SOUTHERN UTAH Woodturners

American Association of Woodturners Chapter Since May 2010 MAY 2023

Officers & Contacts

PRESIDENT:
JERRY KELLER
(702) 497-5355-- j.keller534@gmail.co

VICE PRESIDENT:
BILL VINCENT--
(206 979-3218--billvincent1947@gmai

SECRETARY:
JIM POPE
435-559-8277
suwt2020@gmail.com

TREASURER:
Steve Ashworth
(435) 704-4192

WEB PAGE DESIGN:
George Mason
(435) 590-8169
georm@aol.com

NEWSLETTER EDITOR:
Leon Olson
(763) 458-4370 text only no calls
leonolson@aol.com

AUDIO/VISUAL :
Jim Pope
(435) 559-8277
suwt2020@gmail.com

ST. GEORGE AREA:
CHIEF ENGINEER-R&D
Grant Johnson
(435) 773-5998

DEMO COORDINATOR -
ERIC WALKER-
(435) 477-2655 -
mamapapabear186@gmail.com

From the Office of the President--

Hello fellow turners, how about that demo from Kirk DeHeer? I heard many positive comments during the raffle and pizza. I along with others were amazed at the surface finish of the square bowl that was right off the tool!
Next month at the June 10th meeting Joe Peacock will be demonstrating how he turns flower pots and the wooden flowers. It'll be something new and very informative.
Remember that we don't hold a meeting in July so let's have a great show and tell at the next meeting.
Take care to all and remember to turn safe!!

We are making the application for membership to Southern Utah Woodturners available on our website as well as including with the newsletter mailing as a separate attachment. Please mail form, with dues check ($30) for 2022, to Glenn Pearson at the address on the application so he may update our records for the membership roster.

The demo of the month: Kirk DeHeer Turning a myrtle bowl with square sides

Kirk discussed safety. His glasses have side shields. He does not have jewelery on his hands or arms. Wax on the wood makes the floor slippery. Water on the floor helps. He discussed a variety of tools. He uses a Oneway wormscrew in his Vicmark chuck. He also

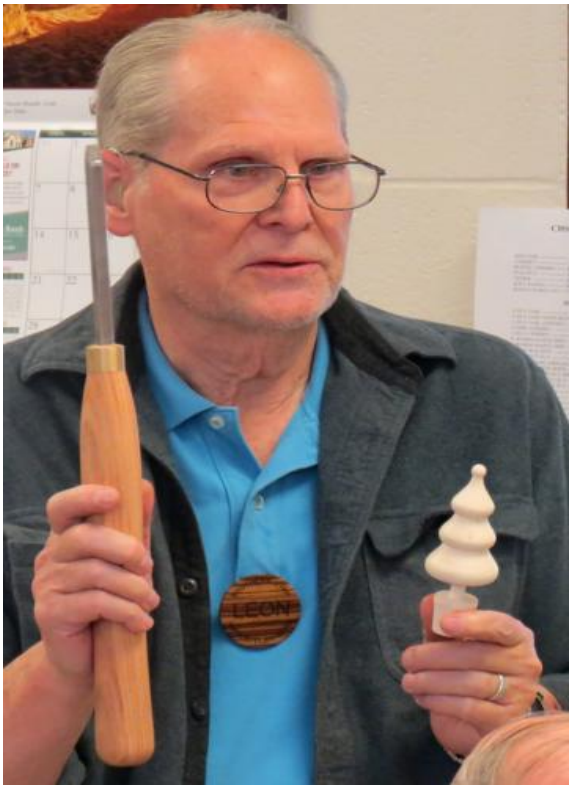
Vicmark chucks holding the best with the smallest holding feature and why. He put blue tape on the tool rest so he knew where the corners of the blank were spinning. He used pull cuts to remove most of the wood. He used push cuts for the final cuts. Standard tool rest height is where the tip of the tool is at center when the tool is horizontal. The diameter of the tenon matching the original diameter of the chuck jaws before they are cut into four jaws will give the best

as finish cuts. He used a negative rake scraper with very light cuts when the wood was to thin to use a gouge. RPM does have an effect on the smoothness of a curve just like driving a car.
Moving the tool rest up or down also can change the smoothness of cutting a curve. For chuck holding put jaw one at 12 oclock, jaw two at 3 oclock, jaw three at 6 oclock and jaw four at 9 oclock. That also helps to rechuck a turning accurately. A 50 degree bevel bowl gouges will cut a deeper bowl than the 40/40 grind. Traditional grind bowl gouges, 70 to 80 degrees with no wings cut the bottom of a bowl

