"Bark"ing Bowls

Tom Boley

Making natural edge bowls is a delight which many woodturners have discovered. Here are four designs you may wish to try, from the simple to the complex. Basically, use a piece of fresh-cut wood with the bark on. Wood cut in winter will hold its bark much better than wood cut in the spring and summer. Mount the wood, turn the outside first and put a tenon on the bottom. Soak the outside edge of the bark with thin super glue. Chuck up the tenon and turn the inside, leaving it as thick as 1/10 of the diameter of the bowl. Super glue the inside edge of the bark. Mark it as to type of wood and date of roughing it out, then wax-seal it with Anchorseal or other similar product. Don't wax the face of the bark – just the exposed sides. Set it in a place where it can dry for several months, then re-turn it to round off the tenon and outside. Sand thoroughly. Chuck it in the tenon, re-turn the inside to final thickness and sand. Remember that the bark may look more interesting if it is thicker than you might normally make a bowl of that size.

Here are four different shapes of natural edge bowls for you to try.

Contraction of the second of t	Standard This is the basic natural edge bowl, turned from a half log with the bottom toward the center of the log and the bark making a "roller coaster" around the edge.
The state of the s	Square This bowl is just the opposite, having the bottom of the bowl toward the outside of the log and the top of the bowl being the section just outside the center of the log. The bark only appears on two edges.
top view (G)	Bias I heard this called "turning on the bias" some years ago and can't recall who said it. Crosscut the log at about a 45 degree angle or so and then mount it so the two cuts are perpendicular to the line of the lathe. The point is to offset the head and tail stocks so the bowl part will be offset within the top flare.
(Season of the	Log Cut a small log, no more than 6" in diameter, about a third longer than it is wide. Mount it on the center of the two sides so it spins end for end. Round the end and treat the tail stock side as the bottom, working a tenon into that side. Chuck it and treat it as a hollow form, hollowing out the inside so the inside becomes wider than the outside on the sides only.

Basic Natural Edge Bowl

Use fresh-cut wood with bark still on. The bark will stay on better in winter-cut wood. Mount the curved bark side toward the headstock to shape the outside first.

Use a Forstner bit to drill out a hole in the center of the bark side of the piece. That will provide access to solid wood for the spur drive to hold and spin the piece while turning.

An alternative is to use a faceplate on the bark side. Since that side is curved, you may only be able to use two screws through the faceplate and will likely have to chip off some bark so you can get the faceplate close enough to the wood that the screws will bite.

Shape outside and bottom of bowl, leaving a 3/8" long tenon large enough to be held by jaws of chuck. Cut from bottom toward top of bowl on bottom half of bowl and top toward bottom for top half of bowl. Once outside is turned to shape, use thin CA glue to soak the exposed bark edge and wait until dry. If not, then continue the process by sanding the outside of bowl, although sanding may be difficult if wood is still too wet. Remove faceplate, then chuck piece by tenon in jaws of chuck.

Turn inside of bowl, starting at center and working first toward outside edge and then toward bottom, per demonstration. This is really the tricky part. Watch your thickness closely and match the thickness of the sides to the thickness of the ends by cutting evenly as though the wood were solid all the way from the top edge to the bottom. Be cautious of the ends of the bowls, those whirling wings, as they will hurt if you get your hand in there! Once you are nearly at the end, soak the inside edge of the bark with thin CA glue and let dry. Turn to final shape with one more smooth pass with a freshly sharpened bowl gouge and sand inside of bowl.

Remove bowl from chuck. Put faceplate on waste wood. Turn jam chuck. Pad jam chuck with paper towel and place bowl over shaped wood, then bring up tailstock to hold in place. Turn and shape base of bowl, getting as close to center as practicable. This is best done with a live center which is tapered to the bottom of the bowl. Sand as far as you can toward the center.

Remove bowl from jam chuck, remove small tenon on bottom with a saw and carving tool or chisel, and sand base of bowl. Hand sand with the grain to remove sanding marks.

If you wish to let the bowl dry before completing it, turn it so it is about an inch thick. Actually, the thickness should be $1/10^{th}$ of the diameter of the bowl to ensure enough wood is left after it dries to reround it. Apply a product like Anchorseal and let it dry, then store it for a year. When dry, re-turn to round, then to final thickness, and finish as desired. Since a bowl will tend to change to oval as it dries and a natural edge bowl will always appear to be oval anyway, you may wish to turn it to final thickness and sand it to finish. Once completed, let it sit for a couple weeks before you finish it to let it dry more thoroughly. Then hand-sand it with the grain and apply whatever varnish or other finish you wish.

Square Natural Edge Bowl

As per the diagram, this bowl has its top, or opening, toward the center of the tree.

Mount the wood on a small faceplate or screw chuck with the tailstock live center up against the round bark side of the bowl.

bark

As usual, turn the outside of the bowl first, shaping the bottom with a tenon for later chucking and keeping the top edge flat and square.

