Turning Offset Bowls

Introduction

Today's demo will focus on turning small, offset bowls on any size lathe and with only a few tools. There are many different methods to accomplish this. The process you will learn today is best used to turn bowls 8 inches in diameter or less. For larger bowls other methods are more suitable.

Getting started

1. Selecting a turning blank. Because offset turning may present some challenges to turners it is best to choose blanks between 2 1/2" X 6" to 3" X 8" in size. These sizes will allow you to turn an offset bowl on most lathes with a 10" swing and larger. Smaller sizes will also help to minimize the amount of vibration you have to manage as you turn your bowl.
2. Mounting the blank. Mounting your blank can be done in any way you like. That said, I have found that mounting between centers or with a wood-worm screw is the fastest way.
3. Tools. The only tools you will need are a bowl gouge and spindle gouge. A parting tool or skew may come in handy to make your initial cuts when turning the offset(s) and may also help in reducing tear out with your initial cuts.

Turning your bowl.

Outside

1. Mount your blank using your preferred method.
2. True up your blank by rounding out the outside edge.
3. Begin cutting and shaping the outside profile of your bowl. No exotic shapes are necessary. Just turn a simple profile.
4. Turn a tenon. Size the tenon to your chuck jaws. As most turners have 2" jaws for their chucks, and because these are small bowls, a 2" tenon is perfect.
5. Rather than make a 1/8" to 1/4" tenon, ***make the tenon extra long***. This is important because the longer tenon will allow you to turn the offset cuts later on. I suggest a 3/8" to 1/2" tenon. Use 1/2" if your chuck jaws will allow this.
6. Cut your tenon with a standard dovetail. The dovetail will help you get a good grip when making offset cuts.
7. ***Sand & Finish the outside of your bowl.*** Once you begin your offset cuts it will be difficult to go back and finish the surface of your bowl because of the angled surfaces. You can finish the bowl after you have completed your turning, but it will add a considerable amount of time to the process.

Inside (the Bowl)

1. Reverse the bowl and "flatten" the face. I prefer to cut a convex profile on the face, but flat is OK.
2. Bevel the outside edge. Once again, this is optional, but not necessary if you want to turn a simple, but elegant bowl.

3. ***Setup for your first offset cut.*** Loosen your chuck jaws and tilt one side of the tenon away from the face of the jaws. A 1/4" gap between the face of the chuck jaws and the bowl is a good place to start. Adjust the gap to the size of offset you desire. More gap = more offset. Use your tail stock and live center to hold the bowl.
4. ***Before starting your lathe,*** turn the speed to zero and ***slowly turn the bowl by hand to view the amount of wobble or offset***. Take time to set your tool rest to allow clearance between the bowl and the rest. Looking at the wobble or offset will also help you in adjusting the amount of offset as needed.
5. Start the lathe at its lowest speed and slowly increase the RPM. Turn up the speed until you can feel vibration and back it down some to where it runs smoothly.
6. ***Carefully look for the outside edge of the bowl.*** Because of the wobble you will not see a clear outside edge. Instead you will see what looks like a "shadow line". That shadow line marks the outside edge of your bowl. Begin turning your offset. You can start cutting from either the center or the outside of the bowl. I prefer to start at the center and move my cutting to the outside. This allows me to adjust the diameter of the depression. If this is your first time making an offset cut be careful. Take very light cuts with a sharp tool. Aggressive cuts will probable lead to a severe catch and could possible cause your bowl to come out of the chuck.
7. **Option:** Once you have achieved the desired diameter of your depression, using a parting tool or a skew can help you clean up the outside edge of the depression.
8. ***Finish the inside of your depression.*** If you take the bowl out of your chuck it will be very difficult to get back to the original alignment. I highly recommend you sand and finish your depression before take the bowl out of the chuck.

Bottom (You have two options for final turning the bottom.)

1. You can remove the tenon just like you would for a "normal" bowl. If you select this option, the bowl will sit flat on a table top and the offset depression will be the main feature.
2. You can turn an offset bottom and create more interest in the piece because it will sit at an angle on a tabletop.

<u>Mounting for turning the bottom.</u>

3. If you just want to remove the tenon and have a flat bottom, you can use Cole jaws, a Longworth chuck or a jam chuck. If you choose a jam chuck, make sure you turn it large enough to hold the outside to the bowl.
4. If you want to turn an offset bottom you will need to turn a jam chuck to hold the bowl with the depression you have previously turned.
5. I will skip explaining how to turn off the tenon, because you all have done this many times.
6. Mount your bowl with a piece of foam, etc. between the face of your jam chuck and the depression in your bowl. Carefully push your live center into the bottom of your bowl, offsetting the tip. The amount of offset will determine the angle for the bottom of your bowl. More offset = more angle.

7. Line up the grain of your bowl with the offset. I think it looks best if the grain runs parallel to the bottom angle.
8. Begin turning your offset. You can start cutting from either the center or the outside of the bowl. I prefer to start at the center and move my cutting to the outside. This allows me the watch how the outside edge of the bowl will develop as I continue my cuts. Once again, use light cuts with a sharp tool.
   Caution: Watch out for the outside edge. It can rap or cut your fingers if you don't pay attention and accidentally touch the bowl while it is spinning on the lathe.
9. Finish sanding the bottom on a belt sander or by hand.

Your Finished Bowl!`