

o-it-yourself woodlot management is full of hearty challenges and doing it well is very rewarding. We covered safety issues and personal firewood in previous issues, and in this installment, we will look at sawlog and lumber production. Controlling the quality of work in your woods is a first benefit, and there are financial benefits of earning the "logging rate" for your products, and perhaps a retail rate on special products and "project wood."

Once you have mastered personal firewood, the next challenge is harvesting lumber-quality sawlogs and doing it well. Harvesting sawlogs for your own projects is fun. For any one-time project, my advice is to find the best trees to suit your needs. If you are building furniture, for example, this is a great time to put some premium trees to use. I had my first kitchen cabinets made from some low-grade cherry, and it was a big effort to select out decent cuttings for use. Three nice logs would have made a big difference. A barn might have particular needs for stout posts or long beams. A dozen or two premium trees will meet this need. Siding boards are less fussy and can

come from low-grade logs, inferior trees, or edge boards from sawing timbers. The effort and satisfaction of doing a project with your own trees is well-worth cutting some nice ones.

If you regularly sell sawlogs from your woodlot, you still need to follow a forest management plan. "Cutting the best and leaving the rest" will leave you with a degraded property. There is nothing wrong with cutting mature timber, but your harvesting should be directed at growing trees for the future—either regenerating mature areas or releasing crop trees from competition for further growth. There are details of how to accomplish this in other articles that have appeared in this magazine. Most such activities will produce lowgrade wood like firewood or pulp, but middleaged, multiple-aged, and mature stands will produce some percent of sawlogs for either personal projects or sale.

Financial Considerations

Cutting sawlogs for sale has the financial benefit of earning you the logging rate. We looked at firewood in the last installment and noted that you earn about \$50–\$60 per cord to cut and sell log loads of firewood and that this almost doubles for personal wood (since you save on trucking). The normal logging rate, in our area, will range from \$120 to \$250 per Mbf. This is about equal to 2 cords, so that pays you \$60 to \$125 per cord. It can be considerably higher for high-grade sawlogs, since the logging rate often varies based on the end value. Of course, factors like the tree size, access, volume per acre, and all the particulars will affect the logging rates for any project. If you do the work yourself, you are earning that rate plus the "stumpage value."

It is a common mistake to think that if you cut a load of valuable sawlogs in a day, you have earned all that money that day. A friend of mine just cut some decent pine and could average almost a load per day. They were large trees on gentle ground, close to the road. He has a skidder and knows how to use it since he is an arborist and jack-of-all-trades. These pines have grown on his own land, and he thinned them a couple decades ago. A load of good pine sells for about \$1,500 on the roadside (someone has to pay the trucker), and even for a 10-hour day, that would be \$150 per hour. You have to consider what the trees are worth as standing timber, though. While we don't get to count 80 years' worth of property taxes, management fees, and thinning costs, (in most cases), we do have to consider the market value. On his site, with the easy access and large trees, and a large volume per acre, the standing tree value is high and the logging rate relatively low. Sorry to mention that. He might have sold those trees for \$800-\$1,000 per load to someone else and let them do the logging while he just watched or did something else. Still, he made over \$50 per hour to work on his own land.

While you may decide to do a project based on more than financial considerations, it is an important factor. My buddy was slow on arborist work and had just bought a newer skidder that had to be paid for, so it made sense. He sold about 100 Mbf of his pine for \$26,000 and has the satisfaction of doing the work and achieving other goals like not smashing all the hardwood or the power lines. If he could have sold the standing trees for \$16,000, then he earned \$10,000, which is pretty good for about six weeks of work. For your own projects, you do have to consider the best use of your time. There is always something else you could have done.

Let me mention the tax considerations for this type of project. You might like to think you earned a lot of money cutting your trees, and the IRS would like to agree. They get their share, right? If you sold \$26,000 in trees, that is not all "earned income." You had a capital investment in the trees, so as you sell them, a portion of the money is a capital gain. The capital gain rate is usually lower than your income tax rate, so this benefits you. And you do not have to pay the Social

Security/Medicare portion which is about 15%. (Self-employed folks pay both halves of this tax.) So, you pay the income tax rate on the "logging money" you earned and the capital gains rate on the value of the standing trees—your "timber capital." Further, you may have a basis to subtract from the gain, depending on when you bought the land and trees. If you recently bought the land, the trees have not grown or gained much value, so you could have a large basis and small or no gain.

For my friend who has owned this for about 20 years, about 25% of the \$16,000 capital value is his basis. He could pay capital gains (15% for most forest owners) on 75% of the \$16,000, and regular earned income on the \$10,000. Of course, he will have all sorts of cost deductions, including depreciation on the used skidder. I'll make up a number of \$4,000 for all this. If he is in the 22% bracket, he would pay \$1,320 in income tax and \$900 Social Security, plus about \$1,800 in capital gains. This gives him a total tax of \$4,020. If he just paid income and Social Security tax on the whole \$26,000 (22% plus 15%), it would be over \$9,000. Of course, there are the standard deductions and all sorts of other considerations, and you need to contact a qualified professional for your particular situation. You can see that it is worth considering—especially if another \$26,000 in income would bump you up into the next bracket. There is great tax information on a website called www.timbertax.org.

