**Turning: From Blank to Bowl**

Turning a bowl is a complicated process. To make a high-quality bowl, many hours of work are needed. This paper will outline instructions for turning a piece of wood into a bowl, starting from the rough plank and ending in a finished, food-safe bowl.

1. *Design the bowl.* With a pencil, sketch the shape that you would like your bowl to be. Do some research to make sure that the shape you have chosen is sturdy and stable, and not likely to break while on the lathe or soon after. Then, decide on the dimensions of the entire bowl and of every separate part of the bowl (e.g. the foot, the thickness of the walls, the length of the lip). Make a more detailed sketch of the bowl with the dimensions drawn in.
2. *Find a fitting piece of wood.* Any piece of wood that you pick should be large enough to fit your dimensions, and should not have any cracks in it. These cracks could become larger while on the lathe, and result in your bowl blowing off or not being watertight when you go to use it. Some popular types of wood are ash, cherry, mahogany, oak, and poplar.
3. *Cut out the blank.* Once you have chosen a piece of wood, draw lines connecting opposite corners using a ruler or straightedge. Put the point of your compass where the lines meet in the center of the piece of wood, and draw a circle slightly larger than you would like the final size of the bowl to be. The reason to leave it slightly larger is so that you leave some room to round out the bowl, and gives you room to make mistakes when cutting it out. Using a bandsaw, cut out the circular piece of wood in the center of the larger piece of wood. If you try to keep the center of the circle in the same spot and move the edge of the circle around it, you will get a much more uniform and round cut.
4. *Attach the faceplate.* Using the lines you drew to the center of the circle, center a faceplate on the blank and screw it on, making sure not to let the faceplate get off-center while you do so. Preferably use screws such as decking screws, as they are not too long and can stand the large amount of torque exerted on them while the lathe is spinning.
5. *Turn the outside of the bowl.* Attach the bowl to the lathe with the faceplate. If the blank is very roughly cut, a bowl gouge is the easiest way to round the blank out before you shape it further. Once the blank is almost perfectly round, begin shaping it to the design you made in step 1. When you’re still taking off lots of wood, the bowl gouge is probably still the best tool, but you should switch to the disk-bladed tool once you get to more precise work. Once you have the outside the way you want it, move the toolrest around to the side of the bowl opposite the faceplate and either make an outward or inward foot. Inward feet are stronger, so that’s what I’m going to describe here. Using the skew, make a depression in the bottom of the foot. Make sure you have the chuck you are going to use handy so that you can check if the foot is big enough for the chuck to fit on. Make the inside walls of the foot sloped out from the bottom of the foot to the part closest to the top fo the bowl. Finally, sand the outside of the bowl using progressively less rough sandpaper, finishing by buffing the bowl with it’s own wood shavings and rubbing off the sawdust with sandpaper.
6. *Put on the chuck.* Attach the chuck to the newly made foot. Tighten it enough so that the bowl won’t blow off but not so much that the foot cracks. Attach the bowl back to the lathe.
7. *Turn the inside of the bowl.* Using the bowl gouge, get rid of most of the wood on the inside of the bowl. Once you only have a small amount of wood left to take off, switch to the disk-bladed tool and then finally to the scraper. Once the inside is free of tear-outs, repeat the sanding and buffing from step 5.
8. *Finish the bowl.* Cover the entire bowl in Butcher Block or Tung oil, wait 20 minutes for it to dry, and then put on another coat. Wait another 20 minutes for the second coat to dry. Your bowl is done!