

Turn a Handled Bowl

Mark Gardner



I started making handled bowls in 1998 while assisting John Jordan in a class at Arrowmont. Before that, I had been working under a self-imposed rule that all of my pieces would be made, start to finish, on the lathe. Handled bowls were my first attempt at making something that required work off of the lathe to complete, and it turned out breaking my “rule” opened up countless possibilities for my woodturning.

One nice thing about this project is that I can take advantage of smaller-diameter logs. For woodturners starting

with green wood, the diameter of the log is usually the limiting factor for the scale of a turned bowl. Adding handles to the bowls allows me to make larger pieces even when starting with a relatively small-diameter log.

Wood prep

For the bowl illustrated in this article, I started with a cherry log about 10" (25cm) in diameter. With a chainsaw, I cut a couple of inches off the end of the log and then confirmed I had completely removed any cracks in the end-grain. I then cut a 6" (15cm) length off

the log. With freshly cut ends and the log safely supported, I cut the bark off the outside edges and then ripped the log lengthwise, using the center pith crack as a guide. Once the chainsaw work was complete, I finished rough-shaping the blank at the bandsaw (Photos 1-3). Trim the sides of the log equally so you end up with a blank about 4" (10cm) square and 6" long.

I typically orient the bowl in the blank so that the pith is near the bottom of the bowl and the sapwood is at the top of the bowl. This way, as the bowl dries, it will warp to an oval



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Wood prep

(1-2) With fresh ends cut on the log, the author trims away bark from the side of the log and then halves the log at the pith.

(3) The turning blank is finalized at the bandsaw.



4



5

Mark centers, draw bowl profile

(4) Mark the turning centers of the blank, not on the ends but on the blank's sides.

(5) After drawing the bowl profile on the blank, mount the work between centers with the log's sapwood at the headstock side.

Turn lower profile, form tenon



6



7



8

(6) Begin by turning away the bottom corners of the blank.

(7-8) Form a chucking tenon. The author first uses a bowl gouge and then refines the tenon corners with a small spindle gouge.

shape and the grain pattern in the bottom of the bowl will also be oval. I find these elements complement each other visually.

I located the center of both the top and bottom of the blank and marked them with a center punch (*Photo 4*). On pieces like this, it is useful to draw the bowl shape you want directly on the blank (*Photo 5*). The flat sides from the bandsaw cuts provide nice surfaces to draw on. Not knowing exactly where the handles are going to be on the bowl is one of the challenges of this project, and the drawing helps me home in on their location a bit quicker. As shown in *Photo 5*, I mounted the blank between centers and adjusted it between the drive and live center points to achieve a balanced orientation, both visually and physically.

Turn outer profile

Using a ½" (13mm) bowl gouge, I started turning the underside of the bowl, paring away the bottom corners

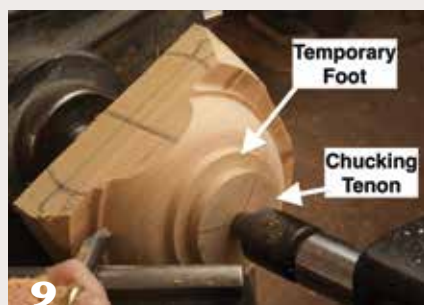
(*Photo 6*). I made several cuts until the tailstock side of the blank was approximately the diameter of the tenon I would need for remounting the piece later. Size the tenon to fit the jaws of your chuck (*Photo 7*). I used a small spindle gouge to clean up the inside corner to ensure a good seat in the chuck jaws (*Photo 8*).

Next, I turned a temporary foot. This foot will be turned away later since the bowl will feature a round bottom, but for now it will provide

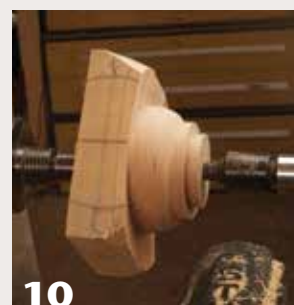
support during hollowing. Shape the lower half of the bowl, up to the handle area, before switching to the top half (*Photos 9, 10*).

I tend to “sneak up” on the placement and thickness of the handles, removing a bit of wood from both top and bottom and then stopping the lathe to take a look at the profile (*Photo 11*). Once you turn the wood away, you can't put it back on to essentially “reposition” the handles, so take care getting the placement just right. ►

Complete lower half



9



10

Shape the bottom half of the bowl, including a temporary foot.