How a Mill Changes Woods-Work

Of course, having your own sawmill changes everything (and the taxes get more complicated...). Now, you have the opportunity to sell lumber products instead of round logs. There have been many articles in this magazine and others about using your own mill, sawing for grade lumber, and adding value to your products. This DIY series focuses on the woods-work, so we will examine how a mill changes the woodswork. And to keep things complicated, you can always hire a mill if you don't have one. This is a great way to turn your logs into project wood. I have done many "custom sawing" projects and so I get to look around my office and house at beams, paneling, and floors from trees I once knew.

One key to success with selling lumber or sawlogs from your property is to get retail rates for some of your products. But do not be afraid to wholesale your "by-products" like narrow boards. It is better than storing them to rot. I have bought a lot of "miscellaneous lumber" from mills. Having a sawmill gives you a wide range of retail options. Selling "retail logs" is more difficult, since most sawlogs are handled in wholesale quantities. Every now and then, I get calls for something special—usually oversize or particular lengths. You can't do "forest management" merely on these special orders, but if you have a sawmill, your orders



will be for boards for all sorts of needs. Special orders for timbers or odd lengths and thicknesses are relatively easy and should get a premium price. I work with one farmer who has a sawmill, and his mixed woodlot is well set up with many stands holding different products. He has a dense hemlock stand with a scattering of large pines and some hardwood. He tended to pick at the edges as he needed hemlock, but could not really access the stand for other products. I suggested he cut strips through the stand, leaving the pine and good hardwood. This gave him a commercial volume of hemlock pulp and sawlogs, some of which he kept for the mill. Now he can drive through and get the other products as needed, such as long pine timbers. He can saw 24-foot lengths, for example, which are not available everywhere.

And if you have a mill, you still have to decide what orders to take, what logs to cut on your own land, and what logs should be sold or bought. It partially comes around to your forest plan. If you have a lot of mature fir that is not going to last 10 years, you either need to develop a market for those products or just sell the logs. Low-grade logs are problematic, and there is a reason these are not favored by commercial mills. Perhaps you can make something out of them, but a lot of labor is involved. If you are cutting lower-grade trees to either regenerate an area or release desired crop trees, then let that be your primary goal. Selling the logs in the commercial market or cutting them up for firewood or pulp might be best. There are odd exceptions. I sometimes see logs in the pulp pile that are not suitable for the commercial market, but have something to offer. One example is the premium pine butt log with some center-rot but a lot of clear wood on the outside. And it might make sense to sell highquality logs since the market rewards you with a premium price. Veneer logs might be too valuable to make into lumber. Conversely, it might make sense to buy logs in some instances. It might be as simple as an order for pine lumber and you have a hardwood lot. Or logs might become available from a neighbor, arborist, or other source.

If you are cutting logs for sale, you have to consider your markets. Let's face it, you are doing it "for the money" even if these are by-product logs from implementing your forest plan. We published an article in this magazine on bucking hardwood logs for grade products (Oct./Nov. 2015). Softwoods are a little simpler, but you still need to check with your buyers on their needs and pricing and the detailed specifications like minimum diameter and allowed defect. I have seen instances where cutting a log a few inches too short lost hundreds of dollars of value. An 8- foot 6inch, veneer-quality maple misses the veneer market since it is just too short and merely pays a lumber price that may be less than half. Red pine, for example is normally sold in 12-foot and 16-foot lengths, but I just sold a small batch and the mill asked for a percent of 10-foot logs to meet their orders. It is worth the call. If you are not experienced at log bucking, many buyers will come out and help you for a couple hours to teach the basics and get what they need from you. You should have a couple dozen trees pulled out and ready—preferably spread out and not in a pile.

Planning

In our mixed woodlots, you need to plan ahead to market your wood effectively. Some species like maple and pine spoil in summer heat so loads need to be accumulated and sold within a week or so in hot weather. Species like ash and hickory can split if they sit around and dry out. With smaller equipment, this can be a problem, especially if you have a day job and are doing woods-work on evenings or weekends. Either leave these products for winter or have everything set up for a flurry of activity with a truck and market all lined up. Many buyers take mixed loads, especially log-brokering yards, and this can simplify things for you. If you can sell full loads of logs they use directly to a mill, that is usually the best gain. If you only cut a few loads per year, you will want to schedule this activity. Sorting in the woods with a tractor adds some cost, but you might cut pine logs one winter and hardwood logs the next. At some point, you also need to follow up with the improvement cutting for firewood and pulp to finish the section.

In the next issue, we will look at your forest from a "management planning" perspective, how to set priorities and to distinguish between culturing an immature stand and regenerating a mature or low-quality one—and, of course, when it makes sense to pay for a task to be done or when to do-it-yourself.

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