Awesome Cutting Boards!

This details how to make hardwood cutting boards out of maple and cherry scraps. Not only are they beautiful and high quality, they're made from materials that would have been discarded otherwise. Reduce, Reuse, Recycle!

Step 1: Get Your Materials

For this project, my friend N. graciously provided the materials and his workshop. We used maple balusters removed during a remodel as the main elements of the cutting boards. You can see from the two pieces in the foreground that each piece had a few holes in the ends from where they'd been attached to the stairs/banister. We cut off just enough material to get rid of the holes, not worrying about uniform length.

Step 2: Getting a Square Deal

After we'd removed the ends, we had to take care of the rounded edges with a quick trim on the table saw.

Step 3: It Is Not OK to Eat Varnish

Varnish: good for balusters, bad for cutting boards.

Here you can see N. passing them through a planer to take off the outermost layers of varnish and wood so we could get back to clean maple. We passed through each face that glue would be applied to several times to get a nice smooth surface. We left the varnish on the faces that would become the cutting surfaces to be dealt with later.

Step 4: Check Your Work

This step is more or less concurrent with the last, you can see that the piece he's measuring (for thickness) still has varnish on two sides.

As a related aside, you can see we were wearing ear protection, which is key.

Hearing is one of those things, like eyeballs and fingers, you want to hang onto for as long as possible.

Step 5: Make It Go Faster

I've said it before, and I'll say it again: The key to speed lies in the paint job, not what's under the hood. For a spiffy racing stripe, we used a piece of cherry leftover from a desk N. had built. The nice thing about using cherry is that it gets darker the more you use your cutting board. Here you can see N. trimming it down to size so it matches the thickness of our maple pieces.

Step 6: GLUE!

The important thing is to get an even coat and to make sure there won't be any air pockets lingering after they're pressed together, this is important! A nice, evenly spaced squiggle brushed out smoothly does just the trick. Also, don't worry too much about getting glue everywhere, because you will.

Even on your face.

Wear a helmet.

EDIT: We used regular Titebond for this project and it's held up fine for me over the past 5 years. In the meantime I've switched to Titebond III which is their waterproof glue. It's more expensive, but I think the added protection/precaution is worth it.

Step 7: Line 'em Up!

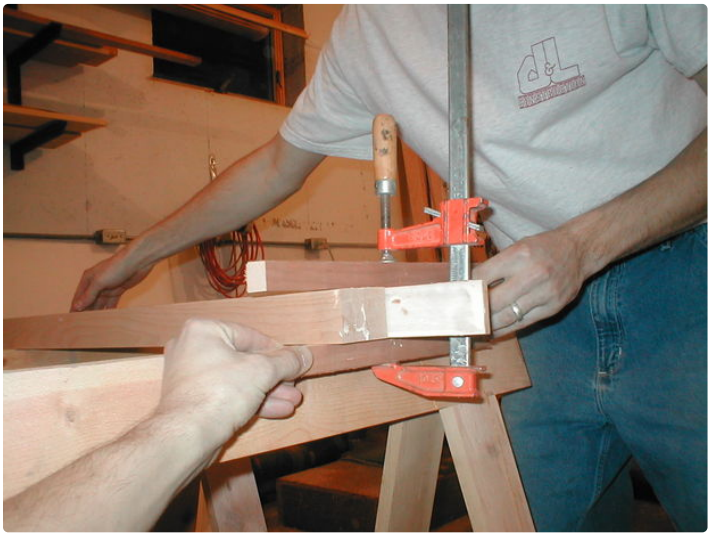
Once you get your glue nice and even, making sure there are no air pockets, you can start to slap the pieces together.

This is a nice shot, because it illustrates some of the things I mentioned earlier. You can see that we left the varnish on two of the surfaces and that we also didn't worry about length at this point.

Don't be mislead by this last statement! For clarification, we'd decided (based on the number of pieces we had) how big and how many of each cutting board we wanted to make. I mean "not worrying about length" in terms of not being ultra-precise about the lengths of the individual pieces PER cutting board. You can see the cherry racing stripe is quite a bit longer (and thinner) than the other pieces.

Step 8: The Clamp Down

We supported the slats from the top and bottom (we did the same thing on the other end simultaneously) to keep the pieces even as we squished them together with pipe clamps. You should also keep some wood scraps between the clamp faces and where they meet the wood. If you're not careful you can end up damaging your project by leaving a depression if you clamp tightly. After you get the boards clamped from the sides be sure to remove the clamp and wood you used to keep everything in line (pictured), otherwise you'll end up with railings on your cutting board, which most users will find undesirable.



Step 9: Sit Down and Have a Think. or Two.

