TIMBER HARVESTING IS AN IMPORTANT TOOL FOR WOODLAND OWNERS

When conducted with care and good planning, harvesting trees allows you, as a landowner, to enjoy your woodlands while keeping them healthy and meeting your ownership goals.

Landowners choose to cut trees for a variety of reasons. Your decision may be due to a recommended action under a management plan or may be one you did not expect to make. For example, a violent windstorm or pest infestation may require harvesting to salvage timber or protect your forest from further harm. Regardless of the reason, a successful timber harvest that meets your goals begins by working with a forester to develop a plan.

Harvesting is not a process to enter lightly. A timber harvest is a complex interaction of ecology, forest operations, business, law, taxes, marketing and negotiations. It has both short- and long-term consequences for you and your forest. This publication is a first step in helping landowners understand some of these consequences and how you, as a landowner, can ensure a careful timber harvest. You will also learn about the timber sale process. However, don’t consider this a definitive “how-to” guide for conducting your own timber sale. Much of the process will depend on your specific situation and the individuals with which you decide to work.

Anyone entering the timber sale process should seek assistance from a forestry professional (see facing page). These professionals are the first stop in understanding your woods, and they can recommend whether or when you should consider conducting a timber sale. Numerous studies have shown that landowners who work with a forester in planning a timber harvest report greater satisfaction, greater revenue from the sale of trees and healthier and more valuable woods following a harvest.

SIX STEPS TO A SUCCESSFUL TIMBER HARVEST

Once you have a management plan and decide to harvest timber, further planning is essential. A successful timber sale consists of the following steps:

**STEP 1** Mark boundaries and identify trees to be cut – page 4

**STEP 2** Locate roads, trails and landings – page 6

**STEP 3** Prepare the contract and prospectus – page 8

**STEP 4** Solicit bids and select winning bid – page 10

**STEP 5** Monitor the sale – page 13

**STEP 6** Complete post-harvest administration and activities – page 14
It is important that you keep good records throughout the entire timber sale process. For example, if you need to ask your contractor to adjust the harvesting operation, you should write down what is discussed and agreed upon. Retain a copy of these records and send a copy to your logger as a written record.

Documenting what is done and why during the entire process is essential for clear communication, addressing tax issues and planning future activities.

**Why a forester?**

Some landowners might be skeptical of the services provided by professional foresters. However, unless you are well versed in many of the issues raised by this publication, the services of a professional forester are invaluable. Here are some ways in which a forester can help you meet your objectives and get a fair price for your timber:

**Forestry expertise.** Foresters are trained and experienced in managing forests. They can bring that expertise to help you decide what management options are possible and how those decisions will likely affect your forest. Even if your decision is to do nothing, a forester can explain the likely outcomes.

**Market knowledge.** A forester can provide knowledge of local timber markets. Unlike landowners, who rarely sell timber, foresters know which mills are buying and which mills are paying better prices. Foresters can help you get the most money for your timber.

**Experience with loggers.** Along with their familiarity with local markets, foresters are also knowledgeable about the loggers that work in a particular area, and they can help you select the right logger for your particular job.

**Sale oversight.** Foresters understand timber harvesting operations. They will periodically check on the progress of your harvest and monitor compliance with the contract, erosion control and other Best Management Practices (BMPs). Foresters will address any problems before they become serious. Research shows that BMP compliance is highest when a forester is involved in the sale.

**Coordinating several sales.** Since foresters often work with many different clients in an area, they may know of several landowners wanting to sell timber at the same time. In this situation, the forester can market the sales together and get all the landowners a better price.
Loggers, also called timber operators, will be unfamiliar with your property and goals for your land. Good communication with your logger will more likely lead to a harvest that meets your planned goals and objectives. Well-marked property and timber sale boundaries let loggers know that they are on the proper site. Identifying property lines will help prevent cutting trees that belong to your neighbors, commonly referred to as timber trespass.