Since this is a slightly closed sidegrain form, I want to work from small diameter to large, which in this case means turning from foot to handle and from rim to handle, with the handle area being the widest part of the bowl. What I wind up with, when the outside is finished, is a bowl with a roughly rectangular flange around the middle of

the form. I will typically shape the outermost edge of the flange as well to give it a bit of curve that follows the curve of the bowl (*Photo 12*).

I also like to undercut the handles slightly on both the top and bottom, giving them a bit of a flared profile. I use a $\frac{3}{8}$ " (10mm) spindle gouge to work from the outer edges of the handles and

into the corners where they meet the bowl (*Photo 13*). The spindle gouge has a sharper angle than my bowl gouge, so it is better at getting into tight corners.

One of the challenges of this project is getting the profile of the bowl to look as though it flows continuously under the handles. A good tool to help you see the curve, as it is interrupted by the

Fine-tune the handle flange



11 Shape the top half of the bowl, leaving a rectangular flange that will later become the handles.



12 Shape the outside edge of the handle to a slight angle.



13 The author uses a small spindle gouge to clean up the corners where the flange meets the bowl.

Confirm lines



14 Check the profile of the bowl with the help of a contour gauge. Aim for a continuous line above and below the handle flange.

Turn bowl rim



15 With the bowl now mounted in a chuck, the author first flattens the face using a shear-scraping cut and then angles the rim inward with a bevel-supported cut.



16 With the bowl now mounted in a chuck, the author first flattens the face using a shear-scraping cut and then angles the rim inward with a bevel-supported cut.



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19

Hollow bowl

Hollow the interior of the bowl. The author starts with a bowl gouge with a traditional side grind and then switches to a blunter "bottom feeder," which maintains bevel support at the bottom.

flange, is a contour, or profile, gauge. Press the gauge over the narrowest part of the flange and then take it away to see how well the curve flows. The contour gauge transforms the three-dimensional form of the bowl into a line drawing. It eliminates a lot of extra visual information and allows me to see just the curve of the bowl (*Photo 14*).

Hollow the bowl

When I was happy with the outside shape of the bowl, I reverse-mounted the work, gripping the tenon in a chuck. If the bowl isn't running perfectly true after remounting it, take light cuts on every surface to bring the bowl back into round.

Satisfied with the outside surfaces, I then flattened the rim with a shear-scraping cut using a ½" bowl gouge. I like to slope the rim inward slightly with a bevel-supported cut (*Photos 15, 16*).

I began hollowing the bowl using a bowl gouge with a traditional grind

(*Photos 17, 18*), but as I progressed to the bottom, it became impossible to maintain bevel contact. The shaft of the gouge ran into the rim of the bowl and wouldn't allow bevel support, so I switched to a much blunter gouge, often called a bottom feeder (*Photo 19*). I completed the hollowing and blended the areas turned by the two gouges. For bowls like these, I aim for a consistent wall thickness of ¼" to ⅜" (6mm to 10mm).

Since this bowl will feature a round bottom, I drew a pencil line continuing the curve of the outside of the bowl onto the temporary foot. In relation to this line I drew a second line, together indicating the bowl's thickness at the bottom and providing me with a target depth for hollowing. I use a simple gauge to check the depth as I go (*Photos 20-22*).

Sand the bowl

With the hollowing complete, I sanded the bowl. Due to its size and odd

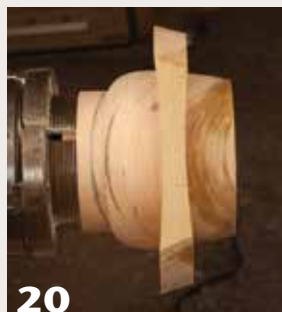
shape—with the flange around the outside—I sanded the outside of the bowl by hand and the inside with a 2" (5cm) disk mounted on a mandrel in a lightweight electric drill (*Photos 23, 24*). I usually sand to 320 or 400 grit for most domestic hardwoods, and to 600 grit for harder exotic woods.

Complete the bottom

With the inside of the bowl, as well as the area above the handles, sanded, I reverse-mounted the work to finish the outside bottom of the bowl. I removed it from the chuck and turned a jam chuck from a piece of scrap wood. I turned a tenon with a square shoulder to match the opening of the bowl (*Photo 25*). Strive for a tight fit but not so tight that you risk cracking the bowl when pushing it onto the jam chuck. Mount the bowl on the jam chuck and bring up the tailstock for added security (*Photo 26*).

Using the ½" bowl gouge again, I turned away the tenon and ►

Confirm bowl depth



The remainder of the bowl's profile is drawn onto the temporary foot (lower curved line at far left). A second line is drawn to indicate the bottom thickness and interior depth.



