

TURNING A NATURAL EDGE BOWL

by Jim Burrowes



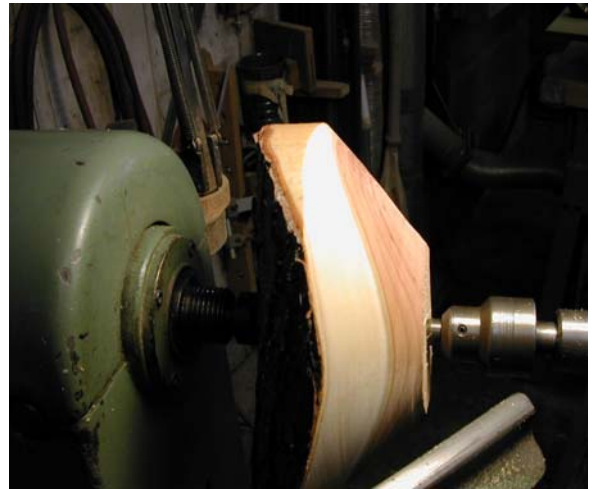
Make sure your lathe is at the lowest speed setting. First, mount your blank between centers.



Use the tool rest as a reference to align the top (bark side) so that top edges of bowl will be even. This is an advantage over faceplate mount because you are able to make adjustments in alignment. Tighten tail stock and lock in place. Spin wood by hand to be sure it does not hit the tool rest before turning on the lathe.



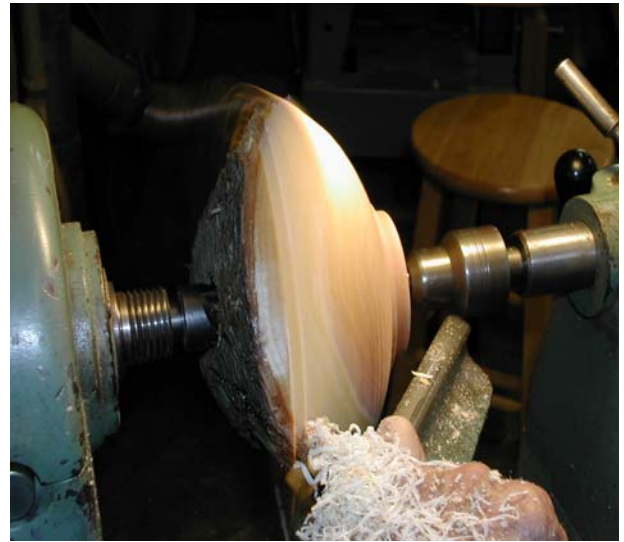
With the tool rest set at an angle, begin to shape the bowl from the bottom up using your bowl gouge. Your first objective should be to remove most of the waste wood on the bottom so you can begin to form the spigot.



Once you have formed about 2/3 of the curve, turn a spigot on the bottom that will fit in your chuck. To form the spigot, use your bowl gouge to make a cut parallel to the lathe axis and towards the head stock. Repeat until your spigot is the desired size. Turn a flat shoulder or small second spigot for the chuck jaws to rest against. Use a spindle gouge to square up the cuts by making small clean cuts from both directions. The bottom of the spigot should not quite reach the bottom of the chuck. This will allow for greater accuracy when the piece is mounted. The spigot should also have a slight dovetail shape which will fit the piece more firmly in the chuck.



Use a bowl gouge to finish shaping the outside of the bowl. Watch top edge to see shape. Bark can be glued with CA glue if it is coming loose, especially if you will be twice turning the piece. Rough spots can be cleaned up using the shear scrape.



Place bowl in chuck so jaws rest on shoulder (second spigot). Remove tail stock. Turn on lathe. Adjust speed if necessary. Increase speed until you begin to feel vibration and then back off a little. Shear scrape the outside to clear up any rough spots or if it is slightly out of round.



