Forest Owner Cooperation in the Upper Midwest

Overview and Lessons Learned, 1998-2012

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I was fortunate to be able to interview people knowledgeable about all of the 13 forest owner cooperatives and one community-based forest owner association that operated in Wisconsin, Minnesota, Iowa, and the Upper Peninsula of Michigan between 1998 and 2012.

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Executive Summary

Forest Owner Cooperation in the Upper Midwest: Overview and Lessons Learned, 1998 – 2012 was written with three goals in mind: to provide information on community-based, forest owner initiatives in Wisconsin, Minnesota, Michigan, and Iowa; to review the forestry-related activities of agricultural co-ops in Wisconsin and Minnesota; and to draw lessons for future initiatives of this kind.

Chapter One provides an overview of 13 forest owner cooperatives, one forest owner association, and the forestry-related activities of seven agricultural cooperatives.

These initiatives are analyzed in Chapter Two. Only three of the 14 forest owner organizations are active today, two of them are dormant, and the rest have dissolved. None of the biomass and forest management projects of the seven agricultural cooperatives reviewed got beyond the feasibility study stage.

The organizations and projects are grouped into five strategic models in Chapter Two:

- Value-added processing and marketing
- Forest management services
- Peer-to-peer and other educational services
- Producer cooperatives (formed by forest owners active in forest management and forest product-related activities)
- Forest-related projects carried out by agricultural cooperatives.

Chapter Three presents nine lessons learned from these organizations, activities, and models and proposes five activities that have good potential to be carried out by forest owner cooperatives and associations and by agricultural cooperatives.

Four of the lessons presented in the chapter are broad ones, applicable to different forest owner cooperation models: the need for favorable public policy, a clear identification of member and co-op goals, the identification of markets for the organization's goods and services (including members and potential members as a central part of the organization's market), and a support network or organization for the local co-op initiatives.

The other five lessons presented in the chapter focus on the different models identified in Chapter Two. The chapter concludes that all five models have potential for success.

The value-added co-ops reviewed in this report failed for a variety of reasons: lack of a rigorous business plan, failure to adhere to the business plan, a high percentage of members who were not interested in value-added production and marketing, undercapitalization, lack of wood processing expertise, lack of markets and/or failure to

adequately access markets. The model itself has worked in Europe and Québec for decades and could work in the United States under the right circumstances.

Forest management services (or land care services), peer-to-peer learning, and producer co-ops all had various degrees of success during the 15-year time period reviewed in this report.

The biomass and forest management activities explored by the seven agricultural cooperatives did not develop for two primary reasons: 1) electrification projects to which the co-ops were planning to market biomass were shelved, and 2) the co-ops gave low priority to forest management in the face of high demand for corn and other agricultural products and services. This report stresses that the failure of these projects to develop was not due to the inherent incompatibility of these activities with agricultural co-ops, but to high demand for agricultural products and services and low demand for forestry products and services.

Five forest owner cooperation activities that have good potential growth opportunities in the United States in the next couple of decades are also identified in Chapter Three: land care, ecological services (services that benefit the general public, such as prevention of soil erosion, reduction of water contamination, carbon storage, and preservation of wildlife habitat), biomass aggregation and marketing, tree planting, and peer-to-peer forest owner education.

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Introduction

There are three primary purposes for this report:

- To provide information on the community-based, forest owner cooperatives and associations that operated in the Upper Midwest – Wisconsin, Minnesota, Iowa, and the Upper Peninsula of Michigan – between 1998 and 2012;
- To review several projects in Wisconsin and Minnesota that attempted to involve agricultural cooperatives in forestry-related activities; and
- To draw lessons from these experiences intended to benefit future initiatives to organize and operate community-based forest owner projects in this and other regions of the United States.

The report does not provide a comprehensive set of case studies of forestry co-ops and associations or of forestry-related activities of agricultural co-ops. Instead, the first chapter of the report presents brief overviews of these organizations and activities, focusing on the key factors related to their success or failure.

The second chapter identifies five strategic models into which the organizations and forestry-related projects can be grouped.

The third chapter presents nine lessons learned from these organizations, activities, and models and proposes five activities that have good potential to be carried out by forest owner cooperatives and associations and by agricultural cooperatives.

A note on definitions and selection criteria. A cooperative is an organization that is owned and democratically controlled by its members. Twelve of the forestry organizations reviewed in this paper were or are registered as cooperatives in the states in which they were formed – Wisconsin, Minnesota, Iowa, and Michigan. One organization – Wisconsin Family Forests – is incorporated as a not-for-profit association; and one, the Wisconsin Upper Peninsula Forest Improvement District (WUPFID) operated in a cooperative manner but was established under a special statute in Michigan.[i]

All of these organizations have in common a focus on local, community-based activities among private forest owners, especially on practices that are intended to improve forest management. Because the large majority of these organizations were incorporated as cooperatives and the other two operate primarily according to cooperative principles, the report sometimes refers to them collectively as cooperatives or co-ops.

In all of the co-ops reviewed in this paper, the members are forest owners. Forestry co-ops can also be organized by forestry workers (for example, co-ops of workers that carry out tree planting and/or other forest management activities on public lands) or as business co-ops (for example, co-ops of logging and/or forestry companies that purchase equipment and supplies, carry out joint projects, and/or market their services jointly). These kinds of forestry cooperatives are not the subject of this report.

The report also briefly reviews forestry-related projects involving six agricultural cooperatives, five of them incorporated in Wisconsin and one in Minnesota.

