

## REACHING MINNESOTA'S NONINDUSTRIAL PRIVATE FOREST LANDOWNERS

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**Abstract.**—One thousand nonindustrial private forest landowners in Minnesota were surveyed by mail. The top six reasons for owning forest land were: (1) wildlife habitat, (2) recreation and scenic enjoyment, (3) hunting and/or fishing, (4) part of the farm, (5) green space around home/cottage, and (6) growing timber for sale. Thirty-five percent previously worked with a forester or other natural resource professional, but only 16% had a written management plan. Fifty-two percent had harvested wood for personal use and 38% had harvested timber for sale. Incentives that landowners preferred were: (1) property tax reductions, (2) income tax deductions, (3) cost-sharing, (4) technical assistance from a natural resource professional, (5) and educational materials.

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Nonindustrial private forest landowners are an important element of future timber supplies. We need to know what motivates and what inhibits these landowners from engaging in forest management. In 1996, we sent mail surveys to 1,000 randomly selected forest landowners in Minnesota. Our main objective was to learn the relative value of different incentives for encouraging forest management on private lands.

To draw our sample of landowners, we started with the Minnesota State Planning Agency. It had a list of legal descriptions for all 40-acre parcels in the state containing forest, and it could tell us whether each parcel was in public or private ownership. We chose a random sample of 1,000 40-acre, privately owned parcels in 62 counties. These counties contained 99% of the state's total forest area. Landowner addresses for each parcel were obtained from county tax assessors and land record offices, based on the legal descriptions we provided them. From among 972 valid addresses, 930 mail surveys were returned with useable information for a 96% response rate. Statistics reported here are based on 539 respondents that owned 20 or more acres of forest. For this particular conference paper, we excluded landowners with smaller acreages because the survey told us that landowners with more than 20 acres of forest were roughly two times more likely to harvest than those with less acreage. Our data analysis is not yet complete, but this paper will highlight some of the basic findings.

The average forest land holding is 106 acres among respondents that owned more than 20 acres. Twenty-six percent own between 20 and 40 acres; 31% own 41 to 100

acres; 22% own 101 to 200 acres; and 20% own more than 200 acres.

They have owned their land for an average of 20 years, but the median length of tenure is 25 years. That means half the owners had owned their land for at least 25 years.

The average landowner is 55 years old, but keep in mind that half of them have owned their land for over 25 years. This means they first acquired this land when they were 30 years old. Among landowners that acquired their land in the last 5 years, however, the median age is 43. These newer landowners are acquiring forest land at an older age than the average landowner. Maybe we should be targeting young landowners with our technical assistance and education programs. They are more likely than older landowners to reap the benefits of forestry investments within their lifetimes.

Fifty-three percent live on their forest land. The remainder are absentee owners who live an average of 62 miles from their forest land. Absentee landowners, however, spent an average of 24 days on their forest property in the previous year, and half of those absentee owners spent 30 or more days on their forest land. One reason why it was convenient for absentee owners to spend so much time on their land was that 46% had a seasonal home on their forest property. That means roughly 75% of all private forest lands have a permanent or seasonal home on them. Such homes, however, also contribute to land use fragmentation and may be a detriment to timber harvesting. We'll analyze the data further to see what impact permanent and seasonal homes have on timber management.

When we asked landowners what their most important reasons were for owning forest land, growing timber for sale ranked fifth among 10 reasons. The most important reasons for owning forest land, in descending order of importance, were: (1) wildlife habitat, (2) recreation and scenic enjoyment and hunting or fishing, (3) part of the

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farm, (4) green space around a home or cottage, (5) growing timber for sale and investment for resale of the land, (6) growing wood or other forest products for personal use, (7) growing Christmas trees and potential mineral value. It is interesting that wildlife and recreation were rated the highest and income-generating activities were rated the lowest.

We asked landowners what types of management activities they had conducted on their land, and we gave them a list of 14 activities from which to choose. We included activities that related to management for timber, wildlife, recreation, and watershed protection. Fifty-two percent had harvested wood for personal use on an average of 7 acres. Thirty-eight percent had harvested timber for sale on an average of 43 acres. But we all know there is a difference between harvesting timber and managing timber on a sustainable basis. You will be interested to hear that 37% of all the landowners had naturally regenerated an average of 43 acres, which coincides with the average acres harvested for sale. In addition, 18% had planted trees following a timber harvest on an average of 10 acres, 29% had planted trees on open land averaging 8 acres, 21% had controlled weeds around young trees on an average of 5 acres, and 30% had completed timber stand improvement work on an average of 13 acres.

