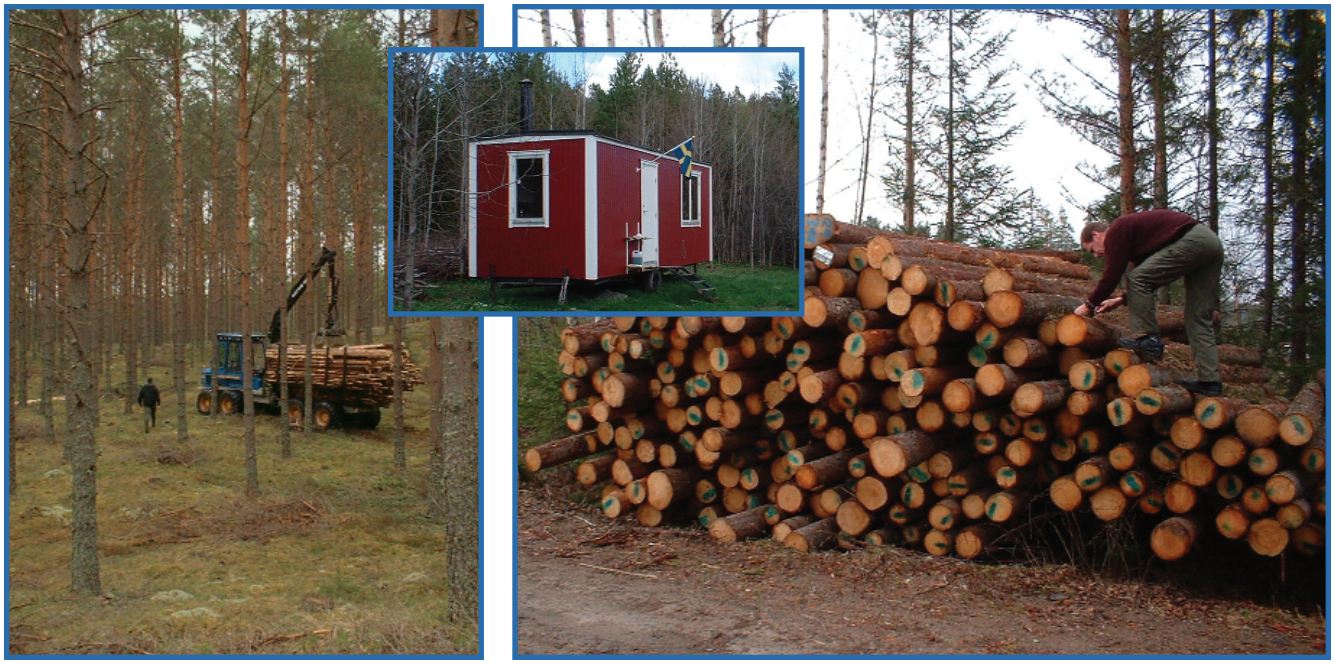

Photos by David B. Kittredge

Private Forestland Owners in Sweden

Large-Scale Cooperation in Action

David B. Kittredge

ABSTRACT

Swedish nonindustrial private forestland (NIPF) owners have historically cooperated in associations to obtain market influence and negotiate improved prices with industrial purchasers of wood. This model of cooperation has succeeded for decades and provides insight to the newly emerging cadre of American NIPF owner cooperative groups. Although the Swedish model of cooperation focuses primarily on timber transactions and may not currently be applicable to an American NIPF owner audience with other interests, it is possible to speculate about potential ways this approach may be applied in the United States to achieve broader owner objectives, both through new organizations as well as existing conservation-based groups.

Keywords: international forestry; landowner cooperatives; NIPF

New interest exists among private forest landowners in the United States to cooperate on a scale larger than individual properties. At least 16 forest owner cooperative groups have recently organized in Iowa, Massachusetts, Michigan, Minnesota, Nebraska, New York, Vermont, Virginia, and Wisconsin (Community Forestry Resource Center 2002), with interest developing in Alabama, Kentucky, and North Carolina (Groot 2002). Forest owners joining these new groups seem to be motivated by a variety of goals (e.g., Barten et al. 2001; Vermont Family Forests 2002), including

- Capturing value beyond the sale of logs or stumpage.
- Wood production that contributes to local economies.
- Exchange of information and experience.
- Improved achievement of nontimber objectives.
- Greater collective influence ecologically, socially, politically, and economically.
- Management that meets ecologically sensitive standards (several of these new groups are pursuing some form of green certification).

