

# Hall Table with Flair



Inspired by a local flower, the natural curves of this table make it a California original

BY JENNIFER  
ANDERSON

I designed this entryway table when I was a student in the Fine Woodworking program at College of the Redwoods. Many of my classmates were designing furniture with legs that tapered from thick at the bottom to thin at the top, a style we called “Gumby” legs. Inspired by the calla lilies that grow wild near the school on California’s north coast, I took a different approach.

To echo the flower’s shape, I gave each leg a pronounced taper, topped with a gentle curve, on both outside faces. I cut away the table’s top at each corner to put these graceful shapes on full display, and I shaped the apron faces to harmonize with the profile of the legs. I built the table from shedua, with maple for the drawer sides and bottom.

The piece is a treat to build. The design is not as complex as a carcass piece but goes beyond a simple table with drawer, adding a few wrinkles that will help you grow as a woodworker.

There’s a variety of joinery, from traditional mortise-and-tenon joints to dovetails to dowels, and real pleasure in shaping the legs and aprons. For this, I blend machine work and hand tools.

CALLA LILIES

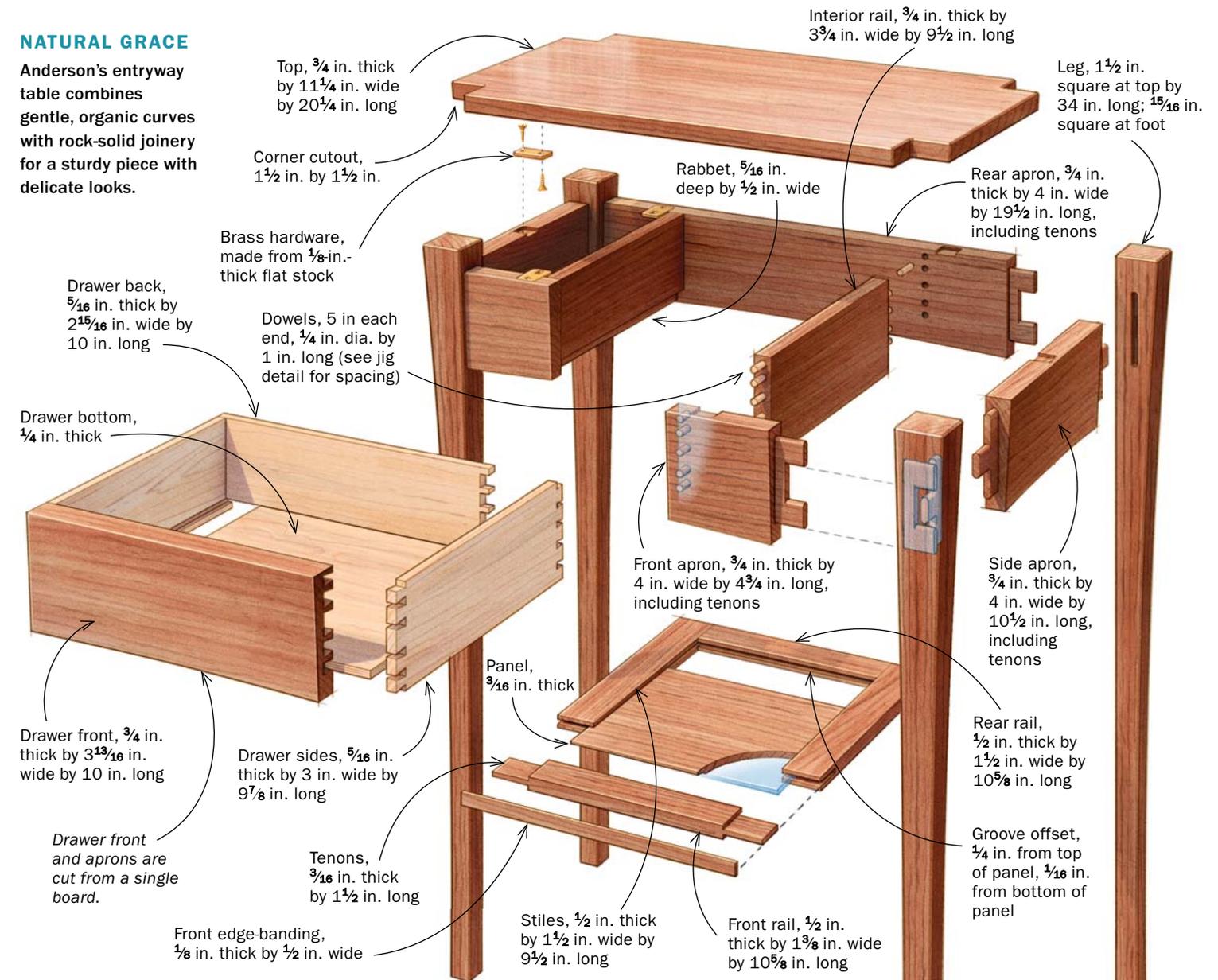


## Start with the joinery

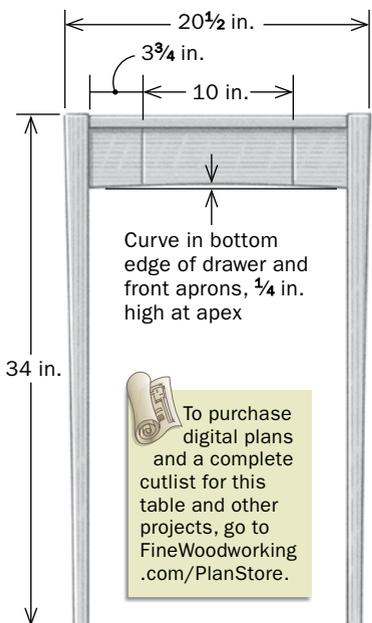
Cut all of the joinery while the stock is still square, but first

## NATURAL GRACE

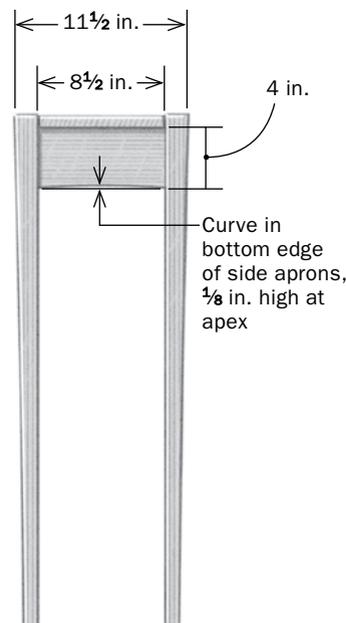
Anderson's entryway table combines gentle, organic curves with rock-solid joinery for a sturdy piece with delicate looks.



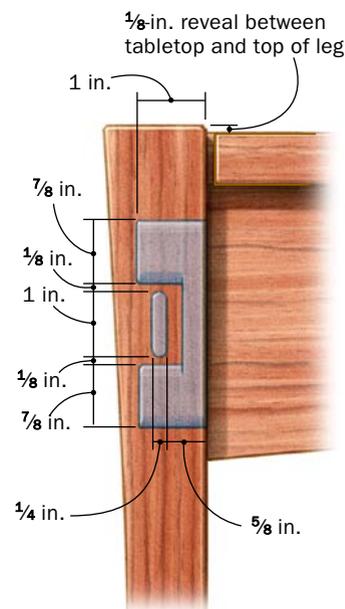
### FRONT VIEW



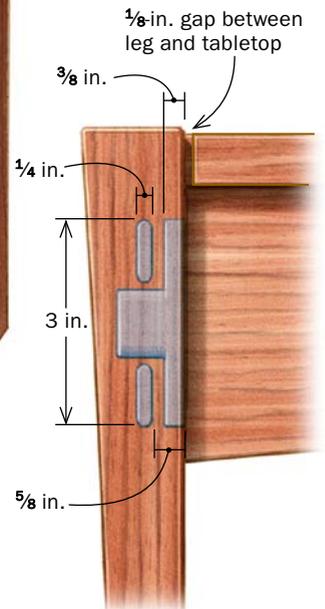
### SIDE VIEW



### FRONT APRON



### SIDE APRON



# Join the base

Anderson uses two types of joinery to bring together the table's base. Interlocking mortise-and-tenon joints provide a sturdy connection between the aprons and the slender legs. Dowels fortify and align the butt joints between the aprons and interior rails.



