

Finish Cherry...

This common problem can be avoided easily by choosing either of these methods

BY JEFF JEWITT

Years ago, one of my first projects was a simple Shaker-style table for my wife. After carefully selecting the best grain and figure for all the parts, and sweating through the construction details, I was ready to apply a finish. I wanted something really special, so I chose a dark-red dye stain and applied it first to the tabletop. I had a sense something wasn't quite right as soon as I wiped the stain with a rag. Dark, ugly splotches began to appear. I was nervous, but figured the problem would disappear when the stain dried, so I stained the rest of the table. The result was a disaster. I managed to salvage the top by removing a good $\frac{1}{8}$ in. of wood with a belt sander and applying a clear finish. But those beautiful book-matched legs, covered with the most delicate ray fleck patterns, now stand in a corner of our living room under a coat of green milk paint.

Cherry is a joy to work. It's easy to cut, shape and sand. If left unstained and coated with a clear finish, it eventually matures to a deep, reddish-brown color coveted by antique dealers as well as woodworkers. In an attempt to duplicate that old-timey color and overcome the pink-salmon hues of freshly machined cherry, many woodworkers use full-strength stain as a first coat and end up with the same blotchy mistake I did. But there are ways to avoid splotching. The first step is to understand the causes.

Knowing why cherry splotches will help you avert the problem

Splotches develop in cherry (and other woods like birch, red alder and soft maple) because of the uneven penetration of stain. It penetrates

unevenly for a number of reasons, and any one or a combination of them can condemn your finishing efforts. So before devising a strategy to prevent blotching, it helps to identify which obstacles may exist within the wood you have on hand. I know of three reasons why stain will penetrate unevenly in cherry.

Resin deposits, the most common culprit—Cherry is one of many woods that often have unseen, concentrated deposits of resin within the wood as a result of the kiln-drying process. The resin deposits attract stain solvents, causing stains to penetrate more in some areas and less in others. It's hard to know when this is going to happen. One easy test will warn you of trouble ahead



A clear coat of thinner tells all

Knowing where splotching is likely to develop is half the battle. By saturating the surface of a piece of cherry with thinner (see the photo at left), you can get a good reading on how splotch-prone that wood will be. —J.J.



Without Blotches

(see the box and photo on the facing page). Saturate the wood with any common solvent, such as denatured alcohol, paint or lacquer thinner. Splotch-prone areas will show up right away because they will absorb the solvent faster, just like they would with stain.

Alternating grain, avoid it when possible—When the grain direction changes within the same board, the stain will penetrate unevenly. This effect can be dazzling, as in curly figure, but more often than not, as in areas around knots, a less-than-attractive appearance is the result. It's usually easy to avoid this condition when it exists, simply by reading the grain direction on the edge of a board and cutting around problem areas when you select wood for cabinet or furniture parts.

Improper sanding, the easiest cause to detect and correct—The most obvious truths are sometimes hard to see: Improperly sanding the surface of any wood species can cause problems. And careful sanding is especially essential with cherry. Dull sandpaper can burnish the surface rather than cut it, making it less likely to accept a finish. Leaping from rough to really fine abrasives is also a no-no, leaving scratched surface areas that are more porous than others. A scraped or planed cherry surface will usually accept a clear finish evenly, but a stain applied over these surfaces will often spell trouble, too.

I usually sand cherry with a random-orbit sander, starting with

100-grit and proceeding up through 180-grit, changing grits at 120 and 150. I switch to fresh paper often and inspect the surface in backlighting to make sure I don't miss any spots. I then hand-sand, using 180-grit, with the grain of the wood. Such careful sanding won't eliminate splotching, but it will help to minimize it, especially in concert with the finishing techniques outlined below.

Two strategies that work

Some people attempt to tame splotching by controlling how much stain is absorbed. I've heard several woodworkers who swear that the new gel stains help control stain penetration, but I've found that they don't work very well on raw cherry. Washcoating is another technique popular with professional finishers. A washcoat seals off the surface of the wood with a very thin resin—diluted shellac, thinned oil or glue size—which decreases the penetration of a stain. But this technique is hard to control evenly, and less penetration means a lighter shade of stain.

I've used two methods to prevent blotches that are well within the range of just about any woodworker's finishing talents. Both are applied by hand, and both yield finishes that have depth and luster with little or no splotching. The first technique (see the top photos on p. 48), which is the easiest, will change cherry from its initial pinkish tone to a golden color that will continue to darken with age. I recommend this technique only for projects that have been carefully matched for grain and figure because exaggerated

color differences in the lumber won't be concealed.

The second technique, which is a bit more complicated, will satisfy those who want a dark, rich color without waiting for nature to do the job. It can also be used for projects that are made from wood of varying color and figure.

The quick and easy method uses oil and dark shellac to supply color without stain—After sanding your project through 180- or 220-grit, apply a light coat of boiled linseed oil or Watco Danish oil. It's not necessary to flood the surface, just apply

enough oil with a rag to make the wood look wet. This step enhances the grain and adds depth. After a day or so of drying time, lightly scuff-sand the surface using 320-grit sandpaper. Wipe off the dust with a rag, and then apply a dark garnet-colored shellac to the surface.

