



**CRAFT SUPPLIES USA**  
THE WOODTURNERS CATALOG

PRESENTS

# Turning an End Grain Bowl

*By Darrell Feltmate*



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Recently I was asked on the user group, [rec.crafts.woodturning](http://rec.crafts.woodturning), to explain how to turn a natural edged, end grain bowl. That is, a bowl with the grain running parallel to the lathe bed and the edge of the log left as the bowl edge. If you want a smooth edged bowl, just turn the piece round as you start. It will make sense as we go.



1 I cut a piece of yellow birch to rough out a natural edged bowl and found it to be wonderfully spalted. During the process I cut a slice off the end to get past any cracks.



2 This wood is too good to waste so I have decided to use the slice for this bowl. I will have to turn past the cracks but look at the spalting lines.



3 First I mount it between centers and flatten the end with all the cracks to receive a face plate.



4 Note the washer on the tail stock. I flatten the washer leaving a tenon the size of the washer's diameter. The washer not only prevents the tail stock from digging too far into the piece, it is also selected to be the inside diameter of the face plate. Once the wood is off the lathe the face plate automatically centers on the wood for attachment.



5 The wood is fastened to the face plate with 1" long #14 self tapping sheet metal screws and remounted to the lathe.



6 First I turn the wood down from the face plate to get past the cracks and to get past the screws for the anticipation of later parting from the lathe.

7



In order to be sure I am far enough from the screw tips to fit in a parting tool, I check the distance with a spare screw I keep by the lathe.

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Being far enough in, I part well in to establish the desired bowl bottom. Establishing the diameter helps the eye direct the cutting lines for the final form.

9



I turn the outside of the bowl. Note the wave to the top line.

10



Moving to the top of the bowl, I establish the center and drill a hole to within a half inch of the bottom. I could drill all the way but I like to leave room for changes as necessary. There is no way to know what splits, cracks or other problems may be waiting.

11



The inside of the bowl is turned away. Even though I use a hook tool for the task, there are few shavings due to the nature of the spalting of this wood.

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The bowl is ready to be sanded but the spalt-ing creates another difficulty to be overcome. The surface is rough and will be hard to sand because of tear out.

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I coat the inside and outside with paste wax to ease the sanding. I have no idea why this helps but I know that the wax will speed up the first sanding immensely. The wax I am using is a blend of 2 parts mineral oil, to 2 parts vegetable oil to 1 part bee's wax. In this case I will start with 60 grit and proceed all the way to 2000.

16

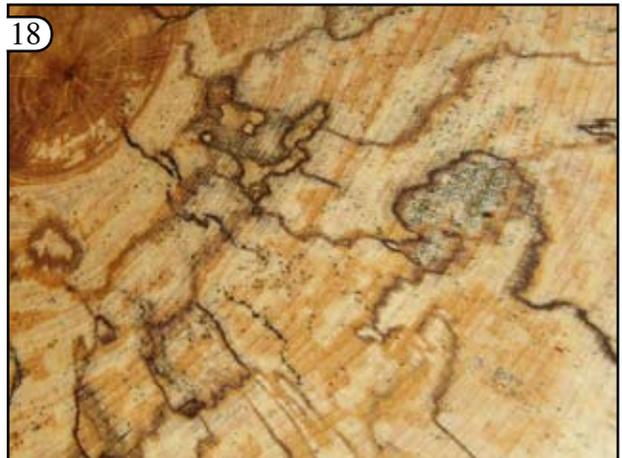


The bowl is sanded and ready for the finish.

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18



A good finish demands a good surface.

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I have been using double boiled linseed oil lately for a finish and really like it for yellow birch.

20



Then the parting tool is used to cut away the tenon and the bowl is cut away from the lathe with a saw. The bottom will be sanded later, after the oil is dry.

21



The finished bowl measures about 7 1/2" x 2"

**EDITORIAL NOTE:**

Due to the tendency of end grain wood to warp while drying, it is recommended that end grain bowls be turned with very thin walls. Thicker walls are likely to crack during the drying process while thin walls are generally flexible enough to avoid cracking.

**ABOUT THE AUTHOR**

Darrell Feltmate is a part time woodturner who has enjoyed giving back some of what he has learned to the woodturning community. He resides in a heavily wooded area of Nova Scotia, Canada with his family. Darrell comes from a long line of woodworkers and has truly enjoyed the craft of woodturning. You can find more of Darrel's tutorials and woodturning techniques by visiting his website, located at [www.aroundthewoods.com](http://www.aroundthewoods.com).

