

# TURNING MUSHROOMS

## Introduction and Thoughts on Design:

The mushroom is an excellent project in which to practice turning ogee curves and to develop your skills in undercutting tops and bottoms. It is a small object that can be made from fallen branches, small ornamental trees, or shrubs that need pruning. Play with the design of your mushrooms as they grow in many sizes and shapes. You may want to consider turning multi-axis or off-center mushrooms to make them look more natural. They also make great gifts for people who like to collect knick-knacks. The mushroom can be sanded and finished to a high gloss or the original tool marks can be left on for a more natural look. Have fun with this project, remembering to focus on tool technique as well as the finished mushroom.

## Materials:

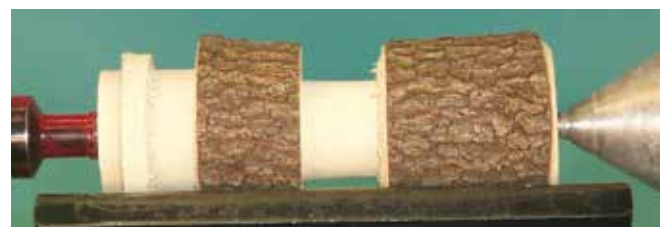
Faceshield  
2" to 3" dia. x 4" long branch or other wood  
Drive center  
Bearing center  
1¼" spindle roughing gouge  
⅜" spindle gouge  
¼" parting tool  
⅛" Chris-Stott-style parting tool

## Procedures:

1. Select a branch or small trunk approximately 2" to 3" in diameter and roughly 4" long. Actually the diameter can vary a great deal and the length can vary, as the actual size is not that important. I have made them as large as twenty inches tall and twelve-plus inches in diameter.
2. Mark the centers on the ends and put a dimple in the center of each end as an aid to mounting on the lathe.
3. Mount on the lathe between centers. I prefer to use a steb center in the headstock and a bearing cone center in the tailstock. Occasionally I turn a tenon on the piece for mounting in a chuck, as this method allows full access to the top for finishing and eliminates the final step of hand sanding or carving the nub left behind when turning between centers.
4. Decide approximately where the bottom lip of the top and the bottom are going to be located, and be sure not to turn the bark off these areas when the piece is turned round.



5. Begin by rough shaping the top and the area for the stem. Practice turning the ogee for the top with the ⅜" detail gouge.
6. As the top begins to take shape, switch to a parting tool and roughly define the area for the stem and base. Remember to leave room for the ogee at the base that the stem grows out of, and the bark edge at the bottom of the base. Room must also be left in the base to undercut the base and part it off. Also, there needs to be room between the dead center or chuck and the bottom of the base for the tools to access this area when parting off.
7. When doing the final cuts on the top near the bark edge, start the cut the same way that you would start a cove cut. The flute is in the closed position, the handle is lowered slightly, and the thumb is acting as a stop to prevent the tool from skidding across the bark edge. Slowly raise the handle as you drop the cutting edge into the cut, while feeding the cutting edge straight in until a space has been cut in which to ride the bevel. Then roll the flute gradually into the open position as your body and the tool handle roll through the cut and do their weaving motion to create a flowing ogee curve. This is a wonderful, flowing motion with the body, tool, and flute all rolling together in a nice, even movement or dance. This move is one of the reasons I like to have some nice music playing in the background. ▶



**Note:** I refer to this motion as the hip-shake-wiggle as my hips start out parallel to the bed of the lathe and then rotate away from the lathe as I turn the cove and then as I start the bead section of the ogee, my hips roll back in toward the bed of the lathe and end up back in the starting position as I flow smoothly through the ogee cut.

8. With the top finished, it is now time to work on the stem and base. As the stem has already been roughly defined, I begin with the ogee at the base and blend it into the stem. This cut in the base is similar to the final cut on the top.
9. Work can now begin on trimming the stem and undercutting the top. To undercut the top, I use a thin parting tool. My favorite tool for this job is the Chris Stott parting tool ( $\frac{1}{16}$ " thick and approximately 2" wide). Start where the stem meets the top and take small cuts, working your way to the outer edge of the top. Each cut should progress deeper under the top.

**Note:** I like to grind the tip of my  $\frac{1}{16}$ " Chris Stott parting tool at a skewed angle to make it easier to match the stem to the undercut performed on the back side of the top.

10. Now it is time to finish shaping the stem. This is done using the  $\frac{3}{8}$ " detail gouge. Be sure to ride the bevel in order to control the cut.

11. Where the stem meets the top, the thin parting tool can be used in a scraping cut to blend these two parts together. The parting tool presents fewer opportunities for getting a catch than if a spindle gouge were used to perform this cut.
12. The mushroom can now be sanded and if you're using a friction polish, it should be applied now. I generally finish my mushrooms off the lathe and spray them with several coats of lacquer or shellac.
13. Using the parting tool, part off the finished mushroom. Make a wide part to provide room for undercutting the bottom of the base. To undercut the base, start at the center and work your way out with light cuts. The final cut should progress from the outer rim to the center. Remember to be ready to catch the mushroom as it is parted off. To be safe, you can leave a  $\frac{1}{8}$ " stub, stop the lathe, and cut the mushroom off with a carving tool or knife by hand.
14. Admire your finished piece or spray it with lacquer and set it aside, to be admired again later.
15. That was easy, so why not do another one? Better yet, read the following handout and make a mushroom box with hand-chased threads. Even better, buy Allan Batty's DVD titled "*Hand Thread Chasing*."

