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Private forests in a fragmented landscape:  
A case study of community-based collaboration in north-central Indiana  
*2003 Community Forestry Research Pre-Dissertation Fellowship Final Report*

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Research Question & Goals

This research aims to understand the potential that collaborative natural resource management may hold for private landowners. Given the increase in collaborative and community-based approaches to natural resources management and governance, especially in landscapes with large public ownerships, it is important to examine what views private landowners hold of these approaches. Understanding private landowners' views of the resource, the process, and the context in which such processes may occur (community and place) may better enable natural resource professionals to help create and engage in these collaborative processes with landowners and stakeholders. In order to address this research issue, there are several tiers of research questions and objectives. There is the overall research question, which drives research design and methodology selection. From this main question, I've developed several associated questions which draw out the critical components of this question. I've developed several hypotheses that guided the development of the interview guide used during the first phase of this research. These hypotheses will also structure the focus group interviews that we will have to assess the participatory research process.

The next phase of this research shifts towards the more participatory elements of my research program, during which I will be hosting open forums through which landowners, stakeholders, and university personnel may uncover ways to work collaboratively to address natural resources issues. I've outlined some questions that I see as potentially framing our participatory research and work together, though I aim to create and develop these questions with the community participants based on what they are interested in, and what questions they wish to raise and address. Objectives encompass both the overall research questions and participatory research questions.

*Overall Question:*

1) How can we form, sustain, and evaluate effective collaborative natural resource planning and management processes on private lands?

*Associated Questions:*

2) How do the antecedents to collaboration influence the process and outputs/outcomes of collaboration; and, how does the process of collaboration influence the outputs/outcomes of the collaborative effort?

3) What promise and potential does collaborative natural resource management and conservation hold for private landowners in two watersheds of north-central Indiana?

*Participatory Research Questions:*

4) Do we see ways to collaborate across private lands?

5) Over what natural resources/ environmental issues, challenges, ideas, and/or activities might we collaborate?

6) What do we want the process to look like?

7) What are some possible or desired outputs and outcomes?

### *Objectives:*

- 1) Document and analyze the formation and progression of collaboration, as facilitated during a participatory research project among interested landowners and stakeholders.
- 2) Examine relationships between antecedents, process, and outputs/outcomes of collaboration.
- 3) Provide an open, inclusive, safe, creative, and engaging forum for interested landowners to work with each other and university personnel.

### *Hypotheses*

1. Social capital is an antecedent to, a component in the process of, and an outcome of collaboration.
2. Sense of place is an antecedent to, a component in the process of, and an outcome of the collaboration.
3. Community is an antecedent to, a component in the process of, and an outcome of the collaboration.
4. The principles and guidelines of collective action will emerge in the process of collaborative natural resource management on private lands.

### Field Experience & Data Collection Experience

Case studies are ongoing in two north-central Indiana watersheds, the Middle-Wabash/Little Vermillion and the Wildcat. Both are dominated by row-crop agriculture and highly fragmented forest land, the majority of which is riparian. Within each watershed we selected a study area based on forest cover, creek presence, private individual ownership, and rural location. Key informant interviews with local natural resources agencies personnel played an important role in site selection, interview questions, and stakeholder identification. During these key informant interviews, agency personnel were asked to describe the county, the major local natural resource challenges, the climate of the community in terms of natural resources, and the names of landowners enrolled in government programs. These enrolled landowners comprised the stakeholders that we interviewed for this project.

We interviewed a wide range of landowners: those in the study sites, those identified as local stakeholders by key informant interviews, and those recommended by interview participants. The criterion for study site participants was ownership of at least one acre of land. The smallest interviewed ownership was 1.6 acres; the largest was a multiple parcel ownership of over 4,700 acres (non-contiguous) spanning several counties. Some landowners were active in natural resources management, enrolling in government programs and participating throughout their communities on related issues, whereas others had never sought professional advice or consultation for natural resources issues, nor were they involved in community organizations. A diverse range of ownership tenure was also reflected in our sample: one landowner purchased his acreage 1.5 years ago (at time of interview) while another's land has been in his family since the 1820's. Some were residents on their property; some owned multiple parcels; and some were absentee landowners residing in other states.

These interviews with 113 participants (82 interviews were taped & transcribed, 2 interviews were not taped) were semi-structured. Questioning followed a pre-determined set of questions, while allowing flexibility in the flow, to provide for the exploration of answers and follow-up probes to shorter answers. The questions group into the following major themes: (1) land use, (2) opinions on land ownership, (3) sense of place, (4) community and social capital, (5) natural resources, (6) working collectively, (7) information sources, and (8) views of the future. Average interview duration was 75 minutes, ranging from 25 minutes to 3 ½ hours. In

County A, response rates were as follows for the following groups: study site landowners—36.2% (n=21), stakeholders—84.2% (n=16), snowball sample—71.4% (n=5); overall response rate was 50.0%. In County B, study site landowners—34.7% (n=25), stakeholders—100.0% (n=11), snowball sample—50.0% (n=1); overall response rate was 43.5%. (N represents the number of interviews.) Additionally there were 5 interviews with participants that lived outside of the study counties.