Timber trespass is not a minor offense (see WI Statute 26.09(3)). Courts can award monetary damages up to four times the stumpage (the price of the standing trees intended for harvest) or two times the fair market value of the trees illegally cut along with other reasonable and necessary costs. It is essential that you work with neighboring landowners in locating shared property lines before logging takes place.

Sale boundaries are also important. Whether they coincide with property lines or not, sale boundaries define the scope of the harvesting operation. Timber harvesting prescriptions, prepared by the forester, are tailored to the specific conditions of the harvest site. Sale boundaries can also protect special ecological or personal areas on your property. For example, sale boundaries can exclude wetlands or your favorite deer stand that might be close to the harvest site.

For harvests that do not remove all the trees, individual “cut” and “leave” trees should be marked. This will ensure that only those trees that are supposed to be removed are harvested during the timber sale. Typically, trees are marked with paint at breast height and near the ground below where the tree will be cut. Selecting which trees to harvest is complex and must balance the desired future condition of the forest (e.g., regeneration) with market and operational realities.

A forester’s familiarity with the capabilities of different harvest systems informs which trees should be cut. The forester balances landowner objectives with the desires to maximize return and minimize damage to the site.

In some cases, particularly stands with trees of low market value, individual trees will not always be marked but instead designated by size and/or species. Marking individual trees requires a great deal of time, and in low-value stands this process can greatly increase the cost of sale preparation compared to the income.

As an example, the forester may prescribe and include in the contract a line similar to, “All merchantable red maple less than 12 inches in diameter at breast height (DBH) shall be removed.” In these situations, sale oversight requires greater care.
to ensure that the loggers correctly follow cutting instructions. Another exception to individual tree marking is the case of regeneration harvests, where trees are removed to encourage sun-loving trees to repopulate the area. In regeneration harvests, sale boundaries become even more important to ensure neighbors’ trees are not removed.

When marking, it is not enough to simply put paint on trees, draw maps and hope that the logger will understand them. Both you and the forester must convey this information to the logger verbally and in writing (usually in the contract). Clear communication about marking can help avoid problems on the ground.

Talking to the neighbors

In planning a timber harvest, talking to your neighbors is a valuable step that could help you avoid problems down the road. It can also bring additional benefits by increasing the price for your own timber, reducing the cost of removing it or both. Here are some items to discuss with your neighbors.

**Property boundaries.** Timber trespass can be a serious offense, and once a tree falls on your neighbor’s property it is too late to discuss property boundaries. By discussing and verifying the location of your property boundaries before harvesting, both you and your neighbors can avoid unwanted conflict and, potentially, legal action. If a property line is uncertain, surveying the line is the safest choice to verify its location. However, this may not be necessary if you or your neighbors locate and document the property line for the purposes of selling timber. For example, an old fence may be close to the real property line. If you and your neighbor agree to it, the old fence can serve as the timber sale property line even when the exact location of the survey line is in doubt. This agreement should be documented in writing and signed by both property owners.

**Sale coordination.** If your neighbors’ woodlots are similar to yours, theirs might also benefit from timber management. If that is the case, a combined sale could improve the financial return for you and your neighbor.

**Access.** Even if the sale isn’t located near your property boundary, talking to your neighbors may make the sale easier. Roads on neighboring property may be available that could make hauling trees or logs easier and less costly. This could increase profit from the sale and make the harvest easier for loggers. Be prepared to pay your neighbors a fair price for access to their land.

**Sharing information.** It’s possible that your neighbors have valuable experiences to share. They may be able to share insights into timber sales that they have conducted and recommend foresters and loggers.
Roads, trails and landings make up the transportation network that allows loggers to get logs to the mill (see illustration on facing page). Loggers move harvested trees on trails to a central location, called a landing, where logs are loaded onto trucks. The trucks then use the on-property road network to access public roads.

For loggers, the best way out is the quickest one. Since time is money, a quick route may even allow loggers to offer you more money for the sale. However, the quickest way out is not always the best option for landowners. An important question to consider is, “How will the roads, trails and landings be used in the future?”

