

IWG News

The Newsletter of the Island Woodturners Guild



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, <u>1229 Clarke</u> <u>Road</u>, Brentwood Bay, BC.

Visitors are welcome.

Executive Committee

President: Tim Karpiak

Vice President: Vik Peck

Secretary: Michael McEwan

Treasurer: Peter Pardee

Member at Large: John Kilcoyne

Member at Large: Virginia Lee

Member at Large: Marlene Speckert

Past President: Steve Werner

Newsletter Editor: John Kilcoyne

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THE PRESIDENT'S TURN

Welcome back. I hope everyone had a wonderful summer. Between the heat waves, forest fires, drought and that other thing going on it's been quite eventful. I'm looking forward to seeing all the projects that were completed while we were away.

September 2021

Our season will start off with a Zoom meeting featuring Bruce Campbell giving us his presentation on working with green wood. Bruce gave this presentation at the AAW Symposium this year and even if you saw it then I think it'll make a good refresher.

Reminder: Please forward photos of your recent turnings to Virginia (<u>remoteva@gmail.com</u>) for our Remote Show and Tell.

The rest of the fall program is coming together nicely but we still have a few unknowns.

Probably the biggest one is how our in-person meetings will operate. There is a note on the latest rules in this edition although it is possible that things may change considering the Delta Variant.

The Zoom meetings will continue to be an option and we may be able to run these in conjunction with in-person meetings. There are a few hurdles to make this happen, but we are working on it.

In the meantime, lets all enjoy the last few days of summer and working in our shops with the doors open. I look forward to reconnecting with all of you and having a great year!

See you all on the 25th!

Cheers! Tim Karpiak

NEXT MEETING: SEPTEMBER 25TH

Our next meeting will begin at 1:00 p.m. on Saturday September 25^{th.} It will feature a live remote demonstration by Bruce Campbell on **Managing Green Wood**. A member of the Greater Vancouver Woodturners Guild, Bruce gave a similar presentation at the 2021 AAW Virtual Symposium which was very well received.



MEMBERSHIP RENEWAL

Current (2020-21) memberships expire on September 30, 2021. If you have not renewed your membership and intend to do so, please complete the Renewal Form and forward the dues payment. The Form can be found online at: <u>Membership Application/Renewal Form – Island</u> <u>Woodturners Guild.</u> Otherwise, you will be removed from the Guild's email and newsletter mailing list.



VOLUNTEERS: PHOTOGRAPHY AND AUDIO-VISUAL

In anticipation of a return to in-person meetings, the June newsletter contained a request for volunteers to photograph live demonstrations and to operate the audio-visual equipment. While it was hoped that multiple volunteers could share these tasks, not a single person has responded.

While there are many members who contribute in various ways behind the scenes, there are many more who do not, which, at the risk of sounding somewhat testy, brings to mind a famous tome that you might recall.



Tim and Vik remain willing to offer training and assistance to volunteers. Please contact Tim Karpiak if you are willing to help.

IN-PERSON MEETINGS: HEALTH PROTOCOLS

While plans for in-person meetings are still up in the air, the following is what you can expect once they resume. In accordance with the relevant Provincial Health Orders (PHO,) our "landlord", the Central Saanich Senior Citizen's Association has now issued a set of protocols. While there are several requirements, the following are the key ones:



1. Capacity

Meetings are limited to 50 people or 50% of maximum capacity, whichever is greater. As the maximum capacity of our meeting hall is 120, this means a maximum of 60 members.

2. Masks

Masks will be mandatory.

3. Vaccination and Proof

Anyone attending must be **fully vaccinated with 2 doses** with the 2nd dose given at least 7 days prior. **There are no exemptions**. The B.C. Vaccine Card is the **only** acceptable proof of vaccination and members will be required to show their Card, either digital or paper. **The Guild will be legally responsible for verifying this information**.

4. Record of Attendance

In accordance with the PHO, the Guild will be legally required to maintain a record of those who attend each meeting setting out the member's first and last name and a signature of a Guild Executive member certifying the information. (This is obviously intended to provide a record of attendees should there be a subsequent outbreak.)

JUNE RECAP

The June meeting featured a remote demonstration by Carl Jacobson on making a Cryptex. As Carl has posted a video on YouTube detailing how to make this, it makes no sense to offer a detailed note on his presentation.



