



# The Right

Go beyond router-bit profiles for custom edges that stand out

BY GARRETT HACK

I expect a lot from a tabletop edge. On one hand, I need it to be tough, able to endure a life full of bumps and bruises, even spills. Yet I want the edge to be attractive, with lines that are in keeping with the overall piece and with a profile that is pleasant to touch. It's not an easy dance to master, but it's a fun challenge.

I treat table edges with respect, spending a great deal of time on them. My goal is to design edges that are as alluring as the rest of the piece. I use the edges as a canvas to add detail or create interest by incorporating facets that catch light or add shadows. But make the edges too delicate, and they won't hold up to the ruthless wear and tear of use. I look to soften sharp, square surfaces so that they're friendly to hand and



## Don't overlook the overhang

The overhang is an important aspect of table design. Wide overhangs can accommodate seating and increase surface area, but they can hide aprons or drawers from standing view. Short overhangs tend to draw attention away from the top, blending it in with the overall lines of the piece.

◀ **Small table with lots of surface area.** The top of Hack's end table is wide with large overhangs. A sweeping underbevel on the front and ends makes the top look thinner, in keeping with the overall light feel of the table.

**Thick top doesn't distract.** ▶ The short overhang and wide underbevel on Hack's sideboard draw attention away from the top and toward the facade of the case.





# Edge for Your Tabletop

## CHAMFERS AND BEVELS

A chamfer cut along the top or bottom of a tabletop is a simple and very effective profile that catches light, draws the eye, and softens hard edges. A bevel is simply a wide chamfer. Both can be cut with handplanes, but bevels often are cut with a router or a tablesaw and refined with a block plane.



**Chamfers are quick to make with a block plane.** You can kiss an edge for a light facet or make repeated passes to create a wider flat. Use your fingertips to register the tool at a consistent angle for each pass.



**Two steps to a bevel.** Rough out the bevel on the tablesaw (above). Be sure to support the top with a tall fence as you make the cut. Clean up the sawn surfaces with a handplane (left).



CHAMFER



UNDERBEVEL



BEVELED TOP WITH FILLET

body. Subtle shapes can be very appealing, and less is usually more.

### Consider the overall piece

When designing a tabletop edge, make the profile an important part of a cohesive design. Generally, simple furniture calls for simple edges while more intricate designs call for more elegant profiles. I consider the shape or aesthetic of the table and its function, the size of the overhang, the wood the top is made of, and how thick it is or how thick I would like the top to appear. You can make the top look thinner by shaping the underside of the edge with, say, an underbevel. You can accentuate thickness by using a simple bullnose or roundover, or using a beveled top edge.

The overhang of a tabletop is a critical part of a table's design. Dining tables may have wider overhangs to accommodate seating, while an overhang on a sideboard may be shorter to allow access to a door or drawer. The size of the overhang will have a direct impact on the width of the edge profile and the way it's seen. Wide overhangs can be nice, but they partially conceal the aprons or any drawers from standing view. In such a case, you may choose an



### Beyond the basic bevel



COVE

You can shape a concave profile, or cove, on a beveled edge using hand tools. First, make thick marks along the top and bottom edges of the bevel (top). Next, use a convex spokeshave (or curved scraper) to remove material between the marks (middle). Finally, use a bullnose sanding block to fine-tune the shape and remove the reference marks (bottom).



# Roundovers

Expecting dings and bumps? Rounded edges are especially effective at deflecting them. This classic quarter-round is roughed out on a tablesaw, then refined with hand tools.



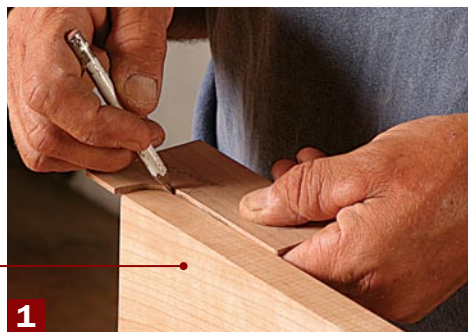
QUARTER-ROUND



BULLNOSE



BULLNOSE WITH BEVEL



1

**Make a template of the profile.** Then use the template to trace the profile on the corners.



2

**Mark the boundaries.** Extend a line across the top, indicating where the profile will end. The lines will provide a consistent stopping point for all the shaping cuts to follow.



3

**Round the edge with a block plane.** After making a few chamfers on the tablesaw, take light cuts with the plane, removing corners of the facets with each pass.



4

**Check your progress.** The template will show where you need to remove more material.

## When a roundover meets a bevel



**Elegant roundover for wide overhangs.** The edges on Ted Blachly's claro walnut sideboard taper up and away from the carcass, giving a light feel to the top. The profile is also lightly chamfered along the rounded edge.

underbevel profile, which exposes details below the top. Shorter overhangs limit the size of the edge profile to the thickness of the top, such as a bullnose or beaded edge.

## Hardwood vs. softwood tops

If you are really on your toes, you'll choose a profile that works with your wood selection, whether softwood or hardwood, figured or plain.

Softwoods and hardwoods each have working characteristics that make them suitable for particular profiles. Softwoods age to a beautiful patina, but they dent easily and don't take or hold detail as well as harder woods. So for softwood tops, you may incorporate pronounced chamfers or bold profiles with less complex shaping and no sharp edges. The harder the



## FILLETS



**ROUND  
OVER  
WITH  
FILLET**



**ROUND  
OVER  
WITH  
FLAT  
AND  
FILLET**

Adding a fillet to a simple roundover creates a shadowline and catches light. Rough out the profile with a router, then use hand tools to customize the shape.

wood, the better it holds detail, so harder tops are better for multifaceted edges.

