

Forest Management in the Interface: Forest Cooperatives¹

Sarah F. Ashton, Bruce Hull, Rien M. Visser and Martha C. Monroe²

Economies of scale make interface forest management challenging. Many of the traditional techniques for vegetative management such as harvesting timber and pesticide application are expensive and only become reasonable when taking advantages of economies of scale afforded by large, contiguous acreages. The tendency of industrial forestry, just like industrial agriculture, is to grow larger, more mechanized, and more highly capitalized in order to take advantage of economies of scale. Unfortunately these practices do not work well in the rapidly fragmenting interface forest where most forest landowners live and own land.

Fragmented property ownership and diverse management objectives present additional challenges for vegetation management in the interface. Many ecological systems cross property boundaries and require some coordinated management effort. Likewise, desired forest products such as water, wildlife, wildfire risk-reduction, and most amenities require many more acres and resource conditions than are typically available on small interface forest tracts. Thus, to achieve desired forest qualities, some form

of cross-boundary management and cooperation may be necessary.

One means to motivate coordinated management among multiple owners or managers is to implement the top-down approach of government-enforced regulation. An alternative method is to implement a bottom-up, voluntary approach of cooperation. In a review of strategies to implement ecosystem management in the U.S., Sample (1994) concluded that voluntary, cooperative strategies were more likely to succeed in mixed ownership, especially in the South, where property rights concerns are high.

Expecting landowners to engage willingly and actively in cooperative management practices may contradict the old adage that “good fences make good neighbors.” This might mean there are potential obstacles to voluntary strategies for cooperative management on private lands. Or perhaps the old adage means that neighbors prefer clearly defined property boundaries and hence clearly defined responsibilities; if so, cooperation among neighbors need not erode these boundaries nor obscure these responsibilities.

-
1. This document FOR 176, is one of the Forest Management in the Interface series of the School of Forest Resources and Conservation, Florida Cooperative Extension Services, Institute of Food and Agricultural Sciences, University of Florida. This fact sheet was first published in 2006 as part of Changing Roles: Wildland-Urban Interface Professional Development Program. It was reviewed and revised for EDIS in August 2008. Visit the EDIS Web Site at <http://edis.ifas.ufl.edu>.
 2. Sarah F. Ashton, Program Assistant, Bruce Hull, Professor, and Rien M. Visser, Associate Professor, Virginia Polytechnic Institute and State University, Department of Forestry, Blacksburg, VA 24061. Martha C. Monroe, Associate Professor, School of Forest Resources and Conservation, Institute of Food and Agricultural Sciences, University of Florida, Gainesville, FL 32611-0410.

The Institute of Food and Agricultural Sciences (IFAS) is an Equal Opportunity Institution authorized to provide research, educational information and other services only to individuals and institutions that function with non-discrimination with respect to race, creed, color, religion, age, disability, sex, sexual orientation, marital status, national origin, political opinions or affiliations. U.S. Department of Agriculture, Cooperative Extension Service, University of Florida, IFAS, Florida A. & M. University Cooperative Extension Program, and Boards of County Commissioners Cooperating. Larry Arrington, Dean



Figure 1. Multiple property ownerships can make forest management more challenging, unless owners work together. Credits: Photo: Harry Groot

Several studies of landowners suggest that some forms of cooperation are acceptable (Bliss et al. 1997; Hull, Johnson, and Nespeca 2000; Williams and Ellefson 1997). These and other studies show that cross-boundary cooperation can take many forms, including

- informally sharing of information, equipment, labor
- coordinating of management across boundaries (e.g., prescribed fire, timber harvest, hiking trails)
- protecting privacy buffers and creating scenic vistas
- creating wildlife corridors for migration and cover
- meeting wildlife habitat needs (water on one property, cover on another, forage on another)
- sharing access roads, and
- developing formal business arrangements that coordinate management, sales, and profits.

Temptation, Time, and Trust

There are several factors that determine whether or not a landowner is interested or able to participate in a cooperative. Those interested in organizing a cooperative should emphasize the incentives that coop membership would provide. The informal coordination of management activities and management goals requires temptation, time, and trust.

Forest landowners must be *tempted* to participate. That is, they must be made aware that they can realize more through coordination with neighbors than they can alone. Landowners highly value scenery, privacy, wildlife, and related forest products. Many of these qualities can be enhanced through cooperation. In addition, management expenses can be reduced by coordinating prescribed fire, mechanical operations, or herbicide treatment across several properties.

Forest landowners must be assured that the *time* it takes them to make and monitor these arrangements is minimal, or at least worth the benefits that result. Lengthy, drawn-out meetings showing little progress quickly lose landowner interest and participation.

