THESIS

FOR A SPECIES MORAL RIGHT TO EXIST: THE IMPERATIVE OF AN ADEQUATE ENVIRONMENTAL ETHICS

Submitted by

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WE HEREBY RECOMMEND THAT THE THESIS PREPARED UNDER OUR SUPERVISION BY WINTHROP R. STAPLES III ENTITLED FOR A SPECIES MORAL RIGHT TO EXIST: THE IMPERATIVE OF AN ADEQUATE ENVIRONMENTAL ETHICS BE ACCEPTED AS FULFILLING IN PART REQUIREMENTS FOR THE DEGREE OF MASTER OF ARTS.

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ABSTRACT OF THESIS

FOR A SPECIES MORAL RIGHT TO EXIST:

THE IMPERATIVE OF AN ADEQUATE ENVIRONMENTAL ETHICS

The worsening environmental crisis and the anticipated mass extinction of the world's species require the evolution of an environmental ethics more capable of restraining destructive human actions. Political and business leaders manufacture ever more human need to morally justify, and enable ecosystem liquidation for profit, discouraging human population and consumption stabilization and reduction. The human survival adaptation of moral rights that protects less powerful members of communities by restraining more powerful members, and by doing so benefits both individuals and whole communities, must evolve to meet these challenges. This vital step in human social evolution must build on the recognition that all species have immense intrinsic value, and that like humanity, all species are ongoing entities, superindividuals that have an interest in surviving. All species lineages are morally considerable and environmentalists should support the species' "biotic right" to exist, as asserted by Aldo Leopold. I propose this right is equivalent to a right of nonhuman species to the majority use of a minimum of 50% of every major ecotype on Earth, which would ensure the survival of approximately 85% of all species. Similarly, because intimate contact and dialectic with nature is necessary for the survival and flourishing of humanity, common people have a moral right to the abundant access to nonhuman

comrades made possible by this minimum 50% allocation. The hoped for ‘demographic transition’ will not happen quickly enough to avert mass extinction, if the current assumption, that it is moral to develop the most of Earth’s remaining productive natural ecosystems to support 3-6 billion additional humans, is allowed to stand. Vague predictions of ecosystem and species recovery after a future ‘bottleneck’ event do not explain why, in a moral universe where human interests trump all others, profit-making developed habitat would be turned over to nonhumans. The objection that the human right against poverty overrides the moral right of species to exist fails. World leaders can eliminate most poverty by ending authoritarianism, corruption and the denial of education and basic human rights. Allowing perpetual ecosystem liquidation to reduce poverty retards this progress. Human societies have the ability and moral obligation to the larger biotic community and future human generations to restrain human population growth and consumption that cause species extinction and ever more poverty. The destruction of another species by moral agents could only be justified by reason of species self-defense, and with the exception of a threat of human extinction posed by a highly contageous lethal disease organism, no such justification is plausible.

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INTRODUCTION

Appeals by major environmental groups and many environmental philosophers have been dominated by anthropocentric arguments based on the reasoning that we should avoid destruction of ecosystems and other species in order to ensure human health, economic, recreational and aesthetic opportunities. This strategy and the hard work of many dedicated environmental advocates, wildlife professionals and citizen volunteers has resulted in the placement of substantial areas of usually low species diversity habitats into *presently* protected status. These efforts have also resulted in the recovery of some wild game populations valued by hunters, and the partial recovery of a few endangered species populations in the United States.

Perhaps predictably, however, this environmental pragmatism based on appeals to human interests has not stopped the continued progression of destructive human actions that injure nonhuman life and distant human generations. We are continually reminded of what appears to be an inevitable overcrowded, species poor and conflict-ridden future, and the environmental movement and environmental philosophy’s failure to stop this regression, by our personal observations. We have seen former hunting, birding and hiking grounds bulldozed for development, and continual media reports of collapsing fisheries, rainforest destruction, desertification, water shortages, global warming, war over resources and the predicted extinction of a large fraction of

earth’s species within the next 100 years. This environmental degradation continues because nonhuman entities have no effective representation, and lack counterbalancing moral rights of sufficient weight to insure just and equal consideration in development and resource use deliberations.

In an ethical universe in which the human moral rights of life, liberty and happiness, guaranteed by a claim to a social minimum of material goods, get top priority, the logical long-term result is only token allocation of earth’s resources to nonhuman life. This future is particularly likely, because national and global decision-makers, using the slogan “grow or die”, now use policies that essentially manufacture human need as a moral justification for perpetual land and resource development by continually increasing the numbers of human consumers and their per capita consumption. There is also the sense that given the greater power, profits and benefits that development accrues to politicians, business leaders, and common persons looking for cheap products, that the preservation of any economically valuable wild land or resource is a violation of the highest priority human moral rights that should not be tolerated.

Another reason to doubt the effectiveness of anthropocentric appeals is the continual empirical falsification of the belief that political leaders will not continue with policies likely to result in severe environmental degradation, because they would suffer along with the common people and nature. Elites have proven themselves capable of distributing environmental

degradation ‘along class lines’ for millennia by living in country homes and presently in air-conditioned penthouses in polluted Chinese cities. The wealthy will also continue to be able to access dwindling preserved natural areas despite escalating costs of transportation.

It has been correctly stated that the rich and powerful do not need rights to protect their interests. But it is equally apparent that the least powerful, nonhuman species do require recognition of a moral right to life in order to survive the claims of powerful human moral agents.

The purpose of this thesis is to prove that species collectives have a negative moral right against extinction due to the actions of human moral agents, and that this right is the basis for an adequate environmental ethics. This right to exist is equivalent to a nonhuman species land or habitat right, a right of native nonhuman species to the majority use of a large fraction (50%) of each identifiable habitat type. I will also prove an associated human right of substantial local access to wild nature for the common persons of the human species.

This thesis is presented in three chapters. The first chapter reviews the traditional definitions of rights and the opinions of philosophers regarding the recognition of nonhuman rights. The chapter will end with a definition of rights that will be used to develop a concept of adequate moral rights consideration for all species.

In chapter two I argue that all life forms have great intrinsic value, value not solely relational to human interests and, therefore, that all organisms are morally considerable. I then argue that all species, like the human species lineage, have some of the properties of individual living entities, including an interest in continued survival, and therefore, that they constitute real *super individuals* that should be recognized to have both individual and group moral rights status. This status is further justified by the precedent and logic of existing conventions against genocide of human racial and ethnic groups. This right against human agent caused extinction obligates human society to the immediate generation of the necessary means to fulfill this duty, the recognition of other species land rights, the right of nonhumans to the majority use of a minimum of 50% of every major ecosystem on earth.

Presently planned “museum piece” preservation of nature also violates the right of common persons to the benefits of frequent intimate contact, dialectic and conflict with nonhuman life as well as being insufficient to insure the survival of species diversity on earth. Common people will accept the moral reasons for restrictions on human behavior mandated by the intrinsic value of all life. The assertion of this truth is pragmatically necessary in order for environmentalists to fulfill their special moral duty to protect the environment. It is necessary to assert a moral right of species entities to exist, in appeals to the public and decision makers, in order to achieve a weight of moral

reasons sufficient to overcome the “We need to save the poor first!” moral arguments offered by business, political and religious leaders.

I conclude that it is wrong for human agents to cause species extinction, unless a species is a lethal threat to human species survival. Therefore, current policies of continued human population and economic growth are morally wrong. Wrong, because they both greatly increase the probability of human species extinction as well as promise to greatly reduce nonhuman diversity in the future.

In chapter three I respond to possible objections to granting species rights. These objections include the assertions that rights only exist in human culture, conceptual difficulties with species rights, rights extension to collectives is arbitrary and does not answer allocation questions, weak anthropocentrism is an adequate environmental ethics, a human right against poverty overrides an other species right to exist, and the human species cannot exist or flourish without perpetual economic growth. Further objections addressed in Chapter three are that other species rights would endanger American security, humans do not have a vital need for or a right to access nature, and inevitable future events will solve our environmental problems without antagonizing powerful forces opposed to rights for nature.

In the thesis conclusion, I propose a 100 Year Plan of legislative initiatives and other actions that environmental

advocates and humanity should take to satisfy our obligations to respect species rights and the right of common people to contact with nature.

CHAPTER 1

RIGHTS

Human societies presently accord nonhuman life few rights. Respected environmental philosophers believe that environmentalists have not constructed a valid environmental rights theory (Hargrove 1992:xxii), and that it is not possible to do so. I begin the presentation of my argument for other species' land rights with a review of traditional beliefs about rights. Then I summarize the opinions of philosophers regarding the extension of moral considerability and recognition of rights attribution to nonhuman life.

1.1 AN EXAMINATION OF RIGHTS

We observe daily that most persons in Western society are knowledgeable about what kind of treatment their rights entitle them to, and how practically effective their appeals to these rights are in motivating human action that promotes individual and group interests. Evoking rights, particularly alleging the violation of rights, arouses human passion and may cause dramatic changes in human behavior within affected societies. When we contemplate extending rights, however, it becomes apparent that a much more detailed and precise understanding of rights is necessary in order to judge whether proposed new rights or the attribution of rights to additional classes of beings are logical or beneficial.

A number of concepts related to rights exist, such as the possession of moral considerability or inherent or intrinsic value, which may some times be different names for the same thing. I will do my best to disentangle as well as relate these, as appropriate.

WHAT RIGHTS ARE

An inclusive synthesis of traditional views appears to define rights as justified claims or entitlements possessed by members of a community. Rights are said to be ‘positive’ rights when they entitle a member to some beneficial action by others, while ‘negative’ rights protect a member from certain harmful actions by restraining other members of the community.

Positive and negative rights may be either moral or legal rights, or both. Christopher Stone (1987:43) has related that many are under the misconception that all legal rights are necessarily supported by or have “underneath” them corresponding moral rights. This is not always true. All that is required for a legal right to exist, and usually be complied with, is the vote or declaration of a governing body. Moral rights, however, exist prior to and outside of the legal systems of societies and are considered valid regardless of whether a given society or its legal apparatus recognizes or respects them.

Moral rights have other than legal justifications based on long-standing religious moral rules, strong shared intuitions like those against fratricide, or widespread consensus regarding rational reasons and arguments given by ethical theories

regarding a particular state of affairs or class of entities. The legal right to life does happen to be supported by a wide consensus of the existence of a moral right to life by many human societies, as exemplified by the first commandment: “Thou shall not kill.” Given the advantages that some members of a society may gain by violating rights obligations, it appears non-controversial that the more reasons supporting a legal right (by a corresponding moral right or strong moral intuition) the more likely it is to be honored.

WHERE RIGHTS COME FROM

Religious or theological discussions of rights usually emphasize their origin, that rights are something given by God. This is exemplified by the phrase in the American Declaration of Independence that men are “..endowed by their Creator with certain unalienable rights, that among these are life, liberty and the pursuit of happiness.” This definition has the benefit of weighty justification due to a very credible author (Jefferson) and the implicit available coercion that objectors to a right may be subject to Divine punishment. When challenged, however, the justification suffers from the fact that rights language was not used in the Jewish or Christian texts, and that moral rules mentioned in the scriptures that could be interpreted to be moral rights are not numerous or apparently comprehensive. The commandments “Thou shall not kill” and “Thou shall not steal” may be used to logically claim that these religious moral rules describe corresponding moral rights that very strongly support

and justify contemporary legal rights to human life and property. The theological explanation as revealed by scripture, however, does not appear to directly support recognized human rights that guarantee free speech or woman's equality. However, the liberal Christian move is to say that Christianity implies respect to the human person which can get cashed out in rights recognition.

Similarly the Natural Law origin or attribution of rights asserts that rights are natural properties associated with certain kinds of entities that also exist regardless of recognition by law or society. Traditionally rights are thought to be properties, possessed by rational humans.

Others believe that rights and moral rules are the result of either informal or formal contracts within human societies. John Rawls' (1971:397-399) theory of the 'original position' in which human moral agents living in a society with just institutions over time come to abide by a number of moral rules or entitlements and restraints is an example of an informal social contract. While the rights recognized in the Bill of Rights of the United States, that were conceived, negotiated, voted on and given the force of law, is the very formal social contract origin of American civil rights.

EVOLUTIONARY ORIGINS AND THE BENEFITS OF RIGHTS

Human evolution may also be seen as the source of human moral rules and moral rights. On this view moral rules and rights, more specifically changes in behaviors or actions associated with them, occur as time progresses. Some moral

intuitions or what we might call primal feelings may be caused largely by genetic factors. Human psychopaths, those who have no feelings of sympathy, in contrast to the majority of other persons, seem to be evidence of this. Human societies also reason, plan and adopt new moral behaviors, for example rights extensions, in anticipation of positive results through a process of cultural evolution of learned behaviors that are passed to subsequent generations via education. Moral behaviors resulting from either genetic or social evolution that cause a society to be more successful than other societies are selected for and persist via selective processes.

Human cultures have recently evolved to the point that they conceptualize some of these moral entities as rights. Then human societies use these rights to guide behavior so as to benefit most individual members of communities as well as to increase the general welfare of whole human communities as a well. Considering the great success of the human species it seems reasonable to conclude that the major benefit of the rights concept is that it greatly increases the probability of species survival, in a species that adopts it as a mechanism to reduce destructive competition and increase cooperation. It also appears obvious that cultural evolution offers much greater flexibility and speed of response to environmental challenges than the genetic mechanism that could take thousands of years to affect a behavioral change through a modified DNA-caused emotional response.

A reasonable objection to this perhaps optimistic view is that a number of large eastern societies have existed for thousands of years without affording their common members any significant rights. Also in recent history when Western democracies have been in conflict with more totalitarian nations there has been a recurrent worry about whether liberal democracies could prevail without restricting individual rights. It appears that it is somehow more efficient for a society to sacrifice the interests of some of its members for the greater good of the community.

A reasonable response appears to be that controlling for a number of variables like the technological stage, relative population and economic wealth of societies at the beginning of a conflict, that an appropriate balance of individual rights to collective citizen responsibilities create the most competitive human social groups. The gradually increasing rights allowed common persons in western society starting about five hundred years ago allowed for more social mobility and widespread education. This in turn led to higher technology, social cooperation and productivity of life necessities that led to eventual western domination of the world.

WHERE AND WHEN DO RIGHTS EXIST

Since the concept of rights can only be understood and acted upon by rational human agents, it appears that rights only exist where and when humans “come on the scene”. This is the position of Holmes Rolston (1988:47-51). The minimal condition for a

rights existence, therefore, is the presence of a rational human or creature of some kind, and one other entity that could be a subject or beneficiary of that rational being fulfilling rights obligations. For example, the time and place of a ‘last man’ in the universe floating in the void of space would not seem to be a situation where rights could exist.

In this extreme, however, Kant might disagree, given his second categorical imperative that a moral agent should never treat a human, *including oneself*, as a means to an end, and his certain affirmation that this moral maxim corresponds with the moral and legal right to human life. His classic thought experiment of a man contemplating suicide to achieve the end of relieving his own suffering, and Kant’s judgment that this action would constitute a failure of the man’s moral duty, does suggest a rare possibility of rights existing in a void occupied by one moral agent. (Kant 1988:58)

WHO HAS RIGHTS?

I will not comprehensively discuss this aspect of rights theory here, because it is the philosophical debate at the heart of this thesis and will be explored repeatedly in following sections. Briefly, however, the majority Western philosophical tradition until recently held that rights are coextensive with the recognition of moral considerability. Again Kant believed that only rational humans that could understand and reciprocate with other humans in executing duties associated with moral maxims were entitled to moral consideration. On this view it is,

therefore, ethical to use all nonhuman entities solely as a means or instrumentally to satisfy human interests or ends.

Numerous authors, however, have pointed out through the argument from Marginal Cases that Kant's theory does not prove that his criterion of rationality or ability to participate in a social contract establishes the correct extent of moral considerability. This criteria appears to exclude many classes of persons, for example, children, unconscious adults, the insane or senile, and formerly women, from full moral consideration and rights possession. Our society now overwhelmingly considers these people as valid possessors of rights.

There is reason to believe that in addition to the traditional concept of rights as claims of individuals that human *group* rights also exist, and may confer benefits on larger human communities. Human rights scholars are uncomfortable with the concept, but Nickel (2007:157-165) concedes that the 1948 United Nations Genocide Convention "..can be seen as establishing a group right that directly protects ethnic and religious groups". Article 6 of the Draft Declaration on the Rights of Indigenous peoples states that "Indigenous peoples have the collective right to live in freedom, peace and security as distinct peoples and to full guarantees against genocide." Although Nickel believes they are not human rights in the "standard sense", he states that of the three types of asserted Group Rights (security, representation and autonomy rights) that group security rights,

rights against genocide, are the least controversial and most easily justified.

It is not clear how one could ever absolutely prove a criterion for moral considerability or rights possession correct or true. It appears that what is needed is consistent application of some requirement for moral considerability that most persons will accept as a first principal that needs no further justification. Authors in the following sections offer alternate criteria for moral considerability and rights bearing, and disagree about what rights different classes of entities should be recognized to possess.

1.2 A HISTORY OF NONHUMAN RIGHTS

ORIGINS IN ANTIQUITY

The predominance of literature asserts that the human rights concept did not exist prior to the imposition of the Magna Charta by the English nobility on their reluctant King in 1215. Therefore, we might believe that views approximating the idea of nonhuman rights did not occur until this event.

Old Testament accounts of the Creation indicate a highly favorable judgement by biblical authors regarding all of Creation "God saw everything that he had made, and behold, it was very good" (Genesis 1:10, 1973). Bratton (1984:204) has also pointed out that in the passage from Genesis 2 "The Lord God took the man and put him in the garden of Eden to till and keep it", the Hebrew word *abad* "to till" has the connotation of service. It can be translated as "to serve" or "to be a slave to". And also

that the word *shamar* “to keep” might also be translated as “to watch” or “to preserve”. Bratton also supports what has been called the stewardship interpretation of the majority Christian preference for scripture supporting the claim of a “dominion” relationship between humans and nonhuman life:

> What the Genesis passages and much of the rest of the Old Testament speak for is a servitude of man to God, and as a result, to God’s interests.
>
> Dominion is not an easy task and can only be executed by continuing hard labor and overcoming major obstacles. The effort must be under God’s direction and must be accomplished for God, not for personal gain. (Bratton 1984:207)

Taken together, with the Old Testament account that God commanded Noah to save many animals from destruction by placing one female and one male from each species on the Ark, these passages and interpretations indicate that ancient Hebrews believed nonhuman life to be valuable and deserving of preservation. It is creditable to conclude that some Hebrew thinkers interpreted this religious obligation to preserve Creation’s other creatures to arise from their inherent goodness as part of God’s Creation and, therefore, that nonhumans have an entitlement due to this value, or in modern terms, a right to continued existence. And many contemporary Christians seem to agree with this assessment.

The later Christian dedication to the belief that ‘God is love’ provides added theological reasons for extending care and compassion to all of living Creation. It is interesting to note regarding the duty of preservation of nonhumans, the biblical

concern for the survival and flourishing of *collectives* in addition to individuals, as populations resident in the Garden of Eden, and as species saved by the Ark.

Little reliable information remains regarding the beliefs of pagan Northern and Western European cultures that could be considered precursors of or approximately equivalent to modern conceptions of nonhuman rights. We do know that some aspects of nature were worshipped as evidenced by mentions of European sacred groves, and that the Medieval Christian church felt threatened by these deviations from its own anthropocentric God theology. The church suppressed these practices, and we can reasonably deduce other beliefs favorable to nonhuman life as well, creating a much wider gap of nature-culture dualism than had existed in Jewish and early Christian philosophies.

One of the few surviving legends of Northern European pagan life, *Beowulf*, does, however, record a combination duty and entitlement or primitive human right associated with killing of a person's kin. The laws of the blood feud dictated that a dead person's relatives were bound to take action and also were entitled or we would say had a 'right' to exact a price for the death. This was accomplished by either killing the slayer or by receiving compensation, the 'werglid' (the man price) (Heaney 2000: xiv). This right to life or human life value concept was apparently widespread in the ancient world and, therefore, perhaps is inherent in the human mind, for it is referred to as "blood price" in *The Iliad* as well (Homer 1990:273, 262, 631).

More generally, thousands of years of written history from the Egyptian, Greek and the Roman Empires document communal condemnation of murder and theft. Whether the word 'right' was used or not it appears that the concept was operative due to the almost universal entitlement of injured parties to some kind of reparation or retribution for these acts, at least if both the victim and law breaker were members of the same social class. It is difficult to imagine what the reparations were for, what was being balanced on the scales of justice, if some thing very much like rights or entitlements to things taken or destroyed by the crime did not originally exist.

HUNTER-GATHERER CONCEPTIONS OF NONHUMAN RIGHTS

Pre-Christian cultural beliefs on the American continent survived into the seventeenth, eighteenth and nineteenth centuries so there is a high likelihood we might discover different ethical beliefs regarding nonhuman entities here. Both Neihardt (1988) and Brown (1992) report reinforcing reliable accounts of the fundamental relationship thought to exist between humans and the rest of life by Black Elk, the Native American Holy Man of the Oglala Sioux. Black Elk variously referred to humans, animals and insects and birds as the two legged, four legged, crawling and winged *peoples* (Brown 1992:23) and that including "all green things" they are "..children of one mother and their father is one Spirit"(Neihardt 1988:1). The Sioux conception that other species were like other peoples or tribes, and the often repeated familiar of "brother" or "sister" when

referring to nonhuman individuals by many American tribes, indicates that nonhumans were to them a class of beings that deserved some amount of moral consideration.

These entitlements were recognized and appeared to operate and demand appropriate action at the level of both the individual and a species collective Master Spirit. Nonhuman rights were some times manifest in approved methods of killing. The Athabascan Dena'ina tribe in Alaska believed that a lynx should be killed by strangulation. An ancestral mythic lynx was reported to say regarding humans that "When they choke me with a snare, I like that, but I don't like to get clubbed." (Kalifornski 1991:121). The traditional Dena'ina felt compelled to obey this primordial lynx request or we would say 'right' to die in a less painful or more dignified manner. In the referenced myth the species group can be seen to take the equivalent of a rights reparation via punishment, by denying a violating trapper the capture of lynx for 7 years.

Cherokee author (Herrin 1989, 2004) and former *Traditional Bowhunter* magazine columnist Al Herrin has informed me that one of the four principal spirits of the ancient Cherokee religion was 'Unehlanvhi', the Apportioner, (Herrin, personal communication 2007). James Mooney also mentioned this spirit in his classic work *Myths of the Cherokee* (Mooney 1995:542). Herrin relates that the Apportioner "..gave every living species of plant and animal, including mankind, its fair share of the resources of earth.". This spirit also was the basis for an

ethic that required that no Cherokee hoard food when neighbors were hungry or kill more animals than were needed. Another statement of Herrin's contemporary interpretation of this ethics is that:

> Every species has a right to their fair share of the earth's resources, including a place to live in their natural state.
> (Herrin, personal communication 2007)

It is common knowledge that many tribes and many members of our mixed Indian-European hunting culture have and still often ask forgiveness from a recently killed animal. Some even offer prayers and tobacco sacrifices to trees before killing them for bows (Hamm 1985). The statement spoken after an elk is killed "Brother, we are sorry to kill you.", in the film *The Last of the Mohegans* (Mann 1992), may be thought to be only romantic Hollywood scriptwriting, but it accurately conveys the beliefs of many American hunters regarding wild animals. Taken together with admonitions not to kill unnecessarily, or to waste any part of a killed animal, these views constitute rights of individual nonhumans that must be honored in a kind of trade or compensation for the overriding of the human intuition that organisms have some basic right to life. Native American beliefs also indicate a potential ethical solution to the moral dilemma of the need to take life in order to survive noted by many philosophers. Killing may be ethical if it is *necessary,* only harms an individual and does not harm the flourishing of the species involved.

EARLY ENVIRONMENTALISTS' NONHUMAN RIGHTS VIEWS

Nash (1989) chronicles in detail the somewhat later evolution of the concept of nonhuman or nature's rights in Western history and philosophy. Some milestone's from his effort include John Locke's widely accepted basic principle that every person by virtue of their existence had a natural right to continue existing and the 'social contract' concept of recognized rights in a human community. Locke further asserted that if a government violated these rights the people were justified in renouncing its authority, creating a justification for violent revolution and opportunity for rapid social change, as later occurred in the American Revolution. We discover here an often undiscussed or sub-conscious motivation, a fear of violence, for reluctance to accept rights extensions.

Darwin's 1859 *Origin of the Species* discredited the Judeo-Christian theory of separate creation or origins of man and nonhumans. This suggested to early environmentalists that since humans and the rest of life are related biologically by common evolutionary origins, and if one were to assume that humans had a right to exist, then nonhumans as part of the same 'family' might have a right to exist as well. Also Darwin's idea that human ethics had evolved over time suggested that they should continue to evolve further indicating the possible validity of future rights extensions to nonpersons.

American environmentalists of the late 1800's such as John Muir, Ernest Thompson Seton and John Howard Moore wrote

respectively that “the rest of Creation”, “wild things” and “all beings” (Nash 1989:39, 52-53) had rights. Nash also reports, however, that Muir largely abandoned rights talk after he arrived in California, and that his written beliefs about the rights of nature in his journals were not published in book form until after his death. Still, in his opinion:

> For Muir evolution was an enormously humbling idea, suggesting that every creature on the planet had a right to exist—or at least the right to struggle to exist—equal to that of every other creature (Nash 1989:43).

Having a number of reasons for advocating action regarding the environment, but publicly omitting or de-emphasizing arguably the most morally significant one, in Muir’s case resulted in a politically directed rhetoric that centered on the benefits of preserving nature for people. This appears to be one of the early manifestations of what appears to have become the most widely approved tactic of environmental organizations and later environmental philosophers, that of some degree of anthropocentric ‘environmental pragmatism’. Nash comments that fearing that it would invite ridicule and hurt the preservation cause if he stated that snakes and red wood trees had natural rights to exist, that Muir instead:

> ..tempered his biocentricity and the ethical system it implied, hiding them in his published writing and speeches under the cover of anthropcentrism.
>
> That it is important to recall that Muir’s remarks about the rights of nature appeared first in his private unpublished journals and not in book form until after his death. (Nash 1989:41)

1.3 ALDO LEOPOLD'S EVOLUTION TO NONHUMAN RIGHTS

Nash and others also note, and a comprehensive reading of Leopold's writing confirms, that much of Leopold's work prior to the publication of *The Sand County Almanac* similarly emphasized anthropocentric reasons for conservation and wildlife preservation. It must be considered, however, that Leopold was educated at the Yale Forest School (Masters in Forestry 1909) and initially worked for the US Forest Service and the U.S. Forest Products Laboratory, institutions whose philosophy and goals were the conservation of resources for future human use.

The excellent collection of Leopold's lesser known published essays, unpublished essays and speeches and lecture notes edited by Flader and Callicott (Leopold 1991) indicate that Leopold began to doubt the "industrial emphasis" of his profession during the period 1924-28 (Leopold 1991:xiv). Then while conducting game surveys in the mid-west from 1928 to 1930 he became aware of the endangered status of many species. In a 1936 essay in *American Forests* Leopold reversed his former position regarding predators. He advocated the recovery and possible reintroduction of the grizzly bear that he called "the noblest of American mammals" and a shift from *game* management to *wildlife* management intended to accomplish the perpetuation of many increasingly rare non-game species. Leopold recommended the preservation of many species that were not economically valuable, including the wolf, wolverine, Condor, trumpeter swan and various prairie, swamp and

alpine plant associations, through a coordinated government plan for each species (Leopold 1991:230-234).

