

Poplar to Cherry

A Bit of Finish Alchemy



Don't dismiss poplar as "primary lumber"; done properly employing a bit of finishing alchemy it can be made to mimic many expensive hardwoods including cherry...

You decided to build your latest project from poplar or soft maple and then give your creation a "cherry finish". You bought a can of cherry stain and you began the transition (hopefully on some scrap and not your project) only to discover that the color produced is "blotchy". Your next step was to apply a so-called "stain pre-conditioner" since you read somewhere that this would prevent blotching. But now, the color is much too light. So, what next...how do you get the deep cherry finish that you want and still avoid the blotching.

The solution is fairly simple, but you will most likely not be able to accomplish your objective in a single step using one of the popular DIY color-in-a-can stains from your local big box or hardware store. You will have to borrow from the finishing techniques used by commercial furniture makers when they faux finish less expensive woods to resemble more expensive lumber such as cherry, walnut, mahogany, and others. In the following finish schedule we will apply a cherry finish to poplar; but, the same basic process can be employed to create a convincing darker wood finish on maple, birch, or any of the other light colored and less expensive woods.



The first step in the transformation process is to recognize the fact that cherry (or any other wood) does not consist of a single color. Look closely at the photo of a typical poplar board on the left. On the right side of the photo you can easily distinguish the cream colored sapwood and see how much lighter it is than the heartwood that has already begun to transition from light green to brown. On many poplar boards the difference between heartwood and sapwood is even more pronounced. But notice also that even within the sapwood and the heartwood there are color variations. This is a property of wood. It is not monochromatic. The color of wood, like most other things in nature, is made up of a collection of colors, tones, and shades blending seamlessly from light to dark to produce the identifying characteristics of the species.

It should stand to reason that if we are going to convincingly transform this piece of poplar into cherry we must mimic the same color variations that we would expect to see

in a piece of finished cherry. Simply applying some manufacturers idea of what constitutes "cherry" to the poplar board in the photo will do nothing to alter the background color of the poplar or create the subtle tones we would expect to see when we examine a cherry board. All we will have done is mask the natural color of the wood with an opaque layer of pigment, somewhat akin to having applied a thin coat of paint. The color may be "cherry-like", but the result will only superficially resemble the real thing. We will have fallen far short of our objective.



So, let's begin the transition by *erasing* the background color of the poplar and putting in its place the underlying color we would expect to find in a darker finish on a cherry board. In the photo at left we have applied a weak solution of water-soluble dye consisting of one part rosewood concentrate, one part brown concentrate, and 18-parts distilled water. The dye produces a fairly uniform "cherry color" by itself, but it is a bit one-dimensional and does not give the sort of convincing cherry look we are after. The other important thing to note is that the dye does nothing to diminish the clarity of the grain and figure of the wood. Dyes are completely transparent—they do not cover the surface of the wood with an opaque film of pigment.



The next step is to "seal" the dye so that the subsequent "glaze" step will not alter the background color of the dye. In this sample I have applied a single coat of super blonde shellac mixed in a two-pound cut. I used a brush but on a larger project the shellac could be sprayed. Just keep the coat light—the role of the shellac is that of a "sealer" or "barrier coat" to keep the stain in the next step from altering the color of the dye. It will also keep the stain from coming into direct contact with the wood, the thing we most want to avoid if we are going to prevent blotching.

Notice that there is very little color change as a result of the shellac giving emphasis to the fact that the role of the shellac is simply to apply a barrier coat or sealer over the dye so that the background color produced by the dye will show through the glaze that we are about to apply. In this way the color imparted by the dye will remain intact and will show through the glaze thus enhancing the cherry deception.



When the shellac is dry (about 25 to 30-minutes if your shellac is fresh) lightly sand with 320P open-coat sand paper, sanding just enough to smooth the surface but not enough to cut through the shellac. Then apply your "glaze". In this case the glaze was a pigment only "wiping stain", but heavy bodied gel stains will also work well, as will a heavy bodied glazing stain, either a pre-tinted product, or one that you have tinted yourself. Stay away from so-called "penetrating stains", those composed of both pigment and oil-soluble dye. The dye in these products will not perform as expected since dyes must be applied to bare wood.

Apply the glaze, allow it to set up for a few minutes, and then begin to wipe it off again until you get the desired result. You do not want to "paint" with the stain. Your objective is to wipe enough off to allow the grain of the wood to show through. The glaze in combination with the background color of the dye will give depth to the finish thus providing a convincing representation of the cherry look you wanted to achieve.



Finally, after the stain is fully cured, apply your topcoat. In this case I applied Waterlox Original Sealer/Finish using the wipe-on varnish technique, but any appropriate topcoat could be used.

In this sample you can see that I intentionally left lighter and darker areas to simulate the natural look of cherry (remember, it's wood, not plastic). If you wanted to achieve a lighter cherry finish you could substitute a lighter golden amber color such as one of the maple dyes for the rosewood and brown dye combination. The key is to build toward the color you want to achieve beginning with the lighter base color and working toward the darker glaze.

This technique also has the advantage of not masking the more subtle grain and figure in the wood beneath a heavy coat of pigment, which tends to be the result of applying multiple coats of pigment stain over a "conditioned" surface when we try to coax a darker color out of the lighter wood.

This multi-step coloring process is not difficult to master. By applying a "sealer" or "barrier coat" of finish (I prefer shellac) you are in complete control of the pigment stain. The stain does not directly come into contact with the wood so blotching is virtually eliminated. Further, since you use a weak dye solution and its purpose is only to alter the base or foundation color of the wood, it too is much easier to control. Any mild color irregularities that do occur are easily remedied by the application of the glaze.

Try it—you may never again go back to using pigment stain directly on wood when you see how much more control you gain over the process when the dye/sealer/glaze technique is used.



© Copyright 2003-2010 Steve Mickley, © Copyright 2007-2010 Hardwood Lumber & More...Ltd. All rights reserved.
No unauthorized reproduction of any images or content without permission
All logos are © Copyrights of their respective companies.

