

THE INFLUENCE OF TRADE ASSOCIATIONS AND GROUP CERTIFICATION PROGRAMS ON THE HARDWOOD CERTIFICATION MOVEMENT

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Abstract.—Forest certification has gained momentum around the world over the past two decades. Although there are advantages to being certified, many forest landowners and forest products manufacturers consider forest certification of U.S. forest and forest products unnecessary. Many believe that U.S. forests are already sustainably managed, the current certification systems are not trustworthy, and certification programs, in their current state, are too costly. To promote the sustainability of U.S. forests and address issues that landowners and forest products manufacturers have with certification, governmental agencies, trade associations, and environmental agencies have become involved in the certification movement. These organizations assist landowners and manufacturers by creating group certification programs and providing information and tools necessary to obtain certification. In 2009, a study was conducted to determine how the involvement of governmental agencies, trade associations, and environmental agencies influenced the certification movement. Research was conducted through a mail-based survey to 1,239 primary hardwood manufacturers in the Appalachian Region and through case studies of the Appalachian Hardwood Manufacturers Inc., (AHMI) Association, the National Wood Flooring Association (NWFA), and the Wisconsin Department of Natural Resources. Results indicated that these entities were instrumental in increasing the awareness of certification and providing the tools their members need to become certified. Through the programs implemented by these entities, the supply of certified raw material and the number of certified forest products manufacturers has increased.

INTRODUCTION

Loss of forests and forest resources has long been a concern of societies around the world. Decades ago, these concerns led to the implementation of forest certification. There are currently two types of forestry certificates: sustainable forestry management certificates and chain of custody (COC) certificates (Anderson et al. 2005). Sustainable forestry management certification is the process of verifying that forests are planted, grown, or harvested according to the standards of the certifying system (Anderson et al. 2005). Chain of custody certification is the process of tracking a forestry product back to the forest source and enables forest producers to verify that their products are made from raw materials produced in a sustainably managed forest (Anderson et al. 2005, Hansen and Bratkovich 2000). Although the forest certification practices began as a way to protect tropical forests in developed/underdeveloped countries, it is primarily practiced in developed countries (Cashore et al. 2005, Kollert and Lagan 2007). Even though most certified forest lands are in developed countries, the certification movement has met much resistance.

In the United States, many forest landowners and forest products manufacturers believe certification of U.S. forests and its products is unnecessary. They do not trust the certification programs, and many believe that forest certification only exists to make a profit. In addition, many landowners

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and manufacturers believe the current certification systems are too costly for them to participate in (Butterfield et al. 2005, Rickenbach 2002).

To address these issues and promote the sustainability of U.S. forests, governmental agencies, environmental agencies, and forest products trade associations have become involved in the certification movement. These organizations have stepped in to assist landowners and manufacturers by creating group certification programs and providing information and tools necessary to obtain certification. Numerous studies have been conducted on small family landowner cooperatives/ group certification (Blinn et al. 2007, Cordell and Tarrant 2002, Hull and Ashton 2008). Other studies have shown the positive impact of government assistance and trade association involvement on business operations (Howard 1990, Kittredge 2003, Stoddard 1964). However, there has been little/no research on the effect of governmental and trade association involvement on the decision to pursue certification. Only two articles related to this subject were found in the literature (Klooster 2005, Segura 2004). Both articles showed that governmental and nongovernmental organizations could have a positive effect on forest certification/sustainable management participation.

To fully understand certification as it applies to the hardwood industry, it is important to understand the key factors that affect the decision to pursue certification. The objectives of this research were to (1) determine if association membership affects pursuance of certification, and (2) investigate and describe the dynamics of forest certification programs aimed at certifying groups of forest landowners.

STUDY AREA

To understand certification and the U.S. hardwood industry, one component of this study focused on primary hardwood manufacturers in the Appalachian Region, which encompasses most of the hardwood production in the United States. The perimeter of the Appalachian Region was set according to the boundaries that the Appalachian Hardwood Manufacturers Association, Inc. (AHMI) uses to define its membership region. This region includes 344 counties in New York, Pennsylvania, Ohio, West Virginia, Maryland, Virginia, Kentucky, Tennessee, North Carolina, Alabama, Georgia, and South Carolina. A list of primary hardwood manufacturers in these regions and their contact information was compiled using listings from association bulletins, state directories, governmental documents, and other resources. The survey population was made up of all primary hardwood solid wood products manufacturers identified in these information sources.

