IWG News

The Newsletter of the Island Woodturners Guild September 2020

About the IWG :

The Island Woodturners Guild meets from 1:00 - 4:00 PM on the 4th Saturday of each month (except for July/Aug) at the Central Saanich Senior Citizens' Centre, 1229 Clarke Road, Brentwood Bay, BC.

Visitors are welcome.

Executive Committee

President:
Tim Karpiak

Vice President:
Vik Peck

Secretary:
Michael McEwan

Treasurer:
Peter Pardee

Members at Large:
Emma Banner
John Kilcoyne
Virginia Lee

Past President:
Steve Werner

Newsletter Editor:
John Kilcoyne

The IWG gratefully acknowledges the support of the following companies:

Artisan Wood to Works
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Industrial Plastics & Paints
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Richelieu Hardware

THE PRESIDENT'S TURN

Hello everyone. I hope you all had a nice summer and you were able to get some time in the shop with the doors open. At least if we were in our shops it didn't seem weird to be wearing a mask!

The current state of the world has prompted the executive to develop new ways to communicate and deliver programmes that are of value to our members.

We start the year off with Cindy Drozda who will demonstrate turning a multi-axis box. While this is not her usual demo, since most of our members have seen her turn a finial box, we thought it would be a good idea to provide something new. (Log in details will be provided by email.)

At the conclusion of Cindy's presentation, we will have a remote Show and Tell. You should have received the email outlining the procedure we will follow. If you have a turning you would like to show, send me your picture(s) and I will arrange for these to be presented on line. After the meeting, the pictures will be posted to the website for all to see.

One last thing. September is the beginning of our new membership year. By the time you read this you should have received an email explaining the procedure to renew your membership on-line. (Help will be available if you get stuck!)

I miss talking to everyone and look forward to the day when we can all get back together for a face to face meeting. But in the meantime, I hope to see all your smiling faces on Saturday for the Zoom meeting with Cindy Drozda.

Cheers.

Tim Karpiak.

NEXT (ZOOM) MEETING: CINDY DROZDA

Our next meeting on September 26th will feature a live remote demonstration by Cindy Drozda beginning at 1:00 p.m. An internationally acclaimed turner, she will demonstrate turning a triangular box.

In addition to providing detailed instruction on multi-axis turning, she will also provide information on various aspects of box making and jam-chuck practices.

UPCOMING MEETING: OCTOBER

The October meeting will feature a live remote demonstration by our own Lin Bayford on turning a Sea Urchin style, multi-axis ornament.

JUNE RECAP: MIKE MAHONEY

Mike gave an interesting presentation on variety of topics. The following are the highlights.

A. BLANK PREPARATION

1. Quartersawn Blanks

If a log has a sufficient diameter, Mike will cut it into quartersawn blanks for his platters and plates. This grain orientation means that there will be little or no warping. Of equal importance, on species such as white oak, it means that the piece will have a unique pattern of “ray fleck” or “tiger stripes”.

2. PVA Glue Sealer

While most turners use a wax emulsion (LV: $46/gal) to seal logs, blanks or rough turned bowls, Mike prefers to use Elmer’s Glue which is ½ the price. He cuts it with 10 – 15% water which makes it easier to spread.

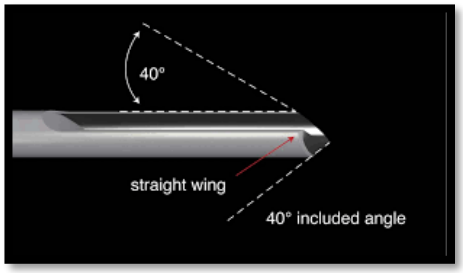
3. Low Tech Dryer

In the case of rough turnings with fissures or burl areas, a sealer cannot be used since it would be impossible to remove all of it during the finish turning. In these instances, he will place 3 or 4 of them in a lidded cardboard box. The increased moisture content from multiple turnings significantly slows the drying rate. (This method could also be used for species, such as fruitwoods or arbutus, that are prone to cracking.) He places a piece of Styrofoam between each blank to promote even drying and to avoid fungal growth.

B. TOOLS

1. Bowl Gouge: 40-40 Grind

While he uses a variety of tools, most of his turning is done using a 5/8" bowl gouge with a 40-40 grind. Made popular by Stuart Batty, this grind features the same 40-degree bevel on **both** the tip and the wings. (The top slope of the wings to the tip is also 40-degrees.)