His writing also chronicles his increasing realization that preservation appeals based on economic or anthropocentric moral reasons alone have severe limits. In his 1924 essay “The River of the Mother of God” (refused publication by the *Yale Review*), he described a kind of backfiring of advocating wilderness and rare species preservation solely for human recreational and aesthetic benefit. Leopold attempted to call attention to the destructive effects of the building of “foolish roads” into the last vestiges of virgin areas to reap more profits from the “Motor Tourist” (Leopold 1991:123-127). Today we call this “loving nature to death” regarding our national parks, but environmental philosophers and environmental groups hesitate to acknowledge that having too many Americans might be one source of our environmental problems.

A major theme of an 1923 address to the Albuquerque Civic Society, “A Criticism of the Booster Spirit” (Leopold 1991:98-105) was that, contrary to the traditional American perception, economic and human population growth did not always have positive effects on people or the environment. Leopold wondered why community leaders were so much more interested in growing the population of Albuquerque to 100,000 by 1930 than improving the quality of education, health care and cleaner government for the citizens already there. And the “father of wildlife conservation” ended the 1924 “The River of the Mother of God”

essay with a carrying capacity metaphor directly aimed at human populations by referring to the potato bug that exterminated the potato and, therefore, itself.

Leopold's 1935 draft of a speech describing his forest observations during his trip to Germany, and then his 1941 Introductory lecture to his University of Wisconsin, Wildlife Ecology 118, class also dealt with human population densities and their affects on the environment and human social violence (Leopold 1991:226-229, 281-286). When he writes of the "teeming millions" of Germans and their hunger for timber and land, and German/American habits of imposing order on nature, he infers that high-density human populations as well as improper management may make it impossible to preserve nature. In a lecture delivered after the start of WWII he explicitly stated that human and nonhuman populations were eventually subject to the limitations of carrying capacity. In referring to the aggression of Germany and Italy he writes that "..ethics have at times suspended predation, but perhaps this is only possible within certain limits of population density.".

Callicott and Flader are perhaps somewhat justified in commenting that "..he argues perhaps too freely by analogy between human and animal populations.", certainly other factors contributed to the outbreak of WWII. But the impossibility of increasing any population forever on a finite planet is a fundamental mathematical truth. It is a reality that logically eventually needs to be addressed in Leopold's words by "self-

limitation of population" and by consideration of his questions ".. why not call for a moratorium on human increase? Why not seek for quality in place of ciphers in human populations?" (Leopold 1991:284). But human population growth is seldom mentioned when philosophers comment on Leopold's environmental ethics.

Some might claim that human population was not a major concern of Leopold's, or the above quotes were atypical comments heavily influenced by his emotional shock at the beginning of WWII. But it should be pointed out that the culmination of his experience and life's contemplation, *A Sand County Almanac*, contains a number of passages questioning the value or morality of perpetual population and economic growth. Right up front, in the book's Foreword, he uses the phrase "our bigger-and-better society" twice and states "..society is like a hypochondriac, so obsessed with its economic health as to have lost the ability to remain healthy." (Leopold 1948:viii-ix). Then in the section most often referred to by environmental philosophers and environmentalists, "The Land Ethic", he writes:

> Many biotas currently regarded as 'lands of opportunity' are in fact already subsisting on exploitative agriculture, i.e. they have already exceeded their sustained carrying capacity. Most of South America is overpopulated in this sense." (Leopold 1948:219).

And on the next page Leopold wrote:

> In this respect, North America has a better chance for permanence than Europe, if she can contrive to limit her density. This deduction runs counter to our current

> philosophy, which assumes that because a small increase in density enriched human life, that an indefinite increase will enrich it indefinitely. (Leopold 1948:220)

The author has included this detailed account of Leopold's negative views on perpetual human population and economic growth in this discussion of rights for two reasons. First, to reveal Leopold's views that suggest that human sacrifice and loss of business profits would be necessary to preserve the environment that have been edited out of popular accounts, and de-emphasized in academic and professional discussions of his overall theory. This has been done presumably to lessen opposition from business, political and religious leaders to contemporary appeals of environmental organizations and environmental philosophers. But second, and most importantly, I wish to point out that his awareness that population and consumption growth have degenerated into unrestrained abuse of nonhuman and human species health and survival prospects demonstrate his realization of the *need for the weighty restraint* accomplished by species rights recognition. It should be remembered that in the beginning of the American struggle to end slavery the most effective initial appeals focused on describing the specific abusive actions against slaves that a rights extension to black people would stop or restrain.

Therefore, when Leopold's writing is viewed as a whole it is obvious that Leopold's concluding assertions that nonhuman life has a "right to continued existence" (Leopold 1948:204), "..are entitled to continuance. (Leopold 1948:210)" "..should continue as a matter of biotic right" (Leopold 1948:211) are not

sentimental asides or inexact phrasings as is often implied. Leopold included his assertion of species' rights to existence to generate the moral restraint on human population and consumption necessary to insure the accomplishment of the "integrity" standard in his Land Ethic the well-known quotation below:

> A thing is right when it tends to preserve the integrity, stability, and beauty of the biotic community. It is wrong when it tends otherwise. (Leopold 1948:224)

1.4 ANIMAL LIBERATION THEORIES

The Animal Liberation movement has been very successful at changing social attitudes and influencing decision makers and legislation by using rights assertions (Singer 1978:122), suggesting that advocating wider ranging rights for nonhuman life and the environment might be similarly effective. Singer's argument is essentially John Bentham's, that since pain and suffering are universally agreed to be normatively bad and sentient nonhuman beings can suffer, then sentient animals have a right to equal consideration, or not to be victims of unnecessary human agent caused pain and suffering. Singer later regretted his use of the term rights by saying that appealing to the moral correctness of equal treatment was adequate to achieve protection of animals (Singer 1978:122). As a utilitarian he apparently believes that appeals directed to the public's sentiments against the greater amounts of suffering in a world where many sentient domestic animals are intensively raised versus one in which humans gain nourishment by eating plant material only are

sufficient to protect nonhuman animals. If he were to heavily depend on the concept of rights to motivate beneficent vegetarianism he would have to face objections to nonhuman rights assignment making his rather narrow goal of sentient animal protection more difficult.

Tom Regan, known for his highly respected *The Case For Animal Rights*, initially argued for the expansion of the class of the morally considerable to contain "mentally normal mammals of a year or more" (Regan 2004:xvi). Since these life forms have interests in staying alive and healthy, Regan asserts that these 'animals' are morally considerable to some degree. Recently Regan has allowed that there is reason to believe that birds and fish may also be "subjects-of-a-life" (Regan 2004:xvi). Organisms to which death would be a greater "prima facie harm", due to higher sentience and the loss fulfillment of more extensive and complicated life projects, are accorded more consideration in competing situations by Regan's theory (Regan 2004:359). Therefore, Regan's calculation of greater prima facie harm would allow for the death of the last members of a less sentient species (plants, insect, fish) to save or feed an individual of an abundant, more sentient type of animal.

Both Singer and Regan claim that only individuals are "subjects of life" and that species are only abstract collectives without any real interests. Therefore, Regan's theory "..does not recognize the right of species to anything, including

survival.” (Regan 2004:359), and would not allow the sacrifice of two less rare individual sentient animals to save an individual of and perhaps the whole species of an equally sentient endangered species like a Black Rhino.

Albert Schweitzer’s intensely protective reverence-for-life ethics shares this characteristic that only individuals are considered subjects of moral consideration. But he does not use the term rights. His reflection on the moral dilemma created by extending moral considerability to nonhumans, that most organisms have to take life to survive, resulted in Schweitzer deciding that injury to life must be “necessary” or “unavoidable” (Schweitzer 1923:137). Callicott criticizes these ethical criteria as “very vague and indeterminate” limits (Callicott 1989:146). Callicott comments that destroying the critical habitat of an endangered species could be considered to be *necessary* for a consortium to develop a resource and make a reasonable profit.

Callicott also states that one of the strengths of Leopold’s ethic is that unlike Schweitzer’s ‘necessity’ theory it provides a possible way to explain the validity of the great amount of death in nature, and also judge what is ethically acceptable taking of life for moral agents. Killing of individuals is justified if it does not disrupt or preserves the integrity, stability and beauty of the biotic community (Callicott 1989:21). However, it also seems that Leopold’s ethics without biotic

rights (Callicott's interpretation) would similarly fall prey to a vagueness that would allow the development of ecosystems that reduces their complexity to stable, beautifully green, integrated crop rotations of a few monocultures.

Returning to Regan and Singer's objection to species rights based on their assertion that species are only abstractions, Ernst Mayr, one of the world's most respected evolutionary biologists, indicated that this view (Nominalist Species Concept) is due to a failure to recognize fundamental differences between inanimate objects and living entities. Mayr writes: "three properties raise the species above the typological interpretation of a *class of objects*". According to his Biological Species Concept, members of a species constitute (1) a reproductive community, (2) an ecological unit, and (3) a genetic unit, resulting in a species definition that "species are groups of interbreeding natural populations that are reproductively isolated from other such groups". (Mayr 1970:11-13)

While the word species is validly used as a category, an abstract term, it is also a symbol representing a "protected gene pool" in a world in which lack of interbreeding, a real gap or discontinuity between species exists (Mayr 1970:13-15). This means that species are real discrete higher level individuals or units in the larger biotic community. David Hull has similarly written that species could be legitimately thought of as "superorganismic entities" or "historical entities" localizable

in time and space, however diffusely (Hull 1978:335). And Theodosius Dobzhansky has also asserted that a species is both a group concept, and “also something else: a superindividual biological system” (Dobzhansky 1970:23). Surely when the last passenger pigeon died it was obvious that something in addition to the last individual bird was lost, that the unique gene sequence that coded for species members that could interbreed was also lost.

Mayr further supports the reality of species existence and their individuality or uniqueness by explaining the “biological meaning” of species. He relates that if all individuals on earth could interbreed, parents quite different from each other would produce a vast array of genetically different types. This would make it impossible to maintain a superior genotype that was very prosperous in a specific niche. Well-adapted genotypes would be continuously broken up. (Mayr 1970:19-20) So when the last passenger pigeon died, an individual genotype as an ‘ecological unit’ that was very successful in eastern United States forest ecosystems was also lost.

1.5 DEEP ECOLOGY THEORY

The ‘deep ecology’ philosophy of Arne Naess is unique for its central moral imperative that plants and animals possess a “universal right to unfolding”, the “right to live” (Naess 1989:165) and its discussion of necessity as a criterion for right and wrong action regarding nonhuman nature. Naess also

advances toward a truly actionable ethics by asserting that *peripheral* needs of humans like animal testing of cosmetics or 'high living standards' are less important than *vital* needs of other species (Naess 1989:30, 171). The following points of his eight point Deep Ecology Platform drafted in consultation with George Sessions summarize his argument for a nonhuman right to life:

> (2)Richness and diversity of life forms are values in themselves and contribute to the flourishing of human and nonhuman life on earth.
>
> (3)Humans have no right to reduce this richness and diversity except to satisfy *vital* needs.

They also indicate that Naess believes that humans have a right to flourish and that since diversity of nonhuman life is necessary for this flourishing, humans have a right to continued nonhuman diversity. Naess anticipates that humans may try to 'game' his bio-centric moral system due to "..the mass of ecologically irresponsible proclamations of human rights" references (Naess 1989:30) by claiming most human desires are vital. He declares that his definition of "vital need is vague" in order to "allow for considerable latitude in judgement", and uses economic welfare as a measure of vital need. His example is that a person from an "industrial" or "rich" country could not claim a vital need to participate in whaling even though its end might lead to his unemployment.

Naess's point five clearly indicates that he does not believe that continued human population growth is vital to, and

in fact is injurious to, both humanity's and nonhumans' right to flourish.

> (5)The flourishing of human life and cultures is compatible with a substantial decrease in human population. The flourishing of nonhuman life requires such a decrease.

He also concludes the referenced text with what could be interpreted to be a declaration of a nonhuman right to a large fraction of earth to provide habitat necessary to continue evolving to realize their species level "equal right to unfold potentials" when he states the following:

> The deep ecology demand for the establishment of large territories free from human development has recently gained in acceptance. It is now clear that the hundreds of millions of years of evolution of mammals and especially of large, territory-demanding animals will come to a halt if large areas of wilderness are not established and protected (Naess 1989:212).

Naess has apparently experienced resistance by other philosophers to his attribution of rights to nonhuman life. Regarding rights of nonhumans he states that it is difficult to clarify the meaning of many related terms like "fact", "verification", "duty" and "value in itself".

> "But that it is the best expression I have so far found of an intuition which I am unable to reject in all seriousness" (Naess 1989:167).

An objective interpretation of this translated passage considered in relation to the rest of his theory appears to be the following. If we believe that entities 'Y' deserve kinds of respect and dutiful action very similar to actions and restraint

we recognize to be appropriate toward other entities ‘X’ that we now affirm to possess ‘rights’ that mandate these actions and restraint, then we must conclude that the class of entities ‘Y’ has similar kinds of rights as well.

1.6 CHRISTOPHER STONE’S NONHUMAN LEGAL RIGHTS

Christopher Stone argued in his classic essay “Should Trees Have Standing” that there is “no generally accepted standard for how one ought to use the term legal rights”. In practice we have observed that legal rights can be bestowed on a variety of entities and objects (corporations and ships) by “some public authoritative body” (Stone 1996:7) without having to meet obstructive requirements demanded by many to justify the existence of a moral right. Because of this precedent Stone suggests that legal rights could be extended or assigned to various natural objects like mountains, rivers and living collective entities like species and ecosystems.

Stone also responds to what might be termed the ‘rights are trumps’ or ‘rights are absolute’ objection to extending rights. The general sense of the objection is that extending rights to non-persons would mean that we, for example, could not then legally or morally cut or kill a tree or any other entity in a world where non-persons had rights. Therefore, it would not be possible to survive in a world in which non-persons had rights. Stone effectively answers this by stating the obvious.

> We say that humans have rights, but-at least as of the time of this writing-they can be executed. (Stone 1996 :7)

In other words in practice rights are strong or weighty claims that are balanced against other claims when deciding what constitutes moral action.

Conventional legal requirements are, that in order to be a holder of legal rights, a thing must be (1) able to “institute legal actions at its behest”, (2) that the court must “take injury to it into account” and (3) “relief must run to the benefit of it”. Stone disposes of these, first by reporting that we routinely assign guardians to corporations or humans that can not speak. Second he explains that damages or what it would take to recover for example a polluted poisoned river can in fact be calculated. Finally, third, he points out that damage awards can be specified and spent to make the damaged natural object whole, for example dredging and restocking the river with fish. (Stone 1996:8-13)

By extending legal rights to nonliving objects like mountains and rivers, however, he strains the credibility of the general project of extending rights to nature by abandoning many of the life properties society associates with human rights bearers, that humans share with all living entities and collectives. Placing nonliving objects in the class of living natural rights holders also makes is more difficult to justify moral rights to this class. This loses environmentalists the added motivating power of legal rights supported with moral ones.

Also legal rights for nature alone may often be inadequate in that unsympathetic humans can over ride or stall them by asserting competing human moral rights claims. The Endangered Species Act is a unique result of American law making in that environmentalists and a large public that loves nature believe that the act is the equivalent of a Constitutional amendment declaring that species have a right to exist. It, however, is only a law, not a right contained in the Constitution. Presence in the Constitution would tend to give it the additional status of moral right that other amendments are by a large consensus agreed to have. Also the specific language of the 'ESA' is strongly anthropocentric giving possible future economic and recreational benefits to humans as reasons for preserving species.

The defeat of efforts based on the ESA to stop the Tellico Dam Project, that threatened the endangered snail darter, was achieved through claims that a halt would cause economic losses to humans. Fundamentally, however, such claims are based on appeal to the Judeo/Christian dominion interpretation of Genesis, Kantian theory that only rational beings are considerable, and possibly the animal rights utilitarian calculation of greater prima facie harm being suffered by the more sentient human species. There also exist contending legal and moral rights enshrined in the Declaration of Independence, human rights to life, liberty and the *pursuit of happiness*. Singly or in combination, these traditional views generate in the public mind,

in the absence of strong legal (Constitutional) or moral right affirmations of nonhuman rights, a widely accepted moral right of humans to priority in human-nature competition for natural resources.

Another aspect of Christopher Stone's rights for nature philosophy is that he advocates a moral pluralism in order to make nonhuman rights operable. Again he appears to be addressing the often-alleged problem that extending rights to many additional entities, and the equality implied by the rights concept, would make it very difficult to judge correct action in the face of competing claims. He also points out that different classes of entities might have different capacities and interests making it necessary they be treated in different ways and allocated different rights. An example of this is that a tree has no capacity to or interest in voting.

In contrast to what he typifies as the animal rights Monist position, that all animals are rights holders and all must be "treated the same way", Stone believes in a decision system that recognizes a number of "planes" that consist of two elements. The first element is the kind of thing to be dealt with, for example Persons and sentient life and "abstractions" like species and nation states. The second element is "the rules that apply". Different rules may apply to each class of things based on Stone's belief that "not all life counts equally, or comes under the same rules and considerations" (Stone 1988:132-141).

This scheme is in accord with the widespread utilitarian intuition that some entities suffer more, or lose more when killed due to the relative “richness” of their lives. And it may also be a good pragmatic move to get social acceptance for more nonhuman consideration by assuring decision-makers that humans will still get priority consideration. But this pluralism appears to be somewhat vulnerable to the recurrent slippery slope problem that if human interests are allocated higher priority in a moral scheme, they eventually over whelm the interests of nonhumans to resources and habitat.

Callicott, who is a monist, has worried that Stone’s moral pluralism might collapse into moral relativism allowing different societies to ethically treat nature in a variety of ways (Light 2002:199). Stone’s response is that his pluralism that uses multiple planes of analysis to determine right and wrong action can lead to the discovery of “universal right answers” (Stone 1987:246-247). In other words, different societies could use the same planes and decision rules, so it is conceivable that his theory would result in decisions regarding human conduct toward nature that would be the same for different human societies.

1.7 OBJECTIONS TO NONHUMAN RIGHTS RECOGNITION

Environmental philosophers have expressed a number of reasons for objecting to rights recognition and language as part of an environmental ethics and a way to protect nonhuman life. A dialogue about nonhuman rights continues in the journal

Environmental Ethics, and earlier intense discussion is summarized in *The Animal Rights/Environmental Ethics Debate* edited by Eugene Hargrove (Hargrove 1992). Much desire to avoid the rights approach seems to be caused by agreement with one or a combination of traditional religious, Kantian based (rational human restriction) or social contract reasons for restricting moral considerability and rights to humans. There also appears to be related pragmatic concern that an environmental ethics based largely on rights would encounter so much public opposition that it would be socially and politically impotent.

Much public and political opposition to rights for nature appears to be based on a refusal of many to share rights with nonhumans based on a vague generalized fear of 'rights dilution'. The assertion seems to be that if the rights concept and language is used to enforce duties and restraint toward nonhumans, and it is obviously at the same time necessary to kill nonhuman life, then this may undermine the hoped for near absolute moral prohibitions toward killing and abusing humans.

Concerning nonhuman rights, Bryan Norton has proposed that an adequate environmental ethics must have basic principles that when applied to contemplated actions ends up rejecting as unethical a set of uncontroversial proscribed behaviors (to the environmental community). Behaviors like the careless storage of toxic waste, gross human overpopulation, wanton destruction of

species and air and water pollution would be decided as wrong by an adequate ethics. (Norton 1984:132)

Norton cites and agrees with Ruth Macklin that rights must be embedded in a theoretical framework, a moral theory in which appeals to abstract notions of rights can be grounded, or said appeals will be arbitrary, ad hoc, or lead to question begging. He, therefore, asserts that minimal conditions essential to rights holding are the following:

> (1) X is an identifiable individual, and
>
> (2) it is in some meaningful sense possible to say that X has interests.
>
> (3) attributions of interests to X are not sufficient to entail corresponding rights had by X;
>
> (4) if it is determined that an interest of X is also a right of X, this determination must depend, perhaps among other factors, upon characteristics of X rather than solely on characteristics of others.

And he further allows that the individual could be either a person or a nonhuman individual entity (Norton 1992:77).

Norton considers what is the most damaging environmentally proscribed behavior, habitat destruction, and states that this could be justified under the individualistic human and animal rights conceptions by taking great care not to harm individual nonhumans. In fact land development when not done in the nesting season approximately achieves this by scaring most mobile sentient animals into adjacent areas. This explains the relative lack of traditional animal rights opposition to most development.

The contemporary individualistic animal rights range of concern, however, does not consider the loss of nonsentient plant, invertebrate and many other classes of life or the reduced carrying capacity for a region's sentient and nonsentient life when an acre of land is developed. Therefore, Norton believes that the mandatory individualistic nature of rights disqualifies rights attribution from being the basis for an environmental ethics, because it fails to protect the habitat, the community, or the ecosystem in question." (Norton 1992:85).

Norton also examines the possibility of recognizing collectives like species and ecosystems as rights holders and treating them like 'individuals' with rights. He points out that if this is done the interests of individuals, species and ecosystems may be difficult to determine precisely and may often be in conflict. Norton's rights analysis can be summarized by his view that the basic problem of environmental ethics——that of deciding "which individual claims have priority over others" (Norton 1992:90), whether they are humans or nonhuman individuals——is not solved by assigning rights to more classes of entities. This only increases the number of claims and conflicts. He concludes his essay with this statement.

> An environmental ethic must support the holistic functioning of an ongoing system. One can not generate a holistic ethic from an individualistic basis, regardless of how widely the basis is extended (Norton 1992:90).

Concluding his discussion of the specific “conceptual difficulties” with the concept of species rights, Callicott expresses the view of most environmental philosophers regarding rights as part of an environmental ethics when he advises that “..from a philosophical point of view it would be better abandoned altogether” (Callicott 1989:154). He then states the following:

> The assertion of “species rights” upon analysis, appears to be the modern way to express what philosophers call “intrinsic value” on behalf of nonhuman species.

Abandoning rights of nature, environmental groups and prominent environmental philosophers have attempted to develop and then appeal to a number of other concepts in order to generate an appeal equal to rights in motivational strength, sense of duty, and restraint toward nonhumans and the environment.

1.8 TRADITIONAL PROTECTION TACTICS

The tactic presently used the most by environmental advocates to justify environmental and species preservation operates, somewhat paradoxically, by implicitly evoking the uncontroversial acceptance of the *human right* to life and a good quality of life (pursuit of happiness). Nonhuman life has largely anthropocentric instrumental value, is valuable as a source of raw material resources, recreation, and amusement for humans, but must be protected to some extent for human benefit. This fails to generate an adequate environmental ethics, because humans

could decide they prefer the sight of plastic trees, that it is only necessary to save a few frozen embryos of each species for economic purposes, and one can often substitute new materials for products from extinct species. Finally since we have destroyed much of nature already and survived, reckless wealthy leaders at least can decide that humanity can destroy much more nature and still survive, or that at a minimum regardless of future environmental degradation that their class will survive.

A related anthropocentric effort by Joel Feinberg in “The Rights of Animals and Unborn Generations” has attempted to gain protection for nature by appealing to sympathy for future human generations (Feinberg 1974:43-68). Andrew Light has reported, while arguing for a turn from the biocentric intrinsic value appeals of environmental philosophers to what he calls “weak anthropocentric arguments”, that the most often mentioned reason in public surveys for supporting preservation is that respondents want some nature saved for their descendents (Light 2003:646). It can be validly claimed that the preservation of what parks and natural areas exist in the USA has been accomplished largely due to the effectiveness of this appeal.

There are, however, a number of arguments against the future generations’ rights approach that limit its effectiveness. Feinberg notes the fact that we do not know who future individuals will be, and what their preferences will be. Opponents also use the tactic of ‘discounting’ to undermine the

logic of present persons making sacrifices for future persons. They believe that lost economic opportunity costs due to preservation now, are unlikely to be paid for by increased welfare or profits in the future, because of the high cost of borrowing (the monetary value of preservation) for long periods. It is also argued that future generations will have higher technology and be ‘richer’ so sacrifice by relatively ‘poorer’ contemporary humans, particularly in developing countries, is illogical and unethical. Also given current events indicating the high propensity of our current society at all levels to borrow and save no money for the future, it seems that saving nature for future generations is likely a motivator of decreasing effectiveness. We daily observe that high contemporary monetary debt is generating a very high level of desperation to maintain high levels of economic growth and liquidate resources now in order to pay it off. Again if nature is saved solely for future human benefit, humans may decide to save trivial amounts and ‘live for today’.

1.9 PAUL TAYLOR’S RESPECT FOR NATURE

Paul Taylor builds a theory of “respect for nature” that asserts that all living things have inherent worth, and therefore, that all humans ought to respect nature and guide action in accord with this respect (Taylor 1986:226). This owed respect generates claims on the part of nature that humans are obligated to acknowledge and accommodate. Taylor’s theory is

unique in two ways. First, Taylor in opposition to Norton does not believe that allowing nonhumans significant claims would necessarily lead to an over complicated nonresolvable competing claims situation. He outlines what appear to be a workable "Five Priority Principles for the Fair Resolution of Conflicting Claims" between human and nonhuman life (Taylor 1986:263, 279).

Taylor's principles require that nonhuman life be accorded distributive justice and, therefore, allotted something like an "equal" share of earth's resources and restitution for past injury (Taylor 1986:292). He does not give even an approximate percentage share, but states that competing claims would be decided on the basis of whether human claims were appropriately respectful or 'exploitive' in nature. He does, however, go so far as to state how this might be made possible and in so doing suggests that an allocation of a significant fraction of earth's resources ought to be made to nonhuman life.

> It is after all within our power as moral beings to place limits on human population and technology with the deliberate intention of sharing the Earth's bounty with the other species (Taylor 1981:218).

This potentially generous view of human-nonhuman environmental justice is shared by Paul Shepard who wrote that 20% of earth's surface is more than enough to meet valid human needs, and that the rest must be left undisturbed to maintain diverse plant and animal communities (Shephard 1973:264).

The second unique aspect of Taylor's theory is his inclusion of a very detailed analysis of rights theory and attribution as a possible means to justify and motivate human preservation of nature. He concludes that plants and animals cannot meet some of the attributes possessors of moral rights must have in order to be bearers of moral rights in what he calls the "primary sense". These aspects include the following. Bearers must be (1) part of the human moral agent community (2) possess self-respect, conceive of themselves as persons, (3) be able to choose to exercise a right, and (4) be able to pursue certain second-order entitlements like registering complaints and demanding redress for rights violations.

Obviously these exclusionary criteria can be at least partially discredited by the argument from Marginal Cases, that children and the insane are now uncontroversially accorded moral rights. But what is most interesting about Taylor's analysis is that he allows that there is a conceptual structure that "seems" to allow a nonhuman "modified concept of moral rights"(Taylor 1986:251). If moral agents believe that they have duties to exercise restraint when their actions might affect the lives and wellbeing of wild plants and animals, it is "a short step to thinking of those duties as being correlated with a general moral right of animals and plants to have their good preserved and protected" (Taylor 1986:253).

