

Hardwood Lumber and Veneer Series



Butternut

FNR-280-W

Daniel L. Cassens, Professor and Extension Wood Products Specialist
Department of Forestry and Natural Resources, Purdue University, West Lafayette, IN 47907

EXPERT
REVIEWED

Butternut (*Juglans cinenea* L.), or white walnut, is a minor lumber species, and it is now becoming a scarce tree due to a canker disease. The species prefers moist, rich loam type soils found in ravines and coves, but it can also grow on drier, rocky soil, especially of limestone origin. The tree is usually scattered in the forest. It is associated with other species that prefer upland sites. Its a small to medium-sized tree ranging from 40 to 60 feet high and 12 to 24 inches in diameter. The largest reported tree is nearly 7 feet in diameter at 4½ feet above the ground.

Wood Color and Texture

The sapwood is white to light grey and narrow. The heartwood is a distinctive cinnamon brown color, sometimes variegated. The larger earlywood pores are readily visible to the naked eye and decrease in size toward the end of the growth ring, making the growth rings somewhat distinct.

Workability

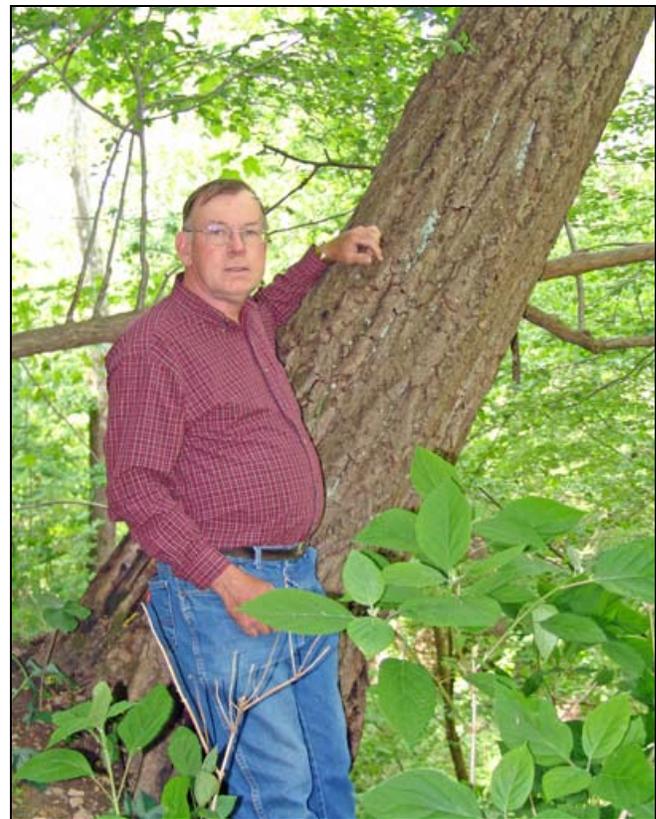
The wood is soft and rated as only good in machining properties.

Strength

At 12 percent moisture content, the wood weighs about 27 pounds per cubic foot, making it comparable to basswood and cottonwood, some of our lightest species. Light-weight woods usually results in lower strength values, and this comparison holds true for butternut as well.

Steam Bending

No information is available.



Chip Morrison

Dan Cassens and butternut tree

Drying

The wood can be kiln dried with a moderate kiln schedule.

Shrinkage

The total volumetric shrinkage for butternut is 10.6 percent. This is a very low shrinkage in comparison to other species, even of the same density.

Decay Resistance

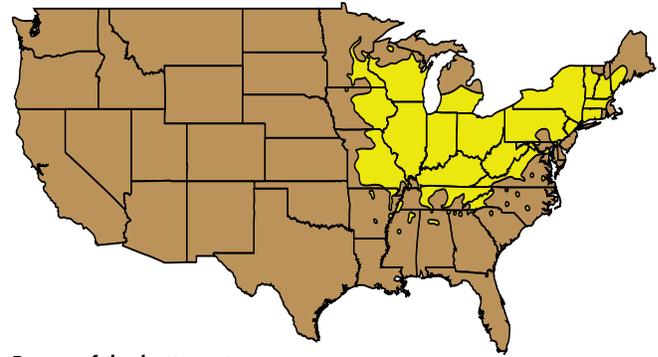
Butternut is rated as a nondurable wood.

Commercial Use, Grading, and Value

The wood has been used for furniture, cabinets, paneling, and other millwork as well as for fancy face veneers. The wood is easily chopped for bowls. When stained dark, it is a substitute for walnut. The wood's softness is a deterrent to its use, particularly on flat surfaces that will receive heavy use. Only small quantities of the wood are available today, and commercial interest is likewise limited.

There is a separate grading category for butternut and walnut in the NHLA grading rules. These rules are less demanding than the standard rule. As such, even the highest grade of butternut or walnut will not appear as good as the best material for the species graded "standard" such as oak and ash.

The value of the species is no longer reported in any of the price reports.



Range of the butternut



Chip Morrison

The grain pattern of butternut is very characteristic to that of walnut, but often with an irregular or jagged shape in the growth ring as seen in the first sample piece. However, butternut is much softer. It's a light cinnamon red color as seen in Boards 1 and 2.

Board 3 is rift to quarter sawn and shows a narrow band of white sapwood. This piece also shows light damage from bird peck.

Board 4 shows a large pith at the bottom of the board. Pith in butternut, like walnut, is large but not chambered.

Boards 5 and 6 show numerous seams and knots characteristics of lower grade stock.

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