

FOREST CERTIFICATION FOR NORTHERN MINNESOTA'S FAMILY FOREST LANDOWNERS: KNOWLEDGE, INTEREST, AND PREFERENCES FOR EDUCATION

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Abstract.—Forest certification is a voluntary opportunity for landowners to undergo an assessment and verification of the quality of their forest activities. It has been well received by large industrial landowners; however, family forest landowners have not yet embraced the concept. This paper presents the first component of a study investigating whether greater knowledge increases interest in family forestland certification, and exploring family forest landowners' preferences for education. Eight focus groups were conducted in four counties across northern Minnesota. Results indicated that segmenting the family forest landowner population according to value orientations can provide an opportunity for tailored educational programs. However, regardless of their value orientations, individuals desired educational material outlining combined or balanced information. Focus group data will inform the development of research instruments for a mail-out survey assessing interest in forest certification, and inform local agencies of strategies for improving current forest-related educational outreach programs.

1.0 INTRODUCTION

The creation of forest certification marks an important turning point in global attitudes toward forest health. Forest certification, initiated by the Forest Stewardship Council in 1993, marks the realization that future forest products are limited without sustainable management. Globally, more than 247 million acres have become certified, and there are currently more than 10,000 certified wood product lines on the market (Molnar 2003). Forest certification involves inspection and monitoring of forestlands to ensure they are being

managed according to set standards. Several certifying programs have been established in the U.S. and worldwide, including those operated by the American Tree Farm System, Green Tag Forestry, Sustainable Forest Initiative, and Forest Stewardship Council. In the U.S., forest certification has been well received by large, industrial forest landowners—65 million acres of forested land have been certified, comprising 13 percent of the total timberland. Forest certification, however, has not yet been popular among the non-industrial private forest landowners. This group of landowners, also referred to as family forest landowners, represents people owning between 10 and 1,000 acres of land. In Minnesota, nearly all of the major corporate owners have certified their land. However, the family forest landowner group, which accounts for 39 percent of the state's land (6.5 million acres), is mostly un-certified (Kilgore et al. 2005). The purpose of our study, therefore, was to investigate family forest landowners' knowledge and interest in forest certification, as well as their preferences for forest certification educational outreach programs.

2.0 THE MINNESOTA CONTEXT

A study completed by Kilgore et al. (2005) investigated Minnesota family forest landowners' knowledge, attitudes, and preferences for forest certification. Findings from this study shed light on reasons this group of landowners has not committed to forest certification. Results indicated that familiarity with certification was low: 53 percent of the participants had never heard of forest certification; 27 percent described their familiarity as minimal; and only three percent of the respondents displayed an extensive understanding of the forest certification process. Their survey included questions inquiring about likeliness to certify, and findings indicated only four percent of family forest landowners were indeed likely to commit to certification. Seventy-seven percent of the study respondents stated that, while they had formulated an opinion about certification, they remained persuadable, but a full 20 percent stated they would never want to certify. Study participants were also asked to describe drawbacks they considered

to be associated with forest certification, and results pointed to four prominent issues: 1) the perceived loss of control over land use and management decisions, 2) the cost of becoming certified and the paperwork involved with the certification process, 3) the need to follow a forest management plan, and 4) the required on-site inspections. Their study closed with a call for five immediate actions, one of which was to identify effective methods for informing Minnesota's family forest landowners about the forest certification process.

Responding to Kilgore et al.'s (2005) call for immediate action, this current project proceeded with four main objectives and reports the first stage of a larger research project. The objectives were:

1. To identify what forest landowners want to know about certification,
2. To explore how the landowner population could be segmented to tailor forest education about certification,
3. To examine how principles of interpretation can be implemented to make certification more appealing, and
4. To develop an understanding of the outreach formats that would encourage Minnesota's family forest landowners to learn more about certification.

The larger study investigates two main research questions: 1) Does greater knowledge increase interest in certifying family forestland? and 2) What are family forest landowners' preferences for education? Figure 1 describes the study by Kilgore et al. (2005), leading into the current study, whereby the circled portion represents the section reported in this paper. Findings from the present study will be incorporated into educational outreach programs, and will serve to develop the research tools for the future mail-out survey examining attitude changes as a result of educational treatments.