Taylor then states that these general rights correspond with the four rules of duty, nonmaleficence, noninterference, fidelity and restitutive justice that make up his ethical system based on respect for nature (1986:213). These rights could be said to be a right not to be harmed, a right not to be interfered with, a right not to have one's trust broken and a right to restitution.

Taylor concludes that we legitimately may accord nonhumans *legal* rights supposedly because their justification only requires a legislative vote. But he argues against asserting that nonhumans possess 'modified' moral rights, because rights language would cause confusion due to the fact that most people tend to think of moral rights in their 'primary' sense of only applying to human persons. He continues by asserting that this added confusion would gain us nothing, for his theory of respect for nature and the duties it generates "say all we need to say about the principals of a valid system of environmental ethics without using the language of rights" (Taylor 1986:255). Taylor's concern about confusion seems in part to be a pragmatic one regarding how successful a modified rights appeal might be in the public arena. As I will argue later, making modified moral rights appeals may be justified for reasons Taylor has mentioned, and pragmatically, that associated confusion may be counterbalanced by some advantages of moral rights based appeals.

1.10 GOODPASTER'S MORAL CONSIDERABILITY

Kenneth Goodpaster in his classic essay "On Being Morally Considerable" argues that the only plausible criterion for what counts morally is being alive (Goodpaster 2003:219). Goodpaster does not believe that moral considerability can be limited to sentient life, because trees and other nonsentient life also have needs and interests in staying alive. Apparently anticipating objections to rights attribution, Goodpaster proposed to "suspend this question entirely" hoping to gain enough protection for nonhuman life through his concept of expanding a more general sense of moral considerability to all life. But interestingly he states that the question of rights remains open:

> I doubt whether it is so clear that the class of rights bearers is or ought to be restricted to human beings,.. (Goodpaster 2003:219)

1.11 CALLICOTT'S SUBJECTIVIST INTRINSIC VALUE

Baird Callicott believes that the most secure footing for what he variously calls truncated intrinsic value, subjectivist intrinsic value, or inherent value, is explained by his theory of quantum theoretical axiology. He does not believe that value can exist independently 'in' natural objects or organisms "ontologically objective and independent of consciousness". But according to quantum theory, in Callicott's view, values are "virtual" and encompass all values to include the entire spectrum of instrumental and inherent (valuable for their own sake) values. On this theory, inherent value is a virtual value in

nature, *actualized in interaction with consciousness*. He states that the advantage of his axiology is that it “puts values on ontological par with other properties”, suggesting that his inherent value is a kind of objective entity or property (sentient emotions) that come into existence when minds become aware of the properties of natural objects. (Callicott 1989:169-170)

Ethical judgments made by this intuitive mechanism are valid due to Darwin’s theory of natural selection that has evolved an accurate “consensus of feeling” regarding actions that bad or good for the survival of individuals and the group within social human communities. This positive feeling towards objects and states of affairs is "projected” on to, or is associated with, a thing in the collective mind of a community. Contemplated actions are evaluated by comparing them with these established feelings of sympathy (Callicott 1989:152-153). Callicott precisely describes his subjectivist intrinsic value as being the often-experienced situation where nonhumans and or human babies are “valued for themselves”, as opposed to being valued for any economic or other selfish psychological benefit they might have for us. This seems for Callicott to solve what he believes is the problem of “classical naturalist axiologies” that he states ground inherent value of objects in properties like reason, self consciousness, moral autonomy, consciousness, life, will to live, organization or richness. He bases his objection on G. E. Moore’s naturalistic fallacy and the is/ought dichotomy. The

choice of a property as good or desired can be said to be arbitrary, because usually a further reason ‘why’ that property is good is not given. The properties (pleasure, life, reason) are just assumed to be good, not ‘proved’ by any argument or reason. (Callicott 1989:158)

Callicott’s evolved consensus of feeling seems to provide the ‘why’ in this sense. But as Rolston openly worries, its lack of emphasis on or vague linkage to objective properties of natural objects leaves open the danger of validity being claimed for widely differing kinds of subjective values being associated with similar objects by different social groups. A noted weakness of intuitionist moral theories is the variable nature of natural sympathies within and between human communities and the concern that there is no way to tell which sympathies lead to correct moral judgements (Brink 1989:3).

This variability, according to Darwinian theory, is due to the tendency of selection to often maintain a significant amount of variation due to differential survival in changing environments over time for any given gene sequence. We probably would not need to be plotting strategies to save the environment if a very high uniform consensus of feeling existed regarding nonhuman nature within the human community. Another likely reason for the absence of universal consensus is that the human species has never been subjected to the selective pressures

necessary to generate it, because our technological power to cause immense environmental damage arose so recently.

1.12 ROLSTON'S 'AUTONOMOUS' INTRINSIC VALUE

Since subjective based value appears variable and unreliable, it might be appropriate to investigate if some *more* objective, undeniably obvious to all persons, objective properties of natural objects might be in some way equivalent to normatively positive value. In other words that *some* natural 'is' states of affairs may be good or have value, and generate an 'ought' duty to preserve or protect them. This would not seem to necessarily contradict what appears to be the true central concern of the naturalistic fallacy, that it is not logically valid to *always* assume that what is, ought to be.

Rolston realizes this, and vows to save all the objectivity he can with his theory of intrinsic value. He agrees that Callicott's kind of subjective intrinsic value exists when "translators" or subjective appreciators of value appear (Rolston 2002:118). But he counteracts to a large extent the danger of this subjectivity-caused relativism by an exhaustive description: in effect, the calculation of many kinds of extrinsic instrumental and intrinsic value in nature. These values include 1. Economic value, 2. Life Support Value, 3. Recreational Value, 4. Scientific Value, 5. Aesthetic Value, 6. Life Value, 7. Diversity and Unity Values, 8. Stability and Spontaneity Values, 9. Dialectic Value, 10. Sacramental Value (Rolston 1981:113-128).

In a sense, to the truly informed, the great value total of the largely anthropocentric values on the list (1-5) *should* be great enough to motivate or demand great duties of preservation of the environment for the sole welfare of humans.

But I believe that Rolston proves that an additional kind of objective and "autonomous intrinsic value" (Rolston 2002:118) exists 'in' life itself independent of human awareness. To begin with it is implicit, and an assumed consensus view among interlocutors in these discussions, that humans consciously value their lives, health, satisfactions and accomplishing life projects. We know this because humans communicate this view to each other. This conscious human self-valuing, termed axiological egoism, has been implicitly agreed by most persons to prove the existence of human intrinsic value. And Callicott uses it to generate support for his quantum value theory, that strongly maintains the continuity of self and nature, by stating "that if nature and I are one, then it is rational for me to act in the best interests of nature" (Callicott 1989:172-173). Rolston, however, argues that the existence of intrinsic value and a living entity's potential to be a valuer do not require that a possessor of value or a valuer be conscious by stating that "we do not want to presume that there is only conscious value or valuing" (Rolston 1994:18). To Rolston an organism's responding in order to defend itself is proof that the organism possesses intrinsic value that it is acting to protect. This could include many of the unconscious responses that a human's

body cells and organs make to protect life and health, life intrinsic values already proved to exist by human consciousness. Similarly Rolston believes that if an organism has traits that enable it to take defensive action it is also the kind of entity that is an evaluator (using its DNA code as evaluation standards), regardless of whether it is conscious:

> A valuer is an entity able to defend value. (Rolston 1994:18)
>
> It is a valuing organism, even if the organism is not a sentient valuer, much less vertebrate, much less a human evaluator. (Rolston 2002:119)

Based on these assumptions, Rolston argues convincingly that nonsentient life like *trees also value themselves*, because they take continual action to cope with the environment and defend their lives based on their DNA coding (Rolston 2002:119-120). Therefore, since all living organisms do value themselves and show this in their actions and development, intrinsic value does exist objectively and independently of other valuers. It must be noted here that Rolston definitely knows and implies that although humans are conscious, most or all their behavior, including actions persons take to defend their lives, are ultimately possible due to DNA coded capabilities as well. It is also interesting that Rolston also wrote that “every set is in a sense a normative set; there is some ought beyond the is..” (Rolston 1989:111) suggesting that DNA coding is something like a fundamental set of moral rules that all life tries to abide by.

Rolston also argues that species are larger individuals of which single organisms are parts by asserting the existence of "species lines", and in this connection that species are a "bigger event" than the individual (Rolston 1988:147). He also states that it is true that species have an "individuality", that they are like individual organisms, because they have a biological identity reasserted genetically over time (Rolston 1988:151).

Using the example of the sequoia tree species Rolston also argued that species lines have intrinsic value when he wrote the following:

> *Sequoia sempervirens*, the species line, has been around several million years, with each of its individual sequoia trees defending a good of its kind. (Rolston 2002:120)

Because species can definitely be harmed, and 'defend' themselves through reproduction and selective adaptation to changing environmental challenges, a resisting of death through extinction, they, like sentient organisms, also value their lives. Individual trees and species lines may lack the trait of consciousness that enable kinds of actions unique to animals and individual organisms, but according to Rolston's theory the defensive survival responses they are able to take prove that they possess autonomous intrinsic value.

The individualistic nature and great intrinsic value of species lines that Rolston establishes makes them the kinds of entities to which human moral agents can have duties; and as the

“appropriate survival unit”, species are the “appropriate level of moral concern”. And quite significantly, it is more important to protect species level integrity than it is to protect individual organism integrity. Most importantly to the environmental debates going on in our society, Rolston also asserts that although human claims of superiority usually cause the claims of individual humans to trump the interests of individual nonhumans, this kind of priority judgement is not appropriate regarding species:

> But it does not follow that the obligation to protect one or even a group of humans trumps the obligation to protect a whole species. (Rolston 1988:138)

He also reports that three quarters of the American public agree when responding on surveys that endangered species must be protected even at the expense of commercial activity (Rolston 1988:309) which indicates there is some support for his philosophy that species survival interests ought to trump some human interests. But exactly what human interests described in this instance as ‘commercial activity’ the public is willing to sacrifice for other species survival is often not clear (slightly more income, lost jobs, human deaths) and seems to vary in relation to time and place.

Of particular note is Rolston’s argument that species have immense value, because they are the result of millions if not billions of years of natural selection and, therefore, an immense sum of biological knowledge, information, and value conserved in

existing forms or species (value 7, diversity and unity values). Because of this, every extinction is like a “superkilling” that kills *forms* beyond individuals. He then goes so far as to say that the corresponding duty to preserve the value in species is “a categorical imperative to living categories.” (Rolston 1988:144)

Rolston acknowledges that his convincing summing up of immense species value may establish species lines as the kind of entities that some might recognize to possess rights, to have as he writes “a right to life (if we must use the rhetoric of rights)”. Rolston agrees with some other environmental philosophers (Hargrove, Taylor, Callicott) that it might be appropriate to recognize species to have legal rights in something like an animal “Bill of Rights” (Rolston 1988:47) or the Endangered Species Act. But he also indicates that it is problematic to apply the concept of moral rights to protect value in nonhumans, when nonhuman rights are not recognized legally.

Rolston states that outside of human culture it is “better advised to dispense with the noun rights” (Rolston 1988:51), that rights are not parts of organisms like teeth or claws. He explains that rights are concepts that were specifically constructed to protect values of persons in human culture and that again rights only appear when “humans come on the scene” and are absent when humans are gone (Rolston 1988:48).

Interestingly Rolston proposes that perhaps what some think are animal rights "are generated by the encounter of moral agents with sentient life—the more sentient the more sense of rights emerges." This possibility is problematic from the standpoint of an environmental ethics in that it would only develop rights protection for sentient life. But paradoxically this suggestion is realistic and workable in the sense that nonhuman interests only require activation/execution of moral rights protection when immensely destructive human moral agents are on the scene and "intervening" (Rolston 1988:49) in natural systems.

Many authors such as John Muir, Aldo Leopold, Charles Elton, David Ehrenfeld, Bruce MacBryde, Paul and Anne Ehrlich, and Roger McManus and Judith Hinds, however, have continued over a long period to assert that species level rights exist (Callicott 1989:130,290). They generally evoke some version of Leopold's philosophy that other species are fellow members of a larger biotic community and that it is now vital to both human and nonhuman welfare, that moral rights consideration be extended to all species populations. Also Edward O. Wilson seeming to want to continue his negotiation with development interests when he can, by maintaining the priority of human interests, has made a statement supportive of a kind of weak or moderate species rights:

> ..first, that humanity is part of the larger living world and, second, other species have rights which, if not equal

> to human beings, are still worthy of consideration (Wilson 1993:28).

It is common knowledge that many wildlife biologists, other diverse environmental professionals, and millions of Americans believe in what could be called a strong species level moral right to life. Proof of this belief is evidenced by the fact that the media has correctly rated the profession of wildlife research biologist as one of the most dangerous jobs yet many continue to volunteer for this low pay career. A biologist I attended the University of Alaska with and 3 other Alaskan biologists were killed while studying the threatened polar bear species. A Russian biologist I worked with in the Russian Far East told me that if an endangered Amur leopard ever attacked him, I was not to kill the leopard to save him. This commitment is in accord with our general experience that persons are usually only willing to volunteer to risk their lives for low wages and no immediate benefit to their families in order to protect some significant moral value or right. It, therefore, is reasonable to entertain the possibility that a significant part of the motivation that has contributed to the success of America's political movement to establish protected areas and the endangered species and clean air and water acts has come from this moral conviction.

1.13 NATURE'S RIGHTS ACTIVISM

Finally, the ethical basis for dramatic and controversial acts committed in attempts to further environmental goals should

be discussed. Dave Forman, the former leader of the organization Earth First, stated in 1985 that “every living thing in the ecosystem has intrinsic worth and a nature-given right to be there”; and he made many other assertions that nonhumans and species populations have a moral right to exist. Foreman also stated that “The early conservation movement in the United States was a child.. of the Establishment”, and that in line with the philosophy of ‘deep ecologists’ that most American environmentalism was too linked with utilitarian human interests to offer adequate protection to nonhuman life.(Nash 1989:190-195) Foreman’s philosophy simultaneously challenges the moral basis of mainstream environmentalism that often concedes that human interests take priority, and its questionable pragmatic efficiency at achieving preservation goals.

Earth First efforts advanced from a dramatic publicity action of placing a large 300 foot long ‘crack’ on the controversial Glen Canyon Dam, to civil disobedience sit-ins blocking logging roads and individual old growth trees to the spiking of trees, an action potentially lethal to loggers and mill personnel. Foreman’s statements, and Nash in chronicling the history of nature rights activism, make the analogy that preservation activism has paralleled the history of the anti-slavery movement. First, that the issues are similar because nature now is, and slaves were formerly considered, only property, possessing no rights. Second, that when civil disobedience actions do not cause violation of moral natural

rights to stop, escalation to more disruptive and violent actions are inevitable, and arguably morally acceptable, as shown by how we describe the progression of events before the American Revolution and the American Civil War.

A large moral no man's land expressed by the phrase "one man's terrorist is another man's freedom fighter" definitely exists regarding how much force or violence is ethically appropriate to change states of affairs in which moral rights are routinely violated. Unfortunately as Nash tells us, leaders or segments of societies often resist change:

> The problem has always been that certain groups of people benefit from the denial of ethics to other groups (or to nature) and were reluctant to relinquish those benefits (Nash 1989:8).

It seems that historically if agents of change win a contest that their cause and tactics are often judged to have been ethical. By this measure it is difficult to balance the success of the eventual cessation of logging in parts of remaining old growth forest in the Pacific Northwest, with the general backlash that many environmental workers including myself experienced in succeeding years. But to previous less confrontational environmental successes one could also add the eventual passage of international treaties protecting sea mammals, caused at least in part by the many demonstrations of Greenpeace against sealing and whaling. And finally the publicity surrounding the environmental group Sea Shepard Conservation Society's ramming of a whaling ship on July 16, 1979 and the anti-environmentalist

bombing and sinking of the Greenpeace ship Rainbow Warrior on July 10, 1985 (Nash 1989:180-182) likely did much to maintain pressure on political decision makers. The willingness of many to assert that these environmentalist illegal actions were justifiable, and the willingness of those who carried them out to risk their lives, lends support to the belief that nature and species have some kind of moral rights that can be violated.

Eugene Hargrove, the editor of the journal of *Environmental Ethics*, apparently spoke for many environmental philosophers when he wrote an editorial opposing the property destruction and potential violence to people that might follow from the philosophy of Earth First (Hargrove 1982:291-292). Two reasons were given for disapproval. First, according to Hargrove, most environmental philosophers traditionally prefer non-violent civil disobedience to violence. Nash (1989:195) writes that even Gary Snyder, a long time supporter of Earth First, thought that ending American civilization's violence against nature could not be achieved through violence, but through a rejection of violence in general. And second—referring to the wilderness, endangered species and clean air and water acts passed in the 1960's and 1970's, —because property destruction and violence to persons "could easily create a terrible backlash undoing all the good that has been done and preventing future accomplishments" (Hargrove 1982:291-292).

Hargrove also mentions in his editorial what he calls the nature chauvinism or anti-humanistic position expressed by Edward Abbey, whose writing inspired the formation of Earth First. To support this he notes a quote from Abbey's book *Desert Solitaire* "I'm a humanist; I'd rather kill a man than a snake". Although statements of both Abbey and Foreman have been provocative in this regard, they were made in the context of our society's leaders apparent determination to liquidate most of the remnants of our original natural ecosystems for what most environmentalists agree to be questionable short-term economic benefit. This was expressed by activist Mike Roselle's statement "we have no right to kill trees with wanton waste" (Nash 1989:194). Their published statements did not advocate a large-scale intentional taking of human life.

This part of environmental activist history suggests the possibility that some of the resistance to recognizing moral as well as legal rights for nature may be due to concerns of philosophers that it would encourage pragmatically counter productive as well as morally questionable actions like those of Earth First. Or that if they supported moral rights for nature that environmental philosophers might be held some how accountable for future acts of "eco-terrorism" initiated in response to violation of these rights. There is a possibly they would be discredited by the now familiar device of framing in the media as anti-humanistic nature chauvinists, by opportunistic politicians and business promoters of resource development. This

is more probable now, since the 9/11 attack, and because many American politicians increasingly seem to equate U.S. economic growth fueled by population growth and perpetual resource and habitat development with national security and continued human welfare.

1.14 OTHER PROPONENTS OF NATURE'S, COMMON PERSONS' AND FUTURE GENERATIONS' RIGHTS

Although most environmental philosophers remain opposed to recognizing species rights, the belief in moral species rights or some increase in legal species rights mechanisms has persisted since Aldo Leopold and Christopher Stone asserted the need for their recognition. Several years after Stone's 1972 'Trees' article, David Favre asserted that the Endangered Species Act was not adequate to protect endangered species, for as soon as a species recovers to some minimal number of individuals, they are taken off the protected list and are vulnerable once again. In order to solve this problem, he proposed an amendment to the U.S. Constitution granting wildlife individual and species level *legal* rights to continued existence free from the intrusion of extinction causing human action (Favre 1979:279-281).

More recently, John Hadly has asserted that extending the scope of property ownership and rights to other sentient animals would allow the key moral demands of both environmentalism and animal rights to be met. He diverges somewhat from the traditional 'only individuals have rights' animal rights views by advocating that these rights claims be made on behalf of "a group of claimants" in perpetuity from each species in an area. Hadly

makes a convincing argument, for what might seem to some objectors to be a questionable nonhuman property rights concept. He does this by indicating that both humans and sentient animals have similar survival interests in the resources derived from land as property, similar interests that could justify ownership for nonhumans:

> Having a vital interest in using natural resources is ordinarily considered a sufficient reason to attribute a property right in natural resources to human beings (Hadly 2005:313).

He also indicates nonhuman property ownership would be workable, because it would be possible to assign guardians for each species (Hadly 2005:312-313).

Hadly concludes by stating one of the primary assumptions of this thesis. It is becoming increasingly apparent that human society needs a "distinctly practical and human mechanism" (like nonhuman property rights) that can address the moral demands of environmentalists to stop human intervention destructive of habitat that nonhumans need to survive (Hadly 2005:313).

Interestingly, Rolston, who is not a strong advocate of nonhuman rights, has argued convincingly that human property rights are limited and do not give human agents the unrestricted freedom of action to destroy nonhuman life. He also mentions a fact that surprisingly may support theories that nonhumans have habitat rights, the fact that nonhuman lineages have been living on America's lands for thousands of years, while most humans have only owned portions of this land for a few decades or less (Rolston 1990:284). This is of critical conceptual and ethical

importance, because claims to entitlement and ‘ownership’ of lands in human society were originally based on length of residence or use. Deeds to land and formal ownership recorded by government officials are a rather recent invention even in Western civilization.

Legal articles by Jim Gardener and Joseph Guth that declare the necessity for recognition of additional environmentally beneficial human rights also indicate significant support for major aspects of my thesis. Gardner asserts that the interests of future human generations should be protected from choices of the present majority that may lead to irreversible consequences, by in some way “rationing and restricting the decision-making prerogatives of earlier generations” under our American system of law (Gardner 1978:59).

In the article titled “Law For The Ecological Age” Joseph Guth reviews the history of the development of Common Law in the United States and reports that early in our history American communities had strong rights against local environmental damage caused by property owner actions on private property. Then he goes on to relate that in the 19th century tort and property law changed to favor economic growth, by allowing significant amounts of damage to the common environmental welfare if activities that caused damage were judged to bring economic benefits. Guth then states the obvious, that the scale of environmental damage is presently out of control and not in balance with any supposed calculation of economic benefit. This is because benefits are

usually localized while environmental damage is increasingly distributed to persons distant in both space and time. (Guth 2007-2008:431-512). Guth concludes that:

> Our law must enforce a limit to the scale of environmental damage that we are collectively permitted to impose on the Earth.

He proposes to accomplish this through the use of a "tort of ecological degradation" which according to his presented outline would presumably lead to significant restrictions on the use and development of privately owned lands and wildlife habitat. (Guth 2007-2008:511-512)

Recently Ecuador's voters approved a constitutional initiative that changes the status of ecosystems from being regarded as property to being recognized as rights-bearing entities under the law (Revkin 2008:1). The rights that the new constitution says are possessed by nature assert the general right of species and ecosystems to exist and mandate restrictions on human actions that could threaten these rights (O'Carroll 2008:1-2). It should also be noted that by recognizing these rights of species and ecosystems to exist in the constitution, the people of Ecuador have very strongly declared that these rights are highest priority moral rights as opposed to simple legal rights that might be more easily overridden. What this amendment will actually accomplish in practice, in a region of the world where laws and rights are frequently not enforced or respected, is uncertain. But its enactment supports an implicit claim of this thesis, that there is a growing consensus that

current law and ethical standards are not adequate to protect nature and common persons that depend on the survival of nonhuman populations.

1.15 CONCLUSION

I have revealed that the rights concept has a longer history than often acknowledged and that it has existed in the moral rules of human societies for thousands of years. Then I have shown that rights as high priority claims of restraint and positive obligation have protected and enhanced the survival of human communities as well as individuals within them by minimizing conflict and maximizing cooperation. I have also shown that there is both a tradition of human-nonhuman ethics in Native American cultures and aspects of Judeo-Christian theology that form the basis for a belief in species rights.

Objections to recognizing moral rights for nonhuman organisms and species are many and include assertions that moral considerability requires rationality, sentience, consciousness, and contractual membership in a human community or individuality. The argument from Marginal Cases refutes the validity of most of these objections, and I have indicated that individuals actually exist at both the level of the organism and species population lineages as part of larger biotic communities. The validity of an individual organism status requirement for rights is also defeated by the widespread acceptance of the basic human group right against genocide.

In order to avoid objections to formal recognition of rights for species and nature there has been a search for alternative "rhetorically commanding heights" (Jamieson 2005:657) resulting in the identification and detailed description of properties in nature that motivate rights assignment to humans, properties consolidated in the term intrinsic value. Like rights it is hoped that intrinsic value (minus the additional mechanism of rights) "trumps mere preferences" (Jamieson 2005:657) and, therefore, will generate strong duties to preserve nature.

The explanation of the immense intrinsic value contained in nature is effective at convincing persons who are environmental philosophers and endangered species biologists that moral agents have great duties to preserve nature. But it appears to be doubtful that the theory of intrinsic value will convince the general public, while philosophers and environmental leaders simultaneously allow that moral rights are highest priority claims reserved for human members of the biotic community. In this moral universe nature will always lose in competing claims conflicts with humans. More fundamentally it is not obvious, without some highest priority restraints on human actions toward nature, how human society might be motivated to solve social, political and economic problems that maintain and continually generate more real or imagined human need. In other words, the status quo appears to lead to a continuous production of increasing 'vital' human needs that in turn justifies an

eventual, nearly complete appropriation of earth's resources from nonhuman life.

Philosophers are concerned that the public and decision makers would not accept recognition of limited moral rights status for nonhumans, and the accompanying loss of total human privilege. There also appears to be a background worry that recognizing the moral right of other species to exist might lead to environmental protest and violence. It is not clear, however, that future environmental protest and some regrettable violence would necessarily be inappropriate or hinder the long-term progress of the environmental movement any more than similar actions hindered the eventual success of the American Revolution and the abolitionist and civil rights movements.

I believe that Aldo Leopold asserted the existence of biotic and species rights, because he realized that the moral rights for humans only status quo would not support adequate environmental protection. But he did not give an explicit argument supporting the existence of biotic rights. Leopold probably thought that the lengthy illustrations of the common properties of nonhuman and human life contained in his *Sand County Almanac* indicated the ethical and logical need for more consideration of the interests of nonhuman collectives, the recognition of some limited moral rights for nonhuman species. I will present an argument for species rights that I believe consistent

with Leopold’s and other prominent environmental thinkers’ philosophy, and intervening world developments, in Chapter 2.

CHAPTER 2

AN ARGUMENT FOR SPECIES GROUP RIGHTS

While many environmental philosophers have argued that individual organisms and natural species have intrinsic value or some kind moral considerability, most have stopped short of recognizing a species-group moral right to existence, or a related right that would insure other species' continued existence. I argue that this is a mistake both logically and pragmatically. Although intrinsic value and other non-rights environmental ethics approaches have been presented with great ingenuity and the best of intentions, they fail to fully express rational agent duties to nonhuman life. These contemporary approaches fail, because by recognizing only humans as possessing highest priority moral rights, they leave in place an ethical hierarchy in which human claims to resources will continue to override competing vital survival claims of nonhuman species populations.

In the argument that follows I will begin with premises based on what I have shown to be valid aspects of foundational environmental theory outlined in Chapter 1. I will then consider the function of rights in communities, life values and future extinction risks, rights of common persons and the reality that all life now belongs to one inclusive moral community.

2.1 ALL LIFE IS MORALLY CONSIDERABLE

Morality is essentially concerned with the assessment of harms and benefits caused by the actions of moral agents (Kaufman

2003:198). Therefore, any entities or objects that could be asserted to have interests, that could be affected by moral agents, might be candidates for moral considerability or judged to be moral patients. What kinds of interests count as patient criteria are critical to an adequate environmental ethics for they determine what entities are included within the moral realm and subsequently are eligible for protection from human exploitation.

Fortunately there appears to be a consensus among philosophers that the class of interests that count under the concept of moral considerability are limited to those resulting from the properties of living organisms. It is logical to assume that although certain environmental states of affairs might prolong the existence of a painting, a painting has no mind, internal program or autonomous goals that might be harmed or thwarted by moral agent actions. Various *real* interests, however, are associated with life properties that include conscious pursuit of life-projects (rationality), avoiding pain (consciousness), and avoiding death (responding to stimuli) and reproduction (accomplishment of life history goals driven by internal DNA chemical programs).

