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The land, it's everything: Women farmland owners and the institution of agricultural conservation in the U.S. Midwest

by

Jean Crim Eells

A dissertation submitted to the graduate faculty

in partial fulfillment of the requirements for the degree of

DOCTOR OF PHILOSOPHY

Major: Agricultural Education

Program of Study Committee:
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Iowa State University

Ames, Iowa

2008

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List of Terms, Acronyms, and Initialisms

Abbreviation	Term
AAA	Agricultural Adjustment Act
CRP	Conservation Reserve Program
CSP	Conservation Security Program
EPA	Environmental Protection Agency
EQIP	Environmental Quality Improvement Program
FSA	Farm Service Agency
IDALS-DSC	Iowa Department of Agriculture and Land Stewardship/Division of Soil Conservation
ISU	Iowa State University
NASS	National Agricultural Statistics Service
NRCS	Natural Resources Conservation Service
SOC	State Outreach Council
STC	state technical committee
USDA	United States Department of Agriculture
WHIP	Wildlife Habitat Improvement Program
WLL	Women, Land and Legacy[SM]
WRP	Wetland Reserve Program

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Abstract

This institutional ethnography was undertaken to address the problematic that *far fewer women than men participate in the institution of agricultural conservation* despite the fact that about the same numbers of men and women own roughly equal amounts of agricultural land in the U.S. Midwest. The institution of agricultural conservation—governmental agencies and private non-profit organizations—provides conservation services such as technical assistance and funding to clients, private farmland owners, who implement conservation practices on their lands.

As a qualitative research methodology, institutional ethnography (IE) is a way to examine otherwise intractable or elusive problems that exist on an institutional level. This IE researcher stood shoulder-to-shoulder with clients—women farmland owners—and looked into the institution to examine processes and ruling relations that influence activities of the institution. Data were gathered concurrently from textual analyses of forms, letters, and other institutional publications and from conversations, interviews, and observations of interactions with women farmland owners and conservation workers.

Analyses revealed ideologies on a continuum ranging from land-as-community orientations (that tend to favor restoring healthy ecosystem functions) to land-as-commodity orientations (that tend to favor the business and economic values of conservation programs). The institution of agricultural conservation favors land as commodity to the detriment of people who hold land-as-community values, such as women farmland owners, some men farmland owners, and some conservation workers. The key finding—*the institution of agricultural conservation is failing to meet the needs of constituents who hold land-as-*

community orientations—leads to an overarching recommendation—*the institution of agricultural conservation must change*.

The institution of agricultural conservation should

- document all requests for conservation services
- reshape policy at federal, state, and local levels to extend programs and services to underserved constituents and to provide more inclusive agricultural conservation practices and informal education
- train conservation workers at all levels to support inclusive policies and services

Further, the systems (e.g., ecological and agricultural education at all levels, including higher education) that prepare people to own farmland and work in the institution of agricultural conservation must evaluate their philosophies and processes to support changes in the institution of agricultural conservation.

Chapter 1. Introduction

Although women and men own farmland in the U.S. Midwest in equal proportions, far more men than women landowners participate in conservation programs. Over time, this uneven pattern of participation has been noted in what I call the *institution of agricultural conservation*. In the U.S. this institution consists, broadly, of two kinds of entities: *organizations*, which are by and large non-profit conservation organizations; and *agencies*, which are units of government at some level. Of the two, governmental agencies are the largest in all respects, including presence and funding. Federal and state agencies provide annual financial support and technical assistance to farm operators and farmland owners who may be enrolled in agricultural conservation programs through county-level offices of the agencies. In general, these county-level offices provide four major kinds of assistance:

- technical assistance that takes the form of agency employees working directly with farm operators and/or farmland owners;
- support that takes the form of production control payments such as the conservation reserve program (CRP);
- support that takes the form of payments for implementing conservation measures; and
- support that takes the form of commodity payments, such as price supports for specific crops.

This study focuses on the delivery of technical assistance and two kinds of financial support—payments for production control and for conservation implementation—to farm operators and/or landowners, with a specific focus on the observed participation in the institution by women who own farmland. This chapter describes the assumptions and problem statement and provides information about the problem in context, then describes the

purposes of the research reported here. After a brief explanation of the research approach, research questions, and key terms that will be used throughout the report, the chapter concludes with a description of the organization of the dissertation.

Assumptions and the Problematic

This study develops from an understanding of non-formal adult education in agriculture and the historic conditions that shape the present institution of agricultural conservation as it relates to women farmland owners' everyday lives. As such, this study rests on five assumptions that lead to the study's central problem. First, *good land quality is important if humans and other biota are to profit from its use.* If land is intended to be used for agricultural production, it qualifies for soil conservation programs that protect soil and water quality, both characteristics of a healthy biota. Although these programs have been based on values and formed by policies built up over time, protection on private lands is accomplished by voluntary participation in conservation practices, carried out either independently or with government program assistance. Soil conservation programs are promoted and administered to everyone—men and women, landowners and tenants—who is legally qualified to participate in the programs that provide both financial and technical assistance. For example, technical assistance may take the form of educational information that is available to everyone—including members of the public with no relationship to any particular land—without restriction. Also, some technical assistance may take the form of assessing land to see if it qualifies for conservation programs.

The second assumption is that *the vast majority of farmland would be improved by the use of conservation practices and most farmland is legally and programmatically suited for conservation programs administered by agencies and organizations within the institution.*

However, participation in the institution of agricultural conservation requires that someone must decide to take action—to apply for and implement assistance, whether technical or financial.

A third assumption is that *people who participate in agricultural conservation know what needs to be done and, further, that they know how and when to do it.* Fourth, this study assumes that *when people know about agricultural conservation practices, they will implement them,* which may include seeking technical or financial assistance provided by the institution.

A fifth assumption relies on the notion that *the gender of the people who participate in agricultural conservation programs shouldn't influence their rates of participation.* In a 2004 report, Mike Duffy and Darnell Smith articulated two findings related to this assumption. First, in looking at patterns of farmland ownership, men and women own agricultural land in nearly equal proportions. Second, in looking at who owns farmland, men and women own land in nearly equal numbers.

Given these findings we might assume that, given the roughly equal numbers of women and men farmland owners and that men and women farmland owners own roughly the same numbers of acres of land, men and women would participate in agricultural conservation programs in roughly equal numbers. This is, however, not the case.

The problematic

Over the years, people who are involved with agricultural conservation have noted a disparity between the participation of men and women in agricultural conservation programs. This anecdotal evidence, when considered in the context of the assumptions articulated above, exposes and frames this study's central problem. This anecdotal evidence has

prompted some efforts to address this disparity with educational programs designed for women. For example, the Natural Resources Conservation Service (NCRS) and the Farm Services Agency (FSA), agencies within the institution of agricultural conservation, established Women, Land, and Legacy [SM] (WLL), a program designed to assist women who wish to engage in agricultural conservation programs.

These efforts, however appear to be insufficient to fully address the disparity in participation between men and women in agricultural conservation programs. In the most straightforward terms, *the central problem is that far fewer women than men participate in agricultural conservation programs.*

The problematic in context

Although the central, simply stated problem—far fewer women than men participate in agricultural conservation—might stand as a sufficient declaration, the realities of the institution are more complex. This complexity necessitates that we unpack the factors that influence the context of the problem. In addition to contextualizing the problems related to this study, this unpacking also helps to characterize, to some extent, the participants in the institution of agricultural conservation. In order to fully understand the scope of the problem, certain facts must be considered, specifically the relationships among the entities within the institution of agricultural conservation, characteristics of absentee farmland owners, characteristics of landlords, and an understanding of leased farmland.

The institution of agricultural conservation in the U.S.

For my purposes, the institution of agricultural conservation is described in broad strokes; later, in discussing the methodology and methods, reporting results, and interpreting findings, a more detailed picture of the institution of agricultural conservation will emerge. Table 1

shows the major players—identified by both the full, official names of the entities as well as by the acronyms and initialisms used throughout this report—and their programmatic functions. This table also indicates the relationships and functions between federal agencies, state agencies, the two kinds of private, non-profit organizations, and landlords and tenants. Together these agencies and organizations produce much of the information that is replicated through media and made available to farmland owners and others.

Absentee farmland owners

Absentee farmland owners constitute another category of interest to the institution of agricultural conservation. Although *absentee farmland owner* is defined in different ways, often farmland owners who live far enough away that they do not visit the land daily or weekly are considered absentee. Boundaries, such as living in the next county, next town, or another state, are also sometimes used as criteria determining absentee status. Many women who own farmland are, in fact, absentee farmland owners which makes it important to consider absentee farmland owners as part of the context of the central problem. Many women are likely to contract with someone else to make decisions or operate their farmland as are absentee landowners. Crucially, in terms of daily operations, agencies and organizations have traditionally communicated agricultural conservation directly to landowners who have historically lived close to their farmland and with whom they had prior conservation program history. Lasley (2004) and Duffy and Smith (2004), however, have reported that this traditional pattern of owners living close to their farmland has changed. In a presentation to an agriculture and the environment conference, Lasley (2004) reported increases in the number of acres owned by both women and men who are absentee

landowners. In fact, Lasley (2004) reported that "70% [of the leased farmland] is owned by women [and] 40% [are] sole owners [of the farmland]."

When I began this project, research funding agencies were interested in specific audiences that were similar to but not as large a group as women farmland owners. For instance, extension was interested in supporting research into the needs of the very small but growing numbers of women farmers. Further, research funding agencies suggested that absentee farmland owners would potentially be an important group for my research because they represented 15% of the landlords (qualified or defined as living 150 miles from their land) and, it was also noted that landlords rented nearly half of all farmland (Lasley, 2004). Conservation Innovation Grant funding (through NRCS), at the same time this research started, provided just less than $376,000 and matched with $541,000 from non-profit regional government funds for a total of $917,000 to study the issues associated with absentee landownership in three Midwestern states and an Eastern state.

Landlords and tenants

It is important to consider landlords and tenants as surrounding the central problem of this study because many women who own farmland are landlords who rent their land to tenants, a term used in agriculture for people who rent farmland. In his 2004 presentation, Lasley reported findings such as: "Land ownership is highly concentrated (8% of the landlords own more than 50% of the land)."

The general consensus in the agricultural conservation community—again attained by years of accumulated anecdotal evidence—is that the entities that make up the institution are ill equipped to reach the absentee landlords with agricultural conservation programs. Lasley (2004) also suggested that members of the soil conservation community could craft

educational programs to prepare tenants to be the indirect carriers of the conservation message to their landlords. This underscores the desire of the institution of agricultural conservation to broaden and to find new ways to meet agricultural conservation goals. However, landlord-tenant relationships may not provide clear paths for these kinds of information to be transmitted. Although there are examples of tenants who encourage their landlords to increase conservation practices, there are many reasons why tenants might not be motivated to communicate conservation information nor to take the time to thoroughly explain the need for—or benefits of—conservation practices to their landlords (Petrzelka, Buman, Ridgely & Buman, 2007).

Duffy and Smith (2004) reported that, according to the 2002 Agricultural Census, the amount of rented land, particularly cash rented land, had increased from the previous Agricultural Census. This increase in the number of landlords worried members of the soil conservation community who had historically worked directly with landowners who actively farmed their own land. Members of the soil conservation community expressed doubt that information about soil conservation programs and opportunities would reach landowners who no longer lived near local offices in farming communities and they worried whether indirect information delivery systems would be effective and compelling. Tenant and landlord issues are huge, but perhaps the most compelling and unaddressed issue is women's involvement with agricultural conservation.

Table 1. Entities in the institution of agricultural conservation in the U.S. Midwest

Name of the entity	Abbreviation	Functions for individuals, the land, and programs
Governmental agencies including federal, state, and county		
Natural Resources Conservation Service	NRCS	provide technical assistance such as engineering services designing structures such as terraces or designing plans for plant buffers
Farm Services Agency	FSA	oversee contractual compliance and distribution of commodity and conservation payments
U.S. Fish and Wildlife Service	USFWS	provide a special program which assists private landowners in supporting populations of rare species of plants and animals and private land with wetlands and prairie features
Departments of Natural Resources	DNR	implement water quality conservation programs in accordance with state policies and rules in compliance with Environmental Protection Agency requirements
Departments of Soil Conservation	DSC	deliver state soil conservation programs and assist in the delivery of some soil conservation federal programs
Extension Services	———	disseminate scientific research about soil, water, and wildlife conservation practices
Soil and Water Conservation Districts	SWCD	prioritize and oversee state and/or federal soil and water conservation programs for their local county conditions (locally-elected volunteers)
Private, non-profit, special interest organizations (environmental)		
Pheasants Forever	PF	promote development of wildlife habitats and support game bird hunting on public and private lands (other fish and game organizations are similarly focused on habitat development on public and private lands)
Iowa Natural Heritage Foundation	INHF	operate exclusively within Iowa to assist private landowners who seek permanent land protection options
The Nature Conservancy	TNC	provide private lands support for permanent land protection in areas of particular biological interest
Private, non-profit, special interest organizations (production agriculture)		
State Farm Bureaus	——	provide strategic assistance to private landowners in areas of resource protection (e.g., buffers or carbon credit trading for soil conservation)
Soybean, Corn or Meat Associations	——	conduct specific campaigns to promote conservation practices that enhance crop production or mitigate for specific losses

Women and agricultural conservation program services

From the outset of the study, it was difficult to discern possible causes for the lack of participation in the institution of agricultural conservation by women. It was remarkably unclear in the early stages of the study whether women were not finding their way to the agencies for services or whether they were not receiving services within the institution. On the whole, it was difficult to discern whether there were other possible explanations for what appeared to be women farmland owners' low participation rates as individual requesters of agricultural conservation services. Women landlords obtained farming services by contracting with family, neighbors, farm management companies, or their legal caretakers if they are otherwise incapable of independently managing their legal affairs. It is through relationships with these family, neighbors, or service providers that the women landlords' goals must be met, including those for stewardship of their land. Many times these relationships are not formalized in written contracts (Wells, 2003). Managing these relationships throughout the year is part of the work that women must do to oversee the farming of their land, and therefore must be included as a "work knowledge" (Smith 2005). Smith's concept of *work knowledge*—a person's knowledge of her work and how it is coordinated with the work of others—is important to this research. Although work is usually thought of as paid employment, in social science venues such as institutional ethnography, work can be understood as anything that is intentional and takes time. Coordinating relationships with tenants takes effort and is necessary to fulfill landlords' land stewardship goals. My focus on these working relationships is guided by awareness of the importance of relationships to women's lives as articulated by Gilligan (1982) and Miller (1986). In an important critique of Kohlberg's theory of moral development, Gilligan pointed out that

women place a high value on relationships, which had been overlooked by Kohlberg. As I surveyed the situations of women farmland owners, no single explanation seemed to account for low participation at the outset of research.

I have always maintained an interest in, and discussed, women's participation in farming and conservation. When I began to talk with others in the conservation community about the large numbers of women farmland owners in Iowa, I encountered expressions of surprise sometimes followed by curiosity about why women are not very visible in the conservation circles considering how much land they owned. Most of the male agriculturalists or conservationists I talked to were certain—and more than a few were strident—in their assertions that there was no evidence of discrimination and no reason for me to suspect that women's lands weren't already well cared for by the laws and agricultural conservation institutional programs that had been set up by men, for men. One woman who was more than 80 years old, upon learning of my research, wanted to be absolutely sure I knew that she had not experienced any discrimination while she was in any of the government offices.

I followed Smith's (2005) instruction to formulate a problematic by starting with experiences without orienting those experiences to problems or "adopting their prejudgments" (p. 40). When it came to women farmland owners and conservation it seemed to me that many of my agricultural conservation colleagues thought the world was fine even if a bit unexplainable as to where the women were if they weren't asking for services in the conservation offices.

Women's participation

Women's land may be visually indistinguishable from land owned by men and includes land that is row cropped, pastured, forested, or reserved for recreational uses. Women's

increased participation in agricultural conservation practices can play an essential role in protecting and enhancing the land for future generations. Increasing women's influence in the implementation of conservation practices should benefit future generations who will see women as role models for taking action to care for land. Women are not all the same in their orientation to land, however, and developing strategies for assisting them should emerge from an examination of all the factors that affect the conditions of their land and their experiences. This work proposes to discover conditions that lead, or fail to lead, women farmland owners to participate in agricultural conservation practices. Further proposed then, is the evaluation (Patton, 1997) of those conditions for which educational practices can be productively brought to bear.

The institution of agricultural conservation involves government agencies and non-profit organizations with multiple programs operating within and between agencies. The research method of institutional ethnography (IE) can encompass the whole of the institution that people, particularly women, experience. IE re-orients the insider's view of these experiences to reveal the effects of the institution on women's participation within. Using IE means focusing on the institution, broadly, and requires an orientation to the research that is, in some ways, the opposite from other ways of studying the people who are not performing as institutional members and the public might expect. Harding (1988), a philosopher of science, argued for considering *standpoint* as an important characteristic of research, one that strengthens the research by working to understand and include the worldviews of people who are often otherwise marginalized and objectified by research. IE researchers use standpoint not by focusing on women farmland owners as the objects of research (Smith, 2005), but instead stand shoulder-to-shoulder along side women farmland owners using their location to

look up into or back towards the institution of agricultural conservation. In this project, IE reveals where policies, rules, and educational opportunities impact women's experiences and participation in agricultural conservation.

Adult non-formal education and participation

Opportunities for adult non-formal education (members of the institution provide partial support) directed toward women farmland owners have increased significantly in recent years with the emergence and implementation of curricula such as Women in Denim, and Women in Overalls (focused on farm life, economics, planning), and Iowa Women in Agriculture (focused on farm life, economics, planning). The curricula typically follow a conference or workshop format with concurrent presentations in one or two days. Annie's Project (focused on the economics of farming) takes the form of a short course with successive meetings leading to completion of selected content. Women, Land and Legacy^{SM} (WLL) provides a forum for women to discuss issues of concern and seek information about conservation among other topics previously mentioned. WLL follows social learning theory that originated with Albert Bandura (1977) and situated learning in a community of practice (Bregendahl et al., 2007; Lave & Wenger, 1991; Wenger, 1998). The purpose of these educational opportunities marketed to women audiences is mainly informational to assist them in participating in production agriculture by providing links to other resources.

Educational opportunities within the institution are primarily of a mix of non-formal adult education or informal educational opportunities. The non-formal adult education is delivered in the form of short-courses, demonstrations, and conferences to provide technical information about how to implement institutional programs and scientifically-based research information about the best conservation practices to use in production systems. Recognized

informal educational opportunities occur at expositions and fairs with the purpose of raising awareness about the institutional members and programs. Additional informal educational opportunities within the institution will be discussed in chapter 4.

Purposes

The work of a dissertation is to report original research and to document the contribution of new knowledge to the discipline, in this case a boundary-spanning discipline at the intersection of agricultural education, sociology, and non-formal adult education. This dissertation also has two secondary purposes. Achieving this first purpose requires two activities: (a) describing the constituents of and delineating the boundaries of the institution of agricultural conservation and (b) articulating the participation (or lack thereof) by women within the institution of agricultural conservation.

The second purpose is to introduce the methodology of institutional ethnography (IE) for studying otherwise intractable problems such as, in the case of this research, untangling the institution that is agricultural conservation. Accomplishing this purpose means demonstrating throughout this research report how departing from conventional research methods uncovers and explores useful and important perspectives on problems that may have otherwise been overlooked. I argue that to apply conventional research methods in the attempt to understand the problems described above would lead to, for example, conceptual traps such as defining a *problem* at the outset of the research process, then *finding* examples or instances of that problem. In a case like this, such an approach would perhaps result in asserting that there is something wrong with the participants that would lead to designing a curriculum to *fix* the participants and, thereby, solve the problem. IE, on the other hand, requires that the researcher identify the “problematic” (Smith, 2005) as part of a research

process that results in detailed articulations of the ways the institution functions and in more inclusive analyses of situations that may yield findings that can be employed to address the complex problems on an institutional level rather than isolating a group of people to fix. Further, successful IE research sheds light on the institution under study in terms of previously unidentified gaps and common assumptions about how services are provided by the institution. Identifying gaps or assumptions would lead to addressing the assumptions and gaps instead of problematizing a vulnerable target group, as women tend to be in circumstances related to land and wealth.

Research Approach

In order to explore the observed participation by women farmland owners, I used the tools of institutional ethnography (IE). As a methodological approach, IE relies on the special topics of the research—in this case, the pathways in and through the institution—to emerge as the data are developed. Like some other qualitative approaches, an institutional ethnography does not spring from a set of hypotheses, theories, or previously identified research questions. That said, it is important to understand that IE is specifically oriented toward the problematic (Smith, 2005), which in this study is the low-levels of participation in the institution of agricultural conservation by women farmland owners. One way to think about this problematic is to articulate general, orienting questions that frame the research as it is conducted and reported; the orienting questions for this study are presented in the following section.

IE is sometimes considered a feminist methodology, but the population of everyday people—women farmland owners in this study—did not need to adhere to feminist beliefs in order for IE to effectively describe the problematic. If participants describe problems, IE

does not take on these problems with a mission to solve them, but rather discovers and describes how extra-local rules coordinate and organize participants' lives. Neither are women farmland owners required to identify or describe conditions of oppression to be effective in providing perspectives that inform the research.

Orienting Questions

Part of the work of the IE process is to tease out and attend to questions that may appear to be subtly nuanced or that overlap to some extent. In this study, several threads of inquiry can be considered as four groups of orienting questions.

Participation: Why are women apparently less likely to participate in conservation practices on their farmland? What, if anything, prevents women from participating at equal rates with men? How do women perceive agricultural conservation programs or their farmland in ways that account for differences in participation?

Institutional characteristics: How does the institution of agricultural conservation support women's interests in agricultural conservation? What is there about the institution of agricultural conservation that prevents women from participating?

Empowering women: In what ways does the institution engage with women farmland owners to empower them to participate in the institution? How might the institution encourage more women farmland owners to participate?

Education: What kinds of opportunities might exist for educational interventions inside the institution of agricultural conservation? What roles, if any, can or should education play in creating the conditions for increasing women's participation in farmland conservation?

Key Terms

This study relies on a common understanding of two kinds of specialized language, language about the agricultural conservation institution and language about institutional ethnography.

Conservation practices. Practices are methods of management to accomplish a particular goal. A conservation practice refers to specified activities such as planting types of vegetation, planting vegetation in patterns, tilling land (or not tilling it) in ways to leave a desired effect, shaping land or reshaping damaged land to change water movement over or within the soil, planting crops or non-crops in a sequence. A grassed waterway is a particular type of conservation practice which is used to retard or prevent gully formation in fields.

Conservation programs. The word *program* is commonly used in both agricultural conservation and in education, but in each situation, the term has a specialized meaning. For example, in education, a program might take the form of a workshop, seminar, or meeting. In agricultural conservation, however, programs provide specific services to landowners. Participation in a conservation program means that landowners receive technical advice or money to partially pay for a contemporary activity deemed to conserve or protect natural features such as soil or water from degradation.

Agricultural conservation programs are known by relatively descriptive titles that are developed within the agency or organization charged with providing those programs. The descriptive titles are nearly always shortened to their acronym version for everyday communication, and in such cases, the dissertation follows suit. Each conservation

program also has subcomponents. Common programs in the U.S. Midwest in 2008 included:

CRP Conservation Reserve Program
EQIP Environmental Quality Improvement Program
WHIP Wildlife Habitat Improvement Program
WRP Wetland Reserve Program
CSP Conservation Security Program

Cost-share. Cost-share is money that is provided by an agency or organization to landowners to share in the costs of engaging in agricultural conservation or protection programs. Public funds or privately raised funds are used as an inducement to increase the implementation of the activity across many acres of land. Public funds are distributed to successful applicants, often in prescribed ratios, to offset the total cost of an activity that would otherwise be fully paid for by the landowner. An example is a program for tree planting that would pay for 25% of the cost of the tree seedlings and 75% of the total cost if a tree planting service is hired. Cost-shared activities must meet particular standards and be accomplished using specifications that limit or describe the total fees that will be split with the landowner. Cost-shared programs are often categorized and described by their ratio: "This is a 25% cost share."

Farm bill. Every farm bill has a different name, such as the 2002 Food and Security Act, but farm bills include support for nutrition programs and other entitlements. These congressional acts are commonly known as *farm bills* because of their great impact on agricultural production and commodity supports or entitlements for farmers. Historically, U.S. senators and representatives from agricultural states were in primary control of their respective agricultural committees which wrote farm bills for approval by the legislative

and executive branches of the federal government approximately every five years since 1930.

Land as commodity. This term describes an orientation to land that encompasses business and economic values of land and favors values of land that produce an economic or harvestable return. This phrase is attributed to Aldo Leopold (1949). I intend that land as commodity reflects both an ideological orientation and behaviors based on that orientation.

Land as community. This term describes an orientation to land that encompasses and recognizes intrinsic values of nature and considers the needs of all living things for a healthy and functional ecosystem in balance with human uses of land. This phrase is attributed to Aldo Leopold (1949). I intend that land as community reflects both an ideological orientation and behaviors based on that orientation.

Problematic. This term describes how an institutional ethnographic research project begins. It provides the overall direction of the research by describing the experience of people that will be used to begin the search—the starting point. This term is attributed to Dorothy Smith (1987, 2005).

Program delivery. The term *program* can refer to a single conservation initiative or an effort to get more, or less, of something to happen. Most often *program delivery* refers to the means of accomplishing something that is legislated, but may include overall best practices for any given conservation activity. For example, a promotional campaign may encourage farm operators and farmland owners to choose no tillage to leave more crop residue on the ground.

Ruling relations. Ruling relations refers to relationships that are external to the women farmland owners, usually those originating within the agencies. Texts describe which relations matter for providing agricultural conservation services by following rules and protocols. This term is attributed to Dorothy Smith (1987).

Standpoint. Standpoint describes a view on a situation from a particular starting point, in this case to orient the research to how the situation looks from the point of view another person. This term is attributed to Sandra Harding (1988).

Technical assistance. This term describes the type of help provided to farmers (landowners or operators, etc.) provided by government agencies and non governmental organizations worldwide. Workers with technical skills such as knowledge of soils, how to plant conservation vegetation, or measure and mark land are employed to provide technical assistance through conversations, writing, and interpreting program requirements to landowners.

Women, Land and Legacy^{SM} *(WLL)*. Women, Land and Legacy is an Iowa educational program of federal agency partners, state agency partners, and two private non-profit organizations.

Organization of the Study

This chapter has provided the boundaries for the research reported here by describing the problematic and presenting the orienting questions. This chapter has also contextualized the research as about and within an institution—the institution of agricultural conservation—and within agricultural education and studies. In chapter 2, I develop a review of the literature that provides the backdrop for understanding the findings and analysis. This study developed from an understanding of non-formal adult education in agriculture, and the historic

conditions that shape the present institution of agricultural conservation as it relates to women farmland owners' everyday lives. Institutional ethnography is described in chapter 3 with details about how it was employed in this study. It is from the ordinary, everyday experiences of women as farmland owners that an institutional ethnography methodology will be developed. The findings presented in chapter 4 are those that affect women and the institutional conservation workers who routinely engage in dialog with farmland owners. Implications for institutional changes and further research are discussed in chapter 5.

Chapter 2. Literature Review

This research project is situated in agricultural education which has a long, rich history in designing, implementing, and researching both formal and non-formal education. This tradition of agricultural education is usually considered to coincide with early efforts to support agriculture and those who practice it, such as the Morrill Act of 1862, followed by the Second Morrill Act of 1890 (Comer, Campbell, Edwards & Hillison, 2006) that sowed the seeds for the system of land-grant colleges that focused on engineering, home and family economics, and agriculture. Over time, that tradition grew to include what we now know as extension services that were intended to disseminate research-based information that came from university colleges, departments, and experiment stations (McDowell, 2001; Rogers, 1989). Today, research conducted under the aegis of one such department, Agricultural Education and Studies at Iowa State University, focuses on extension and other types of agricultural education and reflects the influence of early 20th century educators and policy makers, including John Dewey (1938) and Seaman Knapp (Pigg, 1983), who were followed by scholars and educators such as Malcom Knowles (1980), David Kolb (1984) and Everett Rogers (2003), who encouraged other kinds of learning and education such as hands-on, experiential learning methods and non-formal education methods.

The other field from which the study draws is the intellectual traditions from sociology which contributes the methodology of institutional ethnography (IE) invented by sociologist Dorothy Smith. Sociologists who have used IE for gender studies include DeVault (1999), and Naples (personal communication, May 3, 2008; see also Naples, 2003).

Non-Formal Education in Agricultural Education and Studies

Adult non-formal education in agriculture has deep roots within the land-grant movement and, in particular, Knapp and others' use of demonstrations and farm field days to encourage the adoption of new technologies (coined "innovations" by Rogers) to encourage the "transfer of technology" (often indicated by the acronym TOT in non U.S. contexts) (Pigg, 1983). Knapp's field demonstrations of side-by-side comparisons of research on new techniques such as different tillage methods can be seen in practice today across the world in agricultural regions. A contemporary example of on-farm soil conservation demonstrations is in the Iowa Learning Farms program (Iowa Department of Agriculture and Land Stewardship, 2007). Later, Everett M. Rogers, noted sociologist and statistician, developed the diffusion of innovations theory and kept it current through revisions using contemporary examples (Rogers, 2003). Rogers has heavily influenced research in, and the practice of, non-formal adult agricultural education through his near-ubiquitous theory, the diffusion of innovations. In 1902, Perry Greeley Holden, head of Agronomy at Iowa State College (ISC, now Iowa State University), held the philosophy that "every person who lived in the state was 'really a pupil or student of [ISC] and that the college must see to it that every one receives some direct help from the college'" (Schwieder, 1996, pp. 147–148.). Holden's philosophy led to the creation of traveling exhibits on the use of hybrid corn and other short courses on agricultural subjects that reached thousands of Iowans (a large number at the time) and his influence is evident in contemporary times. Holden's efforts created support for Iowa legislation, the Extension Act of 1906, eight years prior to the Smith-Lever Act that established a national cooperative extension service (Schwieder, 1996, p. 148). Over nearly

100 years, extension has developed into the largest adult education institution in America (Franz, 2007).

Adult Non-Formal Education

Beyond technology transfer, diffusion of innovations, and other formal types of agricultural education, many kinds of adult non-formal education exist, including efforts to raise education levels and literacy and to perform outreach to raise awareness of serious health or safety issues. Adult education theorists address two issues of value to this research. The first is a commitment to democracy in education with attention to understanding whose interests are represented in educational programming (Brookfield, 1986; Cervero & Wilson, 1994; Chambers, 1997; Deshler & Grudens-Schuck, 2000; Freire, 1973). The second issue, transformative education, is mainly attributed to Mezirow (2000) but extended by others (Baumgartner, 2001; Belenky & Stanton, 2000; Brookfield, 2000; Yorks & Marsick, 2000) with regard to facilitating opportunities for learners to change or transform beliefs and assumptions as they learn new ways to engage with information. Each of these issue areas, democracy and transformation, add perspective to the critique and evaluation of learning opportunities within an institution, but are not employed in an institutional ethnography. Not all instances where democracy or transformation is needed are identified and explored during the process of this research. Because IE is used in this project to identify opportunities for educational intervention, any resulting educational strategies would likely benefit from close examination against the theories that inform democracy and transformation as issue areas.

Also, more explanation of how this project fits within adult non-formal agricultural education is in order even though this research is about neither developing a curriculum nor evaluating an institutionally recognized curriculum of adult non-formal education. Eduard

Lindeman, an early adult education scholar, provides a useful construct for conveying the way I approach agricultural education and adult education. Lindeman wrote, "Citizens of this culture are confronted with the necessity of adjusting themselves to a new way of living, and there is no lasting, satisfying method of adjustment which is not at the bottom a form of education" (Brookfield, 1987, p. 31). In the case of people who are involved in agriculture—tenants and landlords—implementing soil and water conservation practices presumes that there will be opportunities for learning. People who are already involved in agriculture have experiences that deserve consideration by adult educators. In some cases, Brookfield (1986) writes, environments for learning "that are supportive of change, and that value the status of the learner will produce the greatest amount of learning" (p. 29). Many adult non-formal education learning opportunities are initiated and hosted by extension services. However, many adults involved in agriculture choose not to participate in these educational opportunities (McDowell, 2001; Peters, 1999). Addressing this situation means addressing the problematic: *far fewer women than men participate in agricultural conservation.*

Sociologists describe social constructs such as gender bias or hierarchies of social class that create barriers to participation. Their work also points the way towards institutional changes that challenge various aspects of social cultures. One sociologist, Rogers (2003), challenged sociologists and others who are concerned with technology transfer—such as agricultural educators—to consider social conditions when their analyses and understandings of adoption-diffusion effects illuminate inequality as a source of slow adoption. Agricultural education, particularly as it is produced by publicly funded, land-grant universities, is ethically bound to challenge inequality.

Institutional women's programs

From a theoretical and historical perspective, both agricultural education and sociology address broad historical inequities such as racism and gender bias. These theories are put into practice as institutional programs in conservation that are intended to equalize opportunities in agriculture for minorities and underserved populations. One way these programs are expressed is through the State Outreach Council (SOC) in every state. In Iowa, for example, the SOC is comprised of representatives from agricultural conservation agencies including FSA, IDALS-DSC, NRCS, and ISU Extension and a few non-profit organizations. The SOC in Iowa supported the Women, Land and Legacy℠ (WLL) initiative from its inception to create a new way for women farmers and farmland owners to learn about soil and water conservation programs. This new outreach program has not been implemented in all of the states in the U.S. Midwest to date. However, in places where WLL meetings have been held, many women have participated. Nonetheless, many women farmland owners do not attend these or other agriculture meetings.

WLL incorporates some of the principles of social learning theory espoused by Albert Bandura (1977) and, by creating conditions for legitimate peripheral participation, situated learning, as described by Jean Lave and Etienne Wenger (1991). WLL intends to create a community of practice per Wenger (1998) to elaborate and maintain the new learning environment. Social learning theory developed by these theorists acknowledges the impact of the social world on learning, not only within the context of a learning interaction but also in recognizing the interrelationships of the social environment as it constitutes broader forces shaping learning (Lave & Wenger, 1991, p. 54–55). Generally speaking, the WLL program creates opportunities for women farmland owners to form social networks—communities of

practice (Wenger, 1998)—where they may discuss common goals and learning opportunities. The basic premise of WLL is democratic in that women who attend are the central actors who determine whether future meetings will happen and, if more meetings are planned, the content they desired. Meetings are facilitated by WLL-trained discussion leaders who follow a process that is also protected by the WLL service mark. These trained discussion leaders later serve the women's groups (mainly located within a single county) by locating and coaching content experts who will be invited to conversations with the women farmland owners.

Although other agriculture education programs are in place in other U.S states, most are not necessarily focused on women and conservation, but instead focus on other aspects of women in agriculture (see Hassanein, 1999). Some of these programs are extension-driven but others are led by other governmental and non-governmental programs.

