

Selling Timber: What the Landowner Needs to Know

Many landowners receive only a fraction of their timber's true value because they do not know what they have or how to sell it. Selling timber can be a rewarding experience *if* you understand the steps involved. This guide will not make you an expert, but it will explain the basic steps involved in selling timber, so you can feel more comfortable during the process and better about the results of your sale (Figure 1).

Work with a professional forester

The first step in conducting a timber sale is to select a professional forester. Many landowners often ask why they should have a forester help them sell their timber. The answer is quite simple: Like your financial planner who helps ensure your retirement and estate goals will be met and your family doctor who prescribes the proper care to ensure your long-term health, a professional forester helps ensure your timber sale will be financially and ecologically successful.

If you cannot answer the following questions and others like them, you may need the help of a professional forester.

- How many trees will be cut?
 - How much is the timber worth?
 - How and when will the logger pay me?
 - Will the logger take only the best trees and leave the rest?
 - What condition will my woods be in when the logging is completed?
 - Will the logger have liability insurance and post a performance bond?
 - How do I report this income to the IRS?
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There are two basic types of professional foresters: public and private. Public foresters work for either a state or federal agency. They can answer questions about managing your woodland and help develop your forest management plan. But landowners often have to wait for their assistance, and the type of assistance they can provide may be limited.



Figure 1. *Becoming familiar with timber marketing and harvesting operations will assure you that the operations are proceeding according to your expectations.*

Private consulting foresters provide responsive service for a fee. They work to get the best dollar value for your timber and, like public foresters, will make your woodland healthier and more valuable. The amount paid for their service is more than returned through the increased revenue from the timber sale.

Regardless of whether you choose a public or private forester, the critical decision is that you choose a forester. A professional forester will provide the following services:

- Maximize present and future economic value by identifying which trees to harvest and which trees to retain in the forest
- Prepare an accurate inventory of what is to be offered for sale, including species, number of trees, volume, quality and estimated value
- Market the timber effectively to obtain the maximum price by using knowledge of the timber's potential value, markets and buyers
- Monitor harvest activities to ensure your satisfaction
- Offer guidance on income tax provisions relevant to timber sales

In Missouri, to find the Missouri Department of Conservation resource forester closest to your woodland, call 573-751-4115 or go to the webpage <https://mdc.mo.gov/regional-contacts>. To find a private consulting forester, go to <http://missouriforesters.com> and click on "Find a Consulting Forester."

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Develop a forest management plan

Although a plan is not required to sell timber, having one will help you be a better steward of your land. A plan will help you better understand the reasons for owning your woodland. That better understanding will help you identify clear goals and objectives, and how you and your forester can use harvesting as a tool for meeting those objectives. Yours might include some of the following objectives:

- Reducing overcrowding in the forest
- Creating wildlife habitat
- Renovating a neglected or degraded woodland
- Salvaging damaged trees
- Improving the overall health and vigor of the forest
- Developing areas for recreational activities
- Creating vistas and trails

Determine what you have to sell

The next step in conducting a timber sale is determining what to sell. Selection of trees to be harvested should be done with the advice of a professional forester to ensure the harvest will satisfy your objectives and maintain the woodland in a vigorous, healthy and productive condition. The type and intensity of harvesting required will depend on your objectives and the type and condition of the woodlot.

Trees selected to be cut should be clearly marked for easy identification. A forester typically marks individual trees to be cut with tree marking paint at two places on the tree: one spot at about chest height and the other on the eventual stump at ground level. This second spot acts as a quality control to ensure only marked trees are harvested. High-quality veneer trees are often also numbered.

To help the logger easily see trees to be cut, most foresters will mark opposite sides of the tree; some will even paint a ring completely around the tree. Loggers can avoid trees to be retained if they can easily identify the trees to be harvested from any direction.

After selecting the trees to be cut, the forester will estimate the volume to be harvested, which is commonly called the “merchantable volume.” This volume is expressed in board feet (one board foot is equal to a 1-inch thick 12-by-12-inch board) and is calculated using the diameter of the tree at breast height (dbh) and the harvestable length of each tree.

