

GARAGE BOWL

Gets Makeover and a Worthy Purpose

Kurt Hertzog



During a recent visit, a friend showed me a bowl he had bought at a garage sale. A non-turner, he bought it for a buck with the intention of sanding it as a side project for amusement. A quick look showed that sanding away the current finish wasn't going to yield the finished project he was expecting. Coincidentally, I was planning on turning a Beads of Courage lidded bowl/box for a young man. My friend and I decided that his garage sale bowl could be the foundation for my project. I knew it wasn't the most accomplished bowl but thought that perhaps

some reworking would make it suitable for this worthy purpose.

The plan

Examining the bowl a bit closer showed that the original maker had undertaken a significant segmenting challenge and had done the best they could at that point in their turning journey. For a segmented piece, it had a puzzling inlay in the bowl center along with a rather clunky solid base with the original faceplate mounting screw holes still evident (*Photos 1, 2*). I'm uncertain as to why these features were retained in the finished bowl, but

they might have been to cover up errors of some kind. At this early stage, I hoped that whatever surprises revealed themselves could be adequately overcome. The starting bowl was rather beefy in its overall shape and finish. My plan was to trim as much weight as possible from the starting 26 oz. and refine the bowl's chunky proportions.

First mounting

To trim excess from the base and reshape the bowl, I decided to reverse-mount the piece on a chuck with large plate jaws (Cole jaws). The rim of the



The Beads of Courage (BoC) program for youngsters undergoing treatments for life-threatening illnesses has long been supported by the AAW. Our annual International Symposium as well as many regional events have encouraged attendees to turn lidded boxes and bowls to hold the beads these youngsters receive after each of their medical treatments. It is a small bright spot for young people undergoing serious medical care.

BoC offers important guidelines for woodturners who want to donate turned boxes. Learn more at beadsofcourage.org/bead-bowls.

The original bowl



1



2

A garage sale bowl, purchased for \$1.00, began as an ambitious segmenting challenge but was clunky in design. It initially weighed 26 oz., with a lot of excess material in the base. After its makeover, the bowl lost more than half its weight, taking on a new shape and a more elegant appearance.

bowl wasn't round or flat, but using the jaws with most of the buttons engaged got close enough to center the bowl, allowing me to true it up (*Photo 3*). Then I could engage the tail center to create a new "true" center point.

A parting tool made quick work of creating a pocket in the base for the jaws of my chuck (*Photo 4*). While this groove was wide enough for either compression or expansion of the chuck jaws, I almost always hold workpieces in compression mode.

With the bowl mounted using the Cole jaws as a friction drive and the bowl securely held in place with tailstock pressure, much of the excess stock in the side walls and base could be removed. But while I could have removed more of the excess at this point, I left some of it in place, as it would provide added support as I worked on the bowl from the top.

Looking inside

The chucking groove I had formed in the bowl bottom allowed me to remount the bowl centered accurately and with full access to the inside and much of the outside. I was eager not only to get the original finish stripped away, but also to see what the "Z" or "N" inlay was all about. Some light cutting and power-sanding uncovered a solid walnut block in the center with a screw hole. At some

First mounting: jumbo jaws



3 The author first mounts the bowl on a set of jumbo, or Cole, jaws, along with the tail center for support. Note the tape on the jaws to protect the workpiece.



4 A chucking tenon is formed in the bottom (see arrow) for a later mounting. Also, the body of the bowl is trued and reshaped.

point, this bowl was held on a mounting screw (*Photos 5, 6*).

Not a lot of reshaping of the inside was required, so I was able to focus on power-sanding and filling the many gaps from the original glue-up using wood glue and sanding dust. Once the glue had cured, I continued power-sanding to get back to the raw wood (*Photo 7*). Not all but most of the construction gaps were filled. I applied epoxy in the central interior screw hole. Since it took quite a bit of epoxy, I guessed the screw hole went quite deep or there was a hidden grotto beneath the surface.

Visual review

While many turners can design on the fly with the work remaining on the lathe, I'm not one of them. Depending on

the project, I find that I do much better removing the work and setting it at the height where it will ultimately be used. In that position, I can get a better idea of the final appearance. Many times, I leave the work mounted in the chuck, unthread the chuck from the lathe spindle, and set the chuck and work down for review. However, since this bowl would be reverse-mounted to continue the process, there was no reason not to dismount from the chuck for visual review.

Discounting the abnormal lift and massive base, I was pleased with the thinning of the wall thickness and the new contours thus far (*Photo 8*).