Each forest landowner must have *trust* that operations will be conducted in a fashion that respects property rights, privacy, and goals. They must trust their neighbors, the professional offering advice, and the operator working in their forests. Demonstration projects, community leaders, and agency support may help create trust in some but not all instances.

Natural resource professionals are critical to all three conditions of coordinated land management: temptation, time, and trust. They can see the bigger picture and help make landowners aware of the benefits of forming cooperatives. They can help organize a time-efficient process. And, they can establish credibility, networks, and demonstration projects that build trust.

Types of Forest Cooperatives

Landowner Associations

Many conservation developments have large common properties. In other areas, landowners are required to donate land and/or place deed restrictions on a certain percentage of their land. For example, someone may purchase 50 acres and be allowed to build on 20 acres and keep the other 30 acres undeveloped. Some conservation developments cluster the site modifications, keeping larger contiguous lands to be managed. These lands can provide amenities and ecological and financial benefits to all landowners.

"Virtual" or Regional Cooperatives

The traditional cooperative is composed of landowners living adjacent or nearly adjacent to one another. However, a "virtual" cooperative can have members living within a region that cooperate in marketing, perhaps certification, and perhaps also land management. Despite the distance between properties, this type of cooperative makes it possible to create a detailed inventory of timber and non-timber products on member properties around a large region. Buyers looking for supplies (e.g., specialty species, burls, pine straw) can contact the cooperative to see if the resource is owned by one or more landowners and, if so, place a bid on it. These cooperatives will rely heavily on new advances in detailed inventories, information processing, and forest products marketing and processing.

Formal Forest Cooperatives

Formal forest cooperatives require considerable resources to establish and are likely to succeed only when special social and environmental conditions are met. Nonetheless, when these conditions exist, cooperative arrangements provide a powerful tool for managing interface forests. Successful cooperatives have a long track record in Europe, especially in Scandinavia. They are not new to the United States but have only recently become a tool for forest management (Nadeau et al. 2002).

Forest cooperatives may enable proximate landowners to join together to become incorporated into a business. Each cooperative is unique. Each reflects the interests of its members, the conditions of its forest resource, the market and processing opportunities for forest products, and the concerns and resources of its surrounding community.

There are many ways for forest landowners to buy into a cooperative. One way is for individuals with common goals and interests to join by purchasing a one-time membership. For example, members of Wisconsin's Sustainable Woods Cooperative invest \$100 for their stock plus \$2 per acre of forest. In purchasing this membership, the individual agrees to bring some portion of his or her forestland resources to a collective pool. Members may also contribute other resources such as

knowledge, equipment, and marketing opportunities, but in almost all cases, forestland is required to become an invested member of a forest landowner cooperative. Members share benefits and costs in proportion to their invested acreage.

Successful cooperatives have several key components. They usually begin with a steering committee dedicated to developing a clear and concise vision for the organization. The steering committee provides a source of information and guidance in the initial developmental stages. Steering committees can search for interested landowners using a mix of information sessions and surveys. A lack of initial interest or resources will almost certainly hinder a cooperative's progress. At some point successful cooperatives will need to decide whether or not to obtain legal status. Legal status allows a cooperative to conduct formally and legally a business as an entity. States differ in what they require for corporations to become legal business entities, but typically some formal contract of incorporation must be developed, approved, and filed with state authorities before the cooperative engages in business transactions. In this way, forest cooperatives are little different from business corporations. Obtaining legal status may not be necessary if a cooperative is interested only in providing informal educational or volunteer service opportunities.

Cooperatives must also map out a business plan. These plans typically include an executive summary, a brief description of the organization and organizational structure, an analysis of resources and finances, a market analysis, a discussion of research and development, as well as a marketing and sales plan. As the idea for the cooperative firms up, potential members will need to be identified and signed up, finances will have to be secured, and a transfer of power from the steering committee to a board of directors will have to take place. A board of directors is different from a steering committee. It is a formally elected body with decision-making authority. It has the legal responsibility of protecting the cooperative's assets, representing the member's interests, planning strategically, communicating with the membership, and managing personnel.

Successful cooperatives can have diverse memberships. Many types of landowners can join: landowners with 20 acres of land as well as landowners with many hundreds of acres, landowners with little resource management experience as well as landowners with natural resource degrees, landowners who are looking for alternatives to traditional methods of forest management as well as landowners rooted in traditional management, and finally but certainly not limited to, landowners with a lot of time to invest as well as landowners with little time. Most cooperatives allow landowners the option of cashing out their investments at any time. Members may vary in their contributions, but importantly, they all need to agree on the general mission and vision of the particular organization they choose to join. The prevailing goal of most forest cooperatives in the United States is the promotion and practice of profitable and sustainable forest management.