3.0 LITERATURE REVIEW

The forest certification literature includes discussion regarding value orientations that strongly affect the

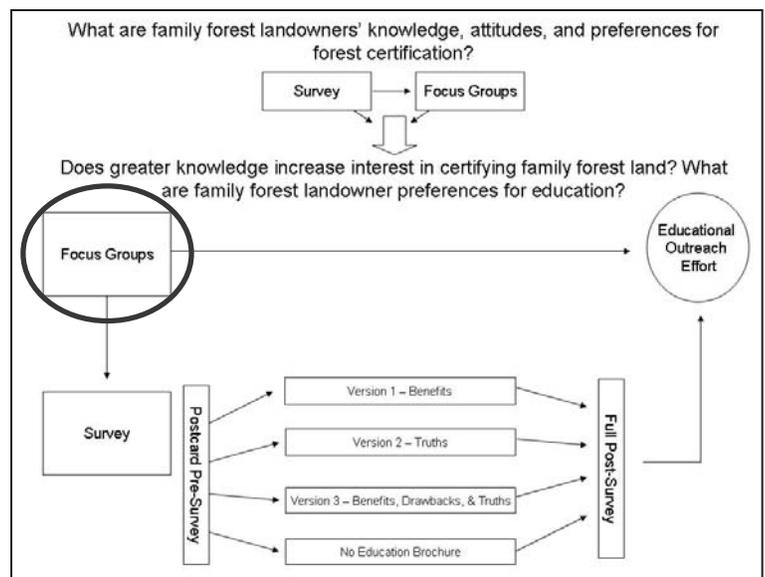


Figure 1.—Study outline.

likelihood of family forest landowner certification. Maser and Smith (2001) highlighted the difference between products and systems value orientations, which they suggest are important for individuals considering forest certification. Product-oriented individuals tend to focus on individual pieces of a system or the perceived products in isolation of the system itself. Systems-oriented individuals take more of a process approach to thinking. Product-oriented individuals tend to be more resistant to change, particularly in the context of forest certification, where no clear immediate or monetary benefits are imminent.

Another relevant scale of value orientations is the protection–use scale implemented by Manfredo et al. (2003) in a study examining the shift in public values toward wildlife. They hypothesized that factors such as affluence, education, urbanization, and declining residential stability influenced a shift away from traditional wildlife values that emphasized use and management of wildlife for human benefit. They highlighted the importance of considering value orientations, given that values provide the foundation for an individual's attitudes and norms, which in turn guide behavior. McFarlane and Boxall (1999) devised a similar value scale to examine forest-related protection-use values.

A plethora of studies exists examining the use of interpretation for changing human attitudes. For

example, Nielson and Buchanan (1986) compared the effectiveness of two interpretive programs for changing knowledge and attitudes regarding fire ecology and management. They found a significant relationship between attitudes and knowledge, and concluded that negative attitudes toward fire management were often due to a lack of knowledge. A study by Loomis et al. (2001) similarly found that information provision made participants more knowledgeable about fire management, and also more tolerant of prescribed fire.

The literature regarding interpretation and attitudes also provides discussion of other factors that may affect attitudes. For example, McComas and Scherer (1999) found that the timing of information provision is important. They suggested information may have little influence on opinions if it comes too late in a decision process. This consideration supports the timing of this study, considering the majority of Minnesota's family forest landowners are currently unfamiliar with forest certification (Kilgore et al. 2005).

4.0 STUDY METHODS

The study objectives required the investigation of “how” and “why” type questions, which can be best explored through qualitative inquiry. Focus groups were conducted because study questions sought to examine group beliefs and behaviors. Our goal was to understand different preferences; therefore, the focus group procedures best enabled groups to describe their opinions (Schmoldt & Peterson 2000). Eight focus groups were conducted in five locations with individuals owning forest land in one of four counties of northern Minnesota. Focus groups were held in Aitkin, Cass, Itasca, and St. Louis counties, and two meetings were also held in the Twin Cities (Minneapolis - St. Paul) to capture a sample of attitudes from the large population of absentee northern Minnesota landowners who reside in the metropolitan part of the state.

Minnesota state tax records were used to select a random sample of family forest landowners in each of the four selected counties as well as in the Twin Cities. Landowners were contacted by phone, presented with a brief explanation of the study, offered a free meal, and

Table 1.—Rate of consent for participation

	Household contacted	Agreed to participate
Before honorarium	119	3%
After honorarium	416	16%

asked to participate. Telephone contacts continued until a minimum of 12 participants had agreed to participate in each of the eight focus group meetings. Overall, 535 households were contacted. During the telephone-contact process, the decision was made to offer a \$40 honorarium, which raised consent rate from 3 percent to 16 percent (see Table 1). Landowners who gave consent received an information package in the mail, followed by a reminder call the day prior to each focus group meeting.