Above: **Scenes from Swedish NIPF land.** ***Left:*** **A forwarder operates in small-diameter Scotch pine thinning.** ***Right:*** **Forest owner association district forester checks pulp for beetle infestation.** ***Inset:*** **This small cabin is leased to hunters for supplemental income.**

Table 1. Comparison of forestland and population in Sweden with that of the northeastern United States, by state.

Location	Total land area (thousand hectares)	Forest area (thousand hectares)	Percent forest	Population density (people per km^2)
Sweden	41,162.0	28,025.0	68%	21.5
New England	16,079.6	13,271.0	82	86.2
Connecticut	1,240.4	752.6	60	272.9
Maine	7,901.2	7,155.2	90	16.1
Massachusetts	2,006.4	1,318.7	65	314.2
New Hampshire	2,296.0	2,017.9	87	54.2
Rhode Island	267.6	165.2	61	391.3
Vermont	2,368.0	1,861.2	78	25.6
New York	12,089.2	7,506.7	61	155.4
Pennsylvania	11,474.0	6,829.6	59	105.8
Total, northeastern United States	39,642.8	27,607.3	69	113.0

Sources: World Resources Institute 1998–99; http://fia.fs.fed.us/library/final_rpa_tables.pdf; www.census.gov/population/censusdata/90den_stco.txt

As nonindustrial private forestland (NIPF) becomes increasingly parcelized into smaller ownerships (Sampson and DeCoster 2000), it makes sense for owners to collaborate in some way. Many of the benefits they seek (e.g., outdoor recreation, wildlife habitat, timber production, privacy; see, e.g., Jones et al. 1995; Birch 1996; Rickenbach et al. 1998) can be better achieved by considering spatial scales larger than an individual woodlot. Likewise, in landscapes where most forest is owned by private families and individuals (e.g., in Massachusetts, 78 percent of all forest), the continued flow of vital social goods and services (e.g., air and water quality, biodiversity, outdoor recreation, backdrop to a scenic tourism industry, wood products supporting local economies) are most easily protected when the size and shape of management activities reflect the natural patterns typical of a given ecosystem or landscape (e.g., natural disturbance, nutrient cycling, faunal migration and habitat use). The newfound interest in cooperation among private landowners seems to be in everyone's best interest.

Private forest owner cooperation elsewhere in the world, however, is not a new phenomenon. Landowners have cooperated successfully for decades in Scandinavia, Japan, parts of Europe, and elsewhere. In April 2002, I visited four of the six major forest owner cooperatives or associations in Sweden, with the goal of understanding more about their origins and effectiveness.

The Swedish Experience

Sweden, at 41.2 million hectares, is roughly the same size as the combined areas of New England, New York, and Pennsylvania (39.6 million ha). Both are roughly two-thirds forested but differ significantly in terms of human population density *(table 1)*. These statistics are deceptive, however, because population density can vary dramatically within a state like Massachusetts (from 2.5 people/km^2 in the rural western corner of the state to more than 5,000 people/km^2 in the Boston area). As in the northeastern United States, nonindustrial private families and individuals own roughly half of all Swedish forests (Lidestav 1998). The balance of forest ownership is split between industry and government. The average Swedish family ownership is 50 hectares, and in New England, New York, and Pennsylvania it is 21. Sweden is roughly on the same latitude as Hudson Bay, with forests dominated by boreal tree species (Norway spruce, Scotch pine, and birch).

In the 1930s, an aggressive land acquisition program by Swedish forest industry resulted in the conversion of many small farm woodlots to industrial ownership. Because a few large companies dominated the wood marketplace, private forest owners felt they could collectively negotiate a better price if they banded together and offered industry significantly larger volumes of wood, in an effort to increase price or market advantage. Originally, associations were relatively small and were composed primarily of rural farmers who cut their own wood. In 70 years, the concept has evolved as ownership has diversified to a broader cross section of Swedish society. At one time there were at least 30 associations in Sweden, but mergers have reduced that number to six major organizations today, in order to play a more meaningful role in the marketplace.