Foresters know that in some parts of the state, livestock grazing in forests is a problem. We learned that 16% of the landowners had livestock grazing in at least some part of their forest during the past year. On the other hand, 11% had fenced their forests to keep out livestock.

Since most landowners own their land for recreation and wildlife, you may be interested to know what management they performed specifically for these objectives. First, I want you to consider that some of their timber harvesting may have been done to benefit wildlife. The most popular game animals in Minnesota are deer and grouse. Both species are more abundant in young forests. Timber harvesting and wildlife management are not necessarily mutually exclusive. We learned that 21% had planted trees, shrubs, or other vegetation for wildlife and 10% had done other wildlife habitat improvement projects that were not specifically described in the survey.

Thirty-three percent had built permanent access roads or trails.

Best management practices to protect wetlands and streams are an important management consideration in Minnesota, and this survey points out our need for continued vigilance on private lands. Only 22% of the landowners said they had no water bodies on their land. In contrast, we learned that 53% of the owners had a wetland on their property, 38% had a river or stream, 27% had a pond less than 10 acres, and 24% had a lake larger

than 10 acres. When we asked what management they had performed to protect water resources, we learned that 7% had established vegetative filter strips or otherwise protected water bodies and wetlands. Ten percent had established or restored wetlands.

There are many forms of assistance offered to private landowners that we collectively call incentives. In this survey, we were especially interested in learning which incentives landowners had used and which ones they preferred most, whether they had used them or not.

We learned that a forester or other natural resource professional had visited land owned by 35% of the owners.

In a different question, we asked how frequently they had used different sources for forest management advice or assistance. Forty-four percent had obtained assistance from the Minnesota Department of Natural Resources (MN DNR); 43% went to a neighbor or other landowner; 42% went to a logger or timber buyer; 30% referred to a forestry publication, book, or video; 29% went to a Soil and Water Conservation District; 24% went to a university or extension service; 16% saw a private consulting forester; 13% went to a forest product company forester; 10% went to the Natural Resources Conservation Service; 10% went to a forestry conference, workshop, or field tour; and 7% went to the U.S. Fish and Wildlife Service.

In that list I just read you, two sources stand out as notable. First, this contact list clearly shows the value of neighbor to neighbor contacts. In this regard, we have a Woodland Advisor Program in Minnesota that provides 40 hours of training to woodland owners who then are expected to provide 50 hours of volunteer service promoting forestry to their neighbors and other members of their community. This survey clearly shows the need for such a program. Second, loggers and timber buyers are a very important source of information to landowners. Foresters need to maintain good relations with them, and we need to continue providing them with forest management information. Some people in this audience do not really want loggers giving forest management advice to landowners, but the reality is that that's where landowners are going for advice. We need to ensure that loggers give sound advice to the limits of their knowledge and that they know their limits.

One reason we want landowners to get assistance from a natural resource professional is so they will get a written management plan. The Minnesota DNR has set a goal for 51% of NIPF landowners to have a written management plan by the year 2005. According to our 1996 survey, only 16% of the landowners had a written management plan. Among landowners that had such a plan, 75% received help from the Minnesota DNR, 17% from a Soil

and Water Conservation District, 11% from a forest product company, and 10% from a private consulting forester. A few plans were prepared with assistance from other sources.

Cost-sharing is another incentive. Ten percent of the landowners had received cost-sharing to help conduct forest management. The five most frequent uses for cost-sharing, in descending order of frequency, were: planting trees on unforested or poorly stocked land; planting trees following a timber harvest; timber stand improvement; planting trees, shrubs, or other vegetation for wildlife; and performing other management for wildlife.

There often is a concern when public money is spent to manage private lands. Policymakers want to make sure that public moneys are not being substituted for private capital and that public benefits result from the expenditure. We asked landowners whether or not they would have done management work without cost-sharing. We learned that 25% would have done the same amount of management work without cost-sharing. Twenty-two percent would have done some work, but on a smaller scale. Only 33% would not have done the management without cost-sharing. There does appear to be a substitution effect in which landowners are using public money to perform work they could afford on their own. This finding is consistent with several other studies. The implication is that cost-share programs could be refined to better screen applicants that truly need the money as an incentive.

