

SKILL-BUILDING PROJECT

Turn a BEEHIVE ORNAMENT

Walt Wager



Every year, I try to come up with a unique holiday ornament. In 2018, my wife suggested I turn a beehive ornament. Beekeeping has become a serious concern in our county in Florida, as bees are under attack from several dangers, such as pesticides and mites. Bees are so important to our agricultural community that they deserve a special place in our consciousness. The beehive ornaments have been very popular in my holiday sales, and they are relatively easy to make.

Although today's beehives are essentially wood boxes, in the past they were made of woven straw coils formed into an upside-down, basket-like structure called a skep. Skeps are seldom used today because the wood box hive is so much more efficient. Yet the skep remains an iconic image of the beehive.

Rough-turn the blank

Start with a blank 2" (5cm) square and 4" (10cm) long. The first step is

to rough-turn part of the blank and then form a chucking tenon. In this case, my initial workholding method was to capture the square blank in the chuck jaws and bring up the live center for added support (*Photo 1*). *Note:* When chucking a square blank, always use the tailstock live center to prevent it from being pulled out of the chuck during turning. An alternate initial holding method is to mount the blank between centers. Rough the tailstock end of the blank to round and form a tenon sized for your chuck (*Photos 2, 3*).

Reverse the blank and secure the tenon in the chuck, as shown in *Photo 4*. Using a proper tenon (as opposed to proceeding with the square blank chucked in the jaws) provides lateral support for the blank, so it can be drilled and turned without the live center in place. Still, it is always safer to use the live center when possible for the greatest amount of support. Finish roughing the blank to round, and square up the end of the blank

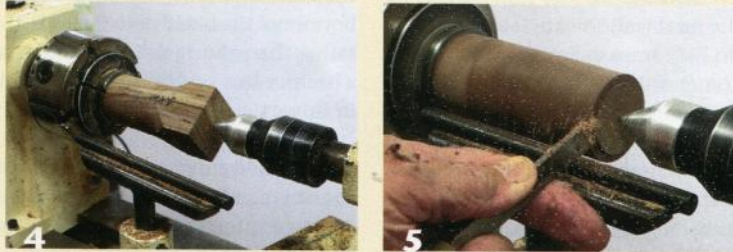
Rough blank, form tenon



1 Mount a blank and form a tenon. Starting with the workpiece mounted between centers would also work, rather than using a chuck.



Remount, square up end



Remount the piece, now holding the tenon in the chuck jaws. Face off the end using a parting tool or spindle gouge.

Mark and drill



Drill a hole to aid in hollowing. Masking tape on the drill bit provides a visual guide to confirm drilling depth.

using a spindle gouge or parting tool, as shown in *Photo 5*.

Drill, shape, and hollow

Draw a line $1\frac{1}{2}$ " (38mm) from the end to indicate drilling depth. Using a $\frac{1}{2}$ " (13mm) drill bit mounted in a drill chuck in your tailstock, bore a hole $1\frac{1}{2}$ " deep (*Photo 6*); this hole will aid in hollowing the beehive later.

Now draw another line $1\frac{3}{4}$ " (4cm) from the end to indicate the top of the beehive. Using a bedan or parting tool, reduce the diameter of the blank from the tailstock end to the $1\frac{1}{2}$ " mark to $1\frac{1}{2}$ " diameter (*Photo 7*). Don't reduce the diameter of the rest of the blank, as it will later become the base of the beehive.

Using a parting tool, form a groove just to the left of the $1\frac{3}{4}$ " mark, defining the length of the beehive. Leave at least $\frac{3}{4}$ " (19mm) diameter to support the beehive while you hollow the inside (*Photo 8*).

Start shaping the outside of the beehive. I like to use a small spindle gouge, cutting from the largest diameter downhill to the smallest diameter—in this case, from right to left, as shown in *Photo 9*. The rough-turned outer profile will aid in determining wall thickness when you are hollowing.

Move the toolrest to the end of the beehive and set the height so that the point of a $\frac{3}{8}$ " (9.5mm) spindle gouge ►

Shape outer profile

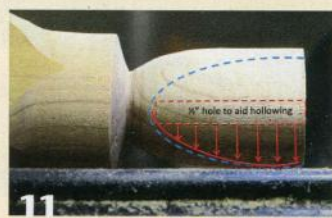


An additional line indicates overall height of the beehive. Make a parting cut here but leave enough material for support during hollowing.



Shape the outside of the beehive.

Hollow the beehive



The author hollows the endgrain form using a spindle gouge, pulling the tool from center hole left to the outer wall.

will be cutting at the centerline of the hole when the gouge handle is parallel to the lathe bed. To hollow the beehive, rotate the flute of the spindle gouge to the left so that it faces the 10 o'clock position. Pull the tool from the center hole toward the outside rim of the beehive, as shown in *Photo 10*. *Photo 11* shows the direction of the hollowing cuts, from the center hole outward. As you hollow deeper,

pull the gouge along the inside edge to remove the chips and to cut the walls to an even thickness (*Photo 12*).

The final wall thickness should be $\frac{1}{8}$ " to $\frac{3}{16}$ " (3mm to 5mm); don't make the outer wall too thin because later you will form beads on the exterior surface that will go $\frac{1}{16}$ " (1.5mm) deep.