Chapter One. Overview of Upper Midwest Forest Owner Cooperatives

This chapter summarizes key information about 14 community-based, forest owner organizations as well as the forestry-related activities of six agricultural cooperatives. The overview is organized according to the state in which each organization was incorporated.

It is important to note that forest owner cooperatives are not a new phenomenon. There are many such co-ops in Europe, some of which have been in existence for over 50 years.[ii] The Province of Québec, Canada, has almost 50 forest owner organizations, incorporated as either associations or cooperatives.[iii]

In the United States, examples of forest owner co-ops date back to the early 20th century. For a variety of reasons, in particular the long cycle between timber harvests and the lack of public regulations and incentives related to private forest management, these cooperatives have not thrived in the United States. The number of these co-ops has ebbed and flowed over the past century. [iv] They have played only a very minor role in private forest management even though more than half of the 750 million acres of forest land in the United States is privately owned by an estimated 10 million individuals, families, and companies.[v]

In the late 1990s and early 2000s, there was a renewed interest by forest owners in cooperatives not only in the Upper Midwest but also in the Northeast, Northwest, and parts of the South. The reasons for this upsurge in cooperative formation are varied, but a common theme appears to have been a strong interest by some landowners in managing their woods, prairies, and other ecosystems in an environmentally responsible manner and the belief that they could better accomplish this goal by working together cooperatively.[vi]

1. Wisconsin

Between 1998 and 2002, there were six forestry co-ops and one community-based forest owner association formed in Wisconsin.

Sustainable Woods Cooperative, incorporated in 1998, was the first of these "new wave" forestry cooperatives.

Sustainable Woods was formed in southwestern Wisconsin by a committed group of environmentally oriented forest owners and a local forester with technical support provided by Cooperative Development Services, the Community Forestry Resource Center[vii] and other organizations. The development model for the co-op emphasized

the role of adding value to forest owners' harvested wood by processing it into dried lumber, flooring, and other products. The underlying strategy was to generate revenue for members from the sale of these value-added products that would provide the financial means for forest owners to improve the management of their woods.

This strategy was unsuccessful for a variety of reasons, including failure to adhere to the co-op's business plan, a lack of capital to enter into successful value-added processing activities, a lack of professional management of the processing facility, and an inability to develop adequate markets for the co-op's products. There was a more fundamental problem underlying these causes of failure: a poor fit between the primary goals of most of the members – the improved management of their forests – and the goal of the co-op – the processing and marketing of value-added wood products. The problems with the value-added approach taken by Sustainable Woods and other co-ops will be reviewed in more detail in Chapter Two.

The co-op struggled for several years to make this value-added model work. It was slowly gaining sales near its end, but they weren't sufficient to offset costs already accrued or to be able to invest in needed processing equipment. In 2003 the co-op shut down, paying off its suppliers but unable to pay off some loans received and the debt accumulated to some of its members for logs already received.

Hiawatha Sustainable Woods Cooperative was organized in 1999 and in many ways was based on the same development strategy as Sustainable Woods. The co-op's members were concentrated in western Wisconsin and eastern Minnesota. Hiawatha purchased and briefly operated a small wood processing facility in western Wisconsin. The co-op then leased a larger facility and transferred its operations there.

Similarly to Sustainable Woods, Hiawatha was not able to operate either facility profitably and for many of the same reasons: under-capitalization, inexperienced management, and inadequately developed markets.

Rather than shutting down completely, Hiawatha was able to continue operations after the closure of its processing facility. The co-op continued in existence for a few more years, primarily focusing on educational services for its members in the two states. However, there was a low level of participation in the co-op after the financial losses incurred during its value-added processing phase. Hiawatha never recovered the enthusiasm from its early days and is now inactive.

Washington Island Timber Cooperative, formed in 1999 in Door County in eastern Wisconsin, was another attempt at a value-added wood-processing co-op. This cooperative suffered a similar fate to its predecessors Sustainable Woods and Hiawatha. It went out of business because it was unable to master wood processing and market development amid limited financial and human resources.

Living Forest Cooperative, formed in far north-central Wisconsin at about the same time as Hiawatha and Washington Island, also initially adopted the value-added processing approach of its three predecessors. However, unlike these co-ops, Living Forest shifted to a forest management services emphasis in the early 2000s and continued to carry out these services until January 2012. In recent years, the co-op operated at or near breakeven. However, the debt incurred from its initial foray into value-added processing and marketing hung over the co-op and made its year-to-year existence precarious. When the co-op lost its forester in the fall of 2011, the Living Forest manager and board of directors decided it was time to throw in the towel and dissolve the co-op.

Kickapoo Woods Cooperative was formed in 2000 in a multi-county area of southwestern Wisconsin to the west of Sustainable Wood's service area.

In part because of the co-op organizers' ability to observe the struggles of Sustainable Woods and Hiawatha, Kickapoo Woods followed a very different development model, emphasizing educational and fee-based forest management services to its members and a strong aversion to incurring debt and to value-added wood processing.

During its first 12 years of operation, the co-op gradually built up its membership, which now approaches 400. A key part of its member-building strategy has been through holding approximately eight workshops per year, open to both members and non-members, on a range of topics that address different interests of woodland owners – everything from chainsaw safety to making maple syrup. Kickapoo Woods was able to provide these workshops at no or low cost because of a series of grants from a special fund dedicated to the Kickapoo Valley administered by the University of Wisconsin Foundation.

