



# The Art of the Dry-Bud Vase

Joshua Friend

A simple and elegant way to bring nature into your home is to display dried flowers in vases. What we generally consider weeds often produce beautiful flowers that can be found growing wild. A dry-bud vase is also known as a weed pot.

At first glance, these vases may look like small-scale hollow turnings, but this project employs a hole drilled from the tailstock into the wood. As the name implies, the dry-bud vase is not intended to hold water, although it is possible to purchase a glass tube to fit into the vase for that purpose.

This straightforward project is ideal for practicing basic skills: rough turning from square to round, forming a tenon, using a four-jaw chuck, drilling with the tailstock, and shaping a design.

## Getting started

Just about any species of wood can be used, so long as it is sufficiently dried. Using green (unseasoned) wood for this project is not ideal; the wood might crack as it dries. To choose the size of your blank, imagine how tall you want the vase to be and how wide at its widest point. Cut your blank slightly larger than these dimensions and add about 3" (8cm) to its length so you won't be working uncomfortably

close to the chuck when you part the vase off the lathe.

Mount the wood onto the lathe between centers and rough it to round (*Photo 1*). Form a tenon on the tailstock end, sized to fit your chuck (*Photo 2*). The shoulder of the tenon should rest on the top of the jaws and its length short enough not to bottom out in the chuck.

Using the tailstock for support, cut across the endgrain at the tailstock end to achieve a clean cut (*Photo 3*). A small bowl gouge works well because it offers easy bevel support for the cut, but you may prefer a spindle gouge or skew chisel. With the tailstock in place, you will not be able to cut all the way to the center. Cut as far as you can, remove the tailstock, and gently finish cleaning up the endgrain (*Photo 4*). Working this far away from the chuck without tailstock support is likely to produce vibration, and a catch could pull the piece out of the chuck. It is essential to use a sharp tool and only take light cuts. Using a skew chisel, make a small indentation in the center of the cylinder.

## Drilling with the tailstock

It is useful to have a Jacobs chuck that fits into your lathe's tailstock, which will ensure the hole is on center

and parallel with the workpiece. If you purchase a chuck, make sure its Morse taper fits into the quill of your tailstock. See sidebar for instructions on how to safely secure a Jacobs chuck in the quill.

Slide the Jacobs chuck into the quill and chuck a  $\frac{3}{8}$ " (10mm) drill bit. Bring the tailstock up so the drill bit is almost touching the wood and lock the tailstock. The same general rules apply for drilling here as in other drilling situations, except the wood is spinning and the drill bit is not. The larger the bit, the slower the wood should be spinning. Back the drill bit out often to clear the chips, being sure to hold onto the Jacobs chuck if it has not been secured in the quill.

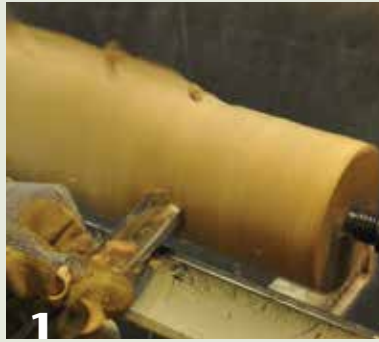
Turn the quill wheel to advance the drill bit into the spinning wood (*Photo 5*). The depth of your hole will depend on the height of your bud vase, but leave about 1" (25mm) thickness at the bottom so you don't end up with a hole in the vase after parting it off the lathe.

### Shaping your bud vase

At the entry point of the hole, cut a gentle slope so the curve flows into the drilled hole. With the Jacobs chuck removed and the tailstock out of the way, use a small bowl gouge to take gentle, light cuts toward and into the hole (*Photo 6*). You will be cutting against the grain; if the wood does not cut cleanly, switch to a small round-nose scraper and lightly cut from the center toward the rim, with the grain. Use a small piece of rolled-up abrasive to clean up any frayed fibers around the hole (*Photo 7*).

The overall proportions of your vase are a matter of preference. I favor a narrow neck that flares at the top. Before starting to shape your vase, use the tailstock with a cone center for support.

To remove a lot of wood quickly from a cylinder, make a peeling cut with a skew chisel (*Photo 8*). It is easier to learn this cut using a small ▶



1 Rough the bud vase into a cylinder.



2 Form a tenon, sized to fit your chuck.



3 Cut across the endgrain to achieve a clean cut.



4 Remove the tailstock support and clean up the remaining area, taking light cuts. Establish a center point using a skew chisel.



5 A Jacobs chuck in the tailstock is an easy and accurate way to drill on the lathe (see sidebar for safety note).



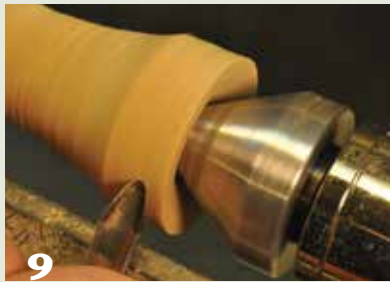
6 Refine the mouth of the vase using a sharp bowl gouge with light cuts.



7 Sand the opening to soften the opening of the hole.



8 A peeling cut is useful for removing material quickly.



9



10



11

Form a bead at the top of the vase. A revolving cone center makes turning and blending the bead into the hole easy.