Technical assistance

Agricultural conservation program assistance and knowledge are offered through an approach called *technical assistance* provided to landowners and tenants. Technical assistance provided by governmental members of the institution is generally seen as providing information about how to do something, such as how to install a grassed waterway or terrace, or how to participate in a conservation program. Technical assistance differs from the social learning and educational programs such as WLL (which take place as formal meetings) because technical assistance mainly is provided through individual communications between a landowner and conservation worker about specific programs offered by the governmental agency. The governmental members other than extension are, by and large, not considered to be in the business of education, per se. Governmental leaders

are mindful of their responsibility to serve citizens without discrimination, and in discussions they approach the topic of technical assistance as if it is politically neutral in its application. For this project I will invoke what Eduard Lindeman first identified as an *organic conception of adult education.* In Brookfield's 1987 biography of Lindeman, he described Lindeman's "organic conception of adult education. In the organic conception (Brookfield, 1987), adult education is not seen as an offer to increase the level of existing privilege to a new population but rather as 'a right, a normal expectancy' (1983:3)" (p. 5). The provision of technical service by the agencies and organizations is nearly always accomplished through dialogs between tenants or landowners and conservation workers. These informal exchanges are fundamentally educational because the landowners or tenants take action based, in part, on their own prior understandings or from having learned the content of the informal exchanges. These dialogs and the resulting learning that takes place should be considered to be informal learning because the interactions are not standardized, monitored, or assessed in the same way that formal and sometimes non-formal educational exchanges are evaluated. Some adults, including some women, routinely seek information about conservation options for their farmlands. However, of specific interest to this research are women who are less engaged with or have not sought help through conservation programs, or who may not perceive existing conservation programs as being helpful or pertinent to them. As described by Marsick and Watkins (2001), "Informal learning can be deliberately encouraged by an organization or it can take place despite an environment not highly conducive to learning" (p. 25). Therefore, this study is based in an area of adult non-formal education which is considered *informal education.*

Informal education

Informal learning can be enhanced by three conditions described by Marsick and Watkins (2001), "critical reflection to surface tacit knowledge and beliefs, stimulation of proactivity on the part of the learner to actively identify options and to learn new skills to implement those options or solutions, and creativity to encourage a wider range of options" (p. 30). For this project, awareness of opportunities to enhance informal learning in these ways—a deliberate process of informal education—will guide my examination of the pathways of ruling relations. In essence, because the institution of agricultural conservation relies on a system of informal education and informal learning, I will look for ways that informal learning is hindered or helped by institutional processes, and further to identify how these processes are coordinated by ruling relations.

Mark Smith describes informal education as "a process—a way of helping people to learn" (Smith, 2008). For this research, I draw attention to the situations where informal education happens primarily between people in dialog, as it occurs in agricultural conservation service delivery situations, unlike the WLL program that develops communities of practice and facilitates informal conversations to help people learn. Although Smith (2008) writes that including situational circumstances is not necessary for understanding informal education, describing the situations within agricultural conservation where informal education occurs may be helpful to readers. Two situations for informal education factor in this research—conversations *between conservation workers and clients*, and conversations *within the community of conservation workers*. A third type of informal education occurs in agricultural situations where farmers observe each other working in fields and notice the effects of particular techniques. The latter situation is mimicked in soil conservation

education by Knapp's use of side-by-side field demonstrations of agricultural technology (Pigg, 1983) as it may be observed throughout the growing season if the location permits.

Conversations between workers and clients fall somewhat into the realm of dialogic education though the institution characterizes these communications as delivering technical assistance rather than education. Although an educational assessment of the effectiveness of the materials is beyond the scope of this research, a portion of the printed materials directed to clients will be discussed later in the results section as part of the textual analysis of those materials.

Conversations within the community of conservation workers are as important for these workers to learn the complex rules and implementation processes for soil conservation programs as they are in workplace learning in other settings (Bracken, 2008; Eraut, 2004; Hamilton, 2006; Jeffs & Smith, 1990; Solomon, Boud, & Rooney, 2006). Etienne Wenger (1998) describes how a local community of practice of workers makes it possible to meet institutional demands. Workers "invent and maintain ways of squaring institutional demands with the shifting reality of actual situations" (pp. 46–47). Networking between workers is commonly recognized as an informal method of learning (Brookfield, 1986, p. 151).

Limitations of education theories for the research

Although educational theories will likely play a role in redressing the situation of low numbers of women farmland owners' participation in agricultural conservation programs, they are by and large not helpful in assessing the situations that may account for participation. Sociologist Rogers' diffusion of innovation theory is not useful for predicting which people might be along a continuum from *innovators* to *laggards* with regard to adoption or adaptation of a technology. Theories about the role of the educator as facilitator

(Brookfield, 1986) presume that there is an audience of learners engaged in a learning event. Absent the evidence of women's participation at the inception of the research there cannot be a logical call to curriculum development. Although WLL creates a new learning environment which appeals to some women farmland owners and generates participation in conservation programs, there are also women who do not participate. Thus, undertaking this research necessarily involves an assessment of the types of education, their effects, and non-responding clients of the institution.

Structure of Landownership, Tenants, and Farming

A comprehensive snapshot of the characteristics of agriculture in the United States is assessed periodically through the Agricultural Census conducted by the National Agricultural Statistics Service (NASS). The most recent survey data available, from the 2002 Census describes the following aspect of landownership of importance to this study. Farmland owners who are landlords own 45% of the farmland in the United States (USDA, 2004; Lasley, 2004). From this we can see that a significant portion of the current farm economy depends upon landlords making their land available to tenants. An additional perspective is gained from information about Iowa, one of the states in the U.S. Midwest, in which approximately half of farmland owners are women, who in turn own approximately half of the farmland in the state (Duffy & Smith, 2004; Lasley, 2004). Further, 70% of landlords in Iowa are women (Duffy & Smith, 2004; Lasley, 2004).

Perceptions, also termed beliefs or worldviews across the social sciences, are important because they affect both behavior and the quality of relationships. For example, women's self-perceptions as landlords and perceptions of women as landlords by tenants and agricultural workers affect women landlords' abilities to conduct their business, including

soil and water protection (Rogers & Vandeman, 1993). Because managing relationships is part of the work women do in overseeing farming of their land, women are at least symbolically dominant because tenants depend on them for land (Salamon, 1992, p. 130–131) even though men are perceived as ranking above women in the larger community. Men exercise practical control over land, however, because they typically make the crucial decisions concerning planting and harvest and assume the economic risks, a distinction often made between farm laborers (men or women) and "real" farmers (Salamon & Keim, 1979). Women's land title ownership does not guarantee women's discourse will give them power in argumentation or influence (Baron, 2001; Carli, 1999; Chiappe & Flora, 1998). Widows who managed the farm bookkeeping are more likely to be knowledgeable about the extent of the farm's assets and rental arrangements. Their knowledge of farm accounting gives them some advantages; however, widows who were routinely excluded from decision-making are disadvantaged when it comes to managing the farm. For example, "dependence on a son to manage the farm prevents a widow, despite being the landowner, from exercising the power usually connected with control of land" (Salamon, 1992, p. 136). This would be true of a widow/son relationship whether the son is the tenant or managing the tenant's activities. In a late 1970s ethnographic study in a farming community in Illinois, Salamon and Keim determined that a widow's status depended upon how well her husband had managed land and their financial assets, which affected her adversely if he was seen as a poor manager leaving her with marginal security (1979). Further, widows who took over or bought farms after the deaths of their spouses tended to be seen as widows, rather than as farmers. This labeling occurred even though many widow-farmers owned considerable land and conducted all of their own business affairs (Riley, 1988, p. 118; see also Fink, 1992; Weber, 2007).

Contemporary women farmland owners inherited a farming culture that is predisposed to ignore women's contributions of economic capital assets to the business of agriculture. Because this point is crucial to the research, it will be discussed further in the following sections. It is also traditional for their land to be controlled by men, particularly if the women grew up in a farm community (Weber, 2007). Women farmland owners are likely to behave in ways that are consistent with these expected roles if they have not challenged the dominant paradigm of control of agriculture by men. These behaviors may follow patterns similar to those of other oppressed or subjugated people who do not ask superiors for clarifications or question the judgment of superiors. People (men and women) working in agriculture may treat women in ways that are consistent with these inherited and discriminatory cultural traditions. These treatments may take the form of limiting the amount of communication about farming concerns with women or eliminating women from decision-making opportunities altogether. For example, a *life estate* may be used to pass certain tracts of land directly to a person. A life estate may also create certain tax advantages. In both cases, the life estate may entirely bypass a woman's full rights to use those tracts land. If women farmland owners have inherited the land as a life estate rather than directly, then for as long as they live they are likely to have only the right to use the land "subject to the rights of other heirs" (Rogers & Vandeman, 1995). This situation can allow for smooth transition to farming sons or daughters, although widows with the life estates may be pressured by her remaining family members to allow her children to manage the land in ways she might find undesirable, such as building facilities for a concentrated animal feeding operation.

Historical perspectives on women and agriculture

Since colonization, agriculture in the U.S. has been viewed as primarily a male occupation, but as many historians documented, this has always been a convention of reporting and culture because women—and children—have always been essential to the farming enterprise. Women's importance in agricultural production has been inconsistently valued (Fink, 1987, 1992; Jensen, 1981; Neth, 1995; Riley, 1988; Salamon, 1992; Schwieder, 1996). Economic value is one type of contribution for which women's roles were historically viewed as being not as important as the contribution by men. *Egg money*, for example, is a term commonly used in the past to indicate money earned from selling eggs or other home produced goods, which was typically only performed by women and children and seen as a minor amount, or as supplemental labor to the main farming enterprises (Fink, 1987, 1992; Jensen, 1981; Neth, 1995; Pelton, 1984; Riley, 1988; Salamon, 1992; Schwieder, 1996). However, the amount of money provided by women and children was not minor. Home-produced goods "made up 45 percent of net family-farm income" during the Great Depression that began in 1929 and which caused farms difficulty operating in a cash economy (Schwieder, 1996, p. 265).

Women's roles in the social fabric of the rural farming community are well documented (Chiappe & Flora, 1998; Hassanein, 1999; Neth, 1995; Salamon, 1992; Weber, 2007). The responsibility of food provision is central to women's role in farming, from feeding their farmers in the field to feeding work crews and hired hands, to organizing community meals (church and other). Managing social relations, or what is sometimes called *neighboring*, was essential for men and women where trading work was often necessary and critical during times of hardship such as an illness or injury (Neth, 1995; Pelton, 1984; Schwieder, 1996).

Food prepared and taken to neighbors in times of need built goodwill that was returned in kind when hardships befell other households. Beyond trading work with neighbors, wealthier farmers were proud of wives who did not labor on the farm, and the "wife of a large property owner might have spent a relatively greater share of her time in managing social relations than a poorer woman might" (Fink, 1992, p. 69). This meant she was expected to host and be hosted by the wealthy wives of other influential farmers and businessmen. The nature of influence of farm women in their communities was primarily relationship-based. Mary Neth (1995) wrote, "The ability to create bonds across gender lines, between generations and families, and beyond geographic limits provided crucial resources not only for farm women, but for entire communities" (p.70).

While historians have documented the significant contributions of farm women's trading and other economic contributions (Barron, 1997), the narrative of *helping out* is persistent and is a phrase used to some degree by farm women in the early 21st century. Gender roles have been passed forward from the mid-1800s where *women's work* was socially defined to be everything but that which contributed to the main production of commodities (Fink, 1992; Neth, 1995; Riley, 1988; Riley, 1992). Historian Deborah Fink (1992) writes,

> That her 'assistance' was 'volunteered or required' implies that another person appropriated the labor of the woman, this other person typically being her husband. She was an adjunct to the farmer rather than being a farmer herself. The USDA [in an 1872 report] delivered this message in order to promote the full exploitation of women's labor potential on the farm. (p. 65)

Further, the same USDA report encouraged farmers to be kind to their wives so that their labors might be "cheerfully" volunteered, in much the same way as "advice that a farmer

might have been given about his livestock, or about his slaves in earlier years" (Fink, 1992, p. 66). Gender divisions in the social control of women continued into 1930s. One example is an article representing how a farm wife might labor to raise sheep by using phrases such as it being "pleasurable," clearly reinforcing that such labor was merely a sideline and not a real business (Fink, 1992, p. 66). Readers are reminded that older women farmland owners who were alive in 2008, were young women in the 1930s and would have been subject to these gendered narratives. Beulah Pelton wrote in her 1984 biography of her family and herself that

> all farm women in my day were expected to do what was euphemistically known as "help out." Translated, this meant that you were supposed to do all the work that your husband didn't have time for, didn't like to do, or considered beneath the dignity of a man. (p. 144)

Kindness towards wives did not extend to making their labor easier. Pelton (1984) describes the prevailing attitude in her day towards improvements to the houses where women made homes for their families: "Nobody ever made a dime off a house, and apparently nobody cared if a woman ran her legs off or ruptured herself while she was trying to do her work. It was livestock that counted—not women" (p. 40). Women were considered unimportant to the farming enterprise in ways that contributed to difficult living conditions on the farmstead.

Recognizing hegemony

After conducting orienting interviews and applying the IE lens to the institution of agricultural conservation, I began to see how the institution produces a system where men have dominated from the system's earliest instantiations and continue to dominate

agricultural conservation even today. When I started the research I thought perhaps there were gaps in services which women could not cross as easily as men. Instead I found a system of thinking, practices, and identities that has been reified by the institution and that has kept many women from even approaching the institution. I was not sure how the institution of agricultural conservation could employ Reuben as one of its leaders. At one point, Reuben said, "I think women have abdicated their responsibility for conservation to their tenants," while at the same time I was beginning to see the same situation, which alerted me to the concept of hegemony as one means of explaining the problematic.

Although the concept of hegemony dates back to Marx and Gramsci (Hobsbawm, 2000), it is usefully presented by Stephen Brookfield (2005) who uses modern examples and defines hegemony as "the process by which we learn to embrace enthusiastically a system of beliefs and practices that end up harming us and working to support the interests of others who have power over us" (p. 93). Brookfield also discusses how Gramsci's writings linked learning to hegemony, a move that brings hegemony into view for adult education and this project.

Hegemony is an important consideration in this study because both the institution of agricultural conservation and all kinds of education—particularly informal education—inculcate hegemonic roles and identities for women farmland owners.

Environmental Orientations

People who own land typically treat their land in ways that they consider appropriate and consistent with their beliefs. Philosophies toward land use provide a useful framework for examining people's behaviors toward rural land use and their participation, or lack thereof, in behaviors which increase conservation practices on agricultural land. For this research project, rural land use is generally considered *agricultural*—meaning that the major capital

investments are directed toward production of a commodity that is sold such as timber, grain, or livestock—or *non-agricultural* meaning capital investments and use of land fulfills other purposes. These other purposes may include harvesting fish and game, or many other purposes such as children's play, retreating in a tent or cabin, enjoying pets, or personal exercise. The distinctions presented here are not mutually exclusive or distinct, but merely serve as a guide towards critically examining data. Land uses that are less often considered as producing an income can be converted into commodities with economic value. For example, the privilege of participating in activities on the land such as hunting or camping may be sold for a fee. Aldo Leopold (1949) wrote:

> It of course goes without saying that economic feasibility limits the tether of what can or cannot be done for land. It always has and it always will. The fallacy the economic determinists have tied around our collective neck, and which we now need to cast off, is the belief that economics determines *all* land-use. This is simply not true. An innumerable host of actions and attitudes, comprising perhaps the bulk of all land relations, is determined by the land-users' tastes and predilections rather than by his purse. (p. 225)

Leopold (1949) asserted that land use in states in the U.S. Midwest can be broadly construed as conforming to either of two viewpoints, *land as a commodity* or *land as a community* (p. 221). Although these two viewpoints alone might prove useful in examining women's experiences of the institution of agricultural conservation, I go beyond Leopold's binary and consider that land-as-commodity and land-as-community ideological orientations exist near the ends of a continuum that is more inclusive of other, less fixed orientations.

For example, from the WLL report (Bregendahl et al., 2007) and Wells (2004) we have evidence that women commonly value their land for more than the proceeds of economic production alone, so that for some it is likely that *land as a community* describes their relationship to their land. The view of *land as a community*, for women, may also encompass values of natural and human communities at least partly. According to Curthoys, Cuthbertson, and Clark (2007), for those who hold land-as-community orientations,

> these subtleties [expressions of local distinctiveness] create complex layers of meaning and sensory richness that may be linked with individual and collective well-being, including a sense of belonging to a wider community of life. Yet links between landscape and lifestyle are often subconscious (Hester, 1990) and therefore require active participation in place to bring these connections to light . . . . Interpretation for and by community members offers social spaces for neighbors to collectively experience home-place more deeply. (p. 64)

Curthoys et al. purport interconnections of "cultural systems nested within natural systems" (p. 64). This notion of nested cultural and natural systems is similar to ways of considering land as a partnership between humans and nature (Sachs, 1997, p. 2).

The Institution of Agricultural Conservation

A basic understanding of the key players in an institution at the local level is valuable to beginning an IE research project, because IE research starts from the standpoint of the clients of the institution. By starting from the clients' standpoint, IE researchers need to know about institutional members when and only when an institution or institutional member emerges in the client's experience. It should not be supposed that knowing about the constituent

organizations and agencies and their organizational flow charts is sufficient for understanding the effects on the clients.

My research focus in this study is the institution of agricultural conservation entered from the standpoint of women farmland owners, many of whom refer to their experiences with components of the entire institution as *the government* or *the conservation*. Table 1 (in chapter 1) lists entities in the institution of agricultural conservation, including governmental agencies and private non-profit environmental and commodity organizations.

Governmental agencies

Governmental agencies such as the Natural Resources Conservation Service (NRCS) and Farm Services Agency (FSA) can be traced to federal legislation in the early 1920s and 1930s. While there were a few activities documented in the late 1920s, the precursors of federal soil conservation services occurred in 1933 and 1935 (Helms, 1985). Helms (1985) reported that Hugh H. Bennett headed the Soil Erosion Service in 1933 and promoted the "Soil Conservation Act (Public Law 46–74) of April 1935 . . . to provide permanently for the control and prevention of soil erosion. . . . [Bennett developed projects in watersheds and] planned to utilize numerous methods in a mutually supportive conservation system tailored to the individual farm" (p. 6), both practices that continue in contemporary use. The Soil Conservation Service was created when President Roosevelt moved the Soil Erosion Service into USDA and signed the Soil Conservation Act of April 27, 1935 (Helms, 1985; see also Cook, 2003). Following the 1933 Agriculture Adjustment Act (AAA) a succession of land retirement programs were implemented by the USDA to protect soils, reduce crop surpluses, control overproduction, and support commodity prices (Iowa State University Department of Natural Resource Ecology and Management, 2006).

Locally led conservation is embodied by soil and water conservation districts in each state and was originated by M. L. Wilson, undersecretary of agriculture during President Roosevelt's administration, who believed that farmers should set the priorities for conservation practices that would work in their areas. Helms (1985) reported that "the 'Standard State Soil Conservation Districts Law' which President Roosevelt sent to the states' governors on February 27, 1937" (p. 8) created the system still in place today whereby district soil commissioners set local priorities and the USDA, through our modern NRCS, provides trained workers to county offices.

Conservation workers

Women are represented within the institution to varying degrees. Historically, the institution was comprised of men, with most of the positions filled by women classified as clerical or typists. For example, Helms (1992) reported that "about 24 percent of the permanent full-time and part-time employees of SCS [now NRCS] are women," and goes on to report that although the number had doubled in a century and more women held professional, scientific jobs, the agency is still working to recruit and retain women and minority workers. The numbers of women employed in professional and management positions within other agency members within the institution are similarly low. Other agricultural conservation agency members share stories of difficulties of retaining women in positions where they could train into upper levels of their organizations.

Understanding the institution of agricultural conservation provides a basis for defining the nature of the relationships as they impact landowners and land. The category of governmental agencies includes federal, state, and county level governance. Each of these agencies has a local presence—that is, they have representatives or workers situated in

county offices that provide the main point of contact for farmland owners and their tenants to conduct business regarding land in that county. For example, one governmental agency—Iowa County Conservation Boards—has independent county agencies that reflect the interests of the county politicians and conservation workers who work in concert with local citizens. Private non-profit environmental organizations often have county-level chapters of members with interests in common who can act independently to promote locally appropriate conservation practices. The environmental non-profit organizations differ in their conservation messages, but generally encourage farmland owners to participate in agricultural conservation programs and promote the environmental benefits of participation. Private non-profit commodity organizations may have county-level member chapters which express independent and local concerns with raising and promoting the sale of their commodity of interest. When these commodity organizations choose to promote agricultural conservation practices or programs, they can directly and specifically link the economic benefits or costs of the conservation practices to farmers who grow their commodity products.

Privately funded non-profit organizations

In addition to governmental entities, soil conservation programs also are promoted by non-profit organizations. Commodity organizations such as those promoting the use and growth of soybeans or corn have an interest in promoting good soil conservation practices to farmers so that their products are viewed favorably by consumers. Commodity organizations also promote soil conservation practices that lead to increased yields or profitability for their growers. These non-profit associations can promote a favorable image to the public when they can report that their growers use conservation practices that protect soil and water for

the public good. Conservation organizations may also promote soil conservation practices that benefit wildlife. Some feature protection and management of wildlife which may be hunted or otherwise harvested (e.g., fish or game). They also generally support soil conservation practices that benefit non-harvestable wildlife while protecting soil and water for the public good. Although these organizations may raise funds that augment governmentally funded conservation practices, they often promote the use of government conservation programs to landowners and tenants.

Water, Soil, and Wildlife

The predominant agricultural methods used in states in the U.S. Midwest create the need for corresponding conservation practices that prevent harm to or remediate damage to water, soil, and wildlife. Conservation practices require nationwide research and analysis to determine the best practices to correct for damage to soil from practices like excess tillage and destruction of soil carbon, to managing manure disposal from confined livestock feeding operations (USDA, 2005). To address the condition of the land, public soil and water conservation programs typically must demonstrate practically and politically that they can provide multiple environmental benefits for soil, water, and wildlife habitat. The following three sections present information about water quality, soil, and wildlife and support the need for ongoing conservation in the U.S. Midwest. This story holds true across the nation although the particulars of agricultural practices and environmental harm may vary.

Water quality

The Illinois Department of Natural Resources (2004) reports that more than half of the streams and rivers in Illinois showed water quality trends toward decline as assessed in their natural divisions by landform, which includes streams in row cropped landforms. The

Minnesota Pollution Control Agency (2006) reports that row cropped regions in Minnesota frequently have sediment-related pollution problems in their streams and lakes. In Iowa, some rivers and lakes, called *surface waters*, provide drinking water for 21% of cities and towns (Iowa Department of Natural Resources, 2003). The quality of water flowing into surface waters from rural agricultural areas is of concern to:

- policy makers,
- urban dwellers,
- people who are concerned about other biota that depend on high-quality water,
- people who use surface waters for recreation, and
- people who make a living from agricultural land.

The human use of water creates political pressure to make any one criterion more or less stringent to minimize costs for treatment and pollution prevention borne by public and private sources. The number of bodies of water considered "impaired" by pollution became a political rallying cry during Iowa Governor Tom Vilsack's final term in office, and he vowed to reduce the number of impaired waters by 2010 (Vilsack, 2003). *Impaired water* is a technical term that indicates that water quality is insufficient to meet intended uses, such as, for example, primary body contact such as swimming or canoeing (Iowa Department of Natural Resources, 2006a). Pollution that comes from both urban and rural areas generally is called *non-point source pollution* because it comes from widely distributed sources as compared with single source pollution such as waste discharged from a factory through a pipe. The 1970 federal Clean Water Act set in motion actions to clean up discharge from pipes from factories and sewage pipes (*point sources*) and recognized the more difficult problem of pollution coming from widely dispersed sources, or non-point source pollution

(Iowa Department of Natural Resources, 2006a). Water drawn from wells is considered groundwater because it is generally hidden from sight underground. Groundwater is also subject to contamination from agricultural and urban sources, and pollution concerns may be related to the smell and taste of that water and related to concerns over chemical and bacterial contamination (Illinois Department of Natural Resources, 2004).

The costs of dealing with polluted water are paid by public and private sources. Cities provide drinking water through treatment plants which must remove contaminants and provide it in acceptable abundance and quality. If costs to treat polluted water increase, public debate arises that points to sources of contamination. Stringent standards for water cleanliness bring stronger requirements for regulated facilities, such as sewage treatment plants, to ensure that the discharged water meets the standards, and generally more treatment means higher costs to the sewage treatment plant operation.

Soil

The benefits of soil conservation to water quality have been featured strongly in policy for decades. Keeping soil in place retains soil productivity and keeps lakes and rivers from becoming shallow from accumulated silt. The Iowa soil conservation committee—a precursor to the current State Soil Conservation Committee—registered their protest of the then-proposed Lake Red Rock flood control dam stating, “the place to begin flood control is where the raindrop falls” (Oppose River, Red Rock Plan, 1944, p. 11). Soil also carries phosphorus and nitrates in the water which are linked to hypoxia (i.e., low-oxygen zones) in the Gulf of Mexico, and some of the nitrates come from agriculture (Turner & Rabalais, 2003).

The connection between soil quality and soil productivity has long been understood even if scientific measurements are recent and our collective understanding of what was observed in earlier histories is enhanced by our knowledge of soil chemistry and structure. Stories about European-descendant pioneers moving westward from "worn out farms" in the East are well-known to school children in the Midwest, such as those who learned that Iowa farms have rich soils by comparison, whatever that means to children. Farms in eastern states became less fertile and productive due to dominant production practices of the times. Pioneer farmers in eastern and southern states caused soil erosion by leaving ground bare and vulnerable to rain drop impacts.

> Soil erosion removed fertility in the top soil, but there was a greater problem – it also removed the soil body, the medium for the growth of plant roots. Turning up the soil also exposed the organic matter of the top soil to the sun and air, thereby increasing oxidation. Organic matter improves soil tilth, increasing the infiltration of rainfall into the soil as well as helping bind soil particles together. (Helms, 1991)

Those general principles about soil hold true today and provide sufficient basis for claims for this research based on two assumptions, first that *the vast majority of farmland would benefit from conservation practices* and second, that *we have to take care of the land if we want to continue to benefit from its use*.

Wildlife

Soil and water are essential for all life, and the quality of the biota is valuable to more than just human life and agriculture. Some consideration of wildlife conditions in the U.S. Midwest is necessary because soil conservation programs sometimes claim benefits for wildlife populations. Concern for wildlife populations became connected to soil

conservation programs most securely in federal law in the early to mid-1980s. The 1985 Farm Bill, federal legislation authorizing farm subsidies and other programs, was considered a major change from earlier domination of the content of the bill by representatives of farm states. This change came about in part to appease urban states with environmental interests, states that now are in a majority (Cain & Lovejoy, 2004). For the first time, Congress linked eligibility for a variety of federal farm program benefits to conservation behavior of farmers who had highly erodible land or wetlands (Heard et al., 2000). Subsequent legislation in 1990 and 1996 elevated wildlife to coequal status with soil and water conservation.

Each state varies in terms of the amount of undeveloped land that remains as effective wildlife shelter, but arguably Iowa has the most altered landscape with the vast majority of the state committed to agricultural production (Iowa Department of Natural Resources, 2000). The condition of the wildlife populations is tied to habitat in terms of amount, quality, and location. States have conducted comprehensive assessments of wildlife populations and formulated state wildlife action plans. These plans prescribe actions necessary to improved the habitat conditions for wildlife that are listed as having declining populations which are at levels low enough to be of concern for their on-going survival. Information from the wildlife action plans for three states helps describe the need for soil and water conservation practices which provide improved wildlife habitat as a benefit within agricultural landscapes. In Nebraska (Nebraska Game and Parks Commission, 2008), "more than two dozen species of plants and animals . . . are listed as threatened or endangered and another 500 species are considered rare enough to warrant concern by the conservation community." In Iowa, "the Iowa Wildlife Action Plan identifies 999 species of birds, mammals, fish, reptiles, amphibians, mussels (freshwater clams), land snails, butterflies,

dragonflies and damselflies. Nearly one-third of all species found in Iowa are of concern due to their decline across Iowa" (Iowa Department of Natural Resources, 2006b). The Illinois Department of Natural Resources (2008) reported that, "Illinois has lost over 90% of it's [sic] original wetlands, 99.9% of it's [sic] original prairie, and currently has 424 state and 24 federally listed threatened and endangered species within its boundaries." People who must manage land in particular ways to protect federally protected species and people who live in rural areas are concerned about the number of declining wildlife populations because their quality of life depends on sharing land with wildlife (Dinsmore, 1994).

Summary

It is with this backdrop of adult non-formal education in agriculture and a brief review of the historic context out of which present day women farmland owners experience soil conservation programs that this research begins. Farmland does not exist in isolation from the historic and political context of land use and philosophies regarding the purpose or use of land. Although this work is centered in the U.S. Midwest, similar contexts and conditions exist for women farmland owners and will be shown to affect men who hold views other than traditional philosophies of land use. The next chapter describes IE as a qualitative research approach and shows how I employed IE first to examine the institution of agricultural conservation in the U.S. Midwest, and second, to identify educational opportunities internal and external to the institution that engage women farmland owners in agricultural conservation programs for the benefit of the land.

Chapter 3. Methods

This chapter begins the work necessary to address one of the two secondary purposes of this dissertation, to introduce institutional ethnography (IE) as a qualitative research methodology for studying otherwise intractable problems that exist on an institutional level, in this case, *the institution of agricultural conservation*. After I briefly describe the institution, I show how I used the IE methodological approach as a new lens to discover whether gaps existed in the institution.

This chapter has five main sections. The first section briefly discusses the relationship between qualitative methods commonly used in agriculture education and sociology research. The second section describes IE in general and the third section describes institutional ethnography as a research approach in some detail. In the fourth section, I describe how I prepared for the study and how I gathered data for the study using IE tools and procedures. The final section suggests broader implications for IE research.

Qualitative Research

Qualitative research emerged as a method of inquiry in the fields of sociology and anthropology and was brought more fully into educational research in the 1970s and 1980s (Denzin & Lincoln, 2005; Patton, 2002; Stake, 1995, 2006). Cultural anthropologists such as Margaret Mead and Clifford Geertz employed ethnographic field work to study holistic systems (Geertz, 1973; see also Glesne & Peshkin, 1992; Merriam, 1988; Patton, 2002). Ethnography uses a technique commonly called participant observation and interviews for data collection, and these have proved useful for education among many other disciplines which have adopted qualitative methods for research.

Case study is another methodology commonly employed to understand and interpret a phenomenon (Stake, 1995, 2006; Yin, 2003) and ethnography, among others, and is still part of the work of sociologists. Sociologists Sonya Salamon and Ann Mackey Keim (1979) used ethnography and case study to study inheritance and family structures in central Illinois during the 1970s. Their discoveries impact this research by providing insights into differences in inheritance (e.g., farm transfer, estate planning) patterns. Sociologist Michael Bell (2004) used interviews and participant observation to develop theories about sustainable agriculture that affect this research by offering a view of farmers and families engaged in sustainable practices, which can include soil and water conservation practices. Bell reported how and why some institutions supported women's participation while others did not. Sociologist Neva Hassanein (1999) used case study approach to examine learning networks among sustainable agriculture practitioners, and included a special chapter on the role of pasture walks and organizations in dairy women operators' learning about sustainable farming practices.

Theories developed by Bell and Hassanein affect my research in that they provide images of farmland owners and tenants who identify with a social and cultural movement that incorporates environmental values in contrast with the farmland owners and tenants in this study who are mainly outside of sustainable agriculture. Their classic use of ethnography reveals evidence of an intellectual tradition that is shared by rural sociologists and educators alike.

Institutional Ethnography

Institutional ethnography (IE) is a qualitative research methodology developed by sociologist Dorothy E. Smith. IE differs from traditional ethnography by locating the view of

the institution in everyday lives, whereas an ethnographer might examine those same everyday lives in the particular by starting with a social construct that is already a commitment to theory. Smith (2005) describes that an ethnographer might begin a study by seeking to examine "global domination and resistance" (p. 36) which point to an interpretive commitment. On the other hand, IE researchers begin their searches by collecting data about the experiences of people engaged in an activity and then pursue only those aspects of the institution which are in evidence in the people's lives. IE can be used to analyze organizational work processes, to discover how extra-local decisions and rules coordinate the everyday activities of clients (Campbell & Gregor, 2004; DeVault, 1999; DeVault & McCoy, 2002; Grahame, 1998), in this case women farmland owners. Years of accumulated anecdotal evidence seems to show that farmland owners experience the institution of agricultural conservation as undifferentiated and, with the exception of specific not-for-profit organizations, farmland owners generally refer to the institution as *the government* or *the conservation*.

Many research methods which use the participants' own words, including ethnography, can view the subjects/participants as the objects of interest, to be described and categorized, but this process shifts the focus away from the institution as it contributes to participant experiences. A qualitative researcher reading a sample of participant stories might suggest ways for grouping participants with similar characteristics based on themes that emerged (Glesne & Peshkin, 1992). Research in which participants are categorized, for example, as "late-adopters" as in Rogers (2003) work of adoption and diffusion theory produces a natural outcome of proposing a way the participants may be "fixed" with some type of intervention—such as education and information. On the other hand, IE turns the

examination towards the words of the institution in texts and worker narratives, as well as the words of the participants who describe their routines in regards to the phenomenon of interest, in this case, the institution of agricultural conservation.

IE makes use of methods such as interviewing, participant observations, and text analysis to systematically study problems that can be difficult to understand or define (Campbell & Gregor, 2004; DeVault, 1999; DeVault & McCoy, 2002; Grahame, 1998). Susan Turner (2003) used IE methodology to explicate how municipal planning produces the main business of land development. Her report featured textual analysis because it provided the most useful data for her analysis. Experiences of front-line welfare intake staff and textual analysis were featured by Frank Ridzi (2003) in his IE study of the effects of welfare reform. Another IE researcher, Lauren Eastwood (2002), examined the institutional effects of policies on a global scale by looking at the work of delegates to the Intergovernmental Forum on Forests connected to the United Nations Conference on Environment and Development. Timothy Diamond (1992) conducted research within nursing homes as he worked as a nursing assistant and used IE to deliver his work which describes in detail how caring for the elderly as a profit-driven enterprise impacts both the care of the residents and workers' lives. These IE studies used interviewing, participant observations, and text analysis in combination to explicate the ruling relations affecting everyday lives. These examples of IE studies show that the scale of the institution under investigation can vary, but the methodology produces results that inform future research and, perhaps, influence future policies and practices.

IE as a methodological approach

Although the marginalized conditions of women in agriculture have been described by scholars in other disciplines, much of the methodology used to date has been (a) quantitative in accounting for the numbers of women or (b) historic documentation and qualitative analysis through case studies or ethnographic studies of women involved in sustainable agriculture farming. Those methodologies will continue to be useful in understanding women's role in agriculture; however, using those methods requires using terms that guide conceptual understanding, which risks overlooking or minimizing essential characteristics of women's experiences. An understanding of women's actual, everyday experiences, as opposed to a theoretical understanding, may reveal new opportunities to engage women in agriculture and in particular conservation practices. Qualitative methodologies are suited to developing description through participant observation and interviews, and institutional ethnography is suited to explaining the activities that are shaped by extra-local relations. IE differs from other qualitative methodologies by "having no prior commitment to theory" (Smith, 2005, p. 36).

Sociologist Dorothy Smith developed IE in no small part as a critique of sociology for its complicity with structures and frameworks informing sociological research. She believed sociologists who used the terminology and theories from within sociology reified phenomena impacting subjects/participants without fully explicating the everyday impacts on their real lives (1987, 1990a, 1990b, 2002, 2005, 2006). Using her personal experience as a single mother of school-age children, she discovered how conditions of schooling that were considered inadequate were often blamed on conditions produced by "defective" single parents. By turning her attention to her actual work of mothering in relation to schooling.

Smith discovered that the work of sociology was to name concepts of single parenting that did not represent the reality she was experiencing, in her bodily existence. Single parenting was not a problem for her and she did not feel inadequate or deficient, but as a single mother she did not have the resources to free her time to do unpaid work of schooling (such as baking brownies or collecting items for projects) and the work of preparing her children for lessons at school. Teachers who depended on parents, particularly mothers, to do the unpaid work had to take time from the school day to produce the same work and thus, single parents were seen as deficient. A single parent caused problems for the ruling relations—and thus conceptually "single parenting" was seen as a problem. It was through her conceptual return to her bodily experience—her standpoint—she was able to discover the web of relationships that in the end caused her situation to be named as deficient and inadequate by others.

Following Smith (2005), my research is undertaken without assuming that (a) the institution seeks to oppress women farmland owners, or (b) women farmland owners see themselves as oppressed by the institution. This stance de-emphasizes the critical approach sometimes featured in ethnography. IE provides a way into understanding an observed phenomenon that is otherwise not easily explainable. The phenomenon may include sites of struggle, but IE does not take on the cause or the fight. The institution of agricultural conservation, like many such institutions, is large and complex and can be difficult to see in total from a vantage point outside the system. Working inside the system means adopting the frameworks and concepts of the system which universalizes and objectifies clients and land in ways that mask the real effects or relationships of the institution. However it is useful to understanding IE to know that at the inception of the project the "relations are not assumed to be malign" (Smith, 2005, p. 36).