The Tree Growth Tax Law is a special property tax program available in some counties for forest lands managed primarily for timber production. The tax is based on the value of average annual timber growth that is influenced by timber prices. In the past, it offered a significant tax savings over other tax programs, although with rising timber prices, there is less incentive for landowners to enroll in it. The Tree Growth Tax Law is not a very effective incentive program as evidenced by the fact that only 2% of the owners have land enrolled in it.

When landowners manage their land with the intent to make a profit, they can deduct management costs from federal income taxes. Since profit can come not only from timber sales but also from the increase in land value over time, many landowners could justify tax deductions. We learned from the survey that only 7% had deducted tree planting costs and 1% had claimed a tree planting tax credit. Those are very low percentages in light of the fact that 29% had planted trees on open land and 17% had planted trees following a timber harvest. We also learned that just 4% of the landowners had deducted forest land maintenance costs. Contrast that with the fact that 30% had conducted timber stand improvement work and 21%

had controlled weeds around young trees. For most landowners, those costs would be legitimate deductions. Finally, we learned that only 5% had claimed capital gains treatment of timber sale income and 4% had deducted the original cost of buying timber from timber sale income. Again, contrast those low participation rates with the fact that 38% had harvested timber for sale. The fact that landowners are not using income tax deductions indicates that income tax policies are not behaving as incentives. We speculate that landowners find the income tax code to be very confusing and cannot figure out how to claim legitimate deductions. This theory is supported by the survey, which tells us that landowners who used a professional tax preparer were nine times more likely to amortize tree planting costs and three and a half times more likely to deduct the cost of buying timber from timber sale income than owners that did not use such services. Likewise, landowners that received technical assistance from a forester or other natural resource professional were nine and a half times more likely to amortize tree planting costs and fourteen times more likely to claim capital gains treatment than owners that did not receive technical assistance. This is clear evidence that it pays to use professional services. Unfortunately, only 33% of the landowners had worked with a professional tax preparer and 35% had worked with a natural resource professional.

Conservation easements and government-sponsored land retirement programs have been designed to help landowners reduce their costs for property taxes and land management. The survey told us that 5% of the landowners currently had land enrolled in such a program. The Conservation Reserve Program and the Reinvest in Minnesota Program were the most frequently used programs.

Thinking back over all the incentives we just discussed—technical assistance, education, cost-sharing, property taxes, income taxes, and conservation easements—you should be impressed by the low rate of participation in all of them. Do these incentives not meet landowner needs or are landowners not aware that such incentives exist? To explore this situation more fully, we asked landowners to rate a list of incentives on a five-point scale from least important to most important. In descending order of importance, landowners prefer property tax reductions for managed forest lands; income tax deductions or credits for management expenses; cost-share assistance to help with management expenses; free or low-cost assistance from a natural resource professional; free or low-cost educational materials or events on forest management; lower capital gains tax rate for forestry incomes; higher prices for forest products; annual rental payments until trees mature; and low interest loans. This order of preference is surprising. Property taxes, income taxes,

and cost-sharing lead the list and yet past participation rates are dismal. This again suggests that either landowners do not know that such incentives exist or that existing programs are not designed to meet landowner needs.

Another question in the survey helped us explore educational needs of landowners. On a list of 11 forestry-related subjects, the top educational needs, in descending order of importance, were: wildlife and/or fisheries habitat improvement; timber stand improvement; forest protection; forestry investment planning and taxation; and timber marketing and harvesting.

We further explored the potential of education by asking what educational methods landowners preferred. The most useful methods, in descending order of importance, were: (1) newsletter, newspaper, and magazine article, (2) publication, book, and videotape for home viewing, and (3) radio program. I think it is significant that several of these preferred educational methods are not used on a regular basis in Minnesota. While there are newsletters available for a price, it's hard to find a newspaper or magazine article or a radio program on forestry. We do have publications, books, and videotapes available, but these may need more effective marketing and they do not cover all subjects to the same degree. Other educational methods that ranked lower were: (4) written management plan, cable TV program, and on-line computer service, (5) field tour, and (6) weekend and weekday workshop and correspondence course. We frankly were surprised by the low ratings for field tours and workshops. These data tell us clearly that we need to devote more effort to mass media projects. By coincidence, a group is meeting on Friday of this week to consider producing forestry-related news releases on a weekly or biweekly basis. These news releases also would be available to radio stations. Our survey research suggests there is a big demand for information packaged in these formats.