What determines timber value

The trees selected to be harvested are commonly referred to as “stumpage,” and “stumpage value” refers to the amount of money you would receive when those trees are cut. A timber buyer must consider several factors when determining the stumpage value of the trees you are offering for sale. First, like your forester, the buyer must determine the value of the log itself based on these criteria:

- Species
- Diameter
- Length
- Quality

Then, the buyer must deduct from that value the costs of certain operations:

- Cutting, or felling, the tree
- Moving, or skidding, the tree to the edge of the forest (also called a landing)
- Sawing, or bucking, the tree into logs
- Loading logs onto a truck
- Hauling the logs to the mill
- Erosion-control practices, including water bars and seeding of disturbed areas as specified in the contract

In addition to the labor and equipment costs for those operations, the buyer must factor in costs such as social security, workers’ compensation, equipment depreciation, insurance and interest on invested capital. The buyer must also consider accessibility of the trees, distance to the mill, and the market for the logs. Finally, the buyer and the logger need to receive a fair profit.

From the landowner’s perspective, tree size and quality are important. The importance of size and quality is best illustrated by an example: A log 10 feet long and 12 inches in diameter at the small end contains 40 board feet by the Doyle log scale (Table 1). The same 10-foot log grown to a 20-inch diameter would produce 160 board feet. If the grown log is veneer quality, the price paid per board foot may be two to 10 times higher. Therefore, in this example, adding 8 inches of diameter to a good-quality log increased its value up to 40 times. A well-developed forest management plan will provide details regarding which portions of your property are most productive and which are least productive for growing trees. Knowing where these sites are will help you focus future efforts to produce high-quality timber. Keep this principle in mind while managing the trees in your forest.

Quality is equally important to the buyer. A poor-quality tree may have no value as veneer or lumber, while a high-quality tree of the same dimensions may be worth hundreds of dollars. Defects lower the grade and, consequently, the value of trees.

The most common defects in logs are **knots** caused by branches; **seams** caused by disease, lightning, fire scars, frost damage or mechanical injury; **holes** caused by insects

Table 1. Doyle log volume table.

Log length (feet)	Diameter of log, small end, inside bark (inches)													
	6	8	10	12	14	16	18	20	22	24	26	28	30	
6	1	6	13	24	37	54	73	96	121	150	181	216	253	
8	2	8	18	32	50	72	98	128	162	200	242	288	338	
10	2	10	22	40	62	90	122	160	202	250	302	360	422	
12	3	12	27	48	75	108	147	192	243	300	363	432	507	
14	3	14	31	56	87	126	171	224	283	350	423	504	591	
16	4	16	36	64	100	144	196	256	324	400	484	576	676	

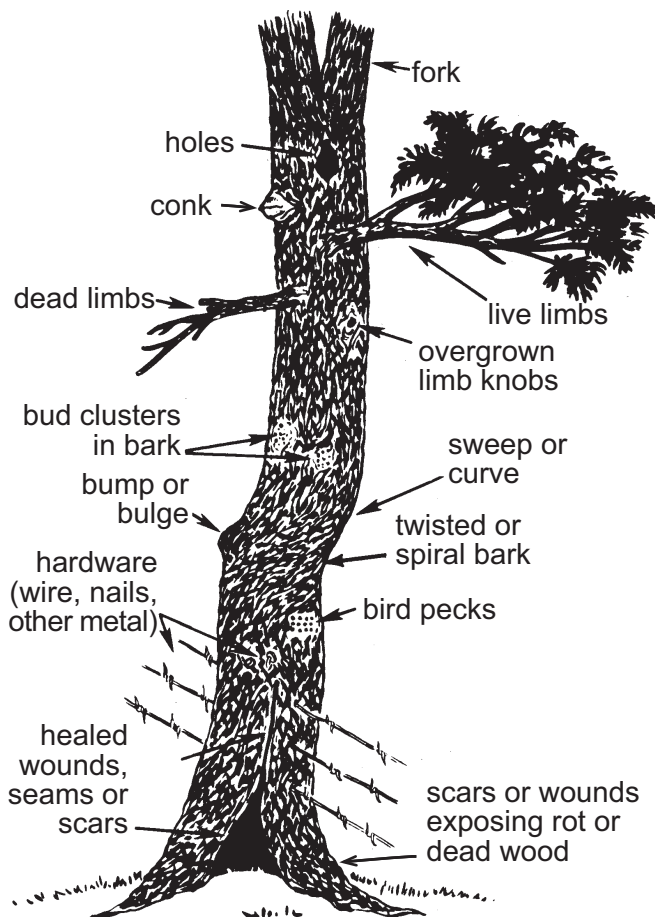


Figure 2. Tree defects.

