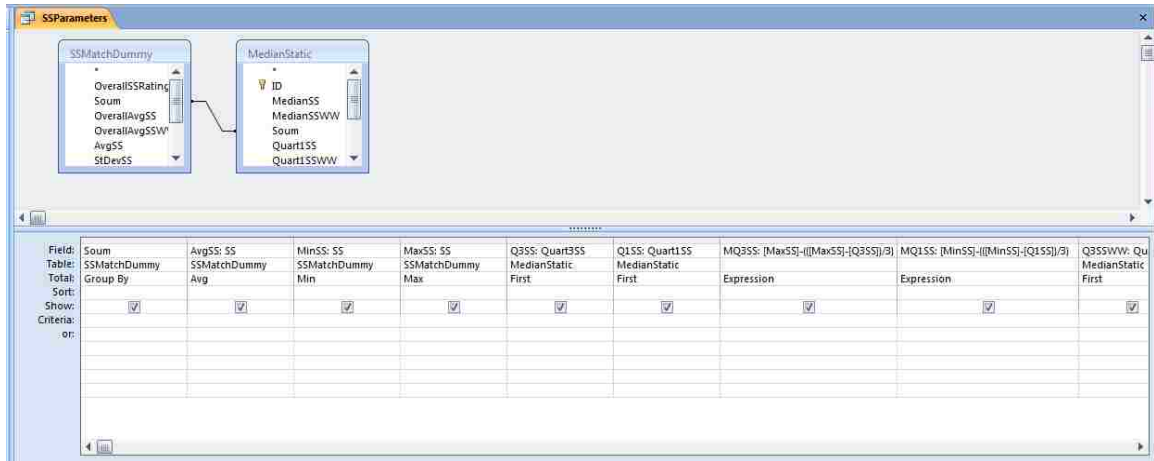


Figure E5. Group By queries in Microsoft Access. In order to compute standard scores and corresponding LOE categories for the overall weighted average (Fig E3), a Group By queries were performed. This computed the average and standard deviation of the overall weighted average for each soum (Fig E5, table in top left). Then, from the standard score (SS), the Average, Minimum, Maximum, Median, and Quartiles were computed. The Quartiles were computed externally in Excel due to some coding complexity issues, but could eventually be incorporated dynamically. The upper and lower quartiles were divided intermediately so that LOE categories for a particular site approximated the normal distribution. The calculation for this is given in the fields [MQ3SS] and [MQ1SS] where the maximum and minimum respectively are used to calculate a halfway point between the maximum and minimum and the neighboring quartiles.

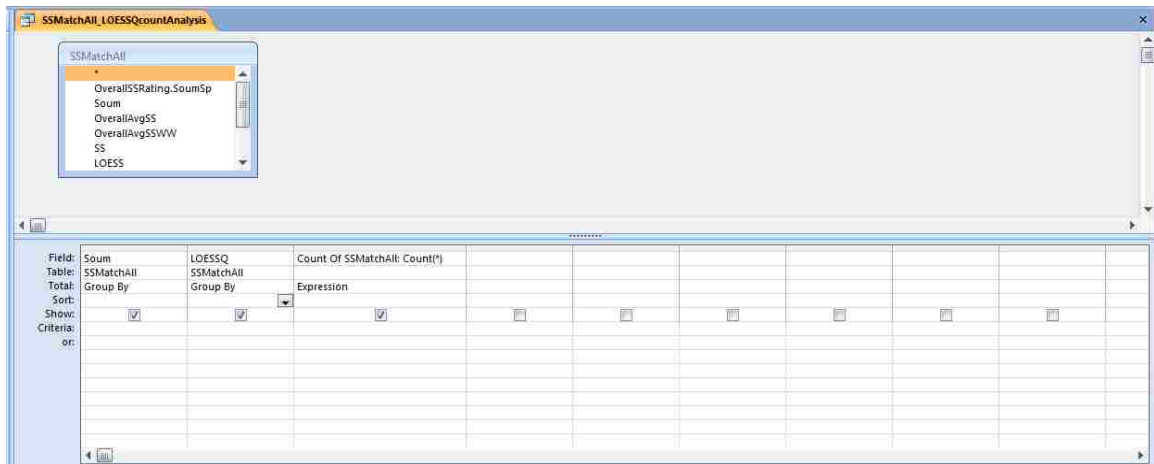


Figure E6. LOE distribution query in Microsoft Access. To assess the normality and consistency of the distribution of the final LOE rating, another Group By query was performed which used a Count function to tabulate the number of species assigned to each LOE category. Similar queries were made for each species across all sites and for comparing the final LOE rating to the original data.

**Report Header**

Levels of Expectedness by Soum

**Page Header**

Basin: Basin\_NAME  
Aimag: Aimag\_name

**Basin\_NAME Header**

**Aimag\_name Header**

**Soum\_I\_Soum Header**

Soum: Soum\_I\_Soum | Freshwater Ecoregion: Ecoregion | Terrestrial Ecoregion: ECO\_NAME | WQM Sites: Expr1

Predicted

**LOESSQ Header**

LOER: LOER | LOESSQ: LOESSQ | SS: SS | =Count(\*)

**Family Header**

Family: Family

**Detail**

FullSpeciesName: FullSpeciesName | Within Known Range?: WinRa | Nearest Occurrence: KM | NEARX | NEARY

**Page Footer**

=Page() & [Page] & ' of ' & [Pages]

**Report Footer**

=Count(\*)

**Group, Sort, and Total**

1: Group on Basin\_NAME with A on top More  
2: Group on Aimag\_name  
3: Group on Soum: (Soum\_I\_Soum)  
4: Group on LOESSQ

Figure E7. LOE report. All LOE ratings were organized according to a hierarchy from basin down to soum. Information is included about the XY coordinates of the nearest occurrence, the ecoregion which the soum falls in, and the Asia Foundation’s water quality monitoring (WQM) sites that fall within the soum for ease of use by citizen biomonitoring groups. Also given is whether the soum falls within the known range of the particular species (Appendix A), which was computed using “Enumerate Intersecting Features” in Hawth’s Tools. If only predicted ENM maps were used for computing the overall weighted average and subsequent LOE rating due to lack of actual sampling, this is noted with the phrase “LOE Ranking Based on Predicted ENM Maps Only” directly below the soum name (see “Predicted” field under “Soum\_I\_Soum” Header).

