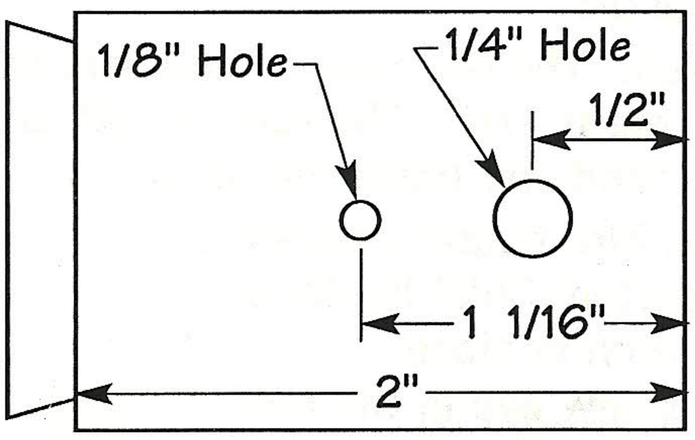
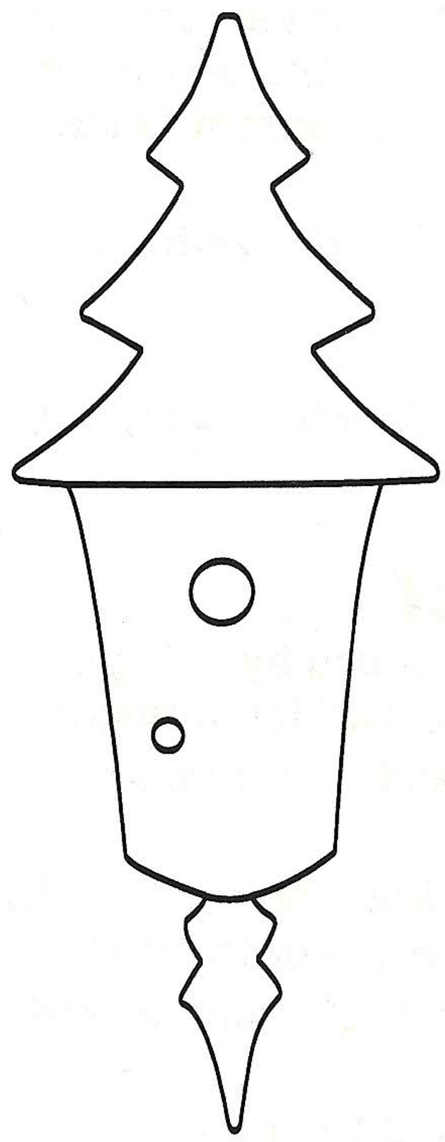
Birdhouse Ornament #3

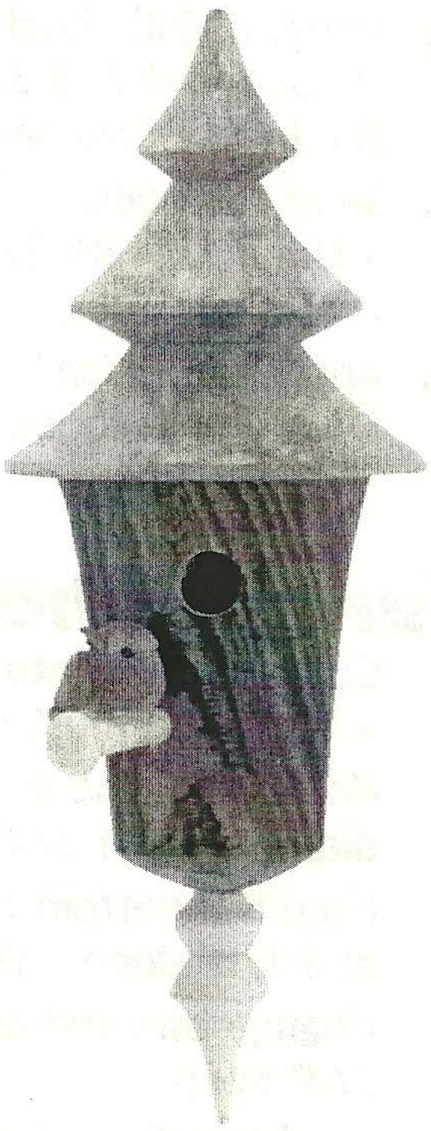
Craft Supplies USA

Turning the Body

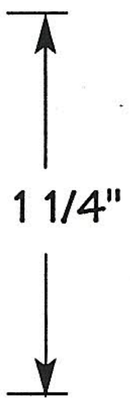
1. Turn a cylinder to 1 3/8" diameter and 2 1/4" long.
2. Square the ends with a parting tool and cut a 5° shoulder on the bottom end for holding the cylinder in a chuck.
3. Decide on the front of the body and mark the entrance hole and perch hole.
   - Center punch the hole.