A broader region was used in the case study component of this research. The Appalachian Hardwood Manufacturers Association, the National Wood Flooring Association (NWFA), and the State of Wisconsin Department of Natural Resources (DNR) were selected for case studies. AHMI represents a primary hardwood association whose members are responsible for a large percentage of primary hardwood production. NWFA is an association that represents a secondary industry whose members are responsible for a large percentage of hardwood flooring production. The Wisconsin DNR is the forerunner in state-implemented group forest certification.

METHODS

To meet the objectives of this section of the study, research was conducted through both a mail-based survey² and case studies.

Survey Methods

A mail-based survey was developed using Dillman's Tailored Design Method (Dillman 2000), methods adapted from Gilbert Churchill's Procedures for Developing a Questionnaire, (Churchill 1999), and other published certification related surveys. The questionnaire was divided into three sections. Section 1 contained demographic questions about the responding company. Section 2 contained questions about the company's beliefs and attitudes on chain-of-custody certification. Section 3 contained questions about the decision process that a manufacturer uses when deciding whether to provide chain-of-custody certified products.

In October 2008, the initial survey was mailed to 1,239 primary hardwood manufacturers. Four weeks after the initial survey was mailed, a followup questionnaire was mailed to those manufacturers who had not yet responded. After the initial and follow-up letters were mailed, it was necessary in some cases to call manufacturers to determine if addresses were correct or if they were still in business.

Of the 1,239 questionnaires mailed to Appalachian primary hardwood manufacturers, 254 were either returned with bad addresses or returned indicating that the business was closed or was not a primary hardwood producer. Of the remaining 985 questionnaires, 192 were returned completed and were deemed usable for the study; this represents an adjusted response rate of 19 percent.

To ensure that the study's results are valid, nonresponse bias was estimated by comparing early respondents to late respondents as per Armstrong and Overton (1977). Manufacturers who responded before the second mailing were classified as early respondents, whereas those responding after the second mailing were classified as late respondents.

Using nonparametric and parametric statistical analyses, we found no significant differences between early and late respondents. Frequency analysis was conducted on all variables in the survey. The results of early and late respondents were compared to determine if any significant differences were found. The results were equally distributed between both groups. To further test for nonresponse bias, a Kruskal-Wallis test was performed on the certification status of early and late respondents to determine if any significant differences existed. At $\alpha = 0.05$, the test returned a p-value of 0.45. No significant difference was found. Because meaningful differences between the two groups were not found, nonresponse bias should not present a serious problem (Rainer and Harrison 1993).

To better understand the relationship between trade association membership and certification adoption, it was important to examine attitudes of association members toward certification. Respondents were asked to rate their level of agreement or disagreement with a number of statements about chain-of-custody (COC) certification. To measure the respondents' level of agreement, the Likert method of summated ratings was used (Likert 1932). Respondents were asked to indicate their

²The survey was conducted by the Warnell School of Forestry and Natural Resources at the University of Georgia.

level of agreement with 18 certification statements by marking the number that best corresponded with their attitude surrounding the statement: 1 = strongly disagree to 5 = strongly agree.

The attitude of association members and nonmembers was then compared to determine if any differences existed. The mean and standard deviation of the responses to each statement were calculated. The responses from each group were analyzed and compared using a Wilcoxon test to see if differences existed.

Case Study Methods

Because this study examined the role of various organizations in the certification movement, it was necessary to obtain first-hand accounts from individuals in these organizations. According to Seidman (1991), the primary way for a researcher to investigate an organization, institution, or process is by interviewing the individuals who make up the organization or carry out its processes. Case studies can help identify and understand the relationships and views of the subjects studied (Thacher 2006). For this reason, case studies were used to further examine the relationship between association membership and certification. Two trade associations (one representing primary manufacturers and one representing a secondary hardwood industry) and one group certification program were chosen on which the case studies were based.

Personal open-ended interviews were conducted with Tom Inman, President of the Appalachian Hardwood Manufacturers Inc., (AHMI) Association; Edward Korczak, Executive Director of the National Wood Flooring Association (NWFA); and Paul Pingrey, Forest Certification Coordinator for the Wisconsin DNR. Additional interviews were conducted with Ed Dallison (AHMI member and President of Dallison Lumber), Donald Finkell (NWFA member and President of Anderson Hardwood Floors), and Terry Mace (Forest Utilization and Marketing Specialist with the Wisconsin DNR). Supplemental data also were collected through Web resources.