or bird pecking; **shake**, a lengthwise separation of the wood caused by injury; **split**; and **decay** (Figure 2). Another common and unnecessary defect is metal embedded in the wood. Fences are commonly nailed to fence-row trees, making the best part of the trees worthless. Even temporarily nailing into a tree causes serious degrade because a chemical reaction between metal and the tree sap produces a stain that permeates the wood.

When to sell

The timing of a sale can also affect price. Most sawmills have limited storage facilities for logs. To avoid loss from deterioration, they keep a limited supply of logs on hand. Buyers will offer the best prices when markets are active and log supply is low. Winter is usually the best season for selling timber. Buyers may offer higher stumpage prices if they have a longer period of time to harvest the timber. However, a seller should seldom allow cutting periods exceeding 18 months. For high-value species like walnut, demand is cyclic. Landowners should follow the market trends and make their sales during periods of high demand.

How to sell

There are two methods of selling timber. You may choose either to harvest your own timber and sell the cut

product — such as veneer and saw logs, pulpwood, posts and poles — or to sell the standing trees and allow the buyer to cut and haul them.

Selling cut products

You might think you can increase your profit by cutting and delivering logs or other products to the roadside or mill yourself, *but that may not be true for several reasons.*

First, logging requires special skills and knowledge, and involves substantial risks. Logging is hard, dangerous work. In addition to personal risks, engaging in logging may alter your insurance coverage.

Second, logging sometimes requires special equipment and attempting to log using agricultural equipment could extensively damage the equipment and be very hazardous to the operator. Improper cutting, handling or transporting of high-value logs can destroy much of their value. Standing trees may also be damaged and their future value greatly reduced or even completely lost. Harvesting of high-value species, such as black walnut or white oak, should always be left to experienced buyers and professional loggers.

Third, logging often requires more much time than initially estimated and therefore may interfere with other activities and responsibilities.

Finally, according to the Internal Revenue Service, once a tree is no longer on the stump, you are dealing with a cut product and thus must claim the proceeds as ordinary income. The option of claiming capital gain is no longer possible. In addition, you will have to pay a self-employment tax using IRS Form 1099-MISC.

Selling stumpage

Most private woodland owners sell their standing timber in one of three ways.

- **Lump-sum sale.** A timber sale in which a single payment is made for the trees designated for sale. This is the easiest type of sale to administer.
- **Sale-by-unit, -price or -scale, or pay-as-cut.** A timber sale in which a certain amount is paid for each unit of product cut (for example, so many dollars per 1,000 board feet, per cord or per post). This type of sale requires the harvested products to be measured (foresters call this scaling). Determining who will provide an accurate production tally and how, when and where the scaling will be done makes this type of sale more difficult to administer than a lump-sum sale.
- **Shares.** This timber sale is similar to sale-by-unit, but instead of a specified dollar amount being paid for each unit of product cut, a percentage of the total value of each product is paid. The split is usually 50-50, with the seller and buyer equally splitting the price the mill pays for the logs delivered to the mill; but the split could be 60-40 or 40-60, depending on the value of the timber. This type of sale requires someone to scale the harvested timber to verify the volume.

As when harvesting your own timber, you need to report stumpage sales to the IRS. Depending on current rules and your individual situation, one type of stumpage sale may

provide greater tax advantages than another. You should also acquaint yourself with IRS regulations and current rules on treatment of sale expenses and depletion allowance. When selling timber, depletion allowance is a method for recouping your original investment in the timber without paying tax on it. MU Extension publications G5055, *Determining Timber Cost Basis*, and G5066, *Managing Your Timber Sale Tax*, will help you become familiar with basic timber tax facts.

Determining the stumpage sale price

In a stumpage sale, the sale price and buyer are usually determined in one of three ways.

