

Stabilizing Green Wood

by Frank Stanko

After reading the article on Soapy Bowls in the Spring 2002 issue of the American Woodturner, I decided to give it a try. Basically, dish detergent is used to stabilize green wood reducing the amount of cracking and checking during the drying process.

I used a freshly cut, 10" diameter, butt-half piece of Apple. I oriented it with the sapwood at the base and a flat top just short of the pith. This was turned to a popcorn bowl shape, leaving the walls uniform at thickness of about 1".

Immediately after turning, I submerged the bowl into a solution of 4 parts water to 1 part Joy dishwashing detergent, with an added spritz of isopropyl alcohol. A five-gallon dry wall compound bucket works well provided it is cleaned properly. I believe that a plastic container is a must. The lid from a Rubbermaid trash bucket works nicely for shallow platters or other turnings too large for the 5 gallon plastic bucket.

I let this bowl soak in the solution, fully submerged, for 3 days. I removed it from the solution and let it drip dry in the coolness of my garage. The bowl showed no signs of cracking or checking. The top rim was flat, without any crowning in the typical pith area. Even after drip drying for days, it felt wet and waxy to the touch.

I final turned the bowl on the 7th day. I turned it to a wall thickness of ¼" and sanded from 120 to 320 grit. I reversed chucked it and finished the bottom. I was planning on vacuum chucking the bowl to finish turning the bottom but the wet, porous bowl wouldn't allow the vacuum to hold it.

The lubricity that the soap added made the wood turn like butter. The sanding was also improved. The walls of the bowl had a translucent feature and I was able to back light the turning while I worked on it.

Since that experiment, I have turned two goblets with the pith included. I finish turned them from the same Apple stock and then submerged them. They remained submerged for only one day and then they were removed to drip dry.

In the future, I am planning on staying away from dishwashing soaps that have a degreasing agent as part of their formulation.