# STANDING TIMBER

We grow trees for a whole host of reasons. We like the way they look and we enjoy being in the woods. Trees provide wildlife habitat and improve the value of our real estate. An important consideration for growing quality timber to maturity is that it has value. People want trees and need them to make products. So in many cases, we are growing trees to sell or are selling trees to achieve other goals.

In past articles we have talked about ways to grow trees, which trees to harvest and why, and how to get the next crop established. If you harvest trees yourself, you might process firewood or mill out your logs and sell retail lumber. You might sell a few loads of sawlogs to local markets. But in many cases, even the most ambitious landowner can't keep up with the growth rate and will eventually sell some of the wood as standing trees. We will discuss a wide range of methods for



selling standing timber and the conundrums for each method. In general, we are trying to:

- make an attractive package for sale, including both the valuable trees for market and the extra work involved (such as cull tree removal or trail work),
- determine the limitations and criteria for any details,
- find the right buyer in terms of price and quality of work,
- and bring the project through an adequate process to successful completion.

#### A MARKING TALLY

A landowner may start with a list of restrictions for what constitutes a perfect job, like winter only, small landing, extra trailwork, cull tree removal, no damage to residual trees—and some requests might not be realistic. In selling a harvest unit, these are viewed as negatives to the buyer. You need to emphasize the positives to make the sale attractive. A marking tally is a good place to start as it's like a reverse shopping list. The buyer wants to know what is for sale. A list of board feet and cords by species, with extra information like average tree size, percent of veneer candidates, and the number of cull trees or sub-marginal pulp trees is very helpful. The ratio of logs to pulp is a factor, and high-quality wood will attract buyers. Marking the unit for particular types of harvesting can add (or subtract) value. For example, if trails are well laid out, with plenty of wood close to the trail such that logging production will be high, then logging costs will be lower and stumpage prices higher. If marked trees are scattered, off the trail, and difficult to get to, logging rates will be high and damage unavoidable. By making the logging process easier, you can get

Left: There are many different ways to sell standing trees or the products made from them.

more money for the timber or get the logger to remove cull/pulp trees or provide additional service. Terrain, skid distance, and your list of extras are all factors in what makes the job attractive or not. These are all part of the marketing package.

The additional criteria for a timber sale are important to the landowner, and they need to be clearly enumerated for a harvest agreement. In some cases, they might be better priced separately. When you offer for sale a batch of timber with an approximate value of \$50,000, but then ask for a truck road to be built for access and a bridge on the main skid trail, wildlife food plots cleared and stumped, or other extra work, any buyer has to evaluate these things and start subtracting. If they have to hedge their offer on the timber due to risks of volume or grade, and then hedge their expected costs, you may be losing on both ends of the bargain.

### BASIC OPTIONS FOR A TIMBER SALE

Three basic options for setting up a timber sale are: Lump Sum (usually by sealed bid), Pay as You Cut, and Contract Logging Services. Each has benefits, risks and problems. Trees to harvest can be marked and tallied, or trees to leave can be marked. Some areas can be cut by prescription, and clear-cut or patch cuts can merely be marked around the perimeter. Marking and tallying timber for sale is both art and science.

Most timber in the world is sold in a Lump-Sum Bid process. The harvest area is delineated, the trees are marked or inventoried in some way, various criteria are established, and buyers are invited to bid a total dollar amount for the project. Normally, the timber is shown on a particular date and sealed bids are offered, with the contract awarded for the highest dollars. They buy the trees and

agree to accomplish the harvest within the specified criteria.

This is the simplest way to sell timber and is considered impartial and fair. Almost all state and federal timber sells this way. The dollars are determined up front with a crisp payment schedule such that all the money is paid before they start, or more commonly, at specified time periods. So the buyer takes all the risk for timber quality and volume, such as internal defect, or color in high value species such as maple or cherry. They prefer to have a very clear expectation of timber amount, so marked sales are best for this. In clear-cuts or prescription cuts, a detailed inventory should be done with a prescription clearly described. Buyers of lump-sum sales thrive on overrun. Everyone expects the volume to be conservatively estimated and hopes for 10% or 20% extra, which is the profit. I have heard of sales with as much as 50% overrun and the landowner lost money. Unfortunately, this was from public land, so we are all the landowners. Every particular detail such as trail work, cull tree treatment, scarification, and cleanup has to be included as part of the contract. This method is attractive to foresters who have little knowledge of the details of timber markets. Send it out there and see who offers the most.