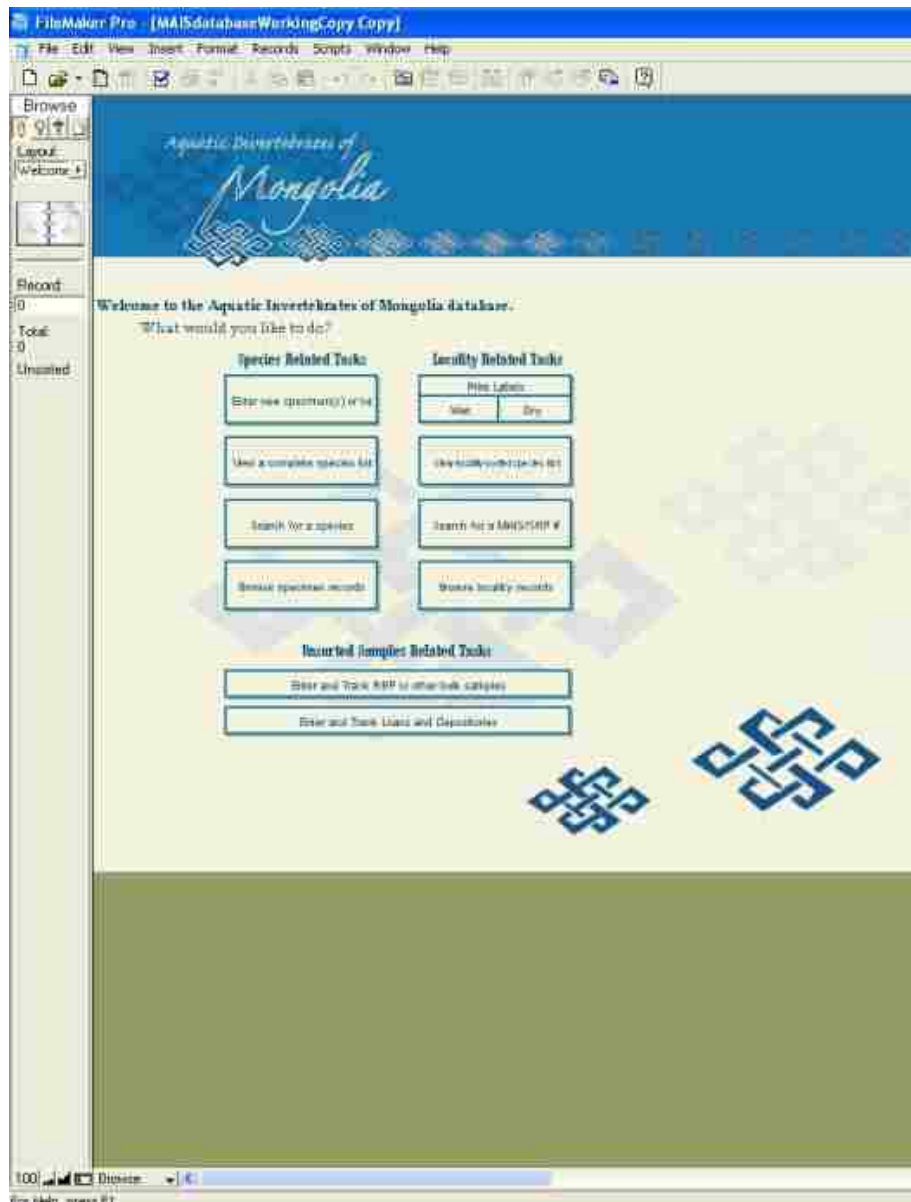


## APPENDIX F. MAIS DATABASE TUTORIAL

This document is meant as a brief tutorial to familiarize users with the MAIS Database. Please consult this for an overview of features available in the Database and the general layout of the Database.

### WELCOME

The Welcome screen is intended to direct a user to the main features of the data base such as entering new specimens, recording loaned specimens, printing labels, viewing reports, and browsing all records.

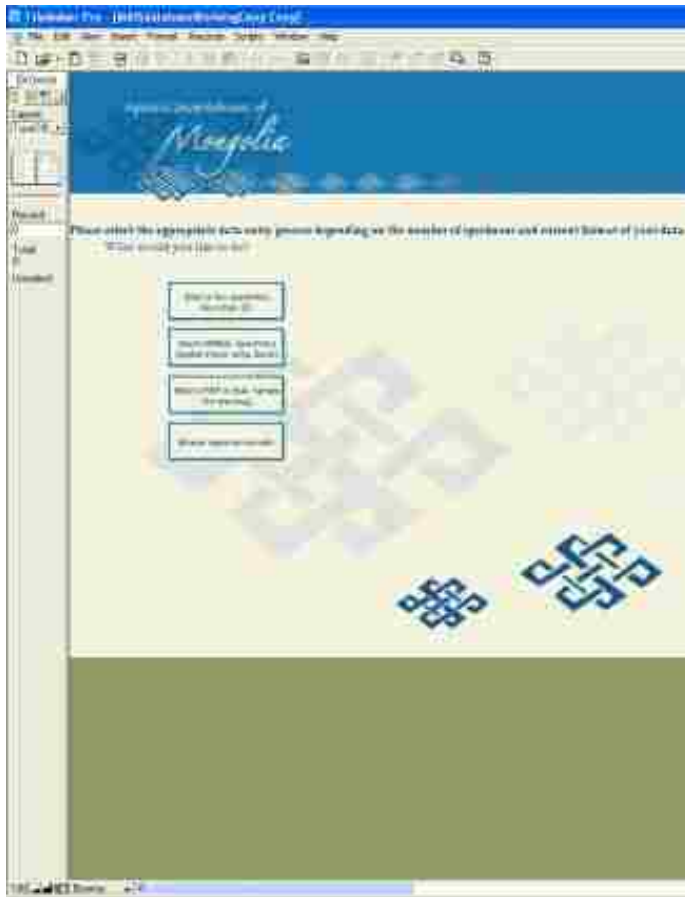


## DATA ENTRY

The Data Entry process is navigated through a series of buttons and layouts that are straightforward. Through a number of steps, all the required information is entered. Most fields should automatically fill in if similar text was previously entered in that field.