BEGIN HOLLOWING YOUR BOWL

Starting at the center, begin to hollow your bowl. Adjust the tool rest so the bowl gouge is cutting level and on center. Begin making small cuts toward the center with the gouge rolled to the right at about a 45 degree angle. Start the cut straight in with the bevel remaining on the wood at all times. Continue until you are just below the wings. Do not go in and push the tool across the inside bottom of the bowl. It is essential that you stay on the bevel during the entire cut to maintain control of the tool! Generally, the cleanest possible cut is achieved when cutting with the grain. In the case of today's natural edge bowl and other side grain bowls you will be cutting with the grain when you are cutting from the top (bark side) towards the bottom.



Thin wings to the desired thickness before hollowing the entire center section. This bulk in the interior is needed for support because the wood in the wings begins to flex as it becomes thin.



Now begin to remove the wood you left in the center for support while thinning the wings. Gradually work back from the center until wings are blended in with the sides. At this stage make sure that your body and gouge make a complete arc. Tool rest can be angled into the bowl a little for better support but make sure you spin the wood once by hand before turning the lathe on to avoid knocking off one of the fragile wings. Chatter occurs when the tool is off the tool rest too far for the size of the tool.



Clean up the bottom of the bowl with a scraper if necessary. Caution: It is not advisable to scrape on the thin wings of a natural edge bowl. Raise the tool rest slightly to be sure the scraper is angled slightly downhill while still cutting on center. To remove the bump in the center of the bottom, start cutting from below and slowly raise the scraper. Be patient! The center of the bowl is spinning very slowly compared to the outer edge. This cut takes time. On a traditional style bowl you can turn the scraper up to about a 45 degree angle so you get more of a sheer cut when scraping on the inner sides.

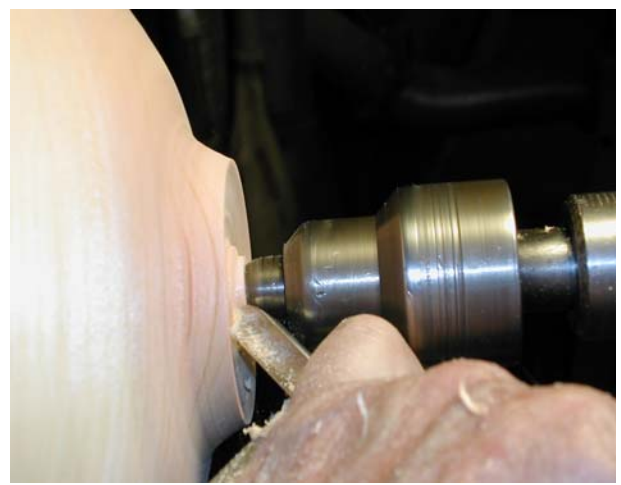


A NICELY FINISHED BOTTOM ADDS CLASS!

Remove the bowl from the chuck. Place a waste block in the chuck and secure tightly. Recut the waste block to shape it as needed using a spindle gouge. Use a piece of paper towel or rubber shelf liner to keep your piece from slipping on the jam chuck. Center your bowl on the waste block using the tail stock in the original center hole to press the bowl up against the waste block.. Spin the bowl once by hand to make certain that wings will clear lathe parts.



Use a spindle gouge to remove chuck marks and shape bottom as desired. Bring in the bottom by slicing in on lower flute alternating cuts in from the side and then up from the bottom along the axis of the lathe. Make the bottom of your bowl slightly concave so that it will sit level. The thin bottom also makes your bowl less likely to crack.



Cut in along the lathe axis until only a small amount of wood remains between the tail center and the bottom of your bowl. Remove your bowl from lathe and trim away the remaining piece in the center using a carving gouge.



The bowl in this example was turned from green (wet) wood. It does not necessarily need to be as thin as the one pictured below but it is important that it be of uniform thickness and that the pith be cut away from the bottom. Place your finished bowl in a brown paper sack (not plastic) until it is dry. Then you are ready to sand and apply the finish of your choice. If your bowl was turned from dry wood you can sand and finish it right off the lathe

Sit back and admire your job well done!!

