



Turned Wood Bowls

Simon of Ravenwood

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Queen's Prize

Category: Bring Your Best
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Summary

I turn wood bowls on a spring pole lathe that I built.

I try to replicate a style of bowl that was common in Europe throughout the middle ages. While the technology is likely older, extant pieces are commonly dated from the 13th to 16th centuries. (Wood, p. 75-79) There are only small variances in the form between European locations and dates within this time period. Most are roughly hemispherical, typically 6-8" in diameter and 1/4" - 3/8" thick, including an integral base, and showing visible tool marks.



Ash wood Bowl, London c1286



Bowl from The Mary Rose, 1545



Author's recreation, 2020



Background

In the fall of 2018, I built a spring pole lathe and entered it at Tri-Baronial A&S in the spring of 2019. At the time, I'd turned six bowls and worked on one during the event.

By the same event in 2020, I'd turned fifteen bowls. Lacking solid research beyond youtube, I presented them as a display rather than an entry; wanting to make a point about improvement with repetition.

I'd heard of the book "The Wooden Bowl" by Robin Wood, but the library didn't have it. After it was mentioned to me by at least two helpful gentles at the event, I ordered my own copy. It's about the history of the turning trade, woodware throughout the medieval era, and includes his method for recreating period bowls.

As you might imagine, I devoured it.

In some areas my own experimentation combined with knowledge gleaned from traditional turners online was fairly close to the academic work by Mr Wood. In some aspects, I was far wide of the mark.

What I learned

There were two places where my previous method differed from the Wood book, and changing them felt like I made a significant leap forward; in ease working the wood, in quality of my final product, and in closeness of appearance between extant pieces and my own.

While some of my online research pointed toward the grain going left/right through the bowl rather than up/down, the side grain orientation dries to a slightly oval shape. To my modern eye just seemed wrong. According to the Wood text, this is common and was considered normal at the time. Essentially, I needed to get over myself and my perfectionistic tendencies and accept that a little warp was okay.



The other major difference was in prepping the bowl blank and how much work went into shaping the piece BEFORE it ever went on the lathe.

Modern powered lathe turners, often start with a very rough piece and jump right into turning. A bowl made on a spring pole lathe needs to be much closer to round to avoid becoming unbalanced.

It feels counterintuitive to spend so much of one's time 'turning a bowl', not actually using the lathe. Of the approximately six hours it takes me to go from log to bowl, about two and a half hours are spent prepping the blank.

Tools

Spring Pole Lathe – Based on period illustrations of foot pedal lathes from the 14th to 16th centuries. It was entirely hand made without power tools.

Steel gouges and chisels. - Modern, but essentially unchanged in form from their medieval counterparts.

Hand Axe - Used for splitting the log, removing bark, and for evening up the cut face.

Hand Saw - Used instead of an axe for the majority of the bowl blank prep; still a period tool, but far easier on my wrist than the axe.



One modern concession

Mounting the piece on the lathe requires the addition of a mandrel; a thick wood rod attached to the part that will be cut away from the middle of the bowl. This requires a hole drilled into the blank about an inch deep and the tapered mandrel hammered into it. Initially, I used a hand drill for this work to keep it 'in period', but the tool broke in the early weeks of Covid and I had trouble replacing it. I reluctantly switched to my drill press instead, which is the only power tool used on these bowls.

Down the rabbit hole

Shortly after the 2020 event, I picked up a birch log from a local arborist with plans to turn bowls following Wood's methods. A few days later Covid hit, and all of a sudden, I had unexpected amounts of time.

Something about the process or the meditative spinning of the bowl was part of how I coped with the craziness of those first few weeks and months. I turned eleven bowls out of that birch log, and worked my way through some cottonwood and then an aspen log. All of which brings my present total to fifty bowls in a little over two years; the last thirty five of which were in the eleven months since the start of Covid.

Photo at right

Aspen log, October 2020

Photo at far right

Twenty three finished bowls turned by the method described below between March 2020 and February 2021.
Birch, Cottonwood, and Aspen

Not pictured

Fifteen bowls displayed at Tri Baronial 2020
Three incomplete bowls which cracked while turning
One cottonwood bowl so rough it's laughable
One experimental birch bowl turned with vertical grain instead of horizontal (see previous page)
Six small experimental bowls turned from already dried wood
Bowl number 50 which is still drying in a bag of shavings

Bibliography

- (1) The Wooden Bowl by Robin Wood, published 2005 by Stobart Davies, Ltd, Pontyclerc, Penybanc Road, Ammanford, Carmarthenshire, UK
- (2) The Mary Rose Virtual Museum web page, 3D artefacts, <https://maryrose.org/3d-artefacts/>
Extant beech wood bowl, identified as being turned on a spring pole lathe, 1545. One of over 60 similar bowls recovered from the wreck in the 1980s.



Process



Half of a split green log with length and diameter approximately the same



Scribe a circle on the flat face and 45 degree corner cuts.



Saw off corners to make an octagon.



Mark center on bark side. Scribe circle for bottom. Outline areas to cut from bark side at ends.



Saw off angled sections from bark face and mark for corner cuts.



Saw off corners.



Saw and chisel edges between cuts to smooth into a rough hemisphere shape.



Drill 1" hole into center of flat face and hammer mandrel into hole.



Mount bowl and mandrel on lathe as centered as possible.



Spin lathe and remove wood until balanced, then roughly shape bowl exterior.



Remove wood to even up flat face of bowl.



Start to hollow out interior. Stop short of mandrel.



Hollowing the interior will take many, many passes. (It's the fun part.)



When sides are almost thin enough, return to exterior and form base with chisel.



Do several passes with angled gouge for final shaping of exterior.



Shape lip of bowl to remove chips and uneven edges.



Use angled gouge for final shaping of lip.



Check for any rough or uneven spots.



Do any final passes on the interior and taper the center as narrow as possible.



Spin lathe while rubbing with shavings to burnish surfaces.



Remove bowl from lathe and break out center across the grain.



With chisel, remove stub from bottom of bowl.



With gouge, smooth inside of bowl where center was broken off.



Sweep shavings into a paper bag. Bury bowl in bag to dry slowly.



Weigh bowl weekly. Drying is complete when weight stabilizes.