A parallel activity to these educational events has been a variety of forestry services provided to individual landowners on a fee basis. Services have run the gamut from forest management plans to timber harvest planning and oversight. Up until recently, these services were provided by consultants, for which the co-op received a

percentage of the service fee. Office administration was also provided on a consulting basis with the consultants working out of their own homes. Thus, there were minimal overhead expenses for the co-op. In fact, to the present day, the co-op has never been in debt and has always had money in its bank account.

Beginning in 2012, the co-op rented an office and hired a forester/administrator. Kickapoo Woods was able to pay for part of the cost of this organizational shift through a one-time grant from the American Forestry Foundation. Thus far in 2012, the co-op has been exceeding its projected earnings under this new model and is beginning to cash flow without grant support.

Prairie Ridge Forest Stewardship Cooperative was formed in northwestern Wisconsin in 2001. As with KWC, the organizers of the co-op did not want to make the same mistakes as Sustainable Woods and other value-added co-ops and instead emphasized the goal of improving members' forest management. Prairie Ridge never really got much beyond the exploratory stage. It had a largely volunteer forest service provider for a while, but when he left for a paying job, the co-op effectively faded away.

Partners in Forestry, located in far northeastern Wisconsin and incorporated in 2002, was organized from the start on a forestry services model as opposed to a value-added processing and marketing model. The initial idea was to generate enough of a volume of timber harvests among the co-op's members so that it could afford to employ its own forester. The forester, thus, would be accountable to the co-op's members rather than to the Wisconsin Department of Natural Resources or to the forester's own business interests.

The model was never fully implemented because of the inability to find a professional forester to carry out the cooperative forester duties. However, because Partners in Forestry had start-up grant support, the co-op did not incur debt as a result of this effort to employ its own forester. The co-op has been able to continue to operate as a forest management advisor to its members, to publish a newsletter, and to sponsor occasional workshops on topics of interest to members and other forest owners in the area.

Wisconsin Family Forests was formed as an association in 2000. It had a unique, “bottom up” approach to encouraging forest owners to work together at the local level. The association’s initial vision was to create a statewide network of township-based "alliances" in which each of the local groups would carry out educational and social events and joint work activities.

The first and most successful alliance was formed in Deerfield Township, Waushara County, in central Wisconsin. At one point, more than half the forest owners in the township were members of the alliance. Joint activities included clearing and maintaining sections of the Ice Age Trail, removal of invasive species, improving the local habitat for the Karner blue butterfly, and a variety of educational and social events.

The number of alliances peaked at about 10 in the early 2000s, with most of them concentrated in the central part of the state. The level of activities among the alliances varied dramatically, largely dependent on the energy and commitment of local leaders. However, no other alliance was as successful as Deerfield.

In retrospect, the general manager and many board members of Wisconsin Family Forests recognized that they had overestimated the ability of all-volunteer local groups to organize and sustain themselves. As a result, beginning in 2009, they attempted to take the organization in a different direction by establishing the Woodland Advocate Program.

This program was also based on local volunteers but was focused on peer-to-peer contact between trained Woodland Advocates and other forest owners in their townships or nearby townships. The core idea behind the program was to encourage forest owners to become more knowledgeable about, and to become more active managers of, their woods. The role of the advocate was to meet with landowners and encourage them to schedule a visit with a DNR or private consulting forester who could advise them on ways to improve their woodlands and, in some cases, work with them to prepare management plans.

The Woodland Advocate Program operated for a couple of years and had a mixed performance record, primarily based on the commitment and characteristics of the volunteers. In particular, having good social skills turned out to be more important than having a detailed knowledge about forestry. Wisconsin Family Forests submitted a number of grant applications to fund the program but was not able to secure adequate multi-year funding that would have provided a good test of the model.

WFF continues to exist but is dormant.

Forest-related activities of Wisconsin agricultural cooperatives. There are at least six agricultural cooperatives in Wisconsin that have explored forestry-related or

biomass activities: Goldstar (now merged with Countryside Cooperative), Shell Lake, and Midland Energy in northern Wisconsin and Premier, Landmark, and Farmers Cooperative Supply and Shipping Association (which merged with Wisconsin River Co-op in November 2012) in the central and western part of the state.

In the mid-2000s, **Shell Lake** and **Goldstar** were involved in an experimental project with Living Forest Cooperative. The first phase of the project was intended to encourage and assist members of the two agricultural co-ops to develop forest management plans. The second phase, which was not implemented, would have involved the two co-ops in processing wood chips into mulch and compost, bagging and branding these products, and primarily marketing them though co-op-owned convenience stores.

This project was unsuccessful for several reasons:

- There was no direct financial benefit to the agricultural co-ops in phase one, and, therefore, forest management planning was a low priority activity for co-op managers and staff.
- Living Forest did not make a strong effort to market the program.
- There was a boom in corn-based ethanol production and marketing at the time of this experiment, which further reduced interest in forest-related activities.

In 2010, CDS prepared a feasibility study for **Midland Energy Co-op**, evaluating the potential for the co-op to be involved in providing woody biomass to Xcel Energy's Bayfront Plant in Ashland, Wisconsin. The study was premised on a proposed major expansion of the plant's use of biomass as a source of electrical energy. Xcel backed away from the proposed expansion because of construction bids that came in well over the anticipated cost. Without the expansion, the potential for a biomass project at Midland was indefinitely put on hold.