Swedish forest owner associations are an important influence in the national and international wood market. Approximately 44 percent of all Swedish family forest owners (>5 ha per ownership) are members of an association (LRF Skogsägarna 2002). Roughly 28 percent of the annual wood harvest in Sweden comes from an association (Swedish Forest Industries Association 2001; LRF Skogsägarna 2002). Five of the six major associations have developed industrial capacity, and in 2000 they produced 1,954,530 cubic meters of sawn wood (828,330 mbf) and 1,602,147 tons of pulp (LRF Skogsägarna 2002). This represents approximately 12 percent of total Swedish sawmill capacity and 40 percent of raw pulp capacity (LRF Skogsägarna 2002). The associations that started as a counterweight to industry have become industrial themselves, and association members believe they enhance their returns through capturing more value-added. The six major associations collectively represent 88,230 members and more than 6 million hectares. In Sweden, forest owner associations are not new startups just emerging on the scene.

How the Model Works

In general, each member of a Swedish forest owner association has one vote, regardless of property size. Associations are divided into small districts of between 150 and 300 owners. Each district has its own elected leader-

ship board or council, and each district sends representatives to the association's annual meeting. These representatives annually elect the organization's board of directors and its leadership.

Associations have district foresters in the field, who work with forest owners and loggers. They also have central administrative staff responsible for marketing, contract negotiation, coordination of wood flow from members to buyers, and overall administration. Staff size ranged from 50 to well over 300 per organization within the four associations I visited.

Members of the association invest in a "capital share" to belong to the organization. There are no annual dues or fees. The capital share is usually based on the size of the property. This ranged from $16–$23 per acre in the associations I visited. In some cases the share is based on a percentage of a property's assessed value. Capital shares do not have to be paid or invested all at once. A member may elect to contribute a few percent annually toward the share until it is fully realized.

The capital share is considered an investment in the association. It is fully refundable if someone withdraws from the association. Like stock in a company, a member's capital share potentially grows. Share growth depends on the profitability of the association, but it is not based on an individual member's harvest activity. In contrast to an industrial sawmill or pulp mill that shares its profits with stockholders who do not necessarily own any land, forest owner association members function as "stockholders in" or "owners of" the association and share the profits. The important difference is that, while it is in the best interest of the industry to minimize price paid to forest owners for wood, thereby maximizing potential profit to the company and stockholders, associations strive to pay high prices to members for their wood. The annual share growth of associations varies, and of the ones I visited it ranged recently from between 0 and 12 percent. One association realized an average annual capital share growth rate of 8.9 percent over the past 15 years.

Associations were originally formed to provide a competitive means to market timber from NIPF lands, and that remains their primary function today. Initially, the associations bought roadside wood from members and marketed it to industrial roundwood buyers. Today most associations buy stumpage from members. The association's district forester offers the owner a price per cubic meter, based on species and quality. The district forester also negotiates with a harvesting contractor on the basis of value per cubic meter to produce logs at a roadside location to desired specifications. Logs are trucked to a variety of mills, based on contracts negotiated by the association. At the mill, logs are scaled and graded by a national, independent organization (i.e., not a sawmill employee) before processing. The association handles all bookkeeping of the transactions and provides the landowner with

- The independent estimate of volume delivered to the mill.
- A summary of logging expenses paid to the contractor.
- Timber sale administrative expenses charged by the association (generally based on cost per unit volume, ranging from $1.20–3.50/mbf).
- The amount withheld by the association and invested toward the owner's capital share (generally 2–3 percent for each timber sale), if the owner has not yet fulfilled the share obligation.
- The net proceeds to be delivered to the owner.

If the association has a profitable year, it may also make an annual dividend return to members who harvested in that year. In some associations, members can elect to either receive that money as a check or leave it in a separate interest-bearing account (approximately 3.5 percent) and draw on it in the future to pay for harvest administration costs, planting expenses, or other forest management services.

