Make a Table from a Board

Stylish side table is a great lesson in getting the most out of your lumber

BY MICHAEL PEKOVICH





You put a lot of effort into building a project—from creating gap-free joints to meticulously prepping surfaces and spending hours finishing. But all that work is compromised if the piece ends up with mismatched boards and chaotic grain. To avoid these hazards, you need to put as much effort into choosing and milling your lumber as you do into designing the piece. The two go hand in hand.

This small table is a simple project that lets you focus on using wood successfully and efficiently. All of the parts can be had from a single board. The focus, though, is not just on economy. By getting all of the parts from one board, you'll ensure a great color match throughout the piece. And by cutting parts from strategic locations in the board, you'll end up with the pleasing grain patterns in all the right places. Along the way, you'll get great lessons in resawing and rough-milling stock. These concepts will work with any piece you make, from chests of drawers to cabinets.

Pick the right board

For this table, you'll need a flatsawn board that's 2 in. thick by 8 in. wide

by 8 ft. long. This will yield more than enough stock, giving you the flexibility to work around knots or defects. The thickness is necessary to get the stock for the legs without having to glue up thinner boards. It also gives you plenty of material to resaw boards for the tabletop and aprons.

Find a board that's as clear as possible with little to no sapwood. You'll see the importance of this later as you break down the board. The grain also should be as straight as possible along its length. The longest part in the table is only 26 in., so a little bow along the length is not a problem.

Lay out parts before milling

Before you do any cutting, consider where the parts will come out of the board and mark it accordingly.

Start by locating the leg blanks. On a typical flatsawn board, where the growth rings arch through the stock along the end grain, the rings will arch down at each edge. This creates areas of riftsawn grain, in which the rings are diagonal to the face and edges of the board. Those riftsawn areas are ideal for table legs because they have straight grain on all sides that will accentuate the lines of the slender legs for a pleasing and ordered look. By picking a board with the arch centered,

Plan out the parts before you cut

By carefully choosing where each component comes from, Pekovich not only gets the best grain flow and match from the pieces, but he also mills the board with minimal waste.



GET FLAWLESS GRAIN AND COLOR MATCHES



Book-matched top. By resawing and bookmatching the top, Pekovich gives the top a mirrored grain pattern.



Continuous grain around the table. Resawing one section of the board for all four aprons and then using the boards in sequence allows the grain to flow across each side, giving the piece continuity from every angle.



Straight-grained legs. Choosing riftsawn stock for the legs results in straight, tight grain on each face and helps ensure stability.



Crosscut first. With the sections for the top, aprons, and legs marked out, Pekovich uses a circular saw to cut the board into rough lengths, usually 1 in. longer than the finished length of each piece. He uses $\frac{1}{2}$ -in. stickers to raise the board off his outfeed table to prevent cutting into it.

Template for riftsawn stock. Pekovich uses a window cut into a piece of cardboard to lay out the legs so that the grain runs diagonally across the ends. This is the key to tight grain lines on all four sides.



you'll have plenty of riftsawn material on the edges to use for the legs.

The flatsawn section between the legs is perfect for the aprons. By keeping track of the orientation of the apron parts, you can also ensure a great grain match from apron to apron. The top of the table is taken from the full-width end of the board, which is resawn to create the tabletop halves. The riftsawn grain at the edges works in your favor here as well, giving you straight grain along the edges for a seamless glue-up.

Separate the parts

With all the parts laid out, you can break down the board. Make a crosscut between the end of the leg/ apron section and the top section. Then make two ripcuts to separate the legs from the aprons, and crosscut each section to rough size. I do all of the crosscutting with a circular saw and the rough ripping and resawing at the bandsaw. The boards are not yet flat enough to run safely through the tablesaw. In addition, there's a good chance the boards will warp as they are ripped. This isn't a problem using the circular saw or bandsaw, but at the tablesaw the kerf can close up and pinch the back of the blade, causing a dangerous kickback.

Work out the leg grain

The leg/apron sections are now ready to be cut apart, but first the grain along the leg must be corrected



Lay out legs parallel to the grain.



Straight grain along the face. Use a square to transfer a line from the inside point of the leg to the board's top. Then orient a straightedge along the grain to mark for a ripcut.



SQUARE UP THE LEGS



Cut to the line. After ripping the blank from the board, Pekovich angles the band-saw table to match one face of the leg.



Complete the square. Using the first face as a reference, level the bandsaw table and make the remaining cuts.



Arrow straight. The results of correcting for grain runout are impressive: a perfectly riftsawn leg with tight, straight grain along each face.

to get riftsawn stock. A good tip for this is to cut a square "window" out of a piece of cardboard slightly larger than the final leg blank. Place this window on the end grain of the blank and rotate it until the grain is as close to diagonal as possible. Trace the square onto the blank and use that as a guide to strike a line following the grain on the board's face. Depending on the stock's width and the final dimension of the part, you should be able to straighten the grain. This is a great tip for any furniture part and it's a good reason to buy a little more lumber than you need when starting a project.

The legs are shaped at the bandsaw. First cut out the rough blanks and then angle

the table to follow the lines placed on the end grain. The result should be a perfectly riftsawn leg. Orient each leg on the table with the grain running from the inside corner to the outside corner. If you taper or curve the legs, the grain will flow along the profile of the leg.