Note: Carl has posted two videos on the process. The one you want is the second one dated July 22, 2016, which can be found at: <u>https://www.youtube.com/watch?v=2WjSNUJRiHc</u>



This presentation was followed by a photo-tour of Gil Heise's shop. As long-time members are well aware, Gil is a master "jig-maker", and we are hoping that we will be able to arrange a remote demonstration of these jigs "in action"!

SEVEN RANDOM TOPICS

1. FINISHING CUTS: NEGATIVE RAKE SCRAPER

(The following is a revised version of a portion of a note on scrapers from the May 2017 Newsletter.)

Introduction

Regardless of how proficient you are with a gouge, the final surface of a bowl before sanding will often include ripples, transition ridges, tool marks and/or tear out of varying magnitudes. Finishing cuts refers to very fine "whisper" cuts that can be used to remove, or at least minimize, these flaws prior to sanding. This note considers one of the more popular tools for a finishing cut – a negative rake scraper (NRS).



Conventional Scraper vs NRS

Unlike a conventional scraper which has a single bevel, a NRS has two bevels, one on the face/bottom and one on the top. It is this downward sloping top bevel which is said to be the negative rake.



While a conventional scraper (with an appropriate burr) can be used for a finishing cut, it remains an aggressive tool which tends to self-feed into the wood, often leading to a catch. Not so with a NRS. It can be used on any grain orientation and density without becoming aggressive and is also well suited to turning acrylics, plastics, and resin-treated woods. Furthermore, with a conventional scraper, tool presentation is crucial. The tool **must** be angled downwards in all cases and when scraping the outside of a bowl, contact **must** be at or below the centre line while contract **must** be at or above centre when scraping the inside of a bowl. In contrast, a NRS is simply presented level and on the centre line regardless of whether you are working outside or inside of a bowl.

Finally, most conventional scrapers are quite thick (3/8" - 1/2") to minimize vibration. However, this makes them more difficult to maintain a very light touch and means that if there is a catch, it is much more dramatic. In contrast, most NRS tools are made from standard 1/4" thick steel.

Bevel Angles

The combined angle of the two bevels is called the "included angle". Most tool manufacturers and professional turners recommend an included angle somewhere between 40 and 70 degrees.



Included angles at the lower end of this range will produce a stronger burr but a slightly rougher cut while those at the higher end will produce a smoother cut but a weaker burr (requiring more frequent sharpening).

Every professional turner appears to have their own "magic angle" and many use different bevel angles depending upon the type of turning and species. Stuart Batty, who is a leading authority on these tools recommends using the same angle for both bevels which enables you to use the same platform setting to sharpen both bevels. He and many others recommend that you start with bevels of 25 to 30 degrees which will produce an included angle of 50 to 60 degrees.

Sharpening

For a finishing cut, a burr must be created on the tip of the scraper (right – exaggerated). While the burr is rarely visible, it can easily be identified by touch. Instead of scraping wood, this burr severs wood fibres akin to the action of a gouge.



It follows that you do not "ride the bevel" with a scraper - only the burr should touch the surface. This means that a very light touch should be used. In the words of many professionals, the scraper tip should just "kiss" the surface. While you can create a burr using a burnisher or a diamond hone, it is faster and easier to use a grinder. The rotation of the grinding wheel deforms the steel and causes a burr to form at the tip of the lower bevel. For this reason, the bottom bevel must be ground last to create the burr.

The life of the burr is measured in seconds. While it will depend upon the density of the species, the burr on M2 steel will likely last no more than 30 seconds and on CPM steel perhaps up to a minute. If you cannot feel the burr or the tool is simply producing dust, it is time to re-sharpen. If you are uncertain how to grind the bevel on a NRS, check out the following video by Cindy Drozda. <u>https://www.youtube.com/watch?v=uZ5kqiT3FE0</u>

Miscellaneous Thots

a. Skew

A skew can function as a NRS subject to 2 qualifications.

The first is that the included angle should fall within the 40 to 70- degree range noted above.