In addition to timber sale services, an association's district foresters also provide management planning, estate planning and tax advice, and planting and site preparation administration. Perhaps their most important role, however, is to serve as wood brokers, buying wood from members (and even nonmembers who like the price offered by the association), arranging harvests, and getting wood to the landing. The association's wood-flow managers coordinate log transport from landings to various buyers with whom the association has six- or 12-month contracts for specified volumes and grades. If an association meets its contractual obligations, it can receive incentive bonuses from buyers. Likewise, associations can offer price incentives to members if they provide logs at certain important times of the year. Efficiency and cooperative economy of scale in buying and selling of wood, bonuses for meeting contracts, and the judicious management of primary processing facilities result in annual profit for the association. Unlike their industrial competitors who seek to buy wood from owners at the lowest price to maximize their corporate return to stockholders, associations seek to pay members a high rate for their timber, within the limits of the value they can in turn receive. Importantly, members are not obligated to sell their wood to the association; they are free to sell to whomever they wish.

Why They Join

The primary benefits of membership are a competitive price for timber and full-service forestry. Landowners (especially a growing number of absentee ones) can leave all details to the association's forester. There are other ancillary membership benefits, such as reduced prices for forestry supplies and educational materials. Members also have a political voice in Stockholm, where the collective clout of the six major associations is expressed through the forestry branch of the national farmer's association, LRF Skogsägarna. Such political representation is also proving important in the European Union. Association members do not seem to cooperate on the basis of other management objectives, such as habitat or outdoor recreation. The latter may be less important in a country where all citizens have the open rights to access any private land for walking or other forms of passive recreation (except hunting and fishing).

All six of the major associations are involved with Pan-European Forest Certification (PEFC 2002) and can provide this means of third-party green cer-

tification to its members. Some of the associations provide PEFC certification to members for free, but owners must pay for a management plan that meets PEFC standards (e.g., one association charges $145 as a flat fee, in addition to $4.85 per acre for a plan). Associations are supportive of PEFC certification and want to make sure they have a critical mass of certified wood products to offer in the future. One association has set a goal of achieving 40 percent of its members' lands in PEFC certification by 2003. Another association even offers its members a modest incentive premium ($2.35/mbf and $1.80/cord) for wood that comes from PEFC land. Regardless of individual goals or incentives, associations in general seem to have embraced the PEFC approach and promote certification to members.

With all these benefits—annual share growth, potential annual dividends to owners who sell wood, no annual fees, full forestry service, freedom to sell wood to anyone, and flexibility to withdraw from membership and take your share—one might wonder who would *not* want to belong to an association. But forest owner associations are not for everyone. Some owners believe they can receive a better price for their wood from an industrial procurement forester. Others are less interested in contributing a portion of their earnings to a share in the association that grows at a modest rate. It is also possible to be a "free-rider" and gain the benefits of higher general prices (due to the competitive influence of the association in the marketplace) and political voice for family forests without membership. Nationally, it is estimated that approximately 44 percent of all forest owners are members in associations (LRF Skogsägarna 2002). This can apparently vary from region to region, with participation rates ranging from 30 to 70 percent.

Could This Model Work Here?

Many NIPF owners in the United States profess a lack of interest in timber income from their land (Birch 1996). Because many owners are affluent, potential timber income does not always compete favorably with their perceived notion that harvest will negatively affect their primary goals (e.g., protecting or preserving aesthetics, wildlife habitat, recreation opportunities, privacy). Wood product revenues, however, seem to be the main objective of Swedish associations. So, is this model applicable to US private forest landowners? Indeed, a revenue-oriented form of landowner association may find little appeal currently among many owners in the United States. But in the future, if the value of wood relative to forest owner incomes increases (in response to the overall supply of wood decreasing; Wear et al. 1999; Alig et al. 2002), this cooperative- or association-based model may find favor, especially with owners who have not yet adopted the conventional approach to management (e.g., contracting with a private consulting or industrial forester).

