



Finishing Walnut

Dyes and glazing bring out the best in this traditional hardwood

BY JEFF JEWITT

It's no mystery why so many antiques are made of domestic black walnut: It cuts and sands well, accepts stains without blotching, and can have attractive figure. However, there are two reasons why today's woodworkers sometimes are frustrated with walnut's appearance. Harvesting of smaller trees means that a greater number of boards incorporate sapwood, whose creamy color contrasts with the dark heartwood. Most commercial walnut is steamed and then kiln-dried, which darkens the sapwood but robs walnut of the richer colors seen in air-dried lumber.

To eliminate these problems, I apply dye to blend the sapwood into the heartwood and to give the whole piece a warmer tone. The first dye is sealed, then a second coat of dye provides a rich, deep color. The piece can be finished with a clear topcoat.

Warmer, more uniform color

If you wipe bare walnut with mineral spirits or alcohol, you can see what it will look like with a clear finish. Kiln-dried walnut, either solid or veneer, likely has a grayish color. You also may notice that different boards have contrasting color tones. Linseed oil, varnish, and shellac, because of their natural amber color, mitigate the first problem, but a better way to achieve tonal uniformity is to stain the entire piece.

Apply the base stain—The best way to start making different boards (or a combination of solid lumber and veneer) look more



1 WARM UP THE WOOD WITH A DYE

Staining the whole piece improves the color of kiln-dried walnut and gives different boards a more uniform appearance.



Apply the base stain. If you apply the stain by hand, use water-based stains because their long drying time reduces the chance of streaks and uneven color.

Conceal the sapwood

If your piece contains sapwood, the first finishing step is to blend it in with the heartwood. Because the color of heartwood doesn't change drastically over time, you can blend in the sapwood by staining it. Wipe the wood with a damp rag to preview the finished color of the walnut. Blend and dilute one or more water-based dyes, and dip in strips of white paper to judge the tone and intensity of the color. Lightly wipe the dye on the sapwood with a cotton rag; for molded edges or other hard-to-reach areas, use an artist's brush. When you've coated all of the sapwood, wipe the entire surface lightly with a water-dampened rag to blend the dyed area into the heartwood.



Reveal the contrast. To see how much the undyed sapwood and heartwood will contrast under a clear finish, wet the wood with a damp cloth.



Apply the dye with care. Stain the sapwood with a small piece of cloth to ensure that you don't color the adjoining heartwood.



How to reach small areas. Use an artist's brush with either a pointed or a chiseled tip.

Seal and sand the surface, then apply an oil-based glaze made from boiled linseed oil, gel varnish, and artist's oil colors. The thin coat of color gives wood the appearance of greater depth and emphasizes the grain structure.



Seal the dye with shellac. After the dye has dried, brush on a thin coat of dewaxed shellac such as Zinsser's SealCoat.

uniform is to apply a base stain to the piece. You can spray a non-grain-raising (NGR) or alcohol-based stain and save application and drying time. A water-based dye applied by hand dries more slowly, but it reduces the chance of streaking.

If you had to blend in the sapwood (see the story on p. 35), wait until that dye has dried and then apply a base stain of golden brown to the entire piece. Dilute the dye to the desired strength. In this case, I used ½ oz. dye to 1 quart water. As when applying dye to the sapwood, use a small piece of cloth to color the large areas and an artist's brush for crevices and corners. To force the dye onto the parts of raised panels within the frame, use compressed air. Using this method will prevent a strip of pale wood from appearing when the panel shrinks seasonally.

Seal in the dye with shellac—After the piece has dried completely, apply a thin coat (1-lb. to 2-lb. cut) of dewaxed shellac. You may want to apply a second coat to end grain to prevent these areas from absorbing the oil-based glaze and becoming too dark. When the shellac has dried, lightly sand the surface with P600-grit (FEPA grade) no-load sandpaper (400- or



A shopmade glaze. You can make oil-based glaze using boiled linseed oil, gel varnish, and artist's oil colors (left). To check the color and translucency of the glaze as you add artist's oil colors, smear samples onto white paper.

320-grit CAMI grade). For moldings, use a gray fine-abrasive pad.

Oil-based glaze completes the transformation

The process of applying stain over sealed wood is called glazing. If you don't like the effect on the color from this step, you can remove almost all of it using mineral spirits without damaging the base stain. (Obviously, it's best to work out your coloring options on scrap first.)

Making oil-based glazes the easy way—Ready-made colored glazes are sold in stores, but I like to make my own because I have more control of the color and there is less waste. You'll need boiled linseed oil, an oil-based varnish, and artist's oil colors.

Vandyke brown and burnt umber are good colors to start with, and you can use lamp black and red for fine-tuning. Japan colors work almost as well as artist's oils but are a bit weaker in tinting strength.

Mix one part boiled linseed oil and one part varnish. I use gel varnish because it makes the glaze thicker and less likely to run. It also hangs better in nooks and crannies. The glaze for this cabinet was made with ¼ cup (1 oz.) boiled linseed oil, ¼ cup Bartley gel varnish, ½ teaspoon Vandyke brown, ½ teaspoon burnt umber, and ¼ teaspoon deep Azo red. But feel free to experiment. To test the color and translucency of the glaze, simply smear it on a piece of white paper. Keep adding artist's oils until you are pleased with the color.

Apply, then remove the glaze—With an inexpensive natural-bristle brush, generously cover the entire surface with glaze. On relatively small areas like this cabinet, you can glaze the whole door before starting the removal process. Larger surfaces have to be done in sections to prevent the glaze from setting up.

Wipe off most of the glaze with a cloth, leaving a thin film of color on the surface of the shellac. The effect of these two colors,

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Brush on and wipe off. Don't worry about applying the glaze evenly. It is more important to cover the whole surface and to work fast so that the glaze can be wiped off before it becomes tacky. Leaving extra glaze in the recesses replicates the dirt often found on antiques.



Dry brushing. To remove surplus glaze from confined areas, use a dry brush and wipe it frequently on a clean cloth.

the base stain and the glaze, is to create the illusion of depth. The glaze also darkens the pores, emphasizing the grain pattern. You can leave excess glaze in corners and crevices to simulate age.

If certain parts end up noticeably lighter in appearance, let the first coat of glaze dry overnight, then apply a second coat to the lighter areas.

Add a clear topcoat of your choice

Any solvent-based clear topcoat can be applied after the glaze has fully cured in 12 to 24 hours. In keeping with the country-style appearance of this piece, I wanted an open-grain appearance and a satin luster. I chose to wipe on a single coat of Waterlox satin finish, an oil-based varnish. If you wish to use a water-based finish, I recommend first applying a thin-cut coat of shellac to seal the oil-based glaze. □

Jeff Jewitt is a frequent contributor of finishing articles to Fine Woodworking.

3 SEAL IN THE COLOR WITH A TOPCOAT



A wipe-on coat of satin finish gives this piece a low-luster, country look.