Benefits of Forest Cooperatives

Forest owner cooperatives provide a wide range of benefits and services to individual members, some of which are outlined here.

- **Trusted knowledge.** Members share knowledge and experience. Some members may be more knowledgeable than others. Cooperatives provide a credible option for landowners who want to manage their forested land but lack familiarity with, access to, or trust in the professional forestry community.

- **Increased property access.** Right-of-ways are constructed (or already exist) through neighboring property allowing for better coordinated timber harvests and other management activities.

- **Coordinated forest health.** Management activities promoting forest health (e.g. prescribed fire, stand thinning, herbicide use, insect control) are carried out among properties in the cooperative.

- **Shared work activities.** Members have access to more reasonably priced equipment, whether through purchase or rental. With a variety of individual interests, members also have the flexibility

of focusing their time and energy on particular coop activities that interest them.

- **Profit.** Cooperatives make timber management feasible because aggregation of timber resources increases economies of scale for equipment and opens access to markets (Nadeau et al. 2002; Kittredge 2003; Barten et al. 2001). While services are provided to all members of the cooperative, the financial benefits gained are primarily based on the amount of business each individual member chooses to do with the cooperative.

- **Value added.** Some cooperatives provide the coordination of processing and marketing for wood and non-timber forest products (NTFP), value-added processing, and access to a growing specialized market for certified timber products (Groot 2002).

- **Community development.** Cooperatives, by their very nature, encourage team work, fellowship, and trust among members and the surrounding community. For example, members of the Cook County Sustainable Forestry Cooperative in Minnesota hold fun-filled, educational field days targeted to members as well as community residents.

- **Political clout.** Numbers give cooperatives political visibility because they translate to votes and donations. A representative of a cooperative may get more access to political leaders and agency staffers.



Figure 2. Custom wood flooring is a value-added service that cooperatives can provide. Credits: Photo: Jim Berkemeir

Forest owner cooperatives also provide a wide range of benefits and services to local communities and their surrounding regions. Wood or non-timber forest products production can go directly into the local economy in the form of harvesting, processing,

and marketing. As an example, the first significant timber sale by Vermont Family Forests, a cooperative formed in 1995, went to a local college for the construction of a science building (Barten et al. 2001). Regions benefit ecologically through watershed protection, air quality, and biodiversity and economically through a sustainable wood and non-timber forest product supply (Nadeau et al. 2002; Kittredge 2003). Additionally, cooperatives that actively manage their forests may be able to reduce fuels and protect communities from wildfire.

Costs and Reservations of Forest Cooperatives

There are numerous challenges to the feasibility and viability of forest cooperatives. Some of the more important issues concern the presence or absence of an effective governance, membership and retention, start-up costs (e.g., certification costs and equipment), and marketing.

- **Governance.** At the very least, a forest cooperative needs a committed, knowledgeable board, capable of being clear and succinct about the vision, mission, and direction of the organization in order to recruit and maintain members. Lack of leadership and organization will raise a red flag for prospective members, discourage current members, or lead to the dissolution of an existing cooperative.

- **Property rights.** Cooperatives require that landowners allow others some amount of access and influence over their land. Cooperative members might be required to forego private business opportunities regarding their invested forestland for the good of the cooperative. Not all landowners are comfortable with these constraints.

- **Start-up cost.** This is perhaps one of the most important issues. Like any small business, it can be very expensive to start a forest cooperative. For example, if an organization markets itself as certified sustainable, not only does it have to pay for the certification, but it must first pay a forester specializing in that particular certification to write management plans for each landowner in the cooperative. Equipment and expertise are also important. Furthermore, if the organization decides to engage in the value-added process as a way of

increasing profit, it incurs more costs in order to purchase additional equipment (e.g., kilns, planers, packaging, etc.).

- **Marketing.** Forest cooperatives must market their products and, perhaps even more important, the process used to create their products. Currently, certified sustainable wood is found in large hardware chains. Co-ops must find a way to sell the idea of “local,” certified sustainable wood even if it costs a little more. If they cannot sell their services and products, they are likely to fail.

- **Lack of time, trust, or temptation.** Some cooperatives fail due to lack of landowner interest. Management or commercial activities become too time-consuming or distrust may arise among the group, making landowners less enthusiastic about being involved. There must be incentive for people to remain involved.

Funding

Although the 2002 Farm Bill acknowledged the importance of cooperative and community forestry, special funding to support forest cooperatives failed to pass. Many cooperatives never get off the ground because they cannot find or do not take an adequate amount of time to find the funding to support their early endeavors (Foster, 2002). There are small grants available through state and federal government and private foundations; however, larger investments usually come after an organization has operated successfully for a period of time.