The transportation network may help meet your management plan objectives. For example, roads and trails can provide future hunting access or places for recreational activities like skiing or snowmobiling. Recreation aside, the network should also minimize ecological impacts. Different soils and slopes tolerate harvesting equipment differently. Roads, trails and landings near or crossing streams or wetlands require additional special consideration. Follow Wisconsin’s BMPs for water quality to minimize ecological impacts.

Above all, be flexible in planning the transportation network. Different loggers and harvest systems have different capabilities. Forcing a one-size-fits-all approach may result in greater site damage and lower income. In some cases, roads, trails and landings are identified after you award the contract and know the requirements of your logger’s harvest equipment. Again, it is essential for you and the forester to work with the logger.
SAMPLE HARVEST SITE

- **Trees marked with a blue dot indicate the property boundary.**
- **Trees marked with a red dot indicate the harvest boundary.**

**PRIMARY LOGGING TRAIL:**
A permanent trail used multiple times by the logger to haul logs to the landing.

**TREE STAND:**
Locate trails so they also provide access to areas of your interest.

**STUMPS FROM RECENT CUTTING:**
A temporary trail in use for a single harvesting operation.

**SECONDARY LOGGING TRAIL:**
A temporary trail in use for a single harvesting operation.

**STREAM:**
It is best to leave areas around streams/lakes unharvested.

**LANDING:**
A cleared area where harvested logs are processed, piled and loaded onto a truck.

**LOG DECK:**
A pile of logs ready for loading on a truck.

**ENTRY ROAD:**
Trees marked with a blue dot indicate the property boundary.

**TREES**
Trees marked with a red dot indicate the harvest boundary.

**RELATED PUBLICATIONS:**
FR-093  *Best Management Practices for Water Quality, forest roads* (Chapter 6)
FR-380  *Do I Need a Permit for Building a Forest Road?*
Prepare the contract and prospectus

TIMBER SALE CONTRACTS

A timber sale contract is an essential part of any timber sale transaction. It is a legally binding document that outlines the relationship between the seller and the buyer. Key elements of a timber sale contract include:

- Identification of who is responsible for all activities spelled out in the contract and who is liable if someone gets injured during the logging operation.
- Type, terms and dates of sale.
- Property and sale descriptions.
- Terms of payment.
- A description of how trees will be harvested and utilized, including stump height and whether tops are removed from the site (e.g., whole tree harvest vs logs).
- A description of standards for operations on the site including the completion of the sale, degree of soil disturbance, disposal of waste and adherence to BMPs.
- Notification and permit responsibility (see Step 4).
- Any requirements regarding the bid submission and/or performance bonds by the logger.
- End of sale requirements.

Although the sale contract won’t be signed until after you select a winning bid, loggers will want to be aware of what they may be agreeing to when they prepare their bid.

Timber sale contracts are complex. Even if you use the sample timber sale contract (see For More Information on page 9), you should consider consulting both a forester and an attorney to cover both aspects of a contract. Attorneys are not always familiar with timber sale contracts, and foresters are not always aware of all the legal and liability concerns.

PROSPECTUS

You will advertise your timber sale through a prospectus. This document describes what is for sale and where and when it will be available. The prospectus should mirror the contract.

There are important income tax considerations for timber sales that depend on which method for selling timber you select. Visit timbertax.org for more information on taxes as they relate to timber sales.
Lump sum versus scaled product sales

Private landowners typically use one of two methods in selling timber – the lump sum sale or the scaled product sale. Which method to use depends on several factors, but an important tax consideration is your previous and future harvesting intentions.

**Lump sum sale.** A lump sum sale is the simplest way to sell timber. The sale is put up to bid and each potential buyer submits one bid for all stumpage. The buyers are responsible for determining the volume and quality. The winning bidder may make a single lump sum payment or several partial payments. Generally, payments are made before the removal of timber. Lump sum sales are easy to administer but require accurate volume estimates to establish a fair price.