A depth gauge indicates hollowing progress to the intended depth.



Sand bowl

Sand the top half of the exterior by hand and the interior using a small sanding pad in an electric drill.

temporary foot and shaped the base until the bottom of the bowl had a continuous curve and a round bottom (*Photos 27-29*). I removed the tailstock only when it got in the way and I had just a small amount of wood left to remove. The last bit was turned away, without tailstock support, using a $\frac{3}{8}$ " spindle gouge.

Finally, I sanded the bottom half of the bowl (*Photo 30*).

Form the handles

After taking the bowl off the lathe, I drew a centerline on the underside of the flange, positioning the centerline along the long grain fibers. Next, I drew the handle shapes using the

centerline as a guide (*Photo 31*). I do this by eye, but you could easily make a pattern to ensure the handles are exactly the same size and shape.

I like to cut the handles out on the bandsaw. Make the first cuts on the side profile lines in towards the bowl. Place the bowl rim-side down and, holding the bowl firmly, cut the handle profile (*Photo 32*). Next, I placed the bowl on its rim just behind the blade so that the profile of the bowl was visually in line with the blade. I tilted the bandsaw table until the blade was tangent to the bowl right where the flange meets the bowl, as shown in *Photo 33*. I had to cut the handles out in two passes in order to cut into both corners where the handles meet the bowl.

I made the first cuts on the right side of the blade, removing the majority of the waste wood between the handles

Reverse-mount bowl



Turn a custom jam chuck from scrap wood to fit snugly inside the opening of the bowl. Bring up the tailstock for extra support.

Complete bowl base



Turn away the tenon and the temporary foot, and shape the curve of the bowl's bottom. Leave the tailstock in place for as long as possible, before turning away the nub that remains.

Sand bottom



Sand the bottom of the bowl by hand.

Cut handle profiles



With the handles drawn on the bottom of the flange, the author cuts the outside profiles at the bandsaw. The flat rim of the bowl registers safely on the bandsaw table.



(Photo 34). To remove the remaining waste, you'll cut on the left side of the blade, so you will need to tilt the table in the other direction. Most bandsaws I have used allow their tables to tilt a few degrees to the left. Sometimes there is a stop that needs to be removed to allow this. If the table doesn't tilt to the left, a wooden auxiliary table can be made with a few degrees tilt to allow the left tilting of the bowl. Ten degrees is usually more than enough. Place the bowl against the left side of the blade where you have just cut, and tilt the table to the left until the blade is running parallel to the first cut (Photo 35). Now you can finish cutting out the handles (Photo 36).

I like to leave a raised band between the handles, so I when I'm cutting, I'm careful to leave a consistent depth to the band. I like the texture left from the bandsaw and prefer to leave it as is if I've done a good job cutting out the handles. Another option would be to carve the bandsaw marks away, leaving a smooth band between the handles or carving the band away completely.

After sanding the top and bottom of the handles, I chiseled their sides, passing the chisel from their ends toward the bowl (Photo 37). This gave the handles a bit of flare from top to bottom. Finally, I chamfered the corners of the handles using a sharp knife (Photo 38).

Final steps

The last steps are to finish the bowl and sign it. Since the bowl was made from a green (still-wet) log, it will air-dry and not only warp to an oval shape, but the rim will distort, too. This is why I like to cut the handles right away, before the rim has moved and won't sit flat on the bandsaw table.

By placing the handles in line with the long wood fibers, the handles end up on the long axis of the oval, which feels right and visually accentuates the "ovalness" of the bowl. By placing the pith near the bottom and the sapwood at the top, the rim distorts in a more subtle,

pleasing way, rather than warping to the kind of peak one tends to get when the pith is at the rim of the bowl.

There are many variations possible based on this idea. I have made wider, shallower versions as well as bowls with very long handles. I've even made bowls with one handle, a spoon, or ladle using this same technique. ■

Mark Gardner lives and works with wood in the foothills of the Appalachian Mountains in Saluda, North Carolina. His work has been featured in American Woodturner as well as Woodwork magazine, and he has written articles for Fine Woodworking. Mark teaches and demonstrates around North America for woodturning clubs and craft schools. For more, visit markgardnerstudio.com.

Cut away waste



Tilt the bandsaw table to the right for the first angled cuts to remove the majority of the waste between the handles.

Make final waste cuts



Tilt the bandsaw table to the left to make the remaining cuts on the handles.

Fine-tune handles



The author uses first a chisel to shape the edges of the handles and then a sharp knife to bevel the edges.