

# MichiTree Newsletter

4th Edition

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**W**elcome to the 4th edition of our annual newsletter. 2007 marks the 24th anniversary of MichiTree and on December 1st, it will be 10 years since I started with the company. It's hard to believe how quickly the time has passed. I've recently started getting repeat clients, on properties that we had thinned during my first couple years as a consulting forester. It's amazing to see how a forest has progressed several years after thinning, and really demonstrates the advantages of long-term forest management. A common benchmark during a forester's career, is to conduct an aspen reproduction harvest for a second time on a given tract (30-40 years). This is the point when you know retirement is near.

After years of procrastination, I've finally become a qualified inspector for the American Tree Farm System. Landowners whose tree farms are due (or past due) for inspection, and would like to schedule a meeting, please feel free to call or e-mail me. Landowners who are interested in becoming members or would like to learn more about this program can check out the following website: [www.michigantreefarmssystem.org](http://www.michigantreefarmssystem.org) or call (800) 474-1718. Basically, membership requires a commitment to sustainable forestry and written management plan. Some advantages to membership include: regular inspections and advise from pro-

fessional forester, a plan that can be passed on to heirs, and informative magazine titled "tree farmer" which contains very good articles and is published 6 times a year.

The Michigan legislature recently passed several bills (912,913,914, 917, 5454, and 5455) designed to give tax relief to landowners committed to active forest management. Many are familiar with the Commercial Forest Program (CFP) which allows tax breaks in exchange for opening private lands for public use. The new modified program called the "Qualified Forest Act" (QFA), requires a commitment to following an approved forest management plan submitted to the MI-DNR. However, it does not require allowing the public to enter your property. Once approved (plan, application and fees), landowners would be exempt from certain levied school taxes. There are many details on which properties qualify, penalties for withdrawal etc, that should be examined closely before signing up for the program. Since it's in the early stages and details have only recently become available, it's too early for me to pass judgement on this program. For more information, you can contact your local conservation district, the Michigan Department of Natural Resources or MSU Extension. Detailed outline of the program can be viewed at the following website: [forestry.msu.edu/extension/extdocs/facts32.pdf](http://forestry.msu.edu/extension/extdocs/facts32.pdf)

This year, I'm excited to feature an article summarizing hard maple tree growth patterns from three Continuous Forest Inventory (CFI) plots that I've measured at the end of the last seven growing seasons. I'm learning a great deal from this study and believe it has made me a better forest manager. In addition, articles on market trends and forest management tips will be provided. We encourage and appreciate any comments or suggestions you can make on the content of our newsletters/website. This newsletter and those of past years will be posted on our website. We hope you will pass on our web address to anyone that you feel would be interested: [www.michitree.com](http://www.michitree.com). We very much appreciate your past business and look forward to assisting you with future forestry projects.

Sincerely,

Scott R. Erickson, ACF  
Registered Forester #671



Recently thinned northern hardwood stand

## *Analysis of Maple Growth from 3 Inventory Plots*

In 1999, I established three, one fifth acre Continuous Forest Inventory (CFI) plots, in which trees are measured after each growing season. Plots were strategically placed to represent areas of differing stem densities, so growth rates could be compared. Trees within woodlot (approximately 30 acres) are mostly hard maple and relatively even-aged. Current diameters mostly range from 10"-18" in diameter at breast height (DBH). The woodlot was last thinned during the winter of 1999, just prior to plots being established. The first plot contains 18 trees, or 90 Trees Per Acre (TPA), the second has 10 trees, or 50 TPA, and the final plot has only 4 trees, or 20 TPA. Plots with varying tree densities allows long-term comparison of annual growth rates, relative to spacing of neighboring tree's crown and root systems. Amount of crown sun exposure seems to be the determining factor in diameter growth.

As expected, trees within first plot (90 TPA) are growing the slowest, and have averaged only .88 inches of total diameter growth during the 7 year period. Trees within the second plot (50 TPA) have averaged 1.75 inches of diameter growth, and the third plot (20 TPA) have averaged 2 inches of growth. This equates to more than a doubling in annual growth rates in trees spaced at 20-50 TPA versus 90 TPA. Several trees in the first plot (10 out of 18) have grown less than one inch. The slowest growing trees were observed as those having little to no room for crown expansion. A few trees in plots 2 & 3 have grown as much as 2.5 inches in diameter. The fastest growing trees seem to be those with full sun exposure (South and East sides of canopy), with very little or no competition in crowns.