Because this research sought to investigate the relationship between trade associations/group certification programs and the certification movement, the case studies are exploratory and descriptive in nature. Information obtained from the interviews was recorded (with permission) and analyzed for cause and effect relationships.

RESULTS

Certification and Trade Association Membership Status

To address the objectives of this study, it was important to determine the certification and trade association membership status of the respondents. Respondents were given a choice of five different certification levels to describe their current certification status: (1) certified and intend to remain so; (2) certified, but not sure about recertification; (3) not certified and not currently considering certification; (4) not certified, but actively seeking certification; (5) and not certified, but somewhat interested. Of the 192 respondents, 186 indicated their certification status. For this study, these respondents were then classified into two categories: certified and noncertified. After classification, there were 40 certified respondents and 146 noncertified respondents.

Table 1.—Association between trade association membership and certification adoption

| | | Nonmember | Member | Total |
|--------------|-----------------|-----------|--------|--------|
| Certified | Frequency | 12 | 28 | 40 |
| | Expected | 18.495 | 21.505 | |
| | Cell Chi-Square | 2.2807 | 1.9614 | |
| | Row Percent | 30.00 | 70.00 | |
| Noncertified | Frequency | 74 | 72 | 146 |
| | Expected | 67.505 | 78.495 | |
| | Cell chi-square | 0.6248 | 0.5374 | |
| | Row percent | 50.68 | 49.32 | |
| Total | | | | 186 |
| Statistic | | DF | Value | Prob |
| Chi-square | | 1 | 5.4043 | 0.0201 |

Respondents were then asked if they were a member of a trade association. If the respondent indicated “yes,” they were asked to list the associations they had memberships with. Of the 192 respondents, 186 indicated their membership status. Fifty-four percent (102) of the respondents indicated they were members of a trade association. More than 50 percent (55) of the respondents who indicated they were members of a trade association held membership in multiple associations. Appalachian Hardwood Manufacturers, Inc., National Hardwood Lumber Association, National Wood Flooring Association, and Kentucky Forest Industries Association were some of the association memberships listed.

Trade Associations and Certification Relationship

To determine if membership in a trade association had an effect on the decision to pursue certification (two-sided test), a chi-square test was performed to determine if there was a relationship between trade association membership and certification status. The p-value of the chi-square was 0.020. Therefore, it was concluded that at the 0.05 significance level there was a relationship between certification status and association membership. The results indicate that members of trade associations are more likely to pursue certification than nonmembers.

Results indicated that differences existed between the attitudes of the two groups. The result from the tests for the two different groups and the differences between the two groups are shown in Table 1. When comparing the responses of association members to the responses of nonmembers, numerous differences were found. Although association members tended to be more positive toward the statements than nonmembers, both groups overall had primarily negative feelings toward the certification statements. Of the 18 statements, responses between the two groups were statistically

Table 2.—Ranking of certification statements by association membership status and statistically significant differences (1=strongly disagree, 5=strongly agree)

