## Walnut Trees <br> When to Hold'em and When to Fold'em

High quality walnut trees can be a great investment, but like any good investment or card hand, you need to know "when to hold'em and when to fold'em". I often get asked how big a walnut tree should be before it is sold. The answer is not simple and each tree must be assessed to determine it's financial maturity. Financial maturity is when the income from selling the tree can be placed in another investment and earn a higher rate of return than the tree is earning growing. This differs from biological maturity, which is when the tree dies. Trees that reach biological maturity have already surpassed financial maturity. There is a time period when the tree is deteriorating and actually losing value before it reaches biological maturity and dies.


At what size does a walnut tree reach it's maximum earning potential? This is determined largely by tree quality. The better the tree - the longer you should grow it. The poorer the tree the sooner you should sell it. Walnut trees that have no defects such as knots, branches, cracks, or scars are called veneer trees. Thin sheets of veneer are sliced or peeled from the logs. Veneer is often cut $1 / 38$ of an inch thick, so any defect rules out veneer production. Logs are graded by the number of sides that are clear of defects. Most markets require a minimum of 3 clear sides or faces. Four clear faces are preferred and these are the most valuable trees. You must have a veneer grade $\log$ for a minimum of 8 feet, but the longer the better.


Trees that have defects on two sides or more are called lumber trees. These trees have too many problems to be efficient for veneer production, so they are cut into boards.

As veneer quality trees grow in size, they gain volume in board feet, and each board foot is more valuable as the tree gets larger. In other
 words, you are gaining in volume and each unit of volume takes a price jump as the tree grows larger in diameter. Walnut lumber trees gain in volume over time, but the lumber does not take price jumps as the tree gets larger in size. If walnut lumber is $\$ 0.50$ per board foot, it is the same price for a tree regardless of how large the tree is. Growth is $2-3 \%$ per year. This is a poor return on your investment, so lumber quality trees should be sold as soon as someone will buy them.

Foresters measure trees at chest height, or $41 / 2 \mathrm{ft}$. above the ground. If you have a lumber quality tree, the tree is financially mature at 16-18 inches in diameter. A veneer quality tree at 18 inches in diameter is like a 150 lb . hog.


The frame is there, but you can make a good return adding "meat" by allowing the tree to grow longer. Following is an example of how walnut veneer trees gain value as they grow larger. On good sites, walnut will grow 1 inch in diameter every 3 years. Over a 12 year period, the tree will increase in diameter by 4 inches. The figures are for a 16 ft . veneer $\log$ with 4 clear sides.

| Diameter | Board Feet | Price Per Bd. Ft. | Total Value |
| :---: | ---: | ---: | ---: |
|  |  |  |  |
| 18 | 122 |  | $\$ 4.00$ |

Prices are estimates only and do not reflect values you may receive for your trees. Tree value varies greatly with quality, access, and number of trees for sale. Price can only be determined by getting bids from reputable timber buyers.


Good quality walnut trees are gaining value at an annual rate of $7-10 \%$. This does not include inflation or increase in the walnut market. If you include these factors, many trees are easily gaining $10-15 \%$ per year in value. This is a great long term investment that many people on Wall Street would love to have.

District foresters or consultant foresters are available to help you assess your walnut trees and determine the best time to sell individual trees. Knowing when to hold'em and when to fold'em is critical to realize the potential value from your trees. Many people sell their trees too early and miss out on the time period when walnut trees are gaining their maximum rate of return. High quality walnut trees continue to gain a high rate of return until they show signs of deteriorating or damage. On good sites, high value trees should
be grown to at least 26-28 inches in diameter. If you are willing to take some risk, the "magnum" walnut trees that command the highest price are 30 inches and larger in diameter.

The discussion and examples in this article address only the value that walnut trees have for lumber or veneer. There are other values to consider such as wildlife values or the value of having a large tree on your property. You as a landowner must weigh these values along with the value the tree has for wood. A professional forester can help you analyze each tree and determine the best time for you to sell your trees.

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