- **Single offer.** A sale in which either a single buyer contacts you or you contact a buyer and the buyer offers to purchase the timber at a particular price. Although this sales method may produce a fair price, it can result in a price below what another buyer would pay. This may, however, be the best sales method if you have a small amount of timber to sell, the timber for sale is of such low quality that few buyers would be interested, or markets for the species for sale are so poor that few buyers would be interested. A forester familiar with the area will be able to tell you if any of these situations exist and advise you accordingly. In other situations, selling timber by a bid process will usually produce higher income.
- **Oral bid or negotiations.** A sale in which you engage in verbal bidding or negotiations with one or more buyers until an acceptable sale price is obtained. If you engage several buyers, make sure that each buyer knows you are not negotiating with him or her exclusively. Keep all buyers informed. Although this sales method is fairly quick and sometimes produces the highest sale price, a person unfamiliar with timber markets and the quality and value of the timber to be sold should not attempt it. Oral timber sales are best left to foresters.
- **Written sealed bids.** A sale in which potential buyers are informed about the sale and given a period of time, usually two to four weeks, to inspect the timber and submit written, sealed bids. At a specified time and place, the bids are opened and the successful buyer is selected. In most situations, this sales method produces the most desirable results for private woodland owners. In some regions, a written sealed bid is an uncommon practice for buyers and, therefore, may reduce the number of bidders. Again, your local forester will be able to advise you on local market conditions.

Advertising sale and selecting buyer

To receive the highest price for timber you have for sale, contact several potential buyers and don't be so eager that you accept the first offer. The most effective way to notify potential buyers of your timber sale is to have your forester

send them a timber sale notice. Professional foresters are familiar with potential buyers in their territory and the likelihood of certain buyers having an interest in your sale. Additional advertising can be done by placing an advertisement in local newspapers and farm publications, and posting information on websites. Most state forest products associations allow posting timber sales online. In Missouri, simply go to <http://www.moforest.org> and click on "Online Timber Sale" to post a sale notice. Some consulting foresters announce timber sales on their own websites, which loggers often visit.

A timber sale notice (for a sealed bid sale) should include the following information:

- Seller information — List the seller's name and address.
- Location of the sale — Provide a sale map showing property boundaries and access roads. Additional information should include the legal description and directions for locating the area.
- Tree description — Describe the trees to be sold, including volumes by species.
- The type of sale — Specify sealed bid lump-sum, sealed bid sale-by-unit or sealed bid sale-by-shares.
- Times when potential buyers can inspect the trees — Usually at least two to four weeks are allowed from the time notices are sent until a buyer is selected. Specify how and when prospective buyers can inspect the sale area, including whether the seller or the seller's representative must be present.
- Date, time and place that written sealed bids will be opened and the buyer selected — Include a statement that the seller reserves the right to reject any and all bids.
- Whether a deposit binding the offer must accompany the bid and, if so, the amount — The binding deposits of unsuccessful bidders are returned to them immediately after the buyer is selected. The deposit of the successful bidder might not be refunded if he or she later decides to withdraw from the sale.
- How payment is to be made — On lump-sum sales, full payment by bank or certified check before any harvest activity begins is desirable. On large sales, payment schedules are sometimes negotiated. On a sale-by-unit or sale-by-shares sale, a definite cutting and payment timetable needs to be negotiated, with the seller's intent to do this stated in the notice.
- Any major conditions or limitations on the sale — For example, the time by which the trees must be harvested, restrictions on access to the area, and time or conditions when the logger cannot operate, such as when the area is excessively wet. Note that excessive restrictions on buyers may cause a reduced bid or loss of interest in the sale.
- Preference for trained loggers — Include a statement that preference will be given to professionally trained loggers. Such a statement will send a strong message to prospective bidders that you care about your woodlands. Loggers that have completed the

Professional Timber Harvester Program offered by the Missouri Forest Products Association have at least 40 hours of training in chain saw and logging safety, logging economics, water quality protection and forest management. Loggers certified as Missouri Master Loggers through the Missouri Logging Council are held to even higher standards and, more importantly, are audited at least three times every two years by a third-party professional to ensure they meet or exceed 68 standards required for Master Logger certification.