He did note that the ideal grind angle will vary depending upon the density of the wood. Hence, in the case of a hard wood such as cocobolo an angle closer to 60 degrees would be better.

The tool is ground freehand and, as the photo left shows, the wings are shorter and much "beefier" than those on an Irish or fingernail grind.

It is particularly effective at fast stock removal when using a push cut which is obviously a crucial requirement for someone who roughed out over 1400 bowls this winter! Mike also noted that having the same angle on the tip and the wings means that the tool will not "self feed" which might produce a catch.

40-40 Jig

If you are interested in trying out this grind, you may want to consider building this jig which will help you with freehand sharpening: https://www.petermiao.com/news/2017/11/11/a-jig-for-4040-grind

40-40 Using a Vari Grind

If you have the Oneway Vari Grind (VG) jig, you can use it to produce a near 40-40 grind.

The following method was developed by John Lucas and posted on the AAW forum.

a. Move the arm on the VG all the way to the top (Photo right).

b. Insert the gouge in the VG with a 1 ¾" projection.

c. Move the Wolverine V-arm out until you have a 40-degree angle at the tip. You can simplify this process by first grinding a 40-degree bevel on the tip freehand. (On Lucas' grinder and CBN wheel, the V arm extension was 6 3/8".)

Alternatively, you could purchase a set-up gauge (US$30) which is calibrated for use with the VG jig to produce a 40-40 grind.
https://www.ronbrownsbest.com/index.php?route=common/home

Sharpening

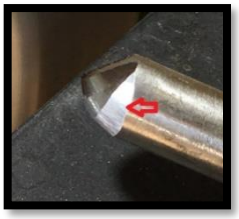
As a production turner, he uses an 80x grit ceramic wheel for sharpening. While the resulting edge is obviously not as sharp as a higher grit wheel would produce, it is much stronger which means less time re-sharpening.

Gouge Tip

Mike recommends a relatively small curve at the tip for all gouges. This minimizes the chances of the gouge "skating" and provides greater control.

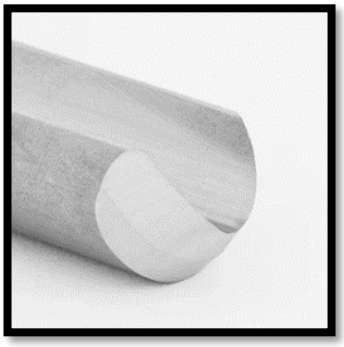
Heel Relief

On all his gouges, Mike grinds away a portion of the bottom of the heel (right arrow) to prevent it rubbing on the wood.



2. Bowl Gouge: Traditional Grind

For deep bowls, the 40-40 grind does not allow you to maintain bevel contact on the bottom of the bowl. In this case, he uses a bowl gouge with what is termed a traditional grind. It has a steeper bevel angle (50 degrees) and is ground straight across the edge akin to that of a spindle roughing gouge.



He finds that it does a superior job on end grain. He also uses this tool on woods that are difficult to obtain a clean cut such as figured woods or burls. While it is more difficult to control for new turners, he finds that it provides a much cleaner cut than an Irish/Fingernail grind.

Note: Maintaining bevel contact on the bottom of a deep bowl using an Irish grind can be achieved with a steeper bevel angle – somewhere in the neighbourhood of 60 – 70 degrees and/or by reducing the size of the bevel on the cutting edge.

3. Bowl Gouge: Irish Grind

Mike relies heavily on shear scraping to provide a fine surface. For this task he uses a conventional Irish grind (35 degrees) with exceptionally long wings which maximizes the surface available for shear scraping.

For a short video of Mike demonstrating shear scraping with a bowl gouge, see: https://www.youtube.com/watch?v=jBIUEfWBxZk

4. Scraper

For a final finish on flat or slightly curved surfaces, Mike uses a 1.5” x 3/8” round nosed scraper with a traditional bevel (as opposed to a negative rake). This bevel requires the rest to be set just above centre and the tool slanted slightly downward.

C. DESIGN

1. General

Mike prefers classic shapes for his turnings and he rarely, if ever, adds any embellishment including beads or coves. As he has access to a range of beautiful woods, he is a strong proponent of allowing the wood to take “centre stage”.