Many US owners have not embraced current and typical NIPF models of stewardship, management plans, Tree Farm participation, or other traditional approaches to forestry (Birch 1996). They either do not see the advantages of a formal management plan, do not have the time or funds to invest (in spite of generous cost-share programs), or are basically fulfilled by the status quo of their land and do not see the connection between a plan and enhanced realization of their goals. The Swedish association model may be more appealing to some owners who have not already engaged in forest management in ways that have been traditionally presented or promoted.

Although the Swedish model primarily functions on the basis of timber transactions, market share, and wood price, it could be adapted for landowners who profess more interest in nontimber benefits. This approach has proved successful in providing easy access to green certification, which might reassure some hesitant owners. Such associations could also provide other nontimber benefits such as coordination of hunting leases in some parts of the country, technical expertise for activities such as road building, opportunities for group liability insurance, spatially sensitive habitat enhancement,

and more in-depth coordinated educational opportunities than can be provided by public agencies stretched thin by tight budgets.

But this is not 1930s Sweden, where farmers seeking a better price for their roadside roundwood started associations at the local level. Can such an approach to cooperation begin now in the United States? What about NIPF owners who are already good stewards on their own or with the professional assistance of a consulting forester, industrial forester, or public forester? If someone is already managing his or her land, what benefits can an association offer? What about preexisting forester–landowner business relationships? In Sweden, management planning can be contracted out by the associations to private consultants; there is no obligation to use association foresters. Likewise, many members (and even nonmembers) sell wood roadside to the association, regardless of the logger or forester involved. Adopting a new model like this may require major philosophical shifts for private consulting foresters, who often base their charges on a percentage of the value of wood harvested and have an established client base. Such business relationships would not necessarily be in conflict with an association.

Furthermore, some US forest owners may feel frustrated by a system they perceive as working in the best interests of industry or foresters rather than of their land. When loggers are paid by the cubic meter for what they cut, and foresters are paid by the cubic meter or hour (regardless of value) for their professional expertise to arrange and administer a sale, there is no incentive to cut harder or high-grade the quality material. In essence, they play a more neutral role. When the landowner's association buys and sells the wood, it is highly likely that the owner's best interests are considered. Organizers of newly emerging US associations are sometimes motivated by the potential to exert more control over their land and its management by restructuring their bargaining position. This is analogous to other efforts to eliminate the proverbial middleman, such as farmers who sell at local farmers' markets and people who purchase cars at a discount over the Internet. Some variation of the Swedish model may appeal to this cohort of US owners who desire more involvement in the management of their land.

Starting Swedish-style associations from scratch may be difficult because developing a critical mass of interested owners and leadership could be problematic. Instead, it may be possible to adopt some aspects of the Swedish association model to part of an existing conservation organization. Forest owner associations (e.g., Massachusetts Forestry Association, New Hampshire Timberland Owners Association) or local land trusts could consider incorporating some aspects of this Swedish model into existing activities. For example, association staff could purchase roundwood or stumpage from members, sell accumulated volumes, and in effect operate a concentration yard. New members may be attracted by this approach, which could offer both economic incentives and a sense of independence. In addition, existing organizations could consider offering GIS and mapping services to members on a broader multiple-property scale, appealing to an interest in landscape-level habitat issues. Under the right circumstances, some owners may be convinced to consider some portion of their timber revenue as a tax-deductible contribution to an organization that provides market power to owners, contributes to local economic development, and offers spatial information services. The Nature Conservancy's Forest Bank Project (Dedrick et al. 2000) is an example of a conservation organization becoming involved in forest management with the goal of improving environmental protection in designated sensitive areas. Rather than depositing private timber rights into a bank to be managed by The Nature Conservancy in return for an annual dividend, private owners may be more interested in having their logs marketed by an association for a higher potential return if their harvesting met high environmental standards (or a green certification system).

Thousands of private forestland owners have successfully cooperated for decades to manage millions of NIPF acres in the Swedish association model. As successful as it has been, however,

this model does not have universal appeal in Sweden. Although interest in private forest owner cooperation may be emerging among some in the United States, it is not clear how this approach might fit into current US circumstances. As new associations emerge, established ones evolve, and the demographics of new NIPF owners change, it is worth considering the Swedish model of forest owner cooperation to modify or adapt and improve the way we approach the management of private forestlands in the United States.

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