


# Tree Series



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## To Sell or Not To Sell? Important Considerations When Harvesting Hardwoods for Income

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Timber buyers frequently contact forest landowners and offer to purchase valuable hardwood trees on their property. If you have been approached to sell some of your trees, or if you have heard that your hardwoods are economically valuable, consider whether or not harvesting and selling timber is an appropriate activity on your land. Before you begin the timber sale process, think first about your goals for your woodlands. If one of your goals happens to include timber harvesting, several additional factors will influence your decision to harvest and the value of the standing timber. These include the species, age and size of the trees, the density of the trees in your woodlands, current market conditions and the number of trees you have to sell.

### How do these factors affect a harvesting decision?

#### Management goals

Your goals should guide any decision about your forest. Harvesting trees can be a means to achieve your goals, including those related to wildlife, aesthetic or recreation management. Perhaps you would like to provide habitat for a particular wildlife species or enjoy taking regular walks through the woods. To encourage favored tree species, it may be necessary to harvest trees earlier or later than their highest financial value. For example, if your desire is to develop a sugarbush, a harvest of smaller trees might be needed to

#### If you decide to sell timber on your property...

**...have a management plan prepared first**  
Before harvesting from your woodlands, be sure you have a long-term plan for your property. Work with a professional forester to define your goals, take inventory of the standing trees, examine the trees' current condition, and outline management activities that will meet your goals.

#### ...don't take the first offer!

Along with other considerations, harvesting should be done in a way that preserves the value of the woodlands for future generations. If you decide to pursue a timber sale, *do not take the first offer!* Always contact a reputable professional forester or timber buyer and discuss your goals before harvesting. Experience has shown that timber owners who actively market their timber get significantly more income from their sales than those who simply take the first offer.

encourage the growth and development of tap-pable trees (Figure 1). If your goal is to encourage a wildlife species such as turkey, you may want to promote the growth of oaks or other tree species that serve as important food sources. This may require removing surrounding trees that are suppressing the growth of the oaks or other preferred tree species.





**Figure 1.** To encourage the growth of tappable trees in a sugarbush, some surrounding trees may need to be harvested (photo courtesy of David Kenyon, MDNR).

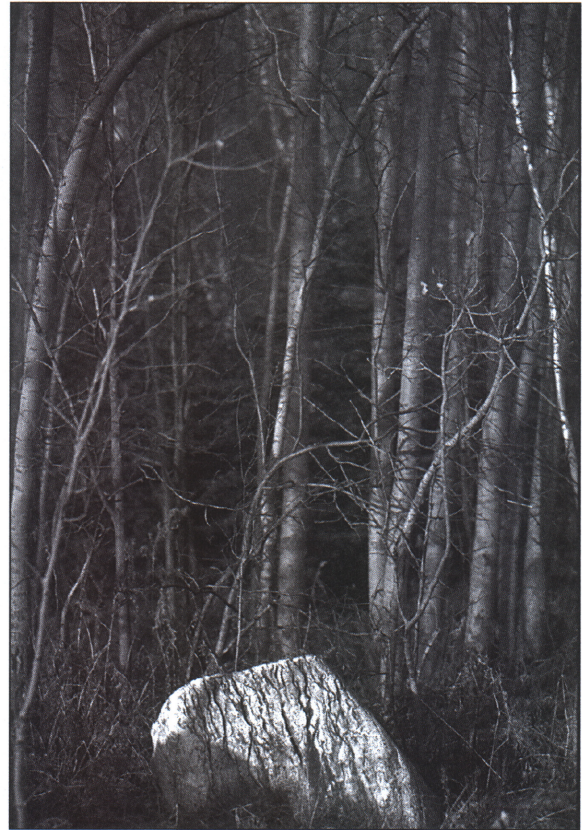
### Age

Age can be a deciding factor when harvesting. In certain forest types such as aspen (popple), harvesting may be initiated at a fairly young age. Aspen is a short-lived tree that usually grows in stands where trees are all about the same age. On sites with good, well drained soils, aspen will begin to deteriorate at about 50 years of age; this occurs even earlier on poorer sites. Other species, such as ash, sugar maple and various oak species, take much longer to reach their highest financial value, and may be harvested when they're much older.

