5/17/2006

Natural Edge Bowls

Safety:

Natural edge bowls, by their nature, have rough edges and a curved top edge. This makes them a potential hazard for fingers. Therefore, take care to keep your fingers away from the spinning outside edge of the bowl, as it is often hard to see.

Procedure:

1. Wood selection:

    a. Select logs with tightly attached bark, unless you plan on taking the bark off. Logs cut in the winter when the sap is down have the best chance of having tightly attached bark.

    b. Select logs without cracks.

2. Pick a good orientation for the centerline of the bowl. A poor orientation will produce a non-symmetrical bowl, unless that is what you are going for.

3. Mount the bowl with the bark side toward the headstock. Turning between centers is almost always a must.

    a. If a spur drive (live center) is used, then drill a hole through the bark to solid wood. A few drops of CA glue can be used to firm up the wood so .the center has a good surface to grip. Trying to use the Spur drive in the bark is a very bad idea; the bark isn't a strong enough material for the spur drive to hold.

    b. A faceplate or woodworm screw can be used but the tailstock is still required. The curved face of the log does not provide adequate support when turning (it will wobble and it will be hard to get a good smooth cut with your tool).

    c. Make sure the tail stock center is in good/solid wood, or you risk the piece coming out of the lathe.

4. Turn the outside of the bowl. Turn a foot/tendon/spigot on the bottom to be mounted in a chuck. Make final cuts and scraping cuts as required so the outside is ready to sand. Power sanding will be done after the bowl is off the lathe.

5. Apply CA glue to the outside edge of the bark, and to the soft growth layer just under the bark. This will help hold the bark in place (we hope).

6. Turn the inside of the bowl. Decide on the wall thickness first. The inside will be cut out in stages. The first stage will set the wall thickness, cut to a depth 1" to 1 1/4" for each stage. Be sure to perform the finish cuts and any necessary scraping done prior to starting another, deeper, stage. WATCH YOUR FINGERS AND TOOLS that top edge is hard to see.

7. Apply CA glue to the inside edge of the bark at each stage as the bark is exposed.

8. With the turning done, place the bowl and a cup of water in the microwave. Microwave on high for one minute. Take the bowl out to cool for a few minutes, take care, as it could be quite warm. After two or three passes through the microwave the bowl should be ready to power sand.

9. Power sanding is usually done off the lathe. However, the bowl can be remounted in the chuck if it is easier to control while sanding.

10. When power sanding on or near the bark edge always, always make sure the edge of the disk that is cutting/sanding is turning so that it is moving from wood to bark. Otherwise the sandpaper disk will catch on the rough edge and may be damaged or knock off bits of bark.

11. After power sanding the bowl can be reversed so the foot on the bottom can be turned, or the foot can be ground off with a belt sander. A special chuck can be made to fit into the bottom of the bowl but it is often just as easy to put a pad over the chuck and press the bowl over the chuck, holding it in place with the tailstock.

12. Perform any necessary final sanding on the bottom.

13. If the wood is still moist then it is usually best to let the bowl set until it dries enough to finish. Usually a week to a month.

Tom Orton