## MORTISES

**Lay out the curves first.** Anderson uses a template to trace layout lines (above) that serve as a visual reminder to avoid mortising into the portion of the leg that will be cut away. Rout in progressively deeper passes (right) to create the stepped mortises for the tenons.

take a few moments to make a template for your leg shape, and use it and a bevel gauge to mark the legs and aprons for the curves and tapers you'll cut later. To join the narrow legs and aprons, I interlocked the mortise-and-tenon joints (for a similar technique, see "Strong Tenons in Skinny Legs," p. 56). I routed the mortises and cut the tenons at the tablesaw.

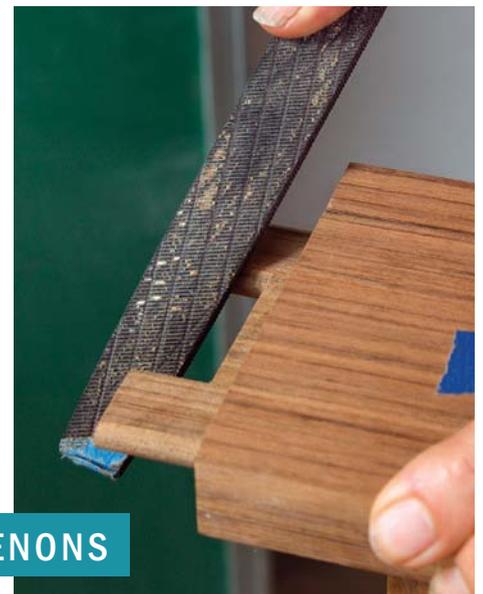
When cutting the tenons, test each setup on sample material until the machines and

jigs are dialed in. Use a marking gauge to lay out the shoulders and cheeks on each piece. Clamp a stop to a crosscut sled for cutting the shoulders. Cut all the wide surfaces first, then adjust the blade to the proper height for cutting the shoulders on the apron edges. Before making this cut, put a piece of blue tape on the stop to offset the shoulder slightly. This leaves a small strip of extra material on the shoulder that can easily be pared flush.



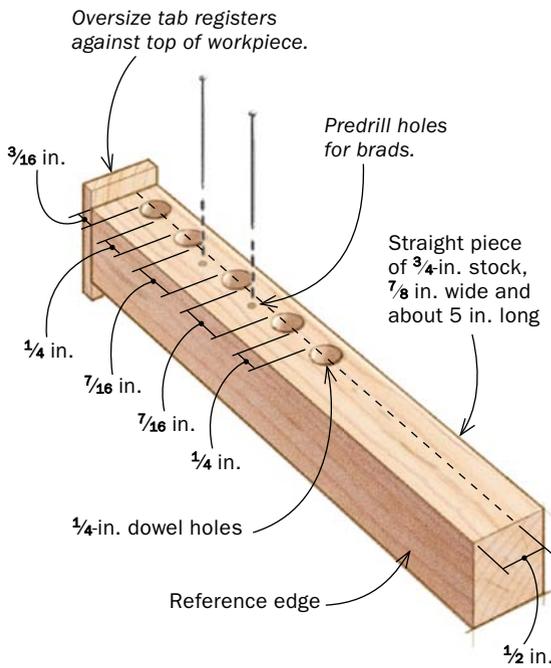
## TENONS

**Rounded tenons for routed mortises.** After cutting the cheeks and shoulders at the table saw, remove the waste with a bandsaw and chisel, then round the tenons with a file.



## DOWELS

A shopmade jig ensures accurate dowel holes.



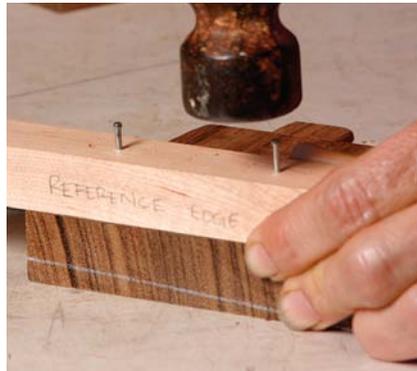
the front apron. Next, dry-fit the end assemblies and measure the inside distance between the front and rear aprons to determine the length of the interior rails. For greatest accuracy, take this measurement as close to the legs as possible.

