

SPOTLIGHT ON BLACK WALNUT

By Pete Stephano

Of the world's several walnut species, it's the American black walnut (*Juglans nigra*) that claims the title of most beautiful. Because of its continuing demand as a classic furniture wood (as well as for its exquisitely figured veneer), black walnut reigns as the nation's most valuable furniture and cabinet species, even though it represents less than two percent of all commercially available U.S. hardwoods. It's interesting to note that black walnut is one of the few native hardwood species that is planted by Midwestern farmers, like any other crop. These patient investors have found that the future value of these trees makes them worth the wait.



Air-dried Black Walnut with Sapwood

Kiln-dried Black Walnut with Sapwood

History in woodworking

In the New World, black walnut has always been at the top of the list of preferred furniture stock, but throughout Europe and the British Isles, walnut was historically (with some exceptions, such as Queen Anne style furniture) given more attention for its nut crop than its wood.

Today, walnut remains a favorite for everything from turned bowls and platters to paneling, musical instruments, carvings, and sculpture, as well as furniture. Due to its stability, hardness, and shock resistance, walnut remains the top choice for rifle and shotgun stocks.

Where the wood comes from

About three-quarters of all commercial black walnut comes from the Central U.S., although it grows in the East and as far north as southern Ontario. You'll find the finest walnut trees (for color and size) in the Upper Mississippi River Valley where Iowa, Minnesota, and Wisconsin border. There's also a native black walnut on the West Coast, *Juglans hindsii*, California walnut. However, the tree is of smaller stature and the wood color more bland. *Claro* walnut, both costly and of limited availability, comes from southern Oregon and northern California. Especially sought by gunstock makers, the beautifully figured wood originates in the lower trunk of grafted orchard walnut trees (European black walnut, known for its nut crops, joined with roots of American or California walnut).

North America boasts another commercial walnut. Butternut (*Juglans cinerea*), often called white walnut due to its much lighter color, proves a carver's delight because it's softer and lighter.

European walnut (*Juglans regia*) grows throughout most of Europe and England, but most woodworkers prefer the North American species for its richer color. There's also a walnut (*Juglans neotropica*) which grows in South America. Although

it looks and works much like black walnut, it has a coarser grain.

What you'll pay

Expect to pay from about \$4 per board foot for 4/4 #1 Common to nearly \$7 a board foot for FAS (the best grade) surfaced three sides. Lumber displaying some lighter-colored sapwood usually costs less.

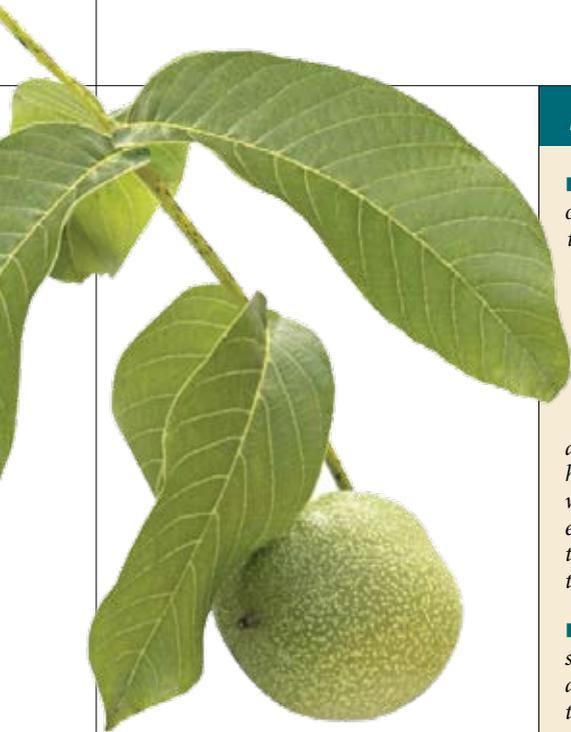
Plywood costs from \$70 for a 4x8' sheet of 1/4"-thick stock to more than \$150 for a 3/4"-thick sheet. Plain-sliced veneer carries a price tag of about \$3.50 per square foot. Burl veneer will cost nearly \$25 a square foot.