Examples of Forest Cooperatives

The Blue Ridge Forest Landowner Cooperative

Conceptualized by Harry Groot, owner of a low-impact harvesting and millwork business, the Blue Ridge Forest Landowner Cooperative is in its very early stages of development. The cooperative is actively pursuing Forest Stewardship Council (FSC) certification, working on a business plan focused primarily on value addition, and becoming legally incorporated. Thus far, funding has come from small grants (e.g. Southern States Cooperative, Inc., Appalachian Forest Resource Center, etc.) and

private donations. Upon incorporation, the cooperative hopes to have roughly 36 members collectively holding between 8,000 and 10,000 acres. For more information, contact: Next Generation Woods, Inc., 540-639-3077 or Co-op@nextgenwoods.com.



Figure 3. Members of the Blue Ridge Forest Cooperative discuss cooperative management options. Credits: Photo: Harry Groot

The Forest Bank

A program initiated in 1995 by The Nature Conservancy, the Forest Bank promotes economic productivity while ensuring the protection of biodiversity and ecosystem health on private forestland. Landowners participating in the program agree to waive development rights on some, if not all, of their forestland, and in return receive an annual dividend based on their participation. The collection of land is then managed by the bank. This program, still in its early stages, has a prototypical example in southwestern Virginia. For more information, contact: The Forest Bank, 339 East Ave., Suite 300, Rochester, NY 14604.

National Demonstration Program in Community Based Forestry

Initiated by the Ford Foundation with support from the Community Strategies Group of the Aspen Institute and others, this program provides technical assistance, support, education, and market opportunities to minority private forest landowners. Demonstration communities exist in South Carolina, administered through The Penn Center, and Mississippi and Alabama, administered through the Mandingo Legacy Forestry Program.

Suggested Readings and Contacts

National Woodland Owners Association (NWOA) – Some states' chapters have helped organize co-ops. NWOA recognizes 20 to 30 landowners that are proximate to one another. NWOA may recommend they get a similar forester or forestry advice so that they can get a better deal on harvested timber. A knowledgeable and experienced negotiator can usually get a good deal. <http://www.woodlandowners.org/>.

Community Forestry Resource Center (CFRC) - Developed by the Institute of Agriculture and Trade Policy, the CFRC is a program that works to assist in the development and support of forest landowner cooperation and FSC certified products and markets. <http://www.forestrycenter.org>.

Cooperative Development Services (CDS) – An organization that has provided valuable guidance for most forest landowner cooperatives in the United States, whether directly with consulting or indirectly through a landowner startup guide called *Balancing Ecology and Economics*. The corporation is a private, nonprofit group specializing in professional business development and planning. <http://www.cdsus.coop>.

Rural Business/Cooperative Development Service—A service of the United States Department of Agriculture (USDA), the Rural Business/Cooperative Development Service provides support and guidance for the development of cooperatives. The USDA has specialists in most states distributing information and providing technical assistance and access to research and funding opportunities for forest landowner cooperation. www.rurdev.usda.gov/rbs.

References

- Barten, P. K.; D. Damery; P. Catanzaro; J. Fish; S. Campbell; A. Fabos; and L. Fish. 2001. Massachusetts family forests birth of a landowner cooperative. *Journal of Forestry* 99(3): 23-30.
- Bliss, J. C.; S. K. Nepal; R. T. Brooks Jr.; and M. D. Larsen. 1997. In the mainstream: Environmental attitudes of mid-South NIPF owners. *Southern Journal of Applied Forestry* 21(1): 37-42.

Foster, B. 2002. Forestry co-ops: Landowners join together to improve the land. *Tree Farmer* (September/October 2002): 6-11

Groot, H. H. 2002. Forest landowner cooperatives: Do they have a future in Virginia? *Virginia Forest Landowner Update* 16(1).

Hull, R. B.; J. E. Johnson; and M. Nespeca. 2000. Forest landowner attitudes toward cross-boundary management. In *Forest Fragmentation 2000 Conference*. Ed. L. A. DeCoster, 145-153. Alexandria VA: Sampson Group, Inc.

Kittredge, D. B. 2003. Private forestland owners in Sweden: Large-scale cooperation in action. *Journal of Forestry* 101(3): 41-46.

Nadeau, E. G.; placeI. Nadeau; M. E. Myers; J. Padgham; P. Guillery; and K. Fernholz. 2002. *Balancing Ecology and Economics: A Start-Up Guide for Forest Owner Cooperation*, 2nd Edition. Madison WI: Cooperative Development Services.

Sample, V. A. 1994. Building partnerships for ecosystem management on mixed ownership landscapes. *Journal of Forestry* 92(8):41-44.

Williams, E. M. and P. V. Ellerfson. 1997. Going into partnership to manage a landscape. *Journal of Forestry* 95(5): 29-33.