Tools constructs

Because IE uses research methods that are familiar and common, but employs them differently, a brief discussion follows of how IE methodology directs the use of research tools. The methods typically employed in IE research are interviews, observations, and text analysis (Campbell & Gregor, 2004; DeVault & McCoy, 2002). The standpoint of the researcher is central to all subsequent concepts and it is there the discussion begins.

Standpoint

Marjorie DeVault (1999) describes IE as part of a research class of what have become known as *standpoint* approaches. Standpoint is attributed to Sandra Harding (1988) who first used the term to describe feminist standpoint. Harding's critiques of science have provided important windows into the value of including rather than excluding women's contributions to scientific research. Smith (2005), who had earlier spoken of perspective but later adopted Harding's term standpoint, uses the term standpoint to refer to a perspective which can then apply to all people whether they identify with a cause or not. IE researchers who adopt standpoint approaches view the world as it is seen by clients of the institution and use that orientation to begin the research. Instead of conducting research that views and objectifies clients as subjects—as objects of interest—to be described, categorized, diagnosed, and, perhaps, fixed with some type of intervention, I chose to adopt the standpoint of women farmland owners and stand shoulder-to-shoulder with them to look at the institution of agricultural conservation.

I was deliberate in this choice because of my experiences on the land—I had worked with and within the institution of agricultural conservation for many years. I grew up on a farm and I had been in the first group of women to work in conservation agencies, so I knew

plenty of strong farm women and was familiar with the masculine culture of agriculture. In fact, I brought to this research more than 25 years of experience as a conservation educator serving in county and state agencies where the mandate of service equity and nondiscrimination was engrained in me as an educational professional. I also brought more than 10 years as an elected soil and water conservation district commissioner. Over this entire time, I observed for myself and listened to colleagues discuss the relative absence of women participating in agricultural conservation programs.

I employed IE because it offered a strategy—adopting the standpoint of clients of the institution under examination—that I could use to ensure that I could see what women farmland owners could see. Understanding the importance of deliberately adopting a standpoint can be illustrated in several ways. First, in the words of Proust, "The real voyage of discovery consists not in seeking new landscapes but in having new eyes." A more visual example is a classic image, an optical illusion that demonstrates how people perceive and, therefore, understand reality. Figure 1 shows this image.

Figure 1. Authentic image elements reveal standpoints.

On first seeing the image, some people recognize certain authentic elements such as a choker necklace, a dainty bonnet, and a dress with lace and understand that the picture shows a beautiful, young woman. I recognized that, as a researcher with my life experiences, I might have mistakenly assumed that my prior knowledge of the institution of agricultural conservation—and women's experiences within it—was authentic and absolute. Proceeding based on that incorrect assumption would have led me to a very different understanding of women farmland owners' experiences with the institution.

On the other hand, some people initially recognize the same authentic elements as thin lips, a rumpled bonnet with a wrinkled ribbon, and a dowdy dress, and they understand that the picture shows an old woman with a large nose. In this case, too, I would have been mistaken to conclude that the old woman is *the* authentic image. My deliberate choice to adopt IE, which places a high value on the researcher adopting a particular standpoint, meant that I had to interrogate the image—in this case, the institution of agricultural conservation—from the standpoint of women farmland owners. I had to engage the women farmland owners in conversation so they could tell me how they understand the institution.

Most people can eventually see both women in the image—or as in this study, both authentic aspects of an institution. Once you see different authentic aspects of an institution, even if that seeing might be unpleasant, I suggest that after different authentic elements of an image or institution can be seen, they cannot be *unseen.* This is important because adopting a particular standpoint does not negate other standpoints, but requires constant awareness of the starting place for the research.

In this research, the standpoint of women farmland owners allowed me to begin to look differently at the institution of agricultural conservation and to notice, as DeVault and

McCoy (2002) report, how the women are “drawn to a common set of organizational processes” (p. 764). Understanding how the standpoint orients the research direction is as central to understanding IE and IE studies as it is to understand the problematic.

The IE problematic

The term *problematic* refers to how an IE researcher begins a topic of inquiry and how the researcher configures the research to look at the everyday activities and see the ways people in those activities are connected to the institution. Dorothy Smith describes these activities as ways to examine how people are “hooked into” services provided or created by an institution. The sets of orienting questions listed in chapter 1 as threads of inquiry are intended to bind the researcher to the direction of the inquiry by describing where to begin, but not to describe the boundaries of where the researcher may look. A problematic may emerge from a site of struggle, but may also be discovered when “something” doesn’t seem to fit an expected course of action. The scope of a problematic is broad, whereas a hypothesis in experimental research narrows the scope of inquiry.

In this study, the problematic is *that far fewer women than men participate in agricultural conservation programs.* Although the problematic is expressed in local terms, the implications for the research are broadened as the researcher adopts a standpoint—in this case the standpoint of women farmland owners—and moves through the institution under study—in this case the institution of agricultural conservation as it exists in the U.S. Midwest.

Interviews

This research used interviews but the IE approach to interviewing is quite different from standard approaches to qualitative research (Glesne & Peshkin, 1992; Patton, 2002), it bears

a bit more description to help readers understand what is meant by interviews. Although Smith and other IE researchers do not describe the role of clients or participants as interviewees in the manner of traditional research, I will describe the conversations I held as falling into two categories. The necessity of distinguishing two categories had to do with the ways research funding created particular situations.

Because I had funding support for a project, I conducted what I call orienting interviews, or pilot work, to gain perspective on the standpoint of women farmland owners who functioned more as advisors than research subjects. I also avoid referring to people I talked with during the course of the research as participants because the conversations were about processes common to their work regardless of whether the people were farmland owners or conservation workers. It is essential that IE researchers learn details of activities by listening to people who are experiencing the institution. To further illustrate this point, consider the interviews that would be necessary if the problematic for IE were located within an institution, perhaps at the level of the field workers. As part of the process of orienting to the workers' experience, the IE researcher would probably have several conversations with workers (whether formal interviews or informal conversations) to establish where to begin looking up into the institution—in this instance from the standpoint of conservation workers—to look for the socially coordinating "others" and resulting ruling relations.

The second category of interviews occurred with workers in the institution and the nature of these interviews—or conversations—is described here. Interviews for IE research are less formal in many cases, than for standard qualitative research (DeVault & McCoy, 2002; Baker, 2002). They consist of conversational elements but without formal questions and answers; however "there is a clear initiation-reply format, and the exchange is oriented to by

both speakers *as* an interview, as can be seen in the asymmetry of the talk" (Baker, 2002, p. 779). DeVault and McCoy state,

> 'Interviewing' in IE is perhaps better described as 'talking with people,' and IE uses of interviewing should be understood in this wide sense, as stretching across a range of approaches to talk with participants. At one end of the continuum are planned interviews. . . . Then there is the kind of 'talking with people' that occurs during field observation, when the researcher is watching someone do his work and asks him to explain what he is doing, why he did what he just did, what he has to think about to do the work, where this particular document goes, and so on . . . . Because IE researchers are investigating widespread institutional and discursive process in which the researcher is located as well as the informants, opportunities to talk with people about institutional processes can arise for the researcher serendipitously, as it were, in her or his daily life of going shopping, talking with friends, seeking medical care and so on. (DeVault & McCoy, 2002, p. 757)

It is also legitimate within IE to use small groups to produce data. "Such an approach works in IE because institutional processes are *standardized* across local settings [emphasis added], so any group of informants encounters those processes in some way" (DeVault & McCoy, 2002 p. 757). In small groups data can be gathered using qualitative methods such as individual or group written narratives or group dialog. Further, the use of "creative narratives provide a means to understand women's standpoints while simultaneously providing the psychological safety necessary for change to occur (Schein, 1987)" (Dougherty & Krone, 2000, p. 27). Standardizing the processes makes it possible to use partial data from any interview to pursue a fruitful investigation. This is in contrast to more typical qualitative

research which often seeks to reach data saturation (Glaser & Strauss, 1967; Glesne & Peshkin, 1992; Patton, 2002).

Sampling

Because the object of interest is the institution, the women advisors who oriented me to their standpoint only needed to be available, willing to share their stories, and fit into the category of farmland owners by any criteria. It did not matter the size of land holdings, age, educational level, or location of residence in relation to land. The women were not the sample. The sample is the institution, which in this case includes all governmental agencies and private non-profit organizations which distribute and promote conservation practices.

While women were not the research sample (the institution of agricultural conservation is the sample) the initial group of women farmland owners who helped me orient to the problematic were chosen because they were typical of a majority of women farmland owners. I interviewed women who were widowed or who were sole title owners of their land, estimated to be more than age 70 and able to understand the purpose of the interview and make the choice to be included. One woman lived out of state and was interviewed during a visit to her land. Another woman managed farmland in a trust left to her and her brother as well as land she inherited through the death of her spouse. Additional data sources included women estimated to be age 35 and older, and their viewpoints were collected during a small group interview, and during interactions between conservation workers and landowners, which I will discuss later in this chapter.

IE data constructs

I collected IE data from three kinds of conversations, (a) conversations with conservation workers, (b) conversations with farmland owners, and (c) conversations between

conservation workers and farmland owners. I observed conservation workers as they worked and collected actual artifacts and information about

- processes used to fulfill client requests,
- texts such as official forms or case files and land conservation maps with colored lines and notations, and
- timelines for actual case processing.

As I mentioned in the discussion of standpoint, I listened as women farmland owners described the opportunities—whether missed or fulfilled—that they experienced in interactions with the institution of agricultural conservation.

I also observed interactions between conservation workers and women farmland owners both in the owner's fields and in conservation offices. I collected data by observing conservation workers as they conducted their normal work activities and by interviewing conservation workers at all levels of the institution. These workers explained procedural steps in detail, including fine-grained details such as the color-coding of folders or when, in actual time, they accomplished certain tasks.

I also gathered data by performing textual analysis of forms used throughout the system to:

- inform clients,
- direct workers,
- stand for the client's interests, and
- make aspects of the client's requests actionable.

I conducted textual analysis (Smith, 1990b, 2005) of all features of several institutional forms to discover the clues to the ruling relations that guide worker and farmland owner

actions. In many cases, my textual analyses occurred at the same time that workers explained to me how the forms were completed and described who is involved in completing each step that the forms direct. I also analyzed texts that were not institutional forms without worker assistance.

Because the problematic adopted directs the researcher to discover how work is conducted, "the problem of the partiality and particularity of perspectives is transformed from a limitation to an essential dimension of inquiry" (Smith, 2005, p. 43). Therefore, it was not necessary to examine every text, interview every worker, and observe work at all levels of each agency in order to gain insights into the experiences of people who are part of or who interact with the institution. A story which appeared to be exceptional, a story that might have been discounted as too extreme to generalize to others, is still about a person who was governed by the institution's ruling relations that coordinated their activities. Because the focus was on the ruling relations, all relations counted in the inquiry. That said, I chose to pursue multiple stories of women farmland owners because I had ready access to many qualified women and felt it was necessary to explore the institution to a fuller extent. I often analyzed data during interviews as I developed an understanding of the processes, checked with the client or worker for clarity, and listened carefully for items to ask of the next person in the sequence of the process to form a complete picture. I judged that data collection was complete when the information I had gathered explicated authentic ruling relations of the institution.

In IE, data are not always processed in the same ways as in more traditional qualitative methods such as grounded theory, where every interview is transcribed, coded, and themed (Glaser & Strauss, 1967). Data can serve as examples of institutional processes that must be

checked against ordinary, everyday experiences. In this research, the experiences of women farmland owners provided the direction for fruitful investigation because data within the institution are embodied as policies that are applied according to ruling relations that are described in texts and can be described by workers.

Textual analysis

In this research, textual analysis was concerned primarily with discovering how ruling relations direct workers and clients to act in order to successfully navigate the institution as they implemented agricultural conservation programs. The actual texts were not the focus; rather it was the work that they directed. Smith (2005) explains, "While we have valuable things to learn from discourse analysis as well as from the field of rhetoric, institutional ethnography recognizes texts not as a discrete topic but as they enter into and coordinate people's doings" (p. 170). Through texts, individuals are brought into existence in particular ways and made to act according to an institutional timeline which organizes the life of the individual. It is this two-way activity—between workers and clients—that is the evidence sought through textual analysis.

Files represent the main way services to clients are processed through the institution. Access to working files, then, was necessary to the investigation. While blank forms could be easily obtained, it was more important and useful to see actual forms as they are used (Campbell & Gregor, 2004; DeVault, 1999; Smith, 2005). This meant client privacy protection was important to both the research as well as the institution because completed forms contained private information. Information may be textually controlled by being requested on a form, or it may be excluded by not having a space on a form. As texts, the forms reflected institutional processes and provided important clues to the pathways and

ruling relations (Smith, 2005) that ultimately impacted clients' experiences. The primary texts included in this research were the contents of agency files and promotional materials and printed explanations that were produced by and about the institution.

Institutional capture

My prior knowledge of the institution of agricultural conservation made it challenging to avoid what Dorothy Smith called "institutional capture" wherein "institutional discourse has the capacity to subsume or displace description based in experience" (Smith, 2005, p. 225). That is to say, I could easily lose touch with workers' experientially based knowledge. Disassociating workers from their titles, statuses, and credentials helped me see the ways in which their work was a structured by rules and policies that were connected to extra-local systems. I followed the example set by Ellen Pence who had, like me, worked for many years inside the institution. Pence's use of the word *worker* (Pence, 1997) provided guidance for writing about the workers as a way to help others see the institution more clearly. In this study, I use *conservation worker* or *worker* to describe anyone employed in the institution of agricultural conservation, and, in some instances, I use *work* and *worker* as they apply to farmland owners and others. Agencies employ soil conservation specialists, secretaries, soil scientists, engineers, wildlife biologists, foresters, and technicians with technology competencies such as computer mapping, at various positions in their staffing hierarchies such as middle level managers or field workers. Thus, calling them all conservation workers removes the hierarchical distinctions of their work titles. Across the institution, many conservation workers are engaged in the same process of implementing a smaller number of programs, as more than one agency and organization may take a role in implementing a particular CRP practice. For example, the distinction between the agencies is less important

to this research than the policies and processes described from a landowner's experience. Very often landowners do not distinguish between conservation agencies unless they have a personal relationship with a worker or have had years of interaction with them. In all cases of conservation workers and landowners I have maintained the gender of the persons in pseudonyms where used. Table 2 shows the pseudonyms of women landowners and male and female conservation workers with whom I had conversations that informed this study. To distinguish women who own farmland from women who are conservation workers, -CW is added to the names of women conservation workers (e.g., Agatha-CW).

Table 2. Landowners and conservation workers who had interactions with the researcher

Women farmland owners	**Conservation workers**	
	Women	**Men**
Alma Clara Mae Elsa Emily Hildegard Lottie Phyllis	Agatha-CW Arlene-CW Edna-CW Eleanor-CW Esther-CW Goldie-CW	Dominick Eldred Emil Harmon Hilford Omar Reid Reuben Taylor Wilbur

In focusing on the work of owning land, I use the word *work* in the same way as DeVault and Smith, that is to say it encompasses "expenditures of time and effort" (Smith, 1987, p. 169; DeVault, 1999, p. 12). This can include the time and effort to communicate with the tenant who farms her land or time consumed in learning of market or weather reports (if crop sharing). These examples of work are typical of tasks done by men and women who farm their land in particular ways, such as cash rent or crop share. However, describing these tasks as though they were simple steps in a recipe presupposes the *doer* knows how to

accomplish the tasks and do them well enough to meet standards of social norms in the community. Emphasizing work in this way also helps bring to light unpaid work that is often done by women, such as was discussed in chapter 2 about the historic roles of women in farming.

Using the IE Method

As with any research approach, the process includes three, often recursive activities. In the case of this study, I prepared for the study, and then gathered data. The problematic bounded the inquiry as I explored the institution. In a manner consistent with IE, I described, then I traced and traced again pathways through the institution of agricultural conservation, suspending my desire to draw conclusions or commit to operative theory too soon. The subjective nature of IE is similar to the process of creating art: you know you've finished when a complete picture emerges. My responsibility was to explore multiple pathways that described how the institution works in the everyday circumstances of people who participate or want to "hook into" services provided by the institution. Some pathways were longer than others and crossed into and out of related agencies. The inquiry was completed when no more pathways appeared to be responsible for effects seen in the everyday doings of the women farmland owners who provided the standpoint for the research. When that occurred, I began the third part of the research process, writing this research report in the shape of a dissertation in the field of agricultural education.

Preparing for the study

This research project is centered in the U.S. Midwest and encompasses diverse agricultural systems and rural land uses. Two sources of funding were obtained for partial support of the research. I received a $2500 Resource Enhancement and Protection Historic

Resource Development Program grant ("The Silent Pillars of Agriculture—Women Farmland Owners"; 07–047) to collect orienting interviews with women farmland owners older than age 70. I also received a $10,000 USDA North Central Region, Sustainable Agriculture Research and Education grant ("New Partners for Sustainable Agriculture"; GNC 06–060) to support graduate student research that covered expenses for a small-group interview, stipends for the women farmland owners, and meals for the workers in attendance that day. To complete the balance of study I used personal funds for travel, and employed standard recording and reporting technologies of cassette tape and digital tape recording and hand notation materials, a personal vehicle, and personal computers. The project was reviewed and approved by the Iowa State University Institutional Review Board and classified as exempt. See Appendix A.

I obtained permission from the governmental agency leaders before I observed conservation workers. Information from private non-profit organizations was mainly obtained through their publicly available materials. However, in one non-profit organization because of the unique nature of their work, I spoke with workers the organization had identified. I defined the scope of the institution to be examined as broadly as possible because I learned in the orienting interviews that most of the women had little experience with the institution except for some of the government agencies. However, I knew that private non-profit organizations expended resources to reach farmland owners and I wanted to determine if there was something about the relationships between the women and the non-profit organizations that could account for the gap between what I knew was available and women's participation in agricultural conservation in general.

Women farmland owners I talked with often demurred that their experience was not exemplary and that they didn't do much of what they described as the farming, which is consistent with my years of experience in talking with women farmland owners. That is to say they spoke of themselves as ordinary and not exceptional conservationists nor did they consider their role in farming to be remarkable. They were active members in social community organizations such as churches, but not as members of conservation or agricultural clubs or non-profit conservation organizations. The oldest women farmland owners had not participated in educational events of the types mentioned in chapter 2 such as Women, Land and Legacy^{SM} (WLL) or Annie's Project. Some women farmland owners who attended the small group interview had attended one WLL forum, however of those who had attended a forum I know less about whether they are self-directed learners who typically seek educational opportunities in small group forums and did not draw conclusions about them as learners. Two commented about conservation information received from private non-profit organizations. To some extent many of these women are figuratively comparable to *non-respondents* in a survey methodology about agricultural conservation education because they had not actively participated in routine educational events for conservation.

Gathering data

I gathered data for this research in several ways that are commonly used in IE research as well as in other qualitative research approaches. I conducted orienting interviews with individual women farmland owners and a small group interview with women farmland owners. I conducted the orienting interviews first, and then, instead of pursuing the data-gathering activities in sequence, I gathered data by the following means concurrently.

I visited with and observed various workers in the institution of agricultural conservation as they conducted their work and at professional meetings. I had conversations with women farmland owners who offered their insights into the institution in both formal, planned exchanges and in informal, spontaneous interactions. In some cases, I had conversations with a women farmland owner and a conservation worker as they discussed conservation program options.

I collected and analyzed a variety of texts from several entities within the institution of agricultural conservation, and I observed conservation workers and women farmland owners as they interacted with each other. The following sections describe in more detail each of these data gathering techniques and provide examples of the kinds of strategies I used as I followed pathways through the institution.

Orienting interviews

Orienting the researcher to the experiences of women farmland owners began with interviews of older women farmland owners in north central Iowa. Conversations with younger women farmland owners occurred during a small group interview and at other times (e.g., during interactions with conservation workers). Starting with older women was a matter of expedience to record the oldest possible vernacular and orientation to landownership from still-living women. This enabled me to capture authentic speech about experiences spanning the longest timeframe possible. When these older women inherited their farmland, they were exposed to historic and gendered land relationships. One purpose of the orienting interviews was to gather strategies women employed to carry out their agricultural conservation goals, no matter their age, social class, educational level, number of acres, or contractual farming arrangements. Interviews focused on their acquisition of

farmland, how they managed their land, what conservation practices were in place, and a sense of how they felt about conservation and the future of their land. Interviews were taped and transcribed as needed; not all of the interviews were fully transcribed. The older women selected for the orienting interviews were active and independent, capable of making considered decisions on their own about participating in the research; these women signed consent forms. None of the women lived in long-term-care facilities.

Other interview and data collection

The small group interview elicited strategies and comments from women who attended a one-day workshop featuring their knowledge and experiences as farmland owners. I prepared a written letter of invitation to participate in the small group interview that was mailed to a list managed by a conservation worker. I did not have access to the mailing list, nor did I contact the women directly. Fourteen women attended the day-long event. During the workday they told their individual stories and discussed aspects of their stories in small groups. Also present were specially invited conservation workers who listened to the women's stories and occasionally advised the group about particular institutional requirements when an attendee expressed uncertainty about something. Together with the conservation workers, these women co-created brief case studies of fictitious women who were imagined to face particular problems in navigating social and governmental systems. Therefore, women who have participated in conservation programs could describe their participation in and knowledge of the steps or rules related to compliance with the program requirements. Women who use conservation practices on their land (even those occurring independently of government programs) could describe their involvement with how those practices came to be on their land. Through these conversations they articulated their goals

for the future of their land; what they believed they would or should do to accomplish those goals whether or not they involve stewardship—and their knowledge of how conservation goals can be achieved. This strategy for data collection was less helpful in this study than conversing and accompanying conservation workers on visits to farmland owners.

I conducted interviews with agency heads and mid-level supervisors to gain overview perspectives about the missions and purposes of the agencies in the institution. They provided information about what the view of agricultural conservation is from their location in the system. In the case of federal agencies which are linked to higher levels of organization they described how they were part of timelines and annual cycles of legislative processes and rule making to define policies and implement conservation programs. These managers and administrators described who they answered to and how they prioritized the work they oversaw.

I conducted conversations with conservation workers primarily in their public work locations where their tools, documents, and procedural manuals were nearby for reference. In all cases we talked about their work processes from beginning to end for the conservation programs they implemented in general, and they selected programs to highlight specific processes in more detail. I considered these conversations with conservation workers to be *interviews* even though they were not subjects of the research.

They chose the programs to show because they were the experts in how to do their job, and could show which jobs and which aspects were particularly important. All of them knew the purpose of my visits and participated willingly (once they knew I was not trying to catch them doing something wrong as I could not possibly know all the details of how they did their work). They were eager to fill me in on procedural matters that guided their everyday

world as rarely does anyone have the focused attention of another person on matters so mundane as how files are moved from one place to the next. They described their public roles and once they understood I really did want to know simple things, like the physical steps to process a file, they took over a teaching role in explaining to me what was important.

Texts

Texts used throughout the institution to guide workers and clients were collected and analyzed to find the evidence of rules and processing (Smith, 2005; Pence & Sadusky, 2005). In one case, with the woman farmland owner present, a worker started a fictitious file for a request and used actual information about her land and circumstances to demonstrate the entire process. In other cases it was easy for workers to mask identifying information, or I had obtained written permission from the woman landowner to view the forms in her file. Forms often serve multiple purposes as they pass from one worker to the next and, in some instances, between agencies. The evidence of each purpose is present on the forms.

As I began to examine the forms as texts that were used in the institution, I was interested in what information was included or excluded from the forms as well as how information was reduced into technical terms or codes. It also seemed to be important to understand how people were trained to use forms and how they used the texts in concert with timelines and seasonality. I noted information that seemed to signal something beyond its surface or explicit meaning and things that would serve as a red flag for other reviewers.

Observations

Observations of conservation workers interacting with farmland owners or in carrying out their daily jobs occurred in as natural a way as possible, consistent with the notion of participant observation common to qualitative methods such as ethnography. Each agency required me to conform to slightly different privacy act considerations and I readily

complied. One agency wanted me to have the woman landowner come to the agency office with me to agree that her file could be used as an example, while another agency asked me to comply with a worker's judgment in the field if the worker felt that I should move out of listening range in order to protect the private interests of the landowner (which was not necessary but we discussed ahead of time how that could work). Landowners received an explanation of my presence and had been asked ahead of time for permission to have me observe their transactions. All landowners had opportunities to decline my observation, so they tended to treat me as though I were an intern of the worker or a non-active conservation worker, which meant they mostly ignored my presence and spoke directly to the conservation worker to conduct their business. In some cases I sat in the offices in public spaces (i.e., I sat in chairs in waiting areas) and simply recorded the natural flow of work when multiple people were involved. In these cases the data recorded was about how work was processed from clients who stopped by and how workers interacted with each other to conduct the day-to-day business of agricultural conservation.

I also attended a conference in July, 2007, for women interested in agricultural issues and found it to be a productive event for collecting observational data. The conference was held in an urban hotel and I participated fully in the conference as an attendee. Mainly I noted speakers' comments and presentations of conservation during this non-formal adult educational event. I attended concurrent sessions, listened to keynote speakers, toured exhibit booths and visited with women during meals and breaks.

Broader Implications

The IE theory, methodology, and methods described in this chapter provide the foundation for the research findings and subsequent analyses. The advantage of IE for this

research was the orienting focus on the everyday experiences of women farmland owners. IE allowed me to learn from women's actual, everyday experiences within the context of the institution of agricultural conservation in ways that illuminated the gaps between perceptions of institutional services and women landowners' experiences.

Institutional services which can be modified through educational intervention were revealed through the emphasis on the lived experience. Prior ethnographic work by Chiappe and Flora (1998) and Salamon and Keim (1979); focus groups conducted by WLL (Bregendahl et al., 2007); and a survey by Wells (2004) contributed significant secondary data about women farmland owners and, as useful findings, informed my use of the IE methodology to explore the institution of agricultural conservation. In my experience, IE methods and practices opened up the topic of agricultural conservation in new ways and revealed productive areas for future, complementary research approaches, such as in-depth, targeted surveys and educational needs assessment, and ethnographic studies. The data contained by this study turns the focus not on women or on farmland owners in general, but towards the institution which uses ruling relations to guide and coordinate the actions of conservation workers and farmland owners.

Chapter 4. Findings

This chapter reports the findings of the institutional ethnography that I conducted on the institution of agricultural conservation. I used Leopold's (1949) notions of *land as commodity* and *land as community* by placing them near opposite ends of a continuum of ideological orientations. Orientations toward the land-as-commodity end of the continuum encompass business and economic values of land and favor values of land that produce an economic or harvestable return. In the same way, orientations toward land-as-community encompass and recognize intrinsic values of nature and consider the needs of all living things for a healthy and functional ecosystem in balance with human uses of land. All of the ideological stances that exist along the continuum reflect not only ideological orientations, but also characterize behaviors based on those orientations.

This chapter is organized into five main sections: the institution of agricultural conservation; land as commodity ideology and ruling relations; land as community and ecology; educational interactions and agricultural conservation; and a discussion of the key finding of the study.

The first section, the institution of agricultural conservation, describes the institution from the standpoint of women farmland owners. In general, the institution is presented in terms of how conservation programs support farmland owners who hold land-as-community orientations, which is an orientation that appears to closely align with what women farmland owners have said they hold as important values (Bregendahl et al., 2007; Chiappe & Flora, 1998, Wells, 2004).

The second section, land as commodity and ruling relations, describes how land as commodity, which is the dominant ideology for agricultural conservation, is driven primarily

by economics with some consideration for ecology. Analysis of texts and descriptions of various encounters with landowners and conservation workers show how the ruling relations of economics actively coordinate actual lived experience to favor the land-as-commodity orientation.

The third section, educational interactions, examines the data for the differential effects of land-as-commodity and land-as-community ideological orientations. Identity roles are guided by cultural and social patterns of repressive or subservient behavior which are reified in educational interactions.

The fourth section explores the less dominant ideology, land as community, a balanced orientation between economics and ecology. These two ideological orientations—land as commodity and land as community—create differential effects in the amounts, varieties, and results of conservation practices that landowners implement on their lands.

This chapter primarily contains data obtained from listening to women farmland owners in the orienting interviews, observations of interactions between conservation workers and women farmland owners, and textual analysis of forms and documents coordinating worker behaviors linked to ruling relations. In accordance with research standards, I assigned pseudonyms to each of the individuals I refer to in this report. Table 3 lists these pseudonyms grouped by the roles of the individuals who provided the stories which informed this work. Women conservation workers are identified by their pseudonyms followed by –CW, such as Agatha-CW, to distinguish them from women farmland owners.

Table 3. Pseudonyms and roles of individuals referred to in chapter 4

Women farmland owners	Conservation workers	
	Women	Men
Alma	Agatha-CW	Dominick
Clara Mae	Arlene-CW	Eldred
Elsa	Edna-CW	Emil
Emily	Eleanor-CW	Harmon
Hildegard	Esther-CW	Hilford
Lottie	Goldie-CW	Omar
Phyllis		Reid
		Reuben
		Taylor
		Wilbur

Using the lived experiences of workers and women farmland owners, I show first how workers' daily work is coordinated by ruling relations of the institution and second how women farmland owners are affected by the institution. Although men own about half of all farmland in the U.S. Midwest, this study focuses on women farmland owners; no men who owned farmland were included in the orienting interviews. The following sections each discuss how the pervasive ideology of economics and profit creates circumstances where workers and women—and by association, women's lands—are affected.

Members of the institution—private non-profit organizations, and county, state, and federal agencies—produce soil and water conservation programs and inducements that are available to farmland owners. The data reported here were obtained as a matter of public record except in the instances where specific information about a particular farmland owner's business transaction with a member of the institution was a matter of private concern. That is to say, if a farmland owner received approval to enter a contract for construction of a windbreak that included cost-share through a public meeting, then that farmland owner's name is a matter of public record in the form of meeting minutes. However, the content of a

file folder with specific information about the farmland is part of a business transaction that is considered to be a private matter by the institution. In cases where data were obtained from texts within private files, either the farmland owner was present or I had obtained written permission of that farmland owner to use the data. Conventions to mask the identities of individuals, locations of land, and agencies and organizations within the institution—including assigning pseudonyms to individuals and agencies and otherwise masking the identity of individuals and agencies—were used in this research.

Documents that were available as educational and outreach materials were examined, particularly as they related to effects of land-as-community and land-as-commodity orientations and identity as hegemony. The main task of textual analysis in IE, however, is to describe how texts are active, rather than passive, as they coordinate actions according to ruling relations. However, before presenting findings about land as commodity, educational interactions, and land as community, the following section describes the institution of agricultural conservation in three ways. The institution is first illustrated from the perspectives of agency members and relationships, followed by brief description of the flow of money within the institution. Finally, the institution is explicated from the IE perspective of the problematic, the way to open the research topic, in this case, from the standpoints of various participants in the institution. As I described in chapter 3, the methods chapter of this dissertation, when a researcher uses the IE research approach, the institution—in this case, the institution of agricultural conservation—was focus of the research.

Women Farmland Owners and the Institution of Agricultural Conservation

The institution of agricultural conservation provides services to any individual or any legal entity which qualifies for those services. Qualifications for service includes, for

example, holding the deed to the land. In addition to the individual or legal entity qualifying for services, the land itself must be suitable for conservation practices eligible as part of specific conservation programs. Participation in conservation programs is voluntary.

In fact, landowners may install conservation practices without government financial assistance if they choose to pay for changes to their lands themselves. Several women farmland owners who participated in orienting interviews have paid for land management services without cost-share assistance from the institution. They have independently installed services such as using native prairie seed, managing prairie remnants, and installing grassed waterways. These women landowners have paid out-of-pocket for these services because the institution failed to provide services that met their stated needs. However, by-passing the institution also created a sense of freedom and independence. For example, one woman farmland owner, Clara Mae, reported that she kept a portion of what she called her "prairie land development [outside of government programs] so I can do what I want with it," even though it meant she did not receive a cost-share payment for that portion of her acres and did not earn any income off that portion. Clara Mae and other women who made choices about conservation and management practices on their lands reported that they did so on the basis of the values about their land that they held.

One way of beginning to understand the values that women farmland owners hold is to look at the limited amount of data that has been gathered about their values. For example, Bregendahl et al. (2007) reported the process WLL used to ascertain the values about their land women farmland owners held. WLL leaders conducted *listening sessions* in which they asked participants to rank issues that related to their particular values about the land and to identify conservation practices on their lands, and reported that,

> women landowners participating in the listening sessions exhibited an unmistakably clear and strong consciousness about land health issues and respecting nature intrinsically—not for its productive value, but because it is like "an old friend" and the sustenance of all life. (Bregendahl, 2007, p. 36)

Ruling relations for the institution of agricultural conservation support land-as-commodity values by featuring economic incentives—such as cost-share—that are attractive to farmers, predominantly men, who wish to maximize profits. Napier and Forster (1982) discuss "research that suggests that many farmers are interested in short-term economic gain from land resources" and in fact are committed to "intensive use of land resources while ignoring soil erosion control measures" (p. 140). Therefore, in the main, the institution of agricultural conservation serves only half of the farmland owners by offering land-as-commodity programs. From another view, if the institution of agricultural conservation were to recognize and acknowledge that women farmland owners hold values for land health and respecting nature, then it would be reasonable to expect to find data that show how institutional services support and engage people who hold those land-as-community values that are consistent with respect for the intrinsic values of nature. In fact, if half the farmland owners, women and men, were to hold land-as-community values, they would represent fully half of the clients of the institution of agricultural conservation.

Institutional funding and partnerships

Primary funding assistance for soil and water conservation programs is authorized and allocated by federal legislation, mainly through what are known as the conservation titles of what is commonly called the Farm Bill. The federal funds are apportioned to state level administrative offices to be further apportioned and allocated through a system of county-

level administrative offices staffed with technical and administrative workers, referred to in this document as *workers* or *conservation workers*. In addition to the federal funds which provide significant funding for particular types of agricultural conservation practices, each state maintains its own departments of natural resources and agriculture which further distribute money that has been authorized and allocated by state legislatures. States use their money to enact conservation practices on private and public lands in a milieu of conservation programs and partnerships with governmental agencies at federal, state, and county levels and with non-profit organizations. For this research, the institution of agricultural conservation may be considered as providing technical information, funding assistance, or a combination of the two to farmland owners in order to encourage them to protect soil and water resources to benefit the public good as well as to protect the value of the agricultural resource.

Problematic revisited

In IE research, the problematic is generally conceived as the way to open up the research topic by starting from the standpoint of the persons experiencing the institution. In this study, the problematic began with a concern for the low participation by women farmland owners in the institution of agricultural conservation. What was significant was the relative absence of women acting on their own behalf in the offices of the institution. Following the IE process meant starting to look at the institution as though I were standing shoulder-to-shoulder beside a woman farmland owner to see the pathways she sees—not to take up her point of view but to look at the institution and its services from her standpoint, from where she stands.

The following sections articulate the problematic in three ways, each related to a different standpoint within the institution of agricultural conservation. First, I use the standpoint of women farmland owners to examine how they come to "hook up" (Smith, 2005) to the institutional services and to identify how women can become engaged with the institution of agricultural conservation or hooked into the pathways of service. Second, I describe the nature of conversations where women farmland owners can be seen as agents in enacting agricultural conservation practices with tenants.

The section on conservation workers' standpoints is reported from the standpoint of women farmland owners, a standpoint that allowed me to gain some understanding of the standpoint of agricultural conservation workers. In the section on conservation workers' standpoints, then, I offer evidence that describes the nature of their work within the institutional culture. I suggest that the institutional culture affects how conservation workers work with farmland owners, particularly conservation workers who understand and can work effectively with farmland owners who hold land-as-community orientations as well as working effectively with farmland owners who hold the more dominant, land-as-commodity orientations.

The third section explicates an example that illustrates the standpoint of what I identify as an invisible farmland owner who hold lands as community values and who received service from conservation workers that contrasted with what she requested and what she might have received.

