

The Journey of Flowing Ribbons of Green Wood to a Piece of Firewood

By *Janice Levi*

To a woodturner, there is nothing more exhilarating and satisfying than turning green wood. Those long, flowing ribbons of wood hurtling through the air are as exciting to watch as fireworks on the Fourth of July! But, depending on where you live in this great world of ours, those fireworks may soon turn to firewood. In no time at all, huge cracks and checks begin to appear, the wood begins to collect mold and mildew (and you wanted to save that nice unblemished piece for pyrography), and that big beautiful bowl you were envisioning has now turned into three tool handles, if you are lucky.

You're now singing the Green Wood Blues. And, depending upon which part of the world you call home, the blues can arrive really quickly. While some of you may have a week or two before you start singing, the dreaded day will come when "snap, crackle, ruined" visits your green wood.

FUNDamentals feels your pain. Expert turners from across the country have been asked what they do, based on their part of the world, to protect green logs from cracking and what they do to prevent turned green wood from checking. Following are some of their solutions.



BARBARA DILL

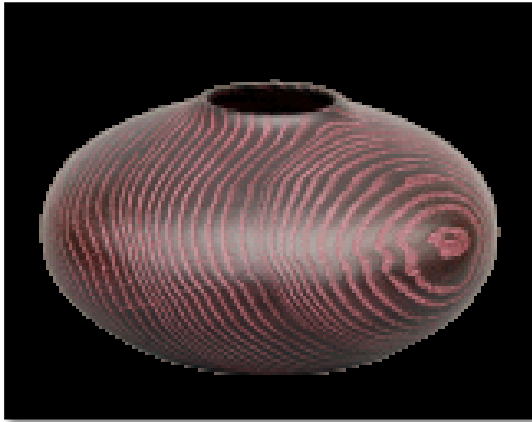
- *Virginia*
- *Temperature: 80s in summer, a low of 30s in winter*
- *Humidity: High year-round*
- *Rainfall: 43-44 inches*

I have always preferred using green wood. I turn a bowl to the thickness that I want it to be and then either put it in a paper bag for a few months, or I put it in the microwave at the highest setting and slowly increase the time and frequency of heating it until it is dry.

I also use green wood for my multiaxis projects. They usually don't check if they are small projects.

The larger forms do check and that is fine with me. The joy of using green wood is worth it.

Barbara Dill is known for her multiaxis turning, and she regularly uses green wood for turning them.



MOLLY WINTON

- *Washington (Western)*
- *Temperature: Summer highs in the 70s, winter lows in the 30s*
- *Humidity: High, ranging from mid-60% to mid-80%*
- *Rainfall: 34 inches*

Depending upon the general stability of local woods, sealing endgrain with Anchorseal or wax for blanks works well. Storing them where they get even ventilation and out of direct sunlight works effectively.

If bowls and vessels are rough turned, they can be stored in a similar environment without sealing them. Sealing rough turned pieces can lead to mildew and mold.

To prevent cracking in fairly unstable wood (madrone, fruit woods), it is recommended that you boil the rough turnings immediately.

Boiling the wood reduces the amount of moisture in the cell walls and works on most woods, particularly those with irregular grain patterns, knots, or wood close to the pith. The boiling process involves covering the rough turnings with water (such as in a large stockpot) and bringing them to a rolling boil. Allow them to boil for a minimum of one hour and up to three hours. When the time is up, turn off the heat and allow the pieces to cool while still in the water, then store them as described previously for stable woods. Wrapping the cooled pieces in paper bags is also a good option. You will find some color fading but it does not go much below 1/16 in.

Molly Winton turns bowls and platters that she uses for further enhancement.



KEITH GOTSCHALL

- *Colorado*
- *Temperature: Summer highs reach 90, winter lows down to -20*
- *Humidity: 10% to 15% in summer, may reach 80% in winter*
- *Rainfall: 9- 1/2 inches*

It's so dry that a green turned bowl will crack by morning if not treated right away.

Rough turn the wall thickness to 10% of the diameter, and then apply green wood sealer to the whole blank. Stack the bowls in a pile and air dry them for six months or longer.

An option is to put sealed bowls in a dehumidification kiln and slowly extract the moisture over 6-7 weeks. Several designs for these kilns exist, including using an old refrigerator or freezer unit with holes drilled in the bottom and top. An incandescent light bulb is placed in the bottom. The holes will allow the air to draw up and through the bowls, spaced slightly apart.

Sometimes, I finish turn the green bowl and blowtorch it to remove surface water. Sand the bowl after torching but leave the foot with tenon intact. Turn the bowl upside down on a concrete floor to dry for a week or more then re-turn it to remove the foot.

Keith Gotschall is known for both his furniture and his woodturnings.



DAVID HOLLEY

- *Texas (Central)*
- *Temperature: 90s-100 in summer, lows of 20s-30s in winter*
- *Humidity: 40%-50%*
- *Rainfall: 25-30 inches*

To keep a green turned bowl or platter from warping, put it in a bucket with a solution of 50:50 water and dish washing liquid (don't use the blue or green soap as it will discolor the wood). The soap is a surfactant, and it works by dispersing and removing the moisture from the wood cells, thereby conditioning and stabilizing. Do not remove the tenon from the bottom. Leave the turning, which will need to be weighted down, for 2-4 days. Remove it from the liquid and let it dry thoroughly for 3-4 days, longer if needed. Return the piece to the lathe and sand it, then remove the tenon and finish the bottom. The bowl or platter will not warp or check.

After twenty years, David's bowl (pictured to the lower left) has never warped or cracked after his 50:50 treatment.

For more information about the treatment of green wood, see "[The Sawmill Project](#)," by Joshua Friend, *American Woodturner*, April 2010. (You will need to login as a member to the AAW website to access this article.)

You can find the average moisture content for your area on the Forest Products Laboratory website, at: <https://www.fpl.fs.fed.us/>

Author

Janice Levi is a past president of both the Brazos Valley Woodturners in Waco, Texas, and the Southwest Association of Turners (SWAT). Janice teaches hands-on classes and demonstrates at various clubs throughout the Southwest. For more, visit janicelevi.com.