If there are multiple (greater than 20 specimens) that are already in an Excel spreadsheet or similar format, these can be Imported as discussed following this Data Entry section.

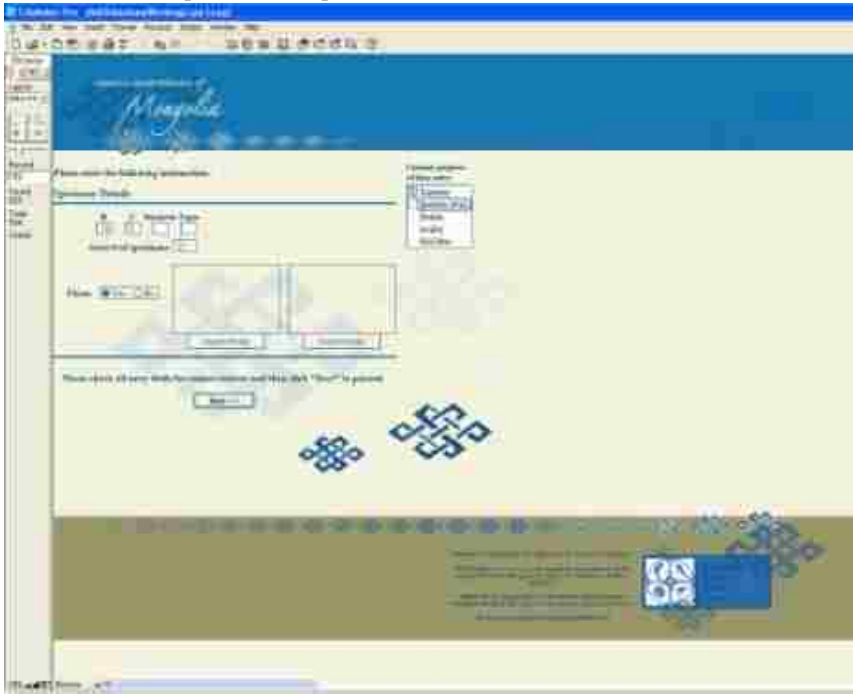
**Data Entry Navigation screen.** Here you decide to follow the data entry process for a few specimens or importing many specimens.



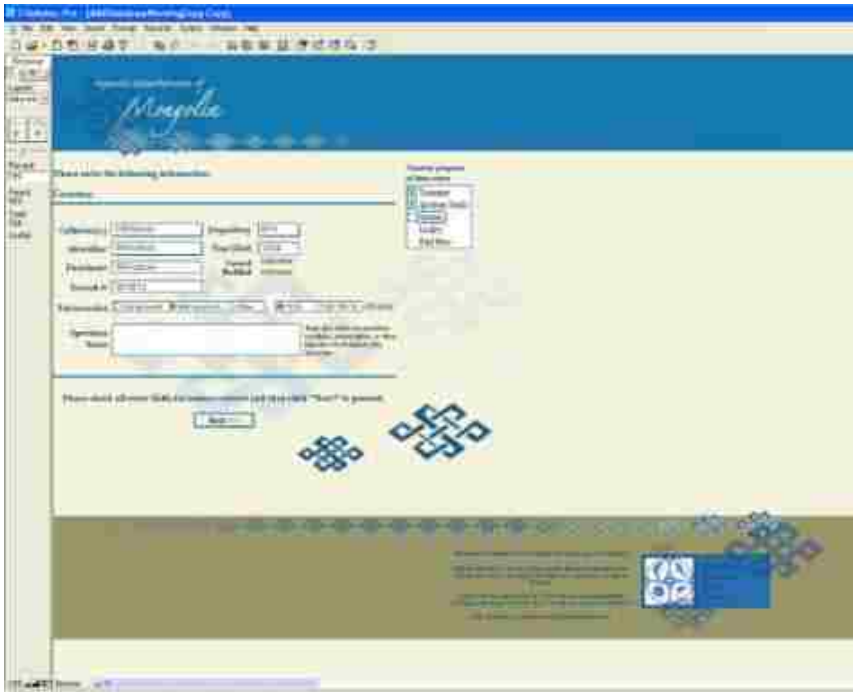
**Taxonomy page.** Here the species and higher taxonomic information is entered. Notes can be made about the morphology or related publications in the “Species Notes” field. If neither genus nor species is known, select “The specimen is not determined to genus” to proceed to a separate taxonomic form for this situation.

**Taxonomy page continued.** If genus or species is not known, you will be directed to this page to enter the lowest taxonomic information.

