


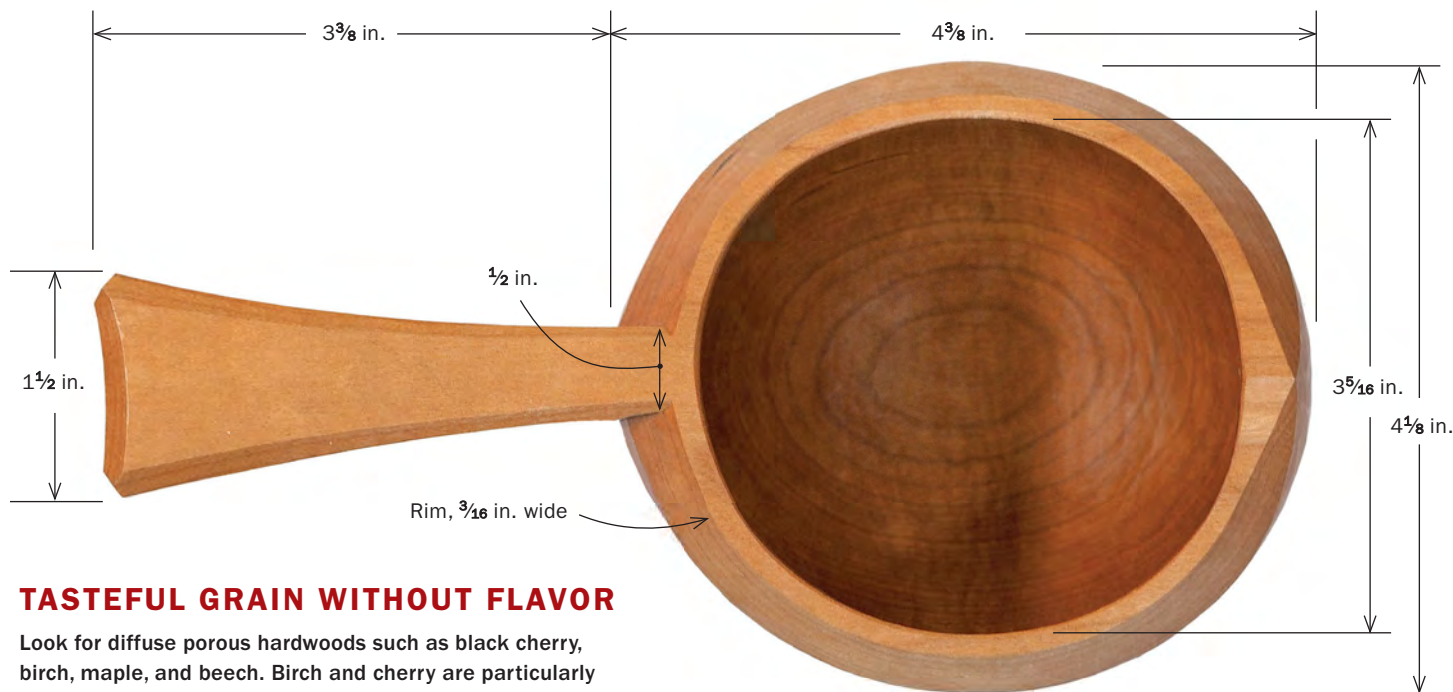
# Carve a wooden cup

BY DAWSON MOORE



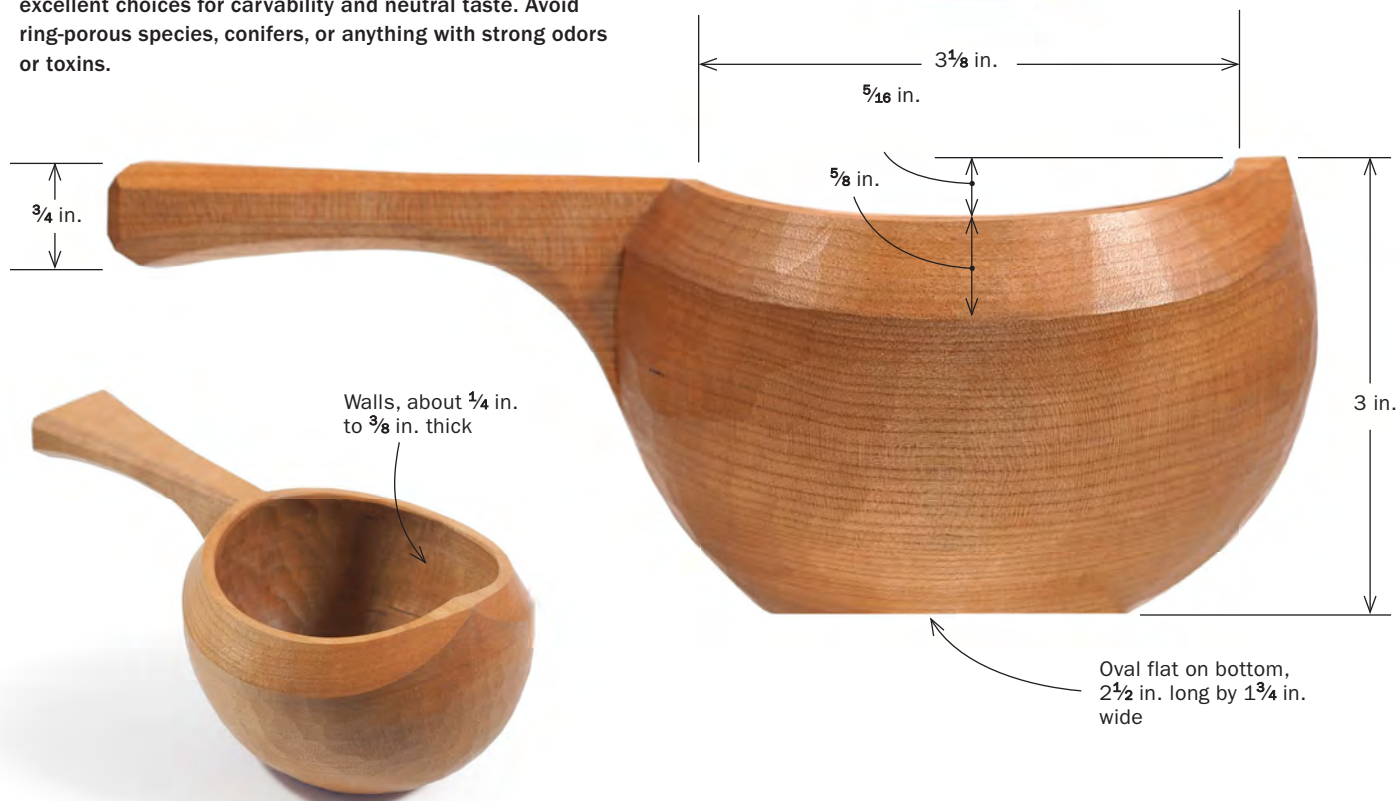
**C**arving your own wooden cup leaves you with a deeply personal object that can become a daily part of your life. And because it is a small object, you'll feel nearly every surface, from facets to curves, each time you pick it up. Wooden cups take many forms and have roots in many craft traditions around the world. Mine tend to be influenced most by Scandinavian *kuksa* and Japanese teaware, but there are many avenues to explore and learn from. Your tool set will also greatly influence the shape of your cup. Instead of trying to force a form that becomes burdensome for your tools, let their individual touch further personalize your cup.





## TASTEFUL GRAIN WITHOUT FLAVOR

Look for diffuse porous hardwoods such as black cherry, birch, maple, and beech. Birch and cherry are particularly excellent choices for carvability and neutral taste. Avoid ring-porous species, conifers, or anything with strong odors or toxins.



