

## What do landowners really want?

When forest landowners are surveyed to determine their goals and interest in forest management, the survey is often conducted by a university, state forestry department, or an

advocacy group. In my opinion, the surveys are biased both by the questions proposed and simply by the messenger. I think that in the comfort of the kitchen table, folks give the answers they think the messenger wants to hear.

For example, I am holding in my hand a recent woodland owner survey by a state department of forest, parks and recreation. To their credit, this is less of a push-poll than I have seen from advocacy groups. There is one full page on "Your Reasons for Owning Wooded Land." It includes a long set of nonmonetary goals, including beauty, recreation, hunting, protecting wildlife habitat, or water resources. The list does include land investment and timber products. It does not suggest that there is income to be gained from harvesting timber products, and does not allow that the income might be a main goal, though you can rate "timber products" as "very important." Most landowners do not harvest for the products—they do it for the money, and to achieve other goals.

The survey results often show that landowners are very interested in non-monetary benefits such as beauty and recreation, and imply that land investment and timber income are secondary at best. But I think landowners answer these questions differently with their pen than they do with their "feet" and their checkbook. When the State, or some advocacy group, is asking these questions, we naturally want to tell them that we are all about protecting resources and enjoying nature. We hardly want to admit that there is any financial motivation. One bias is parcel size, and this is often sorted in the final results. I realize that my clients are, by definition, part of another bias. They have chosen to be influenced by me, which is likely to result in active management and financial gain.

And there is nothing wrong with financial motivation. Land is a significant investment, with considerable costs for maintenance and management. It is this economic consideration that leads us to grow trees to full economic maturity, and to ensure

proper reforestation after harvest. Good forest stewardship also allows the real estate to accumulate value. It is income from the periodic sale of trees that allows ordinary Americans the extraordinary privilege of land ownership. ("Extra-ordinary" in the sense of world history.) So, culturing the forest toward commercially marketable wood products is a main feature of silviculture.

Readers of this magazine have already decided to engage in active management. I don't have to convince you. And you have a full range of objectives that include protecting natural resources like water and wildlife, along with recreation and scenic beauty. But let's face it, the money is important. Many harvesting operations involve more than just selling timber. We make a "package deal" with road or trail improvements, aesthetic considerations, removal of cull trees, scarification of harvest sites, or other services. And the wood pays for all this. But it is important to consider these costs as menu items.



## Well-Informed Landowners

I just did a nice, complicated project for a client. They had all the right questions, which forced me to enumerate the costs and income for various aspects. Two landings had to be constructed, along with improving an old road for large trucks, and constructing a bridge for recreation across a small brook. One stand had mature pine with dying birch and poplar. This was the main attraction for timber value and the contractor's interest. Several other stands had lower quality and/or other complications like their recreational trails and restoring old views. All the trails and landings had to be smoothed and waterbarred for recreational use. Finally, a portion of the view clearing had to be stumped and seeded for a permanent opening.

I made the costs and income estimates, and, fortunately, hit them closely. The logging contractor was very cooperative, partially because he knew he was being fairly compensated for the "non-timber" aspects, and because the project was laid out so that the logging portion was productive and profitable for him. The landowners had a clear understanding of the whole project, and chose the "menu items" that fit their objectives. The initial planning contained many elements that were rejected from the final project. Overall, the landowner has a high degree of satisfaction with the completion.

But how many landowners enter into a project without that information? Some engage in selling timber, perhaps to the highest bidder, or just to the first "reasonable" offer. Then they are surprised when they have a messy job with inaccessible trails, tops and debris that are unsightly, damage to remaining trees, or perhaps a lot of cull trees standing. If the logger was hired to cut and haul merchantable timber, and that is all, then they got what they asked for.

On the other hand, many foresters market their services as "eco-conservative." Light cuts, many areas untreated, and a long interval between harvests make for a well-stocked forest with large trees. This can be very satisfying, and besides personal pride and pleasure, there are important economic reasons for choosing this style of management: real estate value, and high volumes of timber in anticipation of improved markets. Is there anything wrong with this approach?