How to select the best stock

Because black walnut's sapwood is very light-colored compared to its heartwood, it's been a practice in the

Black Walnut Quick Take

	LOW	MEDIUM	HIGH
COST - high	[Progressive bar]		
WEIGHT - fairly heavy	[Progressive bar]		
HARDNESS - moderate	[Progressive bar]		
STABILITY - high	[Progressive bar]		
DURABILITY - fairly high	[Progressive bar]		
STRENGTH - fairly high	[Progressive bar]		
TOXICITY - moderate	[Progressive bar]		
WORKABILITY - hand and power tools	[Progressive bar]		
COMMON USES - fine furniture, casework, gunstocks, marquetry, musical instruments, paneling, carving, and turning	[Progressive bar]		



It's a fact that...

■ *Juglans* in Latin means the nut of Jove or Jupiter, and “walnut” is derived from the Old English words for “foreign nut” as it truly was with origins in ancient Persia. The Romans introduced the tree across Europe.

■ Black walnut roots produce a substance called juglone, which is toxic to some plants, such as tomatoes, and has been known to even kill horses, dogs, and other animals when its chips or sawdust were employed as bedding. It seems the substance is readily absorbed through their hooves and paws.

■ In Greek folklore, walnuts symbolized fertility and were strewn about at wedding celebrations. Quite the contrary in Romania, where brides wishing to delay pregnancy placed walnuts in the bodice of their wedding dresses—one for each year of postponement.

industry to steam the lumber, which evens out the color, but also makes the wood dull and gray. Many woodworkers are willing to drive a few extra miles for air-dried stock. Whether you choose kiln- or air-dried stock, bear in mind that over a few years, walnut's deeper purples and browns gradually fade to a lighter, yellow hue.

While some woodworkers design furniture that incorporates the contrast between sapwood and heartwood, others stain the sapwood (see “Black Walnut Finishing Secrets”), or remove it completely, for a more uniform look.

Working black walnut in the shop

You can work this classic wood with either hand or power tools. Because the wood contains extracts

that can irritate the eyes and skin, you should wear a dust mask or respirator when machining and wash up afterward.

• Ripping and routing.

Walnut works easily, but may cause some dulling of cutting edges. Pay careful attention to the direction of the feed, especially when working figured crotch wood.

Black Walnut Crotch



• Boring and drilling.

As with any hardwood, it's best to drill pilot holes for screws.

• Assembling.

No matter what type of adhesive you use (all work with walnut) be sure to minimize squeeze-out, then remove squeeze-out when it thickens. Unless you use a dark-tinted glue, such as Titebond Dark Wood (Woodcraft #08L46, 8 oz.) the dried glue will show up lighter under the finish.

Black Walnut Finishing Secrets

■ Unless you use black walnut for a tabletop and desire a glass-smooth surface, this wood doesn't require filling.

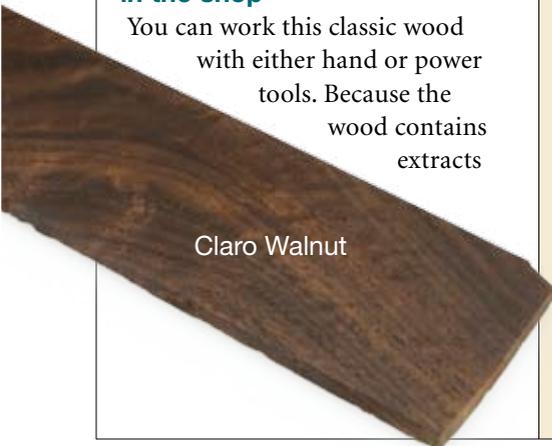
■ To darken sapwood to match heartwood, dampen the board with water, then using a piece of paper towel, wipe on a dye stain (try TransFast medium walnut, Woodcraft #123823) onto the sapwood. When you get close to a match, burnish the area with a gray abrasive pad to further blend in the color.

■ Any type stain works on walnut, but be careful with gels. These thick-bodied stains are great for reducing

blotching caused by inconsistent densities in the wood, but that advantage can wind up hiding the figure you want to pop.

■ To add warmth to steamed walnut, apply orange shellac as a base coat or final finish. You can also tone a clear finish such as lacquer with oil-soluble dye or NGR dye, lacquer-based pigment stain, or universal colorant.

■ Any clear finish will work, but penetrating oil gives you the best clarity. Avoid water-based finishes because they tend to diminish the warm hues of the wood.



Claro Walnut