### Start with a log

My methods rely on the relative ease of carving green wood. A fresh log 12–18 in. diameter and 8–9 in. long is a nice place to start, though smaller or larger also work.

When splitting out the blank from the log, remove any knots or other grain irregularities—or better yet, avoid them from the start. Take off the pith, bark, and, if you don't like it, sapwood too. Last, hew the sides of the blank square to the top and bottom surfaces.

Although I do lay out a centerline, three concentric rings to

guide shaping and hollowing the bowl, and the profile of the handle, the layout is actually minimal. This is because much of the cup's final shape will be dictated by the hollow, which in turn will be determined by your specific tools. It's best to keep an open mind with the design of your cup and explore what shapes and forms are attainable with your given tool set.

### Hollow the inside, then shape the outside

Carving begins with hollowing the inside of the cup. If you began by shaping the outside of the cup, there would not be



## MAKE THE BLANK

**Start with a log.** Moore splits the round into billets using a small hatchet and a large mallet. Split off the pith before using the hatchet to peel away the bark. The pith side of the blank will become the cup's bottom. Make sure the billet is free of knots or wavy grain.



**Flatten the sides.** After using a straightedge to lay out the sides of the cup, hew to those lines so the sides are 90° to the top and bottom. In essence, this process is similar to truing roughsawn boards before laying out joinery. Unless you want to see it in the finished cup, now's the time to split off the sapwood.



enough material left to safely clamp the workpiece for the hollowing process.

I like to start the hollowing with an adze, which works quickly but leaves a rough surface. To refine the rough adze work and undercut the bowl a bit, I pick up a hook knife, preferably one with a long handle for better leverage.

Turn to the exterior shape of the cup. I do this in three stages, rough shaping with a bandsaw and ax, using a drawknife to get close to my final shape, and then turning to a sloyd knife for the final cuts. While some people let their greenwood projects dry before taking finishing cuts—because cuts on dry wood are often smoother than on green wood—I've come to prefer doing most of the cup's finishing work while it's still wet. Working green wood is less physically demanding, and you can still end up with a nice finish provided your tools are sharp. Save any decorative carving, however, until after the piece dries to keep those cuts as crisp as possible.



**Shave down to expose one growth ring.** This provides an excellent surface for drawing layout lines and ensures less cleanup later. Moore does this step with a drawknife at a low bench with the blank wedged in place.



HOLLOW THE CUP



**Lay out the bowl.** Referencing off a centerline, draw three concentric circles  $\frac{3}{8}$  in. apart. The outermost circle represents the outside of the cup at its widest point, which won't necessarily be at the rim, but more likely the belly. The middle circle will be the reference for the outside diameter of the rim. The innermost will be the inside of the rim.

The first step in shaping the exterior, removing the bulk of the waste, can be done with a bandsaw, a hatchet, or, as I prefer, a combination of the two. I cut to the layout lines with the bandsaw before picking up the hatchet for the contoured work.

Aim for a consistent wall thickness, including on the bottom, as this will determine if the cup survives the drying process and future use. At this stage, the wall should be about  $\frac{1}{2}$  in. thick.

The second step, the drawknife work, is done entirely at the spoon mule, a valuable workholding tool similar to a shaving horse. It's here that the cup



**Sketch the handle.** Draw a handle shape to suit your own taste, but consider how the shape will work with your workholding options later. Moore's shape works well with a spoon mule.



**Adze takes care of most of the hollow.** Again at the low bench with the blank wedged tight, Moore uses an adze with a narrow, tight sweep, a laid-back hang, and a relatively long handle to remove the bulk of the waste. He begins by swinging the adze using a two-handed grip. As he nears his layout lines, he uses a mallet to take more controlled cuts.



**Refine the hollow with a hook knife.** When he reaches the point of diminishing returns with the adze, Moore switches to a hook knife—preferably one with a long handle (left). Work right up to the inner layout line (above), and undercut the rim if possible.