In my opinion, well-informed landowners will make the best decisions. Here is a typical scenario: A proposed light improvement cut on 60 acres has \$70,000 of timber in "roadside value" for 10 loads of logs and 60 loads of pulp. Expenses include \$45,000 in harvesting costs, \$5,000 in marking and forestry administration costs, \$5,000 for access improvement, and \$5,000 for final cleanup and trail improvements. The net to the owners is \$10,000. Does it get explained to the owner that the "gross stumpage value" is \$15,000

and the forester will charge \$5,000 for services? Is that all they "need to know"? Does the landowner understand that the roadside value might be more or less depending on how it is marketed? (Better yet, does the forester understand that?) If aggressive marketing added 5% to the roadside value, that adds \$3,500 to the final yield, which is 35% to the landowner.

Let's look at the costs. Perhaps someone else would do the cutting and skidding for less than \$45,000. Perhaps a different harvesting system would be more efficient, or someone with older equipment, or just someone who needs the work a bit more. I did not mention the trucking, since that comes "off the top." But trucking is one of the largest costs to consider. Do the landowners really understand the costs for the access improvement and final cleanup? Do they realize the access improvement is a permanent benefit for their forestry activities and might lower the trucking cost? Tractor-trailer access allows the wood to be trucked and marketed more effectively, and this initial cost might create substantial income. Would they actually write a check for \$5,000 for the trails, or would they rather put up with a few ruts and branches?

A landowner should not be expected to grasp all the subtleties of this. But the forester should, and should be able to explain the necessary portions, and offer the options that best reflect the landowner's true goals. The forester needs to understand the landowner. And the other relationships are also important. If Logger A always uses Trucker B, then it may not be prudent to try to get Trucker C to do the job for a few percent less—especially if Logger A is a better match for the project.

I have seen dozens of instances where a landowner says, "It's not about the money." But when that first four-figure check comes for timber income, they change the

tune. "Is there more that could be cut? More income to be had?" In the previous example, even a slightly heavier cut will have a drastic effect on the bottom line. Cutting 20% more wood might also lower the harvesting costs per ton, and has no effect on the setup, cleanup, or marking costs. So the landowner might come out with double the money at the end of the job for cutting 20% more wood.

I have also spoken with landowners who have engaged "eco-forestry" services for decades, doing light cuts if any, and getting very little income from the forest. When they call me, they are ready for a change. I hear that these issues and options have not been explained, the wood has not been aggressively marketed, the forester did things a certain way with a limited pool of contractors and practices. The landowner understood that they were improving wildlife habitat, and enjoying a wellstocked forest, and avoiding certain problems like the risk involved in regenerating a stand. But 20 years of tax bills and management expenses with little income can wear you down.

Summing this up, why are we improving the woodlot? Yes, birds and salamanders do benefit. But aren't we growing these "better quality" trees for a marketable product? And doesn't it make sense to send them to market in a profitable way? Landowners should have a basic understanding of a number of topics, and foresters should profoundly understand them. Along with silviculture and ecology, as well as state laws, here are some:



Local and regional mills compete for certain logs. Their markets change, and so do their suppliers. Their actual demand for certain products changes almost weekly, though the price sheet might be revised only twice per year. Is their log yard full or empty? Have they invested in new equipment that increases their production? Are they laying off workers? What products do they really want, and what do they just "accept"? How much of this do they resell to other mills? Giving them what they really want, when they need it, can be lucrative. But it is not realistic to think that all your products can all be sold at their market peak.



Most wood is sold via wholesale channels in truckload quantities. Rarely, a landowner without his own equipment can have retail opportunities. If you have your own logging, sawing, or processing equipment, you might be able to sell retail lumber, timbers, or other specialty products. There is profit to be made on this, but it will only be a small percent of the products your forest has to offer.



