

Detroit Area Woodturners Demo

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BIRDHOUSE ORNAMENT

Most of these designs and processes were developed by the late Dale Nish. Also, Eugene Schlaak has a very good write up on www.wooturningonline.com

SUPPLIES NEEDED

Body blank: 2" diameter x 2 ½" long
Roof blank: 2 ¼" diameter x 2 ½" long (for different body shapes)
1/8" drill bit
¼" drill bit
3/16" drill bit
5/8" forstner bit
Mandrel for roof (see diagram)
Mandrel for body (see diagram)
Birds of choice (factory direct)
Ornament hangers (optional) www.factorydirect.com
Screw eyes

There are many different methods used to produce these birdhouse ornaments. After researching various articles from different turners, the following is my version. The use of mandrels will tremendously assist in turning the outside of both the body or roof in one setup and will also reduce material waste.

TURNING THE BODY

- 1) Select a block of wood approximately 2" square by 2 ½" long
- 2) Turn between centers to form a tenon on one end.
- 3) Chuck tenon and turn to desired diameter (approximately 1 5/8") stopping about ¼" away from chuck.
- 4) Face end perpendicular to side.
- 5) Use a sharp 5/8" forstner bit and drill a hole 1 ½" deep.
- 6) Mark the location for the birdhouse opening and the perch holes (see diagram). Using a drill press and a V-block, drill the holes using a ¼" and 1/8" drills respectively. The hole for the perch should be drilled to the right or left of the birdhouse opening depending on which way the bird is facing.
- 7) Return to chuck, (tenon side) and mark the 3/8" by 1" cove dimensions (see diagram). Machine cove paying attention not to go smaller than the 1" dimension.

- 8) Hollow the interior of the body to lighten part. It is important to leave about $\frac{1}{8}$ " of the $\frac{5}{8}$ " diameter hole at the bottom untouched. This is required so that the mandrel registers both at the top and bottom of the $\frac{5}{8}$ " hole. I use a small hooked scraper for this process. Use the birdhouse opening to gage the wall thickness. I usually aim for about $\frac{1}{8}$ " wall thickness.
- 9) Mount the body mandrel in the chuck. At this point it is important to mark the mandrel at #1 jaw, so that it can be returned to the same position every time. Using the tail stock for support shape the outside to the desired shape, keeping in mind that there is $\frac{5}{8}$ " hole $1\frac{1}{2}$ " deep. A finial can be incorporated as part of the body or as a separate entity. If you opt for a separate finial, drill a $\frac{3}{16}$ " diameter hole at the bottom of the body.
- 10) Sand the outside of the body.

TURNING THE ROOF

- 1) Select a piece of wood approximately $2\frac{1}{4}$ " square by $2\frac{1}{2}$ " long. Turn between centers to form a tenon.
- 2) Chuck tenon and turn to just round stopping shy of the chuck.
- 3) Face end perpendicular to side.
- 4) Using a $\frac{5}{8}$ " forstner bit, drill to a depth of $\frac{5}{8}$ ".
- 5) Using a divider mark a 1" diameter on face. Use a square scraper to form a counterbore of about $\frac{1}{8}$ " deep for the body to fit in. I angle the wall of the counterbore to accommodate the sloping sides of the body cove. Use the body to check for fit.
- 6) Chuck the roof mandrel and mark jaw #1 for future mounting. Mount roof on mandrel and using the tailstock for support shape as desired. Drill a hole for the screw eye and sand.

TURNING THE FINIAL

Turn the finial for the body (if required). Here various materials and shapes can be used, so suit yourself. Make sure you turn a $\frac{3}{16}$ " tenon to fit the hole in the body.

ASSEMBLING THE BIRDHOUSE

If using dyes, stains or paints for either, body or roof, now is the time to do so, otherwise glue the roof to the body (I use regular wood glue). For the perch, cut a piece of $\frac{1}{8}$ " dowel about $\frac{3}{4}$ " long and glue in the perch hole, leaving enough dowel protruding for the bird to sit on. If applicable, glue the finial. Apply finish of choice. I use deft sanding sealer and 5 coats of Deft spray lacquer. Glue the bird to the perch using hot glue as this remains flexible and prevents the bird from breaking off the perch.

*These notes are for guidance only, the outside shapes, sizes, color, wood choices and finishes are personal preferences and will enable you to introduce new design opportunities.