Women's standpoints

Nearly all of the women from the orienting interviews who were 70 and older spoke of their tenants as the people most likely to observe the condition of the women's farmland and

said that they depended on their tenants to initiate conversations about problems with the farmland, and to recommend improvements. With only one exception (Clara Mae) all the rest were not involved in any conservation programs on their lands except to approve the decisions and suggestions made by their tenants, even when men in their families were crop-share tenants. Emily spoke sympathetically of how she was glad to approve a conservation program her nephew had suggested she apply for because her nephew had been "putting up with how rough that ground had gotten" and she knew he had not wanted to bring it up because of the cost to fix it. Emily's nephew had prior experience with the institution because he had taken actions on his own land and investigated the options before he brought it to her attention.

Women of other ages spoke of agreeing with their (still farming) husband's or son's assessment of needed conservation—except for Phyllis. Phyllis had learned about agricultural conservation practices at a WLL meeting, but "when I tried to talk to my husband and son about what I learned they would have none of it." Thus the adult non-formal education she received was effective in terms of learning but not action in this case. Because Phyllis must contribute her farmland into a family business system which involves men who discount her concerns for soil conservation on her land, I found that, for her, provision of more information was not the answer. Simply put, an institutional response of more adult, non-formal education would be inadequate to address the inequities many women farmland owners face in achieving soil conservation on their land.

In my search for other data sources that compare men and women as farmland owners, I hoped to find information to distinguish women's and men's values and decision making in regards to agriculture. Because many women are primarily dependent upon men, in

particular men who are tenants on their land, to make conservation determinations on their land, I looked for data that might suggest agricultural conservation decisions might be made according to different values between women and men. However databases for farmland do not differentiate between men and women owners, and research focused on conservation differences between men and women as farmland owners or between tenants and women farmland owners also is limited (Effland, Rogers, & Grim, 1993; Rogers & Vandeman, 1993; Wells, 2003). Until further research reveals differences between men and women as farmland owners, data from studies about women's preferences and values must be examined as contrasted to what the institution produces with ruling relations.

When men take care of women farmland owners' land, the women's land will essentially receive the conservation practices that those men are willing to do and that reflect the men's orientations to the land along the commodity-community continuum. While some tenants will explore and adopt mostly land-as-commodity practices, some tenants will work hard to encourage both men and women landlords to take remedial measures if there are serious problems on the land when they assume responsibility for new rental contracts. One professional farm manager I know, Harmon, routinely requires that every acre of farm he oversees is treated with no-till practices—which is a method of saving soil by minimizing tillage—whether the land had been farmed that way before or not, male or female landowner. Harmon explained to me that, to him, it's the right thing to do. No-till farming also happens to be profitable in that part of Iowa and highly feasible. He has remarked to me in the past that plenty of tenants in that area are familiar with no-till practices so it's not terribly difficult to convince a tenant to farm with no-till or he can find someone who will. Harmon knows farmers in the areas where he manages farms and routinely talks with them, sees the land

they farm in the course of his travels, and he knows how to evaluate soil quality and areas at risk for erosion. Harmon uses this knowledge to his advantage to evaluate whether a tenant practices good soil conservation which Harmon believes is crucial. In many cases, both women and men farmland owners—particularly absentee owners—cannot be presumed to have the same advantages as Harmon when it comes to judging the quality of work performed by their tenants.

In some cases, a woman landowner's family members actively discount the woman's concerns for soil or water conservation, which increases the challenges of addressing her concerns to her. It may be difficult to articulate her claims that the soil or water on her land must be improved. That is to say, a woman's knowledge of the existence of institutional agricultural conservation programs is not enough to help her make that case that better soil conservation practices are warranted on her land. If women farmland owners do not consider knowledge about conservation matters essential to their identity as farmland owners, this presents "dispositional barriers" to learning about their land first-hand, and "situational barriers" (in Cross, 1981, p. 98) when physical distance from land or costs in transportation routinely prevent women and other absentee farmland owners from observing and learning what is happening to their lands.

When I observed that women's speech failed to included technical terms, even though their concerns for healthy land and clean water were strong, I re-examined standpoint evidence from the orienting interviews. For example, some women farmland owners live where they drive past their land every day but they did not speak of going into the fields to inspect their land. Some older women who own farmland have difficulty walking on sloped or rough ground. Emily, who is physically unable to walk or drive through her farmland,

rode with her renter in his pickup truck as part of his request that she understand the area that had "gotten real rough" and that he thought would qualify for a conservation program treatment. One widow who visited with me had extensive historic knowledge of conservation programs but did not indicate that she spent time in the fields making assessments of soil condition or tillage practices. It is not uncommon for widows and other women who crop share with young men in their families to describe how they discussed farming practices and decision-making but did not initiate conservation practices. Nothing in their interviews led me to believe they would notice anything other than serious erosion, such as a gully, though review of the data was not conclusive in this regard. Three women used a small number of technical terms and concepts from soil conservation but overall verbal clues were missing that would confirm they were actively engaged in soil quality assessment or decision-making on their farm.

Alma and Emily: Maintaining their legacies

Two examples suggest, however, that women's farmland has great meaning for them in terms of legacy, and consequently something of great value that they would never wish to be degraded while under their care. Thus, knowing something about soil conservation practices and ability to judge the condition of their farmland would potentially be important. One woman farmland owner, Alma, whose experiences are described below in more detail, was searching for words to describe the importance of the soil when she used her hands to grasp imaginary handfuls of soil and said, "It's everything."

In the second example, Emily, a widow, shared the land from her husband's family with her widowed sister-in-law and brother-in-law. When her brother-in-law wanted to buy out her and his sister's share of land against their wishes, she took the lead to sue the brother-in-

law so she and her sister-in-law could retain half the farmland. Both she and her sister-in-law were more than 85-years-old at the time of the law suit, which they won and retained the poorer half of the land because he got to choose which half to keep. At their advanced age and with the price of farmland they could have had enough cash assets to last for the balance of their lives, but she said that the land itself was so important to them it was worth suing a family member for their right to keep the farmland. She closed her eyes at the memory and shook her head and said, "It was just terrible, just terrible."

Phyllis: Engaging the process of agricultural conservation

Looking further into how tenant relationships might figure in women's management of soil conservation on their farmland, I found, not surprisingly, opportunities for deception of women farmland owners. In fact, conservation workers mentioned situations where women farmland owners were deceived in business matters (e.g., being offered below-market rental rates) and matters of land dispersal. Although these situations are concerning, they were not part of the problematic for this project. Instead I focused on the matter of how soil conservation measures are presented to women farmland owners. These presentations held more interest because of their effects on women's participation in agricultural conservation programs. If a tenant wants to avoid beginning a new conservation practice and presents it to the farmland owner in an authoritative way as not being practical or very effective, it follows that they could subvert a farmland owner—male, female, or absentee—who might not recognize the slow degradation of their land. In addition, I am concerned that if women aren't confident of their use of conservation terms, or hardly use them, it would be difficult to converse with their tenants or with conservation workers. Although I did not assess the quality of farmland owned by Phyllis, either she learned something about agricultural

conservation at the educational event that she thought could apply to her land, or she used the event as an opportunity to talk with her husband and son about conservation. Phyllis' experience and description of how she had attempted to discuss this with her husband and son, who strongly rejected her ideas, represents one possible scenario for other women farmland owners who might be in a position to choose between maintenance of satisfactory relationships with kin, or land protection. Phyllis saw the value of the educational day and the small group interview day as mainly beneficial to her in the long term, "because now I know the gals, I can come and find out what I want to know later." Even though learning for Phyllis did not lead to engagement in conservation practices, it is reasonable to provide opportunities for women who wish to become competent in making their own conservation decisions even if they must work with tenants who have inherently different goals for conservation (Bower, 2008). Based on research on women's influence with men, Carli (2001) states that,

> Although men often resist a competent woman, they are less resistant when they have the opportunity to gain money or other benefits by making a well-informed decision. Under such conditions, men are influenced to a greater degree by competent women than by either women or men who are less competent (Pugh & Wahrman, 1983; Shackelford, Wood, & Worchel, 1996). Apparently, when men feel that they have something to gain by deferring to a competent woman, their need for competence outweighs concerns over threats to male authority. (pg. 731)

Thus it may be possible that women with non-kin tenants could exert more influence when asking for conservation practices if they demonstrate their competence in making such decisions.

Conservation workers' standpoints

Some conservation workers are strongly committed to the land-as-commodity orientation and are certain that economics rightfully drives the decision making regarding soil conservation. Their interactions were sprinkled with production agriculture language about yields, acres, markets, and profits. Workers with strong production agriculture orientations are not upset by rotating conservation programs, for example, that protect sloped land for a few years and then that land is tilled and farmed for one or two years before the next conservation program produces sufficient financial incentives to entice the farmers to protect the slopes once again.

The stories of Hilford and Taylor illustrate the standpoint of conservation workers. These two conservation workers separately agreed to visit with me about how soil and water conservation programs and soil conservation issues figure into their work. As I rode with each of the conservation workers in their trucks, I asked them to interpret what they saw on the landscape that they would consider inadequate or adequate by way of farming practices that could be improved upon. Hilford, was "not the least bit concerned" about soil that had blown into the road ditch with snow that we observed as I rode with him, while the other worker, Taylor, was not concerned about the relatively low amount of residue after fall tillage that he observed this year. When I asked Taylor to tell me about the practice of using tillage to turn over all soil for a distance of twenty to thirty feet around the outer edges of harvested soy bean fields, he knew of no practical justification for it. Conducting fall tillage on soybean fields exposes soils to wind erosion, organic carbon depletion, and is strongly discouraged by all agricultural conservation agencies and nonprofit organizations. In fact, if soybeans are grown on soil that erodes easily and if that farmer participates in federal

programs to receive government assistance money, then fall plowing is prohibited in those fields. Taylor described the practice of tilling around only the outer edges of soybean fields as having "transferred socially" which he explained meant simply that if one farmer was observed using a practice then another would copy it.

As we drove past a field with a farmer engaging in that very practice, Taylor grinned and nodded towards a big green tractor with a large disk as it churned up soil and said, "Besides, it's fun to use that big equipment. Most of these guys just like to drive and do that." I do not have data to show how women farmland owners who might hear these explanations would sort weak justifications from strong reasons to adopt or reject certain farming practices. I asked Taylor if in the course of his work he received calls from absentee farmland owners who have concerns or questions about their tenant's practices. He said,

> Oh yes, I got one the other day from a guy who was concerned about something his tenant was doing and he wanted me to tell the tenant that he [the tenant] was doing something wrong. I never interfere between a landowner and tenant and usually tell them to talk to their tenant and find out why he's doing something. There's probably a good reason for it, and they need to develop trust in their tenant or find one they do.

I found no data from the women farmland owners—who did not use conservation language—in my orienting interviews to suggest that any of them would openly question the accuracy of statements by such authoritative conservation workers as Hilford and Taylor.

Invisible farmland owners' standpoints

One woman farmland owner, Hildegard, had an idea for a conservation practice that would clean up water that was contaminated with chemicals from a neighboring farmer's land that flowed through a culvert under a road onto her property. She carefully drew on a

piece of paper and showed me a plan for addressing the problem. Neither her circumstance as a recipient of water that carried unwanted chemicals nor her idea fully illustrated on paper fit any of the situations the institution is allowed to serve. However, Hildegard's request is both not actionable and unreported as a request for service that could not be met, two characteristics that functionally make her and women like her invisible to the institution.

The land-as-commodity orientation directs the institution away from concerns like Hildegard's that emerge more from the land-as-community orientation. In Hildegard's case, paying for services to mitigate what are seen as normal and acceptable levels of agricultural pollution calls attention to a problem that would be considered too expensive for farmers to fix and therefore unrealistic. If the farmer who sends water to Hildegard's creek wants to create a large detention basin or wetland to clean the water before it reaches her land, a program exists to help him do so. However, he would be unlikely to do so because of the amount of income he would lose by not being able to grow cash crops on those wetland acres as he and his father before him have done for decades.

In many ways, it is as though Hildegard is invisible to the institution. While it is true that Hildegard's request was not denied because of her gender, this illustration shows that there is no incentive and likely no means for the institution to record unfulfilled requests such as this. Further, without a means to track who requests other types of services it is not possible to determine if there is routine discrimination. The current conservation programs provided by the institution, particularly those of the federal agencies, are so greatly in demand by traditional production-oriented farmland owners and tenants that requests always exceed the funds provided and there is some record of requests that exceed the funding available for institutional programs. Despite Hildegard's thorough understanding of her land and her

careful planning, Hildegard—and others like her—disappears from the agricultural conservation records that only record instances that are consistent with the rules, which are an expression of the ideology of land as commodity. Bowers (1995) writes, "The vocabulary of an ideology encodes a way of knowing, and it also determines both what can be named and what will be relegated to the domain of silence" (pg. 37). To describe and document that there is a different constituency with unmet needs for different services would not be in the best interests of the institution which supports the current constituents through ruling relations. This kind of documentation would not help the agencies appear to be doing a very good job of serving the constituents of congress and senators.

A second feature of Hildegard's situation matches the ways Elsa, Lottie, and Clara Mae work with their land. All four women identified small-scale areas of their land and treated these places as discrete and unique within the rest of their land. Many conservation programs have minimum acreage requirements that exclude small areas from treatment. These four women also favored work with native plants arranged in particular ways and not according to the typical programs which otherwise, according to Tom Rosburg of Drake University (2008), "homogenize" native plantings across the region rather than mimicking the unique suites of plants that typify regional soil and climate difference. The current tools of the institution do not fit the actualities of these women's lived experiences.

In other words, farmland owners with land-as-community orientations are subject to the hegemony of believing they are asking for *alternative* practices for which there are plenty of unkind terms, such as *impractical*, *elitist*, *waste ground*, *weed patch*, or *hobby ground*. Elsa, a farmland owner with land-as-community thinking, noted that from her point of view her wishes and the wishes of other similar farmland owners are so marginalized in that they feel

as though they are quite unusual and that they represent a very small minority. They don't expect that workers will inspire them to undertake extra measures to improve ecological health. For Elsa it is a welcome exception to find a worker like Esther-CW who has technical skills for land management recommendations more than what is provided by the dominant paradigm. And for Elsa and others like her, the programs themselves are often seen as having been created for land-as-commodity thinking and, as Elsa said, "some of the rules are seen as inflexible obstacles to ecological goals, not as a means of achieving them."

As described in chapter 1, little statistical evidence of women farmland owners' participation in conservation programs exists that the clues to help me understand the issue of identity came primarily from data in the women's interviews. Identity as hegemony produced by social and cultural patterns of repressive or subservient behavior and reproduced by the institution emerged from the women's orienting interviews. Women, who provide half the tax funding stream for publicly funded institutions, are welcome at the institution as long as they are interested in what the institution offers—which reflects an orientation they may not hold.

Land as Commodity and Ruling Relations

The institution of agricultural conservation reproduces the land-as-commodity orientation throughout the institution through ruling relations, which in this case are rules created to support business fundamentals in agriculture. This means the economic value of commodity transactions—the current price of land or grain, for example—is important to the institution. The institution of agricultural conservation mainly supports the land-as-commodity orientation through the design of programs, by which conservation is strongly linked with reducing the acres available for production, as in CRP. The land-as-commodity orientation

calibrates conservation programs to production values so that land is not used for production for limited time periods, such as 10 years for grassed waterways, rather than making the installed practice a permanent feature of the landscape. For example, the lower end of the range of requirements for conservation practices generally includes options for inexpensive seed (such as *Bromus inermis* Leyss, a non-native grass), the fewest number of species of plants, or the narrowest possible width for a buffer that, in effect, minimize the capital outlay for a landowner and maximize the retained acreage for crop production. Farmland owners who hold a land-as-commodity orientation are heard to complain that even minimum requirements are excessive, impractical, and too costly and that they take too much valuable land out of production. Because farmers use land and resources to conduct their agricultural businesses, all inputs and outputs to the farm balance sheet come under scrutiny for perceived and real costs each year.

The following section discusses the relationships between texts and the institution of agricultural conservation's land-as-commodity orientation and the impact that orientation has on the ruling relations that govern the institution.

Texts favor commodity over community

I turn to textual analysis as it is employed in IE research to locate ruling relations at work within the institution of agricultural conservation. A text directs a reader to interpret information using to a framework of understanding which the writer intends to convey. According to Smith (1990), "textual practices are operative in the work of accomplishing the social relations in which texts occur" (p. 125). In Smith's successive works the term *social relations* evolved to *ruling relations*, the term that I have used in this report.

The following three discussions of texts from the institution of agricultural conservation, the first a news release from a government agency, the second an example of texts that reflect only the land-as-commodity orientation, and the third, which is correspondence between a conservation worker and a woman farmland owner that describes the process and progression of texts that govern conservation practices.

Texts convey ruling relations

News releases from governmental agencies are crafted to convey how the work of the agency is embedded in a sequence of actions that link governing rules to citizen clients. As I will show from a portion of a text—a news release from a Midwest state which is fully reproduced in Appendix B—the ruling relations in force are laced throughout the document and are observable for their coordinating effects for readers.

This news release, which exists on and was accessed from the Midwest state government agency's website, was produced by that agency, which is within the institution of agricultural conservation. The document is headed by the name and logo of the agency and follows conventions of distributing information to news and media outlets, such as including the intended release and the date the news from the agency was produced. The title of the news release places it in the context of the hierarchy of state and federal government agencies and elected or appointed officials.

Table 4 shows the seven sentences from the news release that are analyzed below. The table shows the paragraph and sentence designators. In the analysis text, the sentences are referred to using a convention that combines the paragraph number with the sequential sentences. For example, the first sentence in the text is sentence 1-a, while the fifth sentence

designator (3-e) reveals that the sentence is in paragraph 3; the letter e corresponds to the sequential number of the sentence in the whole document.

Table 4. News release sentences and designators

Paragraph number	Sentence letter	Sentence text
1	a	Governor Rod R. Blagojevich and the U.S. Department of Agriculture announced today an additional 15,000 acres has been funded for enrollment in the Conservation Reserve Enhancement Program (CREP).
1	b	The expansion will enhance efforts to improve water quality and increase wildlife habitat along the Illinois River basin.
2	c	"Expanding the CREP program means that more Illinois farmers can put less productive farm ground aside in order to better manage nutrients in the soil, control erosion and keep waterways clean.
2	d	These funds will give farmers the chance to help the environment and make money," Gov. Blagojevich said.
3	e	Gov. Blagojevich's Fiscal Year 2006 budget includes $10 million for the CREP program.
3	f	As a result of the Governor's commitment, Illinois is now able to leverage a significant federal match for the program.
3	g	Specifically, the U.S. Department of Agriculture will provide 80 percent—or approximately $50 million of the funding for the CREP expansion and the state of Illinois will contribute the remaining 20 percent—or approximately $10 million.

In the first paragraph, the purpose of the news release is revealed, which is to announce the number of acres that will be enrolled in a conservation practice through concerted activities of a state and federal agency is revealed in sentences 1-a and 1-b. *Enrolled acres* in a conservation program generate money for the farmer in the form of an annualized payment proportional to the number of acres multiplied by the dollars per acre specified by the program rules. *Enrolled acres* is a term that insiders understand to mean entitlement (income support) for farmers equal to the number of acres that can be enrolled. Enrolled acres does not indicate that the number of acres is sufficient to correct, permanently or temporarily,

environmental problems on a scale proportional to the total state's farmed acres, nor does it state whether the number of acres to be enrolled is less than, equal to, or greater than the number of acres already enrolled in the state in this conservation program.

The second paragraph consists of a two-sentence quotation (sentences 2-c and 2-d) by the Midwest state governor that ties this conservation program announcement to agricultural interests in land and making money. In other words, the title of the conservation program includes the term *conservation* which can be understood as a general overarching type of conservation of interest to both land-as-community and land-as-commodity oriented readers. However, the term conservation could also be understood as a specific type of conservation of resources of special interest. In this instance, though, the balance of the governor's statement identifies the context for the type of conservation that is intended to be produced by this program. In sentence 2-d, the governor refers to the Midwest state's farmers as having the authority to determine what is considered less-productive farm ground, although the subjective standards for this are left to the interpretation of the reader according to a culturally determined understanding. It is clear, as well, from his statement that the overarching purpose of this land is for it to be farmed—that is, put to use producing commodities—and that it is only temporarily employed in the service of producing other services and thus situates this designation of *less productive land* and conservation within ruling relations of land use and taxation. That the land is set aside from the purpose of agriculture also situates this action within ruling relations that reflect an historic context of a type of commodity production controls that were used by federal authorities during the mid-1950s through the 1970s to boost farm commodity prices. Linking this temporary determination of *set aside* with conservation situates the conservation program within land

use that is temporary and subservient to the ruling relations that spell out the amount of time (ten to fifteen years later in the document) that the land use may "better manage nutrients in the soil, control erosion and keep waterways clean." The governor makes plain that farmers will make money during the period of time they participate in the conservation program.

In sentence 2-d, the main effects of "the chance to help the environment" are not linked to the temporal nature of the program, but later in the document the conservation program effects are linked to statements with scientific phrases, such as "improve water quality," and "reduce the amount of sediment" that are not further linked to the time limits of the conservation program rules. Scientific phrases in this statement place the conservation program within the set of ruling relations that guide research and measurement of parameters important to agriculture, governmental agencies and private groups interested in environmental quality, and the public good. Readers are directed towards a context of systematic and perhaps comprehensive—in the manner of good research—observation and analysis of the agricultural and environmental measures of water quality and sediment loss conducted by the institution of agricultural conservation.

Sentences 3-e, 3-f, and 3-g situate for the reader the importance and relationship of this decision within the context of a larger set of ruling relations that govern the authorization, allocation, and distribution of public money by the state and federal agencies involved in this action. The function of the state funds in this action serve to "leverage a significant federal match" which directs the reader to consider that the state action somehow met federal criteria not specified in the news release, but that can be understood to mean that the nature of the state's allocation of public money opened a portal through which federally distributed public money could flow. These actions by the governmental agencies on behalf of the citizen

reader are sequenced ahead of an action that is cast as the responsibility of voluntary citizen actors to sign up to participate in the program named in the news release. The action of these agencies within ruling relations is linked to a criteria of success commonly understood to be a standard for good governance—that public money flows in the best way to create the desired outcome—which in this case the success of both agencies rests upon participation of enough clients, "farmers and landowners," to verify that the expenditure of public funds was correctly assessed by the public agency administrators.

This textual analysis of an agency news release illustrates that texts are neither benign nor passive in the institution or in the lives of citizens who read the text at a time of their choosing (Smith, 1990b, 2005). The institution's texts direct readers whenever readers engage with information that situates the institution within a set of ruling relations. These texts further describe the correct context for readers so they can interpret the actions of the institution and also provide details about who will benefit from the institution's specified services.

Texts reinforce commodity orientation

This next example shows how, in the end, the work of the institution of agricultural conservation and the texts produced by and within that institution are about commodities. Wilbur, a conservation worker who is a professional forester, sat with me at a table in his office. He had prepared a sample of work files to show as examples of the types of paperwork he completes after a landowner visit. Wilbur noted that the file and form example he had chosen to show was for a tract of land where a stream corridor already had some scrubby trees holding the banks. These trees were of lower quality for wood production, but in order to include the tract of land in the intended program, he had to enter a number

estimating board feet of wood that would be produced which included these trees. He knew that removing those trees would damage the stream corridor and he knew no contractors who would want to bid on removal and replanting, so it was better to leave the existing trees and simply add rows of trees where it was more appropriate to do so. Thus, while the number he entered on the form was defensible in his professional judgment—meaning he could turn to tables that would support his estimate—he acknowledged that the resulting timber production data going to the next agency was hardly appropriate. The likelihood that those trees would be harvested for wood was slim. But the conservation program which makes his skilled assistance available to the landowner for free, along with a percentage of cost-share for her to plant additional trees in that corridor, comes with rules coordinating his activities without regard to the real conditions of the land. Those ruling relations coordinate him to complete a text that takes the board feet of timber produced to the next agency which approves payment of the cost share. That agency then sends his number estimating board feet of timber to the next agency which collects the data on board feet of timber in the state and for that conservation program. From this data that travels between several agencies, eventually an agency—usually a federal agency—reports a number that represents the public good produced by this program.

As we examined one of the forms that is required by a funding agency to be included in a conservation plan, I asked Wilbur to explain each section and to describe who used the information and what the notations meant. Wilbur fluently explained the meanings of the various notations, but even upon reflection, he simply couldn't recall exactly what one particular code meant. However, Wilbur knew that he always put the same code in that particular blank because, in part, he had been trained to do it that way by a senior

conservation worker. Wilbur turned to his manual that described the codes and the sections of the form in detail. As we looked at the meaning of the code, we simultaneously realized why the senior conservation worker—who was known to hold a very strong land-as-commodity orientation—told him to always use the same code in that blank. To do otherwise would call into question all land uses that reflect commodity values, and another code would have favored community values. Using a different code would have required a different level of analysis of the form as it moved to the successive agencies—a red flag—that the intended land use which the form conveyed should be done only after an additional expert conservation worker could conduct an analysis causing delays and potentially preventing the farmland owner from carrying out the commodity activities of the program, regardless of whether the farmland owner might want to know more about the community values of their land. Wilbur reproduced land as commodity, in part because the system was passed along by another conservation worker through the informal education occurring within the institution. The form had been simplified for him by another conservation worker who had avoided creating more work for himself and farmland owners by passing over the guidance in the manual that provided some security for a most critical aspect of the land-as-community orientation. Ruling relations which favor the institutional reproduction of the dominant, land-as-commodity orientation benefit workers who hold similar values. In this kind of situation, the ruling relations work against conservation workers who may not otherwise discriminate against certain people who hold a land-as-community orientation.

Texts describe the workings of the service process

This example describes the experience of one woman farmland owner, Alma, who engaged in the formal process of signing up for a conservation program. As I walked

through this process with her, I became aware of not only the intricacies of the process but also the impersonal nature of the texts that drive the institution of agricultural conservation.

When you walk into the agricultural conservation county office, as Alma did with me, you see a large picture of the President of the United States and posters describing rights to protection from discrimination among other notices on the paneled walls. There are a few chairs along a wall for waiting turns at the service counter, which is about four feet tall so it is a good height for workers standing on their side of the counter to use for writing. It was just below shoulder height for Alma, but she was able to see everything on the counter and reach up to use her hands to adjust papers or hold down with her fingers at the edge of the counter top. She was familiar with the workers in that office and was greeted with personal warmth by everyone there that day. So that Reid could demonstrate the process of signing up for Conservation Reserve Program (CRP) assistance, Alma expressed her intention to sign up for a program to prevent a gully from forming in a field. Reid started a farm program folder for Alma immediately after he determined that her request was something he could act upon—a CRP grassed waterway. The grassed waterway is considered in isolation of other conditions on her land—the office's primary responsibility is for legal administration only. If the land is owned by the person making the request and if there are no legal conditions preventing Reid from further work on the land folder, he can process her request for institutional assistance. The county office does not make technical determinations as to whether other portions of her land should have conservation practices because of observed erosion problems. Reid's responsibility is to start the institutional process that eventually will contractually bind Alma to plant and maintain a grassed waterway for a specified number of years in return for money she can use to pay for installing the grassed waterway.

After Reid starts Alma's folder, he sends it to another agency office which acts on the next step in the process, which is to examine the conditions of the land Alma believes needs a waterway. I will return to Alma's folder, but for now I will discuss how texts guide Reid and other conservation workers to produce mainly commodity orientations to the exclusion of community orientations.

Conservation workers in the next agency to receive Alma's folder have technical skills to observe erosion problems on the land, but generally do not do so for the balance of the farm unless invited to do so by the farmland owner. When prompted by receipt of the folder workers in the next agency perform the requested technical analysis for that area of land as part of the work they are accountable for producing. These workers are not restricted from suggesting that other areas might also benefit from programmatic attention—that is they may spot other areas which could qualify for an institutional conservation program but they are unlikely to suggest other conservation measures to fix problems on the land. Workers are not rewarded for extending unsolicited advice and they may lack technical skills for making recommendations outside the bounds of the programs of their agency. Therefore, professional judgment for holistic soil conservation on Alma's land does not occur unless she knows about and then requests special assistance beyond normally provided service. There was an emphasis by the agency in past years when budgets were strong for counties to encourage farmland owners to receive a comprehensive conservation plan for their whole farm, but this was unevenly accomplished and it was mainly to identify opportunities for institutional program participation and has largely been discontinued. Workers are directed to respond to the requested service even when making a field visit as I observed during field visits with four workers. If Alma doesn't know what to request, the texts don't guide

workers to ask if there are other concerns or if she has ideas about her land that merit a more thorough examination. Texts and supervisors don't forbid workers from having more comprehensive interactions but there is no precedent, guidance, emphasis or programmatic benefit for doing so, particularly in times of minimal staffing and high work loads.

Generally throughout institutional texts or reporting forms, landowners' long term goals or emotional attachments to their land are missing. The farm program folders are impersonal in that regard. Only the necessary legal description, the legal name of the title holder, and the specific details about the conservation practice are included in the folder. Although farms enrolled in successive years of conservation programs have thick folders containing the records of past activities, there are no pages or sections within those files about the landowner's plans for the stewardship of the land. Because cash, tax credits, or exemptions are exchanged for the perceived economic, commodity values of land—in the form of rental value or property value enhanced or regressed in return for specific land management practices—only those economic matters are featured on the institutional forms that workers complete.

In this part of Alma's story the texts and process are not only not engaging but they are also inefficient. An argument to justify that only recording the minimum amount of legal information necessary sounds efficient and businesslike, but paperwork inside the folders I observed did not appear to be efficient even if it was devoid of landowner goals. Reid described how he created a new folder of texts or forms,

> I'm copying the farm number again here on this form which [shows form to us which has 1 sentence] doesn't have hardly anything to it on this whole sheet of paper. I don't know why this form has to be included but she [uses name of regional regulatory advisor] says I

need a form XXX and so I do it. It seems to me pretty evident that the landowner already agrees to this when they sign the final contract when everything is approved. I don't know what good this one does. I just fill it out.

The one-sentence form Reid references is shown in figure 2.

Reid filled out three more pages of forms which emphasize the economic values of the land but which did not include space for him to record the deep feelings Alma had for her land or her expressed pleasure of long-term plans for how the land would pass to her daughter's children. I noticed Alma grow sleepy as she watched Reid describe and fill out the paperwork, until she shook her head and smiled saying, "I don't understand any of this."

Ruling Relations

The next section presents three examples of ruling relations at work. Although examples of agricultural conservation workers in action and ruling relations that govern those actions can be found throughout this report, the following three examples identify representative agricultural conservation workers and show ruling relations most plainly. The first example describes a group of workers—members of a state-level committee—who were involved in applying rules and policies at the highest level of the institution where members of the public are routinely invited to discuss rules and policies. At this level of the institution, ruling relations are discussed and reinforced apart from the daily lived experience of farmland owners.

The second example describes one agricultural conservation worker, Eldred, and shows how his work—which normally allows him to honor land-as-community values—is affected by ruling relations, particularly an unexpected influence of land-as-commodity ruling relations extending into a land-as-community non-profit organization.

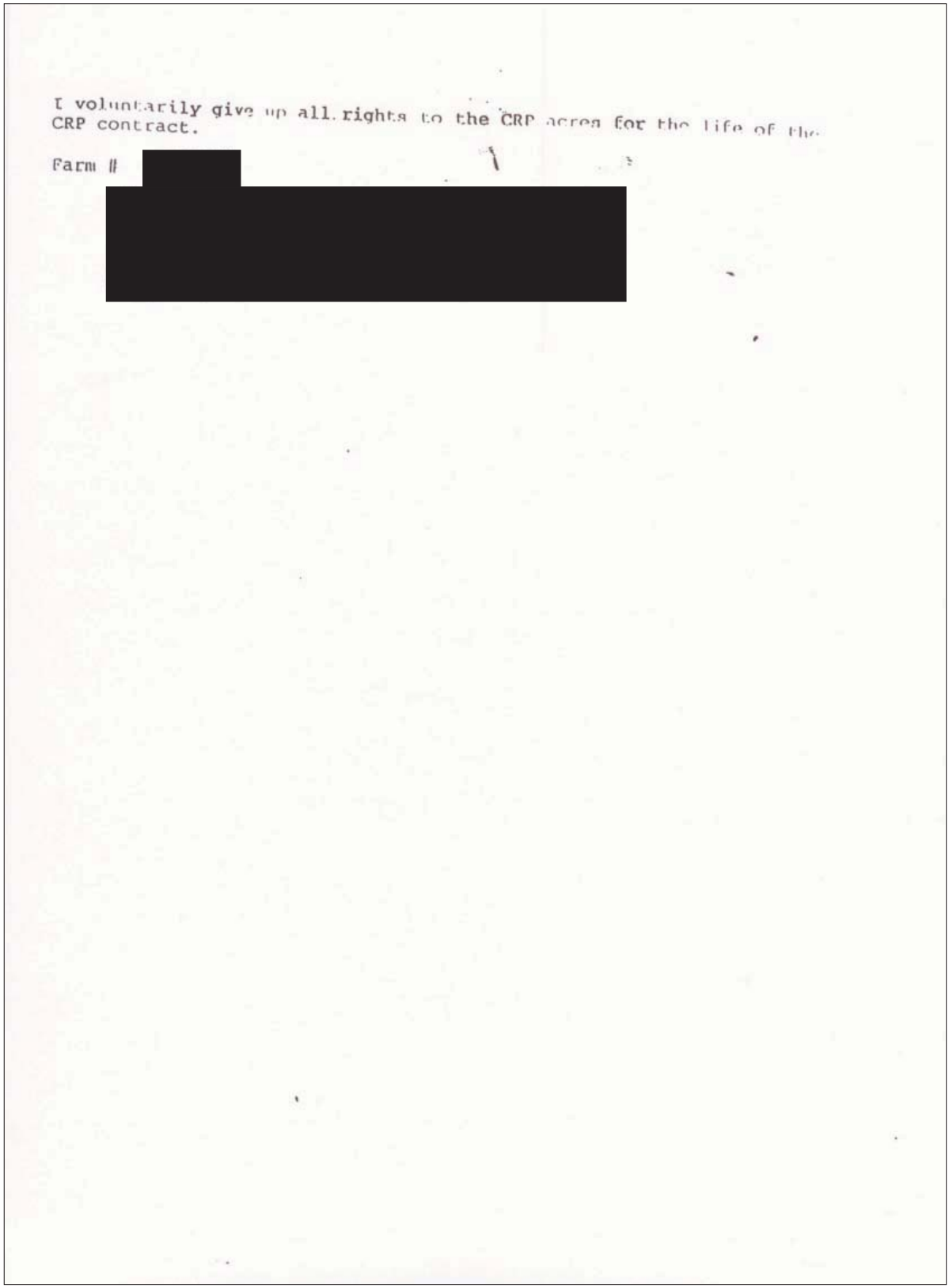


Figure 2. The one-sentence form in the CRP folder.

The third example describes a non-formal educational event for women which shows the penetration of ruling relations into institutionally supported education.

State Technical Committee meeting

The State Technical Committee (STC) in each state, which is led by the state conservationist for NRCS, is one means of negotiating for changes to the rules that administer conservation programs that rely on federal funds. Official committee membership in the STC is determined by the NRCS state conservationist, the title for the highest level NRCS administrator in each state, and the committee meets in open public meetings for observation and allows limited time for commentary by others. The STC considers rules that are mainly for programs that have already been approved and funded, meaning that the program offerings have been named and designed to fit criteria designated in federal legislation, mainly through what is called the Farm Bill, legislation that is passed at regular five- to seven-year intervals. Other, much smaller allocations for agricultural conservation come through the U.S. Fish and Wildlife Service and other agencies, but for practical purposes, the majority of agricultural conservation funds are distributed from the federal level to the states by way of committees and agencies such as the NRCS, the FSA, and the EPA. Like nearly all federal programs, staff at agency headquarters provide guidelines that interpret the legislation that authorizes each program.

The STC in each state is perhaps the most important place where topics of agricultural conservation policy where the public and partners (such as departments of natural resources, non-profit organizations that focus on commodities, ecology, or conservation) can provide input that may result in setting or transmitting ruling relations for the state. NRCS state conservationists may take their STC's recommendations into consideration, but as the top

natural resources conservation administrators in the states, they may implement programs as they see fit. In some cases, a decision to keep a state's program implementation the same from year to year may be based on managerial efficiencies such as those gained by not requiring workers to learn new rules that necessitate training and which may not result in a large difference in the conservation results.