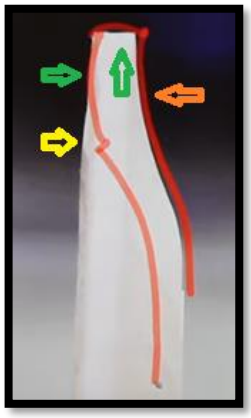
2. Wood Selection: Durability

In addition to the obvious aesthetic considerations, for his utility ware Mike only uses woods which have good shock absorption. He indicated that most “soft” hardwoods such as maple and walnut can handle a tumble without cracking. By contrast, he would never use locust wood for these items. Despite its hardness, there is no shock absorption and it can easily crack if dropped.

3. Salad Bowls: Proportion

As a rule, in designing his salad bowls, he prefers a 2.5 to 1 ratio of height to diameter. Hence for a 12” diameter bowl, he would opt for a 5” height.

4. Platters



In Mike's view, the best design for a platter is one that features:

a. a simple ogee shape on the underside of the rim (orange arrow),

b. a convex surface on the edge and the rim (green arrows), and

c. a small indent or step separating the rim and the bowl (yellow).

For both platters and plates, he finds that a rim width which is 1/8th that of the entire diameter is the most pleasing proportion.

5. Foot Size

Mike primarily turns items intended for every day use. Accordingly, when determining foot size, functionality is an ever-present concern.

For bowls, Mike embraces a foot size that is 35 to 40% of the diameter. For tableware stability is an overriding requirement. Accordingly, on platters he opts for a foot size which is 50 – 75% and on plates, 80 – 90%.

D. TURNING

1. Rough Shaping

For initial shaping of a dried blank, he frequently uses a bowl gouge in a scraping mode which allows him to quickly establish the desired form. The rough finish which is left is later cleaned up using the bowl gouge in a shear scraping mode (right).

2. Recess for Chuck Mounting

Once the bottom is formed, he uses a spindle gouge to turn a dovetail recess for mounting in a 4-jaw chuck.

The diameter of the recess is “just a hair” larger than the size of his chuck when completely closed which means that the jaws barely open when he mounts the piece. Not only does this provide the most secure hold, it also means that the jaws will not damage the walls of the recess.

As for the depth of the recess, he never goes more than 1/8”. (He uses only hardwoods, checks that the wood around the recess is solid and **always** engages the tailstock when turning.)

3. Minimizing Vibration

He emphasized working from the rim inward in small increments. The longer you can leave mass in the centre of the blank, the less vibration you will experience.

E. FINISHING

1. Sanding

He typically sands from 120x to 400x. With each grit, he sands with the lathe in forward motion and then in reverse, with the power sander rotating in the opposite direction.

With some species such as oak, the grain will raise when it gets wet. In these cases, he applies a light mist of water and then sands again with 400x paper.

2. Finish

Mike’s choice of finish is determined by the type of turning and intended customer. For “artistic” pieces including urns, he will often use a film finish such as wipe-on polyurethane. Such pieces will likely see little abrasion and thus it will not be necessary for a “novice” to recoat. The situation is otherwise in the case of utility ware and it is not surprising that he uses his brand of Walnut Oil for these turnings. (For information on Walnut Oil, see the June 2020 Newsletter).

Having said that, in a demonstration video he acknowledged that on the bowls that he turned for his 99-year old aunt, he used mineral oil. Since she takes a spoonful every day (as a natural laxative), it is a simple matter for her to occasionally add one to the bowls.

3. Fuming

Mike will occasionally fume a turning of white oak with ammonia. The ammonia fumes react with tannins in the wood to darken it and highlight the grain pattern. Fuming was particularly popular with furniture makers in the Arts and Crafts movement in the late 19th and early 20th century and was popularized in North America in the mission style furniture of Gustav Stickley. Unlike staining or dyeing, there are no blotches or runs and the end-result is colourfast.

While you can obtain ammonia in various strengths, he finds that household ammonia with a concentration of only 5 – 10% is sufficient. An open container of ammonia is placed below the turning in a container which will "trap" the ammonia fumes. While Mike uses a garbage pail, a lidded cardboard box will work well for smaller items.