Though I was able to accomplish several goals that I had for this past year of research, I was not able to begin the participatory research phase of this project. Originally, I anticipated holding the first community forums, in which interested landowners could chose to work collaboratively with each other and university personnel, in late fall. Late fall was the selected time as this would allow for completion of interviews and preliminary analysis of interview data, as well as a chance to develop ideas for facilitating these forums. Due to a number of circumstances, I was unable to get these forums off the ground in the fall. However, I've had correspondence with all interviewed landowners and have indicated that I'm still here and am hoping to host the first of these forums in the early part of 2004. Several landowners have kept in contact and have indicated that they're looking forward to coming together with other landowners and people from the university to begin to think about ways to work collaboratively.

### Preliminary Findings and Analysis

Through interviews with over one hundred landowners in 2002 and 2003, I have a deeper and richer understanding of how landowners relate to their lands, the nearby land, community, and places, and the natural resource issues and solutions that they deem important. The interviews generated this rich source of qualitative data, which serves to better understand the constellation of antecedents hypothesized to influence the collaborative process. Below I describe some of the preliminary findings for each of these predicted antecedents, though the work of relating these findings to the hypotheses will really began after the community forums are underway. In addition to the research component of these case studies, the interviews also began to establish rapport and connections with landowners in the communities where I'll host the community forums. It is through these community forums that participatory research with community members and university personnel may occur. Through the CFRF pre-dissertation grant and funding through my assistantship at Purdue, I was able to spend the better part of two summers, and several months of fall and winter 2002, interviewing landowners and getting to know the communities where I'll host the community forums and engage in participatory research. Prior knowledge of the community and the issues that members find important may prove beneficial to uncovering common areas of interest that could serve as focal points for collaborative efforts in the community forums.

### Land Ownership

Across nearly all of these interviews, ownership of land was of tremendous importance, whether it was due to monetary value, continuity across generations, the lifestyle it provided, the responsibility to land and nature, the pride of ownership, or the actual physical characteristics of the land. Many landowners articulated more than one reason for ownership and thus themes that I put forth below are not mutually exclusive. One of the prevalent themes was that of connection to other familial generations, past and/or future. Heritage and family tradition served to bind many individuals to the land, such that they continued to bear the cost of owning that land. For others, the possibility of passing it on to future generations figured largely into their rationale for continued ownership. Several participants spanned both of these categories—having inherited the land, and now being of an age where they were considering future heirs.

They were concerned for the future stewardship of their land, noting that their kin were removed from the land in such a way that it may drastically reduce any future commitment to keep the land in the family.

While some people use land as a tool or means to create the lifestyle they desire, we also see the reverse—where the land creates the lifestyle, or self-identity. In these interviews, people described the land as a source of hobbies and opportunities that shaped their identity. In one stakeholder interview the participant said to us, “You become so attached to the land, because you draw your identity from it.” Another participant, a farmer with a long history of farming in his family, stated, “I think, owning land, you become attached to it....” Another theme people talked about during questions on ownership was responsibility to the land and nature. Some felt a duty to be stewards of the land. The owner of several hundred acres said, “Our purpose is more for mother nature. And we’re trying our best to keep it that way and preserve it that way for future generations.” In a few instances, landowners expressed discomfort with the term “ownership,” noting that their interpretation of the term ownership was less about the benefits, financial and otherwise, that they derive from owning the land, and more about the duty that they felt to give something back. One stakeholder explains, “I have a little problem when you refer to ownership—you know we don’t own this ground, none of it. Whether we like it or not we’re more or less care takers of it for a period of time.”

### Community & Social Capital

Landowners offered diverse and divergent views of their communities, yet frequently indicated their satisfaction with the community and rural character, emphasizing that this character often meant sharing and helping neighbors when needed—a sort of rural reciprocity. People commonly described their communities as made of “good people” and as a good place to live. Loss of this rural character was also discussed in terms of natural resources issues and predicted future scenarios for the community. For some landowners, the loss of this rural place identity was enough to force them to consider moving elsewhere. There was variation in how people defined community. Most often, people described community in terms of a community of place, i.e. the particular township or a larger geographic area such as county. Some landowners also described communities of interest in the area, and how those communities have come into being. Throughout the study areas, there seem to have been several communities of interest that have formed in response to a crisis or perceived impending crisis, i.e. water quality issues. These communities of interest seem to serve as informal networks, sometimes providing information on natural resources issues.

### Sense of Place

When people talked about places that are important to them, there were several tiers to this sense of place—including their own land(s), the nearby lands, the relationship between these two land types, and the experiences that people have had in these spaces. Frequently, people discussed scenic waterways and forested areas as places that hold special meaning and importance to them and their family. Across many interviews, there seemed to be shared conceptions of what makes a place important.