If program rules are determined to be especially ill-fitting for a state's unique needs—because of landforms or types of agriculture, for example—the state conservationist may use the STC recommendations as evidence that changes in the rules are needed. The state conservationist petitions the NRCS rule-making committees and scientists at the federal level to request revisions to, or special exemptions from, the national, standard rules. Generally, if this kind of action is needed, the state conservationist asks the STC to form an ad hoc subcommittee to study the issue and reach consensus that incorporates the views of members who hold land-as-community orientations and members who hold land-as-commodity orientations. The consensus recommendations are presented to the full STC by the ad hoc subcommittee, and then the state conservationist determines the best political strategy for using STC formal recommendations prior to creating a formal request to higher levels.

I observed a monthly meeting of an STC that was attended by about 25 people—only four of whom were women and the female secretary who was not an official STC member but who attended every meeting. The purpose of this STC meeting was for members to share information about federal policies and, because federal legislative activities were unsettled, there was little discussion about new impacts to policies. In the past, I have attended STC meetings that included policy discussions where land-as-community issues were presented although the gender representation of the forum has not varied much over many years.

In the meeting I observed, four of the official STC members who attended were women. Two of the women represented private non-profit organizations, one represented a department within a member agency, and one represented a water utility; three of these women STC members were about the same age as most of the men who attended (early to late middle age), and one was in her early 40s. All members who attended the meeting that day held mid- to upper-management positions in agencies within the institution.

In addition to the members in attendance, one woman whom I estimated to be in her early 30s came into the meeting specifically to present an informational report. She frequently looked at her supervisor (one of the older men) while she was speaking to the group, which to me, was an indication that she was unsure or nervous. She seemed to be looking to her supervisor to gauge his response. When she finished reporting and asked for questions, two men made comments and one man asked a question which she deferred to her supervisor to answer. Although her report was not about policy, she seemed to make no recommendations that reflected her professional judgment. This exchange reflects how people within institutions act within social norms that are codified and perpetuated by ruling relations.

The state conservationist who ran the meeting recognized each member who spoke, and, although each of the four women on the committee spoke, the women tended to make statements of agreement or asked questions rather than commenting about policy. On the other hand, male members who spoke commented on policy directions, all framed by a commodity orientation. In fact, it seemed to me that the interests of people with the land-as-community orientation and the interests of some of the women I'd visited with were not represented that day, a clear example of ruling relations supporting the commodity orientation.

Women in Agriculture conference

I attended an adult non-formal educational event offered to women and discovered the primary effect was to produce land-as-commodity ideology. This section describes my experience and observations of how institutional ruling relations are used to guide women towards reproducing land-as-commodity ideology.

A mid-summer educational conference for women attracted an audience of more than 200 women including me. Co-sponsors for the conference included institutional members who had been supporters and leaders in developing the innovative Women, Land and Legacy^{SM} (WLL) program in Iowa which simultaneously helped women and provided research-based insights into women's views and approaches to agriculture and agricultural conservation. I knew that the opening speakers, leaders in the institutions, had been cued into the differences in views and approaches between women and men because I had been told by workers that the speakers had reviewed WLL findings that had not yet been released to the public. I had anticipated that surely their messages—both content and delivery—would reflect the newest understandings of how women weigh and balance the environment and economics and how women's relationships to land and family factor into their farming practices. As an educator, I was eager to observe the speakers and to listen to how they would talk to the women in attendance because leaders at their levels are prepared by their staffs for these types of events, even to the point of being coached if necessary to be effective with a particular audience.

Instead I felt like I was listening to a coach talking to his football team before a game. After welcoming the audience to the conference Reuben, an agency leader, provided information about agriculture that emphasized profits and economics in the same way as

farming is characterized for men. Reuben exhorted the assembled women to learn as much as they could from the other conference speakers because "profit is the engineer" (as in driving the train type of engineer) driving marketing, and "you can't afford to be average in agriculture. Besides, Americans abhor average." Many women in the audience were of an age where the 1980s farm crisis would have been a lived memory. Reuben went on to describe how the 1980s separated social and financial management in farming because success did not depend on how hard you worked because, from the 1980s forward, the only things that mattered was managing for liquidity and profit. Reuben's entire presentation exemplifies how ruling relations—in this case the focus on productivity and profits—are carried through the institution of agricultural conservation.

The next speaker, Goldie-CW, an assistant leader of an agency, represented the leader who could not attend that day. She enthused about all the opportunities and services provided by their department, ranging from making sure elevator grain scales are accurate to promoting the state's products on a trip to China and gathering and disseminating accurate market price data. Goldie-CW fielded questions from the audience about how her agency is preparing for new trends in farming. After a few questions, one woman asked if maybe Goldie-CW's newly-elected boss couldn't do something about improving relations with the DNR (speaking about the regulatory side of DNR duties) which, to the questioner, apparently had displayed a negative attitude towards agriculture. Goldie-CW said, "Oh, I almost forgot to mention that more than half of our department employees work for the Division of Soil Conservation." She went on to say how much better relations with DNR would be because her boss meets weekly with the newly appointed director of the DNR who is "learning a lot about agriculture."

I point this out because, although one questioner inadvertently reminded Goldie-CW about soil conservation, the topic was not addressed again over the two days of the conference. Not only did the agency representatives fail to mention environmental topics, but the entire conference agenda omitted soil and water conservation. The notion that women are interested in production agriculture was not in question. Neither were there questions about whether soil conservation is a common topic in production agriculture.

Many times during the course of talking with leaders of agencies within the institution about my research, leaders described to me how sponsorship of this conference and one or two other conferences was evidence that agencies were actively supporting women in agriculture by helping them learn how to engage with agricultural production and economics. These leaders did not mention and perhaps were not aware that the educational activities occurring during the time of this research—including Annie's Project, Women in Denim, Women in Overalls, and similar conferences and short courses—did not include or disseminate information about conservation. Although WLL makes conservation information available to women who attend county-wide programs, the overall WLL attendance numbers are extremely small compared to the large numbers of women landowners and acres of land owned by women. Further, the low level of institutional support for WLL is estimated to be from .3 to .4 full-time equivalents to serve the entire state. The program is subordinate to the ruling relations of commodity production. The WLL program will take time to reach a considerable number of women who own farmland in Iowa and as yet there is not a WLL-like program in other states.

IRS protecting land

Eldred, a conservation worker in a private, non-profit organization, described a conversation with a woman who located his organization in her quest to protect her land from development and from destruction of the ecosystem from urban encroachment like more houses poking mowed lots and rooflines into this scenic valley—from her windows at least. According to Eldred, their conversation included descriptions of ancient oaks guarding a small, wooded valley bordering an urban creek. The small ecology of her place included wildlife and flowers and the home of her dreams which she knew someday she would leave. She couldn't bear to imagine her urban oasis destroyed by urban sprawl, and she sought out the non-profit to create a *conservation easement*. This land protection tool is employed by agencies and non-profit organizations for the purpose of long-term (30 years in some cases) or permanent sale of select features of the land such that the government holds the rights to those features on what otherwise remains private land. She wanted to sell her rights to build any future houses, buildings, roads, utilities, or to otherwise harm the natural features of the land and prevent all future owners from doing the same.

Easements are assigned to land and not to landowners although the current owners get to specify the rights and terms of their easements in return for credits to their state and federal capital gains and income taxes for many years to come. These credits are examples of ruling relations that spring from the financial and policy arms of the institution of agricultural conservation, which generally can be characterized as land-as-commodity ruling relations. The process of establishing easements requires considerable time and effort on the part of the public and/or private entities and the landowner who seeks the easement, ranging from a few months to more than a year. Even though conservation easement holders and the property

owner may agree on the need for terms of an easement, two practical considerations may stand in the way. First, easements are generally seen to affect the value of the property negatively, which means that future owners may be unwilling to pay market rates for land with public restrictions to how the land may be used for gain (read profit). Also federal and/or state tax entities may, in effect, deny the request for the easement.

This woman's quest had led her to one of a small number of organizations that employ ecologists like Eldred who are skilled in working with undeveloped land to promote ecological health. Eldred is a highly skilled ecologist who understands land protection and ecological diversity from both the land-as-commodity and land-as-community ideologies. Eldred said he could tell by her voice that she was sure she had finally found the only method left to help her protect the land she loved. Eldred could not help her. He explained that he could not help her protect her land in spite of the mission of his non-profit organization and in spite of her goals to prevent further development of the land because he knew that the IRS—which has no ecologists to examine the land in question—could disallow the conservation easement after all the time-consuming work of creating it had been done. A land donation would be possible but she would have to move and give up all title and interest in the land and that was inconsistent with her goals. The nature of the conversation between the woman and Eldred was ruled by the extra-local policies of the federal finance agency and the land thus be cannot protected through the institution. He told me,

> Those are the days I don't like my job very much, when I feel trapped, and it makes me feel frustrated. Don't get me wrong—I love working here and everyone here would be in the same situation with this woman on the phone. I talked it over with them to see if I was missing something.

However, for Eldred, more was on the line than this request for an easement. If the IRS were to question this one easement, many of the non-profit organization's resources would be drained in preparing the information needed to respond to IRS questions. Eldred also feared that the IRS could question more of their conservation easement work. The ruling relations leading from the woman who requested the easement through the non-profit organization and back through the institution to the IRS were more powerful in determining land protection than this woman's good will towards the local community. Those ruling relations were also more powerful than Eldred's knowledge of local ecological health.

By granting an individual, tax-paying entity a free pass from a portion of their annual tax, the IRS and state tax entities are the final arbiters of the public good in land and water conservation. If the public good takes the form of land that protects or buffers an adjacent public natural asset (such as a state park in a semi-wild state) then preventing development adjacent to the park buffers and protects the park for the enjoyment of human visitors, which still reflects the commodity orientation of the ruling relations. In that case, subjectivity involved in the judgment is not particularly contested.

However, scrutiny of a questionable protection—such as a conservation easement that protects a few holes of a golf course as "open space"—activates a lengthy chain of ruling relations that may involve legal actions ending in IRS ruling that such a request for conservation protection is an abuse of the intent of congress in granting conservation easements (Miller, 2005).

In the case of the woman who contacted Eldred seeking protection for a small portion of a small watershed is less clearly identified as a public good equal to the value of the tax credit because her land lies somewhere between a clear case of a parkland buffer and clear

case of abuse in the case of the golf course. Eldred and his non-profit organization couldn't take the risk.

These contrasting situations highlight the issue of who or which agency should make the official determination of what constitutes good to the ecological side of the balance. If an ecologist were to take a hard view of the woman's small watershed, the ecologist might wryly note that the woman built her house on top of what was likely a prairie remnant, which destroyed part of the values she now wished to protect. Further, the existence of the house now complicates implementing state-of-the-art ecological land management, or as Eldred noted, "It's in the worst possible location from a habitat and wildlife standpoint." But the ecologist is not given the right to stand in judgment of whether the woman is unrepentant or unaware of the ecosystem services of water absorption and cleaning that the prairie remnant, if it had been left intact, could have provided. Nor can the ecologist argue for protecting the land on her behalf if she'd claimed a "jail house conversion" in repentance for carelessly locating the house on the property if she now differently values the health of the valley and seeks to stop destruction of its qualities and health by preventing further hardening of the watershed through additional development and construction. The rules applied to this woman's land would be the same for any rural acres just outside a city's boundaries. The nature of the conversation between the woman and Eldred was ruled by the extra-local policies of the federal finance agency and the land thus cannot be protected through the institution.

This tension can be seen in the ruling relations that govern the promotion of and education about easements. For example, in 2007 in Iowa, the Iowa Natural Heritage Foundation (INHF) published the sixth edition of *Landowner's Options: Safeguarding*

Iowa's Natural Resources for the Future. Figure 3 shows a sample from this publication that encourages landowners to consider their values and the particular qualities of land that the landowner would like to protect with an easement. The enticement of an easement is that the landowner retains private use of the land while protecting the land-as-community values of that landowner. The publication describes land-as-community values that the INHF seeks to protect—historic natural landmarks, spectacular scenery, undeveloped shoreline and water quality, prairie pastures, and adjoining public nature areas—by assisting private landowners through the legal and financial paperwork necessary to complete a conservation easement.

Figure 3. A page from an INHF brochure that speaks to land-as-community values.

Educational Interactions and Agricultural Conservation

The institution of agricultural conservation relies on informal educational interactions to transmit information and foster action by farmland owners or workers. These educational circumstances are opportunities for land-as-community and land-as-commodity orientations to be balanced equally for farmland owners and for workers within the institution. I have located circumstances in texts where the educational messages are out of balance and produce land-as-commodity ruling relations at a disadvantage to farmland owners and conservation workers who hold land-as-community orientations.

The institution of agricultural conservation mainly provides technical assistance to farmland owners through conversations—what I came to view as educational interactions—that are opportunities for informal education. The following four sections explicate various aspects of educational interactions in agricultural conservation. The first section discusses adult non-formal education curricula, which leads to an examination of identities

Agricultural education curricula

Adult non-formal education programs in agriculture are presumed to support soil and water conservation issues. However, the soil and water conservation practices provided throughout most of the institution of agricultural conservation are mainly those which support land-as-commodity orientations, although here and there exceptions exist. The land-as-commodity ideology produces exclusionary policies and practices that reify subservient roles for women farmland owners, so agricultural education practices should be examined to reveal the extent that they reproduce these discriminatory effects.

As I investigated adult non-formal agricultural education curricula from the standpoint of women farmland owners, I came to understand that conservation interests of women

farmland owners are largely neglected because of the near-absence of conservation content in the majority of non-formal agricultural education for women farmland owners, which emphasized only production agriculture and a land-as-commodity orientation. The main effects of this emphasis marginalize land-as-community values and reify land-as-commodity values which elevate commodity and profit orientations to the detriment of land-as-community values and interests. In fact, women farmland owners' conservation interests are further threatened by the hegemony of identity because these curricula almost exclusively feature women taking actions that employ land-as-commodity practices. Simply including more commodity-oriented information about conservation programs to these agendas will not redress the inequity.

For example, WLL includes opportunities for women to learn about conservation programs and practices but the program remains insufficient for one main reason. WLL remains insufficient because current partners and co-sponsors within the institution of agricultural conservation do not have non-commodity conservation practices to recommend. The hegemony of identity makes it unlikely that women who participate in WLL forums will ask for information about conservation practices that are not already part of the main offerings of the institution because they are unaware that there are other options that more closely align with their values. I would caution that even when educational program planners and leaders *are* able to attend to women's stated values and translate those values into educational programs about conservation practices, planners and leaders are still faced with an overarching problem: even the most well-intentioned planners and leaders can offer only programs about mainly land-as-commodity conservation practices that are offered by the land-as-commodity-oriented institution of agricultural conservation. In short, equity between

land-as-community and land-as-commodity ideology can not come solely from educational programming. Issues of equity must be addressed holistically at all levels of the institution.

For example, field demonstrations, an educational practice common to agricultural education, allow farmers to observe innovative technologies demonstrated at different times of the year and compare what they observe with their knowledge and experiences on their lands. Field day hosts want farmers to attend and kick the clods themselves. They want learning about new technologies, programs, or practices to occur. Experts are on hand and make brief presentations at these field days and offer farmland owners opportunities for informal exchanges at lunches or breaks, which assume that people feel comfortable asking questions of experts in the larger group or informally. This model also assumes that people are comfortable engaging in technical interactions with others like themselves.

However, as is the case in other current educational practices, field days tend to perpetuate the dominant, land-as-commodity ideology. A second problem with these educational practices has to do with who attends—or who feels like they might be welcome. The field day model favors the primary audience of farmers, a favoritism based on the following factors that planners assume to be true, but which cannot be assumed to be true for women and non-farming men. First, it is assumed that farmers are available to attend field days during the time they are held (Cross, 1981, p. 98). Perhaps more critically, the farmers typically have both (a) a frame of reference to understand what they're looking at and (b) an identity that includes knowing about new technologies, programs, or practices in ways that women may not. This frame of reference and especially the identity reinforced by the land-as-commodity ideology of the institution mean that many men who farm view themselves as capable of knowing

- what to look at (women and non-farming men may not);
- how to compare one technique against the other (women and non-farming men may not);
- how to compare what differences are relevant and which are not (women and non-farming men may not); and
- enough to judge whether a demonstrated technique might work in their farming operation and fields (women and non-farming men may not).

The institution of agricultural conservation not only maintains the identity men who farm but also influences the identities of others, including women farmland owners and women conservation workers.

Identities produced by the institution

Women conservation workers who hold land-as-community orientations are described to show how they work to balance land as commodity with land as community. As a practical matter the women conservation workers provide balance within the institution by their presence and their work with farmland owners, even as that work is devalued. Both women and men conservation workers are subjected to the same cultural standards for land as commodity which tends to exclude women conservation workers just as commodity-oriented programs exclude women farmland owners.

Farmland owners are provided educational information and interactions according to the ruling relations that favor land-as-commodity orientation. Eleanor-CW works in the state office of one of the government agencies designs communications and marketing information for the primary audience of her agency. When asked, she immediately said her target audience is “60-year-old white men.” This is not surprising given the traditional

predominance of men as the active agents within the region of her work. For her to do otherwise with a limited budget would be difficult. She does "the best she can," and works to make printed materials reflect images inclusive of the minority and underserved populations. Eleanor-CW is strongly supportive of the work of WLL, her agency has been one of WLL's supporting partners from the beginning, but as yet she has not had an opportunity to prepare materials for that group. Eleanor-CW's work is generally approved by committees or program leaders for whom she is producing a specific publication or media release. Although Eleanor-CW is considered to be one of the best workers in the federal agency, according to Arlene-CW who has worked in other states within the agency, Eleanor-CW's professional opinion regarding communications sometimes is overridden by workers who favor technical language and technical images in publications.

Although the purpose of textual analysis in IE is to see how features of institutional texts support or hinder women's participation, as opposed to full discourse analysis, it is important to consider the extent to which masculinity constructed through images and text hinders women's participation in agricultural conservation. Shortall (1999) reports "recent research has analysed [sic] how tractor advertising reinforces images of masculinity (Brandth, 1995). … representations are not merely reflections of their sources, but contribute to the shaping of them" (p. 143). Thus, the extent to which Eleanor-CW is tasked by her agency with reaching "60-year-old white men" with traditional text and images, she, and others producing publications for their land-as-commodity oriented agencies, will continue to produce the hegemony of identity that only men *do* conservation.

By contrast one promotional conservation text from a private non-profit organization speaks directly to the emotional attachments owners express when they consider land as a

community. Language used includes words such as *love* and *happy* and *imagine* which can be found on many pages of the 52-page booklet. The booklet mixes language that is about agricultural production and conservation and contains a two-page glossary of legal and conservation terms. The booklet is about the process of land protection and comes at the topic from many levels of consideration, discussing balancing economics and environment. There are many pictures of children and women without men, and older couples and individual men. Pictures of workers include men and women performing tasks that do not emphasize a hierarchy of roles, the women workers are not just shown as *helping*. In captions, quotations, and photos, women are shown as active agents making decisions about purposeful conservation and protection of their land.

Literacy as a gatekeeper

During the small group interview, a few women used their knowledge of specific programs. Most appeared to be very unsure of the terms and did not routinely use the language of soil conservation in general. Language miscues were heard when some women incorrectly mixed up the acronym for CRP and called it CPR—an understandable mistake given the other commonly used acronym for rescue resuscitation. However, CRP is one of the few conservation programs or terms that was used at all by any women. In fact, that was what has been so striking throughout this research—the lack of command of conservation language and concepts. When I concluded the orienting interviews with the older women, I reviewed the conversations and realized they used almost no conservation terms to describe their land.

Although I hadn't expected the women to use technical terminology, I somehow expected them to know a bit about the conservation programs I knew were in place on their land. At

most they spoke of knowing of a *wet spot*, *rough ground*, or *the conservation land*. When asked to describe what they thought was important to do to take good care of the land, if there was anything they perceived might be needed or if they knew of problem areas, their responses were predominantly to shake their heads no or shrug their shoulders, and more than two offered as a question, "maybe tiling?" In short, these women did not use terms common to conservation programs and practices, a literacy level that served to restrict their access to information about agricultural conservation.

Related to literacy, I call attention to the difficulty of accurately describing women's conversations about their land. The women I talked with were not indifferent about their roles in owning farmland. Faithful representation of their stories necessarily entails including the empty spaces as they searched for words, gestured, or shrugged off what they could not say. To underestimate the significance of the pauses and difference in language used would cause a critical error in analysis (DeVault, 1994; Smith 1987; Ribbens & Edwards, 1998). Alma and I had talked for half an hour about her land and how she came to manage the farms in her care. She sat forward in her chair at the dining room table, animated with raised eyebrows and punctuated her speech with hand gestures to help me understand the shapes and locations of the farms. Her answers came quickly after my questions as if we were in synchrony until we reached the point where we talked about protecting the soil and the land and I asked, "So, what does protecting the soil mean to you?" and she stopped talking. She paused to search for words, "It's . . . " and used both hands to pick up handfuls of imaginary soil and hold them up in front of her and said with passion ". . . it's everything."

Gender balance

The gender balance in staff composition is uneven in the institution—it is heavily weighted towards men. Many leaders within the institution have worked to correct this situation but the unequal balance persists for reasons that have remained elusive and difficult to identify to this point, according to conservation workers Edna-CW and Agatha-CW. Agatha-CW and I talked at a conference where we both stood together sipping hot coffee during a break. She commented, "We can hire in women conservation workers, but we can't seem to retain them. They'll work for a year or two and then leave." In a separate conversation, Edna-CW, a conservation worker visited with me as we sat at a small round table located near her office and lamented that "my agency retains few women in technical and leadership positions." Despite efforts to sensitize agency workers to deter overt discrimination such as sexist comments, I believe there is evidence to support that the persistent, even unintentional, masculinist language and behaviors affect retention of women conservation workers.

For example, the implicit cultural expectation that all talk in meetings be concise and to the point may seem efficient and business-like and seems harmless enough. However, if the setting includes a majority of men and a tiny minority of women who are new members, this expectation of "getting to the point" may serve to silence questions and contributions from women (and ethnic minorities) who have not had sufficient practice managing themselves in these settings and who lack models of women successfully "holding their own" in terms of taking the floor, getting their contributions acknowledged within the flow of the conversation, or avoiding ridicule. Certainly the skill of articulating points clearly in a business setting is important for both men and women, but if points to be made by women

are posed in a questioning manner and reflect nuanced and complex issues—they will not likely make points succinctly or with authority. For example, Carol Gilligan critiques "Lawrence Kohlberg's map of moral development as inadequate for characterizing women's reasoning (Belenky & Stanton, 2000, p. 78)." Gilligan described this mode as one where conflicts are "resolved through dialogue," where lasting solutions are found through questioning, listening and responding to everyone's concern (Belenky & Stanton, 2000, p. 79). This type of situation arises and applies to conservation discourse situations that are reproduced over and over wherever conservation business is conducted, including district, regional, and statewide meetings of every member of the institution. When meetings involve moral judgment, such as proposing new policy rules and priorities, women may be differentially at a disadvantage. Women are at a disadvantage in conversations with men (Carli, 1999). When in a meeting with men, it is difficult for solo women to have their points acknowledged and considered (Carli, 2001, p. 728). Further, women conservation workers who find disagreement intimidating will not feel welcome to make professional contributions. Even women who are not afraid of disagreement are not likely to be influential, and may receive more hostility from men and also from women (Carli, 2001).

Hiring women to change composition of the institution of agricultural conservation does not occur without problems. For example, two conservation workers reported difficulties in placing women conservation workers in rural counties, especially in terms of dealing with persistent situations in counties that have not yet had women in leadership roles in their county offices. These two workers hold positions that hold the workers responsible for the task of assuring that career path opportunities for women remain open. These two workers must meet the ruling relations which assures that opportunities exist but shared concerns

about women taking leadership where they may be placed in difficult circumstances. In the U.S. Forest Service (Sachs, 1997), federal mandates required integration of the agency with male and female professional wildlife biologists. This fostered resentment from the traditional foresters against the newly hired workers perceived as being sent to change the organization. Of the newly hired workers, women were more likely to have joined "because of their concern for the environment" (Sachs, 1997, p. 10).

The culture of conversation between workers within the institution reproduces the dominant narrative of land as a commodity. The land as a commodity ideology may be not be fully contrary to what incoming women (and some men within the system) workers view as supporting acceptable land management but at the very least the hegemony of the dominant ideology discourages conservation workers from using language or behaving in other ways toward land. Land as commodity is reproduced culturally in ways that make it difficult for women workers to feel welcome, but also in ways that make it difficult for them to work differently with clients—even clients who have a land-as-community orientation.

Women workers

Esther-CW and I visited at a conference during a break. We caught up on news of mutual friends in the conservation business before we talked about her work and my research. Esther-CW described how she often discovers she's left out of communications between her male colleagues. Based on my years of working within the institution, I share Esther-CW's perspective that workers who are in field offices, decentralized from the main authority, often feel like they're the last to know something decided in the main office. However, I also know that Esther-CW was talking about something quite different. She said, "It's like they [male field workers] have been talking among themselves and decided to do something a

particular way and no one bothered to tell me." She is, to some extent, invisible to her co-workers as a professional colleague or member of the same team of workers.

Another woman worker in a different agency, Arlene-CW, chatted with me about the progress of my research while we waited for another meeting to start. Arlene-CW has noticed how much meetings have changed for her now that another woman at her same level has been hired. Now she is less often ignored. Arlene-CW has been subjected to gendered conversational styles that turn much of professional conservation discourse into masculine communications. She has experienced situations where her comments offered during meetings have not been acknowledged in any way; it was "as if I'd never spoken."

Bilingual workers

Conservation workers are only legally responsible for delivering technical services around the conservation programs which means they become conversant in land-as-commodity values and orientation. All conservation programs but Wildlife Habitat Improvement Program (WHIP), which receive minor funding compared to the other programs, are structured to match land-as-commodity rather than land-as-community orientations. Some workers are also skilled at working with land-as-community farmland owners, in the sense they not only can speak the language of the institution—land-as-commodity language—but also think and speak in terms of the culture of land as community in the same way that a person becomes fluently bilingual by learning the culture and language.

Conservation workers who join a governmental agency enter a culture of work that is closely tied to political climate, due to the nature of funding and the types of services their agency provides. For the most part, conservation workers learn to manage and work within

the dominant land-as-commodity ideological orientation, mainly because their work is coordinated by rules and regulations that support commodity production. Some workers, who come to the institution of agricultural conservation with the less dominant, land-as-community orientation, learn to work within the social and political rules and norms of the institution, but face challenges.

Workers who join the institution with the land-as-commodity orientation survive and thrive because they are never asked to change their service delivery to work with landowners who have land-as-community orientations. I talked with conservation worker Dominick as we rode in his agency truck to check the progress of corn harvest on some farmland which was awaiting earth-moving equipment for a conservation practice when the harvest was finished. As we rode along discussing tillage and soil conservation, he indirectly mentioned the circumstance of another conservation worker who did not thrive and left her post. I knew her prior to the start of research. She represents the situation for workers who hold the land-as-community orientation who must choose how, when, or whether to speak of land uses which are labeled by production agriculture as “alternative” or “unproductive.” They risk being labeled in unkind ways and ostracized by co-workers who are upholding land-as-commodity practices. If workers speak about land-as-community ideals, they may offend farmland owners or tenants who rigidly hold land-as-commodity beliefs, and these workers become the source of complaints lodged formally or informally with supervisors within the agency. The ruling relations of the land-as-commodity orientation are reinforced in ways that are not immediately obvious.

Social norms for how to talk to farmers are reproduced informally within the institution and workers who hold land-as-community orientations learn to choose when or whether to

express their ideology. When I called Esther-CW, a conservation worker, to set up a time we could talk about her work with farmers, we talked informally about an upcoming weekend conference on fire management where we might meet face-to-face. She was planning to attend, not because her agency was sponsoring her attendance, but because she felt the information was important to learn for her work. Some workers, such as Esther-CW, work to maintain their knowledge of land-as-community land management primarily through their off-time activities and thus they have skills to work with landowners of like mind when they find them. To emphasize, workers who serve landowners with land-as-community orientations are only legally responsible for providing service via the land-as-commodity programs. Farmland owners who orient to land as community are likewise socially conditioned to expect to hear commodity and production language from workers. In addition, these farmland owners may recognize that the existing land-as-commodity conservation programs are incompatible with their goals.

Esther-CW talked about how she responds to landowners with land-as-community goals. She explained,

> I work with plenty of farmers—usually men—who just want to do the minimum necessary to get paid for the programs. I can tell right away when I talk to them what they want, and I can work with them to make a plan that fits the requirements but is also minimal. There is definitely a difference with landowners, men and women, who want to do something because they love the land. It's a lot more work and I usually have to make up the time on my own somehow, but they are a real joy to work with. Yes, I can help them with a lot more things that I know about than just the programs, even though I know how to make the programs fit their goals.

Esther-CW's skills and ability to engage fully with farmland owners with divergent interests does not earn kudos from her agency. She must produce the same level of program delivery—measured in acres and dollars allocated—as her male peers, even when it means she must make extra effort to serve farmland owners who have land-as-community values. Esther-CW's interests in diverse conservation practices beyond those which produce commodity wildlife are supported by her agency at a marginal level and she supplements her professional knowledge by personal study on her own time. To just reproduce commodity values, however, would eliminate some of the joy from her job, Esther-CW said, "The real joy is the relationships with the people and their land—with those who want to do more than just the minimum to get by."

Land as Community and Ecology

In this section the effects of institutional support for land as community are presented for workers and women farmland owners. The land-as-community orientation is often articulated in a range of land uses and conservation practices—within the commodity-community continuum, toward the community end of the continuum. At the community end of the continuum, ecological restoration techniques and view points tend to favor restoring healthy ecosystem functioning which includes the composition of plants that support wildlife migration and reproduction and hydrologic function, among other scientifically measured values. The community portion of the continuum also includes recognition that farmsteads and farms with intentional diversity provide values for humans that contribute to a particular quality of life that is subjectively defined as including beauty, neighboring, open space, and safety among other values. For example, one conservation program, the Wildlife Habitat Improvement Program (WHIP), was identified by land-as-community farmland owners and

workers in this study as having rules that are flexible enough to apply practices and help them accomplish goals without compromising ecological health. WHIP has very limited funds available in each state and project plans must compete in a statewide application system, which effectively limits programmatic support for land-as-community landowners.

The next two sections describe in some detail the experiences of two farmland owners who hold land-as-community values and who seek services from agricultural conservation. workers in terms of land management practices and water management practices.

Land management

This section contrasts land-as-commodity and land-as-community orientations as a conservation worker provides institutional services. Omar and I drove together to Lottie's place, and when we arrived, Lottie greeted us and suggested we jump into her truck and she would drive us to the portions of her land for which she sought Omar's technical assistance with CRP while she told us her goals. She understood long-term management and mentioned more than once that she was looking for a ten-year plan to implement that would encompass all of the things she valued in her land. Lottie understood many of the typical land management tools such as prescribed fire and had already thought of specific preventative measures to protect features that could be damaged by fire. She wanted to avoid chemicals as much as possible, but understood that sometimes they may be appropriate and she would not object to them if Omar's plan recommended chemical pesticide treatments. Lottie also asked several wildlife questions which Omar answered and explained in some detail.

Lottie clearly described her conservation goals for all of her land and expressed herself in a way that made me wonder if she didn't have some technical experience in her background that would account for her ability to discuss some of the land cover options she was seeking.

She used terms such as “hydric soils” and spoke knowledgably about “organic matter” in soil, and described “short-grass prairie” and “mesic prairie.” Lottie told us she had worked for awhile as a non-formal educator in a field of work where knowledge of soil properties and native plant uses are important. Her knowledge of trees and woodland was less technical, however and as she described her goals in those areas her words went more to matters of the heart, even as she knew some of how they could be presented to her in the form of a plan.

I will illustrate in some detail how comprehensively Lottie had assessed her land for conservation purposes. Lottie was looking for recommendations that would help her change the land in ways to enhance it ecologically. Her land and her goals reflect more biological diversity and sophisticated design than many of the women and yet in her single story can be found the same sentiments I heard other women express in their tales of their land.

Lottie talked of how “the kids come down to the pond and do catch-and-release fishing, they do that all summer long.” She wondered to Omar if there was anything she should be doing to improve the water quality—not that she knew it was bad but that she wanted to be sure it wouldn’t become bad quality for the fish.

In a former abandoned yard area, she said she would be open to recommendations for fruit and nut trees. She indicated that, although she was not seeking this advice as much for commercial purposes as for her family’s enjoyment, she didn’t discount that as a future possibility. She was tentative, “maybe someday, but I’m not sure.” An area below the house but upon the first land terrace above the river bottomland was a clump of mostly silver maples and cottonwoods in their typical disarray, having been naturally seeded and left to themselves for the sixty to eighty years I judged them to have been growing. Lottie said,

> I'd like this area to be beautiful. I'm not looking for it to be perfect; I just don't know how to improve it. Should I have someone come in and remove all the dead stuff or take out specific trees? I want to do the right thing.

As we continued to drive around the property Omar talked with her about an area where cedars and the color of the vegetation we could see from the distance made us suspect there might be a hillside of native prairie remnant. Omar offered to check out historic land uses for continuous pasture cover from historic aerial photos available to him on-line when he returned to the office. If he could see a long history of permanent pasture cover, he would include in the plan he would produce for her a description of how she could remove the cedars and restore the native prairie remnant.

Lottie told us that she had already set an appointment with another conservation worker who was going to advise her on other parts of the property, but his expertise did not overlap much with Omar's and Omar only commented that this other part of the property could be managed for wild turkeys.

Omar provided accurate technical information for his program responsibilities, in my opinion based on my own technical knowledge—though my purpose was not to conduct a personnel evaluation—I bring this up to make the point that Omar met the requirements of his agency, a governmental funding source. Omar did not respond to or build upon Lottie's excitement about her land with information better suited to her questions and dreams for her land and children. His demeanor towards her was respectful, professional, and even friendly—consistent with institutional expectations for service to farmland owners. He did not indicate to her that her land did not very well fit what he is tasked to do for the institution which is to match governmental conservation programs to wildlife habitat improvements.

When we were on her land and talking with her, Lottie seemed enthusiastic about the possibilities of obtaining service through Omar and his agency. I talked with her on the phone later to ask permission to see Omar's written report (to which he had consented pending her permission). As I thought about how she had seemed when Omar and I were on her land as compared with how she sounded on the phone, it seemed to me that she had lost some of her earlier enthusiasm for Omar's recommendations. It seemed to me that she still thought the plan was adequate and that it had provided another bit of information so she could keep working for her larger goal. On the phone, she reported that she had already—even before receiving Omar's report—made a thorough search to find a vendor who could provide the services she needed and had wanted to accomplish the CRP work Omar had talked about on the day of our visit.

Community-oriented wildlife habitat

With both Lottie's and Omar's permission, I examined Omar's follow-up report that took the form of a one and one-half page letter to Lottie with an attached map that showed an aerial view of her property; the letter is reproduced in its entirety in Appendix D. Omar had highlighted in the area on the map where she wanted to install native prairie plants using the CRP program assistance. The official agency letterhead includes the names of the current governor and lieutenant governor, the highest administrator for Omar's agency, and Omar's name, title, and address. The letter's formal greeting referred to Lottie's as Mrs. ——, and the first sentence stated the purpose of the letter. Next, Omar commented that "Every property I visit has unique characteristics as does yours." Then he thanked her for allowing him to bring me along during the visit.

His next paragraph addressed the primary reason he could justify his visit, which was his agreement that "converting the fields you are currently mowing to mixed native grasses and forbs [flowers] would increase the wildlife habitat value." For the two agencies (with funding from a third agency) coordinating his actions, his use of the term fields was necessary, despite the fact that the actual condition and current use of the fields had not been for agricultural production in recent years (estimated to be less than ten years) and for Lottie's term of ownership, would not be re-established for agricultural production. As evidence of the prior agricultural uses of the land, Omar had looked at previous years of aerial photos to verify that the land had been farmed—thus the land/fields had been used for row crop production establishing a farm number (which identifies the land as producing agricultural goods in excess of $1,000 annually) which is necessary to qualify for government cost-share payments for CRP. Lottie owned additional farmed acres in another location which she showed us near the end of our visit and her oversight of the farming enterprise generates sufficient overall farm income to maintain the farm number for the acreage.