A special note regarding performance bonds is in order here. A performance bond is an amount of money that the buyer places in an escrow account to ensure that he or she fulfills all the requirements of the contract. In states such as Illinois, where loggers are required to be bonded, this is normally not an issue. However, in states such as Missouri, where loggers are not bonded, many potential bidders either simply do not want to hassle with getting a performance bond, do not know how to get one or cannot get one because they have no bond history. To minimize this risk, selection of a professionally trained timber harvester is always best.

The bids should be opened at the specified time and place. The highest bidder is usually selected unless a reason to exclude that buyer exists. Be cautious about selecting new operators or operators who have not previously logged in the area. A professional forester may offer advice as to the desirability of selecting a particular buyer. Most buyers perform satisfactorily when all of the trees on an area are cut, but only the most experienced and careful buyer should be selected for a timber-stand improvement or selection harvest where valuable trees will be left standing. Although this practice may, on occasion, result in accepting a bid other than the highest, it will protect the future quality and value of your woodland.

Entering into a contract with the buyer

To reduce the possibility of misunderstandings and disagreements, a written contract between the buyer and the seller is absolutely essential when selling timber. Terms of the contract can often be negotiated with the buyer to achieve greatest satisfaction. Understanding your selected buyer's limitations before writing the contract is essential. MU Extension publication G5057, *Timber Sale Contracts*, discusses the process of developing a timber sale contract and the basic provisions that should be considered for inclusion in such a contract. As with each previous step in selling timber, seek the assistance of a professional forester when preparing a timber sale contract.

Inspecting the harvesting operation

You should request that you and/or your forester be present the day harvesting begins. By being there, you and/or your forester will have the opportunity to discuss the operation with the buyer or the buyer's representative on



Figure 3. Visit the harvest area frequently to ensure the terms of the contract are being fulfilled and to increase your knowledge of harvest operations.

the site and to clarify points of agreement and have some input on questions not covered in the contract.

Once the timber harvest begins, you and/or your forester need to visit the area frequently to make sure the harvest is proceeding according to the terms of the contract and to discuss questions that might arise. Monitoring the harvest will also allow you to become more familiar with timber harvesting operations, which may be useful in future sales (Figure 3). Remember, active logging sites are dangerous. Approach with caution and only when acknowledged by equipment operators.

Use good judgment and discretion when checking the harvest operation. Unless a flagrant violation of the contract is discovered, a simple suggestion to the buyer will usually solve any problem. Deal directly with the buyer or the buyer's representative; do not complain or make suggestions to other individuals on the job.

When the job is completed and all provisions of the contract have been fulfilled, write a letter releasing the buyer from the contract and return the performance bond, if one has been posted.

Spotting and resolving issues early in the harvest will greatly increase your and the buyer's satisfaction at the end of the sale. Buyers, like most people, do not like to be surprised at the end of the job by a complaint, especially one that could have been easily addressed earlier.

Summary

Make the most of your timber sale by working with a professional forester to market your timber to targeted buyers. As you proceed through the process, remember the following key points:

- Don't sell your timber to the first buyer to make an offer but actively market your timber. Properly marketing timber usually will dramatically increase your returns. Remember, timber has no fair market value — its value is what a buyer is willing to pay. To receive the highest offer, contact as many potential buyers as possible. Timber sale bids can vary dramatically.

- Under most circumstances, you will be more pleased with the results of your timber sale if you hire a professional forester. Studies have shown that private forest landowners who sell timber with the help of a professional forester receive more money for their timber, cut fewer trees, have more residual volume and economic value left in the forest, and are more satisfied with the whole experience.
- Stay involved in the timber sale throughout its duration. By so doing, you will become more familiar with timber marketing and harvesting operations, knowledge you may find useful in the future. Also, being involved will assure you that the operation is

proceeding according to your understanding and the terms of the contract.

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ALSO FROM MU EXTENSION PUBLICATIONS

- G5050 *How to Measure Trees and Logs*
- G5055 *Determining Timber Cost Basis*
- G5056 *Managing Your Timber Sale Tax*
- G5057 *Basic Elements of a Timber Sale Contract*
- G5999 *Forestry Assistance for Landowners*

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