Secondly, never use a skew with a straight-line cutting edge on the inside of a bowl. Use only one with a radius-edge (right).

b. Modifying Conventional Scrapers

It is a simple, albeit somewhat time-consuming task, to re-grind a conventional radius-edge scraper to a negative rake configuration. Most turners who participate in the AAW Forum report that they have done so.

c. Carbide Cutters

Easy Wood tools offers negative-rake tips for their Rougher and Finisher tools (LV: \$26- \$28). Note, however, that the cutting edge is solid steel – it is not a burr.

d. Further Information

For an excellent video on using a NRS for finishing cuts, see Brian Haven's video at: <u>https://www.youtube.com/watch?v=kdkR1I2Z1A4</u>





2. PHOTOGRAPHING YOUR WORK: LIGHTBOX



Beyond posting photos of your work, keeping a photographic record of your turnings is useful in documenting your progress and providing a record of forms and finishes that you may want to repeat.

One of the major challenges is to ensure that you have effective lighting. Direct lighting will tend to create defined highlight spots and dark, hard-edged shadows. Soft or diffused light creates uniform lesscontrasted lighting which minimizes the problems associated with direct lighting.

1. Lightbox

An inexpensive way to obtain soft light is to use a lightbox (also known as a light tent).

This is a simple container which is covered in translucent fabric and typically has two lights on either side of the box (and sometimes a light above). The fabric diffuses the light and when coupled with a simple backdrop, provides near shadow-less lighting.

While there are many commercial versions available, I found that most of them were too small, and the reviews of the less expensive ones (under \$75) did not inspire confidence. I decided to make my own. I wanted one that was 24" x 24", would be quick and easy to put together and disassemble and would take up minimal storage space. There are many videos and articles on-line on how to make your own and I borrowed several ideas from these. The total cost was less than \$30.



a. The Frame

While many turners use a cardboard box for the frame, storage is a problem. Accordingly, I opted for 1/2" PVC pipe. I cut eight 24" lengths and joined them (without glue) using four 3-way connectors.

b. Diffuser Fabric

While I had some spare nylon ripstop fabric – a very durable fabric - you can use any white nylon, muslin, fleece (or even a frosted shower curtain or liner).

You will need to join the long piece which covers the sides and top with a separate piece for the back. While you can use tape to join these pieces together, stitching them will provide greater durability.

Note: Heat activated tape using an iron can be used on muslin and fleece but NOT nylon or shower fabric. The iron will melt these fabrics (and likely ruin your iron).

c. Backdrop

A backdrop is sheet material that fits inside the box. It ensures that there is nothing to distract the viewer from your turning and provides a sharper image. It is important that there be no seams or creases in the backdrop.

While professional photographers use a variety of different fabrics and colours, I opted for a simple piece of poster board from Michaels which is attached to the top rung of the light box.

d. Ease of Use and Storage



The unit can be assembled in seconds and takes up virtually no storage space.

3. OPTIMUM TENON DIAMETER

If you use a 4-jaw chuck in compression mode, the tenon should be just slightly larger than the diameter of the chuck when closed. As shown in the drawing by Duncan Suss, this will provide full contact of the jaw's entire surface with the wood resulting in a more secure hold. If the tenon is larger than this measurement, the blank will only be supported at 8 points which are the ends of each jaw.



This will produce a very weak hold which can come loose in the event of a catch. Of equal concern, if the tenon is oversized, the 8 points of the jaws will push into the wood and the variations in density between side grain and end grain mean that it will come out of alignment. And the more you tighten the chuck, the greater the deviation.

Scroll Chuck Sizing Jig

While there are many jigs that can be used to size tenons (and mortises), Scott Leach at Utah Bowls shared one of the simplest and easiest to use. It is particularly useful if you have multiple jaws and/or chucks.

On a piece of wood roughly $1/4'' \times 1.5'' \times 12''$ make a slot on one end that matches your live centre diameter (5/8'' if you use a Oneway).

On a disc mounted on the lathe, layout the optimal tenon sizes of each of your jaws. With the slot in the jig engaged with the live centre, make a pencil mark on each tenon size. Cut a saw kerf and file each mark to fit a pencil. Then mark each of these with the relevant jaw/chuck information.





With the lathe running, simply engage the jig on the live centre and mark the relevant tenon size.

The photo at right shows a jig made by David Gilbert of the Finger Lakes Woodturners which includes optimal mortise sizes for expansion mounting on the reverse side.



