

Processing Green Bowls

by Dale Larson

Green turning a wood bowl starts with a piece of wet wood. Wood degrades when it dries too quickly and therefore unevenly, so the objective is to exert control over the rate of this process. I rough out a bowl, let the piece dry, then remount the bowl and finish turn it. Here are a few tips that will help you through the process.

Get on it

The first rule is to get the tree as soon as it is cut. Checking begins as soon as the endgrain is exposed to air. The checks will be too small to see at first but will quickly widen into visible end and radial checks. As soon as you cut the block, put sealer on the endgrain (such as Anchorseal, Sealtite 60, or an equivalent house-branded product).

Rough-turn ASAP

Rough-out the bowl as soon as you can. A solid block of wood will release internal stress as it dries, resulting in splits and cracks. A roughed out bowl can “move” to relieve the stress and is less likely to crack as it dries.

Some heft is good

The general rule of thumb is to turn the rough wall thickness to ten percent of the overall

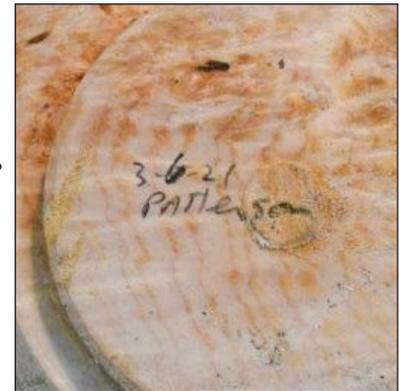


Wall thickness. Aim for a wall thickness that's about 10% of the blank's diameter.

diameter. That means a 10" (25cm) blank will have a 1" (25mm) wall. But there are times to deviate from the rule, and as you work with a variety of species you can develop a sense of what each will require. Stable woods like black walnut can be left a bit thinner. Madrone burl and apple move a lot—you'll need to leave those blanks thick enough to find “round” in their dried and warped forms. Too thick of a blank will prevent that necessary wood movement that relieves tension without cracking.

Lot number.

Note the date and tree, source, or some other identifying feature to track all the wood from a single tree.



Try dating it

Mark the date and source of the wood on the bottom of the bowl. A pencil works great. This will allow you to track all the bowls from a given tree over time. When one bowl is ready to turn, generally all of the blanks from the same tree will be ready.

Wax on

I use cheap paste wax on the endgrain on both the inside and the outside of the bowl. I don't use Sealtite at this stage because it soaks into the endgrain. When the bowl dries the Sealtite soaked endgrain will have to be turned away. Paste wax performs as well but doesn't penetrate.



PRO TIPS: Bowl Design



Wax the endgrain. Focus on sealing the endgrain; that's where moisture loss is fastest. Coat both the inside and outside endgrain surfaces.

Stack 'em

The drying process starts by stacking the bowls on dry stickers in the coolest place in my shop, the floor. Wet bowls stacked without air flow will mold and spalt. Check the bowls every day or two for the first two weeks. Immediately fill small endgrain or foot cracks with thin CA glue. (Bill Luce uses thick CA glue and sawdust to build a "scab" over the crack. The advantage here is that the thick CA glue doesn't soak into the endgrain of the wood which will have to be turned off later.)



Stacked blanks. Stickers maximize air flow between blanks. Take care to allow room between blanks for air movement as well.

Bag 'em

Cracks tell me the bowls are drying too fast. I will move them into garbage bags with dry

shavings. This slows the drying process and lets the wood equalize its moisture content. The dry chips will absorb the moisture from the blanks.

Every couple of days I'll take out the damp chips and put in dry chips. The bowls may go in and out of the bags several times before they are stable. I leave them in the bags 3 to 4 days then put them back on the stickers on the floor.

Mold patrol

If a blank starts to mold it is drying too slowly, so I will move the blanks into the heated part of my shop. I want to get the surface moisture off the blanks. Be careful, because too long in a warm dry location can crack the blank at this stage. I also spray the blanks with a mixture of 50:50 mix of household bleach and water. This kills the surface mold. The bleach doesn't penetrate enough to affect the wood color.

To the racks

As time passes, I check the bowls less often. Generally, after six weeks the bowls are stable and I know I have won the battle. They are not dry enough to finish-turn at this time and they will continue to move. I move the bowls up on the racks around my shop and forget about them.

How long does it take to dry the blanks?

Depends. Depends on the time of the year.

Depends on the species of wood. Madrone burl (that has been boiled) and big leaf maple dry in as little as 4 to 6 months in the summer. Oregon white oak and California black oak take 18 to 24 months.

Dale Larson has been turning bowls for forty years. He is a founding member and past president of the Cascade Woodturners in Portland, Oregon. Dale served on the AAW Board from 2009 to 2014, as both symposium chair and president.