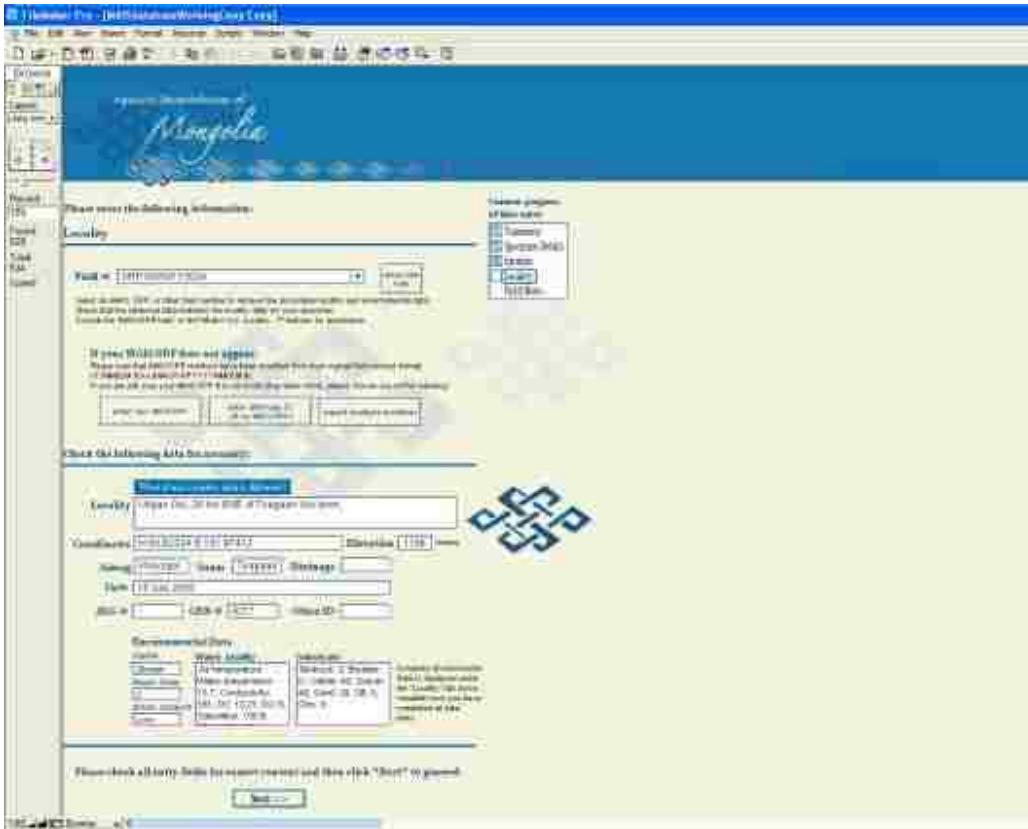
**Specimen Details page.** After the taxonomic information is entered, selecting the NEXT button will direct you to this screen. Here # of specimens and photos can be entered.



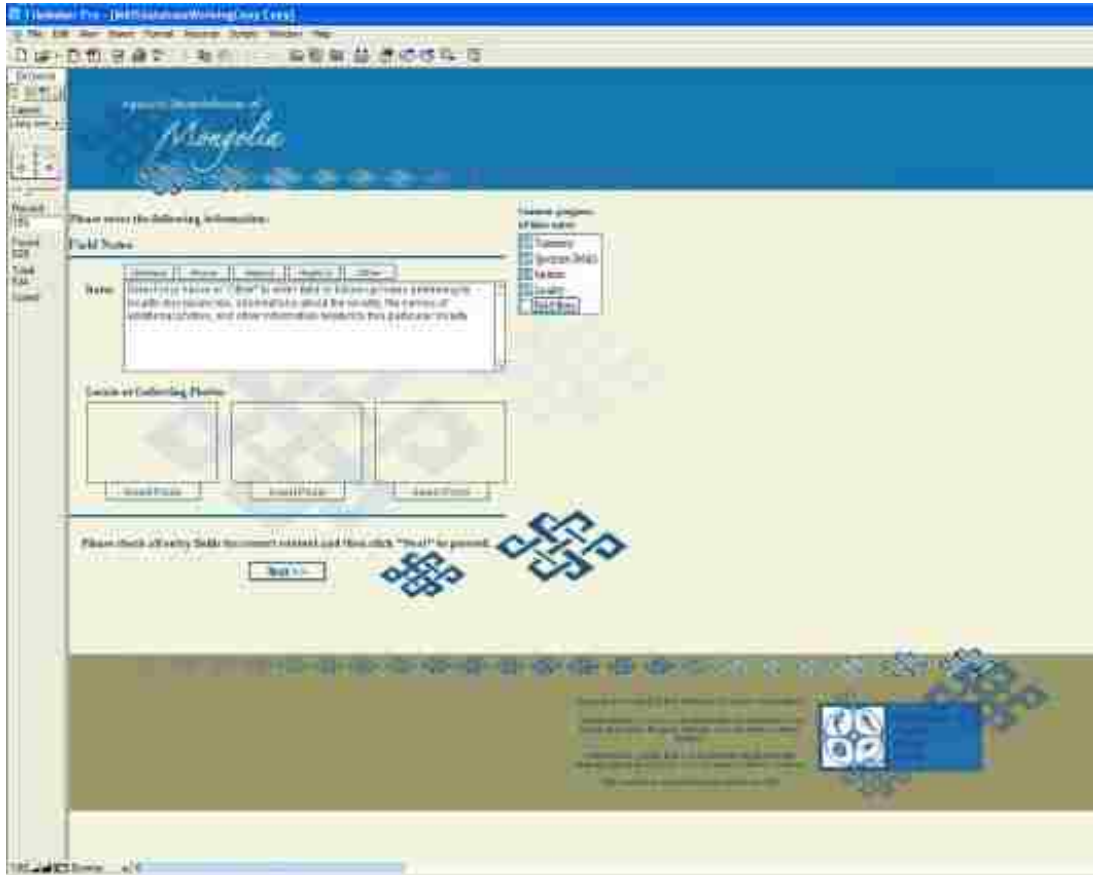
**Curation page.** After the specimen details are entered, selecting the NEXT button will direct you to this screen. Here preservation, depository, collector, and identifier information are entered. The major collaborators and institutions are selected from drop down menus for these fields. Specimen Notes can be made about the condition of the specimens, loans, microhabitat it was collected in, etc.