# StopLossBags®

- Formulated for woodworking finishes
- Patented, internationally known
- Special 3-ply wall keeps VOCs in and oxygen out
- Retains the solids-to-solvent ratio of fresh varnish
- Get more consistent results (no more lap marks)
- Easily dispense a lot, or a little, as needed, great for touch-ups
- Easy to open, easy to close (no more prying the lid off, then pounding it back on)
- Squeeze out any air before tightening cap
- Environmentally friendly
- Use more of the varnish you've paid for
- Easily remix matte, satin, semi-gloss, by rotating, inverting, etc. (clear bag wall lets you see when you're done)
- Works for latex paint as well
- Unsurpassed in maintaining finish quality after can is opened
- Inexpensive, and they really work



*“May you never again need to throw out a can of thickened or skinned-over varnish”™*

Information and videos at  
[www.stoplossbags.com](http://www.stoplossbags.com)

# New Optima™ CHISELS

*Lapped & Polished,  
Surgically Sharp,  
Bench, Butt, Dovetail,  
Paring & Skew Chisels*

**Blue Spruce**  
TOOLWORKS

Visit our website to learn more about these remarkable new tools.  
[BlueSpruceToolworks.com](http://BlueSpruceToolworks.com)  
Strongsville, Ohio • 877-828-0332

## Great Gardens Start with DR® Rototillers

- Bust sod and churn through the most compacted ground
- Prepare seed-beds or till garden waste back into your soil
- Walk-behinds & tow-behinds

[DRrototiller.com](http://DRrototiller.com)

## Make Your Driveway Like New! DR® Power Grader

- Fill in potholes and smooth out washboard
- Loosen & redistribute existing material
- Tow with your ATV, UTV, or tractor

[DRpowergrader.com](http://DRpowergrader.com)

## Make Stumps Disappear! DR® Stump Grinder

- Grind away stumps fast
- Tungsten carbide-tipped teeth
- Rotary head takes 360 “bites” per second
- Self-propelled available

[DRstumpgrinder.com](http://DRstumpgrinder.com)

## Burn Safely with the DR® Burncage

- Stainless steel design
- Light, durable, portable, folds flat for storage
- Perforated construction maximizes airflow

[DRburncage.com](http://DRburncage.com)

**SALE!**  
**FREE SHIPPING**  
SOME LIMITATIONS APPLY

Request your FREE PRODUCT CATALOG  
Online or Toll-Free at 888-213-0916  
**GoDRpower.com**  
DR POWER EQUIPMENT





## BANDSAW AND AX TO ROUGH SHAPE

**Get a handle on it.** After crosscutting relief cuts to the base of the handle, Moore makes the long rips to establish the handle's sweeping shape. Next, he bandsaws the cup's outer diameter. His last step is to remove the waste under the handle.



**Chop large chamfers.** Take short but strong swings to start shaping the cup's round bowl. Keep the cut well supported throughout to avoid breaking it.



really begins to take shape, including the large bevel around the rim.

Last are the finishing cuts with a sloyd knife. Here, I work systematically to make sure I end up with a pleasing shape. By tuning the inside of the inner rim, then the wide chamfer of the outer rim, and then the flat bottom, I create waypoints that guide the rest of the fairing.

### Drying and finishing

The benefit of using green stock is that it's easier to work. However, a drawback is that you need to control the drying process. Fortunately, it's not that tricky, especially if the cup's walls are evenly thick. You just want to slow the process somewhat to prevent cracking. The simplest method I've found is sealing the cup in a paper bag and taking it out periodically for short periods.

**Then switch to skews.** To continue shaping, take controlled skew cuts.



## DRAWKNIFE GETS YOU CLOSER



**Smooth the handle.** Take controlled pulls downhill with the drawknife. But don't go too far. You'll return to the handle after carving the outside of the bowl, when you can better fair the transition between the two.