Instead of trying the turn the center of a bowl perfect and risk cutting a small divot, stop the lathe and sand it flat with 220 grit. You need to retighten your chuck occassionally, wood compresses. Kirk also made interesting comments during

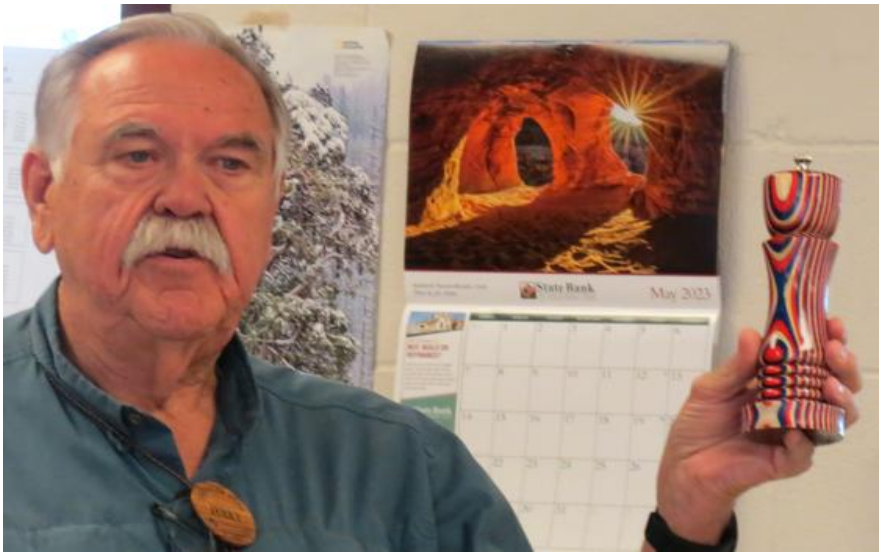
Show & Tell

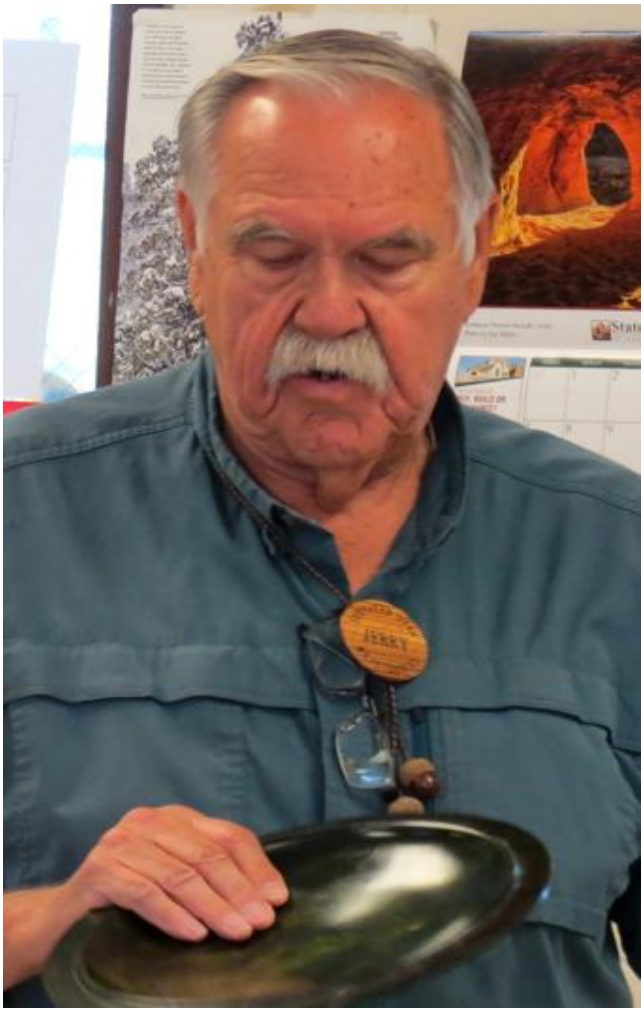
Lavar Bradley with a segmented vase, segemented bowl and red cedar platter