This ongoing study really supports the concept that a tree's diameter is proportional to its crown size. I believe this statement really says it all, in regards to the many benefits of long-term forest management. Through periodic thinning, the best quality crop trees are "released" to grow and annual growth rates can improve dramatically. If the forest is left in an over-crowded condition, trees put on very little growth, and can even become stressed and more vulnerable to insect and disease outbreaks. If forest canopy is mostly closed, and little light is reaching the forest floor, the stand could benefit from thinning.

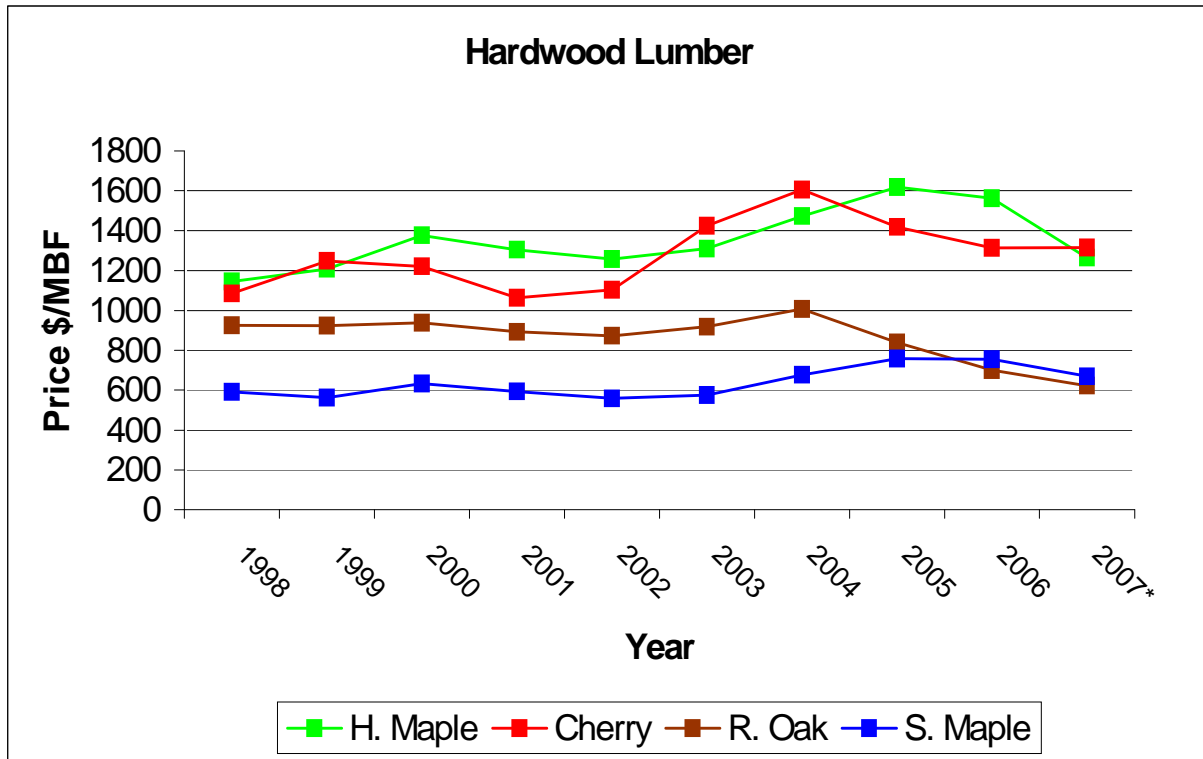
## *Timber Market Trends: 2006 & 2007*

2006 started out very good for hardwood and other timber markets, and ended with fairly sharp declines in prices for most forest products. This is most likely the result of slower than expected housing markets and the resulting over-production of lumber. Even hard maple (Northern Michigan's #1 seller) saw a fairly significant decline in value for most grades of lumber (see figures 1 & 2). Will prices continue to erode, stabilize or rebound? Time will tell. On a positive note, hard maple is still the preferred species for flooring and cabinets and veneer prices seem to be holding. Cherry and soft maple prices are stable to slightly rising. Red oak continues it's downward slide and some reports indicate it may take a decade or more to rebound? Foreign markets may be oak's greatest hope, as reports indicate American oak (white and red oak), are gaining in popularity in some growing economies. Pine and pulpwood prices have dipped slightly, however remain relatively stable.