Between 2008 and 2011, several co-ops in central and western Wisconsin explored the potential for aggregating biomass for electrical generation projects. These included **Premier**, **Landmark,** and **Farmers Supply and Shipping**. For the most part, these agricultural co-ops were looking at corn stover and other agricultural residue as the source of biomass. However, woody biomass might also have played a role in their aggregation and marketing plans because of its high density, high BTU content, and storability. However, as with the Xcel project in Ashland, the biomass energy projects for which the three co-ops were planning to provide feedstock were put on hold.

2. Minnesota

Headwaters Forestry Cooperative, founded in 2000 in Long Prairie, Minnesota, about 130 miles northwest of the Twin Cities, developed a model that was different from the Wisconsin co-ops. Most of the members of the co-op were actively involved in managing their woods and in various kinds of wood processing. The activities of the co-op included sharing of equipment, storage of wood in a renovated outbuilding, receiving certification through the Forest Service Council, joint marketing, and forestry education.

Today, the co-op is still in existence but is mostly inactive.

Cook County Sustainable Forestry Cooperative, located in the northeastern corner of Minnesota, was founded at about the same time as Headwaters. The co-op was engaged in a variety of activities, including forestry education, joint work projects, FSC certification, and the marketing of both wood and non-timber products such as Christmas boughs and woven baskets. It survived for almost a decade but never really took off as a successful co-op business. One of the constraining factors for the co-op was that the population of Cook County – Minnesota's largest county in terms of land area – is concentrated along the edge of Lake Superior, with much of the interior of the county being public forest lands. The linear geography and the low forest owner population of the county limited its ability to organize an adequate member base and to keep the membership involved.

Northwoods Forestry Cooperative is located in Aitkin County in north-central Minnesota. It was formed in 2002 and had a similar organizational base to Headwaters Cooperative. That is, many of the members were actively engaged in forest management and small-scale forest product processing and marketing.

A unique feature of the cooperative is that a subgroup of members formed a limited liability company and jointly purchased a portable sawmill. Today, there are about 10 co-op members who own the sawmill and use it on their own forest lands as well as leasing it to others.

The co-op also holds an annual meeting, featuring demonstrations of timber harvesting, use of the portable mill, and other forestry-related activities. The event is well promoted and draws a large number of members and nonmembers.

The co-op is still active largely because of the members' shared use of the portable sawmill, the popular annual meeting, and a board chair and other board members who are committed to the co-op.

Woodland Cooperative was formed in 2002 and located about 65 miles north of Minneapolis-St. Paul. The co-op's primary goal was to improve forest management on private land in a multi-county area. The steering committee for the co-op met periodically over a number of months, but the co-op did not get beyond the exploratory stage.

Federated Cooperative. CDS did some demographic research in coordination with Federated Cooperative, a large agricultural supply and marketing cooperative in eastern Minnesota, to determine the amount of forested land owned by co-op members and other forest owners in the co-op's service area. The research indicated a large amount of member-owned forest land, especially in the northern half of the co-op's service area. It also showed the potential for expanding the co-op's membership by marketing its services to non-member forest owners. However, this project suffered a similar fate to the Shell Lake and Goldstar projects in Wisconsin. The research was conducted when corn production and marketing activities were booming because of the use of corn for ethanol and because of large increases in commodity exports. As a result, forestry-related activities were very low on the co-op's list of priorities.

3. Iowa

Prairie's Edge Sustainable Woods Cooperative, incorporated in 2000, was located in the heavily wooded northeastern corner of Iowa. While it was being formed, there was much discussion about what the primary activities of Prairie's Edge ought to be. Members of the co-op had an opportunity to visit Sustainable Woods Co-op and observe the problems that the co-op was having in carrying out value-added processing and marketing activities. This visit played a large role in Prairie's Edge decision to focus on forest education and management services to members as its primary activities.

The co-op was able to secure some grant funds to hire a forestry advisor to assist co-op members. Local DNR forestry staff was also supportive of the co-op. However, the forestry advisory services of the co-op never really took off, and member interest in the co-op waned. The co-op has not been dissolved but has been inactive for several years.

4. Upper Peninsula of Michigan

Western Upper Peninsula Forest Improvement District (WUPFID) was formed in 1985 and covered the western half of the Upper Peninsula. WUPFID was formed under a special statute in Michigan and, thus, was neither an association nor a cooperative. However, the organization operated under cooperative principles, with the members electing the board of directors.[viii]

Another unique feature of WUPFID was that it was funded primarily by the state of Michigan during the 1980s and 1990s, with state funding being gradually phased out after that. At its peak, the organization had over 600 forest owner members and was a significant provider of timber management and harvesting services in the Western UP.

WUPFID closed its doors in 2004. The organization's timber sales income had remained fairly consistent over the years, but two key factors in the organization's demise were the gradual reduction in the State of Michigan's subsidy during the 1990s, and the fact that the WUPFID staff and board did not adequately prepare for the transition from state support to operating as an independent business. Although close to breaking even, WUPFID didn't implement an outreach program in its latter years that might have brought the organization to the breakeven point.[ix]

The statute that created WUPFID is still on the books in Michigan, but it appears unlikely in the near future that the state will invest funds to reactivate the organization or create similar districts elsewhere in the state.

Upper Peninsula Community Forestry Cooperative, as its name indicates, was located in the counties on the northern edge of the Upper Peninsula near Lake Superior. It was incorporated in 2002. The organizing group explored several alternative roles for the co-op, including forest management services, FSC certification, and value-added wood processing.