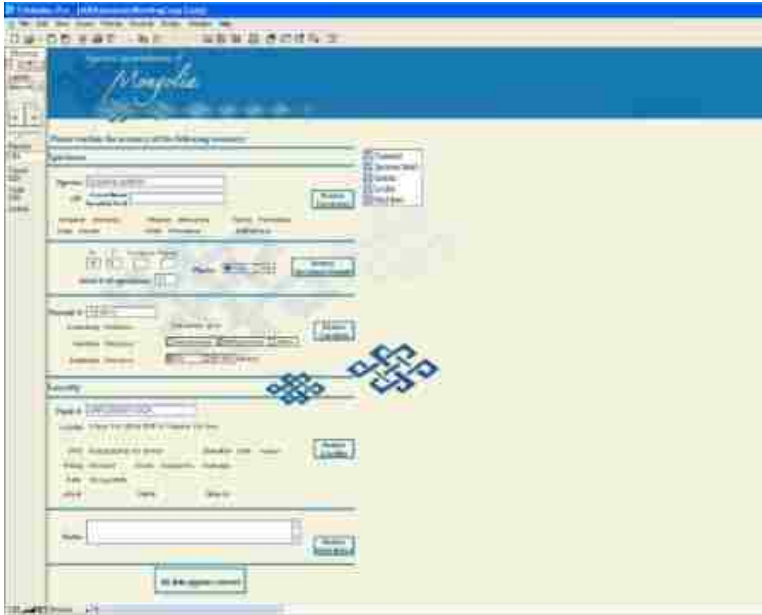
**Locality page.** After the curation information is entered, selecting the NEXT button will direct you to this screen. Here the MAIS or SRP number is selected from a drop down menu. These numbers have been changed to a standard format: MAISYYYYMMDD## or SRPYYYYMMDD## (ex: MAIS2008070601). Once a number is selected, the associated locality information will display. This information is not editable. If the locality information differs slightly from yours, please make notes on the Field Notes page which follows the Locality page. If the differences are significant, email [MAISNSF@gmail.com](mailto:MAISNSF@gmail.com) as to the discrepancies and how they should be fixed. If your MAIS or SRP # is not shown in the drop down menu, check the MAIS/SRP numbers from the same day to see if the locality matches. If not, you can proceed to enter a new locality through an automated process by selecting the “enter new MAIS/SRP” or other related buttons.



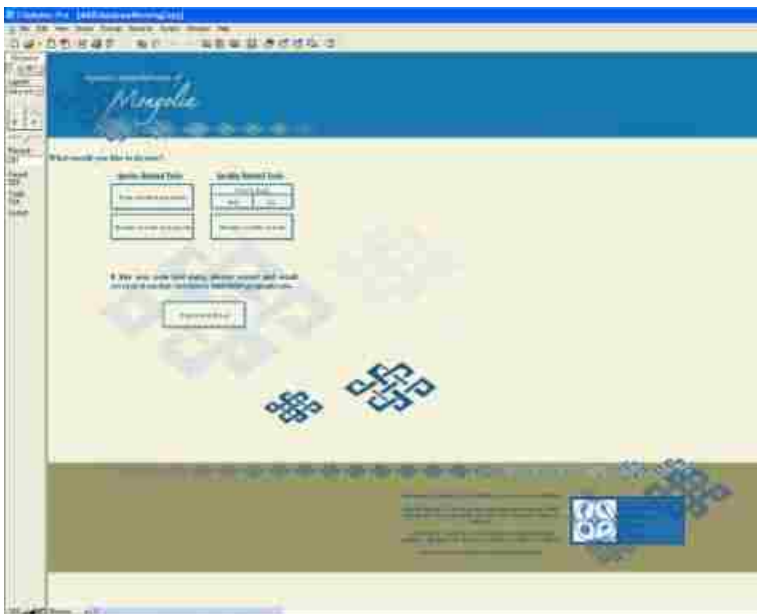
**Field Notes page.** After the locality information is entered, selecting the NEXT button will direct you to this screen. Here you can enter field or followup notes about the locality as well as notes about discrepancies in the locality information from the previous page. Pictures of the locality can be uploaded here.



**Summary page.** After the field notes information is entered, selecting the NEXT button will direct you to this screen. Here all entered information for the specimen can be double checked. This page is the last opportunity to edit the information before it is saved and made inaccessible. Select the “Revise” button for the section you want to edit and you will be directed to the appropriate editing page. Select “All data appears correct” to save the record.



**Data Entry Navigation page.** After the specimen summary is confirmed you will be directed to this screen. Here you can decide to enter another specimen, to export all entered specimens, print labels, or browse records. If you are finished entering specimens, PLEASE select “export and email” and follow the instructions to send the records to [MAISNSF@gmail.com](mailto:MAISNSF@gmail.com) so they can be uploaded to the central Database.



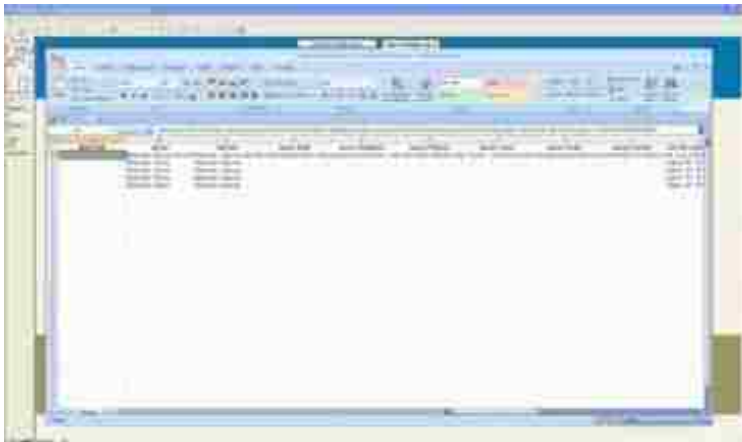
IMPORTING

If there are multiple (greater than 20 specimens) that are already in an Excel spreadsheet or similar format, these can be Imported as discussed below.

A Series of Pop-up windows will give instructions and reminders during the process.



During the initial steps, a spreadsheet titled “SpecimenImportForm” should open on your screen and be saved to the same folder as the Database file. All specimens **MUST** be entered according to these fields and the instructions in them. The file **MUST** not be moved, nor the file name or field names (column headings) be changed. For all information to be imported properly, MAISSRP#, genus, and species fields are especially important to be entered properly. Once the data is imported, no fields will be available for editing.



