

## White Oak Trivet

White oak isn't necessarily the first choice for this type of scroll saw project, but my plan is to create trivets for my wife, each illustrating the leaf and nut of a particular tree, and each using the appropriate species. Sooner or later, I'd have to take on white oak. What I found was that the porous, straight grain of white oak tends to grab the scroll saw blade and pull it along. As a result, it's very important to move slowly and have plenty of sharp blades on hand. If you're just starting out, you may want to experiment a little with a softer, open grained wood like butternut, walnut or poplar. I've found that cherry tends to burn fairly easily, so prepare yourself for lots of sanding when you make your cherry trivet. Once you have a little practice in, find a nice clear piece of 1/2" white oak stock with straight grain and do this regal tree justice.

## **Photocopy and Glue Your Pattern**

Get started by planing your 1/2" stock to a smooth finish. Now photocopy the pattern on the facing page. If you have access to a copier that enlarges or reduces, you can alter the size of your trivet to your own needs. I used double sided the pattern to my stock. With all the holes you'll be drilling and all the fine cutting, you want to be real sure that the pattern stays firmly in place. Some woodworkers prefer spray-on glue for this process but I don't like worrying about glue penetration. Once the pattern is firmly in place, move to the drill press and start drilling out your entry holes, using 1/8" and 1/4" bits to drill as many holes as is practical for each waste area. For the holes at each end of the leaf veins I used a 1/16" bit.

Now move to the scroll saw and begin the slow process of inserting your blade through each entry hole and removing the excess stock. The final cuts on the inside are the leaf veins. To reduce the amount of potential chipping at this stage, cut the main vein first and then come back to cut the side veins. I recommend cutting at a slower speed to reduce burning (about 1,000 strokes per minute) and using a No. 7 blade, which worked well on the white oak. When you're faced with a curve that's a little too tight to turn around in, make a series of straight-in cuts and use the set of the teeth to smooth out the shape. This applies to all outside and inside cuts, and is a very important technique on this type of project. Once you've removed all the waste outside of the pattern, and the thin lines at the top and bottom. These hold the shape of the leaves and have a minimal affect on the strength of the piece. When all the waste stock is removed, peel off the pattern and start sanding. An awl wrapped with sandpaper works nicely for the small curved areas, and you'll probably find other variously shaped tools in your shop that can serve as sanding blocks. Try and get a little bit of a bevel on the top edges when sanding, particularly for the acorns.

To keep your trivet 1/4" off the table top, sand down four screw hole buttons (preferably oak) and glue them in position, as shown on the next page. Since hot items will be placed directly on the trivet, I recommend several coats of a quality tung oil to finish this project.

