

# Forest Landowner Cooperatives in the United States: A Local Focus for Engaging Landowners

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## ABSTRACT

Family forest owners are showing an increasing interest in forest landowner cooperatives as a mechanism for providing a variety of services related to sustainable forest management and product processing. Because these cooperatives are locally owned, user-controlled, small-scale participatory entities, they can more easily adapt to member needs than some other landowner assistance programs. Fifteen experts identified the benefits, strengths, weaknesses, opportunities, and threats to these cooperatives. The results suggest ways in which cooperatives can enhance their effectiveness by seizing opportunities, counteracting threats, and addressing weaknesses. Key issues related to improving cooperative effectiveness include (1) expanding membership to enhance leadership and volunteer assistance, (2) improving marketing efforts, and (3) developing better networks within the local community, with other forestry cooperatives, and with organizations that offer assistance to cooperatives.

**Keywords:** forestry cooperatives, nonindustrial private forest landowners, family forest owners, landowner assistance programs, Delphi method, SWOT analysis

Nonindustrial private (family) forests have long presented a challenge to service foresters trying to actively engage these landowners in forest management (National Research Council 1998). Approximately 10.3 million family forest owners control about 363 million ac of forestland in the United States (Butler and Leatherberry 2004, Smith et al. 2004). Collectively, these landowners are tremen-

dously important to the condition of forested ecosystems and forest-dependent businesses (Larson 2004). They also are an important source of timber within the United States, accounting for nearly 63% of removals in 2001 (Smith et al. 2004).

Despite the high volume of timber harvest from family forests, management for timber is not a primary objective for most of these landowners. Numerous studies have

reported that financial returns from harvesting timber on their land are of relatively minor importance for most family forest owners (Alig et al. 1990, Elwood et al. 2003, Finley and Kittredge 2006). Instead, non-traditional forest products such as medicinal plants and nonmarket amenities, and services including wildlife habitat, recreation, and solitude are of greater interest. In recognition of the diverse range of interests for owning and managing family forests, several assistance programs have been developed to offer a diverse range of services to these landowners (Sagor 2006). These programs include the American Tree Farm System, Forest Stewardship Program, and National Woodland Owners Association. The services provided include information, technical assistance, education, and money to cost-share on-the-ground work.

Cooperatives offer a different approach to providing landowner assistance. According to the International Cooperative Alliance, a cooperative is an independent association of people who come together voluntarily to meet their common eco-

Received October 20, 2006; accepted June 20, 2006.

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nomic, social, and cultural needs and aspire to develop a jointly owned and democratically controlled project (Zeuli 2006). The Agricultural Cooperative Service (1987) defines cooperative as a user-owned, user-controlled business that distributes benefits to members on the basis of their use. People often think of cooperatives as nonprofit businesses, but as with any business, a cooperative can elect to be a nonprofit or profit enterprise. The common characteristic of all cooperatives is that they return at least a portion of their profits to members based on patronage (Zeuli 2006).

Agricultural cooperatives have played an important role in the US farming community for years. A variant of those cooperatives, forest landowner cooperatives (forestry cooperatives), claim to provide members with unique services that may not be available through other assistance programs (Rickenbach 2006a). Typical services offered by a forestry cooperative include (1) forest product marketing; (2) supplies, equipment, and services offered at reduced costs because of economies of scale; (3) management to improve forest productivity and profitability; and (4) enhanced social relationships by bringing together like-minded landowners with similar goals who learn from their interaction with each others (Corbia 1989). In addition, forestry cooperatives provide opportunities for landowners to become engaged in the economy of their local community. They also facilitate access to local, trusted sources of information about forest management opportunities.

Forestry cooperatives are not new in either the United States or elsewhere (Barten et al. 2001; Kittredge 2005, 2006). Previous efforts to establish and operate forestry cooperatives in the United States produced mixed results (Dempsey 1967, Rickenbach 2006b). The first forestry cooperatives in the United States, established in the early 1900s, were fairly diverse. Their numbers peaked during the 1930s and 1940s. By 1965, nearly two-thirds of the cooperatives had gone out of business. This first wave of cooperatives failed because of insufficient interest and support by members, inadequate capital, lack of sufficient volume of business, or inadequate management (Dempsey and Markeson 1969).