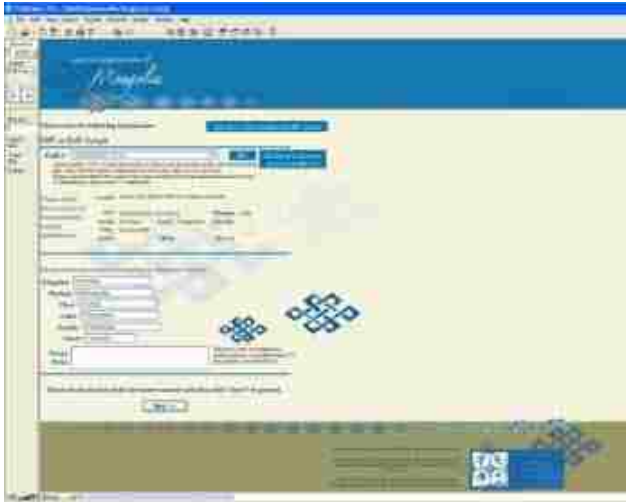
At the end of the process, a spreadsheet titled “MAISrecords” should open on your screen and be saved to the same folder as the Database file. Please email this to [MAISNSF@gmail.com](mailto:MAISNSF@gmail.com).



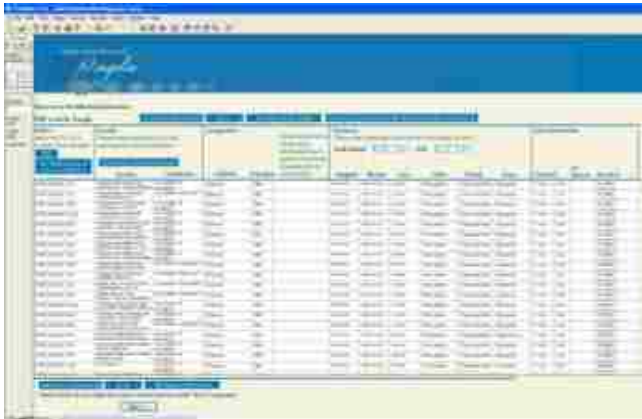
## BULK

If samples need further sorting and are not identified to order, family, or genus, this entry form can be accessed from the Welcome screen.

The specimens can be entered a few at a time....



Or in a table format to enter multiple specimens quickly...

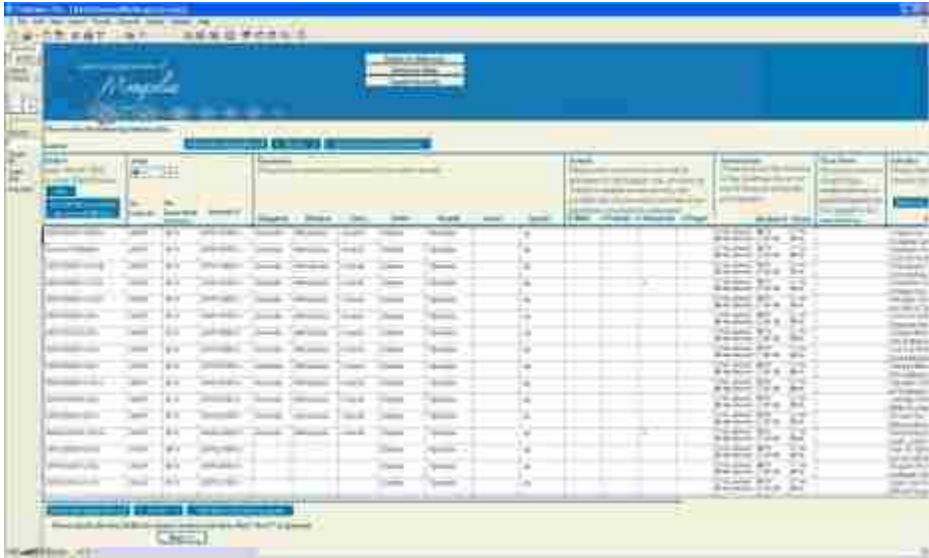


A report can be generated about all specimens that need further sorting.



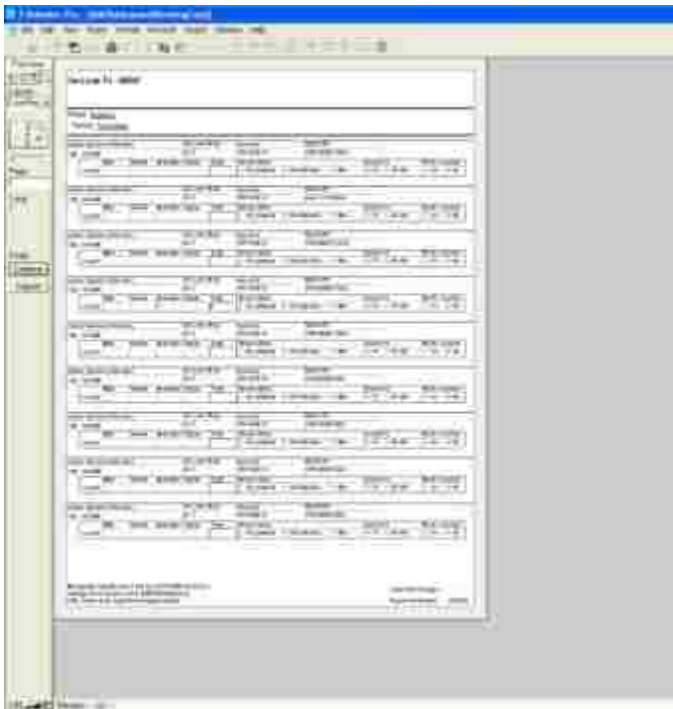
## LOAN

Like Bulk Sample entry, this entry form can be accessed from the Welcome screen. The loaning and receiving institution are selected from drop down menus.



The screenshot shows a software window titled "Loan" with a blue header bar. Below the header is a navigation pane on the left and a main data entry area. The main area contains a table with multiple columns, including fields for specimen ID, date, and other details. The table is currently empty, showing only column headers. The interface includes various buttons and dropdown menus for data entry.

A report can be generated about all specimens that are on loan by taxa, institutions involved, or specimens just entered (for sending with a shipment).



