

# Hardwood Lumber and Veneer Series



## Buckeye

FNR-299-W

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**EXPERT**  
REVIEWED

There are two species of buckeye. Ohio buckeye, (*Aesculus glabra* Willd.,) grows on rich moist soils in flatwoods and mountain slopes from western Pennsylvania to southern Iowa south to east central Texas and back north through northwest Arkansas, Missouri to southern Illinois, most of Kentucky, and central Tennessee. Yellow buckeye (*Aesculus flava* Soland.) prefers deep fertile soils. It ranges from extreme southwestern Pennsylvania, south along the Appalachians to Tennessee, across north Georgia and Alabama, and west through Tennessee and Kentucky, southern Ohio, and extreme southern Indiana.

The trees are generally medium sized. The largest Ohio buckeye reported is about 4 feet in diameter at 4½ feet above the ground, and the largest yellow buckeye is just over 6 feet in diameter at 4½ feet above the ground.

### Wood Color and Texture

Buckeye has a wide white to grayish sapwood with a darker irregular heartwood. The sapwood stains easily and often turns a dark blue-black due to blue stain fungi.

The wood has very small uniformly distributed pores. The growth rings are slightly visible. In the author's experience, the wood acts somewhat "rubbery" and not stiff and crisp.

### Workability

No data is available on how well buckeye planes. It is rated very low in shaping, low in boring, and good in turning.



Chip Morrison

Buckeye tree

### Strength

At 12 percent moisture content, buckeye weighs about 25 pounds per cubic foot, making it one of our lightest weight woods equivalent to basswood. The mechanical properties of the wood are some of the lowest reported here.

### Steam Bending

Buckeye is one of poorest woods for steam bending.

### Drying

A moderate schedule can be used for drying buckeye. Care should be taken to process freshly cut trees as fast as possible to prevent stain.

### Shrinkage

The wood has a very low radial shrinkage and a relatively low tangential and volumetric shrinkage.

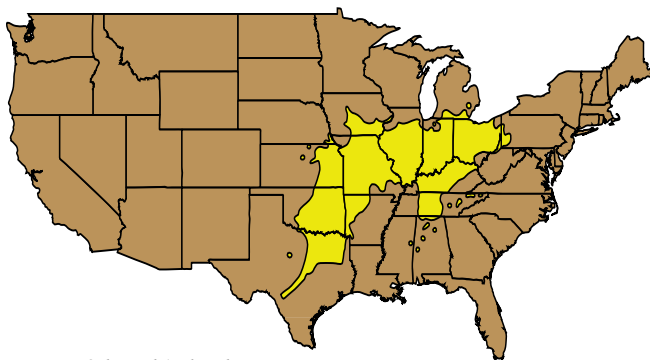
### Decay Resistance

The wood has no resistance to wood decay.

### Commercial Use, Grading, and Value

Buckeye trees are usually scattered, and the wood is very seldom cut for grade lumber. The author knows of one instance where the material was used for paint grade molding. When used, it is typically for concealed or low-cost parts. It is an excellent carving wood, and in the past, it was used for artificial limbs. When the material is processed today, it is most likely to be used for low-strength pallets and crates.

The wood is graded Standard by the National Hardwood Lumber Rules. Lumber prices do not appear in the market reports. When sold in the wholesale market, the material competes with low-valued species like cottonwood and basswood.



Range of the Ohio buckeye



Chip Morrison

Wide white sapwood and a smaller brownish heartwood is typical of buckeye.



Chip Morrison

Buckeye is a light-weight but firm-textured wood that is very desirable for carving. The pores are the smallest of any of our hardwood lumber species. The tree typically has a wide sapwood which stains easily.

Board 1 is flat sawn and shows the very uniform grain characteristics of the species. A few small pin knots are also present.

Board 2 is similar but shows the dark grain pattern associated with the knots.

Boards 3, 4, and 5 show the rather interesting contrast between the darker variegated heartwood and the white sapwood. As seen in Boards 3 and 4, interesting patterns can be made by book matching pieces cut from near the heart of the log.

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