| Statement | Mem. obs. (n=) | Mean/ std. dev. | Non-mem. obs. (n=) | Mean/ std. dev. | Sig. diff. |
|--|-------------------|--------------------|-----------------------|--------------------|------------|
| Our company is environmentally conscious | 102 | 4.37/1.81 | 84 | 4.35/1.88 | |
| Our company is familiar with the certification process | 101 | 3.58/1.27 | 80 | 2.69/1.37 | ** |
| Our company has purchased environmentally certified wood in the past year | 99 | 2.48/1.72 | 76 | 2.00/1.38 | |
| Our company plans to be certified next year | 94 | 2.59/1.58 | 75 | 1.59/1.16 | ** |
| Our company believes that the chain-of-custody certification process is complicated | 99 | 3.47/1.35 | 76 | 3.26/1.60 | |
| Our company believes certification is necessary to be competitive | 99 | 2.70/1.35 | 79 | 2.04/1.20 | ** |
| Our company believes certification has environmental benefits | 100 | 2.63/1.35 | 79 | 2.34/1.35 | |
| Our company believes certification is necessary | 100 | 2.58/1.15 | 80 | 1.94/1.05 | ** |
| Our company believes certification has financial benefits | 98 | 2.39/1.30 | 80 | 1.96/1.13 | * |
| Our company seeks suppliers of environmentally certified wood products or raw materials | 98 | 2.10/1.37 | 77 | 1.53/1.94 | ** |
| Our company believes the benefits of certification are worth the costs | 101 | 2.19/1.19 | 80 | 1.80/1.12 | * |
| Our company feels pressured by our customers to supply certified wood | 99 | 2.32/1.23 | 78 | 1.81/1.18 | ** |
| Our company feels pressured by outside groups (other than customers) to produce environmentally certified products | 99 | 2.12/1.50 | 79 | 2.13/1.36 | |
| Our company cannot find an adequate supply of certified wood to justify our becoming certified | 95 | 2.91/1.50 | 75 | 2.67/1.57 | |
| Our company only buys certified wood when there is a demand | 98 | 2.07/1.35 | 77 | 1.60/1.07 | * |
| Our company believes consumers will pay a premium for certified wood products or raw materials | 99 | 2.05/1.14 | 82 | 1.94/1.26 | |
| Our company always purchases certified wood | 98 | 1.57/1.05 | 78 | 1.51/1.03 | |
| Our company will pay a premium for certified wood products or raw materials | 100 | 1.70/1.03 | 79 | 1.38/1.90 | ** |

*significant at $\alpha = 0.05$, ** significant at $\alpha = 0.01$

different for 10 of the statements. Only two statements received positive ratings by both groups. Both groups agreed to strongly agreed (rating more than 4 but below 5) with the statement “Our company is environmentally conscious” and slightly agreed to agreed (rating more than 3 but below 4) with the statement “Our company believes that the chain-of-custody certification process is complicated.”

From Table 2 it can be seen that, for 7 of the 10 significantly different responses, the responses were different at $\alpha = 0.01$. Although both groups disagreed that certification had financial benefits, nonmembers seemed to disagree more strongly than association members (a mean rating of 1.96). Nonmembers also disagreed more strongly with the statements “Our company believes the benefits of certification are worth the cost” and “Our company only buys certified wood when there is a demand” (mean ratings of 1.80 and 1.60, respectively).

Table 3.—NWFA RPP fees for each membership division

| Tiers | Tier guidelines | Fees |
|--------|--|--|
| Tier 1 | <p>Must procure raw materials from sources that have been NWFA verified sustainable</p> <p>Must verify that raw materials originating from a country listed as high-risk for illegal logging meets NWFA's verified sustainable guidelines</p> <p>In program for 3 consecutive years</p> | Annual SCS audit fees |
| Tier 2 | <p>Must agree to obtain FSC COC certification</p> <p>Must actively manufacture FSC products and/or trade and actively increase sales of certified products</p> <p>Must join the FSC Procurement Group and meet FSC controlled wood standards for all their non-FSC wood supply</p> <p>In tier for 2 years or program for 5 consecutive years</p> | <p>Based on annual sales:</p> <p>Companies with annual sales of:</p> <p>\$0-20 million pay \$2,000/year</p> <p>\$20-49 million pay \$3,500/year</p> <p>\$50-99 million pay \$5,000/year</p> <p>over \$100 million pay \$7,500/year</p> |
| Tier 3 | <p>Must meet RPPs benchmarks for 3 or more years without interruption</p> <p>Must ensure that FSC certified product sales constitute 50 percent or more of overall company sales in a single year</p> | Same as Tier 2 |

Some of the differences between association members and nonmembers may be a direct result of the increased knowledge obtained through membership networking. Association members slightly agreed to agreed with the statements “Our company is familiar with the certification process” (a mean rating of 3.58). Nonmember respondents tended to disagree with this statement (a mean rating of 2.69). Because of the emphasis that forest products associations have placed on certification in the last decade, it was expected that association members would be familiar with the certification process. Nonmembers may not have access to the information networks provided by trade associations. Several respondents indicated being unfamiliar with the certification process, and two indicated they had never heard of COC certification.