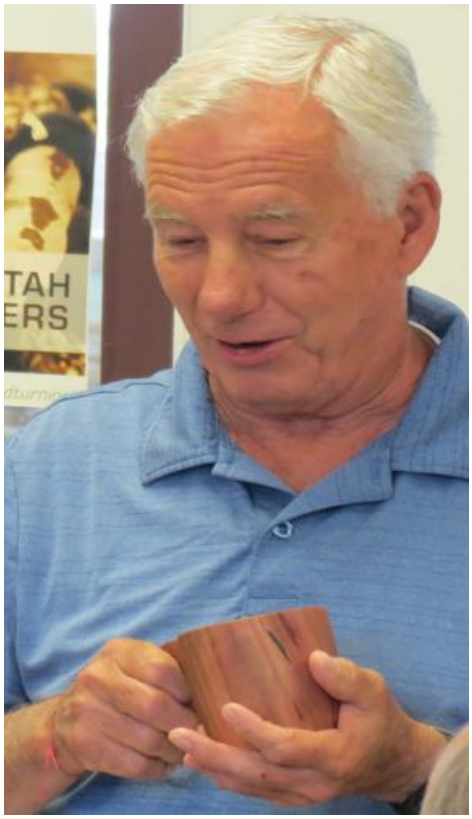
Leon Olson with a square skew, a Richard Findley challenge skew turned tree and two eggs

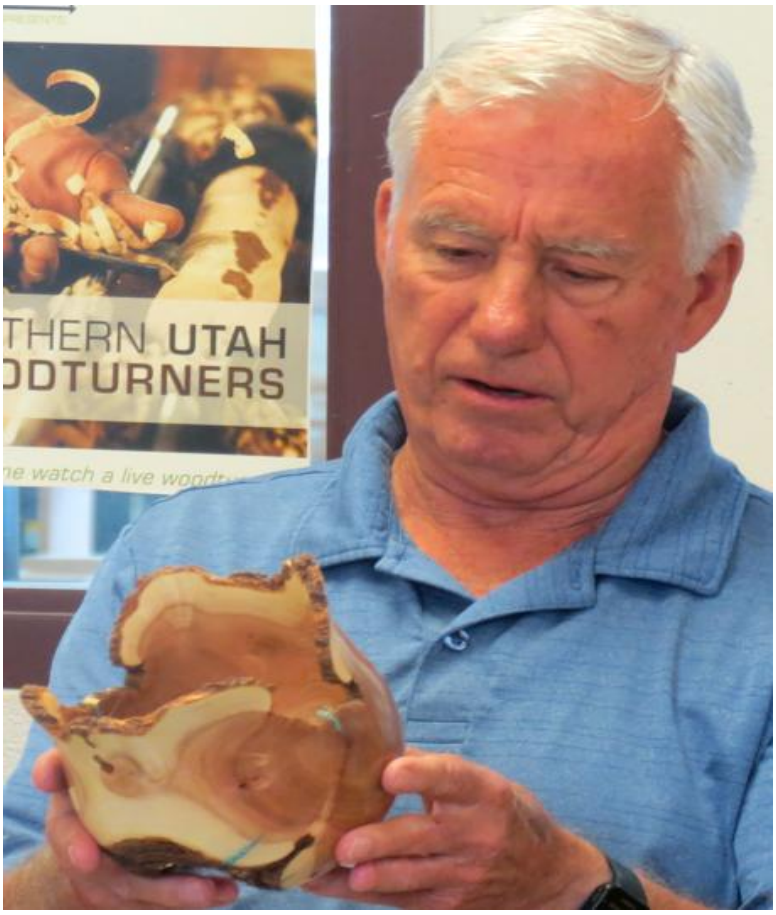
Ken Kofoed with a gap segmented vase, a gap segmented bowl with curve template and a dyed tamarisk vase