### Create the drawer pocket

The drawer enclosure is formed by a pair of interior rails—each slightly narrower than the aprons—that run front to back



**Mark the back apron for each drawer rail.** Align the ends of the front and back aprons. Scribe a line along the front apron's inner edge, marking the rear apron to locate the doweling jig.



**Secure the doweling jig.** Drive brads just far enough to hold it. Drill the jig and the first set of dowel holes at the same time.



**Mind the reference face.** To ensure proper alignment of the dowel holes, keep the jig aligned with the workpiece edge.



**Drilling goes quickly.** For the holes in the rear apron, keep the jig's reference face oriented toward the interior of the piece. Align the edge with the layout line you scribed on the apron's inner face. A large hand screw secures the rail (right) for drilling into the end grain.



# Shape the parts

Anderson's table is distinctive because of the organic curves that require shaping on every major component. Aside from a few bandsaw cuts, much of the work is done by hand with spokeshaves, planes, scrapers, and sandpaper.

## LEGS

**Start at the bandsaw.** Cut close to the lines to create the long, gentle curves on the outside faces.

### Smooth the shape with hand tools.

The curve is gentle enough to accommodate the sole of a skewed smoother or a block plane. Anderson follows up with a scraper.



**Flexible sanding pad.** Anderson attaches adhesive-backed sandpaper to strips of plastic laminate for a flat backer that is rigid but gives enough to easily follow the curve.



and guide the drawer sides. Each rail is joined by dowels to the front and rear aprons and rabbeted along the bottom to accommodate a framed panel. This panel closes the compartment, adds rigidity, and supports the drawer from underneath.

For smooth drawer movement, the interior rails must be parallel to one another, with dowel joints that are precisely aligned, front to back. To accurately lay out the joints on the face of the rear apron, I used the front aprons as a reference (see photo, p. 69).

**A jig aids doweling**—I drilled my dowel holes using a shopmade jig created especially for this project (see drawing, p. 69).

To drill a front apron, set the jig in place so its reference face is flush with the apron's interior edge. Clamp the jig temporarily while you fasten it with a couple of brads. At the drill press, take a moment to set the bit depth, using the layout for your shaping as a guide. Drill through your layout marks, simultaneously completing the jig and drilling your first set of dowel holes.

After drilling the apron, carefully align the jig on the end of the corresponding rail and drill the mating holes.

Repeat the process on all the aprons and corresponding rail ends. Once all the holes are bored, test the fit. One way to simplify the test-fitting of dowel joints is to use dowels in only half the holes. It also helps to compress them by rolling them between a file and your bench. This keeps the dowel holes from loosening during multiple dry-fits.

### Build and fit the frame-and-panel bottom

The drawer pocket's bottom is a panel set in a frame held together with bridle joints. These joints are easy to cut with a tablesaw tenoning jig, and their ample glue surface makes them very strong. Because the drawer runs directly on the frame, I oriented the frame's joinery so the grain is

## APRONS AND TOP

To give the table a graceful, cohesive appearance, Anderson shapes the aprons and tabletop to match the legs.

Plane edge of top to match the apron face.

Apron front face

Scribe line

Area to be planed



**Mark the profile on the apron.** Measure the reveal between leg and apron at the top of the assembly, then mark the apron's bottom and end grain to match.



**Make shavings.** The taper on the apron faces is gentle, so the waste can be removed with a handplane. Start with the iron set for an aggressive cut, then adjust for a finer cut as you approach the layout line to minimize tearout.



**More curves.** Anderson bandsaws a very gentle curve into the bottom edge of each apron. Afterward, she smooths the bandsawn edges. She shapes the curve in the underside of the drawer front after it is assembled and installed.

uninterrupted from front to back. I made the frame slightly wide, so I could handplane a perfect fit later. I added  $\frac{1}{8}$ -in.-thick edge-banding to hide the end grain on the frame's front edge.

Although it is hidden most of the time, the panel inside the frame is more for beauty than strength. Use your primary project wood, and take care in assembling and finishing.

I cut the tongue on the panel, and the stopped grooves that hold it, on the router table with a fence and straight bit. Sand the panel before this step. Heavy sanding afterward may loosen the fit. Prefinish the panel and the inside edges of the frame. After glue-up, saw  $\frac{1}{8}$  in. from the front edge and add the edge-banding. Flush the edge-banding and then plane the edges for the final fit.