Philosopher Tom Regan believes that interests must be *consciously* desired in order to count and, therefore, only mammals may be morally considerable. Paul Taylor, however, argues correctly that choosing species properties that coincide with those of human beings and similar species is arbitrary and

transparently biased toward insuring that human interests prevail. We are but one species population among many and the impressive survival enhancing capabilities of fish extracting dissolved oxygen from water or birds flying could easily be said to be property criteria that makes them morally considerable, but excludes most mammals.

Kenneth Goodpaster supports this view by stating that interests that non-sentient beings share with sentient beings are more plausible criteria for moral considerability than differences between these different kinds of life. He explains that psychological capacities "seem unnecessarily sophisticated" when determining minimal conditions for an entity's being valued for its own sake (Goodpaster 2003:223). He, however, agrees with Gary Varner when he writes that different interests and capabilities may affect the relative moral *significance* of various life forms. Varner reflects that conscious animal's lives may have more value than plant's lives, because animals have more and or higher quality interests (Varner 2003:235).

All things being equal, as long as some organisms considered are not rare or near extinction it seems reasonable to concede that some *individual* life forms may be more morally considerable than other individuals are. But it is also reasonable to expect that the interests of all affected life forms should be considered before potentially harmful human actions, because all life forms are in fact morally considerable to some degree.

2.2 CONSIDERABILITY IS NOT DEFEATED BY NECESSITY TO KILL

Goodpaster relates a potentially fatal objection to any adequate environmental ethics, one that affords all life moral consideration, that must be disposed of early on. This objection is that the principal of respect for all life cannot be true, because one cannot live according to it. This objection is not valid, because the respect for life principal does not assume absolute prohibition of actions that might harm life. Similarly in modern society the human right prohibition against killing another person is not absolute, but allowed in self-defense.

It is also obvious that most life forms, including herbivores, plants and many microorganisms, must directly kill, poison or crowd out other individuals in order to survive, grow and reproduce. Restraint is not possible or expected in the case of non-human actors, because they are not rational moral agents. It must be noted, however, that this relentless killing in nature usually enables non-human populations to flourish. Out of death rises life. The total amount of morally considerable life remains approximately constant, and during most former eras there has been a progression or increase in value associated with evolution of additional species and to life forms that may be considered to have higher levels of moral considerability.

Goodpaster also explains that there are regulative as well as operational components of moral consideration, and that there is no inconsistency in a theory that recognizes that there are often limits to the operational character of moral considerations

(Goodpaster 2003:225). Taylor proves that humans can in fact live by a moral theory of consideration or respect for all life, because it is logically possible to resolve inevitable conflicting human-nonhuman interest claims using common sense priority principles. His five principles include principles of self- defense, proportionality, minimum wrong, distributive justice and restitutive justice (Taylor 1986:263). Then we have a significant history of indigenous peoples living by killing wild animals, but surviving for millennia partly by exercising moral restraint, like that of leaving two beaver in each pond. Also the successful history of wildlife management in the United States, although motivated largely by instrumental anthropocentric desire for a continuing harvest of game, indicates that great life value can persist in the midst of continual killing, when restraining human rules (hunting and fishing regulations) are formulated and enforced.

2.3 CLASS POSSESSING INTRINSIC VALUE IS TOO LARGE

Holmes Rolston's concept of strong intrinsic or non-relational value, value that is objectively 'in' natural objects, and Baird Callicott's subjectivist theory of truncated intrinsic value created by valuers valuing objects "for themselves," both attribute intrinsic value to nonliving objects like mountains (their nonbiotic parts) as well as to living organisms. This inclusion is apparently partially dictated by the philosophical tradition of attributing the term to some aesthetically valuable objects, and a well-intentioned desire to find a way to protect

physical nonliving habitats critical to the survival of nonhuman life.

Unfortunately equating moral considerability with a wide, inclusive intrinsic value seems to undermine the credibility of both theories' claims to generate duties to protect and preserve the environment. This equivalency or the blending together of the concepts is suggested by Rolston, renowned for his theory of intrinsic value, when he writes: "natural things are morally considerable in their own right" (Rolston 1989:11). Similar statements have been made by Callicott, Goodpaster and Robin Attfield, and Lawrence Johnson states that "the association of intrinsic value with interests seems odd to me" (Johnson 2003:291). As discussed earlier, however, for objects to be considered eligible for moral considerability it is generally thought they must have autonomous interests, and so must be living entities.

Accordingly, one of the most common ways for opponents to argue against the concept of intrinsic value, and consequently the generation of duties to nature it implies, is to note that nonliving objects like mountains or rocks do not have genuine desires or interests. They often join mountains and rocks with living or life containing entities like individual organisms, species and ecosystems, as objects alleged to have intrinsic value and thereby discredit the attribution of intrinsic value to the whole class. Living organisms cannot have intrinsic value

because saying so requires us to say that rocks have intrinsic value.

It is, however, important to the goal of constructing an adequate environmental ethics to retain the concept of intrinsic value, and to be able to approximate value totals, as a way to evaluate consequences resulting from different courses of human action. Due to the confusion caused by the present inclusive intrinsic value, and because Rolston and others use the term most often to discuss duty generated by discovering value in living nature, I propose that the only term be that should be used is one sometimes mentioned by Rolston, that of 'autonomous intrinsic value', AIV, a value that is present in life forms only. It is also more reasonable to believe that excluded non-living habitats and objects like mountains and rivers have enormous instrumental and aesthetic value to human and nonhuman life, but that preservation of habitats can be adequately justified due to their critical instrumental value to human and nonhuman life. Alternately one could establish a measure of value equivalent to AIV based on the more or less equivalent concept of moral considerability, or statements about amounts of moral considerability or 'moral significance'.

2.4 BY THEMSELVES NON-MORAL RIGHTS APPEALS FAIL

Taylor ends his argument that all living entities have inherent value, a value which mandates major duties of consideration and sacrifice by human agents, by assuming that there is nothing to be gained regarding environmental protection

by recognizing that nonhumans have moral rights “in the same way we have rights” (Taylor 1986:254). This is a particularly surprising conclusion, because he goes on at length about how it might *seem* based on his in-depth arguments that animals and plants have four moral rights. These include rights not to be harmed, not to be interfered with, not to have one’s trust broken and a right to restitution when wronged (Taylor 1986:253). He states that his reason for not recognizing nonhuman moral rights is based on a concern that the public would be “confused” by an assertion that plants and animals have moral rights. Taylor says this is because we have a tradition of using the language of moral rights only in relation to the rights of persons. Unfortunately environmental philosophy has also left in place the tradition that moral rights are trumping highest priority claims.

Taylor did not have the benefit of hindsight over 20 years ago when *Respect for Nature* was published. But his reduced claim that plant and animals have ‘inherent worth’, despite his arguments and priority rules that indicate nonhumans have moral claims as weighty as human moral rights, has not proved itself “fully adequate” as a theory to insure just consideration for nonhuman life. Similarly Rolston and Callicott’s eloquent proofs of immense intrinsic value in nature and various authors’ promotion of the concept of moral considerability, have definitely motivated increased protection of wild nature in the past. But these nonrights approaches to generating duties toward nature are now hampered and often neutralized by humanist,

business and political arguments that the interests of the human poor (moral rights) embodied in the alleged need for continued resource and habitat development take precedence over the welfare of nonhuman life.

Development arguments more easily justify and succeed in appropriating the majority share of lands and resources in newly developed areas, at least in part, because of this reluctance of the majority of environmental philosophers and major environmental groups to recognize moral rights for nature. Daily back peddling by environmentalists in the media proclaiming concern for the poor, and clever advertisements by industry promising more jobs, make it obvious that claims of at least equal weight are needed to compete successfully with human moral right claims implicit in these concerns and appeals for perpetual development.

2.5 OPERATION OF THE RIGHTS MECHANISM IN HUMAN COMMUNITIES

E. O. Wilson’s controversial theory of sociobiology actually makes very modest claims about the amount of observed human behavior that is genetically determined. It appears highly probable based on our observations of almost universal present day behaviors of hunter-gathers that the genetically determined, unique human primate capacities caused early humans to out compete other primate species via ‘between-species selection’. This occurred due to intense human ‘in-group’ selection toward egalitarian sharing and restraint of Alpha male aggression and self-serving behavior that made it difficult to succeed at

expense of others. This meant that members of human hunter-gather groups succeeded primarily by “teamwork” (Wilson and Wilson 2008:389). The great survival value and competitive advantage of the restraint/teamwork life strategy is supported by our knowledge of the great success of non-primate species like wolves, coyotes and dolphins to name a few. Now once most competing nonhuman primates were eliminated it is reasonable to assume that selection between human groups created a human population even more adapted to surviving through the mechanism of teamwork. Wilson emphasizes, however, that ‘for the good of the group selection’ can only occur when it is stronger than within-group selection.

Similarly, cultural evolution seems to be largely disconnected from genetic determination, because we have experienced dramatic historical change in social rules in time spans (a few hundred years) too short for any significant genetic changes in human populations (which take thousands of years). Populations that might be thought to have genetic differences can all adopt a similar culture. All manner of racial types have come to the United States and readily adapted to our culture. We have also observed that culturally evolved and transmitted behaviors (memes) that effectively increase teamwork within nation states cause some nation states to out compete or persist better than other nations. Cultural developments seem rather loosely related to genetic determinants.

Some view the recognition and enforcement, of a substantial body of moral rights in developed countries, as perhaps recent manifestations of within group competition. Most recently there has been much controversy about 'rights', allegedly being defended by mechanisms like gender, ethnic and gender quotas, that at least in some instances have degenerated into kinds of patronage gifts intended to buy the votes or loyalty of individuals or groups, often at the expense of the larger national group. We have also occasionally wondered whether abundant American rights were hampering us in competition with more totalitarian nations like Nazi Germany, the Soviet Union, China and Islamic states. History has proved, however, that when moral rights are accorded to individuals and groups within large national communities there is a long-term benefit not only to supposed subject individuals, but to other individuals and to the whole community as well.

The most relevant aspect of human moral rights to environmental ethics is that human moral rights do often operate by protecting the weakest members in communities by restraining stronger members or groups. Conversely, it has been truly stated that 'the powerful have no need of rights'. A major result of rights protections are that the qualities and capabilities of the weaker members are preserved and are also available to benefit other individuals and the whole human community. A negative proof of this dynamic is that denial of rights to women, minorities and lack of enforcement of the rule of law (that

guarantees the objective existence of all moral rights) is known to hamper the economic status and welfare of common persons in many developing nations. The developed countries have been the most egalitarian, and there seems to be a connection.

Contemporary conditions require that the cultural mechanism of moral rights be expanded to the larger biotic community of which the human species is one individual member. First, this is because human numbers and technology have expanded to the point that human influence has engulfed most of the natural world and so made humans and nonhuman life critically interdependent, and part of one continuous biotic community. Second, this is because humans are the most powerful member of this biotic community and thus the obvious members requiring restraint. And third, this is because the mechanism of moral rights has been demonstrated to be the most effective means of restraining human moral agents.

2.6 SPECIES MORAL RIGHTS ARE NEEDED TO RESTRAIN POWERFUL HUMAN ELITES

Unfortunately human elites have very strong motives for continuing the destruction of natural ecosystems, and the species that they incidentally contain, motives that presently are not countered by an adequately powerful means of social restraint. I became aware of this reality when I attended a lecture in which the former Indian Minister for Health and Family Planning, Dr. Sripati Chandrasekhar, made the following statement to students at the University of Alaska, Fairbanks in the early 1980s':

> No matter how bad things get, the children of the rich will not starve.

This statement was a response to a student's question regarding the fact that some political parties and social leaders in India were opposed to Chandrasekhar's family planning and contraception initiatives. The student had asked how Oxford and Ivy League educated politicians could possibly oppose efforts to stabilize India's population when so much disease, death and poverty due to scarce resources and overcrowding existed there.

Dr. Chandrasekhar went on to explain that it is often the case that, if a society's wealthy elites or leaders can benefit from population growth, or benefit from being advocates for policies that cause it to continue, they will do so. Despite the fact that this may not be in the best interests of the common people in their society, they may in large part benefit, because they are generally insulated from the negative effects of overpopulation and environmental degradation due to their larger incomes. He specifically mentioned that in India's case politicians may benefit by gaining support from conservative religious leaders and that overpopulation and poverty cause wages to remain low. This enables upper class Indian citizens to afford to have house servants, and cheap labor for business that in turn insures high profits. Many may dismiss these concerns as 'class warfare' reasons based on the emotion of jealousy. But Jared Diamond in his book *Collapse* has also reported the past ability of elites to insulate themselves from environmental degradation along with elite leader 'group think' and psychological denial as reasons for their continuation of

policies that benefited their social group, but ultimately resulted in environmental disaster (Diamond 2005:431-435).

Dr. Chandrasekhar also related that at the international level, from his observations at the United Nations, national leaders gain prestige and power through their ability to intimidate adjacent nations and gain favorable agreements due to their large populations. These may include economic clout derived from their country's massive amounts of cheap labor or their potential as a source of consumers for other nation's products.

Now what is most relevant to this argument for species rights is that nation state elites routinely justify environmentally and socially destructive action or inaction (regarding family planning and population stabilization and reduction) by effectively evoking the high-priority human moral right to reproduce or an economic right against poverty. Consider that the leaders of both major parties in the United States operate what is effectively a population growth policy. This continues despite the fact that our supposedly ecologically sensitive society is generally aware that increasing the US population by over 30 million persons a decade causes the destruction of 2 million acres of forest and farmland a year. Most of this increase is due to a high legal immigration quota of approximately 1 million per year, and American leaders' essential refusal to enforce our immigration laws (proved by their continual rhetoric that illegal immigration is good for the

economy). This refusal that allows an additional .5 million illegal immigrants to remain in the country every year, is evidence of very strong elite motivation for large profits gained by using low wage labor that is proving to be extremely difficult to overcome or restrain with available ethical mechanisms.

Although some have tried recently to have nonhuman interests considered in the US immigration debate (Cafaro and Staples 2009), the terms of the mainstream media and philosophy/ethics discussion still largely consist of balancing what amount to explicit and implicit human moral rights claims of competing human groups. Potential immigrants are said to have a human right to cross US borders regardless of the will of the American majority, as reflected in immigration law, because all the earth's resources are the property of a global citizenry (Risse 2008:30). And persons already in the country illegally are said or implied to have a moral right to stay, because forcing them to leave would cause them hardship. Opponents of mass immigration similarly argue in human moral rights terms that flooding the American labor market with low skilled labor reduces wages for the most vulnerable persons in US society, and also overcrowds schools and competes with poor native-born citizens for social services.

Presently immigration policy reform is at an impasse. Past reform proposals have centered on legalizing the status of persons illegally here and actually increasing legal immigration. Elite interests plus creative moral rights justifications, no

matter how questionable, are powerful claims to overcome, particularly when enforcement of immigration law is enforced by federal agencies politically insulated from local citizen displeasure. But it is also apparent that US pro-immigration special interests would have already legally and permanently institutionalized a mass or 'open borders' immigration policy, if competing human citizen moral rights claims had not been available and forcefully asserted.

It is my contention, that because of the demonstrated power of moral rights claims, that a well-developed and strongly asserted moral rights claim of nonhuman resident species to not be further injured by continued human population growth, combined with the human citizen moral rights argument, could force America's political leaders to reduce immigration. Similarly in other countries, and globally regarding human actions in international waters and the Arctic and Antarctic, the recognition of nonhuman species moral rights would enable restraint of exploitation based on an adequately weighty claim able to compete with traditional human moral rights assertions. But a case for some kind of nature's moral right that is objectively logical and true must first be formulated.

2.7 SPECIES COLLECTIVES ARE MORALLY CONSIDERABLE

Since morality is essentially concerned with benefits and harms, in order to prove that species have moral rights, one must first show that species are the kinds of entities that can be affected by the actions of moral agents. Then in order for

entities to be affected by human agents they must have *interests*, or certain states of affairs must be good or bad for them. Many of the philosophers discussed so far as well as Lawrence Johnson (2003:283) and Harley Cahen (2003:290) agree that if an entity has interests (a good of its own) that it could be *prima facie* wrong to frustrate its interests and therefore such an entity counts morally.

What has to be determined next, however, is what exactly counts as a real *interest,* for various authors have opined that perhaps machines, thermostats and rivers and mountains may be considered to have some interests. Refrigerators and thermostats respond to the environment and act to maintain an equilibrium state. And it might be seen as harm to the present state of a river for that river to be dammed or to a mountain to have its top bulldozed off to access coal. Including these entities seems wrong. It suggests enabling a slippery slope of creative justification that could class any or all objects from single atoms on up as having some kind of interest which could in turn paralyze all human action. As stated before, it also appears incorrect to attribute intrinsic value based on interests to nonliving objects.

The difference between a rock and a plant that is often asserted really to matter regarding genuine interests is *life*. But Cahen has correctly stated that a *life* criterion for moral considerability or autonomous intrinsic value is in itself not very illuminating (Cahen 2003:292). Taylor, Goodpaster, and many

others further define genuine interests by stating that living organisms are “teleological centers of life” and they have “tendencies to maintain and heal themselves”, properties summarized by the characteristic that they possess *goal-directedness*.

Goal-directedness may not seem sufficient for moral considerability, for a guided missile, chess playing computer or even the ‘Terminator’ could be said to be goal directed. But these examples are not actually problematic for the criterion, because they don’t possess the complexity and completeness of the many goals that living organisms possess. Machines usually have limited goal directed ability to repair themselves and few if any can now improve or reproduce themselves. Perhaps more important, goals are not truly located intrinsically or ‘in’ machines. Their goals are predetermined by their human designers, or placed in directing computer software by human programmers. They, therefore, lack the true autonomy or internally initiated striving pursuit of their *own* interests or life projects that we are concerned that human actions might thwart or destroy.

I will not dwell on the topic here, but it is conceivable that one could build a machine that performed enough of the functions and actions of living organisms like repairing itself, learning, reproducing and improving its descendants with the result that the machine might be morally considerable. The friendly machines in the *Terminator* films may have seemed to possess enough properties of life to pass the threshold of moral

considerability. But it seems reasonable to assume, that if these properties were ever *actually* possessed by a machine, the machine would then really be 'alive' regardless of its origin or machine nature, so this is no obstacle to a theory of moral considerability based on a 'life' restriction.

Larry Wright has described the mechanism of goal-directedness of individual organisms in a way that begins to reveal a major reason why species are also morally considerable. He explains that in an organism a behavior B tends to bring about a goal-state G, but that also the behavior B initially occurs because it tends to bring about goal-state G. A behavior that is at least in part genetically determined accomplishes the goal of helping the organism survive and reproduce. The preservation of the resulting gene frequencies in turn makes the behavior more likely in the next generation. (Wright 1972:204-218)

The critical insight and reality is that this DNA goal-directed mechanism of life occurs both at the level of an individual organism, and at the second level of the reproductively isolated 'superindividual' species gene pool, as an autonomous self-improving survival feed back loop. A lower level conceptual bridge to this concept can be made by considering that larger life forms are composed of many individual cells with similar DNA living in a larger 'community' population of cells with similar DNA. We subsequently have no difficulty in conceiving that we have a responsibility to avoid actions that might harm the higher of these two living levels.

Lawrence Johnson also brings the value of species into focus by discussing our intuitions and logic regarding the human species. He states that the human race is an “ongoing entity” and it has interests that are not just the aggregate interests of individual humans (Johnson 1983:345). For example when the first human placed a foot on the moon it was said that this was also a step for *mankind*. And Johnson refers to David Hull who has stated that species are gene lineages, historical entities, spatiotemporally localized individuals (Hull 1976:174).

The plots of many science fiction and pandemic horror films suggests an enlightening thought experiment that also argues against belief that species are just an abstraction, due no consideration. One can imagine a future situation in which there is a nuclear war and only 1500 persons remain alive on earth. You have a space ship capable of taking up to 1000 persons to a safe place. Unfortunately you only have time to reach either a distant group of 500 normal persons or another group of 1000 irradiated infertile persons. Most judge that it would be more ethical to save the lesser number of people. This indicates that the continuation of the species takes moral precedence over saving 500 more living humans, that the species ‘superindividual’ has very great independent value much higher than that of individual humans.

Rolston explains while arguing for intrinsic value attribution to species collectives how things can be good for the well being or interests of a species. Species populations often

maintain a genetic load of DNA coding for traits that are somewhat deleterious for individual members, but provide the variation necessary to provide material for selection that can improve the species *form* (Rolston 1989:214). He also points out the obvious, but seldom considered fact that reproduction most often does not benefit individual organisms. Female brown bear risk harm when mating and sacrifice much food and energy when raising and defending young. But their genetically programmed reproductive behavior fulfills the goal of continuing and improving the species. It is for the good of the 'superindividual' of the species collective.

Species, therefore, are real entities with real interests that can be harmed by lowering their total numbers beyond a certain threshold, thus limiting their genetic variability and ability to adapt to changing conditions. Or they may be 'superkilled' via direct killing or habitat destruction. When the last two members of a species die not only the individuals with their autonomous & subjectivist intrinsic, instrumental and aesthetic values are lost, but a second and greater quantity of value is also lost.

2.8 SPECIES COLLECTIVES HAVE MORAL RIGHTS

Nonhuman organisms may be the kinds of things that deserve some level of *moral consideration*, but many may not be recognized to have high priority *moral rights*. As discussed earlier, a moral right against killing many individual nonhumans is impossible to realize, so at a minimum, nonhuman rights at the

level of the individual must necessary be capable of being overridden. But it is also obvious that humans can survive without super killing species collectives, and that the possible immense total values and moral considerability of these superindividuals may entitle species to high priority moral rights.

A few years ago, because of my expressed concerns as an endangered species biologist, I was asked by a philosopher to explain why a world with more persons and fewer nonhuman species would be worse off. The result of this exercise, considering two possible alternate futures, brings the species rights question and other at first unexpected considerations into sharp focus.

Two possible worlds could exist in the year 2100 as the result of different social and economic policies. Future 1 would result from a continuation of current policies and could result in a total human population of 12 billion persons by 2100. This population increase would also be accompanied by a loss of a significant proportion of today's 5 million species, for the sake of argument, perhaps a total of 2.5 million species (approximately equivalent to the 50% loss predicted if we only save 10% of Earth's ecosystems). Future 2 would result from an effort to stabilize the human population at today's 6 billion persons and the preservation of most of the current 5 million species.

Assigning human and nonhuman individuals some kind of value is problematic, but it can be assumed that most persons would

agree that many individual nonhumans have some if only a small amount of autonomous intrinsic value. This appears to be true, because a large percentage of the global human population has animal pets, fish, and even houseplants and ornamental trees that are treated with great consideration, like members of human families. When we try to account for the value of species collectives the first unexpected consideration is encountered. Because of Rolston's insight that a species is equivalent to a 'species line', the loss of an existing species is not only equal to the loss of all the individuals in 2.5 million species that would not be alive in 2100. The value of thousands or millions of future generations with all the individuals each generation would contain will also be lost. Therefore, the loss of 2.5 million species by 2100 would amount to an immense loss of intrinsic value unlikely to be balanced or offset by 6 billion additional human individuals.

Now a reader might point out, that if one assigns a very high value to individual persons, that the total additional autonomous intrinsic value of 6 billion more humans in 2100 could be calculated to make up for, and surpass, the value of the loss of 2.5 million nonhuman species. Taken to the extreme this might mean that one could claim a value for 1 additional person in 2100 to be higher in value than all the future generations of one or more species. Business, political and religious leaders, who in the interim stand to gain from increased numbers of workers, consumers, taxpayers and followers, might implicitly go along

with present demographic policies equivalent to this valuation. But it is questionable how many of them would want to explicitly admit and ethically try to justify this valuing to the educated public of an industrialized democracy. And it is unlikely that anyone that claimed to be even remotely concerned about the environment would say that the whole Amur leopard or North American lynx species ought to be sacrificed for 1 person or even on the average the 2400 persons that our alternate futures thought experiment suggests.

One of the reasons this super high human valuation seems strange or unnecessary is that having 6 billion fewer persons in 2100 would not mean the killing of 6 billion persons in most likely scenarios, in order to prevent mass nonhuman extinction. Rather it would mean that these 6 billion persons would not be born or come into existence by 2100. Perhaps more importantly, it is hopefully obvious that a failure to produce Future 1's additional 6 billion persons by 2100 would not necessarily reduce the total of human autonomous intrinsic value over the whole period of the human species existence. The equivalent of this 6 billion or more other persons could easily be born and exist over a longer time period. And in fact they would have a higher probability of living, and having higher quality lives, at a later time if a healthy planetary ecosystem were maintained due to Future 2 creating actions.

Alternatively, if earth's ecosystems are greatly damaged by very high impacts of 12 billion persons, the resulting human

population crash and the reduced carrying capacity, that might last for centuries, could greatly reduce the total of human as well as nonhuman lives lived in the next 1000 years. It is common knowledge that this has occurred in human and nonhuman populations when habitats were degraded in the past, so this outcome is highly probable.

The absence of *numerous* strong claims by both philosophers and political/business leaders regarding perhaps some high intrinsic value that the currently projected 3-6 billion additional humans might embody, is a significant ethical factor that should be considered when evaluating the morality of the two alternative futures. While the status quo of this increase is usually not supported by an alleged increase in value, it is most often justified by fatalism, that it can not be avoided. We will just have to deal with its consequences or, that in the USA, “We must grow (our population) or die”. Related to the latter reason are the unsustainable and therefore unethical reasons that increasing human populations will insure a steady increase in the number of consumers, workers, and tax payers needed to pay off debt that has been incurred by recent human actions. Actions that in the light of revelations about the recent economic meltdown amounted to greedy recklessness on the part of our societies’ leaders and over consumption and irresponsibility by the larger public. One wonders how we can ethically justify further population growth if in addition to damaging

environmental and intrinsic value loss effects, it also enables the immorality just described.

The second insight that occurs when we consider alternative 1, likely with current policies, is that the loss of so many species and the physical damage to ecosystems on earth that will inevitably occur is likely to increase the probability of human extinction by some undeterminable percentage. Until recently this might have seemed like a doomsday delusion given the ingenuity of human technology, the enormous size of earth's systems and the very large human population (nothing could kill us all). But the reality of global warming, global water shortages, ocean carbon dioxide acidification, dead zones and depletion of fisheries, and the loss of millions of acres of arable land every year indicates that the human species affect on global ecosystems is now very large. Many of these affects, or perhaps several in combination, are now of such a magnitude that these anthropocentric factors could change the environment enough to threaten the existence of the human species.

There are a number of other mechanisms that cause species extinction that are likely to be operative in alternative 1 that are not usually discussed. Very high population densities make whole species populations vulnerable to the periodic emergence of newly evolved highly lethal diseases. These pandemic events have in the past burned themselves out due to sustainable low-medium densities and the resulting isolation of major fractions of former natural populations. But a high density, continuous

across the globe, human population likely under alternative 1 could be totally destroyed by a pandemic as when a wildfire completely consumes high-density timber across wide areas. Alternately, some of the many species that die off approaching 2100 future 1 may end up being not just economically useful, but biologically critical to human life through some chain of events that it will be impossible to predict. Finally, an event highly likely to occur in alternative 1 is a catastrophic nuclear war over scarce resources that poisons and pushes earth's already degraded systems completely out of balance. It seems that risking even a small increase in the probability of human extinction is irrational since it can be avoided through reasoned calculation, planning and human restraint.