12

Add a distinct transition between the bead and the neck of the vase.



13

Temporarily remove the cone center and finish refining the opening of the vase using light cuts.



14



15

A small spindle-roughing gouge works well for shaping long curves. Cut in a downhill direction to go with the grain of the wood.



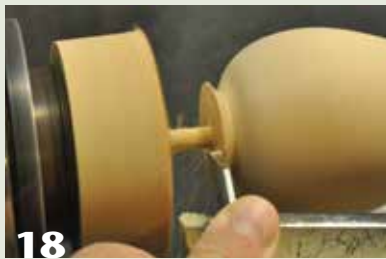
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A spindle or detail gouge is best for getting into tight spaces and clearing away excess wood to give yourself room to work.



17

Sand the vase. Apply finish next if finishing on the lathe.



18

Make final cuts on the foot giving it a concave surface. Use a small handsaw to cut the vase off the lathe. Hand-finish the bottom.

skew chisel than a wide one, which requires a heavier cut. The peeling cut is similar to that of a parting tool. With the handle down and just the bevel lightly touching the cylinder, ease the cutting edge into the wood by simultaneously lifting the handle up while pushing the cutting edge toward the center axis. This motion helps to keep the cutting action just under the surface of the wood as the diameter is being reduced. It may help to imagine peeling the skin off an apple with a knife to visualize the dynamics of this cut.

When the flare of the neck is at a pleasing length and diameter, add a bead at the top of the vase. Visualize where the center of the bead will be and start your spindle gouge in that location with the flute wide open (facing you). Lift the handle slowly until the cutting edge engages and the bevel is rubbing. Twist the tool clockwise to begin forming the bead. To form the left side of the bead, make the same cut, but twist the tool counterclockwise (Photos 9, 10, 11). It may be necessary to make repeated cuts to refine the smoothness of the bead.

To make a distinct transition between the bead and the lower part of the vase, add an angular cut leading to the base of the bead (Photo 12). One final step before shaping the neck and lower body of the vase is to refine the top of the bead so it blends smoothly into the slope at the top of the vase. With the tailstock out of the way, make light cuts (Photo 13). Or, you may even want to use abrasives.

Using the cone center for support, begin to shape and refine the neck and body of the vase. A small spindle-roughing gouge offers plenty of control on long gradual curves. Cut from larger to smaller diameter (Photos 14, 15). There is a hole drilled into the neck, so leave enough wall

## Safety Note

### Jacobs Chuck in the Tailstock Quill

Recently, I was drilling a hole into the end of a cylinder using a Jacobs chuck mounted in the tailstock. Normally, I hold onto the Jacobs chuck when I drill so its Morse taper will not pull out of the tailstock. Morse tapers are not designed to pull, they push.

As I backed the drill bit out of the wood, my failure to hold onto the Jacobs chuck caused the Morse taper to come out of the tailstock quill. The drill bit caught the turning and threw it to the floor, bending and ruining the drill bit in the process. It could have been much worse if I had been using a large Forstner-style drill bit, drilling into endgrain. I might have personally suffered the consequences.

I posted a photo of the bent drill on the WoodCentral online forum and received several good suggestions; the best was Lyle

Jamieson's. He drilled the quill on his tailstock and then drilled a matching shallow hole in the Jacobs chuck's Morse taper into which he inserted a pin so the drill chuck does not come loose or spin. It was a great idea that I took one step further.

I drilled a hole into the quill and tapped it with a 1/4x 28 tap. I cleaned up the burr on the inside with 220-grit abrasive wrapped around a pencil. I inserted the Jacobs chuck into the quill and marked the location of the hole. Using a Dremel with a cutoff wheel, I ground a rectangular flat onto the Jacobs chuck's Morse taper and threaded a short setscrew into the hole. (The setscrew needs to be shorter than the wall thickness of the quill.) Now all I have to do is insert the Jacobs chuck and tighten the setscrew and the chuck does not spin or pull out.

—John Lucas



(Left) Bent drill bit

(Below) While drilling holes, a setscrew safely keeps the Morse taper of a Jacobs chuck in the quill of the tailstock.



thickness for its final diameter—in this case, no smaller than 3/4" (20mm). Use calipers to check your progress.

When you begin shaping the bottom of the vase, it may be helpful to remove some material. Take a peeling cut using a parting tool or skew chisel to provide more room to work. Leave extra wood between the bottom of the vase and the chuck to act as a buffer between your tool, your hand, and the chuck. In this tight space, use a small spindle or detail gouge (Photo 16).

### Sanding and parting off

Sand the vase (Photo 17). If you are going to apply a finish on the lathe, do so now; however, I typically apply a spray varnish or lacquer after the vase is off the lathe.

Use a parting tool to reduce the waste wood. Slightly undercut

the foot to ensure the vase will sit flat on a table, which can be accomplished by lightly angling a parting tool to the right and using its top edge to cut the wood (Photo 18).

With the lathe off, use a fine-tooth saw to cut the vase off the lathe. Carve the nub off by hand and sand the bottom smooth. Apply finish to the unfinished area.

All that is left to do now is find some attention-grabbing flowers to display and surprise that special person with your handmade bud vase. ■

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