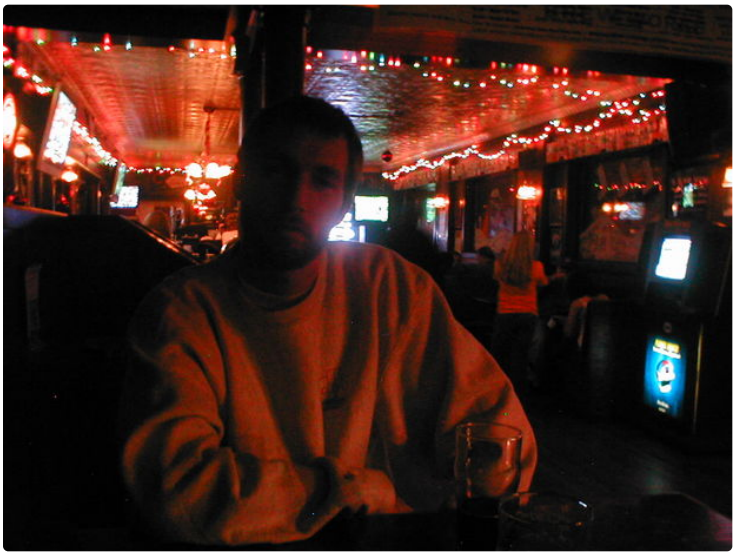
So how long did we need to wait for the glue to dry?

24 hrs?

48 hrs?

All it takes is about 30-45 minutes! Different glues cure differently and wood glue cures in the absence of air, which is why you want to be so careful about making sure there aren't any air pockets in your glue job. The pressure from the clamps forces out all of the air in between the slats and so the glue cures very quickly. Just enough time for a pint. ...better make that two pints, just to be sure.

Safety first.



Step 10: Operation "Reverse Clamp Down"

Once your glue is set, remove your clamps.

Grab a paint scraper and a scrap of something to wipe the glue on (it will still look wet on the surface, don't worry, it's cured between the boards themselves), and get all the excess crud that got squeezed out during the clamp-down. You only want to leave as much glue on the boards as you'd want to send through your planer.

Step 11: The Plane Boss, the Plane!

Once we'd removed most of the glue, we sent the assembled boards through the planer to get them nice and flat. Each cutting board took several passes to remove the varnish we'd left from before.

Step 12: Tying Up Loose Ends

N. had made a table-saw sled for cutting big flat things, just like cutting boards! After a quick zip on the saw all the lengths we'd left from before were squared up.

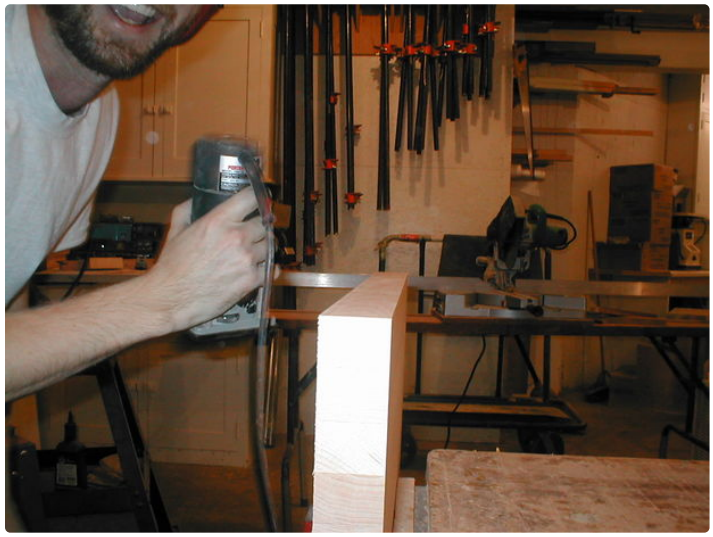
Step 13: Sanding

Here you can see N. passing one of the cutting boards through the drum sander. Talk about a wonderful machine! If you don't have a drum sander, have fun sanding! Alternatively, if you have a cabinet shop in your area they might be willing to run your assembled boards through for you. It's been my experience that they'll charge you around $2 a minute - this is an incredible bargain - it will only take them about 2 or three minutes to do, versus the 45 min to an hour (or more!) it can take using a palm sander. Really, it just depends on how out of whack the slats are after clamping.

Step 14: The Finishing Touches

As you can see from this first photo, I've just said something hilarious. Don't be alarmed, it happens all the time.

We added a chamfer (45 degree angle) to the boards giving them gently rounded outside edges and gave them another light sanding by hand to catch all the side-surfaces.



Step 15: Fin.

We added some tiny cork-feet to keep them from sliding around, but in hindsight this was probably unnecessary.

In terms of protecting your board, use mineral oil, or one of the commercially available products for protecting butcher-blocks. Vegetable oils will go rancid and you'll want to avoid nut oils so you don't send anyone to the hospital with an allergic reaction. Whatever you decide to use, remember that it needs to be food safe.

If your board starts to look dry, just reapply your mineral oil by rubbing it into the surfaces (every side, keep it evenly oiled) with a cloth. You really can't use too much and it probably wouldn't hurt to do it a couple times, i.e. apply oil, let it sit overnight and hit it again the next day.

You don't want to expose these to too much water - do not put them in the dish washer, or let them soak - if you scrub it off with soap and water be sure to dry it immediately. The more you wash it the more often you should apply oil to keep it in good shape.

Happy chopping!