



Getting the Mo\$t from Your Farm Woodland

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Farmers are seriously looking at alternative ways to produce cash flow on the farm. Considering that most farms throughout Michigan also contain woodlands, many farmers are thinking about harvesting timber to provide additional cash flow. While timber harvesting is a good source of income, it is vitally important that timber harvesting be done wisely in order for it to provide a sustainable cash flow like other enterprises on the farm. Here are a few important points from MSU Extension to consider in getting the most from your farm woodland.

How do you get started?

Once you have made the decision to harvest timber from your woodland, what do you do? Call a logger in to cut down all the best trees and leave you with all the worst still standing? Absolutely not!!! This practice is known as high-grading. Unfortunately, this but costly mistake has happened to more than one farm woodlot. High grading is comparable to a dairy farmer who sells all the best producing cows and then depends upon the poor producers to financially carry the dairy operation. Obviously, this makes no financial sense – so why do a similar thing to your own woodlot? For most farmers, it would be decades before a high-graded woodlot is again ready for any type of timber harvesting.

So, don't give in to short term pressures for cash flow by sacrificing long term gains in your woodland. Proper management of your farm woodlot will not only improve the quality of your woodland, but will enable it to produce timber crops on a sustained basis. When compared to high grading, good forest management will give you more dollars in the long run as it yields more income from higher quality timber with each successive harvest.

Take a little time to learn more about the value of your timber before allowing any trees to be cut from your woodlot. A few telephone calls might be all it takes for you to avoid a costly mistake. The gains you stand to make by wise management could not only be worth thousands today, but will enable you to consider another harvest in the near future. Good farm managers look at their woodlands as an opportunity to generate periodic cash flow, to diversify their operations and to pay for the cost of maintaining the woodland as part of the farm property.

What is there to sell?

The farm woodland can best contribute to cash flow and income production when it is producing at or near its true potential. Consequently, the place to start is to see what condition the woodlot is presently in and what needs to be done improve it. For example, perhaps a thinning operation is needed if trees are young and overcrowded. If it's a hardwood woodlot, then you can use the thinnings to heat your home or shop or sell as pulpwood or firewood. If the trees are large and approaching maturity, then a carefully planned timber sale might be in order.

Although certain factors such as the acreage of woodlot and the size, quality and species of trees are the main influences on the value of timber. Possibilities for income exist in most woodlots (given Michigan's diverse forest industry) even if you don't own a tract of large diameter, high value trees.

Depending upon the type of woodland, the range of products that can be produced and marketed in Michigan include:

- fuelwood (industrial fuel chips or home firewood)
- pulpwood
- utility poles
- sawtimber & veneer
- maple sap or syrup
- cedar fence posts & cabin logs
- leasing woodlands for hunting privileges
- conifer boughs for Christmas wreaths & roping

Many of these products may already be there and ready for harvest. However, some (such as maple sap) will require the investment in equipment to produce the product from your woodlot. Check locally to see what type of wood products are currently being sold in your area. A good place to start is with your local extension office, conservation district or Michigan Department of Natural Resources field office.

What's the value of your timber?

The markets for oak, maple, ash, basswood and cherry veneer logs and saw logs have become very active in the past few years. This means that timber buyers are approaching more farmers who have hardwood timber. The more you know about Michigan timber markets and the process of selling timber, the better able you will be to get the best price for your timber and the highest profit from your woodlot.

How much timber do you have?

The value of your timber depends first upon how much of it you have. Standing timber is known as *stumpage* and is usually sold as *pulpwood*, *sawtimber* or *veneer*. *Pulpwood* is measured in terms of cords - stacks of wood 4 feet x 4 feet x 8 feet. *Sawtimber* and *veneer* are sold by the board foot - a piece of wood 12 inches x 12 inches x 1 inch - and are usually reported in terms of thousands of board feet (MBF). How much volume you have in each tree is determined by measuring the diameter of the tree at 4.5 feet above the ground (diameter breast height or DBH) and estimating how many feet up the tree will be veneer, sawlogs or pulpwood. Veneer logs generally must be at least 20 inches in diameter at the smaller end and sawlogs must be at least 10 inches. Volume tables are available from your County Extension office if you would like to try to estimate your timber volume yourself. Look up the volume of a tree in these tables based upon its DBH and the length of the potential log or logs.