The screenshot displays a report window with a title bar and a list of data entries. Each entry is presented in a structured format with multiple rows and columns, likely representing different attributes of the specimens on loan. The report includes a header section and a main body of data. The interface is typical of a legacy software application, with a clear layout for data presentation.



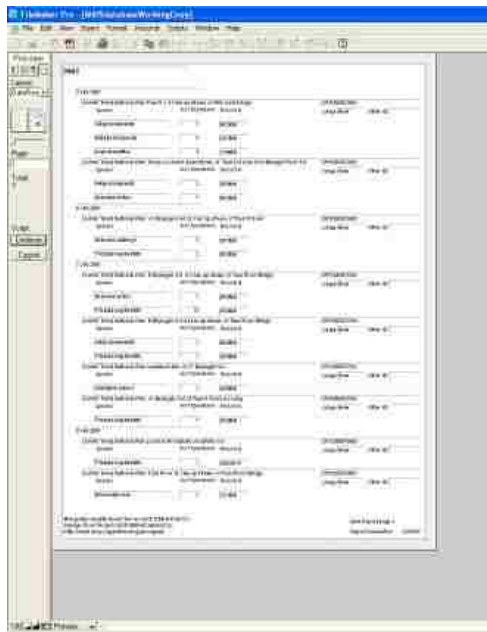
## REPORTS

A number of reports are available to view species lists and locality information. These reports can be accessed from the Welcome screen or the Reports tab on the Main screen. These reports can be browsed printed

**Locality report.** Specimens are organized by Aimag and soum.

**Species report.** Species (not specimens) are organized by Order and Family, then alphabetized by genus.

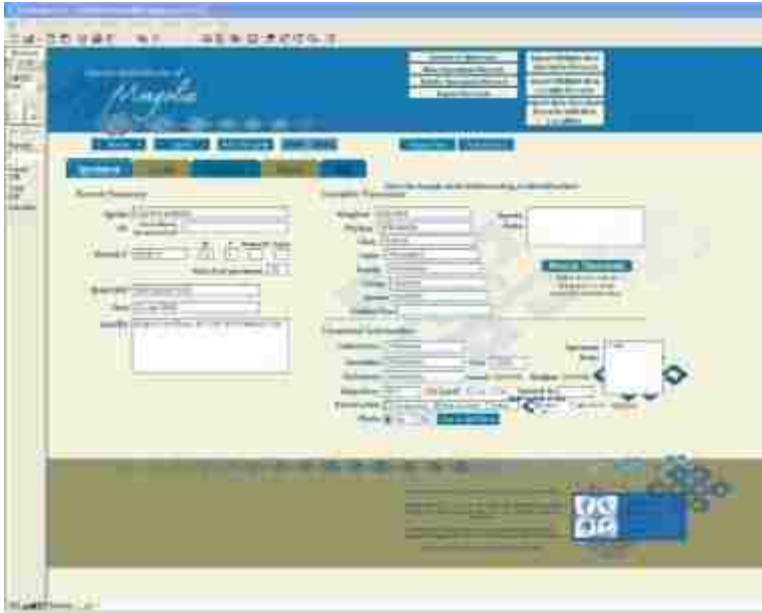
**Date report.** Specimens are organized by Year and Day, then listed by specific locality.



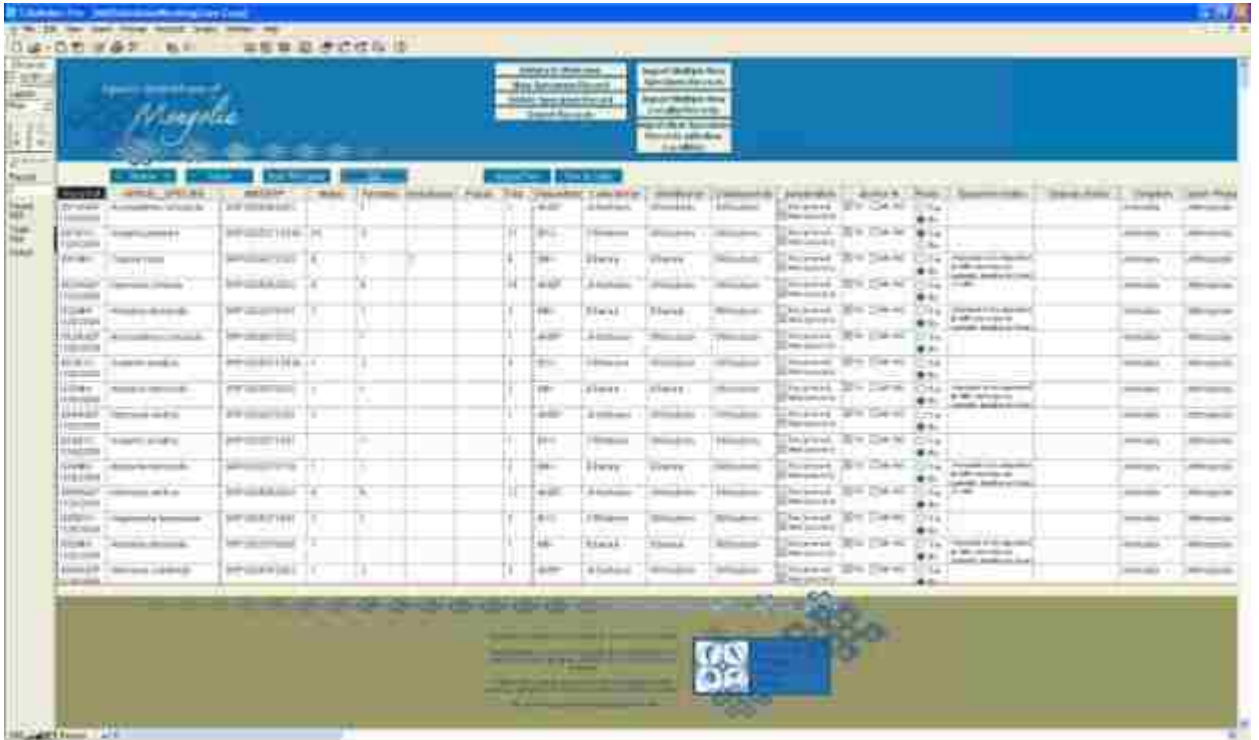
MAIN

The Main screen is the central navigation page for browsing records, accessing reports, and performing searches. Each aspect of the Main screen is illustrated below.