Omar's use of the phrase "increase wildlife habitat value" is evidence that his recommendations carry his authority to judge the merit and worth of wildlife habitat; however the wildlife benefiting is implied to be commodity wildlife—meaning wildlife that is harvested. This claim requires unpacking to explain. Although it is widely acknowledged that natural areas provide habitat for biota ranging in size and diversity from invertebrates to large mammals, this recognition is not a result of legislation that authorizes conservation practices that would benefit non-commodity wildlife in agricultural landscapes. Instead the claim to habitat benefits for non-commodity wildlife is an artifact of benevolence towards

whatever species is regarded as benefiting *in addition to* species strongly supported with significant and essential lobbying efforts by well-informed wildlife commodity non-profit organizations. It is also true that non-commodity wildlife such as migrating raptors or neotropical song birds are targeted species of federally-supported programs protecting habitat, although the programmatic effects are rarely expressed through agricultural conservation programs *to the same extent* as effects for commodity or production wildlife species.

In agriculture circles and in agricultural conservation, people understand that the phrase "increase wildlife habitat value" means to manage and increase wildlife that is hunted, wildlife as a commodity. Hunting is still widely understood to be a masculine hobby even as there are efforts to increase the number of women hunters, people understand that hunting is done by men as a hobby. Following the chain of ruling relations into the institution leads to the understanding, based on decades of practice, that wildlife hunting is regulated and taxed through the sale of licenses. License fees are directed as public funds towards support for wildlife habitat improvements, for wildlife biologists as conservation workers, and for wildlife research and for wildlife law enforcement. Sale of licenses does not fully support the full cost of these activities and so additional public funds are directed towards wildlife agencies. These public funds are often cost-shared with private funds in ways which may be more broadly distributed to species and may include diverse species which are not hunted. Private non-profit organizations such as Pheasants Forever and Ducks Unlimited are skilled in utilizing public funds from agricultural conservation programs to "increase wildlife habitat value" on private as well as large public tracts. Private non-profit organizations without a hunting base have greater difficulty utilizing agricultural conservation programs because, as

Elsa pointed out, some of the practices are harmful to the ecology of interest to her. Again, wildlife that is not hunted has benefited through the efforts of groups such as Pheasants Forever and Ducks Unlimited with national and international membership, and commodity wildlife groups including hunters are quick to claim their support of wildlife is broad-based and inclusive.

Still, the social norm for wildlife habitat is masculine by virtue of strong association in agricultural conservation with hunting. Omar is justified in his use of the phrase based on how he and his agency interpret his work. It is normal for him to use the phrase. He met the requirements and went beyond them in order to provide service to Lottie though she didn't know her land did not exactly meet the agency criteria for service. He has no other tools or ruling relations to direct him to adapt to Lottie's expressed and implied goals for the type of natural areas with values better matched to hers.

The balance of Omar's letter provided technical information in short paragraphs of about three sentences each. Paragraphs contained facts about costs and methods about how to mechanically produce the CRP area using seeding drills pulled by tractors, and mowers designed to be used on acres of land as opposed to small yards. He recommended chemicals to make the task of converting the existing vegetation cover to the new vegetation simple and successful. Omar's suggestion for the area of trees below her house that she wanted to be "beautiful" was to reforest the area. He said the conservation worker with specialized knowledge in that area she had already scheduled to meet with her could provide her with more details.

Omar's concluding paragraph included an invitation to "let me know what questions that you have." He asked her to respond regarding her interest in one of the chemical options

which might need more explanation, and asked how much she might be interested in spending on seed for which he could offer fifty percent cost share from one of the partner agencies supporting his work.

When Omar sent the letter to me after confirming Lottie had given her permission for him to do so, his e-mailed comment was that he tried "to recommend steps to complete a project…. Then we can start on another project." This is consistent with his experience and Wilbur's experience in that they both try to give landowners manageable portions of projects at a time rather than produce a comprehensive set of detailed instructions about each project. Whether Lottie pursues her land-as-community goals through another request to Omar is yet to be seen. Lottie had asked for a 10 year plan.

Commodity-oriented wildlife habitat

This section provides two examples of conservation workers delivering programs favoring commodity wildlife to women farmland owners who favor land-as-community conservation practices. The mismatch of service to landowner goals is unfortunate and represents a missed opportunity to encourage these farmland owners to continue to enhance the ecological health of their land.

When Omar and I took the long ride to Lottie's land, Omar scanned the landscape in a way typical of conservation workers with a strong interest in hunting and wildlife. He saw everything! At least it seemed to be that way to me, but then I was writing notes and missed the small flock of pheasants feeding in a grassed waterway area that was not covered by snow and ice like much of the remaining landscape. With a nod towards the flock Omar commented, "Can tell a storm's coming with them out feeding this early in the afternoon." Then he continued explaining his job to me,

> I try to push the wildlife interest and I guess that's how I see my role in [the agricultural conservation agency]. Unfortunately, some landowners want to do more than the limits set by [the agency], and so there are limits to what I can do for them.

This last was part of a cautionary explanation he offered to me that Lottie was not going to be a typical farmland owner, and was in fact, someone he probably should have turned down for his direct assistance. Her request was somewhat beyond the scope of his work for reasons he explained. He hadn't fully realized where Lottie lived and what type of land it was likely to be when he spoke to her on the phone to set up the appointment for the three of us to meet. Lottie's land falls into the category of acreage and, although it is a larger than average acreage, it is also no longer agricultural land and probably should not receive his limited time and program resources. To prepare for our visit to Lottie's land Omar looked at maps of nearby land while he was on a website available to workers to examine historic land uses which often hold clues of types of vegetation were present. He printed an aerial photo of the acreage land and then realized her land was atypical. The agencies employing Omar do not provide strict guidelines for service to private landowners but prioritization is necessary for field workers who serve a large geographic area as does Omar.

Omar and I visited Lottie, but because Lottie did not intend to produce commodities on the balance of her acreage and was not interested in producing wildlife for hunters, the dominant ideology of land as commodity would not be served by our visit. Omar and conservation workers Agatha-CW and Esther-CW confirmed that prioritizing their time and land owner service was difficult, and prioritization was usually left to the judgment of the worker in the field. However these conservation workers understood that the implied purpose of their roles was to support landowners who produce commodities.

Another example of wildlife as commodity focuses on a request for services from an absentee farmland owner, Clara Mae, and shows how her request for support for a prairie remnant was misread by a conservation agency worker as a request for services that would increase the value of the remnant as a wildlife habitat suitable for hunting. I had known Clara Mae for a few years and, from time to time, as a neighbor and an independent volunteer, I had advised her on ways to restore her prairie remnant and encouraged her as she developed a multi-year plan for the row cropped farmland surrounding her remnant. Over time, I had come to understand how much her grandmother and mother had treasured the prairie flowers and how they had insisted that the land be spared the plow even though by all accounts the remnant was otherwise ideal farmable land. Clara Mae sought advice from many people—including me—and relied on the agency conservation workers to explain what she needed to do to comply with programs. From start to finish of the project (it is still in process) she has worked with three agency advisors. Dominick's advice to Clara Mae to leave some standing corn at the north end of the remnant area seemed strange to me and incongruous with what I understood her goals to be. If she were trying to recreate habitat for pheasants, the vertical structure of the standing corn might have provided some useful cover, but she does not hunt and does not want to provide hunting privileges. It's not Clara Mae's hobby and while she doesn't object to hunting per se, it's what she perceived she was told to do. And so she told her renter to leave some standing corn. I didn't understand Dominick's advice to Clara Mae where she first told me about it and it was many months later when Dominick told me, as we rode through a different area of the county, how much he enjoyed hunting pheasants, deer, and wild turkeys. He had developed positive relationships with landowners with habitat for hunting and he enjoyed seeing the results of conservation advice

delivered by his predecessors. Dominick was practicing the conservation he knew best and understood from a personal level, which is that wildlife hunting is a commodity that is usually considered acceptable to land-as-commodity farmland owners. His advice did not fit Clara Mae's situation. Dominick was already steeped in commodity wildlife land management techniques and the institution does not require him to be proficient in non-commodity production land uses. Unlike Esther-CW who has the skill base to provide comprehensive services to farmland owners who hold land-as-community values and fulfill her institutional requirement to work with farmland owners who hold land-as-commodity values—Dominick and Omar can confidently provide commodity wildlife advice which is supported by their agencies. If asked to provide land-as-community services, workers are not expected to provide those services to the same degree that agencies expect them to respond to requests for commodity wildlife.

Community-oriented goals

Lottie's and Clara Mae's interactions with the institution of agricultural conservation illustrate how the nature of service produced by the institution produces discrimination against people who hold land-as-community ideologies. Lottie differs from most women farmland owners because of her familiarity with much of the technical information utilized in conservation programs. She and Clara Mae were both significantly more likely to assert themselves in the process of creating what they want on their farmland, even if it meant hiring vendors with expertise to fulfill what the institution could not or would not provide. In this regard Lottie and Clara Mae were willing to make what to workers inside the institution considered exceptional efforts to pursue goals. Some workers supporting land-as-commodity values may not fully understand nor necessarily agree Lottie's and Clara Mae's goals are

practical or wise in terms of costs and benefits using commodity production values as a comparison. As I observed Omar's work with Lottie, I simultaneously imagined a much different set of recommendations based on what I observed of Lottie's land and her story describing her goals. My account combines my observation and technical knowledge of her land to inform educational opportunities matching her goals. I also responded to Lottie's demeanor and enthusiasm, which to me suggested she was eager to learn more about her land and how to enhance the land-as-community qualities of it.

My observation is that Omar missed many opportunities to help Lottie connect conservation practices with healthy, functioning aspects of her land. Lottie was excited about her land. She smiled, and looked frequently to confirm that Omar and I were looking at what she directed us towards and to see our reactions to it. She rapidly supplied details about the land, showing her knowledge and thorough research into various aspects of her land. To me, her smiling expressions conveyed hopeful expectation that we were equally impressed with the land and that we would see the potential to transform and improve it. However, she was comfortably confident that her goals were well enough reasoned that she did not need to seek our approval of them—this is difficult to describe but she was not tentative about her goals and she was comfortable with her power in the relationship with us. We were her guests. As a landowner, she is not dependent on institutional support or assistance, but she indicated that she would pursue all institutional services available to her. By way of contrast, in my experience and observations, some comments and stories from farmland owners reflect that they are fearful and untrusting of institutional services and requirements.

Lottie was interested in “doing the right thing” which included sensible management of the trees in front of her house. To Lottie, beauty seemed to equal to land health—though it is difficult to reproduce on paper the earnestness in her voice when she spoke of wanting “that area to be beautiful” which did not include making the trees conform to beautiful straight rows or something otherwise impractical in that location. I would have told her about the trees, why those species were there, and that their growth pattern was not evidence of neglect (the antithesis of beauty), and how some of the limbs functioned as harbors or perches for some of the animals she described enjoying. She was seeking advice to enhance the overall health of that area of trees, and slightly improve her view of the river. Omar’s report to Lottie simply suggested that the area could be replanted whereas she had stated that she would consider hiring an arborist to trim them if Omar thought it was warranted. Replanting would have required removal of the existing trees and new trees would be vulnerable to flood waters making establishment difficult at best, a recommendation I would probably not have made because her house was located in the midst of mainly naturally grown vegetation.

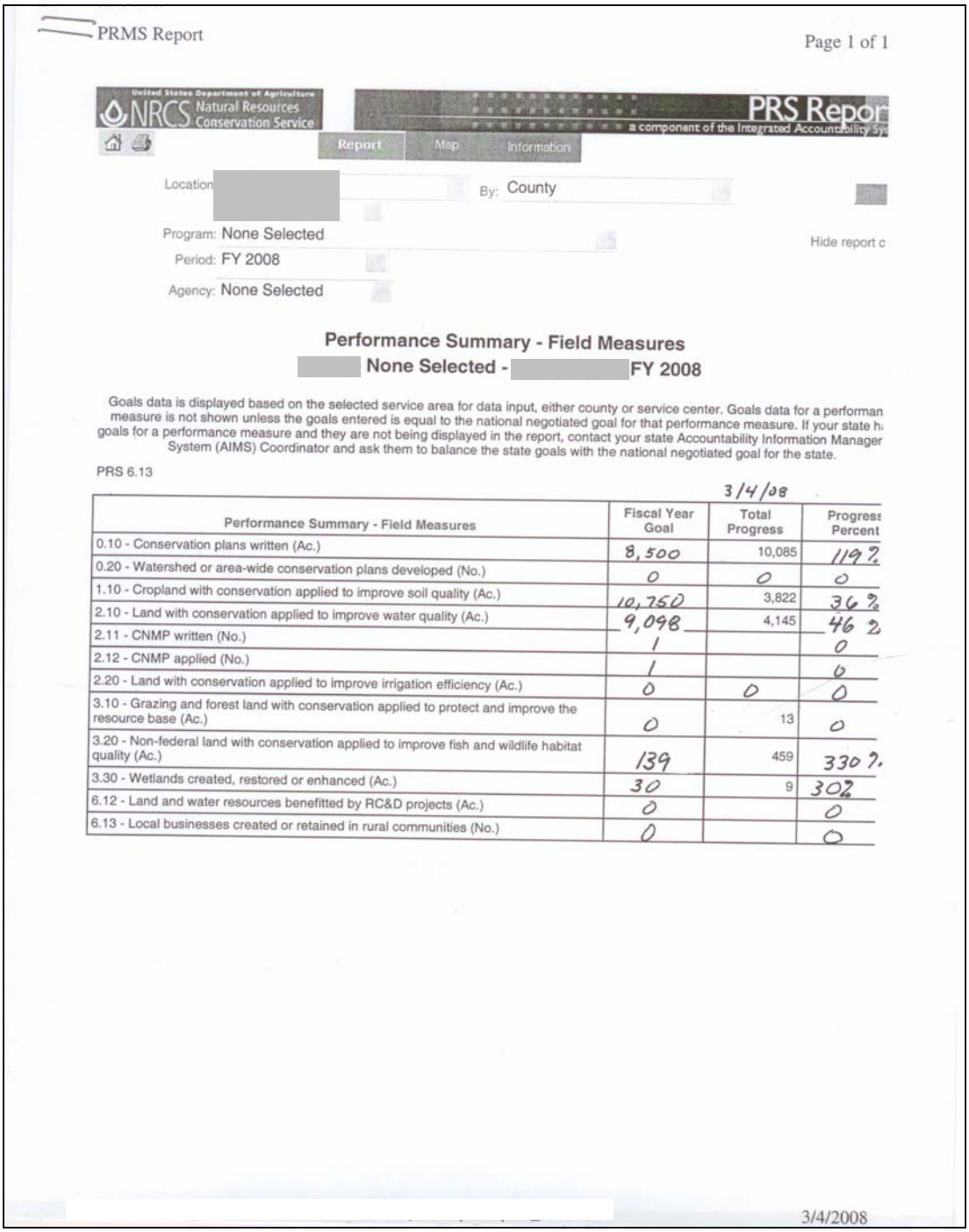
I would have told her how and why she might want to participate in a non-formal education program, which because of her stated interest in education, would provide more information and access to resources for her to share with her family as they enjoy her land. Lottie had more than once during our visit described how her children utilized the land and stated that she desired to encourage their outdoor recreational opportunities. I thought she would also have enjoyed working with herbaceous perennial woodland plants based on new research findings and potential for additional research she could have engaged in as a private landowner.

Instead of considering this as an informal educational opening, Omar politely talked about commodity wildlife and some non-commodity wildlife and provided a plan that met the minimum requirements for his program mandate. Whether his expertise and knowledge of related topics would have matched my recommendations is less important than what I viewed as a missed opportunity to inspire Lottie and connect with Lottie's land-as-community orientation.

Conservation workers who opt to inspire farmland owners to implement additional community conservation practices may do so in ways that are consistent with their personal orientations, rather than with the intention of producing balanced services. That is to say, when there are few workers who are ideologically bilingual as in the case of Esther-CW, without institutional rules and reward for providing balanced services the land-as-community orientation of farmland owners is ignored.

Conservation workers in the institution produce commodity level conservation matching the land-as-commodity ideology favored by the institution—that is their work is coordinated by rules specifying clear goals for acres and dollars. Figure 4 shows how commodity values are made explicit in institutional texts. I include this figure for several reasons. First, this Performance Summary of Field Measures form is representative of the kinds of forms that are used to accomplish the commodity-based work of the institution that can be measured in acreages and percentages of goals. Second, the form shows how conservation workers are accountable for the performance of the conservation programs, again measured in acreages and percentages of goals, that fall under their purview. In this sense, the form exists as almost a performance evaluation for a particular worker. Third, the form articulates the links to the ruling relations that govern the local worker and then influence state and national

achievements, especially because the form accounts for myriad agricultural conservation values and targets across the nation.



PRMS Report

Page 1 of 1

United States Department of Agriculture NRCS Natural Resources Conservation Service

PRS Report

a component of the Integrated Accountability Sy

Report | Map | Information

Location [redacted] By: County

Program: None Selected

Period: FY 2008

Agency: None Selected

Hide report c

Performance Summary - Field Measures

[redacted] None Selected - [redacted] FY 2008

Goals data is displayed based on the selected service area for data input, either county or service center. Goals data for a performan measure is not shown unless the goals entered is equal to the national negotiated goal for that performance measure. If your state h goals for a performance measure and they are not being displayed in the report, contact your state Accountability Information Manager System (AIMS) Coordinator and ask them to balance the state goals with the national negotiated goal for the state.

PRS 6.13

3/4/08

Performance Summary - Field Measures	Fiscal Year Goal	Total Progress	Progress Percent
0.10 - Conservation plans written (Ac.)	8,500	10,085	119 %
0.20 - Watershed or area-wide conservation plans developed (No.)	0	0	0
1.10 - Cropland with conservation applied to improve soil quality (Ac.)	10,750	3,822	36 %
2.10 - Land with conservation applied to improve water quality (Ac.)	9,098	4,145	46 %
2.11 - CNMP written (No.)	1		0
2.12 - CNMP applied (No.)	1		0
2.20 - Land with conservation applied to improve irrigation efficiency (Ac.)	0	0	0
3.10 - Grazing and forest land with conservation applied to protect and improve the resource base (Ac.)	0	13	0
3.20 - Non-federal land with conservation applied to improve fish and wildlife habitat quality (Ac.)	139	459	330 %
3.30 - Wetlands created, restored or enhanced (Ac.)	30	9	30%
6.12 - Land and water resources benefitted by RC&D projects (Ac.)	0		0
6.13 - Local businesses created or retained in rural communities (No.)	0		0

3/4/2008

Figure 4. Commodity values represented on a form used in the institution.

Water management

Hildegard had a problem. Drainage water from the farm across the road flows through a culvert and into a ravine on her land that becomes a creek flowing to the river. She was concerned about the quality of the water because she is sure it is generally laced with chemicals that she has observed her neighbor applying just ahead of rain. She didn't want to confront him, however, because he's "a big farmer in the area," but she really didn't appreciate what she saw as careless applications of chemicals. Hildegard had an idea for cleaning up the water and she carefully drew it out on a piece of paper she showed me. Hildegard would like the water to be clean for children to play in it some day, part of a bigger dream for her land. She told me how she went to visit Emil at the NRCS office to find out if there was a program that might help to pay for the work to accomplish her plan. Emil, however, wasn't able to help her implement her plan despite her careful drawing to show how cattails and layers of rocks of different sizes could create a temporary holding basin where the soil and chemicals could be cleaned before the water flowed the rest of the way through her land. There was no agricultural conservation program Emil could find that would do what she wanted. Not even close. There wasn't a program to do something similar because the area of Hildegard's ravine is not located in an ideal location for a larger structure of the kind that is typically used in fields bordering sloped land where gullies form. Emil could not take institutional action to help Hildegard.

Key Finding

Hildegard and Emil's situation is a microcosm of the patterns that pervade the institution of agricultural conservation, as are many of the other examples in this chapter that constitute the data—the findings—of the IE investigation undertaken from the standpoint of women

farmland owners. The IE lens focused on Hildegard and Emil's situation and on situations of others like them brings into focus the reality, the key finding of this research: *the institution of agricultural conservation is failing to meet the needs of constituents who hold land-as-community orientations*.

In chapter 5, I discuss the findings articulated in this chapter and offer a series of recommendations for changing methods of practice for the institution of agricultural conservation that address the failure of the institution to engage women farmland owners and others like them. I also offer implications for research and practice in the discipline of agriculture education and studies as well as recommendations for future research that seem to be especially well-suited to the IE research approach.

Chapter 5. Discussion, Conclusions, and Recommendations

The work of this chapter is to analyze the data and the findings that emerged during the process of conducting an institutional ethnography on the institution of agricultural conservation. In this chapter, I discuss the findings articulated in chapter 4 and offer a series of recommendations for changing methods of practice for the institution of agricultural conservation that address the failure of the institution to engage women farmland owners and others like them. I also offer implications for research and practice in the discipline of agriculture education and studies as well as recommendations for future research that seem to be especially well-suited to the IE research approach. Before I continue with my analyses and recommendations, I first revisit the problematic, the orienting questions, and the standpoint that were the starting points for the research.

Revisiting the Problematic, Standpoint, and Orienting Questions

IE directs the researcher to formulate a problematic as a way to begin the research. This involves stating the conditions or situation that will be explored by starting with the standpoint of clients or persons who are central to the condition of the problematic. In the most straightforward terms, the problematic is that *far fewer women than men participate in agricultural conservation programs.*

I used the standpoint of women farmland owners as lens to explore the institution of agricultural conservation, a technique that, in the end, produced data that revealed the key ideas listed below. The orienting questions of interest are presented for their role in guiding my examination of the institution of agricultural conservation and in this report of the research.

The groups of related orienting questions that guided this inquiry are organized as follows.

Participation: Why are women apparently less likely to participate in conservation practices on their farmland? What, if anything, prevents women from participating at equal rates with men? How do women perceive agricultural conservation programs or their farmland in ways that account for differences in participation?

Institutional characteristics: How does the institution of agricultural conservation support women's interests in agricultural conservation? What is there about the institution of agricultural conservation that prevents women from participating?

Empowering women: How does the institution of agricultural conservation support women's participation in agricultural conservation? In what ways does the institution engage with women to empower women farmland owners to participate in the institution? How might the institution encourage more women farmland owners to participate?

Education: What kinds of opportunities might exist for educational interventions inside the institution of agricultural conservation? What roles, if any, can or should education play in creating the conditions for increasing women's participation in farmland conservation?

This IE approach follows the problematic using qualitative methods—such as not committing to hypotheses or theory until the end of the research. Further, the IE approach typically results in one or more findings and reveals multiple areas for productive future research and improved institutional practices.

Based on the institutional ethnography that I conducted and on the individual and accumulated findings that I laid out in chapter 4, I offer the key finding of my research: *The institution of agricultural conservation is failing to meet the needs of constituents who hold land-as-community orientations*. From this key finding, I argue that *the institution of agricultural conservation must change so it can better meet the needs of all of its constituents*.

Concurrently with conducting and writing up this research, I have lived and worked in the U.S. Midwest and have experienced first hand the devastation wrought by natural events, including record-breaking floods and tornados that affected millions of acres of farmland, small towns, and urban areas. As I came to understand the key finding of this study—that the institution of agricultural conservation was, indeed, failing its constituents and the land—I had to be aware of the pervasive voices in the media and in daily conversations. I had to ensure that my key finding was, indeed, the result of my research procedures even as I was surrounded by information from all quarters that seemed to resonate with my findings. For example, on June 19, 2008, the *Washington Post* headlined, "Iowa Flooding Could Be An Act of Man, Experts Say" (Achenbach, p. A01):

> "I sense that the flooding is not the result of a 500-year event," said Jerry DeWitt, director of the Leopold Center for Sustainable Agriculture at Iowa State University. "We're farming closer to creeks, farming closer to rivers. Without adequate buffer strips, the water moves rapidly from the field directly to the surface water." . . .
>
> Between 2007 and 2008, farmers took 106,000 acres of Iowa land out of the Conservation Reserve Program, which pays farmers to keep farmland

> uncultivated . . . That land, if left untouched, probably would have been covered with perennial grasses with deep roots that help absorb water.

In another source, *Agricultural Research*, a publication of the U.S. Department of Agriculture, Jeremy Singer reports that,

> In a survey of 3,500 Corn Belt farmers in Iowa, Illinois, Indiana, and Minnesota, only 18 percent of respondents reported ever using cover crops, though most believed that doing so would increase soil organic matter and reduce erosion. (p. 23)

Dennis Keeney, senior fellow at the Institute for Agriculture and Trade Policy, made an explicit call for change in an editorial in an Iowa newspaper (June 29, 2008):

> Instead of paying for a reestablishment of row crops, let's put perennials in erosion prone areas, plant trees in appropriate riparian zones and for windbreaks, rotate crops between longer lasting legumes and row crops. And we should insist that more, rather than less, land goes into conservation reserve. (p. A4)

The sentiments expressed in these public documents were seconded many times over by flood and other natural disaster victims, and I was especially sensitive to the echoes of what I had heard as I visited with farmland owners and conservation workers. We should be doing better in many ways, but, for my purposes, I focus here on how the institution of agricultural conservation should engage more people and begin to take seriously requests for smaller-scale practices and other possibilities for services that are more in keeping with the land-as-community values held by many of the institution's constituents.

We can no longer afford to allow the traditional, commodity-oriented ideology of the institution of agricultural conservation to dominate institutional services. Women who own farmland and absentee farmland owners deserve to be provided agricultural conservation

services that are aligned with their own values, which are mainly land-as-community orientations. Meaningful and measurable changes to the health of the landscape could be made if the institution improves the quality of services it provides to include, rather than exclude, farmland owners who orient to their land using community values. Many people, including conservation workers within the institution, would benefit from incorporation of community values into conservation services and practices.

In the remainder of this chapter, I support my argument for institutional change by articulating why the institution must change, who will benefit from changes in the institution, what those changes might look like, and how the institution might change. In the closing note, I discuss agricultural conservation practices that will balance the institution of agricultural conservation in ways that will encourage all landowners to engage in stewardship of their lands, that will address the interests and needs of farmland owners all along the continuum of commodity and community orientations, and that ultimately will improve the health of rural land and water in the U.S. Midwest.

Understanding Why the Institution Must Change

In this section I offer insights that support the argument that the institution of agricultural conservation must change. The institution—which includes governmental agencies and non-profit organizations—is insufficient in meeting the needs and concerns of a large proportion of farmland owners. This failure to engage all landowners to encourage them to adopt high-quality conservation practices has resulted in continued degradation of soil and water resources. Included in the constituency of the governmental agencies is a concerned public which provides significant funding towards protecting soil and water for the good of the biota. People who own land are not all of the same land-as-commodity orientation which

seeks to maximize short-term profit at the cost of long-term benefits. I suggest that change in three areas will help equalize services provided by the institution: demographic changes, matters of justice, and problems of protecting privileged lands.

Demographic changes

Because demographic and political changes portend the necessity for the institution of agricultural conservation to service a new farmland-owning constituency, a direct examination of the institution is warranted and should be undertaken from the standpoints of these new constituents. The effect of ruling relations in the institution of agricultural conservation is to reproduce the assertion that land as community is a minority or fringe viewpoint when this is not the case. Women farmland owners—who own half of the farmland in the U.S. Midwest—often hold values that do not favor maximizing profits for short term economic gain at the expense of long-term land health. Further, ruling relations have inappropriately marginalized people who hold a land-as-community orientation and have perpetuated systematic rejection of assistance and support for an important group of farmland owners—including some women farmland owners as well as owners of non-agricultural rural lands. This group includes people who are sympathetic with the land-as-community orientation, and who are willing to co-exist in a land-as-commodity agricultural landscape as long as their needs and requests are met.

Because women are considered as part of the constituency that holds a land-as-community orientation, demographics no longer support the domination of agricultural conservation by the land-as-commodity ideology. The sheer numbers of women farmland owners justify attention to conservation values that better match the land-as-community

orientation that aligns with women farmland owners' values as they are detailed in the Women, Land and Legacy (2007) report.

In this dissertation, I refer to a continuum of orientation with a land-as-community orientation on one end and a land-as-commodity orientation on the other end. I do not mean for this continuum to stand as a binary model, but rather to propose how various landowners can be viewed at one or several locations along the continuum, depending on their particular land. This continuum, then, allows room for the nuanced differences in how people holding the orientations actually use language and take actions that support their orientations. It is also true that individuals may treat separate tracts of their land differently according to purposes they alone understand. For example, the farm that was passed along through family generations might be maintained with the farmstead and special places for picnics as opposed to farmland that was purchased and might have little sentimental meaning to the owner.

The land-as-community orientation should not be marginalized by institutional ruling relations that favor the land-as-commodity ideology. This marginalization has meant that a land-as-community orientation appears to be insignificant or a radical point of view held by a small number of people, when this is not the case. I propose that the land-as-community orientation should exist in a co-equal way with the land-as-commodity orientation, whereas heretofore the land-as-community orientation has been marginalized by the dominant, land-as-commodity orientation through ruling relations.

Matters of justice

Women farmland owners must be considered the rightful decision makers for what happens on their land. Their ideas about land and water health must be privileged when it comes to deciding what kinds of—and at what scale—conservation practices will be installed

on their lands. I argue that as a matter of justice—that is, impartiality dictated by reason, conscience, and a natural sense of what is fair to all—landowners should be treated equally with regard to their particular conservation orientation both to meet their specific requests; and ultimately, to increase the amount of farmland protected by higher quality conservation practices. Conditions that have produced women's inaction in regards to agricultural conservation are not unknown. However the conditions seem to be of the type for which solutions are difficult to imagine, so these conditions have been allowed to exist unchallenged.

The conditions of ruling relations reproduced by the institution are discriminatory and oppressive. For example, as I explored the institution of agricultural conservation, I found discrimination even though women farmland owners didn't speak of it nor did they openly identify feelings of resistance based on their gender.

The discrimination reproduced by the institution was of the type which did not actively keep women from participating but was produced by the absence or marginalization of services which serve land as a community and other values such as those expressed by women that are detailed in the WLL report (2007). This type of discrimination is more difficult to observe—in part because one of the effects of hegemony is the failure of the oppressed to identify discrimination, or, as Brookfield (2005) states, "Not only will those being exploited work diligently to ensure their continued subservience, they will take great pride in doing so" (p. 98). Not even Phyllis—whose informed questions about soil conservation were unwelcome and rebuked by the men in her family—said she experienced discrimination. She protected the men in her family by not speaking of this incident in the

presence of a small group of women, but took care to tell me the story in private because she felt it was important to my research.

Based on the examples of Phyllis and others, I argue that assertions which claim that women's lands and interests are adequately cared for by men are critically in error. Further, assertions like this present an incomplete illustration of the institution of agricultural conservation from the standpoint of women farmland owners, even if they are unable to escape the hegemony of identity but somehow manage to find the right words to make plain their values and preferences. Oppression is produced when systems support continued domination or exploitation of people and their resources.

Given that the main effect of many of the conservation programs is to reproduce land-as-commodity values, there are few examples of land-as-community-oriented agricultural conservation programs within the institution from which women might choose, even if they achieved literacy in the institution of agricultural conservation and could articulate their interests. In other words, if marginalized women farmland owners do happen to find their way to and into the institution of agricultural conservation, this does not mean that they will find an ideologically bilingual conservation worker like Esther-CW who can interpret their mainly unspoken desires into appropriate conservation practices. It is inappropriate to expect women farmland owners—many of whom do not use conservation language fluently to communicate their deeply held values in practical terms—to advocate for themselves and confront male tenants and family members whom they perceive as holding more expertise and authority, just as it is inappropriate to expect marginalized persons to keep track of rebukes by the institution.

I recommend that the institution of agricultural conservation begin to determine the extent to which there are unmet requests for services, beginning with determining how those requests are now being articulated. Unmet requests such as Hildegard's, if reported, could build a case for developing new conservation practices on behalf of landowners with situations like hers. However, Hildegard and others like her lack influence because they are not a unified group.

The ratio of men to women farmland owners (essentially a 1-to-1 ratio, with men and women owning farmland in nearly equal proportion) shows that conservation services—particularly those services provided by publicly funded institutional members—warrant seeking a balance between land-as-commodity programs and land-as-community programs that honor interests and values expressed by women. Women farmland owners lack political influence, in part, because they do not know that others share their concerns (Bregendahl et al., 2007). The hegemony of identity activated by the institution that women are not active agents in conserving their land makes it difficult to engage them as a constituency group, and yet the public needs women's help to support conservation program funding and to improve land and water quality. The WLL report (2007) points out that women farmland owners "may lack confidence, skills, and motivation" and do not have a unified voice (Bregendahl et al., p. 34). However, one of the oft repeated benefits of such women's gatherings is the reassurance that they are not alone in their concerns about agriculture and land (Bregendahl et al., 2007, p. 43).

The land-as-commodity ideology has dominated agricultural conservation through producing institutional processes and products that effectively reproduce behaviors that support the land-as-commodity orientation—more simply stated as hegemony. One such

behavior is to act in ways perceived to be consistent with personal identity. Identity affects learning, in part, because "Our concepts of our emotions are often integral to our wider conception of our selves, used to give meaning and provide explanation for our lives" (Lupton, 1998, p. 6). These explanations or "personal stories are not merely a way of telling someone (or oneself) about one's life; they are the means by which identities may be fashioned" (Rosenwald & Ochberg, 1992, p. 1). Upon examining ideology as an organizing theme it became clear that there was something still more overarching at work producing what Rueben saw as women's "abdication of their responsibilities." Jenkins (2004) reports that, "There is something active about identity that cannot be ignored: it isn't 'just there', [sic] it's not a 'thing', [sic] it must *always* be established" (p. 4).

In examining the effects of the ruling relations, I needed to account for how women's identity is reified through social norms and the institution which includes informal educational opportunities to impact learning, behaviors and thus identity if women's identity as farmland owners did not include taking the main initiative on soil conservation practices,. To produce such a widespread effect in women's lives there had to be more than systemic illiteracy or ignorance at work. The observed effect can be understood as identity as hegemony, which according to Brookfield (2005) "is a saturation of the whole process of living" (p. 96). To describe identity as hegemony and its effect on learning, I turn again to Jenkins who writes that

> identity must *always* be established. . . .
>
> - to classify things or persons
> - and to associate oneself with, or attach oneself to, something or someone else (such as a friend, a sports team, or an ideology).

> Each of these locates identity in practice: they are both things that people do. The latter also implies a degree of reflexivity. (2004, p. 4)

The implication for reflexivity concerning ideology provides an opening for informal education as practiced by the institution (but that include a land-as-community ideology) to contest the hegemony negatively impacting widespread adoption of agricultural conservation practices. Adult informal education could be practiced as "oppositional learning" (Brookfield, 2005) within the institution of agricultural conservation.

Privileged land protection

Non-agricultural rural lands are negatively impacted by agricultural pollution and drainage practices. However many non-agricultural lands are excluded from technical or cost-share assistance from the institution of agricultural conservation which provides many such services for agricultural farmlands and farmland owners. If, as is now the case, farmers continue to employ farming practices which maximize short-term gains at the expense of long term benefits, the privilege of dominating agricultural conservation funds should end. More land should be better protected by higher quality practices and, in order to increase the amount of land protected for long term benefit, the institution of agricultural conservation should extend conservation services to include more of the rightful decision makers—the farmland owners. Notwithstanding the extreme examples of greedy farmland owners who do favor profits over land health, there is evidence through WLL and the absentee farmland owner projects underway at the time of this writing which suggests that women and absentee farmland owners are more likely to make choices favoring land health. Certainly the communication strategies which now favor farmers who are men should be reconstituted to

make plain that women and absentee landowners have a rightful claim to their views of land health without reinforcing the hegemony of identity and ruling relations.