I generally avoid lump-sum sales. Once you sign the contract, you essentially have an adversarial relationship with the buyer. The contractor is trying to reduce costs and you are enforcing contract details, so you seldom get the bestquality woods work. Anywhere corners can be cut is an opportunity for profit. It is difficult to make any changes since the trees belong to the buyer. For example, if you decide to leave some marked trees for seed source or aesthetics, you essentially have to purchase them back from the buyer. And since the buyer has to take all the risks, the

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offer has to be buffered somewhat, even if it is competitively bid. To reduce the buyer's risks, it is helpful to have a solid tally of marked trees with a total tree count and total volume. Veneer-candidate trees can be marked with a separate symbol and tally. Pulp trees and log trees need to be differentiated for the buyer as well. But the buyer is taking a substantial risk that the volume and quality will turn out as advertised. With high-quality timber, competitive bidding can give shocking dollar values. But you are always chasing around for contract details, and it is prudent to set aside a portion of the proceeds for additional cleanup, trail work, or other extras. Another aspect of reducing risk for the seller is to limit the bidding pool to invited guests. They can be selected logging contractors with a favorable track record, but mills are usually the strongest bidders for lump-sum sales and will provide their own crew.

The other methods have more flexibility for details and share the risks between the buyer and seller. For the landowner who will not tolerate any financial risk, lump sum is the way to go, but it has other problems. For the landowner willing to share some financial risk, these options create more of a teamwork approach, which is a better way to achieve a high standard for quality of workmanship, or a longer list of required details. They are also better for prescription cuts, or cuts without a crisp tally, like clear-cuts and patch cuts. Of course it helps to have a track record of trust with a range of contractors and mills.

Pay as You Cut sales can be negotiated or bid. These usually offer a batch of timber with particular requirements, and payment terms based on third-party measurements for volume, grade, or value. For example, a logger cuts the wood and delivers it to sawmills and pulp mills. The mills measure volume and value the wood, and the logger's stumpage payment is based on the mills' scale sheets. This includes a price per MBF or

ton for each species or species group. It could include a formula based on the mill price or different prices for different grades or value categories. While the pricing is variable and can be complicated, it shares the risk. If the quality, volume, or value of the wood exceeds expectation, everyone, including the landowner, makes more money. And if the volume or quality is just not there, the landowner gets paid for actual yield. This is a good method when volumes are not crisply measured, such as clear-cuts and patch cuts with perimeter marking, or shelterwood units with leave trees marked to reserve. The loggers or buyers can offer higher prices because they are not taking the risk on quality or volume. This is a common method for forestimprovement work and lower-value sales. The logger needs a higher rate to compensate for lower-value wood and higher landowner expectations. Another risk factor with this method is the possibility of loads not being reported or paid for in

the process. Contract Logging Services can also be negotiated or bid, but are more commonly negotiated with a particular contractor. This method requires detailed involvement with current markets—understanding which mills want which wood, who pays the most, and what the trucking rates will be. As such, this is the normal way wood is handled on industrial land. Foresters negotiate or bid the products to the mills, often for a premium price, and are expected to provide those products in a specific time frame. With this method, the logger is paid a particular rate for logging each product and a trucking rate for delivery. The mill pays the landowner or forester, who then pays the logger his portion. The accounting, cash flow, and things like workers' compensation liability make this the most complicated, but it has a number of benefits.

Logging rates can be adjusted for different products, such as pal-

let logs, softwood logs, hardwood logs, and veneer. To be fair, they can also be adjusted for different treatments, skid distance, or terrain. This can allow the logger a higher rate on high-value products, where there is more money to go around. Since logging is a cash flow intensive business, payments to the logger need to be prompt. This works well with prescription cuts or clearcuts where there is not a crisp volume tally. And it has to be made clear which actions are included in a logging rate and which are done as independent projects, since there is little opportunity for profit when the logger is getting a mere production rate. For example, trail work to satisfy BMP requirements and landing construction are normally part of the logging rate. Constructing a truck road or extra trail work is usually paid out sepa-

#### TIME & PRESSURES

The expected time frame is a consideration for both buyer and seller. A landowner may want the job done at a particular time, like when there is frozen ground, or to get it done quickly. A buyer will want more flexibility, and may pay more to have that. I once offered a decent batch of wood in late fall for a lump-sum bid, with the landowner insisting that it be completed that winter. My extensive list of buyers did not have available crews for that winter and gave very low offers. I was able to hire a logging crew under a contract-logging-service agreement and achieve more than double the highest bid. If the landowner had given two winters, my guess is the bid would have been much higher. There is some ground that simply must be cut during frozen conditions. But loggers are often overbooked for winter work, so if the contract terms can allow for a wider time range, it makes the wood more valuable. Larger sales often have to be spread out over more than a year to be reasonable.

#### SORTING

Sorting products is a consideration

Mills are specialized and forests are

diverse. We normally sort 6 to 12

different products on most jobs.

