

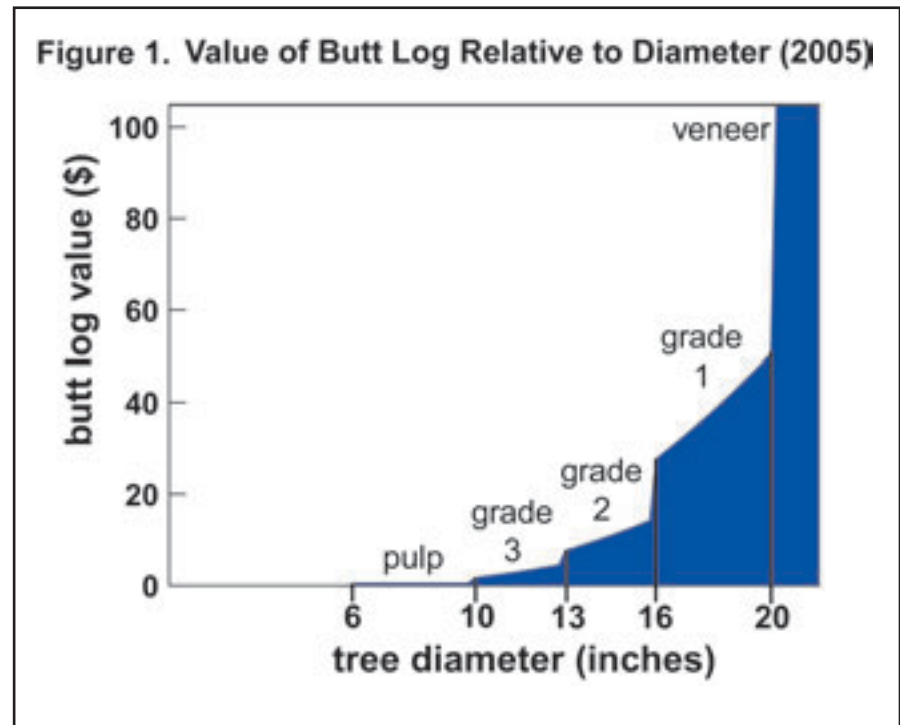


# Where Does the Financial Value of Trees Come From?

By Tamara L. Cushing

Trees are valuable in many ways, including ecologically, socially, and financially. From a financial standpoint, we know that trees have value for forest products such as furniture, flooring, and pulp and paper products. The big question is how do trees gain financial value throughout their lifetime?

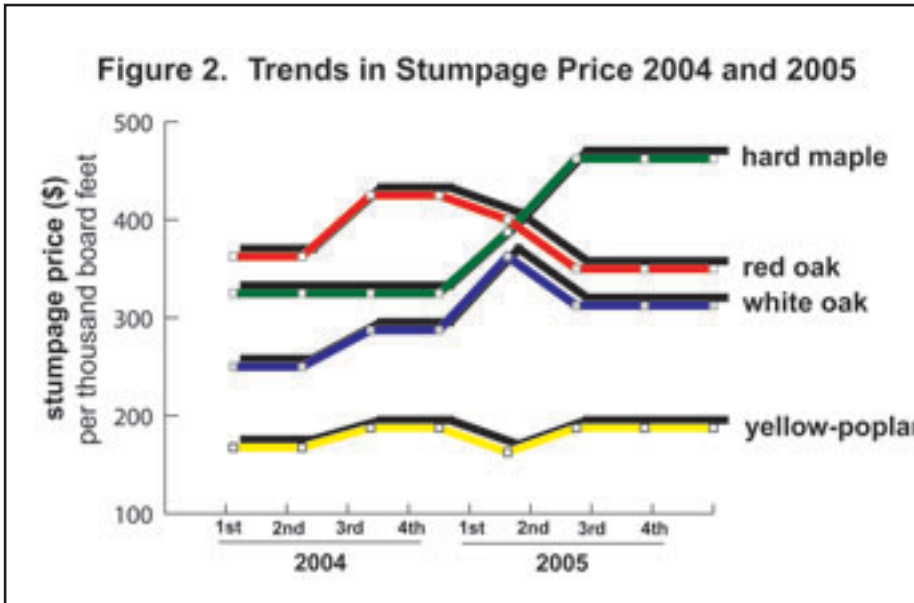
Trees as living, growing organisms continue to grow throughout their lives. This biological growth contributes to a gain in value due to increasing volume. The more volume a tree has, the more value it has because volume is multiplied by price to determine the value of the tree. In addition, as the tree is gaining volume, the tree can change from one product class to a more valuable product class. Figure 1 shows the change in value of a log as it increases in size resulting in a change in product. This change in product class leads to a higher price paid for that tree. Pulp is a low value product and selling a log when it is pulp-size forgoes potential future income of that tree. A pulpwood tree is worth pennies compared to a grade three sawlog which at 10 inches could be worth around \$1.75. Grade three logs are 10-13 inches in diameter. Looking at the value of the log, it would make sense to wait for the jump in value that occurs when the tree becomes 13 inches. If you had harvested at 12 inches you lost the opportunity to double the value of the log by waiting for that last inch of growth. If you have a log today that is 13