A second wave of forestry cooperatives is occurring today. It brings together landowners, wood processors, small forest product manufacturers, consultants, and other community members to create not only eco-

nomic benefits for members but also benefits to society including improvements in environmental health, quality of life, and community economic stability (Nadeau et al. 2002). The reemergence of forestry cooperatives is in response to the growing interest in sustainable forest management, including forest certification, and in increased profitability from value-added processing of timber products. Today, there are approximately 20 forestry cooperatives in the United States. This second wave faces numerous challenges including an increased number of smaller parcels of forestlands (Best 2004) and the conversion of forestlands into other land uses (Sampson and DeCoster 2000).

Although forestry cooperatives are not a new phenomena, relatively little is known about their benefits, strengths, weaknesses, opportunities, or threats. The purpose of this article is to attempt to fill in these knowledge gaps by engaging experts in a consensus process on forestry cooperatives.

### Data Collection—The Delphi Process

Originally developed by the Rand Corp. in the 1950s to study defense issues, the Delphi process seeks to “aggregate the judgments and opinions from a selected group of experts who are knowledgeable about the issue under study” (Ewert 1990, p. 7). The goal is to facilitate a “conversation” among members of the group so that they reach a consensus (Weatherman and Swenson 1974). The Delphi exercise has been an efficient, reliable, valid, and popular tool for collecting information about natural resource issues (Baughman 1989, Gregersen et al. 1989, Schneider et al. 1993). In the study reported here, our research team developed a series of questions that were submitted to a group of experts to elicit and refine their opinions on the benefits, strengths, weaknesses, opportunities, and threats of forestry cooperatives.

There are no rules for selecting Delphi participants, except that the necessary experts and stakeholders are represented (Scheele 2002). Participants also must be willing to stay engaged through the end of the study—in this case, for 13 months, from July 2004 through August 2005. We sought participants who were knowledgeable, articulate, and willing to provide insight that would help us understand the world of forestry cooperatives (Patton 2002). The pool

from which to draw participants is not large. Our earlier efforts to organize and conduct a satellite conference on forestry cooperatives had acquainted us with many of the potential participants (Jakes 2006). Many of today’s cooperatives are found in the Midwest (Rickenbach 2006b) and much of the research related to cooperatives is being conducted in a handful of centers in the eastern United States. We were interested in having some geographic diversity, so we selected 15 individuals from Massachusetts, Minnesota, Mississippi, New York, Washington, and Wisconsin who had firsthand knowledge of at least two forestry cooperatives as our Delphi participants.

The Delphi process used here consisted of three rounds of questions. First, participants were asked to share their insights about the benefits, strengths, weaknesses, opportunities, and threats (characteristics) of forestry cooperatives in the United States (round 1). The research team compiled the responses from round 1 and developed a series of themes for each characteristic. Next, each participant ranked the importance of the themes identified for each characteristic (round 2). The research team summarized the results of round 2 and asked participants to repeat the ranking process so that a consensus was reached among participants on the importance of the themes (round 3). Data were gathered via e-mail sent between a facilitator and the participants. Data collection approaches were first reviewed by peers and approved by the Institutional Review Board at the University of Minnesota.

In round 1, responses for each characteristic were organized into themes. There were 20 themes for strengths of forestry cooperatives, 24 themes for weaknesses, 17 themes for opportunities, and 18 themes for threats. After round 1, we categorized benefits into the following three categories, which were carried forward in round 2: (1) benefits to members of forestry cooperatives with 11 themes, (2) benefits to forestry cooperatives as organizations with 7 themes, and (3) benefits to communities with 5 themes. For round 2, participants selected the most important themes within each of the five characteristics of forestry cooperatives. The most important themes identified by at least 27% (4 of 15) of the respondents were forwarded to round 3. In round 3, participants were asked to indicate the importance of the theme to the characteristic using a 4-point scale (from 1 = not important to 4 = very important) and underline the one

**Table 1. The four questions answered in a SWOT analysis of forest landowner cooperatives in the United States.**

Internal factors	External factors	
	Opportunities	Threats
Strengths	Which opportunities can forest landowner cooperatives seize using their organizational strengths?	How can forest landowner cooperatives counteract the influence of threats by using their strengths?
Weaknesses	How can weaknesses be overcome by taking advantage of opportunities?	How can forest landowner cooperatives avoid or minimize situations where their weaknesses match threats?

theme they thought was the most important for each characteristic. The themes were randomly ordered within each characteristic.

