

Turning Burl Caps Without Cutting the Natural Surface

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To begin, decide what the "center" of the burl will be. This is usually the thickest part to allow for the deepest bowl possible or at the center of mass to reduce vibration. These points will almost certainly not be the same. Note the shallow areas that could end up as holes in the bowl. However you choose to center it, cut a round piece of plywood large enough to center the burl on so that there are no overhanging edges. Mark the center on both sides.

Cut 3 or 4 large wedges from scrap 2x4. Lay the plywood flat. Stand the burl on it with the natural side down and the cut face as level as possible. Use the wedges to support the burl and keep it in that position.



Measure the maximum height from the plywood to the burl. Cut *lots* of thin strips of scrap wood of varying lengths, no longer than the maximum height. I usually cut several pieces from the end off of a $\frac{3}{4}$ " pine board at a slight angle and slice it thinly with a bandsaw. Cut the strips with the grain. Save the small wedges at the thin ends to start the gluing process.

Find a place where a small wedge will fit under the burl and provides as much contact as possible with the burl's surface. Use hot melt glue to attach it to the plywood board and the burl.



Continue to build the wedge using the thin strips. The wedge should conform to the surface of the burl as much as possible. I use a sanding disc to tweak the length and shape of each strip as necessary. Glue each strip to the piece that came before it, as well as the plywood and the burl.



Continue to build the wedge. Don't go all the way to the edge of the burl, otherwise truing up the face could start cutting the wedges.



Keep building wedges. Once the second one is started, you should be able to remove the temporary 2x4 wedges. I build at least 5 wedges.



Turn it upside down and attach a faceplate.



Mount it on the lathe. Use the opportunity of this new perspective to fill in the gaps in the glue between the wedges and the burl. Put a bead of glue around the base of each wedge.



Lock the spindle. Grab the burl and try to move it. If it moves, you'll need more wedges.

Bring up the tailstock, turn down the speed, and start the lathe. Increase the speed slowly to the vibration level you and your lathe can tolerate. True up the face. Once it's true, begin shaping, remembering where the thin spots are. Keep the tailstock up as long as possible.

When completed, use a spray bottle of isopropyl alcohol to loosen the glue. Grab the wedges with a pair of pliers and twist them off. Examine the surface for stray bits of glue. Apply more alcohol and use tweezers.

Here are 3 views of the final piece.