### Natural Resource Issues & Solutions

Key concerns and issues for landowners were water quality, wildlife and wildlife habitat, and residential development. When discussing development, people often spoke of the resulting loss of farmland and woodland and the perceived change in community structure. I was surprised to hear how many people were concerned that their communities were becoming

“bedroom communities.” Such findings of commonalities in perceptions of natural resources issues may serve as hinge points for collaborative efforts.

### Working Collaboratively

Initial analysis indicates that landowners find value in working collaboratively to address natural resources issues on private lands, and consider benefits to be an improved natural resource, and achievement of more influence, voice, and power. Most commonly, landowners cited social attributes and institutional structures, such as leadership, trust, education, and clearly defined goals, as the most essential antecedents to successful collaborative efforts. Opinions on the role of property rights seemed to fall along a wide-ranging continuum, ranging from a “moot issue” to such being a substantial enough concern so as to hamper collaborative efforts. However, the majority of landowners explained that adequate information on how collaborative projects would/would not potentially affect property rights would alleviate concerns over property right infringement.

### Overall

These findings serve to illuminate the many relationships that landowners have with these communities—both in terms of people and resources, and serve to inform collaborative efforts by suggesting potential convening points, as well as suggestions for facilitating an effective collaborative process.

### Benefit to the Community

At this point in the research, I feel as though I have benefited tremendously from my interactions with community members. Many people have enthusiastically shared their stories, their kitchen tables, and their time with me over the past 2 years. I am incredibly grateful for their time, their willingness to share, and their trust of me and the interview process, especially because to many, I was a complete stranger. I hesitate to make bold statements as to what the benefits have been to the community, as most of my contact with community members has been through interviews. I hope that through what I have learned and experienced in the interviews that comprised the work completed both before and during my pre-dissertation fellowship, I will be able to create open, engaging, and beneficial forums in which community members and university personnel can work collaboratively on natural resources issues of importance to the community. It is during this latter phase of the research in which I will endeavor to engage in participatory research with the communities, which hopefully will be beneficial to community members.

However, perhaps it is through these interviews that there has been some benefit to the community. I say this because of the many comments that I received during the interviews. Many interviews concluded with being invited back, going on a tour of the land, or with the grateful comments from landowners of, “thank you for listening,” “this is the first time anyone’s ever asked my opinion on this—thank you,” and “I appreciated you asking me all those questions, I’ve been dying to tell somebody.” Occasionally, landowners shared various documents and objects related to their land, including land deeds, maps, government program contracts, arrowheads, artifact collections, and conservation awards. Although we never requested a tour of the land, interviews often concluded with a brief tour of the land, or in one case, the community that these participants called home. I sat in many a pick-up truck, and hung onto the back of many a golf-cart during these tours. Many people seemed pleased to showcase their land and the hard work they’ve put into maintaining, improving, or using their land. Further, many landowners expressed curiosity at the findings of the research project,

exhibited by comments such as “And so I’ve watched it (the land) over my lifetime disappear, and I’m anxious to hear what these new people say,” and “please keep in touch.” One landowner who has been involved with this project since its inception has commented that this project benefits the community by helping to increase awareness of natural resources and by engaging landowners in the entire process, instead of only presenting the end-products of research.

### Lessons Learned

I’ve learned a tremendous amount throughout this process and continue to learn as I analyze the interview data and plan for the next phase. Reading through the interview transcriptions never ceases to remind me how complex some of the concepts are that we are trying to understand and measure. However, even with all the complexities and variation across interviews, there are many elements of similarity that emerge from the data. The importance of wildlife to people, the recognition of various levels of natural resources issues and concerns, the importance of the physical landscape in creating a sense of place, the tremendous significance and importance of land ownership to individual owners, and the perceived changes to community were just some of the themes that weave throughout many of the interviews. I also have learned important lessons about language and being cognizant of developing and articulating clear and relevant questions. For example, natural resources professionals talk about ecosystems and ecosystem management frequently, but only a few landowners used that term. However, they often did describe the interrelatedness of various components of the landscape and often described how their land was situated in a larger natural area. I’ve also noticed profession-specific language coming from the landowners. Many farmers talking about “working the ground” and spoke about soil as an issue or concern, but these two themes were not nearly as prevalent in interviews with non-farmers.

As for recommendations to CFRF, at this point I can only offer gratitude for the opportunities that this fellowship has provided me. The fellowship has provided financial support and a network of colleagues and mentors whose work and commitment I find inspiring. I look forward to future opportunities to collaborate with some of the graduate students that I met at the conference and have kept in contact with since then. I would strongly recommend continuing to hold a several day workshop for past and present fellows, community partners, and committee members—this was extremely beneficial for me and gave me a better vision of how I might incorporate participatory action research into my research program.