The institutional ways of accounting for commodity-based conservation programs (e.g., Wilbur's notations about board feet of timber) favor numeric measurements which likewise favor the style of reporting which shows large numbers of acres. If landowners like Hildegard, who requested a small scale practice, do not qualify for service their land is excluded from conservation protection if she cannot afford to hire a technical advisor (if one could be found in her rural area) and pay for an entire conservation practice on her own. Similarly, land is excluded if landowners who may be uninterested in large scale conservation program treatments do not participate.

The goal to elevate land as community through development of practices and technical assistance is not proposed as a replacement or as a superior ideological orientation. However, amplifying the trumpet call for better ecological land practices does not need to drown out the song of agriculture. Ruling relations dominate the institution of agricultural conservation by the constant claim that agriculture can only be profitably practiced with land management practices that degrade land health and function for short term economic gain. An overcorrection towards the land-as-community view would not serve farmland owners in the long run, even though significant institutional resources—money, labor, and time—will be required to balance land-as-community and land-as-commodity programs. Starting towards balance is essential.

The current agricultural conservation programs have benefits that enhance soil and water conservation on agricultural lands, but they are insufficient and, as Elsa pointed out, "sometimes the program rules are harmful to land and become obstacles to ecological goals,

not as a means of achieving them." The original CRP program which permitted farmers to plow native prairies on slopes, grow crops for two years, and be paid to replace them with inferior vegetation stands as an example of ignoring ecological health (Reichelderfer, 1987). In addition, because conservation programs are synonymous with income support payments and commodity production limits, environmental gains are lost each time an institutional program ends because conservation practices are removed and the land is once again put into agricultural practices.

Domination by the land-as-commodity ideology also tends to present conservation as though the institutional agricultural conservation programs, with public funding in millions of dollars, are the main source of conservation work in the Unites States. This identity—that *all conservation* is of the land-as-commodity type—produces hegemony where ecological conservation groups are pressed into political support of programs like the Farm Bill because the need for conservation, as they see it, is so great that even poor quality conservation is better than none. As Brookfield (2005) described, these groups find themselves in the untenable position of "begging for [their] own oppression" (p. 98). In addition, although ecologically minded groups also lobby for program support in other areas—such as song bird, raptor, and other migratory bird conservation programs—members of these groups find themselves labeled and attacked as threats to commodity production when they ask for higher standards for water quality or for a share of conservation funding. For example, one Midwestern woman farmland owner, Elsa, reported that she sometimes posts her concerns anonymously on a weblog that discusses agriculture and conservation and has watched other weblog posters make spirited and vicious attacks against her questions about water quality or wildlife habitat. I use this example to make the case for adapting the institution of

agricultural conservation to reflect balance in conservation programs to demonstrate that views such as Elsa's are neither radical nor minority. The effect of this marginal status of the land-as-community view has been for the institution of agricultural conservation to reject possibilities for assistance and support of farmland owners—which includes some women farmland owners as well as owners of non-agricultural rural lands. Change to the institution may be slow, but it is critical for the institution to become relevant and helpful to new constituents.

Discovering Who Will Benefit from the Changes

I suggest that changes to the institution of agricultural conservation will not only benefit the institution by making it more accessible to all manner of landowners, but also that three specific groups of people will benefit, absentee landlords, men—both farmers and conservation workers—who hold a land-as-community orientation, and women conservation workers. The institution benefits by expanding services to new audiences who become engaged with the institution as active, rather than passive or subservient, agents in choosing conservation practices.

Absentee landowners

The benefits of balancing the institution with land-as-community conservation services, programs, and practices may extend to absentee farmland owners and ecologically minded landowners—men and women—who are not members of traditional production agriculture social culture. A 2007 survey of absentee landowners in the Great Lakes region revealed that "less than 20 percent indicated that making a profit was their main priority for their land." The survey showed that "conservation, wildlife, aesthetics, and recreation were generally more important to absentee landowners than their land's profit potential" (Bower, 2008).

Land-as-community men

The institutional culture within agricultural conservation causes workers to provide technical assistance in ways that uphold the identity of farmers as agricultural businessmen who rarely use land-as-community language. In this way they reinforce the identity of farmers and of agricultural business as the dominant—and the only right way—to use farmland. Workers within the institution acknowledge that they have the most experience working with men who comprise the vast majority of farmland owners they serve. Men and women conservation workers who hold a land-as-community ideology must represent and present the socially expected, land-as-commodity orientation which is strongly masculine. Male farmers or workers with the less dominant, land-as-community orientation also deal with hegemony of identity when they speak about land. For example, it is expected and acceptable for men to talk about reducing chemicals because it is profitable, but more difficult for them to talk of reducing chemicals because they believe or feel that it is healthier for the land. A male farmer interviewed for Hassanein's work (1999) prefaced his comment to show that he rejects the spiritual or intrinsic connection to land that is typical of others not like him whom he names: "It sounds stupid, but I feel like you have an obligation to the land. It's kind of a Zen or Native American view of the land" (p. 111). By declaring that feelings of affinity for and inherent worth of land are not to be believed or acted upon, he can retain his identity as a logical and sensible agricultural businessman. He maintains his masculine identity role by rejecting feelings associated with women and nature.

Also important is the matter of the hegemony of identity which marginalizes male conservation workers who hold land-as-community orientations to the extent that they must speak of their feelings in ways to support the dominant paradigm. Although I am

sympathetic to this circumstance for male conservation workers who hold a land-as-community orientation, I suggest that balancing the institution of agricultural conservation to include land-as-community orientations is a critical step in contesting this hegemony of identity. In her biographical work about scientist Barbara McClintock, Keller (1985; 1989) pointed out a problem with identity and gender for men by describing a reason that McClintock could speak of concepts of intuition, feeling, and connectedness as a practice that is "rare among male scientists." Another way to consider this issue is through the construction of masculinity: "However atypical she [McClintock] is as a woman, what she is *not* is a man and hence is under no obligation to prove her 'masculinity'(Keller 1985, 174)" (Keller, 1989, p. 38). I suggest that this same identity as hegemony will make it difficult for male conservation workers to accept and reproduce land-as-community-oriented work with new conservation practices. However, there are a small number of role models within the institution from whom they could learn.

Workers like Esther-CW

Change is needed within the institutional policies and culture and in locations where workers within the institution meet the educational needs of their constituents or clients, such as in county offices. Conservation workers who are in conversation with farmland owners have the main responsibility for informal education through dialog and they may begin to create balance when they are supported with tools and institutional ruling relations that recognize and reward work toward balancing the land-as-commodity and land-as-community orientations. This work toward balance must begin with the institution and workers recognizing that their "technical assistance" is, in the main, an inherently informal educational exchange. Evaluations of conservation workers' performance should include

measures of how well they can match diverse landowner needs—which should account for service to people, not exclusively performance based on acres and ability to disperse program dollars as they are now. Adjusting performance measures in this way would acknowledge the contributions of workers, who like Esther-CW, retain their awareness (or in her case her "native language" of community) of how to engage and build relationships with farmland owners who orient to land as a community.

When conservation workers and members of the institution prioritize how best to promote the conservation programs available to all farmland owners, there is often tension between workers who debate whether their limited time and financial assistance should be spent on large numbers of acres or on reaching large numbers of people who own land.

I have worked with conservation workers on strategic planning and when it comes to prioritizing services to provide with limited resources, the discussions nearly always end up in debates about how to allocate their time responding to landowner requests. The essence of this debate is strategic for conservation workers because it is, in part, a projection of how conservation workers performance could be judged as adequate or as inadequate. For conservation workers who must make judgments on a daily basis of how to allocate their land within their assigned territory, the debate always ends in a draw between whether they should be held accountable for prioritizing their time to providing service on more acres of land or to serving more landowners, even if it means a smaller number of acres of land are treated with conservation practices. In the main, governmental agencies must report their land-as-commodity productivity to the federal headquarters which approve funding for special state programs in state agencies and state-authorized offices of federal agencies. Many of the programs linked to federal funding—which were discussed in the strategic

planning sessions I conducted—provided significant funding to pay staff salaries. Although the conservation workers could debate the merits of types of service and emphasis for their strategic plan, in the end many of their salaries were dependent upon how well they fulfilled the land-as-commodity goals from federal programs that were measured and reported in numbers of agricultural acres or numbers of board feet (commodity). The identity of workers is that of providers of land-as-commodity-oriented information as opposed to being able to provide balance to land-as-community farmland owners.

Proposing What Those Changes Might Look Like

The institution of agricultural conservation is made up of many governmental agencies and non-profit organizations which do not all follow the same rules of practice in offering services. Although the following changes are proposed for the institution as a whole, the governmental agencies bear the greatest burden for producing equity in service to all citizens. Therefore, although private non-profit organizations may make changes to improve their service to land-as-community farmland owners, these findings are synthesized into recommendations that may not fit non-profit situations as well as they might for governmental agencies.

Conservation workers need to learn and become conversant with different vocabulary and attitudes—not that they must change their own minds but that they must display different attitudes—beyond conservation practices. Conservation workers in positions to engage in informal educational conversations with farmland owners and tenants need to master diverse sets of skills so they are capable of recognizing situations that call for land-as-community services. Workers with specialized technical skills already have the flexibility in their work to exercise professional judgment such as this would require. This is more than simply

making new tools available to the same workers who will continue to promote the services they have always promoted that relate to commodity outcomes. I consider this change as being similar to becoming fully bilingual where the speaker is able to use her or his non-native language in ways that reflect nuanced understandings of the culture and can converse in culturally appropriate ways. Esther-CW is already bilingual in this sense because, although she holds land-as-community values, she must be equally skilled in land-as-commodity services or she would have become like the woman Dominick mentioned who left her post when her land-as-community orientation overpowered her ability to provide commodity services.

At a minimum workers should be able to better identify women farmland owners' concerns for land health, as noted in the WLL report (2007), and they must be able to help women understand the choices for conservation practices that support their concerns for long term land health. This is likely to require workers to learn about additional networks of experts by way of expanding their palettes of conservation practices that may interest land-as-community farmland owners.

Conservation workers should be rewarded by the institution, by supervisors and others in the hierarchy, for providing technical assistance about small, individual conservation practices. Even though presently these workers may provide technical assistance to all people without restriction, it is difficult for them to do so in a practical sense. Smaller, non-agricultural land problems do not receive priority because treatments for large numbers of acres of agricultural land are favored by the dominant, commodity ideology. Workers may suggest services and treatments but for small, non-agricultural lands, the institution now provides few resources such as cost-share or technical assistance.

Conservation workers lack tools such as practices that are appropriate for small-scale areas of land that would benefit from conservation practices. Conservation practices that are developed for the institution of agricultural conservation by large research institutions, such as land grant colleges, tend to address erosion or pollution problems that are unique to large scale, production agriculture. The institution of agricultural conservation relies on research-based conservation practices because conservation practices must work effectively in the dominant agricultural production systems—too much is at risk for farmers' financial success and for the reputation of the institutions which are dependent on-going funding support.

One value that might be readily incorporated in some small-scale practices is the value of areas to allow children's play. While cautions to health and safety, particularly around farm equipment, are essential, the values of farmland have historically fulfilled roles of family and children's play at the same time the land produces an economic benefit. In Midwest states there are many examples of farmsteads that are unwelcoming to children with acres of open mowed grass; landscaping in yards with which they are not welcome to play for fear of breaking branches or damaging plants; and no areas where children can conduct messy play which scuffs turf into ball fields or leaves half completed projects. It is not hard to envision rescaling small conservation practices where clean and shallow water is conducive to play or where buffers incorporate a small portion of flowers that children may pick or bushes that can be twisted into forts in spontaneous play. Choosing areas of a farmstead where children may be drawn into imaginative play should not be incompatible with good agricultural conservation design promoted and described by the institution of agricultural conservation. The concept of backyard wildlife is an important start, but strong examples of child-friendly landscapes in agriculture could appeal to many land-as-community farmland owners with

fond memories of childhood spent on a farm where the current manicured farmstead conditions did not dominate the rural areas.

Recommending How the Institution Might Change

I propose that a systematic review of the institution of agricultural conservation be undertaken to correct and rebalance as many aspects of workers' practices as can be determined to be beneficial for enabling women farmland owners to make decisions and take action reflecting their concerns about land as community. I believe that informal education is a good place to start such a review of technical assistance which is an inherently educational exchange. Although many different models exist—and new models will need to be developed—for facilitating change in the institution, I offer here two possible, representative options, a task force and a concerted effort to modify worker practices.

Form a task force

A review of this aspect of work may begin in the form of task force comprised of members of the institution with knowledge of different levels of administrative management and policies and include workers as well as women and men farmland owners. The results of a review like this can be used to begin to rebalance the ideological presentation of agricultural conservation to emphasize land as a community as a co-equal orientation to the dominant commodity practices. The task force could develop a comprehensive set of guidelines to review policies against the lived experience of farmland owners, again primarily women but also men, who consider land as a community.

I recommend that adult educators with experience and understanding of adult non-formal and informal education should be represented in program and policy development projects within the institution of agricultural conservation where the final product depends upon the

informed participation of adults, as with conservation programming. The extent to which this leads to additional scholarship depends in part on the interests and disciplines included in the final product, but certainly creates opportunities for exploring in more detail what the intended audiences or clients for conservation programs presently know and understand.

Modify worker practices through training

Looking at how the institution of agricultural conservation might change requires that the institution develop effective training for conservation workers to help them become proficient with new skills to use in their work with landowners who hold different views of their land. Part of this training must include teaching workers to know when to use specific skill sets. The change to praxis that this would require is significant, but is not unlike the nature of changes made by teachers as they adopt a new method of, for example, teaching science. Although proposing models for this kind of change is beyond the scope of this project, concern for the informal nature of worker exchanges with farmland owners should feature prominently in any models for change. Support for conservation workers to change must come from within the ranks of workers as well as from all levels of the administration of the institution of agricultural conservation. The chapter by Kasl and Elias (2000) titled "Creating New Habits of Mind in Small Groups" provides an example of how a small group discovered their "capacity to inhabit different identities that matched the challenge in different situations [was] akin to what Bennett calls 'constructive marginality'"(p. 238). Change to worker praxis will likely also be based on the extent that conservation workers' identities are central to their work, and further exploration of social learning theory by Bandura, Wenger, and Lave should provide important guidance for this project of worker change.

Pay attention to language

A useful example from an unrelated discipline benefits this presentation of hegemony of identity through language. Carol Cohn, a science educator who was invited to spend an internship learning about technology, spent time with nuclear weapons experts and reported that the "language and paradigm precludes people" (Cohn, 1996, p. 181). The reference point of the conversations and thinking was the weapons, not the people who would be incinerated. While this may seem to be an extreme example, it is similar to the way land is discussed in conservation, where the land-as-commodity ideology precludes people in community with the biota. Cohn (1996) wrote of the word *peace*: "Moreover, to speak the word is to immediately brand oneself as a soft-headed activist instead of a professional to be taken seriously" (p. 180). She had to adopt the dominant military vocabulary in order not to be thought ignorant or simple-minded, much in the same way workers—women and men—who join the institution of agricultural conservation must adopt the language of the dominant paradigm.

Pay attention to informal education

Agricultural conservation program implementation occurs through technical assistance, which is inherently an informal educational exchange. If land and water are to be improved more people need to be included as participants in agricultural conservation programs. Therefore I recommend that the institution of agricultural conservation, particularly the governmental agencies, expand the current ways for conservation workers to address the concerns and goals of landowners in the broadest sense (e.g., inquiring about alternatives, offering more than one kind of information, networking with experts who hold different orientations).

Further, I argue for developing and maintaining communities of practice that are central to the informal education role of conservation workers. Workers who meet the needs of landowners should be able to do so without extra effort on the workers' part. Relationships with farmland owners with any orientations along the continuum of land as community and land as commodity should benefit from technical assistance that is balanced rather than dominated, as it is now, by production and commodity orientation. I propose two essential educational tasks which, among many others, could begin to provide this balance.

- Make the educational function of technical assistance more explicit by providing support and training to current and new staff.
- Make technical information about new conservation practices available, recognizing that these practices must be customized to the land and allowing time for site visits and follow-up visits.

These two educational tasks should be further developed through research and praxis.

Implications for Future Research

In this section I discuss implications for future research as part of the process of recommending research that employs the IE approach as well as research that employs other approaches.

Recommending IE for research

This section is presented in two parts to fulfill the purpose of introducing the methodology of institutional ethnography (IE) for studying problems that seem otherwise intractable. The first part is about the value of IE for research in disciplines other than where it has historically been used in the areas of health and human services but has not been

employed in studying issues in agriculture or conservation. The second part includes recommendations for agricultural education research and research in related disciplines.

One benefit of IE for future research is that the IE methodology provides an alternative lens through which to view a problematic that has not been adequately answered by other means of research. IE is well suited to investigate problems where the everyday experience can be observed and discussed, and for where it is possible to take the standpoint of the client and use it to look out to find how that client's life is organized. Defining problems from the standpoint of the client offers liberation from frameworks that are imposed by professional discourse. For example, I used an IE lens to enter the institution of agricultural with a framework that invited me to look at the familiar as strange, just as Smith used IE to critique her own discipline of sociology for research orientations which rely upon the terms and frameworks which sociology has created.

I am especially intrigued with uses of IE where a fresh view of situations may reveal entrenched patterns of responses for which, through redefinition, new solutions can be found. While scholarly examples of IE research have mainly been conducted by individual researchers without necessarily producing institutional change, one IE scholar, Ellen Pence (Pence & Sadusky, 2005), has produced a copyrighted business tool that engages institutional members in an IE examination in a style more consistent with action research theory (Greenwood & Levin, 1998).

Extending IE to other areas of agricultural education and studies could take the form of examining (a) the experiences of high-school aged women in leadership within the vocational agriculture clubs; (b) the conditions that affect minority agricultural education students at a university; and (c) the types of structural factors impacting the resources directed by

universities to departments of agricultural education across the United States. These examples highlight that the methodology of IE can be scaled to investigate institutions of any size. IE research may be conducted as a local project in a single school district or it may encompass national or international institutions if the problematic is defined by the standpoint of one level of client. The standpoint for the high school vocational agricultural club depends on where the problematic is centered, but, as I have proposed, this it might be the standpoint of girls who enter leadership positions at a higher rate than boys. By contrast in scale, the standpoint of departments of agricultural education in universities in the U.S. could be taken at the level of the departmental administrator responsible for acquiring and distributing resources or the standpoint of faculty who must use the resources available. IE helps expose structural factors that confound efforts to produce meaningful change in ways that some adversaries can become allies to resolve issues without blame.

The value of IE for future research in agricultural education is in areas of study where the standpoints of clients or workers are often assumed to be known and further, where clients or workers are seen to be as deficient or ineffective. Through understanding IE methodology, I have trained my ear to hear and reconsider circumstances and assumptions surrounding missives such as "if *they* could only be educated in this matter, life would be good." If these statements relate to a nearly intractable problem, I now turn to wonder about the problematic, and the everyday assumptions made about *them*, what conditions lead them to do and be as they are, and, further, why someone believes education is the appropriate choice.

While qualitative research using grounded theory or ethnography may be employed to determine standpoint of the client (or some cases the standpoint of workers might be featured), in some cases, the value of IE is to further link the client to larger systems (of

which we are all a part, of course) that contribute to the effects observed. In this way, I believe IE has potential to identify gaps in services particularly when members of the institution acknowledge the unintended consequences for clients that are difficult for the institution to identify and correct. An IE approach, using standpoint, can allow institutional members to deconstruct their policies and practices in a way that does not automatically generate defensiveness on the part of workers who are often victimized for their roles in implementing policies they don't produce. That is not to say that IE lacks descriptive power for discrimination and bad policy, but that this kind of research need not be undertaken with an agenda of blame.

I may have, at one time, been skeptical of the conclusions about discrimination myself were it not for the lens of IE which allowed me to see how agricultural conservation programs produce discrimination by reifying cultural practices which marginalize women's participation in conservation. In fact, I would expect many women would be shocked at the conclusions I've drawn: "Begging for our own oppression is what happens when hegemony works smoothly" (Brookfield, 2005, p. 98). Thus IE offers benefits to research seeking to describe or expose what has been otherwise hidden from view due to preconceptions and domination by ruling relations.

Recommending other research

I propose a research agenda that focuses on the development of new curricula that model the identity of women who implement conservation practices that are congruent with land-as-community values and that show how environmental and economic interests can be balanced. The language and structure of new models that portray women (and men holding land-as-community orientations) must be carefully developed to enable women to think critically

about and understand conservation options that are not first censored by tenants or family members who may hold different views. For example, half the farmland owners in Iowa, based on the WLL report, use terms to express their relationship to the land and agriculture which are often spiritual and that articulate "a great respect for the land" (Bregendahl et al., 2007). Considering that about half of the farmland owners hold these respectful, spiritual views, new educational opportunities should be developed with language and orientations that welcome new audiences. This particular issue is arguably a problem for governmental agencies which seek to maintain scientific and non-religious stances in regards to public communications. However, given the size of the audience—that is half the farmland owners—that is left out or turned off by commodity orientated communications that do not fit their identities, the effects are not consistent with the responsibility of government to provide service without discrimination. This failure of land-as-commodity communication to reach all farmland owners is not only calculated in terms of equity for people, but measured on the land owned by community-oriented farmland owners who are not engaged but who otherwise might actively seek to protect their land.

Given the changing demographics of farmland owners in the U.S. Midwest in particular, two areas of concern may more greatly impact agricultural education research than the institution of agricultural conservation involved with program implementation. One area of concern is to examine the extent to which life experiences cause barriers to learning (Merriam, 2001, p. 5) about agricultural conservation. Barriers to learning is one factor of participation which could not be considered in full using the IE methodology and might better be addressed by a phenomenological study, for example. Recognizing the role of hegemony of identity in learning (Brookfield, 2005) by women farmland owners in particular

has implications for agricultural education research that need to be explored or developed by other research using other methodologies better suited to measuring learning. Hegemony of identity and effects to learning is related to the second area of concern which is described by Marsick and Watkins (2001): “People often do not deeply question their own or other’s views. Power dynamics may distort the way in which they understand events” (p. 31). This area may impact research evaluation methods which seek to assess the efficacy of an educational method designed to produce learning if part of the targeted research audience includes women or absentee farmland owners who may capitulate to people perceived as authorities based on traditional power dynamics. Without extended analysis in this area, the work by Mezirow (2000) and many others in the area of transformative education along with conceptual change used in science education (Strike & Posner, 1985) seems especially important to explore through agricultural education research seeking to understand farmland owners and the institution of agricultural conservation.

Research in agricultural conservation which seeks to incorporate absentee and women farmland owners—who do not fit conventional models favoring farmers who are mainly men—would benefit from careful examination of what constitutes the work the researchers assume will be done by whoever is providing the labor. In the case of windbreaks, for example, spacing between rows of trees is governed in part by the size taken up by the mature trees, but prime consideration is also given to the dimensions of common farm equipment that would be used to control vegetative competition in early growth stages. That capitulation to equipment constraints also governs whose values are ultimately favored in windbreak design—that is of the equipment and those who favor using powerful equipment to perform work over the values of others who might favor multiple benefits to windbreaks

following a different planting design. Giving up "mental models that constrain the way work is done is not easy" (Marsick &Watkins, 2001, p. 27) and I turn to DeVault's (1999) use of "work" to draw in efforts that women farmland owners do to manage social relationships. If researchers are aware of who will *work* to employ the conservation practice under development through research, the design of the conservation practice may be broadened to serve more landowners along the continuum of land as community and land as commodity. More plainly, if a conservation practice appeals to farmland owners who favor land-as-community orientations, researchers should not assume that women, for example, will not be willing take a different pathway of *work* to accomplish something other than the pathway appealing to farmers who are used to solving problems using power equipment. Work that doesn't involve power equipment is not less valuable—it's simply different and it also takes time and effort.

Future studies involving women farmland owners could benefit from differentiating research questions in such a way as to consider land as community and land as commodity on a continuum rather than as strictly binary choices. Observational techniques may be adapted to reduce bias, provided the framework for observations—meaning what constitutes the action being observed—has been constructed to record data in such a way that behaviors can be noted on a continuum. Terminology and language use, however, can produce bias in research methods strongly dependent on direct communication with farmland owners through text or dialog. Attention to women's word choices and moments where women struggle for words describing their experience (DeVault, 1999; Harding, 1989) should be noted in studies determining women's needs. Longino and Doell (1996) in their analysis of a range of studies on sex differences, "demonstrate the permeability of inquiry to culturally based

assumptions. . . . . the different ways in which the structure of inquiry permits the expression of ideology in the content of research. It's not a matter of the willful imposition of stereotypes" (p. 5). For example, using the continuum of land as commodity and land as community, it may be possible to conduct a thorough examination of one area of institutional service, such as publications and promotional materials, to further to redress the inequity by balancing messages about community.

Two areas of concern for future research are centered in the area of language and analysis based on women's communications, and I would add communications to absentee landowners who do not retain strong ties to agriculture. Women and absentee farmland owners are presently misunderstood by the institution of agricultural conservation which marginalizes non-dominant views and interests by subsuming those views in land-as-commodity conservation programs. Therefore I raise this concern about future research to learn about land-as-community oriented farmland owners best described by Ribbens and Edwards (1998), "There is a danger that the voices of particular groups, or particular forms of knowledge, may be drowned out, systematically silenced or misunderstood as research and researchers engage with dominant academic and public concerns and discourses" (p. 2). Also related to research which relies on communication between researchers and farmland owners is an area that I have discussed in some detail throughout this report—that of silences and unspoken but non-verbal clues made by the speakers. This concern is mainly for qualitative research which has tended towards the use of software technologies to manage, process, and analyze large quantities of qualitative data. The significance of the pauses and difference in language used should not be underestimated and, if overlooked, would cause

critical error in analysis (DeVault, 1994, Smith 1987, Ribbens & Edwards, 1998). Researchers need to plan for and seek out ways to correct for this possible error.

The findings of this research have implications for research in other disciplines which are concerned with understanding farmland owners, tenants, and conservation services. One area is awareness of the hegemony of identity roles in agriculture. Identity roles are malleable, meaning they are always enacted (Jenkins, 2004). Aligning research methods with traditional gender roles and land-as-commodity values produce bias that can lead to incorrect conclusions and may possibly influence policy in ways that perpetuate women's low status in agriculture.

The pervasive identification of agricultural conservation as primarily the domain of men confounds survey research such as that conducted by Agren, Inc. (Petrzelka, Buman, Ridgely, & Buman, 2007) with absentee farmland owners, where survey returns were seventy percent completed by men while women comprise seventy percent of absentee landlords (Duffy & Smith, 2004). If women widely assume that men involved with women's farmland hold greater knowledge and expertise, they will refer researchers to men to respond to questions about land use and land management.

Many assumptions—if more clearly understood—would lead towards better policy, practice, and education, because so little is now known about women and absentee farmland owners. One assumption has to do with differences in farmland ownership values between women and men with regards to environmental stewardship and conservation. Findings from this research can inform comparative survey research—about the important language differences and identity differences between men and women with regards to conservation.

Such survey research could clarify the strength of differences if found, and signal whether differential educational programming is needed.

Planners embarking on new non-formal educational conservation programming designed especially for women, however, should be careful not to reproduce harmful effects by setting women apart as deficient *others*. Cautions to assumptions about women's learning come from Elizabeth Hayes (2001). Hayes warns that differences in women's approaches to learning should not be characterized as differences in learning or this could further lead to assertions of women's deficiencies in learning. Further, she cautions that over-emphasizing the idea that women learn best in groups rather than alone could "fuel stereotypes that women are not, or cannot be, competitive, autonomous, or self-directed" (Hayes, 2001, p. 37). Finally, overly emphasizing intuition and emotion "can reinforce the idea that women are not well-suited for logical, objective, rational thought" (Hayes, 2001, p. 38). These important cautions should become part of the training of agricultural conservation program planners who are also often saddled with responsibilities for constructing the programs that disseminate conservation information.

Implications for Future Practice

The following two sections synthesize findings from this research to make specific recommendations for agricultural education practice and for new conservation practices.

Recommending agricultural education practices

In this section, I recommend changes to the ways that agricultural education practices are incorporated with regard to three aspects of the institution of agricultural conservation, education practices that support the institution of agricultural conservation, education at the

highest levels of the institution, and education as it is practiced by workers within the institution.

First, I recommend that practices that inform agricultural conservation education be examined and brought into a balance between the land-as-commodity and land-as-community ideologies. Further, I argue that this kind of examination and intentional balancing be conducted within all levels of education that support the institution of agricultural conservation, ranging from materials like *Ranger Rick*, a magazine designed for young children, to 4-H and extension curricula for older children and young adults, and from FFA through undergraduate and graduate-level university educational practices and curricular content. I suggest that this undeniably broad call for action is important because these educational frameworks educate and support current and future policy makers, conservation workers, farmland owners, farmers, and others who are concerned with the effects of agricultural conservation.

I also would point out that these effects are making their way into the consciousness of large groups of the American public who at one time—if they thought about agriculture at all—thought about agriculture from the land-as-commodity orientation. I suggest that although the land-as-commodity orientation may be the *dominant* orientation, it is by no means the *majority* orientation.

Second, I argue that education practices that include the land-as-community orientation must be introduced and applied at the highest financial and regulatory levels of the institution, both the highest levels in states and in the federal systems. Education must be undertaken because workers in other, lower levels can only put into action as agricultural conservation practices what policy makers and those who craft allocation patterns at the

upper levels of the institution ordain and support. Ruling relations at the highest levels of the institution of agricultural conservation translate into ruling relations that specify how money can be spent—specifically the kinds of agricultural conservation practices that the institution will support and approve. Ruling relations at the highest levels also allocate the agricultural conservation money and govern how the money is distributed at all levels, through the multiple pathways of the institution that touch the lives of everyone who is affected by agricultural conservation policies and practices.

Third, I argue that there needs to be a widespread acceptance of the idea that interactions between conservation workers and others (farmland owners, farmers, tenants, public) are fundamentally educational. It is important to equip workers with the proper conservation tools and adequate language so they can encourage landowners to achieve better conservation that is consistent with their orientation to land, whether that is more toward a commodity or toward a community orientation. That said, we need to find ways to support conservation workers both as individuals with specific skills and as groups of workers who carry the responsibilities for administering conservation programs and working with landowners. These responsibilities include mandates to encourage widespread adoption of the specific conservation practices governed by ruling relations at all levels of the institution of agricultural conservation.

I hasten to add, however, that pointing a finger of blame at conservation workers would be counterproductive and irresponsible because changes to the institution must come from and be made at all levels of the institution. The changes that I recommend here must enhance relationships between conservation workers and farmland owners, especially women farmland owners and men who hold land-as-community values. As I traversed the institution

of agricultural conservation from the standpoint of women farmland owners, I came to see that the institution is about people, people and the land, and that the institution cannot be allowed to effectively deny services to virtually half of the people who are the constituents of that institution.

Recommending new conservation practices

While this research is centered in agricultural education, the linkage of education to new conservation tools is essential if the institution of agricultural conservation is to balance opportunities and thereby engage the widest possible range of ideological orientations to work together to protect natural resources. As I have shown, the dominant ideology of land as commodity also alienates farmland owners who do not fit the traditional identity of a land-as-commodity farmer who has been the primary decision maker and recipient of institutional communications and conservation program funding. I envision educational understanding as central to the development of the small number of practices I have identified here. Doubtless many more conservation practices and research opportunities could be developed by interdisciplinary teams. Theories of educational practice, specifically informal education, should play a vital role in developing the practices as well as in encouraging adoption of the practices.

I recommend small-scale conservation practices be developed, researched, and brought into use to treat agricultural-impacted water coming into non-agricultural lands. Some non-agricultural farmland owners, like Hildegard, are willing to help treat water before it leaves their land by cleaning the pollutants from the water, slowing the energy of streambank-eroding flows, and allowing water to percolate into ground water to the greatest extent possible. Some of these treatments will be suitable for agricultural lands where farmland

owners are interested in the quality and features of the land over the long term, where land can be permanently removed from the production–conservation–production cycle that is typical of current CRP program cycles.

Large scale treatment options ignore the contributions that can be made by many linked smaller systems. In a sense, the precedent for small systems is already developed for grassed waterways, but these systems as designed are limited to gully erosion prevention and in application they trap sediment that limits the useful life of the system, and when planted with brome grass, they flatten and provide rapid water conveyance. Fortunately new research and opportunities for new ways of thinking about waterways are starting to occur and offer potential benefits to water quality as a beginning to re-envision multiple public benefits for publicly funded waterways (Wilson, 2008). For example, understanding the sponge-like role of native prairie plants within a landscape is an important next step for grassed waterway research, because, as Wilson wrote, “I would like to find out why native grasses decrease runoff more than other treatments” (p. 6).

I base the following recommendation on the expressed interests of Hildegard, Elsa, and Lottie and from watching how Clara Mae chose to treat small areas of her 80 acres of farmland as discrete and unique from each other. While these instances may be isolated instances, I believe they stand for others who may not have someone to hear their wishes and ideas. I propose several projects that could incorporate more values common to land-as-community orientation and specifically interests of farmland owners who highly value children’s participation with nature in rural landscapes (Bregendahl et al., 2007; Louv 2005). First, consider how children may be engaged in the resulting landscapes. Examples of landscaping practices which engage children in small rooms of plantings come from other

disciplines and could begin to provide a new image of conservation practices which welcome human interaction.

New practices should be developed, at a minimum, in these five areas.

Water management. Currently there is too much water, moving too fast downstream. Develop practices appropriate for dealing with volume and velocity in small locations higher in watersheds to manage field tile drainage, in-stream flow, infiltration. Create opportunities to slow water and let it infiltrate, particularly in upper watershed areas.

Water quality. Currently non-agricultural land owners receive unwelcome volumes as well as unsafe pollutants in the water coming directly from agricultural lands. Develop small scale wetlands using appropriate native vegetation; and borrow techniques from rain garden, French drain, and bio-swale technologies used in urban storm water management.

Soil erosion. Currently, treatments for soil erosion usually are linked to water but more specifically gully, rill, wind, sheet, and deposition issues for non-agricultural lands adjacent to agricultural fields. Develop small scale treatments for areas where large scale treatments are not appropriate, such as, for example where large scale treatment destroys native vegetation or an excessive amount of land is disturbed. Consider soil stabilization treatment options that incorporate appropriate living system techniques (strategies that focus on native vegetation such as wet meadow sedges and small rushes), very small terraces that minimize land disturbance, and conservation practices that use small mechanical equipment, if any. Develop new practices that are outside the traditional agricultural conservation system that include innovative

strategies such as compost-based urban storm water best management practices (Tyler & Goldstein, 2008).

Streambank and riparian areas. Current streambank treatments provide bank protection but do not alter the stream flow. Develop treatments, depending on size of stream, that slow, hold, or allow streams to meander without cutting using even temporary small treatments that delay losses and slow water or erosion. This could be done in addition to stream buffer programs which currently are utilized and often involve large scale project of bank regarding and tree planting. Projects envisioned are those which affect the velocity as well as volume of water and can be implemented in stages, or installed in series along a waterway.

Windbreaks. Current windbreak designs are mostly of the type with multiple straight rows of trees and bushes. Develop design options with shaped areas that may be implemented in part of a windbreak or along the entire length of the windbreak with the benefits for children's play made explicit in promotional and instructional materials. The visual standard for many farmland owners will likely continue to show a preference for the hegemony of straight rows of uniformly sized trees. However, the benefits of a safe (meaning away from operating farm machinery) place for children to play outdoors could be appealing to grandparents and inheritor's of farmland with fond memories of free and unrestricted play in a "grove" that was not part of a highly landscaped lawn or sterile acres of lawn (where children are rarely seen playing or scuffing the lawn grasses). Plant choices for small carrels designed for children's play could be selected to withstand breakage and manipulation that are normal parts of children's discovery about plants and nature. In fact, I suggest that a

legacy of *grandma's windbreak* or *grandpa's trees* could provide abundant landscapes to combat "nature-deficit disorder" as described and discussed in Louv's book, *Last Child in the Woods: Saving our Children from Nature-Deficit Disorder*.

This small sample of recommendations for conservation practices integrates Lottie's and Clara Mae's desires for plans that could be implemented in phases over a few years, which include small improvements at a small scale. This sample also includes conservation practices that ultimately provide benefits to the ecological health and function of their lands. Hildegard's desire to have a safe place for children to play is reflected in the windbreak and waterways designs. I don't wish to portray these proposed practices as universally desirable to all women farmland owners, but in their roughest form these practices can provide guidance for new research that better reflects some interests of land-as-community farmland owners.