To put this extinction risk in perspective regarding what we are morally obligated to do about it, there have been serious proposals that we spend billions on a defense system against low probability asteroid strikes that would cause human extinction. So if we were being morally and logically consistent, regarding increased human extinction risks caused by a high probability of future human over population, degraded environments and massive nonhuman extinction it seems that we ought to eliminate these factors, particularly since this can be accomplished with current technology.

In addition to the immense total of autonomous intrinsic value or moral considerability present in a species line, the probable negative effect of nonhuman species extinction on the

survival of the human species reveals yet another reason for including species collectives within the class of entities possessing moral rights. If the major evolved function of traditional moral rights is to increase the survival of human groups, then protecting species collectives by recognizing they have weighty moral rights would insure the welfare of the human community as well as the welfare of other members of the larger biotic community. This second aspect of deep survival based human-nonhuman interdependence also largely satisfies concerns about the traditional requirement that moral rights only come on the scene when humans arrive and the 'social contract' conception of rights that many philosophers and the general public have.

Humans and nonhumans are in reality fused into one biotic community, in which the human species is the most powerful superindividual. This superindividual must be restrained via species rights in order to insure the survival of the whole community. Species group rights must be recognized for they are capable of acting as environmentalism's categorical imperative, securing human and nonhuman flourishing on earth, protecting the whole biotic community from the shortsighted selfishness of contemporary humans.

2.9 THE PRECEDENT OF THE CONVENTION AGAINST HUMAN GENOCIDE

Attempting to value species collectives in the last section by contemplating their value as the sum of millions of individuals over millions of generations does not capture our realization that something else of value is also lost when a

species disappears. The loss of a kind that does not evolve into another species is at a minimum a destruction of DNA coded knowledge, a blue print, a strategy for surviving in an ecological niche gained from many generations of struggle. As we have discovered thus far, the DNA gene pool of a species is a higher level life form or superindividual that has interests and therefore a plausible claim to moral rights.

International support for the Genocide Convention of 1948, although referred to as a crime in the United Nations Convention, can be seen as establishing a group right. As the *gen* root of the word genocide suggests, the convention declares a negative right against the destruction of racial (genetically unique) groups. But as article 2 also indicates, by prohibiting destruction of "in whole or part, a national, ethnical, racial or religious group as such" (U.N. 1948:1) the Convention also protects the diversity of human cultural knowledge and identity.

Again the fact that authorities like James Nickel (2007:157) insist on pointing out that the convention text "does not a say any where that the right against genocide is a human right" (but rather a crime), while William Schabas (2008:3) recently wrote that "the Genocide Convention was the first *human rights treaty* adopted by the General Assembly of the United Nations" (italics mine) reflects the inevitable tension between individual rights, and the rights of communities to make majority decisions for the common good. The fact that some believe that Group Human Rights may somehow threaten or over come individual rights does not mean

that group rights do not exist, and that if properly balanced with individual rights that they can not be beneficial to the larger human society.

Certainly, as Schabas's view indicates, the Genocide Convention has since developed in the collective consciousness of most humans (as well as in the U.N. Office of Legal Affairs that sponsored Schabas's essay) into a high-priority human moral right. This right exists regardless of whether it is universally recognized. Although likely widely approved of due to its instrumental utility of protecting all human groups in wars that could conceivably break out anywhere, there is the sense that it and other group rights recognize the value of different kinds of humans. It also appears to be recognized that it is necessity to protect these different kinds for themselves and the welfare of the global human community as well.

In reality the genetic difference between different racial groups is far less than that between different nonhuman species. But it is widely thought to be important to allow humans to preserve racial, social and cultural differences of kinds through protections against genocide and free choice in marriage. Ethnic differences that reflect the accumulated knowledge of cultural evolution also constitute arguably greater differences of properties between human kinds. Identity politics and desire for profit has motivated much of the promotion of preservation of cultural diversity in the last few decades by academic, political and business leaders in developed countries. But this

celebration has also recognized legitimate value in different kinds of cultural knowledge whose dialectic in Western society since the time of the ancient Greeks has led to high levels of innovation and high value.

By analogy, if protecting and maintaining the differences between human racial and ethnic kinds is such a high priority moral duty, then maintaining diversity of species kinds at the next level, in the biotic community, must be a moral right mandated duty also. It must also be emphasized that the diversity value of numerous other species is not restricted to gene or DNA variability. As Brian Czech has noted (Czech 2001:665-674), and humans have observed since the origin of human cognition, nonhuman species possess a vast store of nonhuman knowledge, similar to, but immensely more varied, than the different behaviors and cultural traditions of human ethnic, national and religious groups.

I have used lynx snowshoe hare hunting strategies to hunt caribou at similar encounter ranges with a bow. Native Americans mimicked wolf hunting and search behaviors when ‘scouting’ for both enemies and game. And the media continuously reports that scientists are observing not only the chemical composition of nonhumans, but also their physical structure and behavior to gain conceptual knowledge necessary to design both machines and artificial intelligence entities. As Czech has asserted, if the extinction of many species occurs an enormous amount of nonhuman knowledge will disappear and “total knowledge would decline

precipitously” (Czech 2001:271). The recognition of species moral rights is, therefore, necessary to protect and preserve for both humans and nonhumans the infinite value of nonhuman-human dialectic for all of life’s future generations.

2.10 OBLIGATIONS FROM PAST SUPPORT AND CO-EVOLUTIONARY CREATION

The traditions of gratitude and loyalty and resulting sense of belonging to a larger family to which one has obligations is a large part of the moral framework that has nurtured the human species. The human species owes a limitless debt to the countless other species of animals and plants for the support of food and shelter they have provided us, acting like a genuine ‘Earth Mother’ to our species since the origin of our unique primate line millions of years ago. This obligation manifests itself as a duty to respect and protect those that give us sustenance and is thus part of the genetic and culturally evolved sympathy and moral mechanisms that have led to the success of our species.

Some years ago, it was reported that one of the earliest hominid skulls found in Africa had been punctured by the canine tooth of a leopard. Although my studies indicate that leopard in temperate climate geographies (Snow and Amur leopards) have not been reported to hunt humans, leopard attacks and consumption of humans in tropical areas has been recorded for 100’s of years. It is, therefore, thought that predators in ancient Africa had a significant effect on early pre-humans.

The need to avoid and escape from leopards and lions was likely one of the factors that caused our ancestors to move out into more open areas that lack stalking cover that these predators need for a successful hunt. This and conversion to a diet including meat caused them to stand on their hind feet in order to see enemies and prey at greater distances. Once ‘hands’ are freed up for weapons making and use, an adult human with a simple spear becomes very dangerous prey and his community is fairly well protected from wild carnivores.

Similarly, the sly and fleet-footed antelope and deer are probably partially responsible for selecting for the highly dexterous modern human form and mind. These adaptations were necessary to accurately throw the javelin and plan hunting and trapping strategies. Therefore, our true Creators are many of the other species lines that have forged us on the anvil of our competition and conflict with them. Our debt to these entities, from the smallest infecting viruses to the largest lions and bears, for making us who we are, is no less than that we owe to the more benign plant life that has nurtured us.

Although smallpox may seem to many to be a species we owe no debt to, because of the great suffering it has caused in human history, it is definitely true that entities that challenge us, but do not kill us at the species level, usually make us stronger. We should also recall that an adequate ‘defense’ of sorts has always been available to humans through maintaining low enough populations to insure good nutrition, sanitation, and

isolation of the infected, long before modern medicine was invented. Disease has also acted as a human population control device that in part has prevented us, at least in the past, from becoming too numerous to severely damage earth's ecosystems.

While great duties of protection flow from this debt to our brother and sister species lines, it is perhaps thought that human evolution is at an end. But by definition it cannot be. If we wish to survive it will be necessary for us to adapt to changing environmental conditions here, and possibly those that we will encounter in space or on other worlds. It has been discovered that the Arctic ground squirrel a highly evolved mammal is capable of lowering its body temperature, to near the freezing point of water, in order to conserve enough energy to survive long Arctic winters. Use of this ability could make long space voyages to the stars possible some day. Again, showing restraint and mercy toward weaker members of a community results in benefits to other individuals and the entire community. It is not possible to separate our interests from those of other species and the biotic community as whole.

Aldo Leopold stated that the other species have been our "fellow voyagers" in the Odyssey of evolution. But they have also been our comrades and will continue to be our allies if we allow them to survive in numbers great enough to enable their further evolution and perfection. To gain maximum mutual benefit, their numbers will also have to be large to allow access and dialectic with the majority of our human population. Poets,

carpenters, office workers and soldiers as well as scientists may learn from the almost infinite amount of knowledge and behaviors contained in the other species that have DNA recorded the combined experience of 3 billion years of evolution. By giving these species a *right* to continued existence, we make real the *right* of human beings to continue to know and appreciate them.

2.11 SPECIES RIGHT TO LIFE EQUIVALENT TO A RIGHT TO A MINIMUM OF 50% OF EARTH'S HABITATS

The great weakness of the present operative environmental ethics is its imprecise nature, which continues to allow what Aldo Leopold called "museum piece" preservation of small nature reserves incapable of supporting large enough species populations to insure their long-term survival. It is also an ethics that fails to satisfy any reasonable standard of equality, an equal sharing of earth's resources with the rest of the biotic community. Leopold, because of his extensive knowledge regarding both biological and human political systems, perceived and in fact effectively addressed this problem of indeterminacy. He did this by adding his 'second categorical imperative'. Leopold added the "biotic right" of species to exist, to support his land ethic's first imperative of protecting the "integrity, stability and beauty of the biotic community". Unfortunately, subsequent environmentalists and philosophers have failed to realize and emphasize the necessity of this prohibition against using species superindividuals as mere means to contemporary human species ends.

Leopold also intensely addressed the problem of perception and practice that suggested that a small allocation of natural habitats to nonhuman species was ethically adequate. He advocated extensive wildlife friendly management on private lands, as well as advocating for more government protected areas. In past decades, the panicked but heroic efforts of organizations like the Nature Conservancy to gain conservation easements on private lands have been motivated by the realization that the type and distribution of protected areas is also inadequate. Large protected areas exist in the American west and in sub-arctic and arctic areas worldwide, but fewer and smaller protected areas are established in the world's more productive temperate areas, such as in the eastern half of the USA. Estimates vary somewhat, but protected land areas probably do not greatly exceed 11.5 percent worldwide (Kunzig 2008:46).

Additionally within regional areas humans have heavily modified or destroyed all or most of the most economically profitable ecosystems, thus leaving wildlife to struggle for existence on areas heavily biased toward 'rock and ice'. For example, all but a few thousand acres of the vast American tall grass prairie have been converted to industrial agriculture. This appropriation of the overwhelming majority share of the richest lands by humans not only makes life hard for animals like highly mobile elk that can not access wintering habitat in low elevation farmed valleys, but it also destroys whole species

specifically adapted to and restricted to these human-preferred areas.

I, therefore, propose that in order to successfully fulfill our duty to protect the right of all species to exist, it is necessary to recognize and enforce an equivalent right of nonhuman species lines to the majority use of a *minimum* of 50% of *all* identified terrestrial and aquatic/ocean habitats on earth. I propose that this goal be achieved in the next one hundred years. The selection of this percentage is not arbitrary. Currently approximately 10% of land areas are in protected status, but according to the area species principle this assumed 90% destruction of habitats means that approximately 50% of existing species will eventually become extinct (Wilson 2002:58).

Using the concept of the species area relation (SAR), E. O. Wilson and a number of ecologists have variously estimated that it is necessary to preserve between 40% and 50% of each of earth's habitat types to prevent this mass species extinction in the future. Wilson accordingly recommended that 50% of each habitat be saved (Wilson 2002:163). In *The Future of Life* Wilson describes the classic example of SAR by relating that the decline in the number of species from Cuba 44,164 square miles (100 species), to Puerto Rico 3,435 square miles (40 species) and then to Montserrat 33 square miles (25 species) are approximately proportional to the 4^{th} root of these respectively smaller land areas. When the 4^{th} root calculation is performed for areas only 50% as large as other areas, the results suggest an approximate

loss of 15% of the original species or a retention of approximately 85%. This is a vastly better state of affairs than the status quo of the present habitat preservation estimate of 50% species loss. And it probably will result in more than 85% protection due to a number of other factors. These factors would include the lack of human use of much more than 50% of very unproductive and inaccessible habitats by humans (deserts, mountains, sub-arctic, arctic, oceans), and the increased probability of being able to take effective measures to protect a much smaller number of endangered species.

Now the “hotspot” preservation strategy favored by Wilson and many other conservationists may suggest that some habitats should be privileged over others due to their high number of species, leading to some severe complications regarding the justification for relative preservation value of 50% portions of all habitats. In my view, however, one of the primary assumptions motivating the hotspot strategy is that a relatively small percentage (on paper) of habitats will be saved under the status quo of our current environmental ethics. I believe it is reasonable to assume, however, that most hotspot associated worries and objectives disappear when we save 50% of each habitat and, therefore, due to sufficient scale, include most of the areas tropical biologists so value. Also, on reflection, it is apparent that the hotspot strategy was conceived to minimize the damage of the moral horror of the future species triage emergency that will result from current plans to only save about 10% of

Earth's habitats. There is also a significant possibility that an unjust bias exists towards tropical species that would also lessen informed concern about hotspots. For example, 100's of very closely related ant species in a square mile of jungle may not actually possess the same intrinsic value per species as a lesser number of very different genetically and niche adapted species in a temperate ecosystem. But it is not necessary to explore this issue in depth here, because our ignorance of the precise relative values and moral significance of different species will not come into play and cause great lose of value, if we save a large minimum of 50% portion of each ecosystem type.

Unfortunately, when personally questioned by me regarding the potential for my theory of species land rights, Wilson further defined his view to be that his 50% allocation of habitat to nonhumans would happen after the world's human population reached the demographic transition (peaked), and declined somewhat (Wilson 2003). Wilson apparently intended his "bottleneck" term and discussion in *The Future of Life* to convey this idea (Wilson 2002:157).

While Wilson's defined view may be based on a well intended assessment that this is the best environmentalists can do, given the reality of the intentions and power of global political and corporate leaders, it falls short of what is in the best interests of nonhuman species. First, because in the past four decades the estimated total population and date of the predicted demographic transition has been continually increased and moved

further into the future. Newly available and cheap, but unsustainable energy sources have made it possible to feed ever more people via energy intensive large-scale landscape alteration, irrigation and fertilizer use. Despite declining supplies of oil, use of what remains and alternative energy sources that increase the total amount of available energy will enable our species to alter or destroy most ecosystems on earth before our population peaks unless some powerful mechanism of restraint is employed.

It is conceivable that species could be saved, if they only had to go through E. O. Wilson's "bottleneck" of low numbers for a few years. But it is certain that many species will be lost as the majority share of most habitats are destroyed approaching the latest projected 9.2 billion (median estimate) or 11.2 billion (high estimate) population peak in 2050 (United Nations 2007). It is also probable given the negative statements of economists and politicians regarding the demographic transition beginning in densely populated European countries, that business leaders will manipulate societies to insure that human populations do not decrease after predicted demographic transitions. This is being done now in the United States where native born citizens have a replacement level birth rate, but where population growth continues largely due to leader-manipulated high levels of legal and illegal immigration. More creative manipulations are clearly feasible and could include already initiated highly subsided

child bearing in the USA, and the future growing of fetuses in vitro and rearing them at public expense.

Then if human populations are maintained at near peak or maximum carrying capacity levels to “pay for social security for the elderly” or to maintain the economic and military clout of business and political leaders, it will not be possible to recover large areas of natural habitat. It also is far from certain that business and political leaders will turn back already developed land to nature even if the human population starts to decrease at some point. Both they and the public, after profiting and suffering respectively from peak population production profits and scarcity, and not aware of the benefits of contact with nature due to its almost total destruction, may decide to consume the increasing per capita production of the planet’s almost totally developed surface. So in both these likely scenarios large amounts of habitats also will not be turned over to nature as Wilson hopes. And large amounts of widely dispersed habitats will be necessary under the after high peak scenario to expand surviving species individuals into minimal viable populations capable of evolving and escaping extinction from unavoidable, local catastrophic events.

Most current species conservation groups appear to share a fatalistic resignation to making do with whatever habitat is left after the mysterious demographic transition occurs in the indeterminate future. They appear to be hoping for some kind of miracle that will enable the recovery of larger populations from

the few specimens of each species they have saved in ‘hotspots’ without having any specific plan of action or advocating any ethic that would cause the necessary habitat to be available. Our moral obligations, however, demand that we do more than hope or wish that a favorable state of affairs occurs, more or less by chance, after the “bottleneck”. Rather as rational beings, we have the ability and therefore moral obligation to plan, restrain ourselves and take action to bring about a good state of affairs for future generations of Earth’s living residents. I propose that recognizing a species right to exist, that is equivalent to an *immediate initiation of action* to turn over a *minimum* of 50% of all recognized habitats to the majority use of nonhumans is the morally required action, and has the highest probability of insuring that species preservation occurs.

Finally, a species right to exist as the categorical imperative of an environmental ethics is a moral right that we ‘can live with’. First it would only apply to human agents and the results of their actions. Although all extinction events entail an immense loss of value, humans would not be obligated to stop naturally occurring extinction resulting from nonhuman on nonhuman competition, unless it was a result of human introduced invasive species or habitat destruction. Human agents probably would not be capable of stopping most naturally occurring extinction events anyway. Also natural extinction loss of value is often balanced by transformation into more or better-adapted species lines.

Most importantly, the problem of how to adjudicate competing claims in an environmental ethics that recognizes nature's moral rights dissolves when the implicit requirement, that interests of human individuals and groups continue to have weight equal to that of the survival interests of species populations and species lines, is abandoned. The ethics of species moral rights allows that some individual nonhumans can be killed, as they must be, in order for individual persons, nonpersons and species collectives to survive. But the simple axiom of self-defense at the level of the species superindividual denies the destruction of other species by moral agents unless it is necessary to preserve the whole human species line. It should be pointed out that all claims to date that protecting an endangered species would cause unavoidable harm to large numbers of humans have been false. Or it has been possible to see that the harm could be greatly minimized or eliminated by an appropriately concerned larger society. For example the halt to logging remaining old growth in the Pacific Northwest may cost jobs. But workers liquidating the last remnants of ecosystems will soon have to find other jobs anyway. American society is capable of providing them with relocation assistance and job training.

The often-lamented instances of wildlife-human conflict in developing countries are amenable to similar solutions. The fact that corrupt and uncaring governments may prevent these solutions from occurring does not negate the right of species lines to exist.

Conversely, an acceptable extinction in self-defense would be the isolation of human victims or burning of an infected city in order to destroy a newly evolved airborne transmitted version of the Ebola virus capable of killing all humans on earth. It should be emphasized how close to 'natural' kinds of events human defensive responses to diseases are. The general theory of disease ecology and evolution suggests that highly lethal versions of diseases jump to different species often, but their extremely high lethality usually kills the victim so quickly that the new disease species is not transmitted further and becomes extinct. Diseases that do not kill hosts quickly or often can persist, but hosts develop immunities to them analogous to more technological human vaccine development.

The majority 'locking up' of 50% of earth's many different habitats from significant human influence will also greatly lessen the need to adjudicate competing claims. National populations would be expected to make do with resources in their 50% human development zones. A reasonable plan would also allow persons to hike, view and study wildlife and conservatively hunt and fish in these areas in order to fully access the human benefits the species right to exist is intended to provide. In many parts of the world human societies already know how to manage and accommodate to the existence of large protected areas. Other areas of the world should learn how to do so; for their citizens' sakes, as well as for nature's.

Also the taking off the table of a large fraction of the remaining resources in these nation states would be a striking wake up call regarding the earth's limits and hopefully accelerate policy changes intended to stop and reduce human population growth and per capita consumption. Due to the low productivity of many remaining wild ecosystems much additional area might be effectively added to the *minimum* 50% resulting in perhaps 60% worldwide. But 50% or 60%, neither would be unjust, considering that the human species is but one of 5 million species, and perhaps more intuitively relevant, we are but one of at least several highly evolved mammalian species or 'peoples' present in most ecosystems.

More benefits will accrue from the 50% habitat right of nonhuman species. Regarding constant business and open borders advocates' pressure to liquidate undeveloped ecosystems, it will be possible to clearly state and show the reality that much of the USA and other countries like Canada or Brazil *are not* 'empty' or 'underused'. It will be unquestionable that in fact the USA has 300 million human citizens and many billions of nonhuman citizens living in a biotic community within America's borders. The 50% nonhuman national area is totally *used* by other species citizens and not available for human exploitation any more than our National Parks are today.

The nonhuman nations' lands will also protect all life by acting as a safety or recklessness buffer. They will make it impossible for risk-taking human leaders to move the whole human

species to the edge of the ‘ecological cliff’ in search of profits and power to be achieved by developing the last remnants of ecosystems. Initially it will be necessary, in many nations including the USA, for human cultures to scale back their numbers, resource use, total consumption and increase efficiency in order to free up large portions of developed areas for re-colonization by nonhuman species. Population reduction in very high density nations in Europe and in India and China may need to be as high as 80% to insure both the social minimum quality of life for humans and 50% habitat rights for the other species. These kinds of drastic changes could be achieved gradually over the next 100 years by the expansion of one-child policies. Population stabilization and reduction efforts do not need to be intensely coercive. Better financial incentives, education, adequate social security for the aged, ‘living wage’ regulations, enforcement mechanisms that insure equal treatment and perhaps social innovations that would allow nonparents to share actual parenting activities and benefits with biological parents would make these demographic changes acceptable to a nation’s citizens. The fact that these changes may require creativity, effort and some sacrifice to achieve, however, does not reduce our moral responsibility to accomplish them.

Other countries and differently evolved cultures will initially oppose and refuse to recognize the moral right of species to exist, as manifested in the nonhuman species minimum 50% habitat right. This is particularly understandable given

that a large fraction of many nations' leaders and populations do not recognize the existence of some basic *human* moral rights. But contrary to much environmentalist commentary, it is not necessary and it ultimately is fatal for an environmental ethics to try to incorporate immoral elements into its framework.

The theory of social relativism has been largely disproved. It is uncontroversial that many societies, including our own, have been wrong to deny rights to other entities in the past. Over time the benefits of recognizing species rights will become obvious to most human cultures, if they have the opportunity to observe the implementation of this environmental ethics in a progressive society like the United States. Ultimately all of earth's human cultures will recognize the species right to existence and the duties it entails, or suffer the logical consequences of perhaps becoming extinct themselves.

2.12 THE HUMAN MORAL RIGHT OF ACCESS TO NATURE

Providing a 50% nonhuman habitat right will also make it physically possible to realize what should be recognized as a human moral right of all persons: the right of all humans to have access to and benefit from dialectic with nonhuman citizens of the biotic community. This can be easily conceptualized as a right as important as the accepted human rights of access to a basic education and social minimums of an adequate diet and health care. The evenly dispersed and large-scale placement of 50% of all ecosystems in public-lands status will mean that middle and working class citizens will have near home access to

nature. Millennia of efforts by the ‘best and brightest’ of humanity to seek out the benefits of nature overwhelming prove that nature is a basic good that all persons should enjoy. It is essential to human flourishing.

No longer will experience with nature be limited to the wealthy who have hill top villas, hobby ranches and beachfront mansions, or to common persons who just happen to live in or near undeveloped areas. The nonhuman habitat right aspect of species rights ethics may become increasingly important to ensuring the human right of access to nature, as global energy supplies dwindle, and the cost of long distance transportation now needed to reach, the relatively few, remote natural areas increases.

The human right of access to nature guarantees the moral right of the human species to continued existence, protecting the human species lineage from extinction causing actions of contemporary elites and other short sighted members of the human community. There are numerous ways that destroying nonhuman species and eliminating human contact with nonhuman nature could gravely injure of even destroy humanity. The most often discussed dangers involve the high probability that yet undiscovered drugs may exist in endangered plant or animal species that could cure serious diseases or ailments. What should also be considered, is the possibility that diseases or ailments of such lethality may arise in the future that they may actually destroy the human race, if drugs from endangered sources are not available to combat them.

Then there is also the certainty that many species that may become extinct if we proceed to double the human population in the next 50-100 years, and heavily exploit most of the Earth's productive areas, are presently supporting human life in many ways that we are not aware off. Therefore, losing these species through extinction or denying most citizens access to them could also lead to a catistrophic loss of human life or the extinction of the human species. One possible mechanism is suggested by the widely reported problem of the great increase of allergy illnesses. Studies in several European countries found that persons that lived on farms during their early years had substantially fewer allergenic reactions than those raised in city homes did (von Mutius 2007). Apparently the diverse organisms that occur in natural surroundings that farm children are exposed to, life lacking in artificial city environments, act to adjust human immune systems to a correct, we might say, Socratic mean of response to allergens in the environment.

It is also true that nonhuman organisms make up a large portion of the human body equivalent to slightly less than the weight of the average person's liver. We are actually "human-microbe hybrids", because the DNA of our 100 trillion microbes contains twice as many genes as the human genome. These hundreds of species of organisms provide many services to their human comrades that include the creation of vitally needed vitamins and the digestion of food. (Anderson 2009:154) Some of these are initially and constantly gleaned from 'wild' out of body sources,

so the continued annihilation of life outside of our bodies threatens to cut us off from these naturally evolving life-partners.

Also it has been know for decades that DNA and RNA transfers have occurred between widely diverse species and that these additions have lead to evolutionary change. When this occurs with DNA it is called “horizontal” gene transfer and is known to take place when viruses invade bacteria and animals. This mechanism has recently been proposed to be responsible for the beneficial spread of an antifreeze gene in unrelated fish species though contact of antifreeze gene containing sperm with already fertilized fish eggs (The Economist 2008). The theory is that only the absent antifreeze gene was integrated into the fertilized egg’s DNA. Killing off great numbers of species therefore may greatly reduce horizontal gene transfer that might improve the future survival chances of the human as well as other species.

Finally, the most important human survival tool or capability is our use of reason, discovery of new knowledge and innovation. The knowledge of billions of years of evolutionary experimentation and experience is contained in the DNA, manifested phenotypic properties and behavior of the other millions of species on Earth. Nonhuman species therefore comprise an almost unlimited source of continually progressing and improving knowledge that can be used by persons to ensure the continued survival of humanity. We routinely observe that the

great amount of additional knowledge that persons raised in rural areas, who also receive a good academic education, have access to increases their abilities to survive and seems to increase their intellectual capabilities as well. The great loss of the knowledge contained in other species life lines that will occur if we continue the status quo of economic and population growth motivated habitat destruction, endangers the human species moral right to life. Therefore, it is critical that human society recognizes the human moral right of access to nature in order to generate the powerful moral rights based restraint necessary to stop not only further ecosystem liquidation and species extinction, but to reduce the probability of human extinction as well.

2.13 THE SPECIES RIGHTS SOLUTION REPLACES APOCALYPTIC FATALISM, LIVE FOR TODAY SHORT TERM FOCUS, AND FANTASY SOLUTIONS

In order to motivate people to work hard and sacrifice to solve a problem it is necessary to present them with a logical plan of action that appears to have a significant probability of success, given their experience or knowledge of cause and effect in similar situations. An adequate environmental ethics must give them hope.

