Russ Fairfield on Dyes

I know next to nothing about dyes and using them, however I have learned a few things about dyes the hard way. I have written them in no particular order, and they might save some frustrations and answer a few questions.

The best book on dying turned wood, the one by Jan Sanders, is no longer in print. It is worth the effort and cost to find a used copy on Amazon.com if you are seriously interested in dying turned wood.

Water soluble dyes are more colorfast than those that use alcohol as the solvent. However, no dye available to us is as colorfast as the heavy pigmented stains.

The difference in penetration (and color) can be evened out if the wood is given a wash coat with 50% thinned shellac or lacquer.

If you want bright colors, you will have to remove the color from the wood, and that means you should always bleach wood that will be dyed with a transparent color (red, yellow, orange, etc.). Leave the wood alone if you like dead looking wood colors.

Preparing a surface for dye means sanding to a smoother surface than you have ever done for any finish. Dyes will accent every flaw and scratch; and they love to show up your sanding rings.

Dyes raise the wood grain. Both water soluble and alcohol soluble raise the grain because there is enough water in cheap alcohol to cause a problem.

If you get serious about using alcohol soluble dyes for blending colors and painting the wood, use a pre-mixed dye straight out of the bottle without thinning it. If you are going to dilute the dye, it should be done with a better grade of alcohol because of the water entrainment problem with alcohol. Buy a better grade of alcohol or one that is sold specifically as a dye solvent, because they have less water; and take care to prevent its exposure to the atmosphere. Save the commercial denatured alcohol for clean up, or spend more time raising the grain before using the dye.

Always raise the grain with water and sand back LIGHTLY several times before using a dye. It may take several applications before the water will no longer raise the grain. When the water will no longer raise the grain, neither will the dye.

You will have fewer problems with chemical contamination causing odd color changes if you use distilled water to raise the grain.

A gallon of distilled water for a couple bucks is cheap insurance.

Alcohol soluble dyes can be easily blended on the wood because the alcohol from subsequent dyes will take the other dyes on the surface back into solution, even if they have dried.

Water soluble dyes don't go back into solution very well, if at all. The colors will have to be blended by layering them rather than mixing them. This will give the colors a different appearance, and this difference can be the reason for using either water or alcohol soluble dyes over the other.

Water based dyes take 12 hours to dry when they are applied with a brush because surface dry isn't dry. Spraying them is faster because there is less water to evaporate.

Water based dyes will dry quickly with the heat from a hair dryer or heat gun, but the colors won't be the same as when they are allowed to air dry at room temperature, and there can be some bronzing on the surface of black, and the other colors won't be as transparent and can look more like a whitish latex paint than a transparent dye.

Alcohol dyes evaporate faster, and will not wick into the surrounding wood grain as much as a water based dye. They will dry instantly if the alcohol is burned off with a lighted match. There may be some loss in penetration by doing this.

The shelf life of an alcohol soluble dye seems like forever, just add more alcohol when it evaporates.

Water soluble dyes last longer (years vs. months) if the water is distilled. There is a reaction with the Chlorine and other things that are added to tap water.

You can tell when a water soluble dye is over the hill when the surface takes on a bronze appearance. This is most noticeable with black, blue, and red. Being able to see the surface of the liquid is the reason I mix and store water soluble dyes in pint Mason jars.

The Artisan brand alcohol dyes from Craft Supplies are as good as those costing 3 times or more their price. They might not be as concentrated as some of the other dyes, but that can be a good thing because you can use them straight from the bottle without having to be concerned with water in your alcohol.

Somebody told me this wouldn't be easy, and I didn't believe them either.