CASE STUDY RESULTS

Appalachian Hardwood Manufacturers, Inc. (AHMI)

Appalachian Hardwood Manufacturers, Inc. (AHMI) is a forest products trade association headquartered in High Point, NC (AHMI 2009). It was founded in 1928 to promote logs, lumber, and wood products from the Appalachian Mountain Region. The association has 204 corporate members and encompasses 344 counties in 12 states. In this region, there are currently 110.2 million acres of privately owned forest (AHMI 2009). The Appalachian hardwood industry is an important component of the region’s economy, and AHMI’s mission is to assist producers, manufacturers, suppliers, and consumers in making the best decisions for their hardwood needs. The association is made up of five divisions: producer, distributor, forestry, consumer, and supplier (AHMI 2009).

Any individual or company is free to join AHMI as long as the requirements defined by the association’s bylaws are met. Depending on the membership division, the cost to join AHMI ranges from \$100 to \$12,000/year (Table 3) (AHMI 2009). The membership dues are paid monthly by members in the producer division and annually by all other members. As members of the AHMI trade association, individuals and companies are provided with services to help them promote their

businesses and products. Yearly, AHMI holds workshops and seminars that are specific to current industry issues. The association also provides its members with media training and marketing/promotional materials to help members remain competitive and be successful.

Certification

Because certification has been a major issue facing the hardwood industry, AHMI has sought ways to promote the Appalachian Region's sustainable hardwoods. In 2006, AHMI created the Verified Sustainable Program to verify and promote the sustainability of the Appalachian hardwood timber resource. According to the U.S. Department of Agriculture's Forest Inventory and Analysis (FIA) research data, the annual timber harvest levels in the 344-county Appalachian hardwood region have been substantially less than net annual growth for more than 50 years. In fact, the net annual timber growth in the region exceeds annual harvest levels by more than 2.29 to 1. By the definitions set forth by AHMI, the current hardwood harvest rates in the Appalachian Region are sustainable.

The Verified Sustainable Program, implemented in 2007, is provided to AHMI members as a membership benefit. Members pay only for certificates documenting sustainability and other promotional materials. Certification is not related to individual timber tract sustainability but to the sustainable harvest rate for an entire region. The program provides its members with documentation that the wood and products they produce are verified sustainable. This program helps meet the demands of the customers of some members who are looking for sustainable hardwood products. However, in some cases, customers do require Forest Stewardship Council (FSC) and/or Sustainable Forestry Initiative (SFI) certification. Recently, the association has begun working to provide group certification to those members who desire FSC/SFI certification.

In 2007, when AHMI first began the implementation of the Verified Sustainable Program, only 17 members chose to participate. However, in 2008, 59 additional members joined the program. To date, AHMI has 107 members that participate in this program (with several more joining in 2009). According to AHMI President, Thomas Inman, the Verified Sustainable Program has helped fill a void in the certification program. In a system where manufacturers were either fully certified or noncertified, AHMI has created a middle-tier certification system. Members who were unable to obtain certification from "top-tier" certification schemes such as SFI and FSC (because of cost and lack of supply) or who felt like these certifications were unnecessary for them can now provide their customers with certified sustainable products through the Verified Sustainable Program.

Member Perspective

According to Ed Dallison, President of Dallison Lumber, Inc., being a member of the AHMI trade association has helped his company gain knowledge of the certification movement and process. Dallison Lumber Inc., a family owned company in Jacksonburg, WV, has been in business for more than 125 years. The company produces more than 5 million board feet of Appalachian hardwood each year and supplies lumber, timbers, railroad ties, post and beams, and bridge materials to the eastern and mid western portions of the United States (Dallison Lumber, Inc. 2009).

Although the company first heard of forestry certification 3 to 4 years ago, Dallison admits that he paid no attention until his customers began demanding certified lumber. About a year ago, Dallison Lumber obtained FSC forest and COC certification. The company currently co-owns 20 acres of

land with a local concentration yard from which it supplies roundwood to meet demand for certified lumber. Annually, the company produces around 1.5 thousand board feet (MBF) of certified hardwood and supplies 10 companies with COC certified lumber. According to Dallison, the cost of certification is high, but because the selling of certified lumber is easier, the company has been able to realize a small premium. Dallison believes AHMI has been beneficial in helping him understand certification and has provided him with certification alternatives.