**Specimen tab (default).**



**Specimen tab: table format** (for viewing multiple specimens at once).



Locality tab.

**General Summary**

Species:  (Scientific name)  
 (Local Name)  
 Date of Collection:  (Calendar icon)  
 Number of Specimens:   
 Collector(s):   
 Locality:

**Locality and Environmental Details**

Locality:

Coordinates:  (Show Details)

Photos:  (Take Photo)

**Environmental Data**

Parameter	Value	Unit	Measurement
Water Quality			
Temperature			
Humidity			
Wind Speed			
Wind Direction			
Cloud Cover			
Soil Moisture			
Soil Temperature			
Soil pH			
Soil Type			
Soil Color			
Soil Texture			
Soil Fertility			
Soil Salinity			
Soil Acidity			
Soil Alkalinity			
Soil Hardness			
Soil Porosity			
Soil Permeability			
Soil Infiltration			
Soil Evaporation			
Soil Evapotranspiration			
Soil Saturation			
Soil Water Potential			
Soil Water Content			
Soil Water Retention			
Soil Water Uptake			
Soil Water Loss			
Soil Water Gain			
Soil Water Balance			
Soil Water Deficit			
Soil Water Excess			
Soil Water Stress			
Soil Water Tolerance			
Soil Water Sensitivity			
Soil Water Resilience			
Soil Water Recovery			
Soil Water Retention Capacity			
Soil Water Uptake Capacity			
Soil Water Loss Capacity			
Soil Water Gain Capacity			
Soil Water Balance Capacity			
Soil Water Deficit Capacity			
Soil Water Excess Capacity			
Soil Water Stress Capacity			
Soil Water Tolerance Capacity			
Soil Water Sensitivity Capacity			
Soil Water Resilience Capacity			
Soil Water Recovery Capacity			
Soil Water Retention Capacity			
Soil Water Uptake Capacity			
Soil Water Loss Capacity			
Soil Water Gain Capacity			
Soil Water Balance Capacity			
Soil Water Deficit Capacity			
Soil Water Excess Capacity			
Soil Water Stress Capacity			
Soil Water Tolerance Capacity			
Soil Water Sensitivity Capacity			
Soil Water Resilience Capacity			
Soil Water Recovery Capacity			

Field Notes Tab.

**General Summary**

Species:  (Scientific name)  
 (Local Name)  
 Date of Collection:  (Calendar icon)  
 Number of Specimens:   
 Collector(s):   
 Locality:

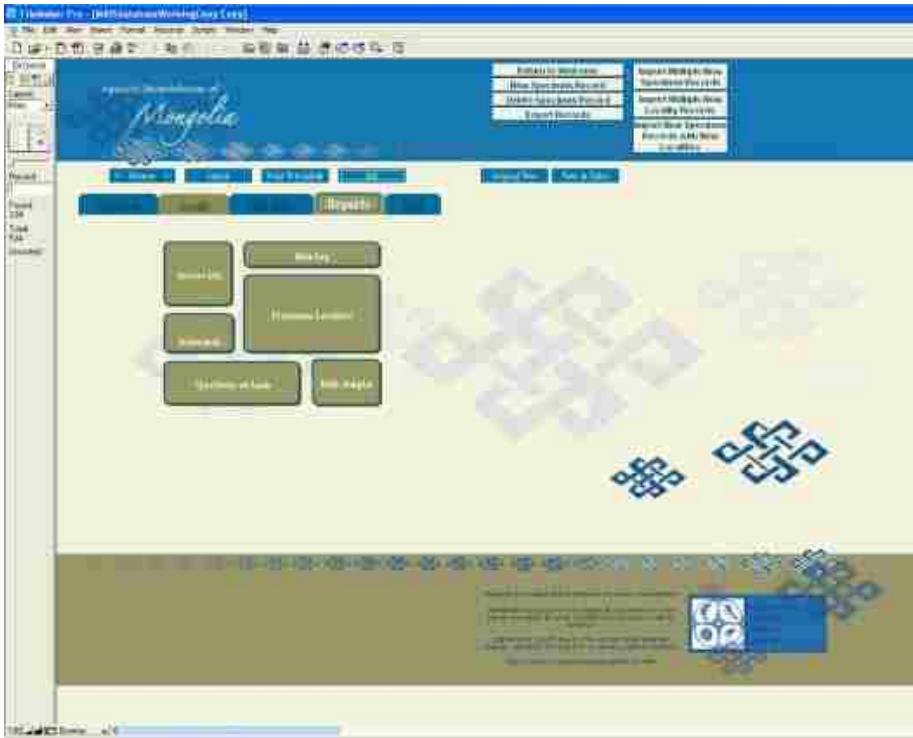
**Notes and Photos**

Notes:

Photos:  (Take Photo)

Map:  (Show Map)

**Reports tab.** Reports (page 13-14) which sort and display a variety of specimen lists.



**Help tab.** Instructions for navigating the database in potentially confusing areas.





## FIND

Search functions are currently being developed to make searches more intuitive. For the time being, select the Magnifying Glass Icon from the sidebar or the Search button. You will know you have entered find mode when all the fields are outlined with dotted lines. You can then enter a search term into the relevant field and select “Find” on the sidebar.



The screenshot displays a web application interface with a search section. The interface includes a sidebar on the left with a magnifying glass icon. The main content area features several search forms:

- Search Overview:** Includes fields for Name, Address, and a large text area.
- Complete Treatment:** Includes fields for Name, Address, and a large text area.
- Complete Information:** Includes fields for Name, Address, and a large text area.

The forms are outlined with dotted lines, indicating they are in search mode. The interface also includes a navigation menu at the top and a footer with a logo.