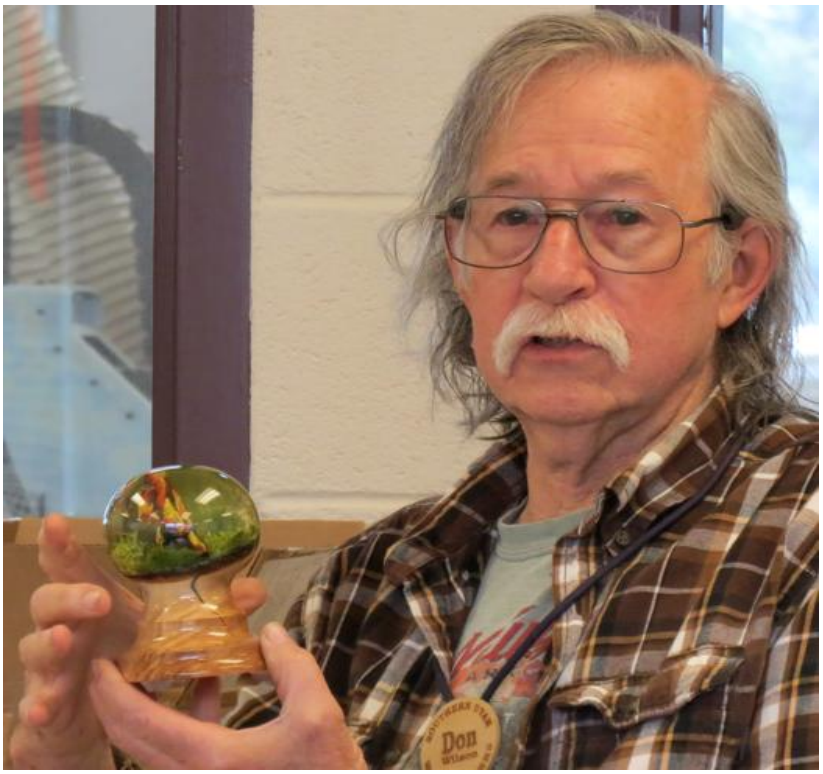
Jerry Keller with a Spectraply pepper mill, a multi colored platter, a man in a maze basket weave platter and an aspen basket weave platter





Joe Peacock with two cups with handles, a cat, a mouse, a spalted apple vase with flowers, a honey pot, a tamarisk natural edge bowl, multi axis male and female figurines

Roger Bender with an ash bowl



Don Wilson with a resin globe diorama cast onto a maple base and turned

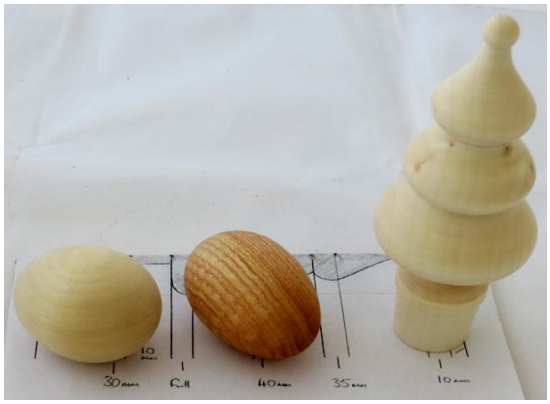
Jeff Blonder with two square bowls and a large square segmented vessel

GALLERY

Ken Kofoed gap segmented vase, dyed tamarisk vase, gap segmented

Jerry Keller Spectraply

Leon Olson square skew
Richard Findley tree and egg challenges



Jerry Keller man in a maze basket weave platter and basket weave aspen platter

Jerry Keller multi color dyed platter

Lavar Bradley segmented bowl, segemented vase and red cedar platter

Joe Peacock two cups with handles, honey pot, tamarisk natural edge bowl, multi axis male and female figurines, cat, mouse and a spalted apple

Jeff Blonder two square edge bowls and a lidded segmented square vessel

Don Wilson resin globe diorama cast onto a maple

TIPS AND TRICKS
LEON OLSON MAY 2023

Tool geometry or the "grind" you use Part One

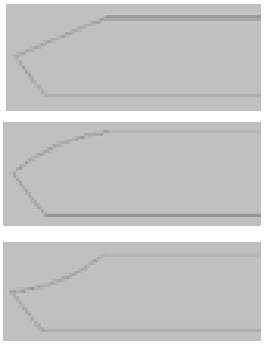
As a machinist I learned quickly that tool geometry for each material is critically important. The same issues apply to woodturning. The type of cut you are trying to make determines which tool geometry or "grind" will produce the best results. There is the grind that comes from the factory which you may or may not want to use. Then there are grinds for specific purposes. Sometimes we only have one tool and use it for a variety of cuts with a "grind" that is a compromise. So, what is the best grind for each tool? It is the grind that YOU like and works well for YOU.