Equations known as "log scales" are used to calculate the tree volume from the measurements. There are three log scales commonly in use - *Scribner*, which is used in the Upper Peninsula; *International*, used in the Northern Lower Peninsula; and *Doyle*, used in the Southern Lower Peninsula. Since the volume estimates from each of these scales are different, it is important to know with which scale your timber is being measured. A tree 30 inches in diameter, measured 4.5 feet above the ground, with 48 feet of trunk saleable as sawtimber or veneer contains one thousand board feet, International 1/4 -inch scale. The same tree would have only 898 board feet using Doyle and 933 using Scribner. Two 22-inch diameter trees, also with 48 feet of timber, would also contain one thousand board feet, International scale.

What are the current markets?

Stumpage prices for many hardwoods have been relatively high for several years. Veneer and sawtimber are of special interest as their value is several times that of pulpwood. Prices statewide for veneer and sawtimber fell, however, in the past 12 months. Markets for hard maple in the Upper Peninsula remain strong. In 1998, representative sawtimber prices for key hardwood species in Michigan were:

	UPPER PENINSULA	LOWER PENINSULA
	Dollars per thousand board feet	
Ash	180	155
Basswood	205	135*
Cherry	230*	190
Hard Maple	440	220*
Red Oak	240	210
Soft Maple	160	80
White Oak	NA	70

*Prices estimated from Michigan Department of Natural Resources, Forest Management Division - Timber Sale Management System Report 10/1/97 to 9/30/98.

All other prices are based upon quarterly data from Timber Mart North published in 1998 by George Banzhaf & Company, Milwaukee, WI.

Prices for veneer quality stumpage are usually significantly higher and may be up to 10 times that for sawtimber. Veneer stumpage, however, must meet high quality standards and be straight and free of limbs, holes (even small bird pecks), and other defects.

Your timber might be worth more or less than your neighbor's.

You can use the average stumpage prices above to get an idea of about how much per MBF you can get for your timber. But how much your timber is worth depends not only upon the stumpage price and amount you have to sell but other market factors as well. Prices paid for any sawtimber and veneer stumpage vary greatly depending upon the timber demand in your part of the state. There is more hardwood timber buying in the southern Lower Peninsula because this

region is closest to the hardwood using mills in southern Michigan, Indiana, and Ohio. What it would cost a buyer to harvest your timber is another large factor. The amount of timber you have to sell in one tract and how easy the access is affects the buyer's profit over their stumpage and harvesting costs. The easier a site is to harvest, the higher the stumpage price you should be able to get. Likewise, the more restrictions you put into your timber sale contract, the more costly your timber becomes to harvest and the lower the stumpage prices you will be offered.

Consumer's tastes very much affect hardwood stumpage prices. Oak has decreased somewhat in popularity in part due to previous high prices, which lead to buyers finding substitutes such as ash. After years of low demand, maple is now very popular. Maple buyers in search of logs that would produce bird's eye maple have pushed prices quite high in some parts of the Upper Peninsula.

What should you know about timber harvesting?

Eventually, the timber in your farm woodland will become mature and be ready for harvest. At this point, time spent planning for the harvest will pay for itself whether it's timing the sale around other cash flow needs or timber market conditions. However, there are other considerations that the farm manager must decide upon in planning for a timber sale.

To begin with, who will decide which trees are ready for harvest? When a selective harvest is planned, it's essential that someone knowledgeable and someone you trust determines which trees should be harvested (based on age, species, condition and future value - not just present size). It's also important that each individual tree to be harvested is clearly marked on the stump and about chest height as a safeguard to the farmer. While some farm managers may trust a logger or timber buyer's judgement, there are times when a farmer may want to get the help of a professionally trained forester.

Research into past timber sales on privately owned land has shown that timber harvests conducted with the help of a professional forester resulted in more income and more timber left standing than compared to timber sales conducted without the help of a forester. Even if a farm manager has to pay for help, as in the case of a consulting forester, the expense is deductible on your income tax. Furthermore, in many areas of Michigan, with its abundance of forests, it's not hard to find a professional forester to give you advice about your woodland. Contact your local extension office for a list of foresters (both public and private) in the area.

Another important decision to be made is who will do the harvesting - your crews or an independent logger? While the temptation might be there to do the logging yourself, that might be a costly proposition in the long run. For example, logging is dangerous work so you need to be sure that you and your farm workers understand proper felling techniques and are fully covered by your insurance. It's possible that your farm policy may not cover against accidents in the woods. Check it out before sending your crews in to start logging. In addition, many mills no longer buy timber from anyone who is not fully insured by worker's compensation for legal liability reasons. Finally, when selecting a logger, choose one who has completed the Sustainable Forestry Education Program (an 18-hour training program for loggers) sponsored by MSU.