The UP forestry cooperative is another example of a cooperative that did not get much beyond the organizing stage. A small number of steering committee members ended up with the bulk of the coordinating work and eventually decided that continuing the development of the cooperative was not worthwhile.

Chapter Two. Evaluation of Forest Owner Organizational Approaches

This chapter reviews the overall performance of the community-based forest owner initiatives carried out in the Upper Midwest between 1998 and 2012. In conducting this review, these initiatives are clustered into five different models based on their strategies for cooperative approaches to improving private forest management. The review of models presented in this chapter sets the stage for identifying major lessons learned that can be applied to future cooperative forest owner programs, which is the focus of the Chapter Three.

The most important observation to make is that, in general, forest owner cooperative initiatives in the Upper Midwest did not fare well during the past 15 years. Of the 14 forestry cooperatives and associations reviewed in the previous chapter, only three are actively carrying out their missions today (Kickapoo Woods Cooperative, Northwoods Forestry Cooperative, and Partners in Forestry), two are still on the books but are inactive (Wisconsin Family Forests and Headwaters Forestry Cooperative), and the rest have dissolved. None of the seven agricultural cooperatives mentioned in Chapter Two that have explored forestry and biomass activities have initiated such projects to date.

These organizations and projects can be divided into five models based on the forest owner strategies they pursued:

- Value-added processing and marketing
- Forest management services
- Peer-to-peer and other educational services
- Producer cooperatives (cooperatives of forest owners active in forest management and forest product-related activities)
- Forest-related projects carried out by agricultural cooperatives

These models are reviewed below.

1. Value-Added Processing and Marketing

Sustainable Woods Cooperative, Hiawatha Sustainable Woods Cooperative, Washington Island Timber Cooperative, and Living Forest Cooperative (during its early years of operation) all pursued value-added wood processing and marketing strategies. And all failed to make this approach financially viable. As discussed in Chapter One, there were a number of reasons why this model didn't work for these co-ops.

The main factors were:

- Differing goals between co-op members and the lead organizers of the co-ops, the former primarily interested in improving forest management, the latter focused on value-added wood processing;
- Unrealistic business plans, no business plans, or failure to adhere to business plans;
- Undercapitalization, including the cardinal sin of launching business activities despite not attaining the capitalization requirements specified in the business plans;
- Lack of professional management, and processing and marketing expertise; and
- The high cost of small scale processing combined with the inability to access customers willing to pay higher prices for “good wood” products.

Based on the experience of forest owner cooperatives in Europe and Québec, we know that value-added co-ops can be successful companies.[x] Thus, there is not an inherent incompatibility between forest owner co-ops and successful value-added processing. Instead, the efforts in the Upper Midwest lacked the necessary ingredients for success, above all, forest owner members with a strong commitment to value-added processing and a set of market conditions and a marketing strategy favorable to such an approach.

2. Forest Management Services

Kickapoo Woods Cooperative provides the best example of the forest management services model. It is also the most successful of the Upper Midwest forestry organizations in terms of financial performance and membership.

Living Forest also successfully pursued this strategy after its initial, unsuccessful attempt at value-added marketing.

To some extent, WUPFID's timber marketing services on behalf of its members also fit within the forest management services model but WUPFID focused more on timber marketing than on forest management.

Partners in Forestry carried out forest management services provided by a forester in its early years, but, because of inadequate business volume and its problems in hiring a forester, the co-op backed off to a more informal services and educational approach, which is ongoing.

Both Prairie's Edge in Iowa and Prairie Ridge in Wisconsin developed forest management services goals, but neither was successful in implementing these goals.

Kickapoo Woods shows most clearly that this model can work. The experience of other co-ops, especially Living Forest and WUPFID, also supports the viability of this model.

Some landowners place a high value on receiving forest management services provided by a trusted, local co-op. The availability of these services, however, is not enough. The co-op also needs to have a viable business plan and the ability to deliver quality services at an affordable price.

As the discussion of Kickapoo Woods in Chapter One indicated, the co-op has been very leery of incurring debt and has used a combination of subsidized educational services, low-cost forest management services, and consultants rather than full-time paid staff to gradually build up its membership and its bank account. After more than 10 years of operation using this low-cost model, it has shifted to a strategy involving a rented office and a forester (whose salary is partly subsidized by a grant). This new approach appears to have a positive cash flow as well.

3. Peer-to-Peer and Other Educational Services

Wisconsin Family Forests is the only one of the 14 organizations reviewed that carried out a systematic peer-to-peer forest owner education program. However, almost all of the organizations provided informal peer networking among forest owners through workshops, informal contacts, and other events.

A key point about the peer-to-peer approach and most other educational activities is that they usually need outside financial support and are not business “profit centers” (although, as in the case of Kickapoo Woods, they can generate follow-on business activity).

Even during the first phase of Wisconsin Family Forests, its alliance-building activities were based on a peer-to-peer learning and action model. The biggest problem encountered during this phase was the difficulty of recruiting and retaining active volunteers to coordinate and participate in the local alliances.

There is quite a bit of evidence in the research literature that shows the effectiveness of peer-to-peer learning among forest owners and other groups.[xi] The inability of Wisconsin Family Forests to carry out a long-term Woodland Advocate Program appears to have been more a function of lack of funding than the effectiveness of its peer-to-peer approach. The funding issue is discussed in more detail in Chapter Three.