Round 3 responses were summarized according to a combined level of importance, with 3 and 4 lumped into the “important” category and 1 and 2 into the “not important” category. When the theme was selected as important by at least 57% (8 of 14) of the experts under this revised 2-point scale, we stated that participants “agreed” that the theme was important to that characteristic of forestry cooperatives.

### Data Analysis—Strength, Weakness, Opportunity, and Threat (SWOT)

SWOT analysis is a tool for strategic research and organizational management based on the assumption that an organization’s effectiveness can be maximized by building on its strengths and opportunities and minimizing its weaknesses and threats (Gilligan and Wilson 2003, Nijssen and Frambach 2001, Pearce and Robinson 1991). It provides a logical framework for analyzing the internal (strengths and weaknesses) and external factors (opportunities and threats) that impact the effectiveness of an organization. A SWOT analysis was performed on the results of the Delphi process.

The SWOT analysis was performed using the 2-point scale results for the most important strengths, weaknesses, opportunities, and threats identified through the Delphi process (round 3). The SWOT analysis consisted of the following four sets of analyses: a strength-opportunity analysis, strength-threat analysis, weakness-opportunity analysis, and a weakness-threat analysis (Table 1).

### Characteristics of Forest Landowner Cooperatives

Participants identified a number of benefits in having landowners organize as a

forestry cooperative—benefits to members, to the cooperative business itself, and to the community (Table 2). Although the numbers in Table 2 indicate the level of importance that Delphi participants attached to the different themes, the more interesting information is in the story these numbers tell. Our participants believe that a cooperative, being user owned and user controlled, is better able to deliver important services to members, including improved access to knowledge and information; to necessary resources such as labor, services and equipment; and to markets. Cooperatives are effective in reducing operating costs through economies of scale and in enhancing market participation, resulting in increases in landowner income. Ultimately, cooperatives are seen as empowering landowners to achieve their ownership objectives, resulting in higher landowner participation in forest management. Forestry cooperative efforts to bring people together to promote better forest management on family forests not only improve environmental health but also community cohesiveness and stability.

The cooperative structure has strengths that enhance a cooperative business’ organizational abilities. Some of these strengths are similar to benefits identified earlier, including creating opportunities for economies of scale, providing important member services, and facilitating forest management (Table 2). However, by bringing together people with similar views of forest management and the production, marketing, and distribution of diverse forest products, cooperatives help forest landowners achieve common goals that are difficult to achieve individually. This concept of shared management and action was identified as the greatest strength of cooperatives.

There also was support from the Delphi participants for the idea that cooperatives provide an alternative for reaching absentee landowners who might not be attracted by

traditional landowner assistance programs (Table 2). This strength would facilitate broader participation in forest management by a more diverse ownership base. Forest certification also may attract more landowners to forest management. The cost of certification can be problematic for individuals, but forestry cooperatives offer certification to their members at a reasonable cost.

Several of the weaknesses of a cooperative structure focus on its dependence on members to volunteer the knowledge, skills, and abilities necessary to keep the business functioning (Table 2). High initial start-up and operating costs, with generally inadequate sources of funding, make this dependence on members critical to the survival of the business in its first few years of operation. The number of members who have significant amounts of time available to keep the business functioning effectively is limited. Members who have critical leadership skills are even fewer in number. Active members, critical to the cooperative’s success will ultimately burn out, leaving the business searching for new members to do the necessary work.

Another weakness observed in previous, recently closed, and currently operating forestry cooperatives is an insufficient attention to business and marketing strategies (Table 2). Although member commitment and action are important to a cooperative’s success, a business plan that guides members and maintains focus on goals is essential to the long-term stability of the business.

The state of family forest management provides some opportunities to forestry cooperatives to improve their businesses. There are significant numbers of family forest landowners, those living on their forestland both full- and part-time, who are not currently involved in forest management (Table 2). Many of those involved in forest management are searching for information and support that may not be provided by other assistance programs. Members of both groups have diverse interests—in forest certification, nontimber forest products, wildlife habitat, stewardship, and harvesting—that are easily addressed within a member-controlled forestry cooperative. These under- and unserved landowners provide cooperatives opportunities to build their membership base.

