

PURDUE EXTENSION

Hardwood Lumber and Veneer Series







FNR-276-W



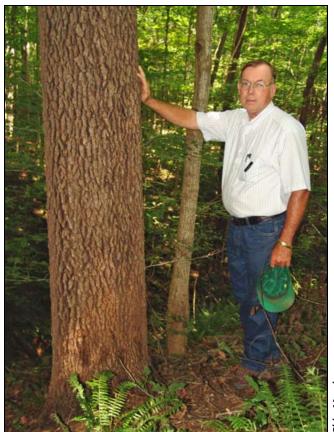
Black Cherry

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Black cherry (*Prunus serotina* Ehrh.) is one of our most intriguing and exciting species. Its fame began when the colonists soon learned it could be substituted for the more expensive mahogany in making fine furniture, and when finished it took a reddish brown, lustrous appearance. Perhaps George Washington was cutting the cherry tree for just that purpose. Today, the species is in extremely high demand for many of the same uses and therefore quality lumber is very valuable.

Black cherry ranges from the Great Plains east and from central Florida to the very southern portion of Ontario to New Brunswick. Surprisingly, it also grows from central Arizona and south through Mexico, but the trees are not considered commercial. Pennsylvania, parts of West Virginia, and New York have developed a reputation for having the best veneer quality and a relatively gum free cherry.

Black cherry is a medium-sized tree ranging from 60 to 80 feet tall and 2 to 3 feet in diameter. Larger trees were once common but are now rare. The largest tree reported is about 5½ feet in diameter at 4½ feet above the ground. In forest situations, the tree develops a long, straight defect-free bole and does its best on rich, deep, moist soils. Suppressed and less vigorous trees can develop a zig zag appearance requiring the tree to be cut into short logs. Cherry may appear in pure stands, but it is more often found as a widely scattered tree with northern red oak, white oak, sugar maple, and other northern species. In the northeast, it is found on sandy soils with red spruce and white pine. The species is intolerant to shade and makes early rapid



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Dan Cassens and cherry tree

growth. It also tends to develop in fence rows and other exposed sites. The tree has a shallow root system, and it is easily tipped by storms.

Wood Color and Texture

The initial pores formed at the beginning of each year's growth are just somewhat larger than the others. Therefore, cherry has somewhat of a growth



Gum spots in surfaced cherry lumber

ring pattern on the board face, but it does not provide a high level of contrast. The wood is relatively fine textured.

The heartwood when first cut varies from a very light pink to a dark red brown color. The wood darkens substantially with exposure to light. It is not uncommon to hear of walls newly paneled in cherry and decorated with several pictures and plaques. When the decorations are removed a few years later, the protected wood will be distinctly lighter. A few producers have steamed cherry to darken the color. The white sapwood, which is usually narrow, can provide a striking contrast, but it is not always desirable.

Cherry wood can be figured with "flash" or a broad undulating grain pattern. This material is particularly prized for the special decorative effect it gives. Quartered cherry has a very interesting, small but numerous ray fleck.

Gum spots or small dark longitudinal liaisons about 1/16 inches wide to 1/2 inch, or longer, are a common characteristics of cherry. Dark streaks

which extend for several inches can be associated with the gum spots. Gum spots can be larger, and sometimes gum even follows an entire growth ring around the tree. These spots are caused by wounding or by a peach bark borer, which feeds on the tree cambium. The cambium responds by forming the gum spot. Peach bark borers reproduce in fallen trees and tops. When a finish is applied, it may not be able to bridge gum spots and thus the product may appear defective. However, veneer log buyers will select against gum spots.

Workability

Cherry is rated as one of the best woods for planing, shaping, turning, and boring. If the cutting tools are not sharp, or the feed speed is slowed, there is a tendency for the wood to burn.

Strength

At 12 percent moisture content, cherry weighs 34.9 pounds per cubic foot making it an intermediate to light weight species. However, it is a relatively strong wood for its weight.

Hardwood Lumber - Black Cherry

Steam Bending

Not rated

Drying

Cherry dries easily with a moderate kiln schedule. Boards with a predominately sap side will tend to cup severely if not properly stacked and weighted.

Shrinkage

Cherry has a low initial shrinkage and as such it is stable once properly dried.

Decay Resistance

The heartwood of cherry is classified as resistant to very resistant to decay.

Commercial Use, Grading, and Value

Cherry is one of our most beautiful and expensive hardwoods. Its most common applications include high end cabinets, furniture, architectural millwork, paneling, and face veneer. It has also been used for professional and scientific instrument boxes, wooden ware, novelties and toys, patterns, and blocks for mounting electrotypes.

Cherry is graded standard with the exception that gum streaks and spots as well as small knots not exceeding ½ inch in diameter are not considered defects by the hardwood lumber grading rules.

Cherry is our most valuable species. Even low grade No. 2 Common lumber is worth about as much or more than the very best grades of species, such as beech, basswood, and even ash, hickory, and yellow-poplar.



Range of the black cherry



Cherry is one of our most beautiful and highly prized woods. When first machined, the heartwood color can range from light pink to a darker red color as shown in this panel. The wood darkens substantially with exposure to light.

Board 1 is a very light pink color with white sapwood on its outer edges. This piece would be representative of very high-quality, flat-sawn cherry lumber.

Board 2 shows a rift to quartered pattern. A small ray fleck will be seen on perfectly quartered cherry.

Board 3 is nearly clear, but has a darker color and numerous gum spots. The amount of gum in cherry lumber can vary substantially. Nearly all lumber has at least some gum. Veneer log buyers are routinely able to select logs with very little or no gum present. Gum-free material demands a premium price.

Board 4 shows some sapwood near the top. Some mills sort cherry on basis of the amount of sapwood present. High-grade, sap-free lumber demands a premium price. Where small pieces are used as in kitchen cabinets, companies often purchase lowergrade lumber that is predominately heartwood. This piece also shows numerous pin knots near the top. Like gum spots, these are not considered defects in the species.

Board 5 is lower grade. It has two large tight knots. Scattered mineral streaks are also present.

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NEW 9/07

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