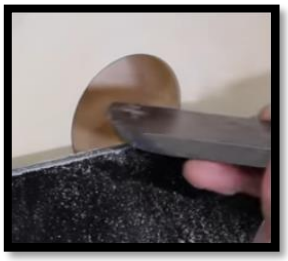
Safety: Ammonia is a caustic compound that will burn skin on contact and the fumes can cause serious respiratory damage if inhaled. Rubber gloves and a cartridge respirator with filters rated for ammonia exposure are required.

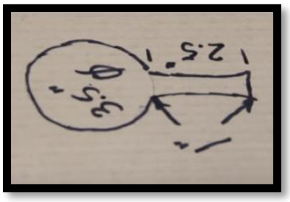
F. PROJECT: DRINKING CUP

Mike begins with an 8" x 2.5" disk mounted on a screw chuck. The edge and face are trued up and a tenon is turned on the face.

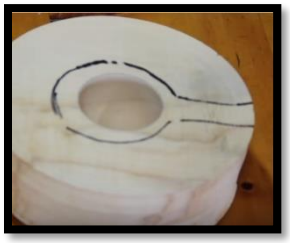
The blank is then mounted in a 4-jaw chuck and the face is trued up.

He then marks the inside diameter of the cup (approximately 3”) and uses a drill to mark the desired depth. The cup portion is hollowed using a bowl gouge with a traditional grind. He then finishes the surface with a rounded scraper before sanding to 400x.





He then prepares a cardboard template with a circle of 3.5” and a handle 1” wide and 2.5” long and transfers these dimensions to the blank.



The form is then cut out at the bandsaw.

Two offset 1” circles are marked on the handle and then drilled out using a spade bit. (He alternates drilling from each side to prevent tear out.)

He then refines the shape of the handle the bandsaw.

He rough shapes the piece first using a spindle wrapped with 80x sandpaper and then a soft pad mounted in his drill press.

For finish shaping, he uses a carbide burr in a rotary carver.

The final sanding to 240x is done using a soft pad in the drill press and a cylinder sanding drum in the rotary carver.

For a video of this project see: https://www.youtube.com/watch?v=0TSD6g__TZA

RAINBOW TURNINGS: PHIL COTTELL

The spring challenge was to create a unique hollow form.

Phil's submission was turned from aspen with a spigot of spalted birch and the rainbow was created using acrylic inks. A striking piece of art!

He has also used this process on bowls which feature "rainbow rings" on the rim.

For AAW members, detailed instructions can be found in Phil's article in the AAW *Woodturning Fundamentals* (August 2020) at:

https://www.woodturner.org/common/Uploaded%20files/WoodFunPub/WF0903-2020.pdf

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"LOCKING LID" BOX

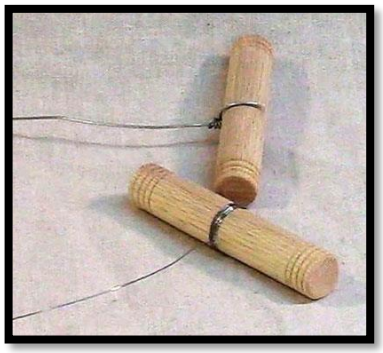
This maple box with a locking lid was made by Bill McColgin of the Finger Lakes Woodturners in western New York state. As the photo at right shows, the two tabs on the inside of the lid are inserted into grooves in the top of the box and then rotated to "lock" the lid in place. An interesting design on its own, with a slight modification, it could be used to ensure a "no-fuss" alignment of the grain in the box and lid.

QUICK TIP: BURNING LINES

A common decorative feature is to friction burn one or more dark lines on a turning. Depending upon the orientation, there are two basic tools that can be used. Both require a small groove for tracking and a relatively high lathe speed for heat generation.

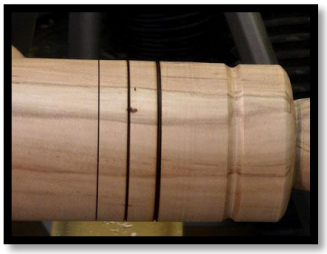
1. Wire Burner

To burn lines on the outside of a turning, use a length of wire fastened to 2 wooden handles. The simplest arrangement is to drill a centre hole through each handle and wrap each end of the wire around the handle.



Steel wire is recommended for this application. (While copper will heat up faster, it will quickly "melt" and snap.) Recommended sources for wire include old guitar strings or fishing line.