It is also important to point out that the success of Kickapoo Woods' forest management services is largely attributable to the effectiveness of its forest owner workshops and other events, which piqued the interests of local landowners regarding various aspects of woodland management, leading them to join the co-op, and in many cases to make use of its management services.

4. **Producer Cooperatives** (cooperatives of forest owners active in forest management and forest product-related activities)

Northwoods Forestry Cooperative and Hiawatha Sustainable Woods Cooperative are the two best examples of this model in the region. A high percentage of the forest owners involved in these two co-ops were active in managing their own woods and processing forest products, including milling, furniture-making, woodworking, maple syrup processing, and mushroom growing.

Cook County, Partners in Forestry, and Prairie's Edge also had members who were active in their woods and in producing timber and non-timber forest products, but not to the same extent as Northwoods and Hiawatha.

Probably the best example of a shared service by this type of co-op is the portable sawmill that is jointly owned by some of the members of Northwoods. It appears that the sharing of the sawmill (in addition to the educational format for its annual meeting) has served as the most important glue that has kept this co-op together over the years.

5. **Forestry-Related Projects Carried Out by Agricultural Cooperatives**

The exploratory projects carried out by the seven agricultural supply and marketing cooperatives in Wisconsin or Minnesota are included in this model. However, to this point, none of them have actively engaged in forestry or biomass projects. Rather, they have explored biomass aggregation and marketing as well as various approaches to increasing forest management by their members, but none of these activities have become an ongoing part of their operations.

There are examples in Europe, especially Austria, in which agricultural cooperatives have effectively become agro-forestry cooperatives because of their strong involvement in a variety of forest-related activities, especially the aggregation, processing, and marketing of woody biomass.[xii]

There are several factors that have thus far inhibited the involvement of agricultural cooperatives in forestry-related activities:

- The strong markets for agricultural products, especially corn, over the last few years that have fully occupied the attention of these cooperatives;
- Concurrently, the undeveloped forest service and products market in the Upper Midwest that makes this a high-risk business proposition for these co-ops;
- The "false starts" that have occurred in converting coal-fired electricity generating plants to biomass in Wisconsin and Minnesota. (Several agricultural co-ops have

prepared feasibility studies to provide biomass to plants that then failed to carry out conversions.);

- The slow development of the biomass market in the region is in part a result of increased availability of low-priced natural gas; and
- The difficulty of these agricultural co-ops to redefine their missions to include forest-related activities.

This chapter has provided an evaluation of the forest owner organizations and projects carried out in the Upper Midwest during the past 15 years. The next chapter draws lessons from these experiences and proposes several cooperative forest owner activities that appear to have promise during the next decade.

Chapter Three. Lessons Learned and Future Opportunities

1. General Lessons Learned

a. **Public Policy.** It is difficult to form and sustain forest owner cooperatives and related initiatives without favorable public policy. Public policy can take the form of regulations, taxes, tax deductions or credits, grants, subsidies or other mechanisms that influence private forest management and/or forest product marketing.

The Forest Service of the United States Department of Agriculture and many state-level forestry service programs provide education, technical assistance and small grants to private landowners. An excellent example of this is the Forest Service's Forest Stewardship Program, which also provides support for state forestry services.

However, public policy that strongly supports coordinated approaches to private forest management through substantial financial incentives and required practices is largely absent at the federal and state levels in the United States. In contrast, favorable policies toward cooperative private forest management in many European countries and in the province of Québec have been in place for decades.[xiii]

Wisconsin's Managed Forest Law provides very good property tax incentives to forest owners to develop and implement forest management plans. The MFL program coordinates management on over three million acres of forest land in Wisconsin. This is about one-third of all private forest land in the state. The program also provides FSC and SFI certification for land enrolled in the program.[xiv] However, there is no consistent support from the State of Wisconsin for coordinated forest management activities among landowners. Minnesota, Michigan, and Iowa have much weaker programs in support of private forest management.

Unless improvements in private forest management become a higher priority for federal and/or state policymakers, the development and sustainability of forestry co-ops and other joint private forestry initiatives are likely to lag behind their counterparts in Europe and Quebec.

b. Co-op and Member Goals. Many of the forestry cooperatives in the Upper Midwest did not articulate clear goals in their early stages of development, and co-op goals were often inconsistent with member goals. This problem

was especially evident in the co-ops that chose the value-added model despite the fact that most of their members were not interested in this activity. Surveying members and potential members about the kinds of forestry-related services that they would like is a simple and effective way to increase the odds that the co-op will be designed to address member goals.[xv]

c. **Markets.** Even with a clear mission that is consistent with member goals, it is important for each co-op to conduct a feasibility study and business plan, including a market analysis, because shared goals do not themselves lead to the formation of a successful business. All but a couple of the 14 co-ops and associations reviewed in this report skipped or gave limited attention to this "due diligence" phase.

   It should also be noted that in a forest owner co-op, members and potential members are the primary market. If a co-op doesn't provide what they want at a price they are willing to pay, it will fail.

d. **Support Network.** There were attempts made to bring representatives of forestry co-ops together in the Upper Midwest at annual gatherings and through informal communications. But because of the diversity of strategic models, the all-volunteer nature of most of these organizations, and the financial precariousness of many of them, these periodic contacts were not enough to stave off the failure of most of them.

