

At some point in time, nearly all woodlands are likely to experience a timber harvest. For many woodland owners, this is a once or twice in a lifetime event. Once a woodland owner decides the time is right for a timber sale, the questions surrounding forest products and pricing become important. Timber harvesting is the main tool through which forest management goals are met, including financial returns, forest regeneration, forest vigor and health, ecological services, wildlife habitat improvement, and visual quality. Unlike other raw materials, wood is a renewable resource and harvesting provides many benefits.

There are many kinds of harvested forest **products**. These include veneer logs, sawlogs, sawbolts, pulpwood, utility poles, cabin logs, energy chips, firewood, and others. The process begins when a forest owner sells standing trees to a logging contractor. This is called **stumpage**. The logger manufactures products in the forest. Trucks are loaded and the products are delivered to a mill, such as a pulp mill or sawmill. A logger makes a living from the margin between stumpage and delivered mill prices. It is not an easy job, requires many skills, and is filled with risk, both from safety and investment standpoints. From the mill, a wide variety of products flow to secondary manufacturing mills.

In this process, the price of stumpage is important to forest owners and can be a source of confusion and misunderstanding. There is no commodity market or standard pricing schedule for stumpage. The Internet does not have pricing for private sales that will be accurate for products in your particular location. There are a few sources of regional trends. While the Michigan DNR makes price information on state-offered timber sales available, these sources are not always applicable to a private sale on a particular ownership at a particular time.

Forest owners need to be aware of certain things when deciding how to sell their timber. First, don't expect a logger's first offer to be the highest price possible. Their living depends on buying as low as possible; the same as any other business. Second, there are no standard prices for harvested forest products. The variables are many and the prices often change with the seasons or even shorter periods of time. Third, the specific trees that interest a logger can vary from contractor to contractor, depending upon their market connections, equipment

configurations, and status of the economy. A forest owner needs to make sure that the logger harvests the right trees in order to meet forest owner objectives. Working with a consulting forester can help reduce some of the mystery and uncertainty associated with selling timber.

How Stumpage Is Sold

Like stumpage prices, there is variability in how standing trees are sold. The simplest method is a single price for all the trees to be sold. This is called **lump-sum**. Payments might be made on a schedule that would be spelled-out in a contract. Alternatively, different stumpage prices may be specified for various raw wood products and/or tree species, such as one price for sugar (hard) maple veneer and another for sugar maple sawlogs of different grades. This is called a **"scale sale"** because the volume of each product needs to be measured by a trustworthy party that is identified in the contract. There are advantages and disadvantages to each sale arrangement and there are potential tax implications.

Contracts

Once trees have been harvested and removed, it is too late to discuss a misunderstanding. Contracts help protect forest owners, as well as the contractor. Having a contract with a logger is always recommended. The contract language should be understood by the forest owner. The owner needs to make clear to the logger what is desired and make sure the logger can do what is expected. Contracts can be fairly simple or more complex depending upon the kind of timber sale. A simple contract with a contractor that you know and trust is easiest. However, most forest owners are best served by working with a forestry consultant to make sure all the many considerations are properly presented to both the forest owner and the logger, and to make sure timber harvest achieves what the owner desires.

Veneer Logs

These are the highest quality logs of a particular species, yet the range of specifications, grades, and prices will vary widely with the markets. A well-managed forest will yield the highest quality



The economic chain from forest to consumer is a complex web of pathways, beginning with the forest and forest owner.

wood. These logs, of various species, are used to produce thin veneers for panels, furniture, and other high-end wood products. Many logs are exported to other countries.

Sawlogs

Grading systems for hardwood and softwood sawlogs have several classifications. Log length will vary depending on the characteristics of a tree and the demands from the current markets. Both veneer logs and sawlogs are usually sold in units of 1000 board feet (MBF). A board foot is the equivalent of a one-inch thick piece of wood that is 12 inches on each side.

Sawbolts

Sawbolt definitions vary widely with the local markets. Sawbolt prices are typically in between those for pulpwood and sawlogs, although they're often measured in cords. Lengths are usually eight feet but diameters are non-standard. Only certain species may have a sawbolt class, such as aspen or oak for an area pallet plant. In the Lower Peninsula, this product class is sometimes referred to as "crating logs". Some mills may call them "chip & saw" logs.

