

BLACK WALNUT

One of North America's finest offerings

By Ken Burton

Black walnut (*Juglans nigra*) is one of North America's most popular and sought after hardwoods. It is prized for not only its rich, dark brown color, but also its strength, stability, durability, and ease of use. Today it can be readily found not only in the form of rough-sawn and surfaced boards, but also as live edge slabs. Perhaps its only drawback at this point is its cost—about twice that of other premiere domestic species such as cherry, oak, and maple.

Where the wood comes from

Black walnut trees grow throughout the eastern half of the U.S., although much of the wood commercially harvested comes from the Midwest states of Indiana, Illinois, and Missouri. It is a fast-growing, pioneer species quick to sprout along roadsides and hedgerows. Despite the popularity of the lumber, the trees are not particularly desirable for landscaping. They tend to be late to leaf out in the spring, and one of the first species to drop their leaves in autumn. Additionally, their roots and the decaying nut husks produce toxins that can stunt the growth of surrounding plant life.

Left alone, a black walnut tree can live for 100-125 years and reach a diameter of 2 to 3 feet.

While not cited on either the CITES list or the IUCN Red List as being endangered, the wood's popularity and value have contributed to a decline in the number of trees yielding wide boards.

Figure abounds. Black walnut often displays fabulous figure, as in this platter by master turner Palmer Sharpless. The feathery grain grows near a crotch in the tree.

History in woodworking

Nearly as soon as the first colonists started clearing the eastern forests, black walnut was recognized as a valuable commodity. Ships' manifests dating from the early 1600's list black walnut lumber being exported to England for use in the furniture industry. Another noted use was (and continues to be) for gun stocks. Black walnut's shock resistance, combined with its stability and relatively light weight make it an ideal material for the wooden parts of a rifle.

More recently, the late woodworking icon George Nakashima is known for his use of live-edge black walnut in many of his signature pieces. Of particular note are the "peace altars" he made from a certain spectacular walnut log. To date, three of these magnificent tables have been placed around the world with a fourth planned for installation in South Africa.

Selecting the best stock

Black walnut is available as lumber, veneer, and plywood. As solid stock, it comes in thicknesses from 4/4 to 16/4. While boards as wide as 20" and lengths up to 16' are available, stock 6-8" wide and 8-12' long is far more common. Black walnut prices vary widely, but don't be surprised to find premium stock going for in excess of \$10 per board foot. When



TEXTURE
MEDIUM-FINE



TOXICITY
LOW-MEDIUM



ROT/INSECT RESISTANCE
MEDIUM-HIGH
(HEARTWOOD)



STABILITY
MEDIUM-HIGH



HARDNESS
MEDIUM



DENSITY
37 LBS./CU. FT.



Lightness into dark. In its natural state, black walnut has creamy white sapwood with rich, reddish-to chocolate-brown heartwood. The middle board here was steamed, which takes some of the color from the heartwood and infuses it into the sapwood.

selecting stock for a specific project, try to find boards cut from the same tree. Black walnut's color can vary a lot from a reddish brown to a rich chocolate brown, so grain matching is easier if you have kindred boards. When shopping for walnut, ask if the wood was steamed as it was dried. Steaming is a commercial process that darkens the creamy white sapwood a bit by transferring some of the pigment from the heartwood. Unfortunately, the process tends to mute the color of the heartwood somewhat. Also, in my experience, steamed walnut is brittle in comparison to its non-steamed counterpart.

Working and finishing

Walnut is a joy to work with. If you're new to hand-planing, find a nice, clear piece of walnut and use it to build your skills. It is hard enough to cut cleanly,

but soft enough to make the job seem easy. Likewise, when machining, it behaves admirably. It also bends and glues well. About its only drawback is that walnut dust is somewhat acrid, and a potential sensitizer. So wearing a tight-fitting mask or respirator is a good precaution. As for finishing, the wood readily accepts both water- and oil-based finishes. In my opinion, the latter look better. See, for example, the dimpled box featured on page 32. If you must use a water-based finish, try to find one with an amber tint added. Also worth noting is that although black walnut flooring is available, it isn't really hard enough to stand up to heavy use. If you decide you must have a black walnut floor, save it for areas that don't see a lot of foot traffic.

My perennial favorite

Years ago, when I was first learning the craft, I made nearly everything out of black walnut. I've since branched out, but it is still among my favorite woods to work. It is fun to turn, it carves well, and finishes easily. What more can you ask for? It is even my go-to wood for simple picture frames. As I was gathering the pieces to photograph for this column, it was enlightening to see how they had aged over the years. The platter shown on the opposite page was a gift from Palmer Sharpless, one of my mentors. It is finished with Waterlox, an oil-based wiping varnish. While it has lightened a little in 34 years, it still highlights the beauty of the grain. I finished the hollow vessel below with shellac. As I recall, it was on the light side to begin with, and has lightened even more over time. I made the trivet just recently and finished it with Danish oil, giving it that rich, dark color I've come to love. For another look at oiled walnut, check out the Shoot-the-Moon game on page 24. I finished it with boiled linseed oil. ■



A difference of age and finish.

The two pieces here clearly show the difference age and finish can make with black walnut. I made the lighter turned vessel over three decades ago, and finished it with shellac. The darker trivet is a more recent piece finished with Danish oil.



Black Walnut Uses

- Furniture
- Cabinetry
- Gunstocks
- Interior paneling
- Turnings
- Musical instruments
- Flooring