### **Sculpt the bowl.**

The convex surface can be challenging to carve, especially where it meets the handle. Be sure to take controlled cuts, and skew the drawknife here. Keep the walls evenly thick—a necessity for proper drying—letting the inner hollow significantly dictate the outer form. Moore uses his fingers as calipers.



## Online **Extra**

### SADDLE UP A SPOON MULE



During all of this drawknife work, Moore is constantly reorienting the cup to work different parts of it. His spoon mule (FWW #286) is a great help here, as it adjusts quickly while clamping securely and out of the way of the drawknife. To read how to make it, go to [FineWoodworking.com/296](https://FineWoodworking.com/296).



### **Rough in the large bevel.**

Make angled cuts as you work to the middle layout circle, creating the outer rim of the cup (right). With the bowl close to final shape, return to its transition to the handle; now you can blend the elements much more cleanly (far right).





# MORTISE & TENON

magazine

144 pages, independently published twice per year.

Subscriptions, back issues, books, and online educational resources available at our website.

Timeless craftsmanship is *worth celebrating.*

[www.mortiseandtenonmag.com](http://www.mortiseandtenonmag.com)

Explorations in traditional hand-tool woodworking.

## Make Yard Cleanup EASY! DR® Chipper Shredders



- CHIP big branches up to 5" thick
- SHRED lighter yard & garden waste
- REDUCE it all to a fraction of its original volume

[DRchipper.com](http://DRchipper.com)

## America's Original Field & Brush Mower

- MOW FIELD GRASS up to 8' high
- CUT BRUSH up to 3" thick
- Engines up to 22 HP
- Decks up to 34" wide

★ **USA**  
ENGINEERED AND BUILT  
Assembled in the USA using domestic and foreign parts.



**PLUS ALL-NEW**  
Commercial Grade XD Series  
with hydrostatic drive!

[DRfieldbrush.com](http://DRfieldbrush.com)

## Trim and Mow the EASY Way! DR® Trimmer Mower



- TRIM fencelines and perimeters
- MOW waist-high grass & weeds
- 5X the power of handheld trimmers
- Self-propelled models
- Gas- or battery-powered

[DRtrimmer.com](http://DRtrimmer.com)

**SALE!**  
**FREE SHIPPING**  
SOME LIMITATIONS APPLY

Request your **FREE PRODUCT CATALOG**  
Online or Toll-Free at 888-213-0916

**GoDRpower.com**

DR POWER EQUIPMENT





## KNIFE FOR FINAL CUTS

**Wide chamfers on handle.** Use short cuts by pulling the knife. Anchoring your thumb to the workpiece offers more control and acts as a stop, since your knuckles will hit it before the knife can (right). For the long cuts, don't try to take a single cut at final depth; instead, move from the end of the cut back, slicing slightly deeper as you go (far right).



**A little off the top.** Clean up the top of the handle and the rim, making sure to fine-tune the flowing sweeps that travel around the rim (right). Make very fine cuts to fair the inner rim (far right), ignoring the rough surface of the outer rim. Take your time, as this shape will be your reference for adjusting the outer rim and will significantly impact the overall look of the cup.



After the cup is dry, you can add finish. My finishing regimen helps it hold hot liquids and maintain a neutral taste. I use Half & Half from The Real Milk Paint Co., which is tung oil cut in half with citrus oil. I apply it in several thin coats to speed curing time. A light bulb kiln expedites the process even more. If your oil is not properly cured before use, your drinks will taste awful and you'll increase the risk of cracks.

A wooden cup can last for years if properly cared for. Don't put it in the dishwasher. Try to keep hot liquids below 190°. Avoid leaving liquids in the cup for long periods, such as overnight. But don't be shy about using it. Regular use can help to maintain a relatively stable moisture content in the wood, which can be better than cycling through extremes of dry and wet. □

You can follow Dawson Moore on Instagram at @michigansloyd.



**Final cuts.** Flatten the bottom and refine the large bevel so it looks good against the inner rim. Then, working from the bottom up, finish shaping the cup and bringing the walls to final thickness.