Pulpwood

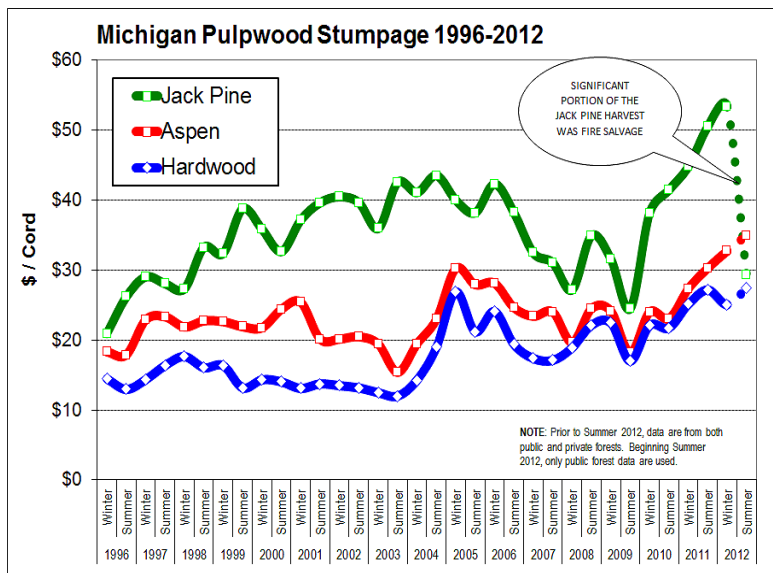
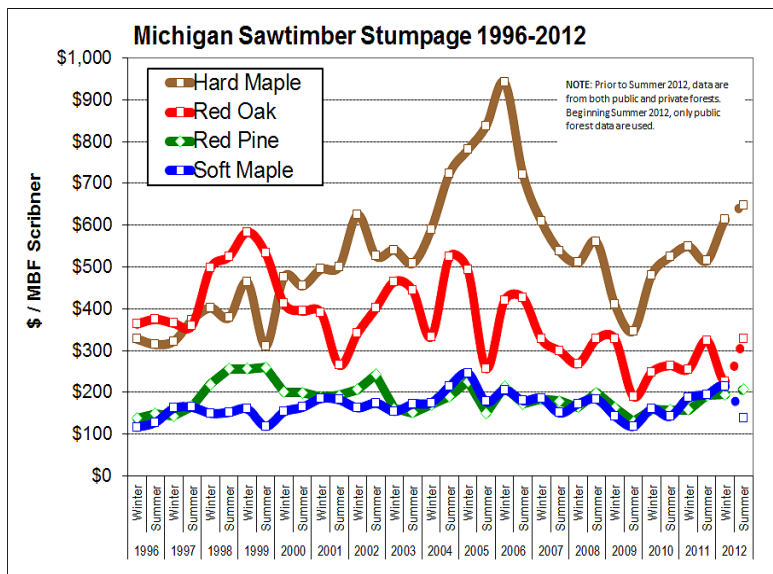
Much of the wood harvested in northern Michigan is used to make paper, oriented-strand board, or other processed wood material. Smaller diameter wood can be utilized, which expands forest management opportunities in the forest. Pulpsticks are 100 inches long and are sold in cord units or weight equivalents. A cord is the equivalent of a pile of 8-foot pulpsticks stacked 4 feet high and 4 feet wide. There are about 80 cubic feet of solid wood in a cord, depending upon how large the diameters are. A green cord will weigh about 2.2 to 2.5 tons.

Utility Poles & Cabin Logs

Usually red pine or other softwood, these products bring a high price but they must meet exacting specifications. Those specifications will vary from company to company and there are only a few of these companies in Michigan. Most of them have their own buyers to select standing trees because of the special requirements.

Energy Chips

Trees or parts of trees can be chipped or ground into a feedstock for boilers that produce heat, electricity, or both. Different boiler types require different feedstocks. Oftentimes, this is the forest product that brings the lowest price for the logger (and subsequently to the forest owner), although this may not always be the case. Chips are usually bought and sold by the green ton, with price allowances made for species and moisture content.



Data from Timber Mart North, by permission of Prentiss & Carlisle

Harvesting Systems

Most Michigan wood is harvested with a "cut to length" system, which consists of a large machine called a **processor** (fells the tree, trims branches, and cuts the wood to specified lengths) and a second machine called a **forwarder** (moves the cut wood out of the woods). This combination may cost more than a million dollars, which is a substantial investment for a small business. There are other systems and combinations of systems, including a few horse operations. All of these harvesting systems can be used with a minimum of damage to the site and/or residual forest. Operator skill is the major determiner of a well-done harvest. Working with a skilled logger, with the set-up that best suits your forest is an important consideration. Layout of the timber sale is important; forwarding routes, order of harvest, landing location(s), etc.