Closing Note

Women's informed participation in agricultural conservation programs could increase the amount, permanence, and ecological quality of conservation practices. One way to make this increased informed participation possible would be if the technical assistance provided by the institution better matched women's goals, as in the cases of Lottie, Elsa, and Clara Mae. These women farmland owners invested their own money into conservation practices so they could be independent of the restrictions of government programs as well as so they could use practices that matched their goals. For them, knowing what to do and how to do it and receiving validation or encouragement was sufficient. Conservation workers who have retained or acquired the skills so they can modify their behavior to match farmland owners

with land-as-community orientations seem to effectively work with those landowners as well as landowners who hold land-as-commodity orientations.

Changes to the institution of agricultural conservation as I have described in this report may allow more women farmland owners to successfully, and to their satisfaction, engage with the institution of agricultural conservation.

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Appendix A
Institutional Review Board Forms

IOWA STATE UNIVERSITY
OF SCIENCE AND TECHNOLOGY

Institutional Review Board
Office of Research Assurances
Vice Provost for Research
1138 Pearson Hall
Ames, Iowa 50011-2207
515 294-4566
FAX 515 294-4267

DATE: August 18, 2006

TO: Jean Eells
2550 Stagecoach Road, Webster City, IA 50505

CC: Dr. Nancy Grudens-Schuck
217 Curtiss Hall

FROM: Jan Canny, IRB Administrator
Office of Research Assurances

SUBJECT: IRB ID 06-366 **Study Review Date:** 13 August 2006

The Institutional Review Board (IRB) Chair has reviewed the project, "New Partners for Sustainable Agriculture" and has declared the study exempt from the requirements of the human subject protections regulations as described in 45 CFR 46.101(b) (1, 2). The applicable exemption category is provided below for your information. Please note that you must submit all research involving human participants for review by the IRB. Only the IRB may make the determination of exemption, even if you conduct a study in the future that is exactly like this study.

The IRB determination of exemption means that this project does not need to meet the requirements from the Department of Health and Human Service (DHHS) regulations for the protection of human subjects, unless required by the IRB. We do, however, urge you to protect the rights of your participants in the same ways that you would if the project was required to follow the regulations. This includes providing relevant information about the research to the participants.

Because your project is exempt, you do not need to submit an application for continuing review. However, you must carry out the research as proposed in the IRB application, including obtaining and documenting (signed) informed consent if you have stated in your application that you will do so or if required by the IRB.

Any modification of this research should be submitted to the IRB on a Continuation and/or Modification form, prior to making any changes, to determine if the project still meets the Federal criteria for exemption. If it is determined that exemption is no longer warranted, then an IRB proposal will need to be submitted and approved before proceeding with data collection.

Exempt Categories

(1) Research conducted in established or commonly accepted educational settings, involving normal educational practices, such as (i) research on regular and special education instructional strategies, or (ii) research on the effectiveness of or the comparison among instructional techniques, curricula, or classroom management methods.

(2) Research involving the use of educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures or observation of public behavior, unless: (i) information obtained is recorded in such a manner that human subjects can be identified, directly or through identifiers linked to the subjects; and (ii) any disclosure of the human subjects' responses outside the research could reasonably place the subjects at risk of criminal or civil liability or be damaging to the subjects' financial standing, employability, or reputation.

For IRB Use Only		
	Review Date: _____	IRB ID: 06-366
	Approval Date: _____	Length of Approval: _____
	Approval Expiration Date: _____	FULL Committee Review: _____
	EXEMPT per 45 CFR 46.101(b): 1 & 2 Date: 13 Aug 06	Minimal Risk: ✓
	EXPEDITED per 45 CFR 46.110(b) _____	More than Minimal Risk: ____
	Category _____, Letter _____	Project Closed Date: _____

IRB
JUL 2 8 2006

ISU NEW HUMAN SUBJECTS REVIEW FORM

ORIGINAL

SECTION I: GENERAL INFORMATION

Principal Investigator (PI): Jean Eells		Phone: 515-832-1771	Fax: 515-832-1771
Degrees: M.S. Adult Ed.	Correspondence Address: 2550 Stagecoach Road, Webster City, IA 50505		
Department: AGEDS		Email Address: jceells@wmtel.net	
Center/Institute:		College: Agriculture	
PI Level: ☐ Faculty ☐ Staff ☐ Postdoctoral ☒ Graduate Student ☐ Undergraduate Student			

Title of Project: New Partners for Sustainable Agriculture
Project Period (Include Start and End Date): [mm/dd/yy][08/15/06] to [mm/dd/yy][8/15/07]

FOR STUDENT
Name of Major Professor/Supervising Faculty: Nancy Grudens-Schuck
Phone: 515-294-0894
Department: AGEDS
Type of Project: (check all that apply)
☐ Research ☐ Thesis ☒ Dissertation ☐ Class project
☐ Independent Study (490, 590, Honors project) ☐ Other. Please specify: _____

KEY PERSONNEL

List all members and relevant experience of the project personnel. This information is intended to inform the committee of the training and background related to the specific procedures that the each person will perform on the project.

NAME & DEGREE(S)	SPECIFIC DUTIES ON PROJECT	TRAINING & EXPERIENCE RELATED TO PROCEDURES PERFORMED, DATE OF TRAINING
Jean Eells, MS Adult Education	PI, Interviewer, facilitator	ISU qualitative methods coursework '03-'06, ISU-HSR certification Apr. '03
Transcriptionist to be hired	transcribe interview tapes	when contracted will complete web-based ISU-HSR certification

Add New Row

FUNDING INFORMATION

Internally funded, please provide account number:
Externally funded, please provide funding source and account number:
Funding is pending please provide OSPA Record ID on GoldSheet: 80187
Title on GoldSheet if Different Than Above:
Other: *e.g., funding will be applied for later.*

SCIENTIFIC REVIEW

Although the assurance committees are not intended to conduct peer review of research proposals, the federal regulations include language such as "consistent with sound research design," "rationale for involving animals or humans" and "scientifically valuable research," which requires that the committees consider in their review the general scientific relevance of a research study. Proposals that do not meet these basic tests are not justifiable and cannot be approved. If an assurance review committee(s) has concerns about the scientific merit of a project and the project was not competitively funded by peer review or was funded by corporate sponsors, the project may be referred to a scientific review committee. The scientific review committee will be ad hoc and will consist of your ISU peers and outside experts as needed. If this situation arises, the PI will be contacted and given the option of agreeing that a consultant may be contacted or withdrawing the proposal from consideration.

☒ Yes ☐ No Has or will this project receive peer review?

If the answer is "yes," please indicate who did or will conduct the review: North Central Region - Sustainable Agriculture Research and Education - proposal review panel, (NRC-SARE), Eells dissertation committee, and Resource Enhancement And Protection Historic Resource Development Program

If a review was conducted, please indicate the outcome of the review: NRC - SARE, dissertation committee and REAP-HRDP have approved this project.

NOTE: RESPONSE CELLS WILL EXPAND AS YOU TYPE AND PROVIDE SUFFICIENT SPACE FOR YOUR RESPONSE.

COLLECTION OR RECEIPT OF SAMPLES

Will you be: (Please check all the apply.)

☐ Yes ☒ No Receiving samples from outside of ISU? See examples below.
☐ Yes ☒ No Sending samples outside of ISU? See examples below.

Examples include: genetically modified organisms, body fluids, tissue samples, blood samples, pathogens.

If you will be receiving samples from or sending samples outside of ISU, please identify the name of the outside organization(s) and the identity of the samples you will be sending or receiving outside of ISU:

Please note that some samples may require a USDA Animal Plant Health Inspection Service (APHIS) permit, a USPHS Centers for Disease Control and Prevention (CDC) Import Permit for Etiologic Agents, a Registration for Select Agents, High Consequence Livestock Pathogens and Toxins or Listed Plant Pathogens, or a Material Transfer Agreement (MTA) (http://www.ehs.iastate.edu/bs/shipping.htm).

SECTION II: APPLICATION FOR INSTITUTIONAL REVIEW BOARD (IRB) APPROVAL

☒ Yes ☐ No Does this project involve human research participants? If the answer "no" is checked, you will automatically moves to a question regarding the involvement of radiation producing devices in your project.

SECTION III: ENVIRONMENTAL HEALTH AND SAFETY INFORMATION (EH&S)

☐ Yes ☒ No Does this project involve laboratory chemicals, human cell lines or tissue culture (primary OR immortalized), or human blood components, body fluid or tissues? If the answer is "no" is checked you will automatically move to a question regarding the involvement of human research participants in your project.

ASSURANCE

- I certify that the information provided in this application is complete and accurate and consistent with any proposal(s) submitted to external funding agencies.
- I agree to provide proper surveillance of this project to ensure that the rights and welfare of the human subject or welfare of animal subjects are protected. I will report any problems to the appropriate assurance review committee(s).
- I agree that I will not begin this project until receipt of official approval from all appropriate committee(s).
- I agree that modifications to the originally approved project will not take place without prior review and approval by the appropriate committee(s), and that all activities will be performed in accordance with all applicable federal, state, local and Iowa State University policies.

CONFLICT OF INTEREST

A conflict of interest can be defined as a set of conditions in which an investigator's or key personnel's judgment regarding a project (including human or animal subject welfare, integrity of the research) may be influenced by a secondary interest (e.g., the proposed project and/or a relationship with the sponsor). ISU's Conflict of Interest Policy requires that investigators and key personnel disclose any significant financial interests or relationships that may present an actual or potential conflict of interest. By signing this form below, you are certifying that all members of the research team, including yourself, have read and understand ISU's Conflict of Interest policy as addressed by the ISU Faculty Handbook (http://www.provost.iastate.edu/faculty .) and have made all required disclosures.

☐ Yes ☒ No Do you or any member of your research team have an actual or potential conflict of interest?
☐ Yes ☐ No If yes, have the appropriate disclosure form(s) been completed?

SIGNATURES

[redacted] 7-28-06
Signature of Principal Investigator Date

[redacted] 7/28/06
Signature of Department Chair Date

PLEASE NOTE: Any changes to an approved protocol must be submitted to the appropriate committee(s) before the changes may be implemented.

Please proceed to SECTION II.

SECTION II: IRB SECTION - STUDY SPECIFIC INFORMATION

STUDY OBJECTIVES

Briefly explain in **language understandable to a layperson** the specific aim(s) of the study.

This project aims to 1) create an educational activity to help agencies and non-profits understand and better serve the needs of women farmland owners, and 2) create a permanent record of the oral histories of women farmland owners to be archived at ISU and University of Iowa. 8 - 11 women farmland owners in central Iowa will be interviewed about their experience of owning farmland. Three case studies will be developed and used to create a pilot educational activity for up to 12 volunteer participants. The pilot educational activity will consist of an interactive mapping activity. The interactive mapping activity will focus on the complex relationships and the institutional systems of agriculture affecting all aspects of sustainable agriculture. Participants will develop customized action plans for their own sustainable agriculture efforts – plans reflecting business timelines and the relationships and needs of women farmland owners who are most often overlooked as active partners. The pilot educational activity will involve one day of participation by the volunteers. The interviews with women farmland owners will be conducted in two appointments, each less than 2 hours long.

BENEFIT

Explain in **language understandable to a layperson** how the information gained in this study will benefit participants or the advancement of knowledge, and/or serve the good of society.

In Iowa, women own half the farmland but they are largely under-represented in conservation and agricultural service delivery programs. Conservation and agricultural agencies charged with providing services lack effective ways of serving women land owners, largely because the experience of women as farmland owners (not as operators) is little known or understood. This project will use womens' experiences to construct the pilot educational activity.

PART A: PROJECT INVOLVEMENT

1) ☐ Yes ☒ No Is this project part of a Training, Center, Program Project Grant?
Director Name: Overall IRB ID:

2) ☒ Yes ☐ No Is the purpose of this project to develop survey instruments?

3) ☐ Yes ☒ No Does this project involve an investigational new drug (IND)? Number:

4) ☐ Yes ☒ No Does this project involve an investigational device exemption (IDE)? Number:

5) ☐ Yes ☒ No Does this project involve existing data or records?

6) ☐ Yes ☒ No Does this project involve secondary analysis?

7) ☐ Yes ☒ No Does this project involve pathology or diagnostic specimens?

8) ☐ Yes ☒ No Does this project require approval from another institution? Please attach letters of approval.

9) ☐ Yes ☒ No Does this project involve DEXA/CT scans or X-rays?

PART B: MEDICAL HEALTH INFORMATION OR RECORDS

1) ☐ Yes ☒ No Does your project require the use of a health care provider's records concerning past, present, or future physical, dental, or mental health information about a subject? The Health Insurance

Portability and Accountability Act established the conditions under which protected health information may be used or disclosed for research purposes. If your project will involve the use of any past or present clinical information about someone, or if you will add clinical information to someone's treatment record (electronic or paper) during the study you must complete and submit the Application for Use of Protected Health Information.

PART C: ANTICIPATED ENROLLMENT

Estimated number of subjects *contacted* to reach required enrollment: 25	
Number of subjects to be enrolled in the study Total: Males: Females: 15	
Check if any enrolled subjects are: ☐ Minors (Under 18) Age Range of Minors: ☐ Pregnant Women/Fetuses ☐ Cognitively Impaired ☐ Prisoners	Check below if this project involves either: ☒ Adults, non-students ☐ Minor ISU students ☐ ISU students 18 and older ☐ Other (explain)
List estimated percent of the anticipated enrollment that will be minorities *if known*:	
American Indian: 1%	Alaskan Native:
Asian or Pacific Islander:	Black or African American:
Latino or Hispanic:	

PART D: SUBJECT SELECTION

Please use additional space as necessary to adequately answer each question.

11. Explain the procedures for selecting subjects including any inclusion/exclusion criteria (*i.e., Where will the names come from? Will a sample be purchased, will ads, fliers, word of mouth, email list, etc. be used?).*

Subjects will be selected from women known to the researcher and through word of mouth snowball sampling to find additional women farmland owners. The women farmland owners will be located in north central Iowa. Volunteers for the pilot educational activity will include agency and non-profit service staff and women farmland owners who will be selected from people known to the researcher and through nomination by the agencies and non-profits.

12. Attach a copy of any recruitment telephone scripts or materials such as ad, fliers, e-mail messages, etc. Recruitment material must include a statement of the voluntary and confidential nature of the research. Do not include the amount of compensation, (e.g., compensation available).

Note: Please answer each question. If the question does not pertain to this study, please type not applicable (N/A).

PART E: RESEARCH PLAN

Include sufficient detail for IRB review of this project independent of the grant, protocol, or other documents.

13. Describe the flow of events used in this research protocol. Include information from the first contact with the volunteers to the end of the study. Use a diagram or flow chart if appropriate. Also, include a description of the study procedures or tasks that participants will be exposed to or asked to complete. This information is intended to inform the committee of the procedures used in the study and their potential risk. Please do not respond with "see attached" or "not applicable."

Volunteers will be recruited by a phone call for the oral history interviews and the interviews conducted where it is

most convenient for the volunteer. The information gained will be written into 3 case studies that will provide the basis for developing the pilot educational activity. Volunteers for the pilot educational activity will be recruited by letter. To participate in the pilot educational activity, volunteers will be asked to read the 3 case studies and to interact in small group activities with the other volunteers present that day. The small group activities will include volunteers speaking, writing, and sharing information with each other and with the full group as they choose. Volunteers in all phases of this project will receive a thank-you letter by mail.

14. For studies involving pathology/diagnostic specimens, indicate whether specimens will be collected prospectively and/or already exist "on the shelf" at the time of submission of this review form. If prospective, describe specimen procurement procedures; indicate whether any additional medical information about the subject is being gathered, and whether specimens are linked at any time by code number to the subject's identity. If this question is not applicable, please type N/A in the response cell.

N/A

15. For studies involving deception, please justify the deception and indicate the debriefing procedure, including the timing and information to be presented to subjects. If this question is not applicable, please type N/A in the response cell.

N/A

PART F: CONSENT PROCESS

16. Describe the consent process for participants who are age 18 and older. *If the consent process does not include documented consent, a waiver of documentation of consent must be requested.*

Participants will read and sign attached consent form. The consent form contains a check box that will clearly indicate whether permission is given for the oral history tapes to be archived or if permission is denied. Volunteers will be allowed to respond to transcribed interviews and text in the case studies and may withdraw from the project at any time.

17. If your study involves minors, please explain how parental consent will be obtained prior to enrollment of the minor(s).

18. Please explain how assent will be obtained from minors (younger than 18 years of age), prior to their enrollment. Also, please explain if the assent process will be documented (*e.g., a simplified version of the consent form, combined with the parental informed consent document).* According to the federal regulations assent "…means a child's affirmative agreement to participate in research. Mere failure to object should not, absent affirmative agreement, be construed as assent."

PART G: DATA ANALYSIS

19. Describe how the data will be analyzed (*e.g. statistical methodology, statistical evaluation, statistical measures used to evaluate results*)

Data will be analyzed using qualitative methodology, particularly ethnographic methods for individual narratives and participant observation.

20. If applicable, please indicate the anticipated date that identifiers will be removed from completed survey instruments and/or audio or visual tapes will be erased:

8/15/13 Month/Day/Year

PART H: BENEFITS

21. Describe the benefit to the volunteer from participating in this study, *if any,* and the benefit to society that will be gained from the study. Please note that monetary compensation is not considered a benefit.

Volunteers for the oral history interviews will benefit from telling their personal stories to help service providers better understand what women experience as farmland owners. Volunteers in the pilot educational activity will benefit from helping to shape an activity that agencies could use to raise awareness among their staff of what women experience as farmland owners.

PART I: RISKS

The concept of risk goes beyond physical risk and includes risks to subjects' dignity and self-respect as well as psychological, emotional, legal, social or financial risk.

22. ☐ Yes ☒ No Is the ***probability*** of the harm or discomfort anticipated in the proposed research greater than that encountered ordinarily in daily life or during the performance of routine physical or psychological examinations or tests?

23. ☐ Yes ☒ No Is the ***magnitude*** of the harm or discomfort greater than that encountered ordinarily in daily life, or during the performance of routine physical or psychological examinations or tests?

24. Describe any risks or discomforts to the subjects and how they will be minimized and precautions taken. Do ***not*** respond with N/A. If you believe that there will not be risk or discomfort to subjects you must explain why.

Volunteers could become fatigued with telling about their personal experiences during the oral history interviews. The interviews will be paced according to the energy level of the volunteer, and breaks offered to the volunteer. The pilot educational activity will require small group interactions and will take place during a full day (6-8 hours). Volunteers will be permitted to opt out of the small group interactions if they choose, and they will also receive breaks and appropriate refreshments and meals. Volunteers who will travel to the pilot educational activity will be geographically limited to those who can reach the site in less than two hours of driving one way.

25. If this study involves vulnerable populations, including minors, pregnant women, prisoners, educationally or economically disadvantaged, what additional protections will be provided to minimize risks?

N/A

PART J: COMPENSATION

26. ☒ Yes ☐ No Will subjects receive compensation for their participation? If yes, please explain.

Do not make the payment an inducement, only a compensation for expenses and inconvenience. If a person is to receive money or another token of appreciation for their participation, explain when it will be given and any conditions of full or partial payment. (E.g., volunteers will receive $5.00 for each of the five visits in the study or a total of $25.00 if he/she completes the study. If a participant withdraws from participation, they will receive $5.00 for each of the visits completed.) It is considered undue influence to make completion of the study the basis for compensation.

Three women farmland owners providing oral history interviews will receive $150 each for their stories. Up to one dozen participants in the pilot education activity will receive $100 each, plus mileage reimbursement at the approved mileage rate at the time of the activity. Compensation will be awarded at the conclusion of their participation and will be prorated if the participant withdraws from participation early. The three oral history interviewees will receive $75 if they start the interview process and withdraw before completion. The participants in the educational activity will receive full mileage reimbursement and, for example, $50 for a half day of participation.

PART K: CONFIDENTIALITY

27. Describe below the methods that will be used to ensure the confidentiality of data obtained. For example,. who has access to the data, where the data will be stored, security measures for web-based surveys and computer storage, how long data (specimens) will be retained, etc.)

When tapes are transcribed, pseudonyms will be used if the interviewee has requested identifiers be removed. The key to pseudonyms will be kept in a file separate from the tapes, transcriptions, and written narratives based on the interviews. The tapes will be kept in a waterproof container in the researcher's home until the date they are to be destroyed. Taped interviews for which permission to archive has been given, will be transcribed with identifiers intact and tapes duplicated for archival purposes at ISU library and for the archive collection at Univeristy of Iowa.

PART L: REGISTRY PROJECTS

To be considered a registry: (1) the individuals must have a common condition or demonstrate common responses to questions; (2) the individuals in the registry might be contacted in the future; and (3) the names/data of the individuals in the registry might be used by investigators other than the one maintaining the registry.

☐ Yes ☒ No Does this project establish a registry?

If "yes," please provide the registry name below.

Checklist for Attachments

The following are attached (please check ones that are applicable):

☒ A copy of the informed consent document **OR** ☒ Letter of introduction to subjects containing the elements of consent
☐ A copy of the assent form if minors will be enrolled
☐ Letter of approval from cooperating organizations or institutions allowing you to conduct research at their facility
☒ Data-gathering instruments (including surveys)
☐ Recruitment fliers, phone scripts, or any other documents or materials the subjects will see

Two sets of materials should be submitted for each project – the original signed copy of the application form and one copy and two sets of accompanying materials. **Federal regulations require that one copy of the grant application or proposal be submitted for comparison with the application for approval.**

FOR IRB USE ONLY:

Initial action by the Institutional Review Board (IRB):

☐ Project approved. Date: _____
☐ Pending further review. Date: _____
☐ Project not approved. Date: _____

Follow-up action by the IRB:

[redacted] _____ 13 August 2006
IRB Approval Signature Date

SECTION III: ENVIRONMENTAL HEALTH AND SAFETY INFORMATION

☐ Yes ☒ No Does this project involve human cell or tissue cultures (primary OR immortalized), or human blood components, body fluids or tissues? If the answer is "no", please proceed to SECTION III: APPLICATION FOR IRB APPROVAL. If the answer is "yes," please proceed to Part A: Human Cell Lines.

PART A: HUMAN CELL LINES

☐ Yes ☒ No Does this project involve human cell or tissue cultures (primary OR immortalized cell lines/strains) that have been documented to be free of bloodborne pathogens? If the answer is "yes," please attach copies of the documentation. If the answer is "no," please answer question 1 below.

1) Please list the specific cell lines/strains to be used, their source and description of use.

CELL LINE	SOURCE	DESCRIPTION OF USE

Add New Row

2) Please refer to the ISU "Bloodborne Pathogens Manual," which contains the requirements of the OSHA Bloodborne Pathogens Standard. Please list the specific precautions to be followed for this project below (e.g., retractable needles used for blood draws):

Anyone working with human cell lines/strains that have not been documented to be free of bloodborne pathogens is required to have Bloodborne Pathogen Training annually. Current Bloodborne Pathogen Training dates must be listed in Section I for all Key Personnel. Please contact Environmental Health and Safety (294-5359) if you need to sign up for training and/or to get a copy of the Bloodborne Pathogens Manual (http://www.ehs.iastate.edu/bs/bbp.htm).

PART B: HUMAN BLOOD COMPONENTS, BODY FLUIDS OR TISSUES

☐ Yes ☒ No Does this project involve human blood components, body fluids or tissues? If "yes", please answer all of the questions in the "Human Blood Components, Body Fluids or Tissues" section.

1) Please list the specific human substances used, their source, amount and description of use.

SUBSTANCE	SOURCE	AMOUNT	DESCRIPTION OF USE
E.g., Blood	*Normal healthy volunteers*	*2 ml*	*Approximate quantity, assays to be done.*

Add New Row

2) Please refer to the ISU "Bloodborne Pathogens Manual," which contains the requirements of the OSHA Bloodborne Pathogens Standard. Specific sections to be followed for this project are:

Anyone working with human blood components, body fluids or tissues is required to have Bloodborne Pathogen Training annually. Current Bloodborne Pathogen Training dates must be listed in Section I for all Key Personnel. Please contact Environmental Health and Safety (294-5359) if you need to sign up for training and/or to get a copy of the Bloodborne Pathogens Manual (http://www.ehs.iastate.edu/bs/bbp.htm).

FOR ENVIRONMENTAL HEALTH AND SAFETY USE ONLY

Signature of Biological Safety Officer

Date

7/27/2006

ISU IRB # 1 06-366
EXEMPT DATE: 13 August 2006
Initial By: jlf

Informed Consent Document

Title of Study: New Partners for Sustainable Agriculture
Investigator: Jean Eells

This is a research study. Please take your time in deciding if you would like to participate. Please feel free to ask questions at any time.

The purpose of this study is to examine women's experiences of owning farmland.

If you agree to participate in this study, we will talk for about two hours today. You will be asked to tell about how you got the farmland you own, how you have made decisions about how it will be farmed and by whom. You need only answer what you are comfortable telling me. To help me remember your story accurately, I will tape record our conversation. Later I will transcribe the tape to paper so that I may review it in more detail. I will also take notes as you talk in case there is a failure of the tape recorder.

If you get tired of talking or feel uncomfortable in any way we will stop the interview. You do not have to tell me information you feel is confidential or too personal. You may ask to have something you have told me be removed from the information I consider.

There are no foreseeable risks at this time from participating in this study.

If you decide to participate I hope that your story and that of others I will be interviewing at this time will help policy makers adapt farm and conservation programs to meet the needs of women like you. We are also capturing a story today that may be valuable to your family members and we can work together to share a record with them if you wish.

Your interview is completely voluntary and you may refuse to participate or stop it at any time. If you choose to stop the interview early, or reconsider your participation after the interview is over it will not result in any penalty.

The purpose of collecting your story is so I may share your experiences with others. If you wish, I will give you a new name when I tell your story so that you will remain anonymous. I may include your story in more than one article after the conclusion of this study, so please consider this carefully. If you give permission to make your story public, the tape we make today will be duplicated and stored in a collection of oral histories at Iowa State University and University of Iowa. Some day another researcher may listen to the tape of your story we record today.

You are encouraged to ask questions at any time during this study. For further information about this project you may contact Dr. Nancy Grudens-Schuck at Iowa State University at 515-294-0894.

7/27/2006

ISU IRB # 1 06-366
EXEMPT DATE: 13 August 2006
Initial By: jle

If you have any questions about the rights of research subjects please contact Ginny Austin Eason, IRB Administrator, (515) 294-4566 or Diane Ament, Director, Office of Research Assurances (515) 294-3115.

Your signature indicates that you voluntarily agree to participate in this study, that the study has been explained to you, that you have been given the time to read the document and that your questions have been satisfactorily answered. You will receive a copy of the signed and dated written informed consent prior to your participation in the study.

Please check one statement below:

____ I do give permission for my real name to be known and for the tape to be archived at the libraries for future use.

____ No, I do NOT give permission for my real name to be known – I request all identifiers be removed from my story. The tape may not be duplicated for the libraries.

Please print your name here _____

Please sign your name here _____

Date_____

I certify that the participant has been given adequate time to read and learn about the study and all of their questions have been answered. It is my opinion that the participant understands the purpose, risks, benefits and the procedures that will be followed in this study and has voluntarily agreed to participate.

_____ _____

Jean Eells
515-832-1771

Eells.ver. 1

ISU IRB # 1 06-366
EXEMPT DATE: 13 August 2006
Initial By: jlc

Survey Questions to be asked of Oral History Respondents for
Oral Histories of Women Farmland Owners
Project: New Partners for Sustainable Agriculture
Jean Eells, AGEDS
August 2006-August 2007

1. Please tell what you would like me to know about the land you own – how you came to own it, how long you have owned it, how many acres you own, what crops are raised and if there is livestock on it now.

2. If you don't actively farm the land yourself, who helps you manage the farmland? Please describe the relationship between yourself and this person if the tenant is a family member or neighbor. Please tell me something about how long this relationship has existed and how this person became the one to help you manage the farmland.

3. Please tell how involved you are with the decision making about the farmland as to how it gets farmed. Please describe what federal programs, if any, that you know are used to help with the farming? Are you familiar with soil conservation programs that have ever been used on the farmland and are there any you could tell me about?

4. What would you like to see happen to your farmland in the future as to who would farm it, and how you would like to see it passed along (in what condition)? What would be the ideal conditions you can imagine for your land to be passed to future generations in terms of crops or livestock or soil and water conservation?

5. If you are comfortable saying, have you experienced any difficulty with other people in managing your land? Are you aware of stories of other women who have experienced difficulties with others in managing their land?

6. Is there anything else you would like to say about your farmland that I have not asked?

Thank you for your time today.

ISU IRB # 1	06-366
EXEMPT DATE:	13 August 2006
Initial By:	jlc

Recruitment letter/phone conversation

Dear XXXX,

You are invited to participate in a project to develop an educational activity to help agencies and their staff to better serve women farmland owners. This project is part of my graduate research at Iowa State University and is funded, in part, by North Central Region for Sustainable Agriculture Research and Education. Another part of my project involves creating oral history tapes that will be kept for future researchers to use in the libraries of Iowa State University and University of Iowa. Your participation is voluntary, meaning you can stop or withdraw at any time without penalty. If you wish to decline this offer, you may do so by phone 515-832-4687 or in writing to me at the address below.

I will call to set up a time for us to visit more about the project at your convenience. I need to interview particular women farmland owners about the experience of owning farmland. I will not be asking personal questions about your finances but about the history of your farmland as you know it, how you get the land farmed and what it is like to make decisions about the farmland from your point of view. You are the expert on your experience.

The total amount of the information I need to gather may take as many as two interviews each one no longer than two hours. You and I will agree on a time and place that is best for you at your convenience for the first interview. If a second interview date and time are needed we will set that up later, together.

If you wish, your name will be kept confidential when I am writing about the project. I will also bring a document for you to sign after we have discussed it that will describe your right to withdraw without penalty and that you understand what you are asked to do and agree to participate in this research. You will keep a signed copy that states I will endeavor to represent your experiences accurately and if you choose, I will write in such a way to keep your name confidential in the reports I write.

Sincerely,

Jean Eells
2550 Stagecoach Road
Webster City, IA 50595-7375

Appendix B
Illinois News Release

Illinois Department of Agriculture

FOR IMMEDIATE RELEASE
August 16, 2005

GOVERNOR AND U.S. DEPARTMENT OF AGRICULTURE EXPAND ILLINOIS CONSERVATION RESERVE ENHANCEMENT PROGRAM

SPRINGFIELD, Ill. – Governor Rod R. Blagojevich and the U.S. Department of Agriculture announced today an additional 15,000 acres has been funded for enrollment in the Conservation Reserve Enhancement Program (CREP). The expansion will enhance efforts to improve water quality and increase wildlife habitat along the Illinois River basin.

"Expanding the CREP program means that more Illinois farmers can put less productive farm ground aside in order to better manage nutrients in the soil, control erosion and keep waterways clean. These funds will give farmers the chance to help the environment and make money," Gov. Blagojevich said.

Gov. Blagojevich's Fiscal Year 2006 budget includes $10 million for the CREP program. As a result of the Governor's commitment, Illinois is now able to leverage a significant federal match for the program. Specifically, the U.S. Department of Agriculture will provide 80 percent – or approximately $50 million – of the funding for the CREP expansion and the state of Illinois will contribute the remaining 20 percent – or approximately $10 million.

"I appreciate the state of Illinois' willingness to fund its portion and support this popular and highly successful program," Illinois Farm Service Agency Director Bill Graff said. "Farm Service Agency offices look forward to signing up farmers and landowners in November."

"Re-opening CREP helps fulfill the Illinois River Coordinating Council's management plan for the Illinois River," Lt. Governor Pat Quinn, chairman of the Illinois River Coordinating Council, added. "The program will restore 15,000 acres that will improve water quality, wildlife habitat and recreation opportunities, and reduce the amount of sediment entering the Illinois River."

The CREP program expansion was announced during Agriculture Day festivities at the Illinois State Fair in Springfield.

"Our farmers' active participation in CREP is a reflection of their strong conservation ethic," Agriculture Director Chuck Hartke said. "They understand the value of protecting irreplaceable soil and water resources and I expect they will take full advantage of this new enrollment opportunity."

"CREP is key to meeting the goals of stewardship of Illinois natural resources," Illinois Department of Natural Resources Director Joel Brunsvold said. "The land included in this program provides habitat critical to survival for threatened and endangered wildlife."

Since the Illinois CREP program's inception in March of 1998, over 109,000 acres and 5,416 individual contracts have voluntarily been put into this program. Illinois currently ranks second in the country in the total number of acres in the CREP program.

Implementation of CREP is a partnership of the USDA - Farm Service Agency, USDA - Natural Resources Conservation Service (NRCS), the Illinois Department of Agriculture, Illinois Environmental Protection Agency, Illinois Department of Natural Resources and County Soil and Water Conservation Districts.

CREP agreements are part of the Conservation Reserve Program (CRP). Under these agreements, federal and state resources are used to safeguard environmentally-sensitive land. Farmers can enroll acreage in CRP agreements for a period of ten to fifteen years. They then remove the land from agricultural production and plant native grasses, trees and other vegetation to improve water quality, soil and wildlife habitat.

More information about CREP can be found on the USDA website at www.fsa.usda.gov/pas/publications/facts/html/crep03.htm.

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Back to referring page

Illinois Department of Agriculture

Questions or comments.

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State of Illinois Department of Agriculture
P.O. Box 19281, State Fairgrounds
Springfield, IL 62794-9281
(217) 782-2172, (800) 273-4763, (toll free in Illinois)
Last updated: 06/19/2008 10:48:36

Appendix C
Omar's Letter to Lottie

[redacted]

[redacted]

June 16, 2008

Dear Mrs. [redacted]

This letter is a follow up to the site visit I conducted [redacted] Every property I visit has unique characteristics as does yours. Thank you for allowing me to bring Jean Eells to shadow myself on a field visit.

I would agree that converting the fields [redacted] to mixed native grasses and forbs would increase the wildlife habitat value of your property. Before you begin this project I would encourage you consider removing as many of the Scotch Pine trees within these fields. The more open, free of trees these field are will simplify your future management and maintenance (mowing, haying and burning).

This spring the areas to be seeded (highlighted in the attached map) will need to be sprayed with a Glyphosate base herbicide such as Round-up following labeled rates to kill current vegetation. Costs range between $15-$30 per acre. Fall herbicide application is preferred however two applications in the Spring of 2008 will also assure success.

This area can then be planted with a Native grass no-till drill. There are contracts available to complete this. Cost vary from $26-$45/ ac.

This area will need to be mowed 3-6 times the first growing season depending upon rainfall. It should be mowed to a height of 6-10 inches to allow light to reach the ground and your new seeding. The second growing season it will also need to be mowed on the same intervals as above, raising the mowing height to 10-12 inches.

Another option would be to use a pre-emergent herbicide at planting which would reduce the diversity of forb/flower species we could plant in a mix however it would reduce mowing, some sites where we have used this herbicide mowing has not been required until the second year.

I can create a seeding mix based on the amount want to spend on seed as you can see the other costs are minimal. Seed mixes can range from $100-$1000+ an acre I feel you can get a mix for $400-$500 that will meet your goals.

[redacted]

The [redacted] will cost share 50% of the seed cost with seed cost not to exceed $500/acre.

The area in the floodplain of the [redacted] River has variety of changing variables that have to be factored in when planning for this area. The most obvious is frequent flooding, which makes planting this area very difficult, because most desirable perennial plants can not survive a disturbance during there first growing season.

In the past we have tried a low cost native grass and forb seeding expecting that we may loss this to the flooding, however once established it can handle some flooding.

Another option would be to reforest the areas outside the river view shed from your house. [redacted] would be able to describe the details if you are interested in this.

I will also consult with [redacted] Forester about the areas that are possibly prairie remnants/ savannas and woodlands.

Let know what questions that you have. I would also like to know if you would like to use the pre-emergent herbicide or not both ways will be successful and also how much you are interesting in spending on the seed.

Thank you

[redacted]