National Wood Flooring Association (NWFA)

The National Wood Flooring Association (NWFA), a wood flooring trade association headquartered in Chesterfield, MO, was founded in 1985 by a group of leading wood flooring professionals who saw the need for an association that would promote the wood flooring industry and address industry-specific issues. NWFA currently has more than 4,000 corporate members in 55 countries. The membership is made up of manufacturers, dealers, distributors, and installers of wood flooring. The association spends most of its time on education and marketing programs and on programs that assist in the commercial advancement of wood flooring products. At the time of the interviews, the association's Executive Director/CEO was Edward Korczak. The Executive Director/CEO oversees a staff of 25 and is instrumental in developing many of the association's key programs

Any individual or company is free to join NWFA as long as they meet the requirements as defined by the association. The association has a unique system for dues and charges: one set price (\$395/year) for membership regardless of an individual's membership category. As members of NWFA, individuals and companies are provided with services to help promote their businesses and products. The association provides its members with certification training. In addition to workshops and seminars held annually to keep members informed, the association also publishes *Hardwood Floor* seven times a year (NWFA 2009).

Certification

In 2008, to meet the demand for domestically produced certified wood flooring, NWFA introduced the Responsible Procurement Program (RPP). NWFA realized that its members could not meet the demand of the U.S. Green Building Council and other organizations that required FSC certified wood. If FSC certified flooring was demanded, manufacturers would have to import flooring from foreign countries. The program was initiated by contacting the U.S. Forest Service. The Forest Service's Forest Inventory and Analysis (FIA) data were used to determine that 33 states had sustainable hardwood harvests.

Using this information, NWFA developed a three-tier certification program. RPP is open to all NWFA members and is voluntary. The independent third-part auditing firm, Scientific Certification Systems (SCS), oversees the program. The members pay for the cost of the program with annual participation fees based on the company's sales levels (Table 3).

Tier 1 of the program verifies that members manufacture wood flooring from raw material originating from NWFA-verified sustainable U.S. forests. Manufacturers must procure wood from the 33 states in which hardwood harvests have been verified sustainable (growth exceeds removals based on FIA data). If manufacturers use or import raw materials originating from a country listed as high-risk for illegal logging, they must enroll in the NWFA Verified Legal Program that

uses NWFA-approved organizations to verify wood used or imported meets NWFA's verified sustainable guidelines. Companies that participate in the NWFA COC system and meet the defined requirements are entitled to use the "NWFA Verified Sourced from U.S. Renewing Forests" and the "NWFA Verified Legal Imported" labels on their products. After 3 years of participation in and meeting the requirements of Tier 1, members are expected to advance to Tier 2 and meet the Tier 2 requirements.

Tier 2 is the intermediate level of the program. To participate in this tier, members agree to obtain FSC COC certification. The company must actively manufacture and/or trade FSC certified products and actively increase its sales of FSC certified products over time. The company also must join the FSC Procurement Group, led by NWFA and NWFA member companies. The group works closely with organizations such as FSC Family Forest Alliance to make FSC certification more attractive to small private landowners across the hardwood region. If the company meets FSC controlled wood standards for all their non-FSC wood supply after 2 years in Tier 2 or 5 years in the program, they advance to Tier 3.

Tier 3 is the highest level of achievement in the NWFA's Responsible Procurement Program. This tier is reserved for those members who meet all of the requirements for Tiers 1 and 2. They must meet RPP's benchmarks for 3 or more years without interruption. To participate in this tier, members must ensure that FSC certified product sales constitute 50 percent or more of overall company sales in a single year (an aggressive goal).

Since implementation of the program in December 2008 (just 3 months before this interview was conducted), 24 companies have shown interest in participating. Of those 24 companies, four have signed the RPP license of agreement and have begun the process to become a member of the program. The remaining 20 companies have requested the RPP license of agreement and are in the process of reviewing it with legal counsel. According to Korczak, these 24 companies represent 70 percent of the industry's domestic hardwood flooring production. Korczak believes the interest and participation of these 24 companies will help build further program interest (i.e., many of these companies are opinion leaders). He also believes that NWFA's promotion of the program through meetings, video newsletters, trade shows, and mailings will generate additional interest in the program.

Member Perspective

According to Donald Finkell, President of Anderson Hardwood Floors, Inc., NWFA has been beneficial to the hardwood flooring industry. He feels the association's Responsible Procurement Program will have the biggest impact on members with small manufacturing facilities. Anderson Hardwood Floors, founded in 1946 and headquartered in Clinton, SC, will be the first member company to enter NWFA's Responsible Procurement Program. Anderson's product line ranges from wood flooring produced from domestic species such as oak and pine to flooring produced from exotic species such as bamboo (Anderson Hardwood Floors 2009). The company is a leading innovator in the wood flooring industry and is responsible for developing the 5-ply construction method used to create wood flooring. The company also is responsible for providing consumers the first "no wax" maintenance free flooring (Anderson Hardwood Floors 2009).

