

# Whale Tail Shelves

Pocket holes make a seemingly complicated project simple.

These classic shelves are easy to build thanks to the pocket-hole joints that attach the shelves to the sides. While pocket holes aren't a traditional joint, they allow you to build pieces that might otherwise be too complex. (If so inclined you could even build a kitchen using pocket-hole joinery, but the screws would add up in cost).

To build these shelves, based on a design from Contributing Editor Troy Sexton, buy two 8'-long 1 x 6s (which actually measure approximately  $\frac{3}{4}$ " x  $5\frac{1}{2}$ "). Sight down the boards to check for cupping or twisting. And while you're at the home center, pick up a couple hangers so you don't have to make a second trip (at least it got me out of the office).

Before you start cutting, make a pattern for the sides. Cut a piece of cardboard to 5" x 26" (just a wee bit bigger than the shelf side) and draw a 1" grid on it. Using the grid as your guide, copy the curve from the pattern on the next page onto your full-size grid. Use a utility knife to cut out the pattern, employing a fluid hand motion. It's best to make a few light cuts than to try to cut through the several paper layers in the cardboard all at once.

Now use your miter saw to gang crosscut three 27" pieces of wood for the shelf sides (it's always good to have a spare), clamp them together and trim the ends flush. Be careful not to take off too much, as 27" gives you a

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Photo by Al Parrish

small margin for error, and you'll want a bit of that remaining for the next step.

Put double-sided tape on two of the boards (this will help keep them from slipping) then clamp them together and trace the pattern on top. Use your jigsaw to make a few relief cuts at the top and bottom of the curves, as shown below right, then cut along the edge of the pattern. When finished, clean up the edges with your rasp, file and sandpaper.

Next, gang cut the four shelves to final length on the miter saw. Test-fit the shelves between the two sides, and mark the width

in relation to the curve of the sides, as shown above right.

Set your jigsaw's blade to the angle that matches the line, and rip each shelf to width. Clean up each cut as necessary with a block plane or a rasp and sandpaper.

Next, mark the placement of the pocket holes on the bottom of each shelf,  $\frac{3}{4}$ " in from each long edge. Set the jig for  $\frac{3}{4}$ "-thick material, and make a few practice holes in scrap material. When you feel confident, line up the mark on the shelf with the mark on the jig as shown at right, secure the shelf in the jig, and



Clamp up your three side pieces (one is an extra) being sure to align the long edges as much as possible. Then, trim the ends flush.



Use double-sided tape and clamps to keep your side pieces firmly together as you make your relief cuts and curve cuts.

Fit the shelves against the two side pieces, and carefully mark the width in relation to the curve of the side. Then, cut with your jigsaw.



drill your pocket holes using the bit provided in the kit. For the best result, keep the angle of your drill in line with the angle of the hole, and squeeze the trigger while the bit is at the top of the hole to allow it to get up to speed before making contact with the wood. Now drill the remaining 15 pocket holes.

Before assembly, sand all the parts to #180 grit (stop at #120 if you plan to paint it).

Using a scrap piece of material as a clamping block to help secure the shelf to the side as shown at far right, clamp the top shelf to the top of one side and drive pocket screws through the two pocket holes and into the side, using the driver provided in the kit. For the best result, set your drill on a low speed and clutch setting, to avoid stripping the screws.

Now, attach the three remaining shelves to that side. Then attach the other side to the unit.

As shown, the whale tail shelf has three coats of brushed-on amber shellac. Sand between your coats with #320-grit steared paper. Wipe off the dust with a tack cloth, and add a couple coats of aerosol lacquer before attaching hangers to the back. **PW**