The demand for niche timber products, such as medicinal plants, offer enhanced marketing opportunities for cooperatives and a new source of income for members

**Table 2. Attributes identified as important for different characteristics of forest landowner cooperatives through round 3 of the Delphi method.<sup>a</sup>**

Attributes by characteristic	Column A Percent rating the theme as "important"	Column B Percent selecting the theme as "most important"
Benefits to forest landowner cooperative members		
Improved access to new knowledge and information	86	43
Increased access to labor, services, and equipment	64	21
Increased income	64	14
More satisfaction in forestland ownership and management	64	14
Benefits to forest landowner cooperatives		
Enhanced ability to deliver services to members	79	36
Improved market participation	57	29
Reduced operating costs	57	7
Benefits to communities		
Improved community stability/cohesiveness	57	29
Improved environmental health	43	36
Strengths		
Brings together like-minded people to work together toward achieving common goal(s)	93	29
Creates opportunities for economies of scale	86	14
Provides services that are important to the membership	86	7
Focuses on needs of members	79	14
Provides an alternative approach for reaching absentee landowners and those who are not attracted to other landowner assistance programs	64	14
Facilitates forest certification for members	64	0
Weaknesses		
Members and volunteers burn out	86	7
Volunteers and/or members who can remain involved and/or committed are limited	79	21
Business and marketing strategies receive insufficient attention	71	29
Volunteers lack skill set necessary to fill leadership positions	67	0
High initial start-up and operational costs with inadequate funding sources	64	29
Opportunities		
Large number of underserved landowners	86	36
Large number of uninvolved landowners	86	7
Enhanced marketing opportunities	79	21
Landowners' multiple diverse ownership objectives	64	21
Increased interest in cooperatives	64	7
Increased demand for material from private land	57	0
Threats		
Challenges in a cooperative structure	79	14
Lack of understanding of what cooperatives are	64	7
Landowners preference for independence	57	7
Lack of resources and personnel at community level	57	7

<sup>a</sup>Attributes listed for each characteristic were identified as "important" by at least 27% of the participants in Delphi round 2. Columns A and B come from round 3. Column A shows the percentage of participants who rated an attribute as 3 or 4 (on a scale from 1 = not important to 4 = very important). Column B shows the percentage of participants who selected the attribute as "most important" for a given characteristic.

(Table 2). Decreased harvests from public land have increased demand for timber products from family forests and offer additional opportunities for increased income for the cooperative and its members.

Finally, there appears to be increased interest on the part of government, resource agencies, and nongovernmental organiza-

tions (NGOs) in cooperative business structures (Table 2). Tapping into this interest can provide forestry cooperatives with financial, technical, and other support that is critical in the early stages of business formation.

Threats to cooperatives from outside the business itself come from several sources. First, the lack of stakeholders' knowledge

about cooperatives is a threat to a business that tries to organize around cooperative principles (Table 2). This lack of knowledge may make it difficult to attract members, generate government support, or sell products to potential consumers. Communities may lack the capacity to support cooperatives—the networks, organizations, and infrastructure on which the cooperative will build. Landowners may value independence more than the benefits of cooperative action, making it difficult to build membership. All of these threats—lack of knowledge and community capacity, conflicting landowner values, and even local laws and regulations—may make it extremely difficult if not impossible to form a forestry cooperative.

## Discussion

The SWOT analysis provides a framework for discussing the Delphi findings—a framework that illustrates how a cooperative's strengths can help the business seize opportunities and counteract threats, and how its weaknesses may be magnified by threats or minimized by opportunities.

**Using the Strengths of a Cooperative to Seize Opportunities.** By matching a cooperative's strengths with opportunities existing outside the organization, members can identify target areas where the cooperative may have the greatest chance for success. The strengths of forestry cooperatives are that they bring together like-minded people to focus on forest management needs and provide important services such as forest certification and other activities that offer the advantages of economies of scale. They also may offer a structure that is better suited for reaching absentee forest landowners than traditional assistance programs. The success of this outreach effort will depend, in part, on a cooperative's ability to show its flexibility in addressing multiple, diverse ownership objectives.