**Scaled product sale.** Scaled product sales are more complicated and require greater diligence. Usually, a forester administers scaled product sales on behalf of the landowner. Bids are based on prices per unit volume by species, product and/or grade. For example, a bid might offer something like “$300 per thousand board feet (MBF) of red oak sawlogs and $18 per cord of hardwood pulpwood.” In the most common scaled product sale system, prices are bid and paid by volume and species regardless of quality or final product.
**STEP 4 Solicit bids and select winning bid**

Foresters maintain a list of potential buyers and mail the prospectus to those individuals. While sales may also be advertised in newspapers and trade journals, direct mailings work the best. Ultimately, you can expect to see the true market value of your sale by casting a wide net with your prospectus.

One option for private landowners is to use sealed bids. Bidders develop estimates of the volume of timber and its value (usually by visiting the site), subtract their expected costs and formulate a bid. This bid is submitted to the owner or the owner’s forester, and the bids are all opened at the same time.

There are some ethical considerations to follow when using a sealed bid process:

1. Regardless of how the bid is received, immediately place it in an envelope and seal it.
2. Do not open bids before the advertised closing time for submissions.
3. Do not accept late bids.
4. As a courtesy, provide results to all bidders.

Based on your appraisal of the bids presented, you can choose to select one bidder or refuse them all.

In selecting the winning bid, the logger’s skill and professionalism are as important as the dollar amount.
While the highest bid may be most tempting, it is important to consider whether the highest bid will meet both the sale and woodland objectives. In selecting the winning bid, the logger’s skill and professionalism are as important as the dollar amount. Long after you put the money to good use, you’ll have to live with how the property looks.

Keep in mind that bids can differ significantly. Several factors determine the value of the timber: the species, potential products and volumes of the trees to be removed are important. Different bidders have different markets and needs for wood. Equally important are the operability and accessibility of the harvest site and the local market conditions. These factors may make bids for the same sale very different.

There are also sales where you might choose to hire a logger directly, and a sealed bid would not be appropriate. These include sales of low-quality wood and cases where the logger is being paid to remove trees. In other cases, you may be selling a specialty product.

FOR MORE INFORMATION:
What is my Timber Worth? And Why? (Forestry Fact 97)
– for more on what goes into a bid and price that landowners receive for timber.

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Selecting a professional and careful logger

One of the most important decisions you can make as a landowner in the timber harvesting process is your selection of a logger. You need a careful, skilled, professional logger that understands your stated objectives. Things to look for include:

**Training and education.** Through organizations like the Forest Industry Safety and Training Alliance (FISTA), the Great Lakes Timber Professionals Association (GLTPA) and the Sustainable Forestry Initiative (SFI) program, loggers learn the latest skills and techniques that make timber harvesting safer, more efficient and environmentally sound. Trained loggers bring that knowledge to a job.

**Experience.** Different forest types, harvest systems and equipment require different sets of knowledge and skills. In selecting a logger, be sure to find one that is familiar with the forest type, harvest system and equipment that will work best for the particular sale.

**References.** Be sure that a prospective logger provides references from previous jobs. Whenever possible, talk to those landowners and visit their harvest sites. Get a clear picture of how the logger treats landowners and the land.

**Proof of insurance.** Even though a good timber sale contract offers the landowner protection from liability claims, make sure that the logger has sufficient insurance to cover themselves and those with whom they work. The logger should demonstrate both workers’ compensation and public liability coverage that covers the full term of the contract or that notification will be received of renewal of the current policies. Many harvest operations include a number of subcontractors, so make sure that the logger’s insurance covers everything if something should happen.
Permits and notifications

To avoid potential regulatory or legal problems, all permits and notifications must be filed correctly and on time. The types of permits or notifications required depend on the type of activities included in the sale. In all cases, when in doubt about the need for notification or a permit, ask before proceeding with the harvest! Common situations that require a permit include:

Stream crossings. If the harvesting activities require crossing a stream, a WDNR permit is required. If crossing streams, permits for soil disturbance near water and activities in wetlands and floodplains may also apply (see below).