We also learned that the preferred educational methods vary depending on the subjects landowners wanted to learn about. For example, a newsletter was rated highest by those needing information on wildlife habitat improvement, timber stand improvement, forest protection, and timber marketing and harvesting information. A videotape for home viewing was rated highest by those needing information on forestry investment planning and taxation. The study includes a wealth of information that will help us plan more effective educational strategies depending on the subjects that landowners want to learn about.

Since this conference is focused on timber, what does this survey tell us about the interest that landowners have in harvesting timber? Those of you associated with the timber industry are probably concerned that only 3% of the landowners own their land primarily to grow timber

for sale. But take heart. The survey told us that those for whom growing timber for sale was least important were one and a half times more likely to harvest than those for whom it was most important. In simple terms, a very high percentage of private forest lands will be available for timber harvesting. Remember too that the average landowner holds 106 acres and has already harvested timber on 43 acres during a 25-year ownership period.

Furthermore, the survey tells us that if we want to encourage landowners to harvest timber, we should help them prepare a written management plan and offer them income tax deductions or credits for management expenses.

To encourage landowners to plant trees following a timber harvest, we should offer them free or low-cost management assistance and property tax reductions for managed forest lands.

To encourage landowners to plant unforested or poorly stocked land, we should offer them technical assistance, annual rental payments to provide income while trees mature, and a lower capital gains tax rate for forestry incomes.

To encourage landowners to control weeds around planted trees, we should help them prepare a written management plan.

To encourage landowners to naturally regenerate after a timber harvest, we should offer them technical assistance.

To encourage landowners to conduct timber stand improvement work, such as thinning, cull tree removal, and crop tree pruning, we should offer them technical assistance, help them prepare a written management plan, and offer higher prices for forest products.

To encourage landowners to build permanent access roads or trails, we should help them prepare a written management plan.

In summary, we can say that with regard to timber management in general, the most effective incentives are low-cost technical assistance, assistance in preparing a written management plan, property tax reductions, income tax deductions, and higher prices for forest products. Conspicuously absent from this list is cost-sharing. Remember too that among landowners who received cost-sharing, 47% said they would have done at least some of their forestry work without that cost-sharing.

The survey pointed out dismally low participation rates in current incentives of all types. We need to do a better job of marketing the incentives now available. We also

should conduct more in-depth analyses of individual incentives, perhaps through focus-group meetings with landowners, to find out how we can better structure the incentives to meet landowner needs.

This concludes our presentation. Much more will be written about this survey after we conduct further analyses and prepare more in-depth reports.

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To implement effective climate change mitigation and carbon sequestration activities in the southern US, nonindustrial private forest landowner (NIPF) participation is necessary because of the...<sup>Â</sup> Typology of Nonindustrial Private Forest Landowners and Forestry Behavior: Implications for Forest Carbon Sequestration in the Southern US. Authors. Authors and affiliations.<sup>Â</sup> Kuipers BT, Shivan GC, Witter KP (2013) Identifying appropriate communication means for reaching nontimber private forest landowners. *J For* 111(1):34<sup>Â</sup>41Google Scholar. Kulluvainen J, Karppinen H, Ovaskainen V (1996) Landowner objectives and nonindustrial private timber supply. *For Sci* 42(3):301<sup>Â</sup>309Google Scholar. Reaching Minnesota's nonindustrial private forest landowners. Unpublished report. St. Paul: University of Minnesota, Department of Forest Resources.<sup>Â</sup> 6. Forest Management Guides: Not yet live<sup>Â</sup>"in development by the University of Minnesota and United States Forest Service. 7. Forest Stewardship Online: <http://www.extension.umn.edu/foreststewardship>. Identifying Appropriate Communication Means for Reaching Nonindustrial Private Forest Landowners. Brett T. Kuipers, Shivan G.C., Karen Potter-Witter. Published: 15 January 2013.<sup>Â</sup> Share this article. Click here to see the statistics on "Journal of Forestry" .