How should you hold a timber sale?

Instead of logging him or herself, the farm manager may choose to have several reputable loggers or timber buyers bid on the timber he/she has for sale and have them perform the actual logging. The recommended process to use in marketing timber under this arrangement is a competitive, sealed bid type of sale. This is where an announcement is sent to several loggers or mills that buy timber in the area to inform them of your intention to sell timber. Usually these announcements list name and legal address, a brief description of what type and how much timber is for sale and other pertinent information. These announcements will also invite buyers to bid on the timber using a sealed bid that will be opened on a certain day or time listed in the announcement. Using a competitive, sealed bid approach is the **best** way a farmer can ensure getting fair market value for his/her timber. It's a process that is used extensively in the industry, including on state and federally owned timber sales. The following example of the range in timber sale bids for recent sales in Michigan underscores the importance of receiving competitive bids for timber sales.

Timber Sale Location	High Bid	Low Bid	Number of Bids Received
UP	\$22,979	\$7,201	12
	\$72,175	\$22,062	6
	\$91,826	\$41,970	4
NLP	\$66,260	\$27,690	6
	\$14,500	\$9,565	3
	\$281,485	\$133,175	12
SLP	\$10,000	\$5,729	7
	\$22,539	\$12,250	6
	\$16,083	\$7,729	6

Once a buyer is selected (based on bid price and reputation), the farm manager and the logger should enter into a timber sales contract. Such a contract is considered essential to protect the interest of both parties involved. For the farm manager, a well-written contract spells out how, when and what will be done, how payment will be made, dismisses the farmer from any liability should anyone get hurt logging, and other important details. The prudent farm manager should not take a chance on a verbal agreement over a handshake as a substitute for a written timber sales contract. A well-written contract (see extension bulletin on timber sale contracts) is the best control that a farmer has over how the timber sale will be executed. If problems arise and the logger does not abide by the terms of the contract, the farmer can halt the operation, thus avoiding more damage or further problems.

After the contract is signed, it may take several months until the logger actually begins the harvest. From the start of the harvest operation, the farmer (or the forester he contracts) should periodically inspect the harvest operation to be sure that all is going according to the terms of the contract. While the logger has secured the right to harvest your timber, it is possible for the farmer to point out things to the operator to be sure that all elements of the timber sales contract are fully satisfied.

What do you do after the harvest?

When the harvest is completed and the logger has moved his equipment out of the farm woodlot, the operation is still not yet completed. Careful inspection of the woodland is needed to see if anything else is required to keep the woodlot in good condition for future harvest or recreational activities. For example, if the logger left the tree tops as part of the sales arrangement, then the farmer might choose to cut them up for firewood for personal use or arrange for a local firewood processor to cut them up along with any cull trees left standing. Inspection should also be made to be sure that no unmarked trees were mistakenly cut or severely damaged by the logger. In addition, if the logger was not required to grade the skid trails or landing upon completion of the sale, then the farmer may wish to do this by leveling off these areas and possibly seed them to prevent erosion. (Seeding with legumes or clovers can also be beneficial to wildlife.)

From a financial standpoint, all expenses for managing timber, having a timber sale and the revenue produced from the sale of timber should be carefully recorded in the bookkeeping system that the farmer maintains for income tax and farm management purposes. For income tax purposes, all revenue from timber sales may qualify for long term capital gains and depletion allowance and many expenses associated with timber management are deductible. Contact your local extension office for further information on marketing timber and handling income taxes arising from timber sales.

Where can you go for help?

Professional consulting foresters can help you with determining what and how much timber you have to sell and in setting up a competitive timber sale. Your County Cooperative Extension Office has other fact sheets and bulletins on measuring and marketing timber, sample timber sale contracts, and lists of consulting foresters and other sources of assistance. A few of these are listed below.

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Szydzik, J. and J. E. Gunter. 1993. Timber Sales Contracts. Michigan State University Extension Bulletin E-1656. <http://wildfire.for.msu.edu/extension/ExtDocs/contract.htm>

Michigan State University Extension: <http://www.msue.msu.edu/>

Michigan State University Forestry Extension: <http://wildfire.for.msu.edu/extension/default.htm>