In the February 2023 issue of the American Woodturner, vol 38 no. 1 there is an article on pages 24-26 "A Look at Gouge Geometry" by Lyndal Anthony. This article is the best explanation I have seen. There are clear diagrams and photos that allow you to understand exactly what the text is trying to explain to you. As I read the article I could see and understand the mistakes I made as a beginning turner. Mistakes that caused me grief. There are three articles about tool sharpening and maintenance starting at page 18 and going through page 27. Articles like "A Look at Gouge Geometry" are the reason I am willing to pay to be a member of the AAW. Having a truly searchable index for the American Woodturner back to the first issue allows me to find things I want to learn about.

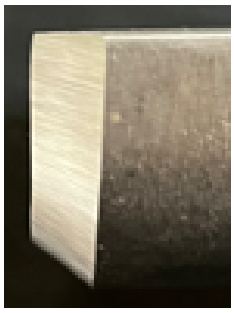
Before we can communicate about tool geometry, we must be speaking the same language and understanding the same things.

The horizontal line in the diagram below shows a line along the inside center of a gouge flute with the bevel ground at 45 degrees.

To the right are profiles of gouges with 55 degree bevels with straight wing, convex wing and concave wing. Straight is ok. A little convex is usually better. Concave will cause grief.



SPINDLE ROUGHING GOUGES: The angle of the cutting edge is about 45 degrees. It can be adjusted according to the hardness of the wood. Softer woods less than 45 degrees and harder woods more than 45 degrees. The angle is measured inside the flute, at the bottom, at the tip of the tool. It will always be an acute angle, less than 90 degrees. There are no wings on a spindle roughing gouge.

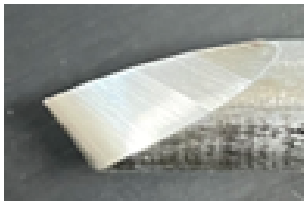


Use a grinder platform to sharpen spindle roughing gouges, not the V arm of a grinding system. In fact, do not sharpen any tools with the end of the handle in the V arm. I have seen multiple grinders and grinding wheels trashed using the end of a handle in a V arm. Kirk DeHeer cut his V arm 10" shorter so you can't use a handle in it.

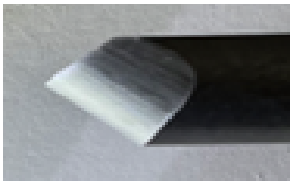
The cutting edge of a roughing gouge should be presented tangent to the wood, not perpendicular. Perpendicular would be a scraping cut and could break the tool off from the handle if the gouge is too

far over the tool rest. I have seen people cut with the spindle roughing gouge perpendicular to their turning. That is the type of thing that will break a cast iron tool rest, which I have also seen.

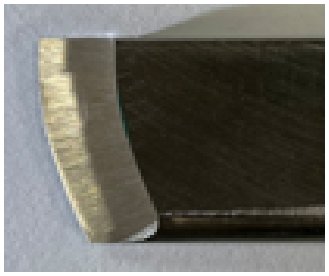
BOWL GOUGES: There are multiple cross section profiles for bowl gouges: U; V; parabolic. The grind angles vary from 40 to 80 degrees. 70 and 80 degree grinds are used to cut across the bottom in the center of a bowl. The angle of the grind determines where the handle will be in relation to the tailstock as the gouge cuts into the bowl blank. 55 degree is a compromise grind. Stewart Batty likes the 40/40 grind with the bevel at 40 degrees and the wings at 40 degrees. The "wings" of a bowl gouge can vary from almost vertical to swept way back along the tool. Swept back wings can be used for "pull" cuts, which is a scraping cut, or "shear" cuts at about 45 degrees to the rotation of the wood. The bowl gouge to the right has about a 55 degree grind and convex swept back wings. Sometimes grinding the heel of the bevel away can make it easier to cut in tight areas and minimize rubbing marks.