Pine logs and pulp go to different

mills. Hemlock logs and pulp and

arately, so that makes six sorts if

spruce-fir logs and pulp also go sep-

you have all three softwood groups.

Hardwood logs are often sorted to

two or three markets for species or

in modern forest management.

grade, and veneer (slicer and/or rotary) may be sorted out. Finally, low-grade hardwood might be sorted for processor firewood (larger straight pieces for commercial firewood production), homeowner firewood, which can be smaller and limby, but might be fussy about species like white birch, and, finally, hardwood pulp, which is not fussy. So there are 14 potential sorts. In lump-sum sales, the buyer has the responsibility to sort the wood and make the marketing dollar by getting logs to whoever pays the most. This can be a liability. The best lump-sum sales are from less diverse forests with the specific products a buyer wants, like a white pine lot sold to a white pine mill. They will resell the pulp, but the less hardwood they have to deal with, the better. Pay-as-you-cut sales allow the logger to make the marketing dollar in most cases. On lower-value sales with smaller percents of high-grade wood, the opportunity for profit is to sort and deliver these products to market. Contract logging puts the marketing in the hands of the forester. It directs the logger to buck and sort for specific markets, making the marketing dollar for the landowner part of their service.

Performance bonds are a normal part of some timber sales, particularly lump sum with higher-value timber. This is a deposit made by the buyer to the seller or third party (perhaps the forester) to be held until successful completion of the job. This can assist with contract compliance on any of the various



terms. As I mentioned, administration of lump-sum sales is all about contract compliance, and a performance bond is the hammer. On contract-logging sales, the forester or landowner is writing the checks to the logger, so they are usually compliant about various details. On low-value sales (which are usually not lump sum and often pay as cut) the landowner is really requesting a lot of service from the logger, in terms of cull tree removal, minimal damage, and to operate on a slim margin. It is simply impolite to ask for a high level of service and then a high-performance bond from a logger who is doing you a favor to be there. I once had a job all set to go, with a logger scheduled to start for a winter's work on a low-grade woodlot. The landowner (a Wall Street real estate banker) insisted on a very high performance bond, and the logger just said no. I tried to explain that this was an unrealistic expectation.

#### STEALING WOOD

Is it possible for wood to be stolen? Of course, and there are more ways to steal wood than one article can cover. The best defense against theft is to work with reliable people with a solid track record. There is more on selecting good folks in the May/June 2015 issue of this magazine. Ronald Reagan said about the Russians, "Trust but verify," and that is a good track to take. A solid marking tally or initial estimate will

give some expectation for final volume. If a lot of the trees have opened up with rot or other defects, then you may have to adjust, but even if every tree is marked and measured, a tally is still an estimate

In lump-sum sales, any tree that is not marked can be stolen. Any cutting outside of the designated area would be a possibility for theft. There is no running tally of wood production, so it is important to inspect the logging and make sure the correct trees are being left and none of them make it into the harvest piles. It is normal for occasional trees to be damaged or need to be cut for trail construction. A lump-sum bid should have provisions for extra trees.

Pay as cut requires the most trust in the logger, so we use a high level of verification. It is possible for a logger to simply not record a load that goes off the property. If it goes to the same mill as other wood from the lot, then it may be possible to get an accounting from the mill. But if the loggers or truckers are working on multiple lots, this can be complicated. If they send wood to a different mill, a missing load can be nearly impossible to find. We inspect our jobs regularly (but not too regularly) and record the volumes produced and the remaining volume of each sort. If there was two thirds of a load of ash logs last week, but only a half load this week, then a load of ash should be

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accounted for. And we have an idea of the production levels for each crew, so by accounting for breakdowns and bad weather, the account should match the expected production.

Contract logging is the crispest method for accounting for each load. The loads are paid directly to the forester or landowner, so there is less chance of a missing load. It is possible for a load to be diverted, perhaps to another mill, so all the other methods of verification apply.

With each sale system, there needs to be inspection of the logging process for successful fulfillment of the goals and contract terms. Essentially all the marked (or prescribed) trees need to be harvested and properly utilized and marketed. And this needs to be done with a dose of reality. For example, if a logger completes 98% of a project, but a small area is too wet or steep to be done practically, or a mere scattering of marked trees remains, perhaps the goals have been met. Proper accounting needs to be done to make sure everyone gets paid what is due. Of course there are variables and sub-variables to consider, and portions of these methods can be mixed and matched. I often do contract logging on the sawlogs and have the logger pay a stumpage rate on pulp and chips. Sometimes I bid the high-value sawlogs as delivered logs to various mills, and then contract the logging service. Each job will have its own peculiarities and these are all tools in the toolbox.

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