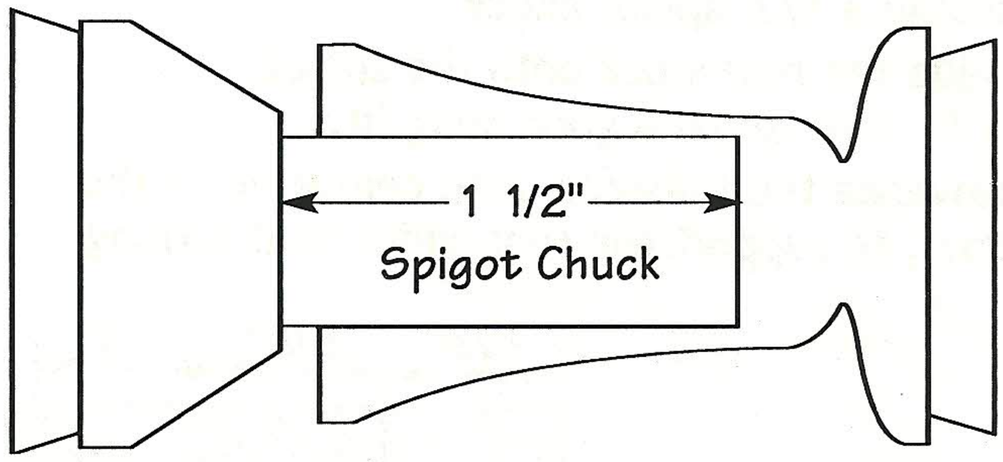




4. Drill the 1/4" entrance hole 1/4" or so deep.
   - Use a V-Block and the drill press.
5. Drill the 1/8" perch hole 1/4" or so deep.
6. Place the body in a chuck.
   - Use the skew point to make a small entry hole so the drill bit will stay on center.
7. Drill a 5/8" hole to a depth of 1 3/8".
   - Don't go too deep.
8. Turn the outside to shape as much as you can without hitting the chuck jaws.
   - Leave a 1/8" shoulder at the top of the body where the diameter is finished to 1 1/4". This shoulder will fit into the top.



9. Prepare stock and turn a spigot chuck to the following dimensions.
   - The spigot will be 5/8" dia. by 1 1/2" long.
   - Check the diameter with a 5/8" wrench.