Workholding

Throughout this process, I used a variety of workholding methods, and there was ▶

Assessing the interior



5 With the underside thinned and reshaped, the interior is addressed while there is still sufficient wall thickness for some cutting and reshaping as needed.

Turning and sanding



6 The author turns away the inlay in the bottom, revealing a solid Walnut block with a threaded hole. Apparently, the bowl had been mounted on a screw at one point.



7 The interior is reshaped and the walls thinned. With the work mounted securely in the chuck, the author power-sands and fills the central hole with epoxy.

Visual assessment



8

A good way to assess the design of a work in progress is to remove it from the lathe. Hence, the importance of reliable mounting and remounting methods. Thus far, the bowl shape is nearly complete, but the base must be reduced further.

Removing wastewood



9

With the bowl remounted on the Cole jaws, the author reduces the solid base, making cuts toward the headstock.

A surprise cavity



10



11

A surprise! The solid base had been glued over an opening in the base. Evidently, the solid block was added to provide a mount since the screw hold wasn't sufficient.

a series of mountings and remountings. In my opinion, one of the keys to success in woodturning is the ability to mount work safely, accurately, and repeatably. Therefore, one rule of thumb is never turn away any positioning or mounting features from the workpiece until you absolutely need to. A good example is the tail center impression/indent. With that still in place, you can accurately recenter a workpiece many times simply by aligning the indent with the live center. My advice is to leave it intact until you *must* remove it; there have been many times I've regretted turning it away too soon.

Refining the base

With the inside of the bowl acceptably shaped and roughly sanded, it was time to tackle the base and foot. The easiest mounting method was to again use the Cole jaws, clamping with as many buttons as possible around the bowl rim and with the work being pressed into the place by tailstock pressure. I used the live center point to help recenter the work, as I wanted the newly created base to fare into the outside bowl walls as seamlessly as possible.

Now it was time to remove the big chunk of solid wood at the base and find out what it was hiding inside. Cutting toward the headstock

provided the best support and allowed the tool to cut facegrain continuously (*Photo 9*). If I had cut from the outside in, I would have been alternately cutting long grain and endgrain with each rotation, likely causing tearout.

Cutting away the solid base exposed the screw holes used for the faceplate attachment but also, interestingly, a hidden pocket. There was a hollow chamber beneath the solid block. The screw mount hole originally used evidently had not been sufficient, so a solid block was glued in place. It had served as a cover for the original, now unusable screw mount, threaded hole, and the faceplate screw mounting material.

With the solid base removed, I had opened a recess revealing the bottom of the screw mounting hole along with a tattered perimeter of wood fibers (*Photos 10, 11*). Now I was able to turn away the tattered edges and cut the inset solid base flat. Removing the tatters exposed some gaps around the solid block. Since these gaps were evident only from the underside, I figured there must have been some engagement near the top of the block. Regardless, I drizzled epoxy into the gap and turned it flush to the corner after it had cured. That would fully fasten that solid center block into the bowl securely.

Finally, I cleaned up and sanded the bottom while the bowl was still held in

A new foot



12

The surprise opening at the bottom, along with the bottom rim, will make for a nice foot. The gaps in the corners will be filled with epoxy and then trued up when the base interior is finish-turned.

Another progress check



13

The bowl is removed from the lathe once again for a visual assessment. The outside shape is acceptable, the base sizing and lift look good, and the bulk of the sanding is complete.

this orientation. I tried up and reduced the size of the foot, making a smooth transition from foot to bowl wall (*Photo 12*).

Of note was a metal particle in the outside of the bowl. It looked like a small brad that was impaled in the padauk. It didn't appear on the inside of the bowl, so it didn't go all the way through. Since it was securely embedded, I just left it in place and sanded it smooth, figuring that digging it out would leave a scar worse than the metal itself.

Removing the bowl from the mounting allowed for a re-examination of the shape. Turning it upside down helped me assess the new curves (*Photo 13*), and I was pleased with the results of my efforts. Now it was time to move on to the lid.

Turning the lid

Rather than measuring the size of the lid, I traced around the bowl rim onto the lid material, as this works quickly and just as accurately (*Photo 14*). I found a block of walnut that was thick enough to allow for sufficient shaping of a lid as well as incorporating a knob. Cutting the corners off the lid blank saved a lot of extra turning and left some small stock for other projects.