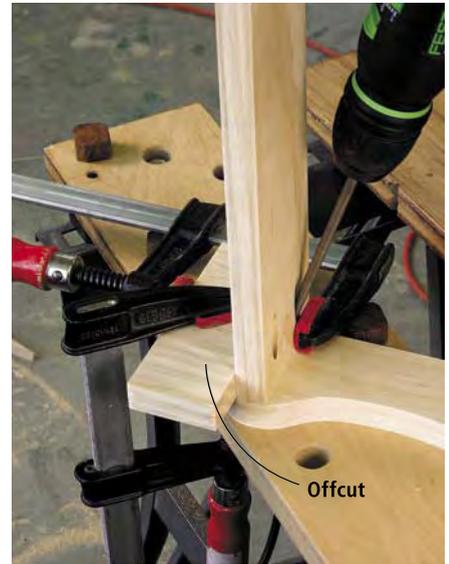
## ABOUT THIS COLUMN

Our "I Can Do That" column features projects that can be completed by any woodworker with a modest (but decent) kit of tools in less than two days of shop time, and using raw materials that are available at any home center. We offer a free online manual in PDF format that explains all the tools and shows you how to perform the basic operations in a step-by-step format. You'll learn to rip with a jigsaw, crosscut with a miter saw and drill straight with the help of our manual.

To download the free manual, visit [ICanDoThatExtras.com](http://ICanDoThatExtras.com).



After securing the board firmly in the jig, squeeze your drill's trigger and allow it to get up to speed before drilling into the wood.



An offcut makes a handy clamping block to help you keep the shelves in place as you drive the pocket screws.

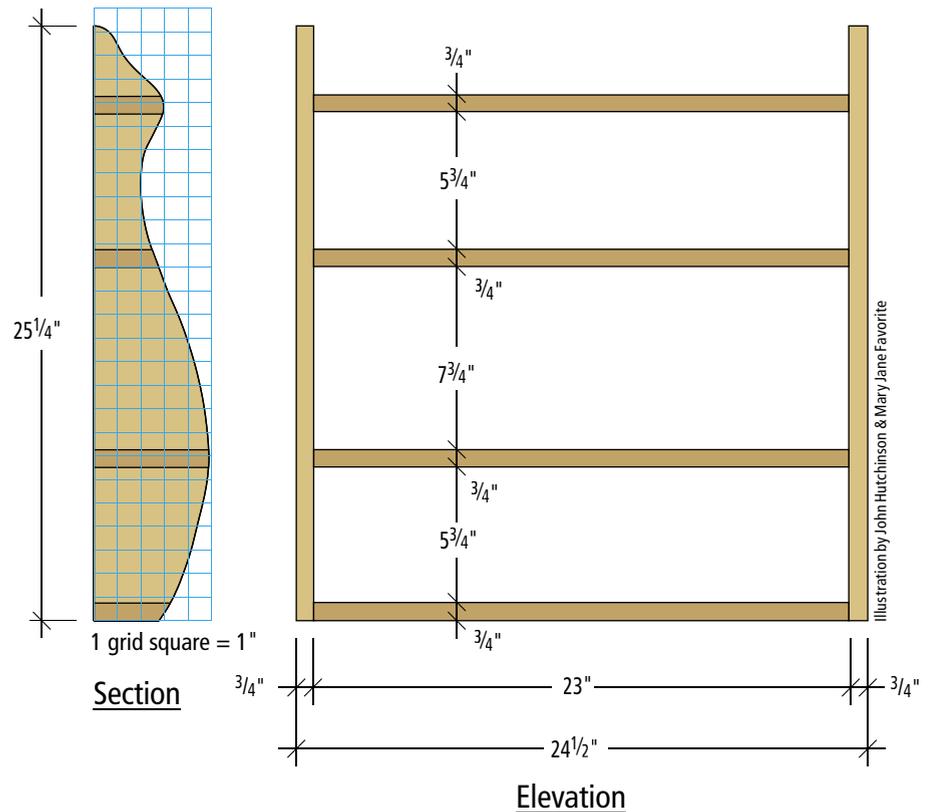


Illustration by John Hutchinson & Mary Jane Favorite

## WHALE TAIL SHELF

NO.	ITEM	DIMENSIONS (INCHES)			MATERIAL	COMMENTS
		T	W	L		
2	Sides	3/4	4 7/8	25 1/4	Pine	
4	Shelves	3/4	5 1/4	23	Pine	Trim to fit