To see the jig in use and for more information, visit the following Instagram post by Scott Leach: <u>https://www.instagram.com/p/CLcJw2JjD4T/</u>

Further Information

Depending upon the project and your chuck size (and jaws), it may be necessary for you to rely on an oversized tenon. In addition to ensuring that the tailstock is engaged, Glenn Lucas offers the following recommendation.



Align the grain vertically in the chuck and have the gaps between the jaws set both vertically and horizontally i.e., the gaps should be at 3, 6, 9 and 12 o'clock. This ensures that the edges of 2 jaws will be cutting into end grain of equal density on both sides.



4. PAINTING: DRYBRUSH TECHNIQUE

Introduction

Unlike conventional painting where the objective is to provide a smooth, comprehensive coat of colour, dry brushing involves using a brush which is loaded with a very small amount of paint and applied with a very light touch. Typically, a minimum of 15 - 20 coats of paint are applied using different hues and colours. The result is an extraordinary sense of depth and luminosity.



These results are wellillustrated in the works of Rembrandt and Monet.





Popularized by Jacques Vesery in the late 1990's, dry brushing is now widely used by turners who want to apply colour to their works.



1. Textured Surfaces

While dry brushing can be used on any turning, it is particularly suited to turnings that have a textured surface. The variations in texture serve to enhance the colour variation.

2. Colourant

While one can use many different colourants (ink, watercolours, tempera, oil paints) the most common is artist's acrylic paints.

Acrylic paints come in a variety of viscosities. For dry brushing you must use a relatively thick paint such as Golden Heavy Body.

Never use a low viscosity paint such Golden's High Flow. It will not provide the light coat of paint that is required.



3. Brush

While you can use just about any shape of brush, there are two that are most popular depending upon what brush stroke is used.



Some turners, such as Art Liestman, use a light "draw" stroke to apply the paint. Accordingly, they prefer to use a flat brush.

Others such as Jacques Vesery prefer to "kiss" the surface using a rapid "back and forth" stroke. They prefer a round brush – specifically a Deerfoot stippler.



Depending upon the size, either brush will cost \$5 - \$10 less the 10% discount at Island Blue.

4. "Dry"

As the name implies, the brush must be **completely dry**. Any water (or other solvent) will smear the paint.

5. Loading the Brush

The crucial requirement of dry brushing is to ensure that you have a very small amount of paint on the brush which will provide a thin coat. The typical process is to load the brush with some paint and then wipe most of it off on a paper towel. A bit of practice on a spare piece of wood will quickly enable you to determine how much paint to leave on the brush.

Caution: If you apply too heavy a coat, never attempt to remove it using water. It will simply smear the paint. Let it dry and then reapply former colours to restore the previous colour.

6. Colour Mixing

You should begin by colouring the piece black using either India ink or acrylic paint. Thereafter, colours should be applied from darkest to lightest.

A common approach is to apply a light coat of the dominant colour and then gradually lighten each subsequent coat using white or a near-white such as titan buff.

Each coat is so thin that it dries very quickly, and you will be able to immediately apply the next one at the same starting point. If necessary, you can use a hair dryer (no heat is needed) to dry the coat.

7. Record

It is useful to maintain a colour record of the coats used. This can be done on a paper towel or better yet, a white paper plate.



8. Illustrations



Donna Banfield



Art Liestman



Laurent Niclot

5. <u>CADDY SPOONS</u>

Phil Irons was a demonstrator at the recent AAW Symposium in which he showed how he turns Caddy Spoons.

Commonly used in the 19th century for measuring out tea leaves stored in tea caddies, they were traditionally made of silver.

He estimates that he has made over 15,000 spoons – so he has the process down pretty well!

1. He begins with a blank (2" x 4.25") – which will produce two spoons - mounted in a 4-jaw chuck.

He uses a custom metal template to mark the length and diameter of the bowl portion.

2. Using a spindle gouge, he removes enough wood from the handle area to provide clearance for turning a rough sphere.









3. To complete the sphere Phil uses a hole saw with the teeth ground off and a bevel sharpened on the inside.

Caution: The hole saw is mounted on a handle and the tool must be held **firmly** on the tool rest



4. A fair curve is then turned for the handle which will provide a curved spoon handle. The piece is then sanded.

Note: The diameter on the handle where it meets the sphere is important for both strength and aesthetics. Bruce Campbell of the Vancouver Guild recommends that it should be approximately one-third the diameter of the sphere.