   Gathering Waters, which is a secondary organization assisting more than 50 land trusts in Wisconsin, is a good example of a state-level support organization that has been very successful over the past 18 years. Especially in recent years, it has had consistent access to grant support from the State of Wisconsin.

2. Lessons Related to Strategic Models

a. **Value-Added Processing.** The most important lessons for this approach are that
   - There must be a demand for the products that the co-op is intending to produce (with evidence for this demand a key component of the business plan).
   - The co-op’s value-added processing and marketing activities must be adequately capitalized.

- Co-op members need to be committed to value-added processing and marketing.
- The co-op must have professional production and marketing management.

b. **Forest Management Services.** The major lessons here are
   - The need to identify a group of landowners who want forest management services and who are willing to pay the required service fees charged to allow the co-op to function at economic scale; and
   - For the co-op to have the expertise to provide these services either through staff or consultants.

c. **Peer-to-Peer Learning.**
   - The big lesson here is to treat peer-to-peer learning as an educational, not a business, activity. If this kind of program is going to be carried out, it needs to have adequate, preferably multi-year, funding from public and/or private grants .

   - Another key issue with the peer-to-peer approach is having a selection and training process for peer volunteers that emphasizes the social skills necessary to reach out to other forest owners.

   - Finally, the peers need to be backed up by public and/or private foresters who are able to follow up in a timely way with landowners after the peer volunteers' contacts. These professional foresters also need to have good social skills in communicating with landowners.

d. **Producer Co-ops.** This review shows that cooperatives of forest owners who are active in forest management and forest product-related activities can be an effective model. The keys to success are

   - Identifying a group of forest owners who are interested in actively working in their woods and/or in processing timber or non-timber products; and
   - A system of equipment-sharing and/or joint marketing that provides the glue for ongoing cooperation.

e. **Forest-Related Projects Carried Out by Agricultural Cooperatives.** Thus far there has not been a successful example in the Upper Midwest of forestry activities carried out by an agricultural cooperative. But there have been

elsewhere, notably in Austria.[xvi] The three biggest requirements for this model to succeed appear to be:

- Public policy that supports these kinds of initiatives (such as subsidized prices for woody biomass);
- A strong market for the co-op's forest-related services; and
- The willingness of agricultural co-op leaders to expand beyond the co-op's traditional business activities.

3. Future Opportunities

Given the low success rate of forester owner cooperatives over the past 15 years in the Upper Midwest, should we even be talking about future opportunities for these kinds of co-op in the United States? This report gives a qualified positive answer to this question for several reasons.

As mentioned at the beginning of the report, about 10 million private landowners own over half of the 750 million acres of woods in the contiguous 48 states. Writing off cooperative action as a means to improve forest management and to produce forest products doesn't appear to make sense, especially in the face of successful forest cooperatives in a number of other developed countries.

As we look at the threat of global warming in the decades ahead, increasing the use of renewable energy, including biomass, and dramatically reducing carbon emissions are likely to become much more important public priorities. Forest owner cooperatives have the ability to produce, aggregate and market biomass, and to assist large numbers of landowners to store carbon and to receive contractual payments for this ecological service.

However, as stated above, without public policies that support private forest management, biomass production and marketing, and carbon storage, these opportunities are unlikely to be realized.

Keeping both these opportunities and constraints in mind, the following activities could be carried out by forest owner cooperatives or similar organizations in the years ahead.

a. **Land Care.** Kickapoo Woods Cooperative and the latter years of Living Forest Cooperative are two examples of successful land care initiatives in the Upper Midwest. The forest management service co-op model works but

requires the right organizational approach and membership base, as described above.

b. **Ecological Services.** One definition of ecological services is

> . . . [The] purification of air and water, maintenance of biodiversity, decomposition of wastes, soil and vegetation generation and renewal, pollination of crops and natural vegetation, groundwater recharge through wetlands, seed dispersal, greenhouse gas mitigation, and aesthetically pleasing landscapes.[xvii]

Forest owners can carry out practices on their land that provide broad ecological benefits to society. There is a growing realization that public incentive programs can generate markets for farmers and forest owners to implement ecological services in a cost-effective manner to address a range of environmental issues. For example, it is often far less expensive to reduce phosphorus runoff from farms than to remove phosphates from municipal sewer and water systems.

However, there have only been a few examples of such ecological service programs in the United States to date. Forestry and agricultural co-ops could become an important means to carry out these services because of their ability to work with and coordinate activities involving large numbers of landowners.

c. **Biomass Aggregation and Marketing.** As we saw in the previous chapter, this activity is contingent on demand for biomass energy. Several promising projects in Wisconsin were derailed because the biomass conversion projects that co-ops were preparing to serve were canceled. If federal and state policy shifts toward a greater emphasis on reducing the number of coal-fired plants and converting them to biomass-fired plants, forestry and agricultural co-ops are well suited to meet large-scale biomass demand. Even though natural gas is currently an inexpensive fossil fuel alternative to coal, this does not preclude simultaneously providing incentives for biomass energy.

d. **Afforestation, Reforestation, and the Cultivation of Short-Rotation Woody Crops.** There is excellent potential for forestry and agricultural cooperatives to play a major role in increasing the amount of carbon stored in trees and soils, whether through planting trees in areas that were not previously forested; increasing the amount of carbon storage in existing

forests; or growing short-rotation trees, such as fast-growing poplars and willows, as agroforestry crops. As with ecosystem services and biomass production, co-ops are well situated to mobilize large numbers of landowners to carry out these different kinds of carbon storage projects.