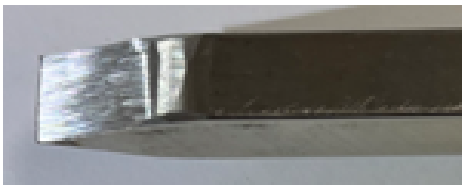


SPINDLE GOUGE: The spindle gouge grind angles vary between 40 and 25 degrees. A 25 degree grind allows you to cut in confined areas but will grab and catch easily and the cutting edge is more fragile. The wings can be a function of the grind angle or swept back. Swept back wings can be used for pull cuts like a bowl gouge. Richard Raffin uses the swept back wings of a spindle gouge to rapidly hollow out boxes. He makes a center hole and then cuts the side grain with the swept back wing as he enlarges the hole. The spindle gouge in the photo to the right has about a 35 degree grind with straight wings that are a function of the grind. The spindle gouge shown is my favorite to use. It is the one I use to cut finials and turn eggs. If I want to make a pull cut, I use a spindle gouge with swept back wings. The swept back wings allow you to make a scraping cut in very tight or small areas without grief. Lazy or careless tool movements are the cause of most of my catches.



SKEWS: There are three basic ways to form the bevel of a skew: concave; flat; convex. Concave is what you get from a grinding wheel. It is the most aggressive and difficult to control. Flat is what you get from a belt sander like the Sorby sharpening system. Convex is the least aggressive but if the bevel is too convex it will not cut. I used a cheap diamond hone from Harbor Freight to slowly create a convex bevel. It was a lot easier to use and allowed me to learn how to use a skew. It was also difficult to keep sharp. Currently I use a concave bevel because it is easy to sharpen quickly. The angle of the cutting edge can vary. The most common is straight at about 70 degrees from the top edge of the skew. I prefer 90 degrees for a short distance from the long point and then an arc to the short point. Usually, the bottom edge of the skew is rounded so that it moves easier on the tool rest.



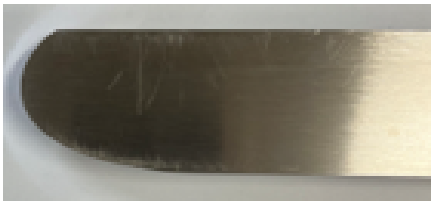


Most tools made from flat stock come with sharp corners on the edges. For scrapers that is an advantage but for skews it is a problem. By rounding the edge, it is easier to move the skew on the tool rest to make a slicing cut. I have even taken a little of the sharpness off the top edges so that the skew does not catch on the tool rest when I make V cuts with the long point. The square skew shown above has round edges and the heel of the bevel is rounded as well. I have used the square skew to turn eggs.

There are also skews with rounded sides. Some turners love them.

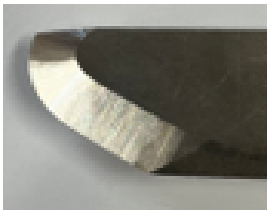
SCRAPERS: REGULAR AND NEGATIVE RAKE

First, scrapers are not supposed to be used when spindle turning. Scrapers do not cut edge grain well. Scrapers usually tear edge grain. Scrapers are usually used for hollowing end grain in boxes or making a fair surface in a bowl. I use a scraper for shear cutting which I find easier that using a gouge. With most woods, scrapers cut with a burr which can be created by grinding or burnishing. You can buy or make your own burnishing fixture. With extremely hard dense woods, like African blackwood, a negative rake scraper can be used with no burr. With scrapers, the angle between the wood and the scraper cutting surface should ALWAYS be less than 90 degrees. Even cutting close to 90 degrees is asking for a catch. One time I bought an expensive large heavy duty Henry Taylor "Richard Raffin" scraper at a garage sale for $30. Just the steel was worth more than $30. It had been used one time. It was still sharp but the handle was cracked in three places. That must have been one scary catch. The wrong angle of presentation will cause that every time. That is the reason most of my scrapers are negative rake scrapers. Negative rake scrapers are a lot easier to use. The angle between the two bevels is less than 90 degrees. Richard Raffin has lots of videos on YouTube showing how to use scrapers.

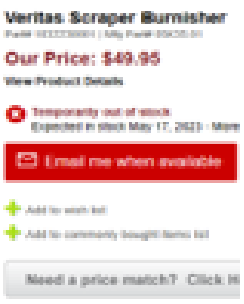


The scraper on the left has a burr at the top edge.

