



# Extension FactSheet

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## Urban Walnut Trees Their Value as Timber or Veneer

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Reports of black walnut trees being sold for hundreds or even thousands of dollars often cause homeowners to dream of huge profits from selling their backyard walnut trees. Unfortunately, while good quality walnut trees are often quite valuable, walnut trees grown in an urban setting usually are not. Only an exceptionally large, high-quality, urban-grown walnut or group of walnut trees would interest a timber or veneer buyer.

Black walnut (*Juglans nigra*) has long been used for fine furniture, gun stocks, bowls, and novelties because of its beautiful grain, color, and the ease with which it can be worked. Good quality walnut logs are cut into lumber; the best are sliced into veneer. Walnut veneer is a very thin sheet of wood (as thin as 1/50 inch) that can be glued to the surface of another species of wood or plywood to give the appearance of walnut. Walnut veneer may be sliced by repeatedly passing the log against a sharp blade, or peeled into larger sheets by slowly spinning the log against a sharp blade. The use of veneer allows walnut products to be produced at a fraction of the cost of producing them from solid wood. While walnut lumber trees must be of good quality, veneer trees are of higher quality and command the highest prices.

Several key characteristics determine the value of a black walnut tree for timber or veneer, including trunk diameter, merchantable height, and how free the trunk is from defects. (More information is available in Fact Sheet F-35, *Measuring Standing Trees—Determining Diameter, Merchantable Height, and Volume*, available from county offices of Ohio State University Extension.)

While walnut buyers will occasionally purchase small trees, particularly if they are part of a group of trees being sold, trees less than 15 inches in diameter are of comparatively little value. Quality lumber and veneer trees generally have diameters of 18 inches or greater. A tree's diameter is measured 4-1/2 feet above the ground. It can be determined by measuring the circumference with a cloth tape or string and dividing the circumference by 3.14.

The length of tree trunk that can be used for lumber or veneer is called its merchantable height. In black walnut and other hardwoods, merchantable height is usually the trunk height to major branches or forking. Minimum merchantable height for lumber and veneer black walnut trees is eight to 10 feet. Quality lumber and veneer trees will have merchantable heights that are several times this height (see Figure 1).

The quality of a hardwood tree is measured by how free its trunk is from defects such as crookedness, limbs, scars, swellings, bumps, cracks, holes, insect or disease damage, and wounds. Other factors being equal, the fewer the defects, the more valuable the tree. High-value walnut lumber and veneer trees have few visible defects. On the other hand, walnut trees with numerous defects are of little economic value. In general, the larger the walnut's diameter and merchantable height and the more free the trunk is from defects, the greater its economic value for lumber or veneer.

Unfortunately, most urban walnut trees (Figure 2) do not display the characteristics of high-quality marketable trees. Urban walnuts often grow in open areas without surrounding trees. This results in trees with short trunks and numerous branches—little or no merchantable height. They are also more likely to have been struck by lightning or injured by human activities than trees grown in the woods.

Even urban walnut trees that appear suitable as lumber or veneer trees usually are avoided by buyers because of the risk that they may contain objects, such as nails, wire, insulators, clothes hooks, and more, that would damage saw blades or veneer knives. This is perhaps the most important reason timber buyers do not commonly purchase urban trees. A substantial percentage of all urban trees have grown over such foreign objects and contain them embedded in their wood.

While most mills have electronic equipment or other procedures to avoid striking embedded objects, there is usually no way a buyer can determine the presence of such objects when examining the standing tree. Unless the tree is of exceptional



Figure 1. This black walnut tree will produce high-quality lumber or veneer.



Figure 2. This black walnut tree will not produce high-quality lumber or veneer.

value, most buyers do not want to assume the risk that all or part of the value of the tree will be lost because it contains foreign objects.

The cost and difficulty of harvesting urban trees also discourages the purchase of urban walnuts. Unless the trees are of truly exceptional value, it is rarely economical for a buyer to invest crew and equipment time in traveling to harvest one or two trees. In addition, many urban trees are close to houses, power lines, or other facilities, making them more difficult, time consuming, and expensive to harvest.

The combination of poor quality, high risk of embedded objects, and potentially difficult logging results in most urban walnut trees being of little interest to timber or veneer buyers. This does not mean that buyers would not be interested in an urban walnut that had a 30-inch diameter trunk, 32 feet of merchantable height in a straight trunk that was virtually free from visible defects, located in the middle of a large back yard away from any utilities or buildings. Unfortunately, there are very few such trees.

Although walnuts are not considered the ideal shade or ornamental tree, this is the highest value for most large urban walnut trees. If, for whatever reason, a large urban walnut must be cut, the highest value of the wood is most commonly firewood. Large, open-grown black walnuts often contain one or more cords of firewood, and walnut is an excellent firewood of medium density and is relatively easy to burn. The value of the firewood may partially offset the cost of having the tree professionally cut. Cutting a tree in the city can cost from several hundred to more than a thousand dollars, depending on the size of the tree and its location. If you have a tree cut in the city and you wish to retain the wood, be sure the contractor knows this. Many contractors remove the wood and market it as firewood.

If you believe you have economically valuable black walnut trees and wish to market them for timber and veneer, the first step is to verify their potential value through discussions with your local Ohio Department of Natural Resources Service or Urban Forester or a consulting forester. (The names of these individuals can be obtained from your county office of Ohio State University Extension.)

At the same time, you should explore the most effective way to market the trees. Options for selling timber are discussed in Fact Sheet F-37, *Getting the Most Return From Your Timber Sale*, available from county offices of OSU Extension. In most instances, if you have several high-quality trees, following the bid sale process described in this publication will produce the most satisfactory results. Occasionally, direct contact with a single buyer will produce satisfactory results. This is particularly true when the sale is small or the local market is limited, and a potential buyer has already made contact. These procedures are both discussed in the fact sheet.

If you do sell your urban black walnut trees, be sure you have a written contract with the buyer. Fact Sheet F-38, *Timber-Sale Contracts*, details traditional timber-sale contract concerns. Many of the provisions discussed will be the same for an urban timber sale; others will need to be modified to address the urban environment.

Finally, before you sell, seriously consider the value of your urban black walnuts as living trees, including shade, beauty, wildlife, and increased real-estate value. Be sure the income you will receive from selling the trees exceeds their value to you as shade and ornamental trees. The removal of large urban trees often has dramatic unanticipated visual impacts, and such trees cannot be replaced in your lifetime.

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