

Chesapeake Woodturners took their demo gear to the Richmond AAW Symposium to perform the "Learn to Turn" demo during registration Thursday afternoon. As part of the "Learn to Turn" demo, our objective was to produce some toys for the symposium's "Return to the Community" program connected to Childrens Hospital of Richmond. As you can see in the "Return to Community" photo, this program brought in a substantial pile of toys -- but none of the items on the table came from Chesapeake, and I apologize to the membership for not getting us involved in this more effectively before the Symposium.

During the "Learn to Turn" demo we produced several baby rattles (see photo at end) guided generally by a design from Nick Cook in the Fall 2004 AAW magazine. We went to Richmond with 40 blanks, and now we need to turn the rest of them into rattles and get them down to Richmond, better late than never. Special thanks to my friend Jim Stevenson for cutting the plugs while I am limited to one arm, and to Kevin at Exotic Lumber for milling the blanks.

All the blanks will come to you with rattle beans already installed in a drilled cavity plugged to hold the beans. Your job is to shape and finish the rattle, and I suggest the following procedure, feel free to modify to suit your style:

- 1) Mount a blank between a spur center in the headstock and a live center in your tailstock, with the plugged end toward the tailstock.
- 2) Rough the square stock blank down to a cylinder, aiming for the maximum diameter you can get from the blank.
- 3) Measure 4" from the PLUGGED end and make a mark. You will form a cove for a handle between this mark and the HEADSTOCK. The area between this mark and the tailstock is drilled to hold the beans, and you don't want your handle cove to cut into this cavity.
- 4) Begin roughing out your handle cove between the mark and the headstock. Your final shape does not have to match Nick Cook's shape exactly but you should follow its general idea of providing an area for small hands to grip, with a bit of detail to appeal to the grow-nups.
- 5) Smooth up the cylinder toward the tailstock, again keeping as much diameter as possible. Consumer Product Safety Commission regulations require a rattle to be at least 1-11/16" in diameter if it has rounded ends as these do (16 CFR 1510). Since our blanks start as 2" squares, this should be no problem, but it would be wise to measure your final diameter to be at least 1-11/16", and a bit more is fine.
- 6) Begin rounding off the plugged tailstock end toward a nicely rounded shape. 16 CFR 1510 does not require a hemisphere, but a rounded end must not protrude through a 1-11/16" hole 1-3/16" deep (see test jig #2 in regulations). At the plugged end aim to cut off not more than 1/8" of the plug as you round off the end; the plugs are just over 9/16" long when installed and we should not cut them down very much. Don't cut down so far now that you risk the end breaking off the tailstock before you finish the rest of the rattle.
- 7) Begin shaping the headstock end along the same guidelines as for the tailstock end. Leave

enough material to support the ends while you turn the handle area to final shape.

8) Turn the handle area to its final shape. Aim for a final diameter of 1/2" to 5/8" so that small hands can get a grip. Rattle test regulations include what amounts to a test of handle strength when twisted or bent, so don't go less than 1/2".

You can be a bit creative in this area but there should be no sharp edges. You can round back now into the 4" area toward the tailstock but remember that there is a 3/4" cavity in there.

9) Look the whole thing over for pleasing curves, etc and make any corrections you wish -- but bear in mind that the children who use these will be much too young to care. At this point you are finessing for your peers.

10) Turn the two far ends down to about 3/16", just enough to support the rattle while for finishing, and begin sanding to 220-320. Be sure to get off any rough edges or splinter-like spots.

11) Apply a generous coating of mineral oil all around and let it soak in for a couple of minutes, adding more to the ends for the endgrain to soak up if you wish. Wipe down with a paper towel, then spin to apply some beeswax, which you should rub in and polish a bit with a dry paper towel.

12) Cut off ends as cleanly as you can and clean them off with a sharp knife or chisel. Apply a bit of mineral oil and beeswax, polish overall, and go back to 1) to start another one.