The scraper on the right is a negative rake scraper with a bevel on each side. The bevels have an included angle of about 60 to 70 degrees.



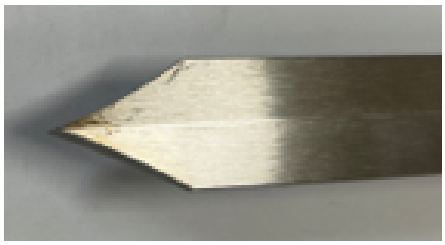
Veritas Scraper Burnisher



Burnishing tool from Craft Supply USA

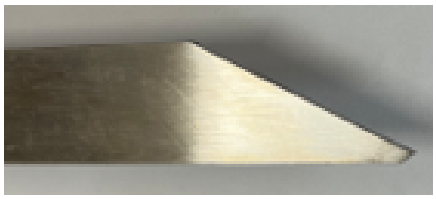
PARTING TOOLS

Some parting tools cut tangent to the spinning wood and some cut as scrapers at less than 90 degrees to the wood. Parting tools that have long concave bevels that meet in the center of the tool should cut tangent to the spinning wood but you can use them pointing at the center of the spindle, the cut is usually not a good one. Thin parting tools with a long bevel should have the long bevel up and the short bevel down with the cutting edge making a scraping cut at less than 90 degrees to the wood cutting below center. If you have the short bevel up, you will have a catch and flex or bend the tool. With the long bevel up the drag on the tool will be at the bottom of the tool and should be stable. Most parting tool cuts leave torn grain. Usually, it is best to make a cut that is wider than your parting tool so that the parting tool does not rub and overheat while cutting.



The parting tool on the left is a diamond shape parting tool which is wider at the center. The cutting edge needs to be at the center.

The parting tool on the right is a thin parting tool. The cutting edge needs to be near the bottom.



SPECIAL TOOLS

Cindy Drozda's Vortex tool is a cross between a detail spindle gouge and a skew. As with both spindle gouges and skews extreme care should be taken with both your entry and exit from a cut. There are many unique tools for specific types of cuts. Tools to cut rings, threads, beads and so on, each with their own issues. The list of hollowing tools is almost endless. Sharpening is unique to each tool.

WHY WE LIVE IN SOUTHERN UTAH

Hiking Queen's Garden and Navajo Loop Trails, Bryce Canyon National Park
Glen Pearson Photos

Attendees to regular meeting May, 2023

Gayle Adams, Will Arcularius, Steve Ashworth, Jared Barlow (student), Lavar Bradley, Bob Belkowski, Roger Bender, Jeff Blonder, Karl Bradshaw, Joe Delong, Les Gray, Ross Henshaw, Chad Humphries, Sunny Johnson (student), Jerry Keller, Ken Kofoed, George Mason, Karl McMullin, Leon Olson, Joe Peacock, Glen Pearson, Jim Pope, Ken Ragsdale, Mike Russell, Don Smith, Bill Vincent, Eric Walker, Don Wilson.

Guests: Steve Bento; Lauren Christensen; Brant Jensen; Oscar Jimenez; Owen Mayes.

Dedicated to promoting woodturning in Southern Utah through educational demos, classes & fellowship between members.
"Learning Through Turning"

Turn Often & Turn Safe

Meeting the 2nd Saturday of each month

Visit our website at :
htpps://www.southernutahwoodturners.com Email-- suwtclub@gmail.com

ITEMS FOR SALE BY MEMBERS

Please submit items for sale to Leon Olson (leonolson@aol.com)before the 15th of the month to be included in the newsletter. Include SUWT Newsletter in the title of the email

FOR SALE

The Foundation of Valley View Medical Center

SUU SOUTHERN UTAH UNIVERSITY
LEARNING LIVES FOREVER

NEVINSTOOLS.COM
508.846.4512

CANYON CREEK SERVICES

Motion Industries is near Costco. They sell belts and bearings among other things. This location is a sales office but they gets things quickly.

Mike's repair is not far from Canyon View High School but it is on the north side of the freeway. There is a road under the freeway from the school. The website is mikestool.com
You need to be careful to get it exact. There is another website that is one letter different.