Because Anderson is a leading innovative producer in the industry, it is not surprising that the company would be one of the first flooring manufacturers to participate in NWFA's innovative Responsible Procurement Program. The company also has a plant in Paraguay and believes this program will help members who have foreign imports to meet the provisions of the Lacey Act (which prohibits the import of illegally harvested or traded timber). Finkell admits that residential consumer demand for certified flooring is essentially non-existent. However, there is a small demand from commercial LEED-projects that must have FSC certified flooring. Through the efforts of NWFA, Finkell hopes to see an increase in the supply of certified hardwood raw materials and products.

The State of Wisconsin

The Division of Forestry of the Wisconsin Department of Natural Resources was founded in 1904, under the guidance of E.M. Griffith, Wisconsin's first Chief State Forester. He was an early leader in developing state forestry programs that have shaped Wisconsin forestry over the past 100 years (Wisconsin DNR 2009). The Division of Forestry is made up of three bureaus and one office: the Bureau of Forest Protection, the Bureau of Forest Management, the Bureau of Forestry Services, and the Office of Forest Sciences. Wisconsin has 16 million acres of forest land that the Division of Forestry regulates, protects, and helps to manage. Of this amount, 70 percent is privately owned forest land (Wisconsin DNR 2009).

Forests are important to the State of Wisconsin. These lands provide habitat for hundreds of plants and animals and provide individuals with a social outlet. Wisconsin's forestry resources also play an important role in the state's economy. More than 1,850 wood-using companies produce nearly \$20 billion of forest products each year, and more than 300,000 individual jobs in the state rely on the forest products industry (Wisconsin DNR 2009). For this reason, Wisconsin has been active in the sustainable management of its forestry resources.

Certification

In 1985, Wisconsin enacted the Managed Forest Law (MFL) as an incentive to encourage sustainable forestry on privately owned forest land (Wisconsin DNR 2009). Through the law, the open-enrollment program reduces and defers the property taxes of landowners that manage lands according to MFL sustainable management plans. The program is open to all private landowners that own 10 to 2,470 acres of forest land. According to Paul Pingrey, Forest Certification Coordinator for the Wisconsin DNR, the program was originally based on U.S. Forest Service stewardship guidelines and gives landowners a 75 to 95 percent reduction on their property taxes. Each plan is developed considering and evaluating several natural resource elements, such as water, aesthetic quality, timber, forest health, and threatened and endangered species. At the onset of the program, 42,826 landowners were enrolled.

In 2003, Wisconsin began to explore third-party certification of its forest lands. In 2005, the MFL program received full certification endorsement from the American Tree Farm System (ATFS). MFL members were automatically enrolled in the ATFS certification, but were allowed to opt out at any time. Because of the endorsement, 500 members of the MFL program decided to opt out of the ATFS certification option. Although companies such as Time, Inc. were happy with ATFS certified raw materials, others preferred FSC. Because of these requests, a full FSC study of forest in the MFL

Table 4.—Major land management programs administered by the Wisconsin DNR

| Land management program | Certified acreage |
|-----------------------------|---|
| Wisconsin State Forests | 517,734 acres |
| Wisconsin DNR Land Division | 1,080,675 acres |
| Wisconsin County Forests | 2,353,897 acres in 27 counties |
| Managed Forest Law | 2,239,205 acres under 41,875 orders with private landowners |
| Total | 6,191,511 acres |

program began in March 2008. By December 2008, MFL had received full FSC endorsement. After FSC's endorsement, an additional 461 members decided to opt out of the FSC group certification option. Pingrey believes that most landowners decided to opt out because of FSC's pesticide restrictions and the fear that certification costs would eventually fall on them.

To date, the MFL certification group has 41,865 family forest members that own 2.2 million acres of FSC and ATFS certified land (22% of all Wisconsin's privately owned nonindustrial forests). As a part of the program, members do not pay to be certified. The state pays the certification costs, which is a total of \$76,585 for a 5-year SmartWood audit contract. Wisconsin pays less than \$2 per landowner for certification, allowing it to realize certification economies of scale.