5. After sanding, the piece is parted off and is ready to be cut in half lengthwise at the bandsaw.

You must use a sled for this – never try to make the cut freehand.

Phil's sled consists of 3 raised sides. The interior is filled with autobody filler (Bondo), and the blank covered in plastic wrap is pushed into the filler to create a mould.



6. The blank is placed in the sled with the growth rings parallel to the cut. He first makes two short-curved cuts on the end of the handle which results in a V-hollow. He then completes the cut straight down the middle of the sphere.





7. The spoons are now ready for hollowing. He uses a custom chuck which is sized to fit the ½ sphere with approximately 1/16" of the rim showing. A groove is made in the side for the handle.

Note: the chuck has deep saw cuts at 90-degree angles which allow it to compress when tightened in the 4-jaw chuck.

8. Final shaping of the handle is done using a 1" belt sander.



André Robin's Experience

André decided to tackle this project.

The first step was to prepare the "hole-saw" cutter, sled, and jam chucks which he reports took 6 days. (It is unclear whether this included afternoon naps!)

He reports that the multiple chucks were a function of the fact that each sphere and spoon were slightly different in size.

Note: Lin Bayford, who joined him in this exercise, chose to make a set of soft jaws using HDPE plastic which solved the problem of variations in size.





Otherwise, the project went quite well, and the proof is in the collection of spoons (left) made from arbutus, cherry, and locust.

Beautifully done.

6. MOLDING PASTE

Molding paste, also known as Modeling Paste, is an acrylic polymer mixed with calcium carbonate – typically marble dust. Akin to "acrylic auto body filler", it is commonly used by painters and craft artists to create a textured surface using either a brush or a palette knife. It is available in different "weights" (light, normal and hard) depending upon the application and will dry to an off-white or light grey.





It can be coloured by adding acrylic paint to the paste before application or by painting it once it has hardened.

It can also be sanded, filed, and drilled to create various textures.

Some turners use the paste in a comprehensive manner such as Tom Gall whose work was featured in the April 2021 edition of *American Woodturner*.



Others such as Michael Hosaluk use it in a more inventive manner as illustrated by his *Rice Bowl* and *Intimacy*.





Member Mike Neal specializes in deep hollowing, and he recently completed a vase in arbutus. While pleased with the overall form, he decided to add some embellishment.



He sealed the piece with Wipe on Poly (WOP) and then turned two grooves in the rim. Using a rotary tool with a round burr, he dimpled the surface inside the rings. He mixed molding paste with white acrylic paint (50-50) and applied it to the rings and dimples. Once dry, he sanded off the excess and applied a coat of shellac before finishing up with coats of WOP.

This "simple" embellishment had a transformative effect on the piece. An outstanding result.



7. HOLLOWING THROUGH THE BOTTOM (INTENTIONALLY!)

In the August 2021 edition of *American Woodturner*, Wes Jones discusses how to hollow a turning through the bottom which enables one to have a very small opening. By turning a plug from the same blank and orienting the grain to match that of the hollow form, the technique can be effectively camouflaged.

Tenons are turned on both ends of the blank.

The photo shows the bottom of the form with the tenon marked by the blue arrow. The red arrow indicates the plug material which will be cut off when the blank is reversed for "bottom hollowing".

The sides of the plug and opening are angled to produce a secure glue fit and the seam can be easily hidden with a narrow indent.





Provided with some juniper courtesy of Dick Isner, Dave Blair decided to make a set of 4 hollow forms using this technique.

While each piece has a different form, he creatively used common features to produce a beautiful "family" set.

The pieces were finished with Wipe on Poly and then buffed.

He has named these Huey, Dewey, Louis and my personal favourite, Petunia (right).

(For those not in the know, she is the Significant Other of Porky Pig!)



PARTING OFF

Thanks to Gil Heise, Mike Neal, André Robin and Dave Blair for their help with this edition and to the members of the Executive for persevering in the face of the ongoing COVID challenges. A special thanks to Gil Heise for his work in preparing the photo-tour of his shop.

CONCLUDING THOT