Most hardwoods are marketable as logs with a 10-inch minimum diameter, inside the bark at the small end. If this log is straight and clean, it might make four clear boards before the internal defects at the center show up. A bit of sweep or crook, or a branch stub, and the lumber value is diminished. Larger logs have a greater proportion of clear wood and the chance to make wider and thicker boards which are worth more per board foot. And larger logs of very high quality have the chance to be used in veneer processes, sliced into thin sheets (instead of sawn) for higher-value products. We call this "grade





each tree will have a maximum

grade it aspires to. Not all trees

have veneer potential..

Each harvesting system has a "break-even tree" under certain circumstances. We always want some submarginal trees harvested to achieve particular goals, but it is important to realize what the logger actually makes money on, what he can just barely afford to do, and what he is really doing you a favor to accomplish, especially when putting together a successful "package deal." A cable skidder with chain saw felling is relatively light on the land, and can get into small spaces for thinning and improvement cut-

ting. But they can't survive on huge proportions of pulp in most places. Here in southern Vermont, under decent logging conditions for terrain and skid distance, a cable crew is breaking even on about an 11-inch DBH firewood tree. On easy ground with very efficient crews, this might go down to 9 inches. Add in some complications like snaking trees out of dense stands with almost no damage, or long skids, steep ground, or extensive trail work, and this goes up to about 14 inches. What I mean by this is that a thousand cords of 8inch firewood trees is worth nothing to a cable crew. So, adding in hundreds of 8-inch trees to a commercial thinning adds considerable cost to chain saw systems. Mechanized systems are more efficient per tree. Cut-to-length systems with a processor and forwarder bring that marginal tree down to about 8 inches, and whole tree harvesting, such as biomass chip crews, can go even smaller. The layout and marking of the harvest are also critical in determining the marginal tree for each system, as is the terrain.

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Matching the right equipment to the project is critical, as mentioned under "marginal trees." Marking and laying out the project to suit the equipment is next. Skidding distance and terrain are important. So, really understanding the project—the land, the owner's goals, the silviculture, and the markets—all comes before looking for the right equipment mix and crew.



Taxes are easy to enumerate. You get a bill every year. Most states have favorable tax treatment for productive forestland, though there are strings attached. Management fees, such as plans and timber sale administration, are significant.

Hopefully, you are getting your money's worth. Sometimes, an afternoon walk through your woodlot for an hourly fee is a great investment. Marking trees for harvest, though expensive, is a critical part of the practice of forestry, and is almost always justified in highvalue hardwoods. We are finding, with certain professional crews, that we can avoid this cost in lower-value stands by providing clear instructions to the logging crew, perhaps by marking "sample areas." Forestry consultants provide a wide range of other services, such as spraying invasive plants, custom chain saw services, tax or estate planning, trail layout, or tree planting. Each of these might be useful for you. Boundary maintenance is important, and it can be postponed. But neglect can be expensive later if a re-survey is required, or timber trespass occurs. Trail construction and maintenance is often a by-product of logging. But many landowners get their best satisfaction through excellent trails. Either for hiking, skiing, motorized

recreation, or woods-work, you interact with your woodlands through the trails. Especially along these trails, the appearance is important. Cleaning up debris, cutting underbrush and views, and other efforts might bring great satisfaction. But all these things are costs to consider.

As a wealthy society, we may want to think we are "above" the base motivation of profit. And there are wide avenues of satisfaction in managing your woodlot. I like the old Tree Farm motto: "Pride, Pleasure and Profit." You can put them in any order you want. But generally it is the trees that pay for all of the expenses. You can do a lot more with high-quality sawtimber stands than low-grade trees.

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## (Captions)

Jan 12 014 Rotten spruce logs, which are only good for pulp. These trees may have appeared sound and valuable from the outside.

jan12 033 Tractor-trailer hauling allows lower-cost trucking and access to farther markets for more profit—especially if loads are sorted for specific products, like these high-grade oak logs.

keller5 Light thinning in high-quality oaks.

picture 005 The marketing takes place on a well-organized landing.

Walker 2 Road construction is expensive, but can lower skidding and trucking costs and add value to property.

webb 008 High-value maple logs sorted for premium markets.