Resaw the aprons and top

Resawing not only lets you get all of the parts from a single board, but it also has additional benefits. For the aprons, resawing allows a continuous grain match around the table. It's a technique I use on mitered boxes where I want the grain to flow seamlessly from face to face, and it works just as well for aprons. Resawing the top boards yields perfectly matched halves for an attractive glue-up.

If the board is bowed or cupped, start by flattening the concave face on the jointer. Remove only enough material to provide a good bearing surface against the bandsaw fence. The stock is still oversize and will be dimensioned later, so there's no need to fully joint it yet. I use a ½-in.-wide, 3-tpi blade for resawing, and I cut right down the middle. If sapwood is an issue with your top pieces, the extra stock from the board can be used to make another set and the best pieces from both can be used.

Once the parts are resawn, sticker them and let them rest for a day or two. After that, flatten one face and plane the

CUT APART THE TOP AND APRONS



Resawing reveals the grain. Flatten the board first with a few light passes on the jointer (above). Then resaw the stock right down the middle (right). Leave the parts thick and let them settle before final milling.





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MILL IT FLAT AND LET IT REST

Joint one side, then plane. After resawing, Pekovich joints one side of the aprons and the top pieces. He then planes until both sides are flat and parallel, leaving as much thickness as possible.





opposite side smooth and square, keeping them as thick as possible. Sticker them again for a few days and they're ready for final dimensioning.

Before cutting the aprons to final length, mark the top edges of the boards to maintain the correct orientation for a continuous grain match. For this table, the front apron will become the drawer front. Use another piece of flatsawn stock for the drawer stretchers as well. There's plenty of scrap left over between the legs. The exposed edges of the stretchers on the front of the table will be quartersawn. The tight, straight grain will frame the drawer front nicely, and will match the front edge of the tabletop.

There are two ways to arrange the halves of the top for glue-up. A book-matched joint, which I used on this table, is visually striking but can make handplaning difficult because the grain will go in opposite directions along the glueline. The alternative is to slide the halves apart while maintaining the same orientation of the faces. This creates a slipmatched joint, which makes surfacing easier because the grain of each board is running in the same direction. It doesn't offer the striking mirrored look of the book-match, but it does a better job of hiding the glueline. The method you use will depend on the individual board and what gives you the most pleasing-looking top.

The payoff for all of the time and effort spent selecting lumber and using it thoughtfully is pretty big. You'll have a beautifully matched tabletop, grain that runs seamlessly from apron to apron, and legs defined by tight, straight grain on every face. This technique is a great way to elevate even a simple project. In addition, the perfect color match is already built into your project. Give it a try and you'll never look at wood the same way again.

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Stickered thicker. Pekovich stickers everything for even airflow and lets the pieces sit for a few days. While the riftsawn legs are relatively stable, the aprons and top tend to shift heavily due to the amount of stress released when they are resawn. Leaving them oversize means they can be lightly re-milled later until they are dead flat.

Contemporary take on a classic leg

The legs on this table are tapered with a little twist. To lighten the look, I trimmed the upper portion where the legs meet the apron, creating a narrow post. For a little extra flair, I added a gentle curve to the tapers and rounded the outside faces of the legs. The inspiration came from the classic cabriole leg (right), which also combines a square post at the top with a serpentine profile below.

I started by making a full-size template from ¹/₄-in. MDF. Once the joinery was cut, I traced the profile onto the leg. Then I defined the angled shoulder at the tablesaw and used the bandsaw to cut the curves. The curves are so subtle that I didn't need to tape the waste from the first cuts back onto the legs to make the second cuts more stable, a common practice for traditional cabriole legs.

To create a seamless transition from the legs to the aprons, I rounded the outside faces of the legs so the shoulder would end where the legs meet the aprons. -M.P.

CUT THE PROFILE





Define the leg post, then cut the taper. After tracing the profile on the leg, cut the angled shoulder on the tablesaw (top). Finish the post at the bandsaw, then cut the serpentine curve on one face (right).





Smooth and profile the second face. Use a block plane to remove the bandsaw marks along the curved faces. Then lay out the profile on the uncut face of the leg (right) and repeat the same steps to achieve smooth curves on all four sides.



Photos, this page (left and top right): Michael Pekovich

SHAPE THE FACES

Pencil line guides the way. Lay out the profile on the shoulder by drawing a subtle curve from the intersection of the post and shoulder to the outside corner of the leg.







Continue the profile down the leg. With your fingertips as a guide, draw a line from each corner of the leg post down to the bottom. These lines will define the inside corner of the leg.



The main chamfer. After marking the leg, Pekovich uses a spokeshave set for a heavy cut to establish a primary chamfer. This chamfer should be centered on the apex of the curve and end just shy of the final depth, laid out on the shoulder.



Flat to round. Use a block plane to establish the shape of the leg. Make a series of chamfers to define the curve using the layout line on the shoulder as a guide. Smooth the face with sandpaper but keep a crisp edge on the inside corner.



Smooth the post. Use a block plane and scraper to remove the bandsaw marks. Take care to keep a sharp transition from the post to the shoulder.