### Shaping is the fun part

Once all joinery has been cut and fit, the shaping begins. I shaped both outside faces of each leg in a pronounced taper that



**Don't overlook the top.** Bevel the edge slightly to harmonize with the shapes of the legs and aprons. Use a bevel gauge to transfer the angle from the apron faces.

# Assembly

Anderson pre-finishes the entire table (other than the joints) before the glue-up, which takes place in several stages for simplicity's sake and to ensure the assembly remains square throughout. Afterward, she assembles, fits, and shapes the drawer.



**Stage one: Side aprons go into the legs.** Because the parts are prefinished, Anderson makes her cabinetmaker's marks on blue tape to help orient the parts for proper assembly.

**Stage two: Inner rails are next.** Glue the dowels into both ends of each rail. Tap the dowels home with a hammer to prevent them from seizing. Anderson uses a measured reference block to set the depth of each dowel. Let this glue dry before adding the front and back aprons (far right).



**Dry-fit the legs to aid clamping.** The legs hold the aprons in proper position, making it easier to clamp the rails in place squarely.



ends in a graceful curve at the top of the leg. I also shaped the face of each apron to follow the taper of the legs for a consistent reveal where the two meet. Lastly, I planed a slight bevel into the edge of the top to match the rest of the piece.

To start shaping the legs, bandsaw close to one of your template layout lines. After the first cut, lay the template on the bandsawn surface and strike a new line for cutting the adjacent face. At the bench, use a combination of block and smoothing planes, scraper, and sandpaper to fair the curves and smooth the surfaces.

The taper in the apron's face is slight and easily planed in by hand. To lay out for the taper, dry-fit each leg-and-apron connection, measure the reveal at the top of the joint, and mark the bottom edge of the rail with this measurement. Strike a line at this mark along the bottom edge, and connect the mark with the top edge of the apron front. This pair of lines guides the planing.

I used a block plane to chamfer the top and bottom edges of each leg to prevent chipout. I also used a spokeshave and block plane to shape a subtle curve on the bottom edge of each apron.

Dry-fit the table to make sure all the tapers and reveals are

consistent. The cut-out gap around the legs should be consistent and wide enough to let the top expand and contract.

## Pre-finish and glue up

I almost always prefinish a piece before glue-up. When the parts are separate, there's no struggling to get a brush or pad into tight corners. The result is a very even finish, even one applied in multiple coats as with the shellac and wax on this piece. Prep by breaking edges and sanding parts to P400 grit, paying special attention to end grain. Tape off any surfaces that will get glue.



Gluing up a piece with a lot of components can become a desperate race to apply glue to all of the many surfaces and then get the joints together and clamped before parts start seizing. For greater control, I broke the process into four manageable stages.

Start by gluing and clamping the two side assemblies. With those in clamps, you have time to glue the dowels into the ends of the drawer rails.

After the glue has dried, glue the drawer rails into the front and rear aprons. Once this assembly is together, dry-fit it into the legs, check for square, and clamp.

When the glue is dry, unclamp and remove the leg assemblies. Apply glue to the tenons on the front and rear aprons, seat them in their mortises, and clamp.

When this assembly comes out of clamps, the last step is to glue the frame-and-panel bottom into its rabbets.

With the base complete, finish cutting and fitting the drawer joinery. Assemble the drawer after shaping its bottom edge to match the curve on the underside of the front aprons.

Once the drawer is glued up, shape its front and its bottom edge to match the aprons. Put the drawer all the way into the drawer pocket. Use a sharp pencil to scribe the shape from the front rail to the end grain on the drawer face. Be sure to scribe both sides of the drawer face. Plane



**Stage three: Add the leg assemblies and drawer support.** After adding the legs (inset, above), the frame-and-panel bottom of the drawer compartment goes into a pair of rabbets milled into the bottom edge of the drawer rails.

close to the lines. Sneak up on the final shape by checking it in the drawer pocket frequently as you work.

There are many ways to fasten the tabletop to the base. I used handmade brass brackets, but commercially made figure-eights would work well, too. Cut the recess for the fasteners into the aprons. Pre-drill and attach the brackets to the aprons and then pre-drill and attach the top. □

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**Harmony in the details.** The organic curve of the leg is echoed in the shaped apron faces and the beveled edge profile on the tabletop.