### Size

Although the largest trees in a hardwood woodlot are typically the oldest, that is not always the case. Crowded hardwood stands containing maple, ash, beech, oak or cherry may have old trees with small diameters due to years of competition with overtopping neighboring trees. Generally, however, trees with diameters of 22 to 26 inches at breast height, or DBH (the diameter measured at 4.5 feet above the ground), may be considered financially mature and ready for harvest. Trees with smaller diameters are usually saleable, but cutting them sacrifices future timber sale revenue. On soils with poor drainage or low fertility, however, cutting smaller trees may be necessary because they may never reach larger diameters.

DBH generally influences timber value. For instance, hardwood trees that are less than 14 inches DBH have a low financial value, but typically exhibit a high rate of growth-especially with proper soil con-



**Figure 2.** A forested stand that is too crowded slows the growth of desirable trees (photo courtesy of David Kenyon, MDNR).

ditions and growing space. As that tree grows from 14 to 24 inches DBH, its height and volume increases substantially. Between approximately 24 and 28 inches DBH, its growth in diameter and height begin to slow as it becomes biologically mature. Somewhere at this point, the tree reaches its maximum financial value. For more information on the relationship between tree size and growth, refer to Cornell University's Cooperative Extension publication, "Timber Management for Small Woodlands (Goff and Smallidge, 1999)."

### Density

When a woodland is too crowded, the number of trees per acre needs to be reduced (Figure 2). In *thinning* a woodland, the intent should be to improve the overall quality of the woodlot, maintain a good growth rate on selected trees, and improve the environment for new and young trees. These woodland thinnings may also provide income.

Consider a crowded woodlot containing trees with diameters ranging from 14 to 26 inches. A thinning or selective harvest would involve cutting some 24-



to 26-inch trees, as well as some 14- to 22-inch trees. Harvest decisions are based on individual tree form, size, soundness, desired species, the tree's location relative to adjacent trees and your forest-land goals.

### Current market conditions

The commercial value of some tree species is so low that no one may be willing to buy them, though they may have a high standing value for wildlife or aesthetics. Examples include ironwood, sumac, sassafras and boxelder (depending on your region in Michigan). Other tree species typically are used only for firewood because they have a relatively low market value. Some other species are valuable in one part of the state but not in another because of the distance from markets and low volumes in given areas.

Current market conditions also affect when trees should be harvested. Certain tree species fluctuate widely in their market value over time, depending on overall supply and consumer demand. Examples include red oak, white oak and sugar maple (Potter-Witter, 2001). Check with the forestry professionals in the Michigan Department of Natural Resources or your local county Extension office for current price quotes. If the current market value of your trees is low, waiting for a higher price in subsequent years may be a good idea. Conversely, if prices are unusually high, you may want to market some trees early.

### Number of trees to sell

The number of trees you have to sell is important. There are minimum volumes of timber below which harvesting is uneconomical for timber buyers to harvest and transport the wood. These minimum volumes vary depending on size, quality and species of the trees for sale, and size, location and available markets of each individual timber producer.

### Catastrophic events

If your forestland suffers serious damage from storms, insects or disease, it may be best to conduct what is called a *salvage cut*, which removes the merchantable damaged trees before additional decay makes them unsuitable for sale.

### Other issues

This list of harvesting factors, along with professional advice from a qualified forester, will help you

### What do these mean?

**Management plan** — A written document that includes (at a minimum) the landowner's goals for the forest, an inventory of existing trees and current forest conditions, and recommended management activities that meet the described goals.

**Hardwood** — A term that describes broadleaf trees such as oaks, elms, and maples. It does not describe the relative density of the wood itself.

**DBH** — An acronym that stands for diameter breast height, measured as the diameter of a tree at 4.5 feet from the ground.

**Veneer** — Thin sheets of wood that can be used to make plywood or can be glued to the surface of other wood to improve the appearance of furniture, flooring or other products. A veneer tree is typically very valuable.

**Sugarbush** — A slang term for a stand of sugar maples that is used to gather sap for maple syrup and its byproducts.

determine the best time to harvest your timber. You should also address some legal issues before any harvest. Be sure you have clear legal title to the timber on your land. Have your property lines well marked to help avoid accidental damage or theft of your neighbors' trees. Make sure you have a timber sale contract that reflects your harvesting goals and protects your rights as a landowner. Your local MDNR forester or a private consulting forester can provide more information on these topics.

There are also some important environmental considerations. Avoid harvesting during spring and late winter to minimize damage to the remaining trees. Try to restrict harvesting to the driest months of the year to minimize the risk of rutting and soil compaction, which can significantly inhibit tree health, growth and future value. Refer to MSU Extension bulletin E-2770, "Water Quality Best Management Practices," for more information on these environmental considerations.



## References

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