Soil disturbance near water. If the harvest plan requires that soil be moved in or near streams, lakes or other bodies of water, a permit is required from the WDNR and possibly from the county zoning office. Contact your county zoning office for further information.

Wetlands and floodplains. Activities in and around wetlands and floodplains are subject to regulations and may require permits at some level of government. Contact your county zoning office, WDNR and the U.S. Army Corps of Engineers to determine what regulations or permit requirements apply.

Burn permits. While usually not part of the harvesting operations, burning may play a role in site preparation for the next stand. Contact the WDNR or your local fire department for information.

Cutting notices

Under Wisconsin state law, anyone harvesting timber (including for personal use except for firewood, boughs or up to five Christmas trees) is required to file a cutting notice with their county clerk 14 days before harvesting begins. These county clerk notices must be filed annually. In addition, participants in the Managed Forest Law (MFL) program must also submit a separate cutting notice to the WDNR before harvesting.

Timely submission of permits and notifications is an important part of conducting a timber sale, so make sure you’re thinking about them early in the process.

FOR MORE INFORMATION:
Do I Need a Permit for Harvesting Timber? (FR-379)
Wisconsin Forest Management Guidelines – available at dnr.wi.gov/topic/forestmanagement/guidelines.html#toc
Monitor the Sale

It is important to monitor the sale to make sure the contract is being followed. Plan to review the terms of the contract onsite with your forester and logger before harvesting begins. Often the logging crew working on the harvest site is not aware of all the terms of the contract. Review contract elements such as: boundaries, location and size of the landing and location of logging trails.

Both you and your forester should visit the harvest site regularly. By monitoring how the harvest is proceeding, you or your forester can address questions early before they become more serious. Visiting the site often and talking with the logger has an added bonus: loggers will know that you care about their progress and the quality of their work.

When visiting the site, check for compliance with the contract and ask for feedback from the logger who may have some suggestions that could expedite the process. While you and your forester should work cooperatively with the logger, you should not feel obligated to give in to requests to change the terms of the contract.

By seeing how the harvest is proceeding, you or your forester can address questions before problems arise.
When harvesting is complete, it is time to retire the site and complete any post-harvest regeneration activities. Sites are most vulnerable to erosion right after harvesting is complete. Proper erosion control practices are essential if the site is to be productive in the future and water pollution problems are to be avoided.

Post-harvest BMPs include seeding the trails, roads and landing to stabilize the soil or installing other erosion control practices. In most contracts, the logger is responsible for these activities.

When retiring the site, it is also time to complete any activities that will assist in regenerating the site. The management plan should be a guide to regeneration efforts. If the plan is to plant new trees, this will include slash (woody debris generated during a harvest) disposal and site preparation along with the actual planting.

Once the harvest is complete and the logger has completed the contract, you or your forester should release the logger from further obligation. If a performance bond was provided, it should be returned.

Post-harvest Best Management Practices, or BMPs, may include seeding the trails, roads and the landing to stabilize the soil.
CONCLUSIONS

A good harvest experience is no accident!

It is the result of thoughtful planning and hard work. This planning is critical because owners have limited opportunities to learn from their past experiences. As with most endeavors, selecting the right people can make all the difference. To ensure a successful timber sale, select careful and conscientious foresters and loggers who understand your stated goals and objectives.

After the sale revenue has been used to pay bills, college tuition or vacation expenses, you will live with, and in some cases, be judged by what is left behind – not by what was taken.
Conducting a Successful Timber Sale  
A primer for landowners

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The purpose of this publication is to inform – not to advise. Your decisions or legal actions should be based on advice from an attorney and other experts familiar with the specific facts relating to your property.

This publication can also be viewed or printed from pdf format available on the web at woodlandinfo.org or dnr.wi.gov (keyword “forestry publications”).

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