NEVER WRAP THE WIRE AROUND YOUR FINGERS … UNLESS YOU WOULD LIKE TO PRACTICE SELF-ADMINISTERED DIGITAL AMPUTATION.



The photo shows line burning with, from left to right, 28, 22 and 16 gauge wire.

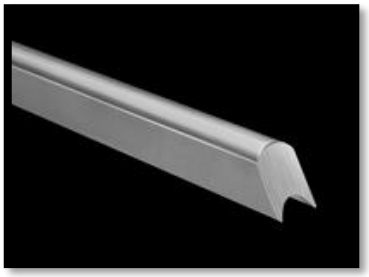
2. Plastic Laminate

For burning lines in a "faceplate" orientation, you can use a piece of plastic laminate. (Free samples can be found at most hardware stores).

For narrow lines, simply sand or file the piece of laminate to a fine edge.

HOMEMADE BEADING TOOLS PETE MANN

While you can certainly turn beads with a spindle gouge, many members rely upon beading tools from D-Way Tools (right).



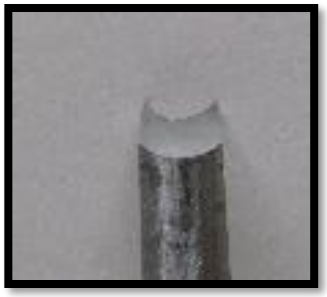
However, at US$50 per tool, they are an expensive investment for tools that are used relatively rarely.

Pete Mann's response was to use some old spindle gouges to make his beading tools.

An internet search turned up many helpful videos including those by:

Mike Waldt (https://www.youtube.com/watch?v=eZ03n8vt2kw),
Brian Havens (https://www.youtube.com/watch?v=8hnIGCUoB4s), and
Mike Peace (https://www.youtube.com/watch?v=RvYphIAev0o

With the grinder table set at approximately 50 degrees, the tool is ground until there are two sharp points at each corner.



The photo at right provides a "before" and "after" view.

His first gouge was carbon steel with a thick body. As a result, the tips were relatively thick which meant a wide gap between the beads. To remedy this, he sanded the sides of the tip at 90 degrees to narrow the gap.

He notes that the same result could be obtained by first applying a swept-back grind to the gouge.

To clean up the flute he used a chainsaw sharpening stone. (Alternatively, you could wrap some sandpaper around a drill bit that is slightly smaller than the radius.) A diamond hone is used to sharpen the bevel.

The tool is used “flute-down” on the tool rest and it should be centered on the workpiece to ensure full bead size.

For best results, slowly engage the two “tips” and then gently rock the tool back and forth until the full bead is cut.

(For a video of this technique see https://d-waytools.com/beading-tools/)

The finished tools.

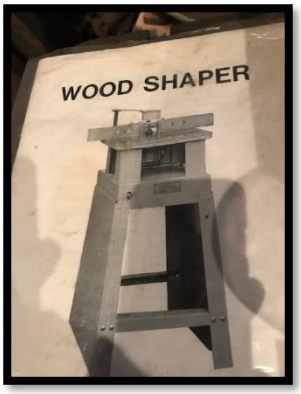
FOR SALE

1. Beaver 16" Benchtop Bandsaw

$150 or OBO.

2. Shaper (Almost New)

$150 or OBO.



3. Rockwell 14" Bandsaw
$50 or OBO.

Contact Lin Bayford for more information (lorbay@telus.net)

IN MEMORIAM: STU CARMICHAEL

A long-time member of the Guild, Stu could always be counted on for a smile and a word of praise for member turnings. Over the years, Stu devoted countless hours photographing "Show and Tell events", demonstrations and a range of social activities. His contributions enriched the experience for all of us and he will be missed.

PARTING OFF

Thanks to Pete Mann for help with the note on beading tools and to Tim K and Vik P and the members of the Executive for their hard work to offer programmes despite the challenges posed by CO-VID 19.

A special thanks this month to Hew Lines for volunteering to make off-set marking gauges for Guild members using his 3D Printer. Much appreciated.

CONCLUDING THOT

(SOMETHING A BIT DIFFERENT…..)

TURN ON YOUR SPEAKERS AND THEN DOUBLE CLICK ON THE ICON

video.mp4