A few years ago I engaged in a discussion with other biologists working on a threatened species project (Florida black bears) that turned on our political and business leaders' insistence on continually increasing the US population, and the inevitable destruction of wildlife habitat and future extinction that this would cause. One biologist, who I had judged to be one

of the most promising of the younger generation, finally stated in exasperation:

> Look we are just going to have to accept that most of the natural world and species are going to be lost. All we can do is try to have as much fun doing research and working with wildlife as we can now.

Interestingly this statement did not suggest to the author that the ‘younger’ generation is any less ethical than previous generations. But rather it proves that their teachers and mentors have failed to develop an ethics that indicates a plan of action sufficient to give subsequent generations hope of averting an apocalyptic event in the future.

The historical habit of business leaders in the USA, of heavy dependence on supplying increasing populations of consumers, as opposed to real innovation and competition, to insure continued profits is as we have seen only one of the killers of the hope of avoiding an ecological crash. Political and religious leaders and even leaders in the fields of philosophy and ethics have also blocked most other means of averting ecological crash due to a perpetually increasing number of human resource consumers. They have done this by declaring or implying an unrestricted right of humans to reproduce or to migrate from overpopulated areas and ecosystems they have devastated to undeveloped habitats, and or indoctrinating societies that family planning and contraception are wrong. Alternately, or in addition, they offer the obviously failed fantasy solutions of hydrogen-fueled economies, global redistribution of wealth, or yet undeveloped super technologies

that will arise just in time to save the earth. Of course many may be distracted or self-deluded enough to believe these unlikely solutions. And elites may be assured of their superiority and ability to survive no matter how bad things get, and so are relatively unconcerned about whether 'fantasy solutions' will actually work. This sense of invulnerability seems to cause many leaders to publicly accept and promote confidence in science fiction fantasy solutions as a way of maintaining the short-term-profitable status quo.

But it is my impression that a critical mass of persons in our society have also seen the uselessness of obsessing about hydrogen energy when no environmentally friendly way exists to produce it in large enough quantities to matter. They also sense, that given the finite amount of resources on earth and current levels of environmental degradation, that the redistribution of material resources is unlikely to bring billions of present day poor and the 3 or more billion additional persons projected by mid-century up to an acceptable social minimum. It is also highly probable, that since current technologies have not been able to halt or keep up with the continuing deterioration of the environment or erase contemporary poverty, that technology is unlikely to solve these problems in time to prevent an ecological collapse if reckless perpetual 'growth' policies continue.

Alternately the restraints mandated by an adequate ethics that includes species rights, do offer a logical, achievable with

real technology action plan able to avert (rather than just to respond) to future global environmental crises. The competing high priority moral rights of nonhuman species rights reliably accomplishes this by greatly reducing the scale of the human enterprise on earth, thus reducing total human environmental degradation below a critical level.

2.14 IMPLICATIONS OF PAST NATURE'S MORAL RIGHTS ADVOCACY

That nature can have some moral rights is a concept that a significant number of persons have accepted in the past and therefore could accept in the future. Although the language of the Endangered Species Act states that the reason for preserving other species is for human benefit, the duty toward legal restraint on human action that the act establishes is interpreted by many to indicate the existence of a moral right of species to exist. Then despite set backs, this implicit assumption of many environmentalists that moral rights of species collectives exist has motivated actions that have yielded significant preservation success.

The history, ethical validity and effectiveness of nature protectionist activism that involves violence against property and some times against other persons is controversial. But two things are certain. First a significant number of well-educated persons have believed that species populations have a right to exist. This was proved by their willingness to take violent action and risk arrest to stop future violations of species or population level rights.

Second, society eventually reacted in a way to activism regarding whales, old growth forests and lynx, that suggests much wider support for the general idea that species have a strong right to exist. This wide support is evidenced by eventual international bans on most killing of whales, a marked reduction in harvest of remaining old growth forest in the Pacific Northwest and the successful reintroduction of lynx in Colorado.

The proof of what is objectively true is not reliably determined by majority opinion. Nor is it proved by the passions of groups willing to exert great pressure on the rest of human society. But there is a real paralyzing inner conflict, regarding nature's rights in this regard that should be discussed by environmental philosophers at this critical juncture in earth's environmental history. On one hand, many philosophers appear to agree in a deep underlying sense that nature has what amounts to some kind of moral rights, based on a wide array of ingenious arguments these end, however, in pronouncements that they are not going to go quite that far. This reluctance appears to be based upon the belief that the greater society or powerful decision-makers will not accept the recognition of other species rights. This reluctance may also be based partially on the belief that the majority of humans would not accept the reduction in human privileges that the acceptance of species' rights would entail.

I argue that environmental philosophers have got this wrong on two counts. First the truth has enormous power to overcome

the powerful forces that they fear. And second, I believe that they do not have sufficient faith in the intelligence and goodness of the common people. Most people at least in American society do in fact believe on their own in an informal kind of species rights. They, and present nonbelievers, could be convinced to pressure our leaders and change their own actions in ways that would benefit nature if philosophers and major environmental groups would assert and strongly advocate for the recognition and enforcement of other species rights. The move to a just and stable biotic community can not take place until the progressive mutation of the species rights mechanism is developed and *exposed in a big way* to the selective forces of human social evolution.

2.15 CONCLUSION

The theory of species rights will protect and insure the flourishing of both human and nonhuman citizens of earth. All species extinctions are immense losses of autonomous intrinsic value. The word symbol ‘species’ represents both a class abstraction, *and* the real existence of the second level species ‘superindividual’, an ongoing entity, an isolated interbreeding population or gene pool. This superindividual has genuine interests and, therefore, a very great amount of moral considerability that in turn warrants the recognition of a species moral right to exist.

Until recently total global losses caused by competition between nonhumans have been small due to species improvement,

multiplication and replacement. The recently evolved rational property of humans has enabled the development of technology and explosive population growth, the human power to cause major ecosystem degradation on both regional and global scales. This rationality-based ability to cause loses of value equal to those of major geological extinction events is balanced by the rational ability to also devise the restraint mechanism of moral rights. Accordingly it is necessary and sufficient for the human species to recognize and enforce species rights.

The species group right by itself is vague and would allow for a continuation of ineffective token preservation. Therefore, the categorical imperative of species group rights must be made effective, by setting it equal to a nonhuman species land right to 50% of all identifiable ecosystem types. Protecting this large a fraction of earth's ecosystems from reckless development orchestrated by power elites, would also protect common persons from future environmental collapse by creating an ecological buffer, far back from the edge of a near-future 'ecological cliff'.

The 50% other species land right will also insure the corollary human right of access to and dialectic with the full range of nonhuman entities. That these other species and common person human rights may be difficult to realize, and strenuously opposed by powerful forces, does not reduce their moral validity and our ethical obligation to advocate for their adoption.

The varied theories of many environmental philosophers also indicate that species collectives possess very high moral value, value of a magnitude that should justify the recognition of species moral rights. But these philosophers appear to believe that decision-makers and the general public would not support an explicit advocacy of species rights. And, therefore, that this assertion is not pragmatically justified.

I propose, however, that since this autonomous intrinsic value exists, and is actually recognized as an objective truth by many persons, that it has the power to eventually succeed in convincing all human cultures to recognize and act on the reality that other species have a moral right to exist.

CHAPTER 3

OBJECTIONS CONSIDERED

Here I will address objections to my argument that environmental ethics should be based on two fundamental rights. First that other species have a moral right to exist, and as human moral agents we can only fulfill our duty to nonhuman nature by recognizing that this right is equivalent to a nonhuman right to a *minimum* of 50% of earth's diverse habitats. Second, that ordinary people have a moral right to the benefits of abundant access to wild nature that will be insured by this large-scale preservation of natural ecosystems.

I will begin by addressing the objections of the environmental philosophers that I consider most sympathetic to extending human consideration to nature such as Holmes Rolston. I will then address objections based on progressive humanist anthropocentric concerns for the poor. Finally I will answer the implicit objections of business and political leaders to any significant consideration for nature. I believe that these concerns, seldom directly discussed or disputed within the literature of environmental philosophy, substantially motivate environmentalist reluctance to make strong bio-centric claims. If the strategies of these powerful interests can be shown to be ineffectual in achieving their implied anthropocentric goals in the long term, as well as being substantially immoral regarding nature, this strengthens the case for a rights-based environmental ethic.

3.1 RIGHTS ONLY EXIST IN HUMAN CULTURE

Perhaps the most common objection to recognizing rights for nature is summarized by Rolston's assertion that rights are concepts specifically constructed to protect values of persons within human culture or communities:

> Rights is a political concept, right for the human that lives in a *polis*, a rebuilt, cultured environment, but not right for the nonpolitical animals who remain wild. (Rolston 1994:109)

Rolston and many other philosophers also note that that these rights concepts do not exist outside of human society, because they do not appear to be understood or respected by nonhumans as evidenced by actions of nonhumans toward other nonhumans and humans.

It is difficult to argue against Rolston's first objection, which largely amounts to the truth that a majority of persons in human society presently limit the definition or extent of the word 'rights' to positive and negative duties of humans to other persons. Admittedly this tradition of belief is deep-seated in human consciousness and will be difficult to overcome. He is correct in implying, as many other philosophers have, that it would be far easier to avoid a major time-consuming effort to change this belief, if one could find other reasons for justifying and motivating strong environmental protection. It is also implicit in the discussion of nature's rights that many people may at least subconsciously resist recognizing rights for nature precisely because they do not want to surrender the current status quo of humanity's highest priority claim on

earth's resources: a top priority privilege that rights restriction to persons insures.

These appear to be the major reasons for Rolston's choice of the argument strategy of claiming that the immense intrinsic value present in nonhuman life should lead directly to powerful human duties to protect nature. This approach skips what one might call the intermediate 'rights' step practiced in the parallel chain of judgments (human properties, intrinsic value, rights, duties) about human moral considerability that eventually derive moral action. Again this avoids resistance due to the reasons indicated above, but at a cost.

In the human chain, the rights step accomplishes the function of evaluating the relative importance of human interests and values and assigning a very high 'trumping' claim value by recognizing certain interests as rights. Rolston's nonhuman intrinsic value chain without rights does not recognize or establish any clearly stated similar mark or level of value that can be used to judge competing claims of humans versus nonhumans. His work, however, does a superb job of describing the properties of life, that justify the assignment of immense intrinsic value that convince many biologists, philosophers and wildlife professionals that some undefined large duties are owed nonhuman life. But it is far less clear whether the concept of intrinsic value might ever be well understood by the larger public and political decision-makers. There the main term for stating the existence of important moral claims remains 'rights'. And the

problem of dissimilar units and levels of value at the ends of the human and nonhuman chains still presents problems for competing claims judgments for philosophers and environmental professionals.

Rolston tries to solve this problem by proscribing how specific nonhuman immense intrinsic value versus human rights competing claims should be adjudicated. Of particular relevance to this thesis, he states that the intrinsic value of species lines should sometimes override what could be called the human rights interests of individuals and groups of humans. This judgment is strongly contested by philosophical advocates for poor humans in developing countries, who obviously believe that human moral rights ought to trump what are to them rather vaguely defined, regarding moral priority, intrinsic values. Unfortunately, despite Rolston's factually correct assertions that in instances where persons' interests were overridden by those of species lifelines, governments could easily compensate humans with a more equal distribution of wealth, conservation groups have become very defensive and reduced demands for human sacrifice regarding preserving areas in developing countries.

Now it is certainly likely that many advocates of the poor and business resource development interests would not accept any environmental ethics that gave some human interests lower priority than nonhuman needs. But it is also likely, that if a common policy statement was adopted by major environmental groups which recognized a high-order species right to exist, these

development advocates would have a more difficult time defending projects likely to cause extinction to third parties or the general public. This rights based stimulation of additional public opposition likely would cause development interests to abandon many of these projects.

There is also the problem that the intrinsic value method of generating environmental duties does not directly challenge the status quo of the almost complete primacy of human rights by proposing a similar nonhuman measure that might result in equal or superior claim weights. But by not asking for what you want, in this case weighty nonhuman rights claims that will override some human claims, you are guaranteed to not get what you want. A widespread recognition of 'species rights' sets the stage for competing claims disputes between humans and nonhumans on which nonhumans have some significant probability of prevailing, some approximate equality in the debate.

Rolston's description of 'where' rights exist is in a sense accurate, but particularly in the contemporary world may be incomplete. On a recent hiking trip I proposed that a trout population in a mountain lake (short growing season) might have a right to exist that required my restraint in the form of releasing fish as opposed to killing individuals for dinner. Rolston, questioning me in the Socratic manner, asked if I thought the trout population still had the right to exist after we descended to our lower elevation campsite. I replied that I thought in line with his philosophy that the right came into

being, and at the same time was only needed, when a human moral agent ‘came on the scene’ at Mirror Lake.

This example suggests a complicated problem of comprehension regarding if and when and what areas are under human influence. It also indicates why nonhuman moral rights are needed and can be justified for nature now, when perhaps they could not have been in the past.

I propose that there have been four eras of relative human-on-environment influence that have generated four different levels of moral consideration and moral duties to nature. The first or ‘primitive’ hunter-gatherer era saw humans clustered largely around areas like rivers that were highly productive for fish, wildlife and wild plant foods. They hardly used adjacent upland, desert and mountainous areas and did in fact perceive these areas as wild dangerous places where young men went on adventures or vision quests to prove themselves. But because of their limited ability to travel far on foot or carry resources from one area to another, and their complete dependence on wild animals, fish and plants for food they realized that they were members of local ecosystems. And subsequently they became aware that how they treated other local ecosystem members had a direct unavoidable effect on their well being.

Because they were so critically dependent on the welfare of nonhuman species populations and lived so intimately with them, they turned to the most effective mechanism for controlling or restraining human action used within their tribes to insure group

survival and cooperation. This was an early version of rights for nature embodied in many traditions and moral rules regarding how nonhumans were to be treated, including but not limited to, methods of killing and use indicated in Chapter 1.

The following agricultural period saw a gradual decline in human civilization's real and or perceived dependence on nature and subsequent need to treat nature in respectful non-harmful ways. To the extent that human agents increasing believed they were 'in charge', because they could plant crops and raise domestic animals, they did not perceive it necessary to treat wild nature or most other species with non-damaging consideration.

During the following industrial period this sense that humans depended on other species populations for survival or that humans affected and, therefore, might have some moral duties to the natural world, was further diminished. Human technological ability to manufacture food via modern agriculture and cheaply transport raw materials to human depleted areas blurred the ultimate dependency of humans on earth's ecosystems, and therefore, the pragmatic need for weighty rules of restraint on human actions affecting nature. Also the formation of large cities and suburbs where humans lived largely isolated from most other species also served to erase the realization that nonhumans and humans had similar life histories and interests and that humans and nonhumans were part of a larger interdependent biotic community.

During this period, perhaps ending in the 1950's to 1960's, the human population was still relatively low, reaching 3 billion, and substantial wild areas that were little impacted by humans still existed. In this era it might have not been completely nonsensical and immoral to maintain that nonhumans did not have rights, because there were still large areas where moral agents were seldom present and whose actions had little potential to substantially affect nonhuman or long-term human welfare.

The situation has changed dramatically in the present late industrial period. Now 6.7 billion human resource consumers and polluters may affect even remote areas like Mirror Lake through air pollution, climate change and introduction of lethal invasive species, whether or not hiker-fishermen are present. The human community has now expanded to the point that even distant human actions have the potential to injure nonhuman interests or goals, thus creating the necessity for moral restraint on many human actions. Fish in Mirror Lake have existence rights against distant humans generating excessive amounts of sulfur dioxide and humans have obligations of positive duties to rigorously exclude most biological material coming into the USA. It does not effect the rationale for nature's rights, that nonhumans can not understand and reciprocate regarding recognized rights, anymore than it does that young human children can not reciprocate morally. What does matter is that it is most important to restrain the more powerful entities in both human and the larger

human-nonhuman biotic communities in order to insure cooperation and survival.

In summary, while Rolston takes a position against moral rights for nonhumans, his theory of intrinsic value actually forms a very firm basis or goes perhaps 90% of the way toward supporting a species moral right to existence. First his description of the immense intrinsic value in species lines establishes them as entities that ought to be recognized to have very high trumping value or moral rights, and that these values and moral rights are of the magnitude that most agree are appropriately assigned to the human species and human racial groups. Second his criteria that humans must be on the scene as in the human community or regarding sentient domestic animals in order to generate moral rights responsibilities is met, and forms a supporting rationale for species rights, now that human actions affect the whole biosphere. Lastly Rolston's description of the limitless knowledge contained in nonhuman DNA and life processes coupled with his confirmation of the immense intrinsic value in the human species whose most important survival adaptation is indicated by Aristotle's statement that "men desire to know", supports the right of continued human access to nature—a right threatened by human population growth and biodiversity loss.

3.2 CONCEPTUAL DIFFICULTIES WITH SPECIES RIGHTS

Callicott like Rolston also recommends that it would be better to abandon the politically controversial concept of species rights and use the theory of intrinsic value alone to

generate duties to nature. But Callicott and other philosophers also emphasize an additional belief obstacle or conceptual difficulty regarding attributing rights to species. Callicott writes that the western liberal tradition largely sees rights as entitlements of *individuals*:

> But the term "species" traditionally designates a class or kind. A class, by definition, is not an individual or localizable thing. (Callicott 1989:135)

Tom Regan's animal rights philosophy, although very sympathetic to nonhuman welfare, reflects the same individualistic moral considerability/rights view:

> The rights view restricts inherent value and rights to individuals. Because species are not individuals, the rights view does not recognize the rights of species to anything. (Regan 2004:xxxix)

Moral considerability or moral rights possession is widely agreed to be only possible in situations where interests exist. In situations in which interests do not exist, interests can not be violated or benefited and so no moral considerations are thought to exist. Gary Varner, when discussing his theory of biocentric individualism, mentions the underlying reason for much opposition to recognizing rights of holistic entities when he writes "On my view, only individual living organisms have interests." (Varner 1998:8)

These objections to species rights fail, however, if, as many endangered species biologists and environmentalists believe, species actually constitute higher level individuals inhabiting biotic communities, and that they have an interest in continued

survival. In an attempt to address and discount this view, Callicott briefly mentions and then dismisses David Hull's assertion that species are higher level individuals or 'superorganismic entities' localizable in space and time by stating that Hull's theory "has not been universally accepted among philosophers of science" (Callicott 1989:136). Somewhat surprisingly, Callicott then concedes that species rights might be understood by analogy with a nation's right to sovereignty, most importantly that nation's rights are not equivalent to the sum of the rights of its individual citizens. Never disproving the validity of group rights in general, he then jumps to a dismissal of the idea of species rights, because he believes that this notion "expresses in a particularly current and forceful manner of speech a deeply felt and widely shared intuition that species are intrinsically valuable". (Callicott 1989:136) If I am not mistaken this statement implies and agrees with Rolston's view that attribution of *only* intrinsic value to species can generate as effective protection of species as acceptance of the allegedly problematic rights intuition or recognition could.

Callicott too quickly dismisses the reality that species are higher level individuals. Callicott's report that philosophers of science do not universally accept Hull's conception of species as superorganisms somewhat miss-characterizes what seems to be the majority view on this issue, and at the same time does not constitute a strong argument against it. Rolston has astutely commented to me regarding Callicott's implied requirement of

universal acceptance, that many reasonable theories that he is aware of have not been universally accepted, but that does not constitute a valid argument against them.

Rolston also sheds light here, because although he does not recognize species rights, he convincingly describes species as entities he calls “life lines” that have interests and sufficient identity and individuality that they can be ‘superkilled’. It is apparent that Rolston’s effort to establish a property of individuality for species is meant to result in recognition of a kind of ‘rights deserving’ intrinsic value for nonhuman species. He hopes that this kind of intrinsic value will then be capable of generating very high order duties of the kind that result from the rights interest-prioritizing mechanism operative in human communities. Rolston’s arguments accomplish this through use of aspects of the “biological species concept” of highly respected evolutionary biologist Ernst Mayr.

Biologist Michael Ghiselin, perhaps one of the first to state “that biological species are not classes, but individuals", has asserted that although this view is “still controversial, it has been widely accepted” (Ghiselin 1987:127). Similarly a recent review essay on the species concept describes Hull and Ghiselin’s view as “we should think of them as individuals” and identifies this as the “prevailing view of the ontological status of species” (Ereshefsky 2007:4).

Returning to Mayr’s theory, he points out that the word *species* represents both an abstraction, a class of similar

objects and also (1) a reproductive community, (2) an ecological unit, and (3) a genetic unit. Species are protected gene pools in a world in which through lack of interbreeding *a real gap or discontinuity between species exists*. This means that species are real discrete individuals in the larger biotic community. (Mahr 1970:12)

One sometimes reads in the media that it is difficult to tell species apart or species boundaries are 'fuzzy'. If applied to this discussion, this could mean that if a species cannot be identified or separated from the surrounding universe so it can be observed, it cannot be an individual or be thought to have interests. But this alleged situation only means that biologist 'splitters' have divided a population of a certain type of organism into too many parts. If one, for example, incorrectly divided American buffalo into 10 different species, it certainly would be difficult to tell them apart, particularly since all these animals would be able to interbreed. But the real species gap in very different physical properties, ecological niche, and reproductive isolation allowed both Native Americans and European settlers in the 1800's to easily distinguish the correct one America buffalo species from mule deer and elk as separate species.

The truth of the existence of real species entities or species "superindividuals" (Dobzansky 1970) is also supported by the logic of their "biological meaning" (Mayr 1970:19) or critical survival function to living organisms. Behavioral and

physical obstacles to interbreeding that constitute a large part of the identity and individuality of species are necessary to keep particularly successful genotypes, in particular ecological niches, from being broken up. The unlikely existence of a world without real species is illustrated by the following example. If red fox and wolf like animals could interbreed in an arctic ecosystem, many intermediate sized hybrids would be produced. Since there is not a niche for a medium sized dog like predator in the far north, all these hybrids would die. This large waste of reproductive effort would likely cause the extinction of all dog-like predators in this alternate arctic world.

Finally the philosopher Lawrence Johnson offers perhaps the most obvious and intuitive example of why most of us do in fact think of species as superindividuals when he convincingly describes humanity, the human species, as an “ongoing entity” that has “interests” (Johnson 1983:345). We easily conceive of our own species, humanity, as an entity that has morally significant interests in continued survival and flourishing and, therefore, that rights attribution could be an appropriate means to protect other species as well as humanity’s interests.

3.3 RIGHTS EXTENSION TO COLLECTIVES IS ARBITRARY AND DOES NOT ANSWER ALLOCATION QUESTIONS

Bryan Norton has written that “extraordinary arbitrariness” would be introduced “in making detailed ascriptions of rights to collectives” (Norton 1982:36). By this he presumably means that the assignment of, for example, rights to species as opposed to many other collectives like ecosystems or forests could be seen

to be arbitrary. This arbitrariness could then in turn undermine the credibility of species' or any other collective's rights recognition. And that recognizing species rights would set up a philosophical and policy situation in which others would claim rights for a variety of other collectives. He then goes on to declare:

> Expanding the number and types of rights holders does not address the problem of deciding which individual claims have priority over others-it only increases these demands and makes it more and more difficult to satisfy them.

In other words he suggests that the resulting tangle of competing rights claims between humans and numerous collectives would then be impossible to resolve.

My response is that the recognition of species rights is not arbitrary. A species or species population is the nearest, next-higher level of organization of life to individual organisms and therefore is a logical and limited step forward. This is particularly true since human culture understands and approves of the concept of human group rights: rights for collections of similar individuals within human communities. We speak of rights of a business corporation, or of a university, or of a church. Conceiving of rights for ecosystems, forests and mountains, collectives comprised of thousands of different species and nonliving as well as living objects and processes, however, is much more abstract, complicated and distant from majority beliefs and opinions.

There is also no logical reason to attempt to secure rights for higher than the species level entities or nonliving objects. These higher level collectives can be protected due to the reality that they are instrumentally necessary to insure the satisfaction of local and regional species population rights. For example it is logical to mandate that 50% of all rivers must not be damned in order to protect a large fraction of anadromous species populations within a given bio-region.

The moderate step of limiting rights extensions to species collectives also largely defeats Norton's objection of non-resolvable claims due to great complication. But he also has written that adjudicating competing claims between humans and species collectives would also not be possible, because rights attribution by itself does not answer the question of which claimant ought to get priority. My species rights argument, however, that includes 1. a species right to exist, 2. a species 50% habitat right, and 3. a human right of access to nature for all persons - supplies ethical rules adequate to make decisions regarding conflicting human-nonhuman claims. These rules ultimately dictate that only a nonhuman species caused likelihood of human species extinction could justify extinction of other species by human self-defense action. And resource or habitat claims of individual persons and groups of humans would lose if they violated any of the three high priority species rights rules.

Finally there is a simple logical response to the objection that according species rights would complicate competing claims conflicts. We can show that increased complication does not necessarily constitute a good moral reason against any ethical decision by recalling the situation after the abolition of slavery in the American South. Abolition certainly complicated life and decisions in the South for many years after 1865, but it was the right thing to do, and lead to a much stronger and healthier human community for the over whelming majority of Americans.

3.4 ALL SPECIES DO NOT HAVE EQUAL INTRINSIC VALUE AND AN EQUAL MORAL RIGHT TO EXIST

Some may interpret the assertion that all species have immense intrinsic value, and therefore that all species lineages have a moral right to exist, as equivalent to a statement that all species lineages have equal intrinsic value and an equal moral right to exist. Most philosophers do believe that there is a difference in the intrinsic value of individual organisms and species based on their possession of diverse properties ranging from life and the ability to respond, reproduce and evolve to additional abilities of mobility, sentience and rationality. Similarly, others believe that nonhumans are owed differing amounts of moral consideration and the recognition of weaker or stronger animal rights based on these varying properties. This possible value and rights variation would pose a problem for my environmental ethics if in fact it depended on a foundational premise that all species have equal intrinsic value.

My basic premise, however, is that all species superindividuals possess a high threshold level of ‘immense’ intrinsic value due to the combined values of all existing individuals and yet unborn future generations. This immense threshold value of species lifelines means that it is impossible that the benefits from destroying a species that might be gained by a human individual or group could be greater than the intrinsic value of a life lineage. This is exemplified by the historical fact that endangered species conflicts have revolved around sacrificing the intrinsic value of an entire species superindividual, and often associated instrumental value that greatly enhance human intrinsic values. And these great loses have been suffered for nonvital human benefits like cheaper electricity or a short-term jobs gained from building a dam.

It is possible that if we were wise enough to determine the correct standards of evaluation, and then were able to total the combined intrinsic value of all future generations, to include the evolutionary improvements differing species might achieve, that we would determine that the intrinsic value of one of the 100 species of ants, or one of a few primate species, in a tropical jungle were not as intrinsically valuable as the jaguar species. But the limited capabilities of mortal humans, indicates that we would likely make many mistakes determining the relative value of species lifelines. This means we face a horror of value loss if moral agents allow a state of affairs to develop

in which relative value judgements of this kind determine the survival of species lineages.