One hundred ten landowners representing 78 households agreed to participate, and 57 attended the focus group meetings. Acres owned ranged from 11 to 211, with a mean of 52 acres. Fifty-seven percent of the study participants stated they lived on their land. Table 2 demonstrates out of that 57 percent, about half have lived on their land for 20 years or longer. Thirty-seven percent of study participants were retired, and age ranged from 15 to 83, with a mean of 56.

Two interpretive brochures were developed as prototypes of the education materials to be used in outreach efforts. The brochure content was selected based on findings from the recent study by Kilgore et al. (2005). The two brochures were identical except for the front page. They both included an introduction to forest certification, a list of the required standards of certification, the steps involved, the cost of certification, and contact information for further details. The first brochure differed by providing a list of benefits associated with certification, while the second brochure listed truths

Table 2.—Years lived on land

Years on land	% Participants
1-10	17.9%
11-20	32.1%
21-30	21.4%
31-50	10.7%
50+	17.9%

to clarify any misperceptions individuals may have regarding the certification process. Possible benefits associated with certification were wide-ranging, including improved wildlife habitat, increased timber growth and health, increased water quality protection, balanced timber harvesting with ecosystem health, and support for local community economic development. Examples of truths provided in the second brochure include the following: (1) that decision-making responsibilities related to the land are maintained, (2) the freedom to decide who can harvest the timber is kept, and (3) with certification, organizations or government agencies do not have a greater say over what can and cannot be done on the land.

Following an introduction and discussion regarding confidentiality, focus group procedures involved several questions for group discussion regarding forest certification and the brochures. Focus group questions included:

1. What are your general impressions of the brochures?
2. What information was missing that you still have questions about?
3. From the list of benefits, which one would be most important to you? Why?
4. Which brochure do you prefer? Why?
5. How would you like to learn about certification in terms of format?

This was followed by the completion of a one-page survey. The participant survey included a scale of forest values, assessments of familiarity with forest certification and likelihood of becoming certified, and inquiry into participants' preference for brochure content. The sessions were recorded and transcribed, and transcripts were inductively coded to thoroughly analyze the data.

5.0 STUDY RESULTS

5.1 What Family Forest Landowners Want to Know About Certification

Although we received a wide array of suggestions regarding information that landowners may seek with respect to forest certification, several points were

particularly prominent among the transcript data. Participants wanted greater detail about the restrictions involved with becoming certified, especially with respect to the development of a management plan. They wanted to know exactly what a management plan entails, and how developing a management plan changes their decision rights on every-day forest-related actions. Participants did not have a strong understanding of how becoming certified would change their current management scheme, if at all. Many landowners felt they were taking care of their land already, and worried that becoming certified would allow someone other than themselves to make decisions about how best to harvest or conserve their land. Participants sought more detail regarding the benefits of certification, and wanted more detail on tangible benefits in particular. They also requested further detail regarding the costs associated with certification, including the initial cost of becoming certified, and cost of future inspections. Participants requested more information about the history of forest certification, how it began, and whether it is run by government, industry, environmental organizations, or other groups. Further details were also sought regarding the link between forest certification and water quality or wildlife habitat protection. Landowners wanted a more direct description of how certifying their land would lead to ecological health.

5.2 Segmenting Family Landowners to Tailor Forest Education

Data analysis revealed that many of the study participants could be segmented according to Maser and Smith's (2001) product versus systems value orientations. The data clearly demonstrated that some individuals were concerned with one particular aspect of the certification process (most often cost), while others voiced feelings of overall benefits of certification, some even on a global scale. Two sample comments illustrating product-oriented values were:

"You've really got to focus on what's in it for the landowner. What do I get for my ten bucks an acre?"

"I think those benefits have to be more tangible..."

Table 3.—Information preference according to value orientation

	Benefits	Truths	Combined Information	Balanced information
Protection oriented	19.4%	3.2%	29.0%	48.4%
Use oriented	17.6%	0	52.9%	29.4%

A sample comment voiced that illustrated a systems value orientation was:

“I just want to leave it. I don’t want to do anything to my land, but [with certification] you could help wildlife by helping along the management.”

