

Member Gallery



Our Tools - Part IV of a Few More

The Mad Woodturner

Scraping versus Cutting

New turners are often confused about this issue. Most start out just scraping no matter what kind of tool they are using. Lots of seasoned turners think scraping in any fashion isn't acceptable. See, you can use every cutting tool (see below for the distinction) in a scraping fashion and you can use many scraper tools in a cutting or at least a shear scraping way. Scraping is an easy although rough way to remove wood. The angle at which you hold the tool to the wood isn't as critical as with using a cutting tool. The bevel on a scraper isn't there to support the tool in the "cut". It's just there to get everything but the very edge tip of the tool out of the way from the wood. You don't "ride the bevel" with a scraper.

A parting tool (which is really just a thin skew .. but that's a different article) is a good example of a tool that is often used in both a scraping and cutting method. Simply pushing the parting tool into the wood at, more or less, a 90 degrees angle to the workpiece is presenting it in a scraping fashion. You'll get a lot of heat and a poor finish. You'll also have to push harder into the workpiece to get it to remove material. If, instead, you raise the tip of the parting tool as you start your cut and "ride the bevel" and then, as the cut starts, you push forward and slightly down still "riding the bevel" all the way down, you'll be using the tool in a cutting manner. This is a slightly more advanced method of using the tool but it gains you so much. The cutting is easier, faster, and with less heat. The surface left can be quite good as well.

What you are doing while scraping is tearing the wood fibers apart. You're not really slicing them off. The reason you get a fuzzy or jagged (tearout) surface from scraping is because of this tearing. Scraping also tends to cause more chatter especially with thin pieces. The chatter is caused from the fact that as each wood fiber comes into contact with scraper tip, it causes the tool to ever so slightly bump until that wood fiber finally tears loose. It's also caused because you have to press harder against the wood in order for the scraper to work.

So, how can you make a scraper work better without all of the fuzziness and chatter? The answer, sometimes, is a technique called sheer scraping. Take that scraper and tilt it clockwise or counter-clockwise about 45 degrees. Try pulling the tool across the wood instead of shoving it into it to get good control in the cut. It's also a good idea to take very light cuts here. With a good rolled edge (explained below), it shouldn't take much pressure at all to get very fine shavings to come off. What you're doing here is your presenting that rolled edge at an angle to the wood fiber instead of directly at it. The great part of this is that often you'll get a better surface on the wood than even the best of cutting chisels. I use shear scraping on the outside and inside bowl sides especially when the grain is wild or soft. A couple of light passes with a fresh, wide scraper and you'll have a surface that doesn't need to be sanded. Sheer scraping isn't always the answer though. Sometimes you can't get the tool in some tight spaces and still have it at an angle that'll do the job nicely. Other times, it's not practical to have a scraper hanging over a toolrest very far for example.