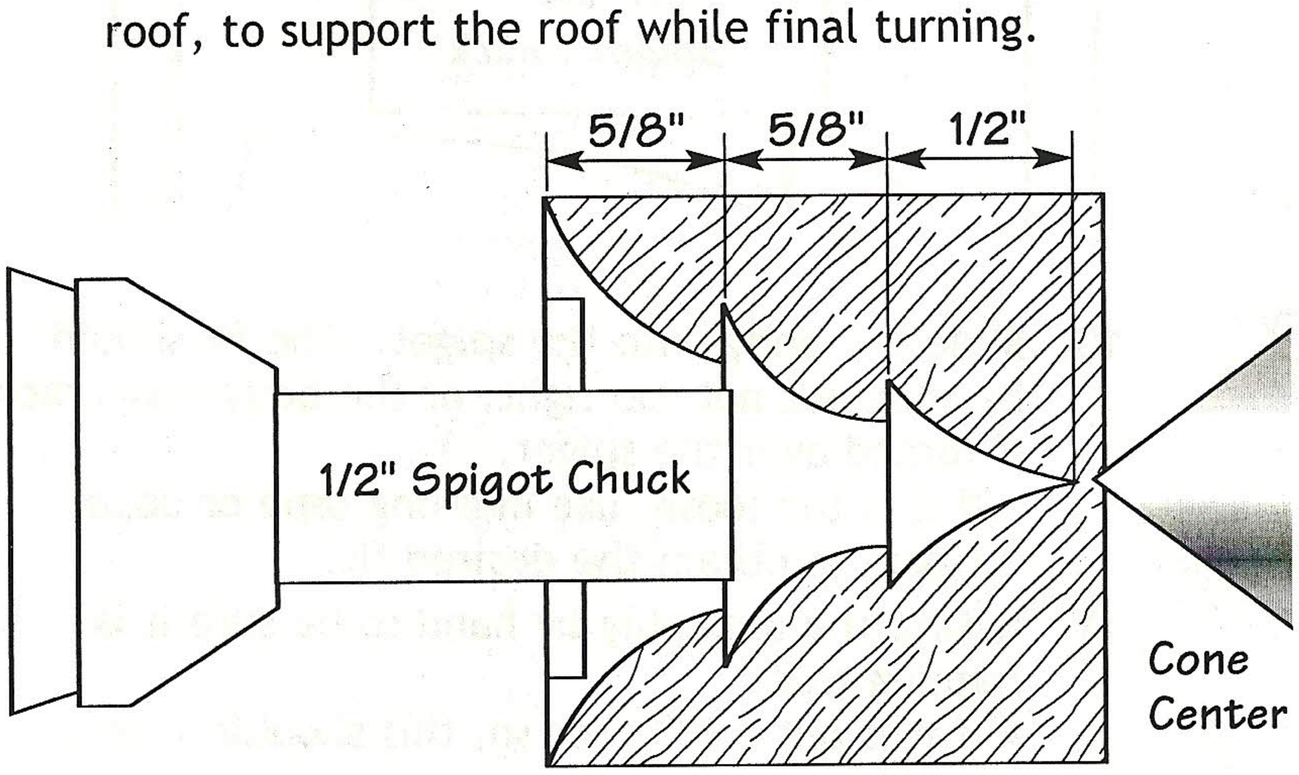


10. Slide the body onto the spigot. The fit should be snug but not too tight, or the body may crack if forced over the spigot.
    - If it is too loose, use masking tape or paper tissue to obtain the desired fit.
11. Rotate the assembly by hand to be sure it is running true.
    - If it is out a 1/16" or so, this shouldn't be a problem.
    - If it is out too much, make the necessary adjustments.
12. Move the cone center up to point of contact with the body, and advance it into the wood until the cone center spins when the lathe is turned on.
13. The finished body length is about 1 5/8" so about 3/8" will be turned off the body.
14. Turn the lower part of the body to a pleasing curve similar to the drawing.
    - Use a 3/8" spindle gouge and cut down toward the cone center.

15. When most of the curve has been cut, slide the cone center out of the way and complete the shaping of the bottom.
16. Insert a drill chuck with 3/16" bit into the tail-stock and drill a 3/16" hole into the bottom of the body. This hole will fit the bottom finial.
17. Sand the body.
    - Use 100, 150, 220, 320 grit paper with a 2" velcro holder.
18. Apply the finish.
    - I prefer lacquer, either by brush or spray can.

Turning the Roof

1. Cut out stock into a disc 2" round by 2" high.
   - The grain must run up the roof for strength.
2. Mount the disc in a chuck and true it up at a diameter of 1 3/4".
3. Face the bottom off, then drill a hole 1 1/4" dia. and 1/8" deep. This fits the top of the body.
4. Change bits and drill a hole 1/2" diameter and 3/4" deep.
5. Sand and finish the bottom of the roof.
6. Install a 1/2" spigot chuck.
7. Slide the roof stock onto the spigot.
   - Be sure to get a good snug fit.
8. Advance the tailstock cone center up to the roof, to support the roof while final turning.



9. Sand through 320 and apply finish.
10. Drill in the hole in the top of the roof to fit the screw eye.
    - Do this while the roof is still on the spigot.

Turning the Finials

1. Turn a square down to a dowel. My chuck will fit 1/2" so that's what I use. However, don't make the dowel too thin or you get excess vibration when turning the finials and perch.
2. Turn the bottom finial with the 1/4" dowel end towards the headstock. Support that end with a cone revolving center.
   - Be sure the dowel end is 1/4" diameter. Check with a wrench.
   - The length of the finial and its shape is up to you.
3. Sand and finish the outside of the finial.
4. Part the finial off.
5. Turn the perch. The diameter of the part which goes in the hole is 1/8". The total length is about 3/4". Sand and finish the perch.
6. Assemble the bird house ornament.
   - Glue the bottom finial in place.
   - Glue the perch in place.
   - Insert the screw eye in the roof.
   - Glue the roof to the body.
   - Glue the bird to the perch.