Delphi participants agreed that there are a large number of forest landowners who are not being adequately served by other assistance programs or are not actively involved in managing their forestlands. Those landowners offer an opportunity for cooperatives to expand their membership. It also may be possible to draw new members by building on a perceived increase in interest in cooperatives and cooperative activity.

Forestry cooperatives can inform potential members of the diverse benefits they provide by publicizing their activities in the community newspaper, staffing a booth at

county fairs or other community celebrations, hosting tours or education days on a landowner's property, or by placing signs on a member's property along adjoining public roads. These educational efforts also can increase the interest of government, resource agencies, and NGOs in supporting a forestry cooperative through various forms of assistance and securing critical start-up funding.

Forestry cooperatives have an opportunity to contribute to satisfying the increasing demand for wood and other forest products from family forests. By sustainably managing members' forests as one block and taking advantage of economies of scale, cooperatives can compete in a marketplace that is becoming more demanding and diverse.

Enhanced marketing opportunities for a cooperative's products was recognized as an opportunity by Delphi participants. Anecdotal evidence suggests that there is a potential niche market for locally produced sustainable forest products. Marketing efforts could focus on architects and homebuilders who may have an interest in using locally grown timber or who have clients who are increasingly demanding "green" materials. As consumer knowledge and interest increases and demand for sustainably produced items continues to expand, marketing opportunities for cooperatives that focus on forest certification will grow.

***Minimizing the Weaknesses of a Cooperative by Capturing Opportunities.*** Our Delphi participants identified two primary weaknesses of cooperatives related to membership—members and volunteers of forestry cooperatives tend to burn out, and the number of members who can volunteer significant time or expertise to make the business profitable is limited.

As mentioned earlier, there are opportunities for increasing membership by reaching out to forest landowners not currently involved in forest management or underserved by other assistance programs. Other potential sources of members are local residents and businesses or organizations that recognize the importance of community stability and cohesiveness and wish to support cooperatives that produce these benefits. Builders and other potential consumers of cooperative products also may be interested in membership. By broadening their membership to those who do not own forestland, forestry cooperatives can promote interest in their goals and objectives and play a broader role in educating the public. These nonland-owning members could be charged a mem-

bership fee that would help defray the costs of cooperative-sponsored educational programs, new equipment, or improved services. In return, these nonlandowner members could be offered a discount on products produced or events sponsored by the cooperative. This is the model used by many food cooperatives.

At some point, it may be necessary to hire staff to operate the cooperative business. Although this is an obvious expense, the benefits of obtaining necessary skills when they can make a difference, stabilizing leadership, and easing the burden on members can override the cost.

In addition to membership challenges, a weakness of cooperatives often is the lack of members with the necessary skills to develop and manage a cooperative business. To be able to draw on the talents of their members, cooperatives would benefit from an inventory of member skills and attributes. Broadening membership to community members who do not own forestland would expand the skills available to a cooperative. Sympathetic local individuals also might be approached to provide pro bono services to a cooperative without requiring membership. As an example, lawyers, accountants, tax preparers, marketing specialists, and other professionals could increase the business skills of the organization on an as-needed basis.

Delphi participants recognized that a common weakness of cooperatives is insufficient attention to business and marketing strategies. Members can learn a lot about cooperative business management by studying successful forestry cooperative models in the United States and in other countries such as Sweden, Canada, and Japan, as well as agricultural cooperatives. Although the political and institutional context varies between countries and commodity groups, lessons can be learned that may provide the key to a cooperative's success. Partnering with other cooperatives with similar philosophies and complimentary products also can provide beneficial exposure to a broader potential membership and to more consumers. For instance, a partnership could be developed with a food cooperative that sells edible non-timber forest products or wood products such as salad bowls, salad tongs, or salt and pepper shakers.

In addition to cooperatives, there are other successful local businesses from whom cooperative members can learn. Other businesses may have experience with grant writ-

ing, bookkeeping, and business planning that would be beneficial to the cooperative. Developing relationships between the cooperative and other businesses also can build support for the cooperative and its products within the broader community.