inches in diameter it is worth almost \$8. However, if you allow that log to continue growing and reach 16 inches, it could be worth almost \$28 (a 360% increase in value!). You could choose to cut that log when it reaches 16 inches or wait until it reaches 20 inches when it would be large enough to be veneer. A 20-inch veneer log could be worth \$173! This is now a 625% gain in value for allowing the tree to grow to a larger size (assuming the log is veneer quality). Allowing the tree to grow can be a valuable way to gain financial value.

Biological growth is not the only way that trees can increase in financial value. Timber prices, as part of the value equation, can affect what you receive for a particular tree. Prices paid for timber depend on factors related to the economy and the environment. Economic factors such as consumer spending levels and supply and demand of forest products contribute to current timber prices. If consumers are not purchasing oak furniture then, all else equal, it can be expected that prices paid for oaks will be down at that time. Figure 2 shows trends in stumpage price for 2004 and 2005 for four species groups. Of the four, yellow-poplar remains the lower-priced species. Based on this data, it would be better to wait on harvesting oaks as they are receiving a lower price than they were in 2004. A landowner would need to consider harvesting hard maple

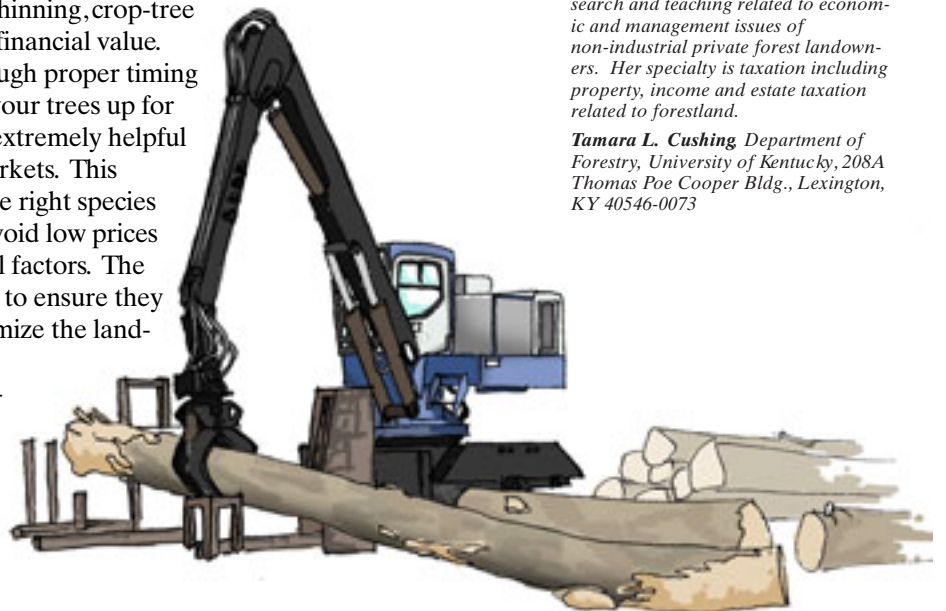
Figure 2. Trends in Stumpage Price 2004 and 2005



since the price for that was at a two-year high and was the highest priced species group relative to the oaks and yellow-poplar. Further examination of long-term price trends could reveal even more information regarding the price cycle of certain species. Environmental factors such as rainfall amounts can also impact current prices. In especially wet periods, for example, landowners with “high and dry land” may receive a higher price because it is easier to operate logging equipment in dry areas.

The most important thing to note is that in many cases financial value can be enhanced by management and marketing decisions. On the biological side, timber stand improvement (TSI) as a management tool can increase volume and/or value by concentrating growth on commercially desirable trees. Timber stand improvement could include (but is certainly not limited to) site preparation for natural regeneration, thinning, crop-tree release and other practices improving financial value. Economic factors can be handled through proper timing of the market. Knowing when to put your trees up for sale can be critical. A forester can be extremely helpful since they have knowledge of local markets. This knowledge can be critical for selling the right species or selling at the right time of year to avoid low prices due to economic and/or environmental factors. The forester can also help market the trees to ensure they are sent to the mill that will help maximize the landowner’s revenue.

Trees are capable of increasing in financial value by themselves through biological growth. However, it is possible to increase their value through market timing and good forest management. Resources exist to help landowners maximize the revenue received for harvested trees.



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