I turned the walnut blank between centers to make it round for subsequent mounting on the Cole jaws (*Photo 15*). With the blank round and flat on both sides, I mounted it on the plate jaws, using the tail center indent to help align the work on center. Since the blank had the bowl perimeter marked on its surface, I sized the inside edge of the lid. I shaped the inside contour by eye and created a flat for seating near the inside rim (*Photo 16*).

By removing the tailstock, I had access to check the fit of the bowl to the lid (*Photo 17*). I had intentionally left it undersized, and this allowed me to creep up on the fit that I wanted. A few test fits with minor adjustments created my desired fit. Also with the tailstock removed, I was able to turn away the material that was under the tail center and shape and sand the internal contour of the lid. ▶

Prepare lid material



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Time for the lid. A block of walnut with sufficient thickness to allow for decent shaping is selected and marked for rough cutting.

Rough-turn lid



15

After cutting the corners from the square lid blank, the walnut block is mounted between centers and turned round.

Shape and fit lid interior



16

Now the lid is mounted on the Cole jaws, which act as a friction drive with the tailstock providing holding pressure. The dome of the lid interior is hollowed, and the rim is established.



17

The lid is sized for a good fit to the bowl. The author tests the fit manually, makes small adjustments, and sneaks up on the right fit.

Reverse-mounting, two methods



18

The lid must be remounted for access to its top. One method is a vacuum chuck, which provides full access from center to the edges.



19

Another mounting method is to use a scroll chuck as a jam chuck, or friction drive. Press the workpiece against the jaws, lined with protective tape, with tailstock pressure. Regardless of the mounting method, using the tail center until it has to be removed provides added security.

Next up was to reverse-mount the lid to turn its top surface. Cole jaws would restrict access to the edges, so I wanted to use a different workholding method. Generally, there are two easy methods of holding the lid from the inside, allowing full access to the edges of the workpiece. If you have a vacuum system on your lathe, you can use a vacuum chuck to hold the lid from the inside (Photo 18). Barring that, you can use a friction chuck to drive the lid blank, as shown in Photo 19. A simple friction drive can be fashioned by taping over the jaws of a chuck whose jaws expand enough to provide a good platform. In either mounting method, the tail center is engaged for added support, essentially trapping the work between centers. As noted earlier, the tail center point allows for accurate re-positioning of the blank.

With the lid reverse-mounted, I turned a gentle curve to complement

the overall shape of the bowl. I then sanded the lid, except for the center area where the knob would be (Photos 20, 21).

To turn a knob, I remounted the lid on the jumbo (Cole) jaws, which gave me full access to the center of the lid. I shaped and sanded the knob/pull (Photo 22).

Finishing

The lid was already sanded to the desired level for finishing. At this point, I remounted the bowl, exposing the bottom using the Cole jaws to do any additional sanding. This mounting allowed access to everything except the rim. Once the sanding was completed on the bottom, I remounted the bowl, now with the inside exposed, using the chuck I had previously used as a friction drive. With the tape padding on the jaws still in place, a light clamping of the base provided access to the rim and inside of the bowl. Slow-speed turning

and power-sanding made the inside as ready as it could be.

I chose a simple wipe-on polyurethane finish. Multiple coats per the instructions with plenty of curing time took me to buffing out the finish (Photos 23, 24). I have an attachment to mount my buffing wheels or internal buffs on my lathe. Buffing safely involves appropriate speeds and proper workholding. A common mistake made when buffing is using too much compound on whichever wheel you are working with. In the age of more is better, many load up the wheel with far too much compound, creating more mess than effective buffing.

Completion and a new home

I was pleased with this bowl's transition from a garage sale junker to an elegant Beads of Courage bowl. As I completed the writing of this article, the bowl was being packed for shipment to its new owner, a young man in the Beads of Courage program. I hope the bowl brings him some happiness during what must be a difficult journey of medical treatments. ■

Kurt Hertzog, a retired engineer, has been turning a wide variety of items—from pens to pierced ornaments—for more than twenty-five years. A past AAW president, Kurt has demonstrated and written extensively on woodturning with more than 250 published articles. You can find examples of his work and articles at kurthertzog.com.

Shape and sand top of lid



20

The author turns and power-sands the top of the lid.



21

Turn knob/pull



22

Now the lid is remounted on the jumbo jaws to provide access for turning the knob/pull.

Finish and buff



23

Taking advantage of a warm spring day, the author applies multiple coats of wipe-on polyurethane outdoors.



24

Once the finish has cured, both the lid and the bowl make a trip through the lathe-mounted buffing wheels to achieve the final sheen.