I use a 2-lb. cut (meaning a ratio of 2 lbs. of dry shellac flakes dissolved in a gallon of alcohol) and wipe it on with a rag in a process called padding (see *FWW*#112, pp. 60-63), but you could also use a brush. This shellac has a dark golden-brown tone that adds a bit of color to the cherry. If you want a darker color, you can apply an-

QUICK AND EASY METHOD



Finishing doesn't get any easier than this. A sealer coat of oil (1) and subsequent topcoats (2) of a dark-toned shellac (button or garnet) will give a rich finish on cherry that will only improve over time. The author pads on the shellac with a lint-free rag.



INSTANT AGING METHOD

Start with a light amber dye stain. A first coat of heavily diluted water-soluble dye stain evens out the colors among different pieces of wood (1), and is the first step toward building up layers of color in the cherry.



This thick, gloppy stuff adds more color. Using a gel stain as a glaze (2), applied over a sealer coat of shellac, is an easy method for adding more color to the cherry.

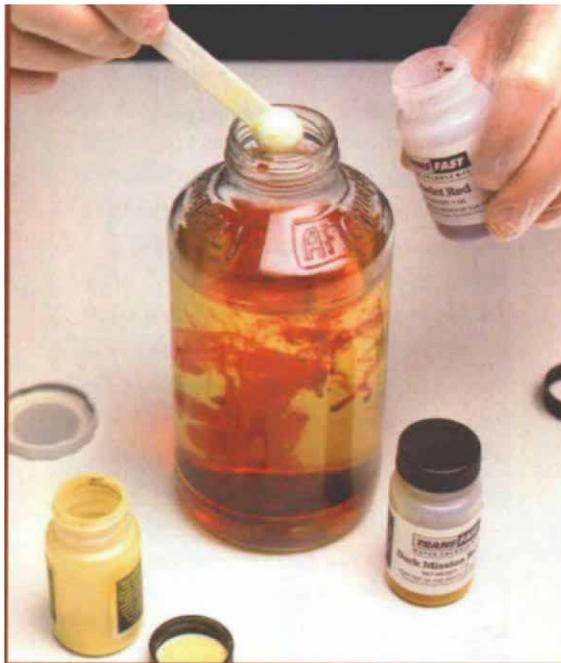


other coat of the dark shellac. If you're satisfied with the color after one application, you can apply a lighter colored shellac for additional coats. (For more protection, you can apply a varnish as the topcoat.) Build the finish to your liking, and after the proper drying time, rub out the shellac (or varnish) with 0000 steel wool and a dark paste wax.

The color of this finish will start out as a light golden brown but will quickly pickup reddish tones after a month or so when exposed to light and air. By the end of the first year, your project will have a deep-red tone that just keeps getting better with age.

Instant aging is trickier—This finish will result in a rich, dark color (see the bottom right photo) and will help to even out tonal disparities in the wood. Prepare for the finish by sanding the wood through 180-grit. Using distilled water (free of minerals that might stain the wood), wet the surface of the wood to raise the grain. After the wood is dry, smooth down the raised fibers with 220-grit.

To color the wood and minimize splotching, you can build up color in layers. Apply a light amber-brown dye stain (see the bottom left photo on the facing page) as the first coat of color (called a base or a ground stain). This color is sometimes sold as honey amber, but you can use just about any light shade of golden-brown dye. The dye is diluted with four or five times the recommended amount of water and should have the appearance of strong tea. If you cannot find a suitable color of dye stain, you can mix your own (see the box above). This base stain, applied as a diluted solution, will add depth and will even out the tones of different boards.



Mix your own dye stains

If you don't want to buy a premixed water-soluble dye stain, it's easy to mix your own from pure colors—by weight—using five parts lemon yellow, one part red and one part dark brown. If you don't have access to a scale, you can make a diluted 1-qt. solution by adding 1 teaspoon of yellow, a pinch of red and a pinch of dark brown using the tip of a spoon (see the photo at left). Mix the stain in a glass or plastic container, and wear gloves and a dust respirator when mixing dyes: This stuff stains skin as well as it stains wood. —J.J.

After the base stain is dry, very lightly scuff-sand the surface with a synthetic abrasive pad. Seal in the dye with a 1-lb. cut of shellac, and let that dry. To add more color and depth, you can apply a dark pigment glaze. I use a dark-brown gel stain (see the bottom right photos on the facing page), such as Bartley's dark-brown mahogany, brushed on and wiped clean. After the glaze is fully dry, apply orange shellac, brushed or padded on, to add more color to the final finish. Keep in mind, no matter what finish you put on cherry, it will continue to darken all by itself, getting better looking with each passing day. The more it's exposed to light, the faster that will happen.

Jeff Jewitt restores furniture in North Royalton, Ohio. He and his wife also own Homestead Finishing Products.



Nearing the finish line. When wiping off excess gel stain with a rag (3), you can control how much is left on the surface for just the right effect. Successive coats of orange or garnet-colored shellac build up the color in layers (4). The more coats you apply, the darker the finish will become.