This is how the bowl should now look on the lathe. The flat top is on the left and the bottom, which you are shaping, is on the right. As you continue to shape the bottom, be conscious of the thickness of the top square.

Remove bowl from screw chuck or faceplate and grip in four-jaw chuck. First, face off the top so it is parallel to the bottom of that square part. You can leave a lip at the top around where you will make the inside of the bowl or leave it flat to the in-cut.

Using a bowl gouge, remove wood from the inside of the bowl, taking care to keep the thickness of the sides of the bowl the same from top to near the bottom.

Remove bowl from chuck and reverse in a jam chuck to finish-shape the base of the bowl. Since it is jam-chucked, you will have to keep the tail stock live center up against it. Turn as far toward the center as you feel comfortable and then remove that little post in the center with a small saw or chisel.

If roughing only, leave plenty of wood to accommodate changes in shape as it dries. Anchorseal and set aside for a year. If completing the bowl now, sand the outside after turning, the inside after turning, and the bottom after final shaping. Let dry, then varnish.

Bias Cut Natural Edge Bowl

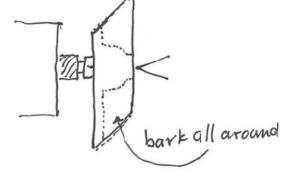
As per the diagram on the first page and the diagrams below, cut and mount the blank on a screw chuck or with a spur drive. Always use the tailstock live center whenever possible.

This will be pretty well balanced until you start cutting away the bottom of the bowl. As you do so, the piece will be more and more out of balance. Ensure the lathe is stable when you start. This is not a good exercise for a mini-lathe unless it is firmly anchored to a strong base.



Cut the log per the diagram on the first page, repeated here. More than a 45-degree angle seems to work best. Try to utilize any features of the wood to best advantage, such as knots.

Mount this angle-cut piece on the lathe so the cut sides are perpendicular to the bed of the lathe. On one side, one edge will stick way out and on the other side, the other edge will stick way out.



Then turn the bottom of the bowl first, leaving a tenon on the bottom for the four-jaw chuck. Reverse the piece on the lathe, chucking by the tenon, and flatten the top face, then hollow out the bowl section. Reverse the piece once again and jam chuck it to finish off the bottom.

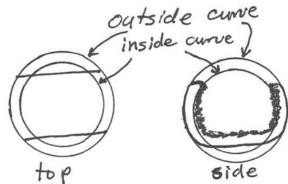
Note: It is difficult to get the bowl to stand up on its own because of the weight of all that wood out to one side since the "bowl" section is so far offset from center. Consider alternative mounting OR just round off the bottom of the outside of the bowl section and let the piece sit at an angle.

Log Bowl

The log bowl is great fun to do as it is the most challenging of the four. This involves hollowing since the inside will be bigger than the effective opening at the top. Sitting on the table, the top opening appears to be pretty big, but when it is whirling around on the lathe, the effective size of that opening is only the size of the shortest measurement between the two top edges.

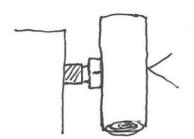
The secret to the log bowl is the size of the log. You will have to turn a whole piece of log which is longer than it is wide. If the log is about 4" wide, then the length of the log should be about 6" to 7" long.

The diagram to the right illustrates the outside turning and the inside turning. It is because the log is longer than it is wide that allows the cut through the sides to plunge down so precipitously rather than smoothly as in the basic natural edge bowl.



It should be noted that wood tends to check from the pith out. I have found generally that the smaller the branch of wood, the less chance there will be of serious checking. Also, fairly thin hollowing helps the wood to dry more evenly, too, which further reduces checking tendencies.

Mount the whole log on the lathe with a spur drive on the headstock side and a live center on the tailstock side. It is helpful to first round the ends of the log with a bandsaw, but be very cautious about that as you will be moving a round log through the blade and the blade will tend to jerk the side of the log downward as you saw into the first side and again when the blade moves out the other side. Support the log firmly with your hands. Saw slowly. Watch your hands!



Once mounted as shown here, carefully round the outside ends of the log. Cut from the bottom to the center and then from the top to the center to minimize knocking off bark. Shape the bottom of the bowl as usual, leaving a tenon for later chucking.

Reverse the bowl and grip in a four-jaw chuck. Start hollowing with a bowl gouge as usual. Be careful to leave a line of bark around the top. Once you have cut as much as you can with a bowl gouge, you will have to switch to a scraper or hollowing tools to complete the task. The good news is that the deeper you go, you will be opening up the sides of the bowl and that will allow you to watch the position of the tool inside the bowl as you turn. Keep the thickness of the sides uniform all the way down to the bottom. You will have to judge how thick to make the bottom, depending on the type of base you want. Sand as you go.