Unfortunately, the acceptance of most environmentalists that it is inevitable that 90% *or more* of many ecosystems will soon be destroyed, creates the perceived need for this kind of species triage based on judgements about relative species value. One of the primary goals of the species rights theory and minimum of 50% habitat preservation is to make this tragically flawed intrinsic value evaluation unnecessary. Preserving a minimum of 50% of each habitat on Earth makes whatever reality is contained in the possibility that species lineages possess different intrinsic value irrelevant in most conceivable future human-nonhuman interest conflicts. But as I have illustrated elsewhere, this does mean that the species rights theory cannot accommodate the validity of considering some relative estimate of intrinsic value in a life or death struggle, between humanity and some nonhuman species life line. In the most likely conceivable scenarios the relative intrinsic values would be uncontroversially different, and a self-defense super-killing justified, as between a mutated population of highly lethal Ebola virus and the whole human species. But instances in which the survival of a nonhuman species would threaten the extinction of the human species will be extremely rare, so differences in the intrinsic value of species do not pose a significant obstacle to the adequacy of species rights ethics.

3.5 WEAK ANTHROPOCENTRISM IS AN ADEQUATE ENVIRONMENTAL ETHIC

Bryan Norton (1984) and more recently Andrew Light (2002) have questioned the effectiveness of environmentalist appeals based on recognition of non-human intrinsic value or rights, and have instead advocated the use of weak anthropocentric or pragmatic environmental arguments. Both authors note the obvious, that environmental philosophers do not unanimously agree on the existence of nonhuman intrinsic value or nonhuman rights. Therefore, they say, these theories do not supply a firm foundation for an environmental ethics needed to critique human actions harmful to the environment.

Light additionally points out that environmental philosophy has two different audiences, first environmental philosophers and second a combination of environmental activists, resource managers, policy makers and the general public (Light 2002:558). He maintains that this second audience of nonphilosophers, the part of society that must be motivated to actually accomplish environmental protection, find it even more difficult to recognize the abstract concept that nonhumans are morally considerable based on intrinsic value or that nonhumans have rights. Light asserts that this is true, because most persons are used to thinking of value, moral obligations and rights in strictly human terms.

Note that Light does not dispute that the theories of intrinsic value or rights recognition for nature are true. But he claims that the difficulties of opposition to these reasons

should be avoided, particularly when discoursing with nonphilosophers.

Norton believes that an adequate environmental ethics can be achieved by asserting a “weak anthropocentric” rationale for protection of nonhumans. This weak anthropocentric ethic consists of an ethical standard of *considered* as opposed to merely *felt* human preferences. Now, felt preferences or desires of presently living individuals allow many actions to proceed that degrade the environment and also have harmful effects on human interests. Norton’s light anthropocentric ethics proposes that initial felt preferences be evaluated based on concern for future human generations and the instrumental-human aesthetic, health and material benefits of protecting nature. Only preferences or contemplated actions that are found not to injure these human concerns or interests will be judged to be right action and therefore acceptable or *considered* preferences. (Norton 1984:134)

Weak anthropocentrism and Light’s similar strategy termed “methodological environmental pragmatism” (Light 2002:561) suggests two potential objections to a theory of species rights. First that since most persons are used to thinking of rights in terms of human-on-human action, they cannot be convinced to recognize species rights. It also suggests that they cannot be convinced of the existence of species rights in time to use nonhuman rights as a motivator to avert great near-future environmental damage. And second, that these anthropocentric

strategies that depend only on human interests as a motivator are adequate to prevent this environmental damage, or perhaps that they will at least be more successful.

First I believe that Light has got it precisely backwards when he writes that it is more difficult for persons to recognize that nonhumans could have rights than that nonhumans could be morally considerable based on possession of the abstract concept of intrinsic value (Light 2002:557). At least in Western society, the general public has experience with and is used to rights discourse regarding the vital interests of sentient nonhumans as well as humans, while the theory of intrinsic value has been largely confined to discussions of environmental professionals and philosophers. Also the general public in the USA has been very supportive of environmental and endangered species protection. In the recent general election voters passed the overwhelming majority of often-expensive proposals to purchase and preserve open space in communities across America (New York Times 2008). The evidence suggests that, contrary to philosophers' pessimism, the general public would respond favorably to a moderate assertion of species rights. Many already, in fact, believe the protections of the Endangered Species Act constitute a statement of the moral right of species to exist, regardless of the act's instrumentalist anthropocentric wording.

Although environmentalists may underestimate the selflessness and good judgement of the general public, what is

probably of as great a relevance to the concerns of philosophers is that very powerful nonphilosopher elites might be the most resistant obstacles to species rights. Then what we philosophers must consider is the morality of yielding or catering to the beliefs of these power groups depending on whether they represent the will of the majority of persons, the entity that is supposed to rule in Western democracies.

Jared Diamond, the author of *Collapse: How Societies Choose to Fail or Succeed*, lists a number of reasons often given to dismiss environmental concerns or protection efforts. One of these refers to Light's 'policy makers' nonphilosopher group, by stating a view we often encounter in our society:

> What can I, as an individual do, when the world is really being shaped by unstoppable powerful juggernauts of governments and big business" (Diamond 2005:514).

It is obvious that 'policy makers', governments and big businesses will likely refuse to accept any consideration for nonhumans or humans that might injure their short-term interests. But this refusal is likely irrespective of the logic or morality of either anthropocentric or nonanthropocentric arguments, for as Diamond reminds us, elites are able to isolate themselves from environmental degradation in "gated communities".

Even though powerful government and business interests may oppose rights for species, this does not constitute a moral or pragmatic reason to yield to their likely responses. Philosophers should not restrict themselves to trying to contrive arguments and efforts to try to appeal to these elites' selfish

interests. Rather environmental philosophers should go around them and advocate directly to people's consciences for recognition of species rights. Then they should agitate with the mass of common persons for government officials to obey the will of the majority. The fact that our government now essentially defies the will of the people regarding some issues does not mean they cannot eventually be forced to obey an American majority.

It also seems obvious that, at a minimum, weak anthropocentrism is *no longer* the basis for effective protectionist appeals. Something rather like it has in fact been the majority strategy used to appeal to nonphilosophers since the beginning of environmental philosophy and activism in the 1800's. While the population of America was still rather low, only half of its present size in the 1940's, and 100 million less than today on the first Earth Day in 1970, the total acreage of government protected lands and undeveloped private land constituted a large fraction of many American habitats. Therefore, up until this point it seemed that largely anthropocentric appeals were effectively preserving the environment. The constant development of wild private lands in the last several decades, however, has resulted in a great reduction in wild land totals, and the kind of "island populations" and "museum piece" preservation condemned by Aldo Leopold when he commented on the rather small percentage of lands placed in protected status by the late 1940's (Leopold 1949:198, 1993:149). Wildlife and poor and common persons experience the

effects of this recent massive loss of wild habitat, but decision makers and the more affluent can afford to travel ever greater distances to remaining park show pieces like Yellowstone and Yosemite as access to undeveloped private land continually decreases. This elite ability causes an illusion that the continuing anthropocentric appeals of the 'majors' is working, and will continue to work. But the real state of affairs of most college age persons experiencing the destruction of the last hiking and hunting grounds in their home towns as they grew up, appears to be the predictable result of preservation actions based on the status quo paradign of anthropocentric motives to save nature for human amusement, aesthetic experiences or future material exploitation.

Leopold added the second imperative of "biotic right" to his environmental ethic precisely to eliminate the shortfall between symbolic instrumentalist preservation, and the preservation of vast areas of habitat actually necessary to preserve species over the long term. He had observed that when only human interests are taken as the measure of ethical action, or "economics determines all land-use" (Leopold 1949:225), risks to nonhumans are usually discounted and misjudgments are made in favor of human economic interests.

Norton and Light have also got it wrong when they assume that the public in Western nations will not eventually accept an environmental ethics based on collective nature's rights theory, particularly a modest assertion of species rights based on an

analogy with genocide. As Thomas Friedman expresses in many ways in his recent book *Hot, Flat and Crowded,* American leaders have consistently underestimated our common citizens' ability to understand and take action to correct environmental problems. An excellent expression of this is the quote of Michael Maniates, a political scientist whom Friedman references:

> ..we are treated like children by environmental elites and political leaders too timid to call forth the best in us or too blind to that which has made us a great nation. (Friedman 2008:405)

I assert that this miscalculation or dynamic of low expectations extends to philosophers regarding American citizens' likelihood of recognizing rights for nature, which might require some personal sacrifice.

3.6 A 'HUMAN RIGHT AGAINST POVERTY' OVERRIDES AN OTHER SPECIES RIGHT TO EXIST

Few environmental philosophers or humanist liberal advocates for the poor in developed countries choose to explicitly state that alleviating poverty trumps other species rights to exist. They just presuppose it. Unfortunately, our society avoids discussing conflicts and questions about the real sustainability of further human population and perpetual economic growth (Huesemann 2003:31). The motive for this avoidance appears to be both subconscious and conscious desires to avoid the unpleasant moral dilemma of making a choice between very sympathetic entities, and the severe criticism that would be inflicted upon anyone who made such an explicit public choice.

Then, at least in the USA, people want to believe that they can have their cake and eat it too. Even major environmental groups go along with the wishful thinking that in America we can continue to grow our population and consumption, essentially forever, and save the environment with clever application of technology. American society has, therefore, devised a way to largely avoid explicitly discussing in the public arena whether the poor or species survival interests prevail in competing claims for resources. But in fact this conflict and its effects are much of the time subconscious major motivators just below the surface of all developmental planning here. Unending appeals for more “jobs” or tax revenue is code for the assumption that the needs of poor or ordinary persons have very high priority.

Some advocates for the poor in developing nations are not so circumspect about nonhuman interests ultimately taking first priority. A World Health Organization (WHO) policy states:

> Priority to ensuring human survival is taken as a first-order principle. Respect for nature and control of environmental degradation is a second-order principle, which must be observed unless it conflicts with the first order principle of meeting survival needs. (WHO 1992:4)

But a variety of philosophers and commentators on developing country poverty also use American-like rhetorical strategies that amount to denying that a choice between humans and nonhuman species interests is ultimately necessary. This avoidance is achieved by stating that poor nation poverty is caused by, is largely the responsibility of, and can be solved by ‘first world’ actions. The resulting lack of poor country action to protect

the environment in turn leads to an inevitable state of affairs of intense present and future human-nonhuman species competition that is of course decided in favor of the human right against poverty. The view that adjudication of this inevitable human-nonhuman species competition should be decided in favor of humans is also furthered by international organizations that make rather internally contradictory statements like those in the Rio Declaration:

> Human beings are at the centre of concerns of sustainable development. They are entitled to a healthy and productive life in harmony with nature.
>
> All states and all people shall cooperate in the essential task of eradicating poverty as an indispensable requirement for sustainable development. (United Nations 1992)

The title of Thomas Pogge's recent publication *Freedom from Poverty as a Human Right* (Pogge 2007) in which he states that world poverty "manifests an ongoing human rights violation" also indicates the increasing popularity of the idea of the right against poverty as a right that trumps all other interests. Frequent media appeals and authors in Pogge's anthology advocate that the appropriate mechanism for alleviating poverty is direct transfers of resources from the 'North' to the 'South'. This solution is justified by the rationale that poverty is an evil, and the simple duty of beneficence obligates the North to reduce this evil. This redistribution solution is also justified by asserting that it is reparations, owed by the North, due to the injuries of the present world institutional order, colonialism, past unfair trade agreements, and illegitimate World Bank loans.

Mathias Risse provides another justification for redistribution with a concept of justice he calls *egalitarian ownership*. This is based on the belief that random circumstances of birth and location do not entitle some persons to more resources than others "arbitrarily excluded from them by accidents of space and time" (Risse 2008), that everyone is entitled to an equal share of the world's resources. Risse also describes another means to accomplish this equal sharing of the world's resources by arguing that duties to the global poor should be satisfied by allowing people to move to wealthier countries whose territory is "underused", regardless of the wishes of a country's citizens (Risse 2008). Again what impresses one is the failure of Risse and other respected authors to mention the impacts of resource extraction on nonhuman species, when they discuss global resource allocation among humans. This void leads society by default toward the belief that earth's resources are solely the property of humans or that human-nonhuman conflict does not exist.

Risse does make a symbolic statement that the intent of population redistribution is "not to establish human despotism". But this would be the inevitable result of mass human migration, because high-density countries according to Risse "making full use of their territory" have, due to simple exclusion, little wildlife, so the result would be to equalize this worse off case for nonhumans globally. Examples of this worse off situation for nonhumans include the fact that Germany and other high-

density (full use) first world countries no longer have most of their medium sized or large carnivores like lynx, wolves, bears, or leopard.

Risse makes simple statements that other policies would have to be changed. And we are left to guess or assume that this means that we must find some as yet dreamed of way to both accommodate high human population densities and prevent annihilation of wildlife in receiving countries. But this flippant passing off the moral responsibility and the real world problem of averting the inevitable result of higher human population densities (additional extinction) on to others does not change the reality that nonexploited (unused) land is necessary to support nonhuman species. And it also does not consider the reality that human beings are unlikely to reduce their quality of life in order to accommodate new arrivals. Rather a real social minimum exists that people will refuse to go below and the weakest entities in the new high density receiving communities, nonhumans, will be inevitably pushed aside.

As indicated previously, ecological footprint analysis shows that a social minimum, very green life style would require two planets worth of resources for the present population of 6.7 billion. Others have similarly stated that we need to reduce the human population to half or less than half of its present size in order to enable a decent standard of living for all earth's human citizens (Lovelock 2007, Porritt 2007). Because of the fact that massive population migration would leave little or no

resources for wildlife. The mass migration solution to poverty is by default a normative judgement that the right against poverty overrides the right of nonhuman species to exist.

Returning to the alternative proposals of moving resources from better off countries to nations with many poor people, it is obvious that this also amounts to a de facto normative statement of human priority over species existence. Now the most moral and hopeful sounding expression of this view is that nature actually need not be sacrificed to alleviate poverty. But rather if wealthier nations value nature sufficiently they will pay what is in essence a ransom (redistribute global wealth) to poor human populations threatening to destroy local ecosystems. In other words, nature should be held hostage to eradicating human poverty, or humans have a superior right against poverty that must be bought off to prevent them from over ridding the lower priority right of other species to exist. This might seem to be an effective strategy until one remembers the reason why hostage taking is a capital crime in Western nations. Often the hostage is killed, because those asked for the ransom either cannot afford to pay it, refuse to, or don’t pay it in a timely manner.

Another, anti-poverty perpetual development justification that is often used is reducible to something like the following. “Northern nations destroyed much of their native ecosystems and caused species extinction on their way to affluence, so it is ethically acceptable and practically necessary for other societies to continue this kind of behavior until they reach

similar affluence." This reasoning very strongly confirms the traditional assertion that human interests trump those of nonhumans, and that this priority extends to the super killing of species extinction.

The reluctance of environmental philosophers to recognize rights for nature also creates a certainty that the interests of humans will generally continue to prevail over those of nonhumans. It is also my conclusion that the relative ease of predicting this outcome indicates a desire of most philosophers to preserve human priority in human-nonhuman competition for resources, or a pragmatic political decision to not risk opposing the tradition that a sacrifice of human 'vital' interests for nonhumans is a moral horror. But with the exception of Rolston's controversial essay "Feeding People Versus Saving Nature" (1996) competing interests of the human poor and nonhuman species populations are seldom explicitly discussed in the literature of environmental philosophy. In this essay Rolston writes the following regarding human competition for resources with the last few tigers on a nature reserve in Nepal:

> We are not always obligated to cover human mistakes with the sacrifice of natural values.
>
> Persons are not told they must starve, but they are told they may not save themselves from starving by sacrificing the nature set aside in reserves. (Rolston 1996:266-267)

Now Rolston does not support recognizing species rights, but in the above article and elsewhere he argues in agreement with my thesis that species survival is the highest good. He also points out the reality noted by Christ "you always have the poor with

you", indicating that if we do not protect or promote other values until poverty is eliminated, we likely will take no other beneficent or moral actions. Both Rolston and I argue that actions of individuals or groups of humans that destroy species are an absolute wrong unless in self-defense of the whole human species. It would be redundant to restate more of the argument for species rights here, but as some of the comments thus far suggest, the poverty objection, rights over ride solution can be defeated on its own terms. This is because recommended related actions are unlikely to benefit the majority of the poor in the long term, or even the short term.

First, although some poverty in developing countries is partially due to past Colonial era misbehavior of other countries or some multinational corporations, the majority of it is obviously largely due to present day in-country factors. This is strongly suggested by the fact that a number of countries like Japan and Germany were literally bombed into the Stone Age in WWII, but recovered to full first world status within a few decades. Some major in-country factors include cultural-political deficiencies that formerly existed in first world nations like lack of democracy, equal rights, endemic corruption, and leader resistance to providing public education and other public services and infrastructure. Most of these deficiencies appear to persist for reasons that usually originate from intentional elite manipulations intended to maintain their power and wealth.

It is not clear, based on past experience, how transfer of wealth to these countries would correct many of these innate social factors. Sending money for education and health care to a country like Mexico, whose finance minister brags that it has the lowest tax rates in the world, and other officials admit it has a tax system like 'Swiss cheese', is likely to result in correspondingly less in-country government expenditures in these areas. And it is not at all clear why redistribution of resources or poor people would cause democracy to arise, or stop discrimination or economy destroying government corruption in any society. Again using the example of Mexico, it is certainly not our experience that allowing mass migration of the poor from has any significant reforming effect on country of origin elites, or that it helps the majority of the poorest who must remain behind. Remittances sent back to Mexico from the USA have benefited the families involved, but there is no indication these have changed the basic cultural and political deficiencies that limit opportunity there. Examples of the severity of these inherent deficiencies include daily news reports indicating that many Mexican government officials recently had agreements with drug cartels, and that the terror of widespread kidnapping in Mexico is due to police involvement or refusal to hunt down and arrest kidnapping gangs.

The proposed and failed strategies of mass migration and mass redistribution of wealth and resources, that are implied to make the recognition of species rights unnecessary, have the

perverse effect of distracting philosophers from coming to terms with the most important factors that cause poverty. By failing to strongly condemn developing nation's authoritarianism, fatalism, elitism, lack of long term focus, low priority for education, and emphasis on connections rather than merit "that suffocates both individual initiative and economic rationality" (Harrison 2008:89,96), philosophers are allowing leaders to stall making badly needed political and social reforms. This in turn will cause the continuance of poverty of more persons, for more years as well as prolonging the human desperation that is said to ethically allow human destruction of other species.

The implicit moral rule that humans have a right against poverty that trumps all others, thus allowing them to cause the extinction of species for short term gain, will also most surely harm poor humans the most in the future. We have observed time and time again that persons on the lower rungs of the economic ladder are least able to escape problems associated with ecological degradation. A poor family may benefit for a week or so from the proceeds of killing the last tiger in Nepal. The well-off middleman who sells it will make most of the profit. But the poor and most citizens of Nepal will be injured forever, for they will be the least able to travel to India or a zoo to see and experience a tiger.

The acceptance of 'the poor trump species existence' morality allows the maintenance of a vicious cycle of increasing human suffering and species extinction. Business and political

leaders see undeveloped habitat as wasted if it is not liquidated into profit and power. If alleviating poverty is allowed to be the ultimate trumping right, then 'locally manufactured' or imported poor people can be used to justify liquidating most remaining ecosystems and resources. This motivates elites to increase poverty rather than fighting against it, at least for the next few decades until all resources have been developed. As we have seen, leaders easily manufacture millions of additional poor every year by failing to make family planning education and contraception available and indoctrinating them to have large families. So they are able to achieve the requisite number of poor to justify cutting down tropical rain forests by difficult to detect, and assign ethical responsibility for, actions of omission, or actions whose stated goals are different from those claimed. In America, failing to enforce immigration law is the elite calculated moral *need* mechanism and justification for continuing to bulldoze millions of acres a year for housing, infrastructure and to supply 'jobs' for an increasing number of foreign-born working poor.

However, the recognition of the highest priority species rights to exist would break the poverty-extinction cycle by taking away the poverty trumps all excuse. Just as important, locking up land to satisfy other species habitat rights would also remove the motivation for elites to generate more poor to justify continuing ecosystem liquidation. In both a legal and moral sense remaining habitats and resources would not exist.

When elites have to share a much smaller store of resources (human 50% allocation) with the poor, as opposed to 'helping' the poor by encouraging them to destroy more of remaining wild nature, it would seem that some leaders due to a lack of alternative excuses, might be more strongly motivated to finally decide to do what is needed to end poverty. The operation of this social-resource limit motivation has already been demonstrated in China and India. But tragically almost all habitats and wildlife were destroyed in these countries before leaders felt the squeeze on their interests and began population stabilization efforts. And now they have so many poor that it will be impossible to eliminate poverty for them all before all resources on earth run out.

It is precisely for this reason that environmental philosophers should not allow a requirement for an adequate environmental ethics to include that it must satisfy the wishes of developing countries to end poverty *without* making moral judgements about population, cultural deficiencies and the unsustainability of perpetual economic growth. It is morally and pragmatically vital that the USA and other Western nations 'go it alone', set the ethical example in recognizing the highest priority species right to exist. Other countries will either follow our lead, or suffer, and perish in the long run. At least in the short term given the likelihood of significant cultural variation, it will probably be most beneficial for all nations to adjust their populations and consumption so they can move to

resource self-sufficiency. Otherwise stewardship responsibilities, actual inventories of remaining resources and who has actual access to them will be blurred to the point that sustainable management will never be accomplished. If nations try to take what others have justly allocated to the other species, these societies' efforts will have to be vigorously resisted. This may ultimately be the next chapter of cultural selection and evolution that must take place if the human species is to survive.

Moral persons cannot allow themselves to be held back from taking moral actions by lack of approval of others. Trying to satisfy developing country elites, who do not even believe in most human rights, by crafting an environmental ethics that does not contain similar concepts and powerful restraints, will inevitably result in an environmental ethics that is ineffective in protecting the larger biotic community and the human poor.

3.7 THE HUMAN SPECIES CANNOT FLOURISH WITHOUT PERPETUAL ECONOMIC GROWTH WHICH SPECIES RIGHTS MAKES IMPOSSIBLE

Even the most anthropocentric philosophers and business and political leaders do not wish to explicitly state that the human species will descend into poverty or perhaps may even die out without perpetual economic growth, because then they would have to defend this implausible notion and might be discredited. But various versions of this vague idea and fear operate as an effective implicit threat to encourage passivity by a public continually warned that they will lose their jobs if they do not allow 'growth' of all kinds to continue. Again it is vital to

discuss this notion here, because unexamined reasons motivating behavior toward the environment pose some of the greatest dangers to our existence.

First although as Huesemann states “political and corporate leaders continuously bombard us with the half-truth that both economic growth and environmental protection are possible” (Huesemann 2003:31) it is obvious that perpetual economic growth generated by consumption of resources and living space would eventually cause many nonhuman species to become extinct. Therefore, giving nonhuman species absolute rights protection would at some point stop that economic growth that is largely dependent on converting ever more resources into products. Well-founded assertions by environmentalists that certain development projects threaten the existence of species are present proof of this. And wishful thinking by well-intended persons like Thomas Friedman (2008) that eco-efficiencies like “building up” in high rise cities will allow both economic growth and environmental protection fail to recognize the obvious: even vertical living space requires materials and energy to build, light, heat and cool. This resource extraction that affects numerous acres of habitat and pollution sinks elsewhere will still be required to increase perpetually.

The precise objection that the human species will become extinct if it does not continue economic growth in perpetuity would, according to my theory, be an unassailable *self-defense* objection to other species rights, if it were true. It is,

however, common historical knowledge that the human population has been relatively stable with approximately the same technology and per capita consumption for long periods in the past, and the human species has not become extinct. So it does not appear that gradually moving to a steady state economy in the future as Daly (1991), Czech (2000) and Huesemann (2006) and an increasing number of thinkers in many fields advocate would cause the extinction of the human species.

Some, however, may see a stabilization of economic growth as likely to cause a halt to human technological and social progress. One could imagine that some future environmental challenge, disease, or even invasion by aliens might be fatal to the human species without some possible technological advance enabled by continual economic growth. This assumes, however, that research and development of new technologies will not continue without continued economic growth. This is a false assumption for many reasons. Nations and communities with the best values and foresight could still choose to spend a significant fraction of tax revenues on science and education. Also without continual economic growth and the resulting conflict among nations that increasing competition for resources requires, much wealth now spent on defense budgets could be diverted to scientific research. Finally scientists and engineers have the same “erotic love of wisdom” and discovery that Socrates said typified the first philosopher-scientists. Contrary to the low

opinion of egoist elites, they do not need the motivators of fear, deprivation or greed to do innovative research.

The end of social progress complaint is in my opinion based on the simplistic idea that ‘making a bigger economic pie’ to share will solve most human problems. This strategy alone will fail for the same fundamental reasons that making more resources available per person by charity handout mechanisms of redistribution and mass migration discussed in the last section has failed in so many developing countries. Larger national economies, slightly more money trickled down to average citizens, will not necessarily correct endemic political and social deficiencies and inequality favored by contemporary elites that are the fundamental cause of serious social problems.

Finally it is also possible to increase the welfare of the poor without liquidating most remaining ecosystems through economic growth by eliminating two major causes of continually increasing resource consumption. First, human population growth or the total number of resource consumers must be stopped and then the human population reduced. This will result in a larger slice of the currently exploited resource pie per person. Second, philosophers, elected officials and other social leaders and authority figures must stop the business media induced increase in humanity’s perceived social minimum of material consumption. If people are indoctrinated to think that they are poor if they do not have 2, 3 or 4 TV’s in each household then poverty will never be eliminated by economic growth or any other

means on our finite planet, with its limited supply of resources. Conversely, a move by society to satisfy the basic human needs for personal fulfillment and social status in more non-materialistic ways would at some point end perceptions of disadvantage without perpetual economic growth and ecosystem liquidation. Other species land rights enables this conversion by making low consumption activities like hiking, bird watching, nature photography, hunting, fishing and gathering accessible to all humans. This would be true, because saving a minimum of 50% of all habitats would cause undeveloped or recovered habitats to be abundant and located relatively near all citizens.

3.8 SPECIES RIGHTS WOULD PREVENT THE MAJORITY DEVELOPMENT OF AMERICAN ECOSYSTEMS NECESSARY FOR AMERICA TO MAINTAIN ITS ECONOMIC AND MILITARY SECURITY

National security versus ecosystem preservation has not been discussed, at least at any length, in the literature of environmental ethics. But again it is critical to examine the likely belief of many of our national leaders, that security and preservation are not compatible, because this belief would also likely affect many of the decisions they make. The common observation, that America’s large GNP and continual economic growth allow us to have the most powerful military in the world, is a good reason to suspect this upper leadership view. An examination of this possibility is also necessary, because we have experienced numerous instances in recent decades where our federal government does not obey the popular will regarding war declarations, environmental protection and immigration law

enforcement. Since leaders are to a large degree free of any checks and balance controls in regard to national policy, a logical approach to achieve progress is to openly confront their beliefs and try to change their opinions and policies. Similarly these views and the extent to which they might be shared by some of the general public may be a background influence on pragmatic environmentalists who deny the political/social acceptability of bio-centric theories of intrinsic value and other species rights.

In addition, it is not a particularly cynical or partisan observation that the national leaders of both major parties have displayed very poor judgement in the past few decades regarding both the environment and security issues. Examining in a very public way the beliefs and paradigms of this isolated and apparently often not very knowledgeable (regarding areas other than the politics of getting elected) class of national leaders might benefit human society and the larger biotic community.