However, as with these other two potential areas of expanded forest owner activities, public policy at the state and federal levels is a prerequisite to significant increases in carbon storage in trees and soils. For example, the State of California is just beginning to implement a program to limit carbon emissions by utilities and manufacturers. One option for carbon emitting businesses is to purchase credits to offset some of their emissions. As this program develops, forest owner cooperatives or other joint initiatives across the United States will very likely become a major source of carbon offsets.[xviii] The federal government and other states are also considering various kinds of carbon tax and carbon credit programs.

e. **Peer-To-Peer Learning**. As indicated in the previous chapter, peer-to-peer learning programs for forest owners are usually not self-supporting business activities but instead are educational services that require some type of external subsidy. Nonetheless, experiments in Wisconsin have shown that the use of peers is a cost-effective way to increase the number of forest owners who develop and implement forest management plans.[xix] Thus, forestry programs at the federal and state levels should be encouraged to make more use of community-based, peer-to-peer outreach in their efforts to increase private forest management.

This chapter has identified nine lessons from the experiences of forest owner organizations and projects in the Upper Midwest during the past 15 years. It has also listed a number of activities that could be carried out by forestry co-ops and associations and by agricultural co-ops during the next decade.

D. Conclusion

This report has reviewed the experiences and the successes and failures of 14 forestry cooperatives and associations in Wisconsin, Minnesota, Iowa, and Michigan and the forestry and biomass activities of seven agricultural cooperatives in Wisconsin and Minnesota between 1998 and 2012.

Although the success rate (measured in terms of ongoing organizations and projects) has been low – three functioning forestry cooperatives and no ongoing biomass or forestry-related projects of agricultural cooperatives – there are many constructive lessons that can be learned from the experiences of these organizations.

The most important lesson is that forest owner cooperation can be an effective means to improve forest management and to market forest products. But it needs the right combination of public policy, clear member and co-op goals, business planning, organizational management skills, favorable markets, and access to ongoing business support services in order to be successful.

Farmer and forest owner cooperatives have a unique ability to aggregate large numbers of members and the acreage that they own in order to create economies of scale for land management services and for marketing forestry products and ecosystem services. During the next decade, we will see whether these co-ops can realize their potential to provide improved forest management and improved ecological services on a large scale in the United States.

Endnotes

[i] Rickenbach, Mark. 2003. "Forestry Cooperatives: Past and Present" in Jakes, Pamela, ed. *Forestry cooperatives: what today's resource professionals need to know.* Proceedings of a satellite conference; 2003 November 18. Gen. Tech. Rep. NC-266. St. Paul, MN: U.S. Dept. of Agriculture, Forest Service, North Central Forest Experiment Station; Sturgess, Emily, Kimberly Zeuli and Mark Rickenbach. 2004. "Brief Reflection on Forestry Cooperatives in the US." University of Wisconsin Center for Cooperatives Bulletin Number 7, March 2004.

[ii] Kittredge, David. 2003. "Forest Owner Cooperation Around the World: Where, How, and Why It Succeeds." In Jakes, op. cit.

[iii] http://www.resam.org/; *Case studies of private forest owner programs.* 2006. http://transition.blandinfoundation.org/html/documents/VFVC_NIPF_CDS_Appendix_FINAL_07_26_05.pdf

[iv] Sturgess et al. op.cit.

[v] http://www.treesearch.fs.fed.us/pubs/15758, http://www.fs.fed.us/ccrc/topics/forest-stewardship/

[vi] Nadeau, E.G. (ed.). 2002. *Balancing Ecology and Economics: A Start-up Guide for Forest Owner Cooperation.* http://www2.dnr.cornell.edu/ext/info/pubs/misc/balancing%20ecology%20and%20economics.pdf.

[vii] A project of the Institute for Agriculture and Trade Policy that has been discontinued.

[viii] Nadeau. op.cit. p 25.

[ix] Don Peterson, email communication, November 1, 2012.

[x] Kittredge, op. cit. p. 31.

[xi] Sagor, Eli et al. 2009. "Woodland Owner Networks and Peer-to-Peer Learning." http://www.slideshare.net/esagor/woodland-owner-networks-and-peertopeer-learning

[xii] Bagley, Scott and Bob Parker. 2010. "Chipping in: Austrian co-ops play role in making nation a leader in wood biomass energy production." in *Rural Cooperative.* September/October 2010.

[xiii] Kittredge, op. cit.

[xiv] FSC and SFI certification can be a means to improve access to wood and pulp markets. In a personal communication on November 1, 2012, Don Peterson made the case that cooperatives or other joint approaches can be used to increase certification on non-MFL land in Wisconsin and in other states.

[xv] It is worth noting that Sustainable Woods Cooperative did conduct a detailed survey of members, but the co-op did not adequately take the survey results into consideration when it implemented its value-added processing model.

[xvi] Bagley, op.cit.

[xvii] http://en.wiktionary.org/wiki/ecological_service.

[xviii] The Climate Registry has developed a protocol for carbon sequestration on aggregated forest parcels, although the State of California has not yet included this protocol in its carbon trading program. http://www.climateregistry.org/

[xix] Nadeau, E.G. and Paul Pingrey. 2008. *The Next Two Million Acres: Review of the Wisconsin Healthy Forest Program and Recommendations for Increasing Private Forest Management in Wisconsin.* http://www.indiana.edu/~workshop/colloquia/materials/papers/nadeau_paper.pdf.

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