



Large End-Grain Bowls

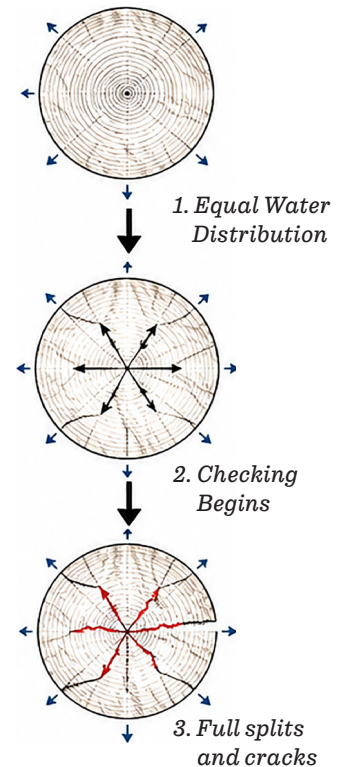
By Clayton Thigpen

Bowls turned in the spindle orientation introduce a whole world of new turning possibilities.... and challenges. In essence, they are the same as a traditional side grain bowl, but require a different approach to achieve a tearout-free result straight off the tool. The key difference is in the drying process, and how to prevent the wood from cracking as it dries.

Coming Apart At The Seams

Understanding Why End Grain Cracks

- The most important aspect of creating end grain bowls is to prevent the pith from splitting as it dries. The secret is to stabilize the pith so that the tubes that have already begun to dry out remain as strong as the surrounding wood. (*Hint: Parfix 3408 does wonders for this! It's why I'm happy to sell it*)
- When the wood dries, it dries faster at the pith. Along the outer rings, water takes longer to exit, simply due to the amount of water present in those rings as compared to the smaller inner rings.
- When wetter wood and drier wood are at odds, the dry wood gives in first, and gets pulled apart across the lignin, resulting in cracks.
- Evaporative effects impact the drying heavily, therefore cracks on the outside can form if the wood isn't properly sealed or covered.



Setting Up For Success

What to Expect While You're Expecting A Bowl To Dry Well



Fig. 4



Fig. 5



Fig. 6

- Maintain an even wall thickness. 3/8" to 1/2" width gives more time to dry slowly.
- Stabilize the end grain with thin, slow-drying CA glue, and set it in a cardboard box on its side. Cardboard is just permeable enough that wood will dry evenly. Too much airflow will crack the outside, too little might allow for mold and too slow of drying.
- Be patient! Let it fully dry.
- Fig. 5: Minor checking might appear as it dries, because those checks were already present in the wood. Be cautious, but these minor lines aren't always catastrophic. Your skill level and understanding of the wood is what makes the final decision.
- Fig. 6: Major splits and giant cracks have a fun nickname: **Firewood**.
- And **NEVER turn it to begin with if there's Ring Shake**. Any splitting along the concentric rings of the tree, don't even let it get to the lathe!