First I concede that other species rights would prevent the majority liquidation or intense development of most of America's ecosystems. And I will also concede that other large countries that liquidate all their ecosystems, and also a large fraction of those in other countries via trade induced extraction, might be able to fund larger militaries than the USA. China, India and Russia for example might be able to accomplish this.

However, it is not primarily size that matters in regard to military forces or the influence derived from a society's economy. Military victories by smaller forces from the time of

Alexander the Great to the British-French battles at Agincourt and the American Revolutionary War prove this reality. However, the US has had the largest economy and the ability to spend more than any other nation on its military for more than half a century, and during this period it has also been the dominant world power. Unfortunately this recent history suggests to many in our society that GNP and power are necessarily closely proportional to one another and therefore that the US must continue its economic growth perpetually and remain the world's biggest economy in order to insure American security and world influence.

There is, however, a proven alternate means to achieve what positive effects on military power GNP actually causes: forming strong alliances with societies with very similar values. The special 'cousin' relationship of America, Britain, Canada and Australia and the almost unconditional loyalty of this cultural family, particularly in security matters, creates in effect a nation that is much greater than the USA alone. This alliance is not only larger in the dimension of GNP and military equipment, but as importantly in dimensions of total intellectual talent, technological innovation and military experience as well. The USA, therefore, could easily maintain its security in the face of, for example, an increasingly powerful China, by bringing more of its less loyal allies like France and Germany and many developing countries into a closer relationship based on shared democratic and progressive values.

Building a larger democratic alliance, however, will require the application of what might be called ‘quality of civilization’ factors that can substitute for raw GNP and military power. These include the real ability of our nation to place greater emphasis on individual responsibility, education in science and the humanities and a sense of community that encourages restraint and efforts to improve the common good. We can also insist that our elected leaders actually use the total knowledge of our civilian, academic and government employee professionals as well as logic to make social and environmental as well as military and international security decisions. This as opposed to government leaders basing decisions largely on political power considerations, lobbyist desires, pet theories and the wishful thinking of government appointees who often have no expertise in their appointed job areas. Increasing the quality of our nation’s civilization in these ways will enable us to win new alliance partners and make the application of our power much more efficient. Making ours a higher quality civilization will eliminate the implicit ‘need’ to match competing nations in raw material consumption by liquidating our remaining ecosystems and the species they contain.

An additional way to increase the quality of our civilization, doable with current technology, is to stabilize the US population by enforcing our immigration laws and reducing legal immigration. It has been our nation’s tradition to lure to the US a steady flow of poor persons for the last 100 years, and

maintain millions if not 10’s of millions of them as a cheap labor underclass. But the inevitable results of mass migration, severely undermine social unity, loyalty to progressive values and patriotism. We daily observe these mass migration effects in the USA in the form of decades long failure to assimilate newcomers, a large fraction of our population without an adequate education and perhaps most importantly resentments due to the intended and inevitable economic inequity that flooding US labor markets creates.

The 9/11 attack perpetrated by persons newly arrived or illegally in the country was ample proof of this self-inflicted weakness caused by the reckless pursuit of an ever-larger population increase fueled GNP. But national leaders wanting to preserve our massive cheap labor underclass for business profits effectively downplay the present risks of having 12 million foreign born persons in this country illegally. It will no longer be possible to down play or dismiss risk, if some group illegally in the country facilitates and or executes an attack with a nuclear weapon in the future. Having a larger GNP and more citizens to tax, enabling the US government to buy more aircraft carriers does not correct these self-inflicted internal weaknesses.

In fact our national leaders’ intentional policy of GNP and population growth, largely caused by their enabled flow of 1.5 million persons into the USA every year, has the perverse effect of making more aircraft carriers necessary. Over 30 million

energy consuming Americans added to our population each decade greatly increases the amount of oil our nation needs to import from the Middle East and increasingly additional other unstable areas. This means we have continually more vulnerable long trade routes to protect, and our nation is forced into close relationships with nations that have poor human rights records. These relationships cause us to have more enemies, which in turn decreases our overall security status. Stabilizing our population and, therefore, our resource needs might also stabilize our defense needs thus making a continually growing GNP unnecessary from a military standpoint.

It should also be considered that the status quo of the US continually increasing its population in order to 'grow' the economy and at least partially in order to increase our military power is perceived as a prima facie aggressive policy and action directed at other nations. If the US does not stabilize and or reduce its population, other nations like China may not stabilize or reduce their populations. The resulting situation, in which we and our potential enemies keep increasing numbers of consumers, and in the case of nations like China consumption per capita as well, will be one of very severe competition for global resources that is highly likely to lead to war. Therefore, a future without species rights, the rights of common people to access nature and the actions needed to guarantee these rights actually makes the US less secure.

Finally the 50% of habitats recognized and protected for other species survival would act as a kind of strategic reserve to insure the survival of the USA in conflicts with other great powers. While potential enemies would be vulnerable due to difficulty of protecting ships and trains carrying resources from aboard, Americans could borrow from other species reserves within our country and repay this war debt later on. An example would be that we could responsibly log a protected forested area due to a extreme war time demand for lumber and then recover and replant the area after the war's conclusion. Also human exploited agricultural lands might be more productive if switched out with nature dominated lands every few to several 100 years in a system similar to what our Native American ancestors practiced for thousand's of years. Societies that recognized species habitat rights would have the vast natural areas needed to accomplish this kind of land rotation.

3.9 ALL HUMANS DO NOT HAVE A VITAL NEED FOR AND THEREFORE A RIGHT TO ACCESS TO NATURE

It is certainly true that many millions of persons live their whole lives in major cities without access to nature, and they survive. This observation also, I believe incorrectly suggests to many that the solution to many of our environmental problems is to jam most of the earth's population into high rise cities. Aside from the fact that most Western nations have recently concluded that high rise 'project' living destroys a sense of community and lowers quality of life in many dimensions, humans may not miss or complain about a right they have never had

or been aware of. But they might well have been better off with access to the opportunities afforded by a right. For example, even today women do not expect to be treated with equal respect in some cultures.

The benefit of nature experiences is proved by the fact that for many centuries wealthy, knowledgeable persons living or working in cities have usually also owned homes or seasonal residences in the country specifically in order to gain access to nature. Unfortunately city living poor or working class people may have never been educated to experience nature, so they do not express dissatisfaction about lack of wild areas. But this absence may have greatly diminished their lives.

It may be true that some sizable fraction of a population may not be by temperament particularly interested in politics or writing for publication. Therefore, they might not be much harmed by the absence of the right of freedom of speech. But it is also true that in order to make a right available to those, to whom it is vital for their physical or mental survival, it is practically necessary to make the choice widely available. Conversely, we daily observe that those that do not want to exercise certain rights choose not to, and may cause no harm to themselves or others by abstaining.

3.10 INEVITABLE FUTURE EVENTS OR CRISES WILL SOLVE OR MOTIVATE SOLUTIONS TO OUR ENVIRONMENTAL PROBLEMS WITHOUT ANTAGONIZING POWERFUL FORCES OPPOSED TO RIGHTS FOR NATURE

There exists yet another fatalistic cluster of implicit and therefore generally not well examined beliefs that have stalled

effective action by environmentalists for decades. First environmentalists have predicted or hoped for what we might call a natural equilibrium event like the often-mentioned ‘demographic transition’. Therefore, the ‘inevitable’ future event of women choosing to have fewer resource-consuming children would solve our environmental problems. Other examples are various environmental technofixes, such as unlimited cheap clean energy, or pollution-free manufacturing. Such hopes support the implicit objection that there is no present need to challenge established powerful political and corporate interests or traditional anthropocentric values with assertions of nature’s rights. Challenging or angering these entities might result in their attacking or refusing *any* cooperation with either environmental leaders or the environmental movement.

Interestingly, Aldo Leopold mentioned an early version of this demographic transition hope, and states that some might think it will reduce the necessity to presently treat land responsibly, writing in 1933 that we are told that the “our population curve is flattening out” (Leopold 1991:188). E. O. Wilson also suggested what seems to be the present preservation strategy of many of the ‘majors’, when he qualified his advocacy of reserving 50% of each ecosystem by saying this should take place *after* humanity passes through a “bottleneck of overpopulation” in the next 100 years (Wilson 2002:157). Basically this vague long-term strategy seems to be that environmentalists and wildlife professions will save what they

can, regarding species and habitat “hot spots”, and hope that the increasing human demand for resources which nonhuman survival depends on ends at some point.

The major problem with this fatalistic strategy is that there does not appear to be a reason for human demand for resources to stop increasing without a change in present values. If humans and human rights remain the majority locus of value, then human action will occur largely independent of consideration of nonhuman needs. And there is a high probability that human population will stabilize and decline (due to women’s reproductive rights being recognized worldwide), after it is too late to prevent environmental catastrophe.

If transition occurs before total environmental collapse, there is a high probability that the hoped for return of habitat to nonhuman species after the overpopulation bottleneck will not in fact occur, without a moral commitment to a recognition of nonhuman species rights. Retiring productive exploited habitat would probably be costly to someone and all the current human hardship and poverty excuses would conceivably be used to prevent this economic loss. It, therefore, is not apparent why putting off the needed changes in our moral philosophy for perhaps another 50 to 100 years is advantageous for either humans or nonhuman life. Alternately the probability of demographic transition taking place too late is also high, because influential elites in many nations benefit from increasing numbers of taxpayers, religious or political followers and

workers and consumers, and so have the motive to retard transition.

The female lead in the recent 2008 remake of the film *The Day the World Stood Still* expresses the opinion that humans are capable of making major changes in behavior when confronted with a crisis. This specific story, however, includes a very credible advanced alien civilization informing the human species of the certainty of immanent environmental collapse, and then threatening to exterminate the human race. In this fiction a global, unequivocal crisis warning is issued and the ultimate motivation is also administered. In fairly recent history the crises of the Great Depression, World War II and the Cold War, and America's ability to meet these challenges also justify wishful thinking that Americans can allow all dangers to progress to life-threatening crisis proportions, and then dependably through heroic and innovative action avoid destruction.

There are a number of reasons why these fictional and historical scenarios do not suggest analogous positive outcomes regarding environmental degradation. The demonstrated occurrence of 'overshoot' in many ecosystems indicates that environmental degradation that is obvious and directly proportional to the amount of some damaging activity may not be observed just prior to a wild animal population crash. Similarly, an impending environmental 'crisis' may not be perceived by humans until it is too late. Often there is a 'lag' in a consuming population's effect on the environment. A herbivore population may be over

long-term carrying capacity for a number of years, but it takes passing some tipping point of, for example, accumulated damage to local vegetation, reduced health or body condition and a deep snow winter, before a sudden dramatic decrease in browse availability, and mass starvation of the animal population. A similar tipping point is now widely discussed regarding global warming in which warming past a certain temperature may trigger massive irreversible releases of more carbon dioxide from natural sources (such as frozen organic material in the sub-arctic), and perhaps make further human action irrelevant.

The likelihood of humans passing a very sharp 'tipping point' is also greatly increased by our technological ability to compensate in the short term for environmental deterioration and over-consumption of resources. Our exploitation of nonrenewable fossil fuels has made it possible for us to greatly increase food and goods production during the last 150 years and, therefore, vastly increase human population and environmental damage. This ability simultaneously dulls our crisis perception, and promises to make a future crash very severe due to the accumulation of great amounts of environmental deterioration before a crisis 'signal' occurs.

Then there is the variable of whether or not our leaders will respond in an appropriate and timely manner to a recognized crisis brought on by immense environmental degradation. Jared Diamond's review of the history of societies on the brink of environmental collapse indicates that many have failed to take

proper action, usually as a result of refusing to change inappropriate values. And this refusal is often enabled if the class system and inequity of a society allows decision-makers to isolate themselves at least from the early consequences of a crash.

For example, the Viking inhabitants of Greenland refused to give up their pastoral farming lifestyles and change to the hunting and fishing life way of local Native Americans, which was more in tune with the environment (Diamond 2005:276). They also had a social system of powerful chiefs who had political control motivations for clinging to status quo values and life ways. Because of their positions of power, these leaders were able to access adequate food until their community's numbers were greatly reduced due to low reproductive rates and starvation. Similarly our present leaders now extol continued economic growth as the solution to all our problems despite obvious environmental degradation and diminishing resources. And the social structure in both capitalist and socialist systems allows for well-off elites who are sheltered from crisis indicators experienced by common citizens.

Finally, many apparently believe that human civilization is too resilient to ever end completely. Their worst case scenario seems to be that after reaping maximum rewards by boosting human population and per capita consumption to the breaking point and destroying all but economically valuable species, that human society would decline into a 'Grey Age'. One can logically

imagine that this Grey Age would be an era in which most common persons would have miserable lives, but elites who were well off would still exist. One could even morally justify this future as being inevitable, or fated. Perhaps as long as social mobility into the elite class was possible in this Grey Age, this would be thought to be a just meritocracy, and the best of possible worlds.

An indication of this dynamic of business and political leader ambivalence toward the declining fortunes of the majority of persons in society can presently be detected in recurrent commentary in publications like *The Economist* regarding the declining real wages of the middle class in past decades. This decline is now predictable. We know that outsourcing well paying industrial jobs and flooding domestic labor markets with poor immigrants causes this deteriorating situation. The solution that business writers suggest is that Americans get 'new' technology or professional jobs that still pay a living wage. The reality, that even in the best-imagined circumstances, these would comprise a small percentage of available job positions in any society does not seem to concern them.

The underlying argument of my thesis, however, is that accommodating the largely anthropocentric values of perpetual human population and economic growth within an environmental ethics is not moral. In pragmatic terms it is highly probable that this approach will lead to a great decline in average human rights and material welfare, as well as the annihilation of many

thousands of species. Hoping for a low-conflict solution or uncontroversial salvageable crisis to naturally arise is pleasant (not doom and gloom) and diplomatic, but not a logical or responsible basis for an environmental strategy. Rather we are now in enough of a moral as well as an environmental crisis that the only responsible thing for environmental philosophers to do is to declare that other species have a right to exist. The great challenge that the recognition of other species habitat rights, and the right of common people to access to nature will pose to human society will ensure that effective preservation actions are initiated in time to avert a collapse, in both the global environment and human societies.

CONCLUSION

Species are bearers of a great diversity of and immense quantities of value that generate duties of human restraint. All species are ongoing entities; higher level individuals; distinct lineages that have a DNA base life program that drives an interest in surviving across generations. This survival interest can be thwarted by the action of human moral agents. Therefore, all species are morally considerable.

We are morally obligated to recognize an environmental ethics adequate to prevent an immense loss of life value and protect the long-term survival interests of human and nonhuman species. It is necessary for environmentalists to assert that *all* species have the *moral* "biotic right" to exist in order to secure just consideration for nonhuman species, and future human generations. This is asserted in the context of the perpetual competing claims that conflict with high priority human *moral* rights claims; most importantly with human claims that they have a right not to be in poverty. Such "poverty" is increasingly 'manufactured' by elite inaction and actions that increase human population and consumption, which in turn are used to justify and enable further ecosystem liquidation. The vital species moral right to exist over rides human non-vital needs generated by rationally *optional* and *preventable* present and projected overpopulation, unequal distribution of wealth, tolerated widespread corruption, increasing consumption and increasing human resource appropriation due to continuing economic growth.

The right of all species to exist free from extinction caused by the actions of moral agents is equivalent to the recognition of a nonhuman species moral right. I conclude that this right requires granting to nonhuman species the majority use of *minimum* of 50% of the Earth's habitats. According to the theory of island biogeography, respecting this right will save approximately 85% of Earth's species from extinction. Continued biological and cultural adaptive evolution caused by interaction with nature and a healthy biosphere are necessary to the survival of the human species. For this reason the species right to exist is also equivalent to a human moral right, held by common persons, to frequent access to and dialectic with nonhuman species. This survival interdependency of human and nonhuman species members of the biotic community, comrades as well as competitors in the evolutionary struggle for survival, fully justifies the allocation of a *minimum* of 50% of each of Earth's habitats to nonhuman life.

The possible loss of 15% of present day species that a 50% habitat allocation may allow is an great lose of value and does pose a risk to the health of surviving nonhuman as well as the human species. But this allocation is the maximum amount that environmentalists can argue for as an immediate goal given the enormous resource needs of the world's human population at this time. It is also likely that the percentage achieved under my plan by 2109 will actually be closer to 60%, because significant portions of the now protected 10% and other undeveloped privately

owned areas are economically worthless to humans. So the protected percentage of species will probably be higher than 85%. And the much reduced challenge of 15% or less species in a threatened or endangered status, under the minimum of 50% allocation to nature strategy, will greatly increase the probability that endangered species preservationists will be successful in saving many species in this 15% group using other means. Also 50% for human and 50% for nonhuman life has a strong rhetorical appeal to the public's sense of justice that is usually conceptualized as equal treatment. It will be difficult for most persons, who profess to care about nature, to deny that millions of other species should be allocated at least 50%. But this is a 4-fold increase over the presently preserved habitat percentage of 10%, and as importantly the habitat rights standard demands a minimum of 50% of the most productive habitats as well as the rock, ice and desert that makes up most protected areas now. Returning to nature close to 50% of the most heavily exploited and profitable habitats will initially be a great sacrifice, particularly since a great amount of capital investment has been made in these areas. Also people have a strong emotional attachment to these highly productive areas due to long histories of occupation. However, there is a significant probability that this first 50% will not be the end of allocation of habitat to majority nonhuman use. The great benefits of this minimum 50% nonhuman allocation will demonstrate the fact that the quality, not the quantity of the human enterprise, is the key

to human flourishing and survival. It will then be highly likely that societies will decide to turn over perhaps 70%, 80% or 90% of Earth's various habitats to the majority use of nonhuman species.

The goal of the following hundred-year plan is to prevent a high human population and consumption bottleneck that will cause a catastrophic mass extinction. The occurrence of such an extinction event can be prevented largely through the application of the revolutionary motivation of the highest priority moral power of species rights. My plan emphasizes specific actions to be taken in the United States. Attempts to make generalist global prescriptions usually result in conceptual and real action stalemates caused by objections from societies that do not believe in, or fully comprehend, human rights. Trying to accommodate these objections enables the continuance of the status quo. Other cultures will make necessary changes and follow the American lead or face the logical environmental consequences.

THE APPLICATION OF THE ETHICS OF SPECIES RIGHTS:

A ONE HUNDRED YEAR PLAN

1. Advocate and enact an Other Species Rights Amendment to the United States Constitution. The amendment should state that a. all species have a right to exist free from extinction causing action of moral agents, b. nonhuman species have a right to the majority use of a minimum of 50% of Earth's various habitats, and c. common persons have a right to frequent access to nature.

Advocates and environmental philosophers should strenuously assert that this legal right is based on a moral right of species to exist that trumps all other rights claims. The following actions are necessary, but alone are perhaps not sufficient to accomplish the realization of these rights.

2. Begin a phased return of habitats to nonhuman populations.

A. One percent of the difference between 50% of the total area of each habitat type, and the area of each habitat now in preserved status will be placed in protected pubic ownership each year, for the next 100 years.

B. Stop further construction of dams. Breach 50% of existing dams and build effective bypasses for anadromous species around remaining dams within 100 years.

C. Recover regional wetlands to 50% of their historic acreage in all states. States that still have 50% or more of their original wetlands, such as Alaska and some others, should be encouraged to not develop wetlands further. This is due to the enormous loss of wetlands thus far, the often widespread damaging effects of wetland development to adjacent ecosystems, their immense value biologically to fish populations, and the now quite low populations of many birds and waterfowl that have been damaged by past development and other human actions.

D. Present designations of parks and preserved areas will be maintained. Preservation or recovery of for example 50% of America’s tall grass prairie, that has been almost 100% destroyed, will not be counter balanced by developing “rock and

ice” alpine, glacier, sub-arctic and arctic habitats that may be now nearly in 100% protected status. As stated previously this will result in more that 50% of the earth’s total habitat acreage being preserved.

3. Accomplish recovery of native species in all portions of their original range.

A. Recover all birds and mammals throughout their original range in all the states of the USA.

B. Disease resistant elms, chestnuts and other plants endangered and eliminated by invasive species will also be developed and completely recovered.

C. Destroy or heavily suppress as many invasive species populations in the USA as possible.

4. In order to establish species justice, stabilize and then reduce the U.S. population to one half the present total, or about 150 million persons, and encourage other nation states, particularly those with very high populations, to reduce their populations by 50% or more. Specifically achieve this in the USA by the following actions.

A. Widely advocate the acceptance of Onora O’Neill’s reproductive ethics that the right to reproduce comes with the responsibility to have a plan to raise children to some acceptable standard (O’Neill 1979:25). This standard of moral responsibility should replace the existing personal practice in many countries, and the one increasingly being adopted in the USA, of having children first and then searching for or asking

fellow citizens for resources, to support this unplanned reproduction. Most problematically these resources usually do not exist in the local developed environment and the additional consumers necessitate the liquidation of additional wild ecosystems or paving/building over of farmland.

B. Reduce legal immigration to 200,000 per year.

C. Grant amnesties to those persons illegally in US for longer than 3 years. Deport the rest. Require US politicians to make a pledge that they will ask for no more amnesties, because they will take effective action to stop future illegal immigration and deport all illegal entries in the future.

D. Institute a sophisticated ‘counterfeit proof’ national ID card required for employment. Legislate that illegal entry into the US and staying in the USA in violation of American laws are felony crimes. Train, adequately fund and require all local, state and federal law enforcement workers to detect and arrest all persons in the USA illegally and set up an efficient administrative and transport system for their deportation.

E. Greatly increase the US contribution to development aid programs in poor countries to eliminate the economic need to flee countries and immigrate to others.

F. Increase media and US political criticism of corrupt elites in developing countries. For example the ‘understanding’ that recent presidential administrations have had with the failed state of Mexico has lead to a reluctance to publicly criticize that country’s leaders. This has created by default a situation

analogous to a second “political escape valve” and enabled Mexico’s corrupt elites to stall reform. If American politicians wish to express concern for American Hispanics and Latinos in order to buy votes, they could do this by demonstrating concern for these groups’ relatives that are being impoverished, abused and murdered by country of origin governments and cultures. They can do this by punishing these elites with intense media criticism as well as with economic and legal sanctions.

G. Stop ineffective abstinence-only education where it exists in the USA and else where. Greatly increase funding for US sex education and international assistance providing family planning education and access to contraception in developing countries.

5. Move to the steady state, no growth economy advocated by Herman Daly, Brian Czech and many others that will be made possible by stabilizing and then reducing the US population and average per capita consumption. An economy must consume natural resources when a unit of increased productivity is created by the application of labor and capital to natural capital. Economies, therefore, cannot perpetually grow and at the same time ultimately preserve wildlife or natural capital on our finite planet.

6. Cease most biological material transport into the United States and global commerce in non-vital foodstuffs.

A. Vegetables, fruit, flowers and live plants should not be transported across national boundaries. Plant materials can contain tiny insect eqgs, virus, bacteria and fungal spores that

are impossible to detect that can annihilate whole species populations, especially when these are transported in the massive amounts characteristic of current global trade.

B. Grain export and import would continue for some time, but eventually be phased out.

C. Processed and sterilized small volume materials like spices and wine would be allowed to continue.

D. Move to self-sufficiency in all biological products and greatly reduce trade in manufactured products through manufacturing self sufficiency to stop inevitable transport of invasive organisms in ship and plane holds and in product packaging.

7. Encourage both vegetarian and easier to follow semi-vegetarian reduced meat diets to facilitate return of agricultural land habitats to other species.

A. Current strict vegetarian ideology somewhat hampers adoption of less meat consumption and ecosystem recovery of croplands. Research and make more meat like plant protein substitutes available. Develop and market meat-plant protein mixtures that would taste exactly like meat by combining some genuine meat, fish and poultry protein in meat substitutes as is now done with crab substitutes made from inexpensive Bering Sea pollack infused with crab juice.

B. Encourage their consumption by making meat substitutes available at prices lower than real meat prices in accordance with the much lower cost of plant protein.

8. Conduct a re-education program by the nation’s authority figures and media to de-materialize society’s perception of individual worth, achievement and social status.

A. Charity and environmental protection work should be afforded highest social prestige via medals, awards and media praise.

B. Life-long education and achievement of degrees should lead to high social status and possible tax credits and government payments.

C. Life-long amateur sports and music and art participation should be encouraged and public recognition afforded prestige via media praise and medals and awards to offer another status, self worth alternative to material acquisition.

D. Accomplishments in hiking, fishing, hunting, bird watching and nature photography should also recognized and rewarded. The government could subsidize education in these activities and items like instruction and bird, plant and insect identification manuals.

9. Conduct massive energy conservation efforts using existing technologies.

A. Build passive heavily insulated homes and finance renovation of existing buildings to save enormous amounts of energy.

B. Increase gasoline taxes, start a carbon tax credit program to encourage purchase of fuel-efficient smaller cars, and more pollution control and energy efficiency of industries. Encourage

use of smaller cars by creating a safer driving environment through lower speed limits, strictly enforcing driving regulations, ban cell phone use in moving cars and better design and more safety features in vehicles.

C. Build efficient mass transit systems in all cities of over 50 thousand residents.

10. Take actions to greatly reduce inequity in incomes. The stated business and individual citizen motivation for species destroying economic growth is that continual habitat development is the solution to poverty, but higher GDP is of limited value if distributed unequally.

A. Support and encourage labor unions, but eliminate all corruption and organized crime influence in unions.

B. Increase the minimum wage to a *living wage* of $15 to $20/hour. US businesses should pay the real costs of labor. Businesses have no right to a continual supply of low-wage labor subsidized by massive, but inevitably ineffective, social services imputes from American society needed to keep their workforce just barely alive. Low wage desperation motivates and justifies the solution of continued ecosystem liquidation and must be greatly reduced.

C. Stop flooding of labor markets by illegal and legal immigration by actions recommended in step 4.

11. Increase benefits from cultural and knowledge exchange between countries with well planned-programs as opposed to the present inefficient random mechanism of mass migration. This

will eliminate the alleged American talent deficiency that population increasing mass immigration is supposed to correct.

A. Institutionalize foreign language training programs in all American education systems at primary and secondary school level.

B. Start a massive scholarship program for US students to attend universities in other countries.

C. Improve science education in the USA in primary and secondary school and increase wages for scientists and university research assistants to eliminate the alleged ‘need’ to import educated foreign-born workers.

D. Greatly increase scholarships for foreign students to attend US universities, but insure that most return home in order to insure the large scale transfer of their knowledge of our society to their home countries.

12. Improve military coordination and alliances with other western democracies so that increases in the American GNP and military power that require more ecosystem liquidation are unnecessary to insure security against more autocratic and undemocratic nation states. This could be achieved by forming a ‘Democratic Alliance’ with strict acceptance standards modeled after those now used for acceptance into the European Union. Countries with fake democracies and poor human rights records, such as most developing countries and Russia and China, would not be accepted. This entity would intentionally rein back unilateral actions by the USA, but by doing so would *insure* a

unified, overwhelming and thus deterrent response by the Alliance to a threat from undemocratic nations.

This plan may be thought by many to be radical. But as President Barrack Hussein Obama recently stated, it is time to put away “childish things” and make “difficult decisions”. The ethical truths that have been established by this thesis indicate that we must behave in this responsible way in order to avert the pending ecological collapse. This is not a philosophy or an environmental ethics of gloom and doom, but an aspirational optimistic statement of hope: rational adult-minded hope that inevitably results from constructing a plan of action that is *adequate* to solve existing problems.

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