The focus group data fit particularly well with the protection–use value orientation scale developed by Manfredi et al. (2003). Participants in each meeting often appeared separable according to how they used their land, and how they believed land should be used. Some participants actually provided a description about the nature of this division; for example:

“It seemed like each [brochure] was geared toward a different group of the public. There are those that are thinking about the environment, and there are those thinking about their land and their money and their trees.”

This individual described how the “truths” brochure may be better suited for use-oriented individuals, and the “benefits” brochure for protection-oriented landowners. The data were also rich with quotes exemplifying either protection or use orientations, for example:

Protection: *“We want to have good, healthy property to hand down to our children and grandchildren, so they can be good stewards of the land.”*

Use: *“I manage my woods. I cut timber. I’ve sold poplar and pulp wood, I harvest wood for fire, I’ve built my house, I do different things with it.”*

The survey data illustrated use-oriented participants were slightly more likely to certify, whereby 64.7 percent of the participants who prioritized use-oriented forest

values reported they were likely to certify or may want to certify. Only 51.6 percent who strongly agreed with protection-oriented forest values indicated they were likely or may want to certify. Use-oriented participants also demonstrated a slight preference for combined information, while protection-oriented individuals tended to want balanced information. A brochure containing combined information would include the “truths” and “benefits” associated with forest certification, while balanced information would include benefits and drawbacks associated with the certification process. Table 3 illustrates preferences for information according to value orientation. The data demonstrate that participants have a general preference for the greater quantities of information; they prefer combined or balanced over single message (benefits or truths), approaches.

5.3 Using Principles of Interpretation to Make Certification More Appealing

A variety of interpretive mechanisms was suggested in the focus group meetings to increase the appeal of educational brochures regarding forest certification. Most prominent among the data were suggestions regarding the credibility and relevance principles of interpretation (Ham 1992). With respect to credibility, participants noticed the current color scheme of the brochures resembled that of the Minnesota Department of Natural Resources. They suggested if a goal is to inform the public that certifying does not mean the government will have greater control over their land, the color scheme should be changed to avoid misperception. Study participants also suggested the University of Minnesota logo would help gain credibility among the public, as would printing brochures on certified paper. Many participants felt the “truths” brochure appeared to be defensive, particularly given overall knowledge toward certification was low. They suggested that positive information or variety in messages presents more appeal than a brochure stating what certification is not.

Participants often made suggestions for increasing the relevance of educational material. For example, many suggested that local and more official contact information would encourage individuals to further inquire about details regarding the certification process. Study participants wanted self-referencing information, or educational material tailored specifically to family forest landowners. Another common suggestion was to incorporate the concepts of heritage and legacy into educational material. They suggested items such as pictures of grandparents and children walking through forests together.

5.4 Formats for Encouraging Landowners to Learn More about Certification

The focus group data were rich with suggested formats for education programs, including:

Websites: Detailed information with links to related sites.

- Programs at local events: Presentations and displays at county fairs, lake association meetings, church meetings, etc.
- Intensive workshops: Multi-day workshops offering a variety of programs for landowners to pick-and-choose from.
- One-on-one visits with foresters: Having local foresters visit their land to walk through the forest suggesting possible management options.
- Case studies and testimonials: Literature and contact with other certified family forest landowners.
- Information: Coverage in newspapers, magazines, and community media.

6.0 DISCUSSION

Overall, the focus group data strongly suggested that Minnesota's family forest landowners require more specific information about forest certification before they will fully consider commitment to the certification process. Useful information was received concerning participant value orientations that will help guide future educational strategies. However, the data suggest that individuals, regardless of their value orientations, require:

1. Educational materials outlining combined information (benefits and truths);
2. Educational materials with balanced information (benefits and drawbacks).

The focus group discussions provided researchers with plenty of input for improving the appeal and effectiveness of educational material, and clear format preferences emerged, including surprises. For example, it was surprising to learn that the vast majority of participants use the internet regularly, especially considering the age range and rural focus group locations. The frequency of requests for local foresters to walk through private land was also an unexpected finding.

Data from these meetings will be used to develop research instruments for a large pre-test, post-test mail-out survey with four treatments including a control (see Figure 1), and will also serve directly to inform local agencies of strategies that may improve current educational programs.

7.0 CITATIONS

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