

Horticulture Update

MARCH 2003

Texas Cooperative Extension, Texas A&M University, College Station, Texas

How Much Is A Native Pecan Tree Worth?

*By Dean McCraw, Extension Horticulturist, Oklahoma State University
(reprinted by permission from "Pecan South" magazine)*

The standard answer to the question "How much is a native pecan tree worth?" usually is "Well, that depends." That answer doesn't do much to solve the problem, but it is true.

Land sales, right-of-way procurement or insurance claim settlements frequently require valuation of individual native pecan trees. There is no valuation recipe that replaces assessment by the trained eye, but some guidelines do exist. The real value of the trees has much to do with the past history of the trees and the care they have received in years past.

Native trees growing in unimproved stands have little value for nut production and can be valued by foresters similarly to other hardwood species (e.g., oak, hickory, walnut) growing beside them. Pecan trees which have benefitted from good management for a period of years have more nut production potential than those left to the whim of nature. Sites which are otherwise good pecan sites but are poorly drained or prone to flooding generally have less production potential than similar sites that drain well. Trees that are crowded to the extent that lower limbs drop are less productive than well spaced trees.

Pecan trees have value for (1) shade, (2) nut production, (3) lumber and (4) firewood. According to their location and use, the tree value may be based on any of the four uses.

Shade tree appraisal may be made according to a formula established by the National Shade Tree Conference Committee. Tree size, current value, species, geographical location, condition, immediate location and land value are considered in the shade tree formula. Professional appraisers are available to assist with determining a fair value for pecan and other trees for their value as shade trees. Most county extension offices can help you locate someone to help with this.

There are often extension materials available by which to measure woodland timber values to aid landowners in their calculations.

Generally, improved-variety pecans are worth more per pound than natives (seedlings). According to the USDA Crop Reporting Board the average price received by growers during the years 1985-1994 was 63.5 cents per pound. During the same period, varieties brought \$1.04 per pound. These are wholesale prices. Retail (direct-to-customer sales) prices are higher and trees with a record of sales direct to consumer would have greater value.

A sound pecan tree in a good location with ample growing space and unaffected by weather events, e.g. lightning, will continue to produce nuts almost indefinitely - at least for a longer period than anyone has recorded.

Nuts are produced on twigs at the end of branches. When the trees are crowded, the bearing surface is reduced. Proper thinning can double or triple the bearing surface and potential nut production. Pecan roots begin to crowd before crowding of the trees is apparent above ground. The optimum tree density (stocking rate) is about 30 square feet of cross-sectional trunk area per acre. More dense stands are overcrowded and tend to drop lower limbs and lose vigor and bearing surface on the interior of the tree due to shading and competition for water and nutrients.

Orchard floor management practices also affect tree yield potential. Some legumes managed properly complement tree growth while grass and weeds are often competitive. Less dense tree stands are less affected by weed competition than crowded trees.

Pecan trees perform best when located on deep, fertile soils containing an adequate supply of late summer moisture. Yields are influenced by the variety or seedling selection and growing conditions. The following factors are important components of a good cultural program:

- adequate tree spacing
- fertilization
- insect and disease control
- moisture control
- weed and grass control
- irrigation

Inadequate attention to any of these factors will decrease the annual production of quality pecans. Arriving at a yield estimate for native pecans is difficult at best. Variable tree spacing affects yield potential per acre of land. Since each native tree has a different genetic makeup, the yield potential per tree varies even if all other factors are equal. A realistic long-term goal for an acre equivalent, i.e. 30 square feet of cross-sectional trunk area, of well managed native pecan trees in Oklahoma is 800 pounds. Production records are the best indicator. Production potential estimates in the absence of records are invariably matters of judgment based on individual conditions.

A producing pecan tree (native or variety) is worth about 10 times its annual income for nut production, i.e. a 10 percent capitalization rate. To estimate gross income, multiply the average tree yield in pounds by the average price of pecans per pound received by the grower. From gross income, subtract the annual production cost. Annual production costs usually equate to about one-half of gross income for well managed pecans which means the tree is worth about five times the value of its average annual production.

In Oklahoma, tree spacing is usually the overriding factor in determining native pecan tree nut production potential and value. The following table provides general guidelines on valuation of native pecan trees which receive some management. These value estimates are based on tree spacing. Individual judgment is always needed to apply these values to an individual situation, i.e. site, management level, etc.