***Using the Strengths of a Cooperative to Counteract Threats.*** One threat identified for forestry cooperatives is the belief that the cooperative may not be the best way to structure the business. This may be caused by in part the limited number of successful forestry cooperatives that can serve as models for structuring and operating the business. This perceived lack of support for the cooperative model is strengthened by the perception that many landowners prefer independence to cooperative action. Forestry cooperatives will not ever be able to win over all landowners. But by focusing on member needs and providing services that are difficult or expensive to obtain as an individual, the number of cooperatives and their members will continue to grow.

The impacts of high initial start-up and operational costs are major weaknesses in so many cooperatives, but they can be minimized by stressing business planning that takes advantage of increasing demand and expanding markets. The increase in interest by foundations, NGOs, and government also may increase the availability of grants and other funding to help defray these costs. Perhaps the best way to overcome the lack of resources at a community level is the cooperative process itself, where like-minded people are brought together, recognize the problem, and work together to overcome threats and take advantage of opportunities.

***Building Awareness of Weaknesses to Avoid Threats.*** Weaknesses and threats identified in the study point to the need for the leaders of forestry cooperatives to understand how to run a business that is comprised of many volunteer members. Part of running a business is developing realistic goals and designing decisionmaking frameworks to achieve these goals. Although individuals who start these organizations generally have tremendous energy and a vision, they may lack practical experience in accounting, human resource development, marketing, and networking. Seeking assistance within the membership, especially during the start-up phase, is critical. Assessing the current organizational capabilities and shortcomings is necessary.

In addition, there is evidence that local businesses, particularly forestry consultants,

see cooperatives as a threat to their livelihood. However, by bringing these businesses into the cooperative, they gain access to a network of members committed to the goals of the cooperative, with the potential to build clients for their activities outside the cooperative.

One way for cooperatives to minimize weaknesses and avoid threats is to develop networks with other forestry cooperatives so they can learn from each other's mistakes and successes. Networking can start with organizations such as Cooperative Development Services and the University of Wisconsin Center for Cooperatives. These organizations offer information and assistance in cooperative development, technical assistance, and extension and outreach programs related to cooperative business principles and leadership. Another approach might be to establish a federation of forestry cooperatives in the United States. While forestry cooperatives promote sustainable use of forests at the local level, a national federation could promote sharing of experiences, educate the public about cooperatives, and serve as a "go-to" place for consumers to find products, which would be extremely beneficial.

Finally, if current land-use trends persist, we can expect continued parcelization of forestlands and increasing numbers of family forest owners. This trend can be both an opportunity and a threat to forestry cooperatives. Although these new landowners may enable forestry cooperatives to increase membership and expand their cadre of skilled people, the values of these new landowners may differ significantly from those in the local community, resulting in a general distrust between the community and new landowners. Forestry cooperatives may be able to help facilitate mutual learning between communities and new landowners, thereby promoting a sense of community.

## Summary

Forestry cooperatives offer many advantages to members and the surrounding community that are either difficult to provide or not available under other landowner assistance programs. Among others, their ties to a local area, opportunities to learn from or share information with other local landowners, access to locally trusted services, and the creation of economies of scale make them an appealing option for better forest management on family forests as well as enhanced community cohesiveness and stabil-

ity. With a growing population of family forest owners, opportunities abound for forming new cooperatives and growing the membership within existing organizations.

Despite the many strengths and opportunities associated with forestry cooperatives, generally, they have struggled to develop viable, vibrant businesses. In some cases, it has been difficult to form a forestry cooperative. Their dependence on a volunteer membership base makes it difficult for them to keep the business functioning or to be strategic in their approach.

To avoid repeating the mistakes made by the first wave of forestry cooperatives in the United States, today's cooperative ventures need to carefully assess the internal and external factors that effect their organization. This includes providing a focus on membership recruitment and retention by concentrating on meeting member needs, developing a business plan, reaching out into the community to broaden their membership and form networks, and learning from and partnering with others to facilitate better business management and marketing strategies.

This research helped identify possible benefits, strengths, opportunities, weaknesses, and threats of forestry cooperatives. To develop policies and programs to support these efforts, it would be beneficial to conduct a broader survey of members, supporters, and researchers to determine the extent to which these findings agree within the relevant populations, including all currently functioning forestry cooperatives.

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