

Turning a Natural Edge Bowl

Objectives

- Learn how natural edge bowls differ from finished edge bowls in the turning process.
- Learn techniques for adjusting and aligning the blank.
- Experience turning “air” as part of the process.

How natural edge bowls differ

When turning a natural edge bowl the resulting bowl will be substantially smaller than a comparable finished edge bowl from the same blank. There will be many cuts where the wood turner will be cutting air – wood – air – wood, etc.

Therefore the tools must be correctly anchored to the body and tool rest and not allowed to climb into the openings offered. It is helpful to increase the turning speed as soon as possible so the tool has fewer tendencies to slip into the voids.

Working with the half-log

In turning natural edged bowls the blank is mounted with the outer surface (bark side) mounted toward the headstock and the flat inner wood surface mounted toward the

Drill out the bark to give the live center a solid bite into the hardwood.
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tailstock. This is the reversed orientation to the finished edge bowl of the last chapter. Be sure to remove a large area of bark where the spur drive will be placed to allow the spur to bite into hard wood for a safer hold.

Mounting the blank between centers with a spur drive and live center allows for some readjustment that may be required during the turning process to get the wings of the bowl even and level with each other. Most designs require the lower wings and the high wings to be aligned with each other. In order to accomplish this, the position of the live center may need to be moved up/down or left/right as the turning proceeds.

As we begin to make the bowl shape we reach the first bark area – the lower wings. Turn the lathe off and rotate the project by hand to measure whether the wings are of similar height.

Check the balance between
The wings to assure
symmetry.

If they are not then the position of the live center in the tail stock is moved one half of the distance of the misalignment to bring them into better alignment. The outside will again be out of alignment and will be re-cut to bring the blank back into balance. Don't forget to cut the tenon for use in the next step.

You may need to adjust the
blank alignment to get the
wings balanced.

Finally the turning proceeds and the rim of the bowl is reached. The high wings are also measured in the same manner and a readjustment in the live center may again be needed. When the exterior is completed the bowl should be sanded then reversed into the scroll chuck. We won't be able to easily cut this area later.

Completing the exterior
reveals the balanced upper
and lower wings.

Start turning away the wood on the interior using the same three-phase cut as before. As the interior is reduced, the high bark edges and the upper wings will become fragile, unsupported, and subject to vibration. Therefore completing the bowl from the rim to the bottom must be done in steps. As the cuts deepen into the bowl there is less and less support and movement at the rim increases. You can't go back to the rim later as it will be unstable and subject to catches or possibly total project destruction. Turn the interior to just below the lowest bark wing area into the solid wood and to about 1" wall thickness. Keep the center of the blank solid for maximum support and minimum vibration.

Start to cut the interior down
to solid wood.

Complete the first inch to final wall thickness by increasing your lathe speed if possible and re-cutting the first 1" to the

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final wall thickness. Check the uniformity of the wall regularly with your calipers.

Because you are cutting both air and wood alternatively be sure the bowl gouge flute is vertical to the bowl's edge and the bevel parallel with the outside wall face. This will reduce the possibility of the tool skating off and tearing the edge.

Now finalize another inch in the same manner, repeating the same cuts for another inch of depth. After completing the second inch of depth, carefully blend it into the earlier first inch with very light cuts or with your interior bowl scraper. Continue these steps one inch at a time until the bowl gouge can no longer maintain a bevel rubbing cut against the interior wall.

Complete the second inch blending it into the first portion.

When the bottom of the bowl is reached or the bowl gouge can no longer maintain a bevel rubbing cut, switch to using the heavy duty bowl scraper to round the inside shape of the bottom. As the bowl deepens it may be useful to rotate the tool rest into the bowl to bring the cutting edge closer to the surface being worked. When you move the tool rest, always recheck clearances by manually rotating the bowl before turning the lathe on.

Continue cutting 1" at a time all the way to the bottom

To complete the bowl's foot, use a jam chuck.