On the following page, *Figure 1* depicts a graph of hardwood lumber prices over the past 10 years for major hardwood species associated with this region of Michigan. These numbers were derived from the publication, "Weekly Hardwood Review", and are based on surveys from sawmills across the country and broken down by region. We are in the "North Central" region and prices are based on yearly averages (published prices from the first week of each month), for number one common grade, green, 1" thick lumber sold from sawmills across the region. Again these are average prices, as each sawmill has their own specialized markets and prices likely vary from mill to mill. Prices are in dollars per thousand board feet (MBF).

*Figure 2* shows recent bid results from timber sales sold in 2006-2007. It is important to note that these "stumpage prices" vary significantly based on a variety of factors. Some variables that determine the price buyers pay for standing timber include percentage of veneer and other grades, length of contract, competition, species mix, total volume, access for trucking/processing, etc. Sales sold during the first half of 2006 saw more bids and better results than the second half of the year. Buyers had more confidence in lumber markets at this time. When housing markets pick up (some predict during the second half of 2007), prices should stabilize/rebound for many items of hardwood and softwood lumber.

Figure 1- Lumber Prices



\* 2007 prices reported up to March 1st

Figure 2- Recent Bid Results

Sale Type (Major Timber Type)	Total Volume (Thousand Board Feet-MBF/ or Cords)	Number of Bids	Low Bid	High Bid	\$/MBF or Cord
Hard Maple (high % veneer)	43 MBF	9	\$20,554	\$56,203	\$1,307/MBF
Hard Maple/Cherry	161 MBF	5	\$110,000	\$155,779	\$968/MBF
Hard Maple & Mixed Hardwoods (50/50)	98 MBF	6	\$33,800	\$50,026	\$510/MBF
Red Oak	40 MBF	6	\$6,790	\$18,000	\$450/MBF
Red Pine	180 CORDS	3	\$9,378	\$12,650	\$70/CORD

## MichiTree

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### What's inside:

- Article on Hard Maple Growth Plots
- Timber Market Trends
- Ideas for the woodland owner

## Ideas for the woodland owner-“The Canopy Gap”

Often get asked if you need to re-plant hardwoods after harvest, to renew the forest. In fact, regeneration of hardwoods is best left to mother nature. Every few years most tree species have bumper seed years. If the conditions are right, new seedlings quickly become re-established and the competition for light and nutrients begins. The trick is to create the “right conditions” that favor species you wish to grow.

Most hardwood trees grow best under moderate to heavy sun exposure, thus holes in the canopy need to be created to fill this need. These “canopy gaps” should be large enough

(one tenth of an acre +) to promote quality seedlings that will compete and self-prune. This improves their chances of becoming quality future stems. Ideally, gaps should be made within a few years after a good seed year. This will improve the chances that seedlings quickly recruit into saplings. Landowner should take the opportunity to monitor the species mix within the gap areas. If an undesirable species dominates (ironwood, beech etc) the under-story, efforts to control species composition can be made (cutting, spraying etc). Also, efforts can be made to control seed source from surrounding stand. For example,

if you want to reduce beech trees in your gaps, surrounding mature trees should be harvested.

In a mature hardwood forest, a good goal is to create 10% of total acreage into canopy gaps at each thinning interval. With each thinning, efforts should be made to expand existing and create new canopy gaps in areas with poor crop tree potential. The result will be a mosaic of uneven aged clusters of trees. In addition to renewing the timber resource, these areas also improve wildlife habitat. Many species (both game and non-game) seek them for both a food source and protection from predators.