You can now use the spindle gouge to shape the top a bit more before parting it off, as shown in *Photo 13*. You will have a chance to finish the top in a later step.

rounding the top of the beehive (*Photo 16*). A creative alternative, if you have the tools and skills, is to thread the bottom of the beehive to the top, rather than gluing it. This would create a beehive box such as the one shown in this article's *opening image*.

Make a line about $\frac{1}{8}$ " past the glue joint to indicate where the bottom of the ornament is going to be.

The next few steps involve turning and finishing the beads. Shown in *Photo 17* is a commercially available beading tool. While this is a handy way to make nice, even beads, it isn't necessary. You can also use a shopmade point tool to form the beads (*Photo 18*).

When you have finished forming the beads on the outside of the beehive, sand between the beads with the edge of a piece of 220-grit sandpaper.

JOURNAL ARCHIVE CONNECTION

EXPLORE!

In his June 2015 *AW* article, "Shopmade Beading Tool" (vol 30, no 3), Bob Patros shows how to make your own beading tool from an old spindle gouge.



Reverse-mount, form beads

Use a parting tool to form a tenon about $\frac{1}{8}$ " deep on the waste wood that remains in the chuck. Then glue the beehive to the tenon (*Photos 14, 15*). When the glue has set, use a spindle gouge to finish

Remount on jam chuck



13 Part off the shaped beehive.



14 Make a jam chuck of the wasteblock remaining in the chuck. Glue the beehive onto the tenon of the jam chuck. A portion of the wasteblock will become the bottom of the beehive.



15

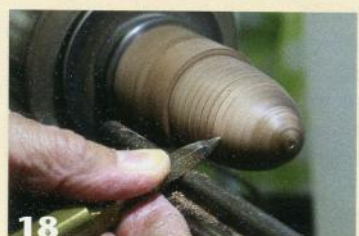
Form beehive beads



16 Finish shaping the very top of the beehive using a spindle gouge.



17 Form beads to achieve the look of a traditional skep. There are various tools that can accomplish this task.



18

Drill an entrance hole into the hive just above the base using a $\frac{1}{4}$ " twist bit (Photo 19). This is also a good time to drill a small hole in the top of the beehive for an eye screw. For this ornament, I used a black ink marker to emphasize the base of the hive before parting it off (Photo 20). Sand the bottom and apply the finish of your choice. I prefer a lacquer sanding sealer, which I can buff using a buffing wheel.

Turn the bees

You can purchase ready-made bees from a craft supply store, but I have found that customers buying these ornaments prefer my shop-turned bees. Start with a length of $\frac{3}{4}$ "-square scrap wood. Mount the blank in spigot jaws and support it using the tailstock live center. Turn the blank down to a $\frac{3}{8}$ " cylinder. You could

also simply use a $\frac{3}{8}$ "-diameter dowel secured by gluing it into an appropriately sized hole in a wasteblock.

Turn a series of bee body shapes using a small spindle gouge. This is basically a series of beads (Photo 21). The head and thorax of a finished bee will be about $\frac{5}{8}$ " (16mm) long, with the head being $\frac{1}{8}$ " long and the thorax $\frac{1}{2}$ " long.

I use India ink markers to color the heads and thoraxes of the bees, as shown in Photo 22. After coloring the bees, apply a fixative spray so you can paint wings over the colored bodies later.

Cut the turned bees in half using a scroll saw, thin-kerf bandsaw, or a thin-kerf Japanese pull saw. *Safety Note: When cutting round pieces on a scroll saw or bandsaw, be sure to hold the work securely in a V-block or other jig.* Then crosscut the bees apart and use a

sanding stick (made by gluing sandpaper to a craft stick) to smooth the cut ends. Use the same color markers to touch up the cut ends.

To add wings to the bees, use a small brush to dab a touch of pearlescent paint to the thorax (Photo 23). Glue the bees to the surface of the hive using silicone or craft glue (Photo 24).

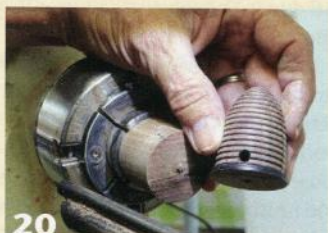
Your completed beehive ornament will make a great gift any time of year. They always remind me of the importance of honeybees as pollinators for our vegetables, fruits, and flowers. ■

Walt Wager has been an active member of the AAW since 2002. He teaches woodturning at Camelot's Woodworking Studio in Tallahassee, Florida. View Walt's work on his website, waltwager.com, or contact him at waltwager@gmail.com.

Drill and part off



19
Drill an "entrance hole" near the base of the beehive.



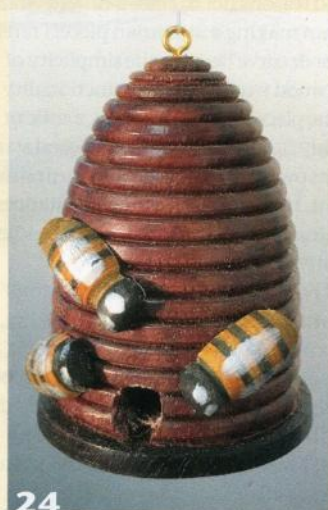
20
The author added black ink to accentuate the base prior to parting off the form.

Turn and color bees



23
A length of scrap can be shaped to emulate a series of bee bodies. The author adds color, cuts them apart, and paints on wings.

Completed beehive ornament



24
Complete your ornament by gluing the bees onto the beehive and adding an eye screw at the top.