In addition to the MFL program, the Wisconsin DNR administers three other major land management programs: Wisconsin State Forests, Wisconsin DNR Land Division, and Wisconsin County Forests (Table 4) (Wisconsin DNR 2009). Through these various programs and DNR divisions, Wisconsin is able to educate companies and individuals about the importance of sustainability. The Wisconsin DNR offers numerous educational and promotional materials to help familiarize the public with forestry certification and is looking for additional ways to market the use of certified wood.

Industry Perspective

According to Terry Mace (2009), head of the Forest Products Utilization and Marketing Program with the Wisconsin DNR, the creation of the state's various certification programs has been the impetus for several Wisconsin sawmills pursuing and obtaining COC certification. In fact, because of the increase in COC certification applications in the state, wood products manufacturers had a 3-month waiting period for auditors to assess their operations in 2009. Through Wisconsin's certification programs, 40 percent of the state's forest land is now FSC certified (state, county, and private). This has increased the supply of certified timber in the state and coupled with the current economic situation, interest in COC certification among manufacturers has increased. Several other states (most notably Indiana) are pursuing or exploring elements of the Wisconsin group forest certification model.

DISCUSSION

The results indicate that members of trade associations are more likely to pursue certification than nonmembers. It is likely that through membership, manufacturers are supplied with industry information and tools that explain certification and the process involved in becoming and maintaining COC certification. Many forest products trade associations have held certification workshops and developed informational packets to aid their members in the certification process. By these means alone, trade associations may provide the catalyst needed for their members to pursue certification.

Although both association members and nonmembers had negative attitudes toward certification, nonmembers' attitudes seem to be more negative than those of association members. Both groups, however, consider themselves environmentally conscious. One reason members of trade associations may be less negative toward certification is because membership in a trade association provides them with certification knowledge that nonmembers may not receive. Most people are vaguely familiar with the concept of forest and COC certification (Mercker and Hodges 2007). Trade associations serve their members by issuing real time information and keeping them up to date on new information and trends in their industry (Suddock 2003).

The complexity of the certification process has often been listed as a major disadvantage of certification. In fact, both association members and nonmembers agreed with the statement "Our company believes that the chain-of-custody certification process is complicated." However, through group certification programs such as the ones AHMI, NWFA, and Wisconsin have, the process of certification becomes easier for landowners and small manufacturing facilities. Not only do members of these group certification programs have additional resources that are unavailable to others, they have the knowledge and experience of fellow group members who have already gone through the certification process.

Certification programs offered through trade associations, environmental organizations, and governmental organizations also address another major issue of forest certification, the costs. According to Butterfield et al. (2005), small landowners and manufacturers can find it difficult to justify the added expense of running certified operations, and the affordability of certification is an issue to them. Group certification programs can eliminate the cost small landowners or manufacturers pay, such as in the case of Wisconsin's MFL program, or they can reduce the amount paid based on economies of scales. AHMI, NWFA, and the State of Wisconsin have been instrumental in increasing the awareness of certification and providing the tools their members need to become certified. Through these programs, the supply of certified hardwood has increased and more companies have become COC certified (Inman 2009, Mace 2009). However, with the change in world markets, hardwood trade associations must do more to change the way they address industry concerns (Barrett 2008).

According to Hardwood Review Weekly, "Trade associations exist to provide benefits and services that either 1) cannot be obtained or provided on an individual corporate level, or 2) could be done more efficiently or effectively with pooled resources and collective representation" (Barrett 2008). Trade associations also can be advocates for their members by educating the public and governmental policymakers on the issues that are most important to their members/industry (Suddock 2003).

Through trade associations, manufacturers are able to form networks that keep them informed of significant industry-related trends and information.

To improve certification among hardwood landowners and manufacturers, it is necessary to understand the uniqueness of the industry. To tailor certification programs so they meet the needs of the hardwood industry, it is important for hardwood products trade associations to be involved in the certification process. These organizations are committed to improving the trade of their members (Barrett 2008). Because the hardwood industry is an important economic component of many states' economies, it is also vital for governmental agencies to become involved with certification. According to Hull and Ashton (2008), government and nongovernmental forestry organizations can support group certification programs by providing financial, technical, and organizational support. Through the cooperative efforts of governmental and non governmental organizations, there is an opportunity to increase the promotion of certification, which could lead to increased pursuance of certification and certified product demand.

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