Finally, think about the figure; a tabletop with abundant figure or prominent grain may beg for a less-detailed edge that doesn't compete for attention.

### Custom edges that sing

Some woodworkers choose an edge profile based on the router bits they have. I avoid that approach because I don't want my furniture to look factory made. Production furniture has a certain look, with predictable edges—perfect 45° chamfers, blunt bullnoses, and other recognizable profiles cut with routers or shapers. The edges are good and durable, but they don't seem very creative or interesting.

However, when I create one-of-a-kind edges that fit my style, common router bits can be a starting point. They certainly make things easier. So I sometimes use a router to rough out the profile, then refine the machined edge with hand tools. Sometimes all it takes is delicate passes with a block plane or a spokeshave, or even scrapers and sandpaper.

From simple to complex, the edge profiles illustrated here can be used individually or combined to create dazzling designs.

**Chamfers**—I often incorporate chamfers in my work to create light-catching facets along edges. A light chamfer is created by kissing the corner with a block plane. More passes with the plane create wider chamfers. The detail can be incorporated into any number of edge profiles. Chamfers can be cut at any angle, even a different angle on the top than the bottom. You also can cut multiple chamfers into an edge, creating a multifaceted surface.

**Bevels**—A bevel is simply a wide chamfer. Cut on the top edge or the bottom, they are often used to



### Router and planes work hand in hand.

Use a quarter-round bit to remove most of the material (above). The bit will carve a fillet at the top and base of the profile. Next, scribe lines to indicate the stopping point of the handwork on top (middle). Finally, refine the edge with a block plane. Remove corners of the facets in steps until you have a round surface. You can leave fine facets to stimulate the tactile senses or smooth the surface with sandpaper.



# Complex profiles

It's easy to use a router bit to get an edge on a tabletop. But you wind up with a cookie-cutter look that adds no dazzle to the design. To personalize your furniture, design your own profiles, then combine power tools and handwork to get the shape you want.



## OVOLOS

This classic edge is simply a modified ovolo profile, created with a tablesaw, router, and handplanes. Start by making a template of the profile and tracing it on the table edge.



**OVOLO WITH FILLET**



**2**

**Hollow a channel.** Use a core-box bit to rout the concave area of the profile.



**1**

**Round the tip.** Use a quarter-round bit to rout the lower edge of the profile.



**3**

**Refine with hand tools.** Following the layout lines on the edge, smooth the curves with handplanes and sandpaper.

## Combining profiles

**Profile dances on edge.** David Lamb created a beaded profile that harmonizes with the other beads on this center table.



disguise or play up the thickness of the top. Steep angles generally accentuate thickness, while wider, sweeping bevels tend to play it down, especially when used on the bottom edge.

**Roundovers**—Though I think of bullnose-style roundovers as a rather unimaginative staple of the modern furniture industry, these edges work well at deflecting dings in a high-traffic area. One way to make an otherwise bland roundover more attractive is to reshape it so that it's not just a radius or section of a circle; sometimes an asymmetrical roundover is best. Another way is to use just part of the full radius, so the roundover has hard edges. To add even more interest, I often lick the top and bottom of the profile with a block plane to create fine, light-catching chamfers. I also combine



a roundover with other profiles, creating any number of elegant custom variations.

**Complex profiles**—High-style tabletops often feature complex edge profiles with multiple shapes. Here's where I use a router to rough out the profile, and then planes or custom-made scrapers to refine it. When working this way, I often create a small wooden mock-up in the profile and then use it to gauge my progress on the real edge.

**Beads**—I use beaded profiles in many ways: along table aprons, on drawer fronts, and on legs. But they also work well as part of a table profile. I prefer to cut beads with hand tools in order to create a fine quirk (the narrow indentation on the inside edge of the bead). Bead-cutting router bits leave a wide quirk. You can combine a bead with a chamfer to create an elegant edge with lots of light-reflecting and shadow-catching surfaces. You also can incorporate multiple beads for a traditional look.

### Last, make it personal

Unless you are making a strict period reproduction, it's difficult to say that one profile is better than another; it all depends on your design and taste. By adding subtle details to the basic profiles presented here, you can come up with a unique shape that fits your furniture. Explore the possibilities. For me, playing with the edges has become one more fun part of building special pieces. □

*Garrett Hack is a contributing editor. Along with Hack, Ted Blachly and David Lamb are members of the New Hampshire Furniture Masters Association. Allen Eason participates in the NHFMA's prison-outreach program.*

## BEADS

A beaded edge works well to introduce a round surface and shadowlines in an otherwise rectilinear edge. To create beads with fine quirks, use a scratch stock or a beading tool.



**Two ways to scratch a bead.** Hack avoids router-cut beads, preferring to incise them with finer hand tools. A homemade scratch stock (top) cuts custom beads and quirks. You also can use a beading tool (above) for a fine detail.



**BEAD WITH CHAMFER**



**TRIPLE BEAD**



**Quirky sanding block.** To refine the bead, use a thin sanding block that reaches into the narrow quirk.



## Moldings give edges a lift

Moldings, usually applied under a shaped edge, are an easy way to add visual interest and weight to the edge. Design the molding as part of the overall shape of the edge, much like a built-up crown molding on a case. Because the tabletop gives it some protection, the molding can be more delicate. Allen Eason added a molding under the top of his Chippendale bureau. The molding mirrors the top edge and, combined with the fluted column, gives the appearance of supporting the top.

