





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: Don Robinson

Treasurer: Peter Pardee

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Members at Large: Hovan Baghdassarian Virginia Lee Marlene Speckert

Past President: Steve Werner

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THE PRESIDENT'S TURN

Well, it looks like spring is just around the corner. That means it'll soon be time to open the shop doors and let all the little spiders out into the wild. And with that comes sweeping and moving things and then probably more sweeping. But it also means being able to leave the doors open and hopefully get to the projects that have been waiting all winter.

With spring arriving it also signals the start of all the little markets that run until fall. If you get the chance, participate in one or two. They're a lot of fun. Or at least go out and see what everyone is creating.

Our last demo with Donna Banfield was very interesting. I think it may have got some people thinking about how to use the techniques in their own work. I heard a few comments about how the slow parts were like watching paint dry. But that was literally what we were watching which I found to be funny. I talked with Donna a couple of days later and she was well aware that it can be tedious. She said she misses the in-person demos because that lull usually brought on a flurry of questions and discussions. I think a lot of us miss those demos.

Next Saturday will be a good meeting with John Beaver. I'm excited to see what he demonstrates. I'm sure John K. will have info in this newsletter.

Finally, if you have anything for show and tell and you won't be at the meeting, please send pictures to Virginia and she'll put then on a slideshow.

See everybody on Saturday!

Tim Karpiak

NEXT MEETING: SATURDAY FEBRUARY 25: 1:00

John Beaver will deliver a remote demonstration on turning a wave bowl.

He will show two different ways to make one.

The first is a relatively simple method which involves using a bandsaw to cut a block of wood apart, inserting a contrasting wood ring between the pieces and gluing the components together.

The second one which is slightly more demanding involves the production of a "protruding" wave bowl using a custom jig.



Inspired by the motion and rhythm of ocean waves, he embraces a "wavy" design which is a core element of his work. He has been a frequent instructor and demonstrator at schools, guilds and symposia around the world.

You can see more of his work at his website: https://www.johnbeaver.net/

MARCH REMINDER

At the March meeting, members will be asked to bring in homemade jigs (including homemade tools and instruments) which they find useful in their turning activities.



As for those items that are too large to transport, photos will be requested.

JANUARY RECAP

At our January meeting, Donna Zils Banfield provided an informative demonstration of the techniques she used on her recent work *Glacial Tides*. These included relief carving (rotary and burner) and dry-brush painting.

(In her covering note, she acknowledged that she learned these techniques from Laurent Niclot who in turn learned them from Jacques Vesery while working as his studio assistant several times at the Escoulen School in France.)



I. RELIEF CARVING TOOLS

Donna discussed two techniques she uses for relief carving: rotary carving and wood burning.

A. ROTARY CARVING TOOLS

1. Micromotor

While there are a variety of rotary carvers ranging from a Dremel to a Foredom flex shaft unit for heavy duty carving, Donna prefers to use a micromotor. As the name implies, the drive unit is in the hand piece (rather than a separate motor with a flex shaft) which minimizes vibration and makes it much easier to control compared to other carvers. They offer variable speed (0-50,000 rpm) and most brands will accept burrs with shafts that are 1/16, 1/8 or 3/32".



While there are many brands, a highly recommended unit and one which is popular with Guild members is the Mastercarver Micro-Pro. (\$275 less 10% discount: Wood to Works).

A review of various rotary carvers can be found in the May 2021 Newsletter. You can find back issues on the Member's Page of our website.

2. Burrs

Donna recommends the burrs sold by noted turner Paul Fennell (https://bursforcarving.com/). While some are relatively expensive, the material, machining and resulting surface are all excellent.

For lower priced, but still high quality European burs, she also recommended *Rio Grande* (https://www.riogrande.com/product/tools--equipment/burs--drill-bits/.

Additional Information

a. Burr Shapes and Materials

Burrs come in a wide variety of shapes and their selection obviously depends upon the type of pattern you are carving.



Burrs are also available in a variety of materials (high speed steel, vanadium steel, carbide, tungsten coated, to name a few) which vary in cost, cutting speed, durability and the smoothness of the carved surface.

For a detailed note on burr shapes and materials, see the note in the June 2021 Newsletter.

b. Dixie Biggs Burrs

In 2018, a workshop was held with noted turner and carver Dixie Biggs. She uses inexpensive burrs from MDI Woodcarving Supply (https://mdiwoodcarvers.com/)



For general shaping she uses a 5mm bud vanadium stump cutter (US\$8.50) and for tight spots a super coarse ruby long flame. (US\$11)



You can find more information and tips in the write up of her visit in the May 2018 newsletter.

B. WOOD BURNING TOOLS

1. Burner

Using a burner for carving is akin to branding which means that one needs a high wattage machine. For commercial models, Donna recommends the *Burnmaster* units. The *Hawk* (\$225) has one port while the *Eagle* (\$270) has 2 ports.



She also mentioned two other units. The first of these was the *Detail Master*. While the manufacturer ceased production in 2013, you may find a used unit on Ebay or similar sites. The second is the *Prescribed Burn II*, a unit that was developed in collaboration with Jacques Vesery. However, this unit is not available for sale and the latest post on the manufacturer's website was dated May 2021 which suggests ongoing delays. (https://www.electromechanical-llc.com/shop)

Additional Information

If you are considering purchasing a burner, please read the note on pyrography in the February 2021 Newsletter.

a. While there are many manufacturers, the 4 most popular commercial burners are the Colwood Detailer (\$120), the Razertip (\$140), the Optima (\$145) and the Burnmaster (\$160). (The prices are for the single port, base model.)



These machines are all well made, and each is used by a number of professional turners and pyrographers.

A review of various sources suggests the following wattages of these 4 units in actual use.

Razertip 20 - 22 watts
Colwood 30 - 35 watts
Optima 30 - 35 watts
Burnmaster 50 - 55 watts

The three highest wattage machines are all suitable for carving. The basic Razertip model will only work for very shallow relief carving.

Homemade Burner

One of the most popular homemade burners is the "Priddle Vapourizer" which uses a re-wired 12-volt battery charger and a number of members have made one of these. However, as Donna pointed out, you must use an older style transformer charger. Most battery chargers today are electronic pulsed units which will not work for this purpose.



b. Cord

While the standard cord offered by most manufacturers is 18 gauge, you should purchase a 16 gauge cord for carving as it will provide greater heat and faster heat recovery.

The magnitude of the difference is revealed by the results of the following experiment. When 1.6 volts was sent through an 18 gauge cord, the draw was 9-10 amps. When the same voltage was sent through a 16 gauge cord, the draw was 14.5-16 amps which represents a massive 60% increase.

c. Pens

The pens for the Burnmaster, Colwood, and Optima are all replaceable tip pens where the tips are secured to the pen with two screws. These allow Donna to use a variety of inexpensive tip shapes.



d. Tips

A range of commercial tips are available for the 3 burners noted above and the widest selection of tips are those offered by Razertip. (https://www.razertip.com/tip-shapes.htm) As Donna indicated, you can modify the shape of any tip using a grinder and diamond hone.

As she demonstrated, you can also make your own tips using 18 or 20 gauge nichrome wire which can withstand 1150 degrees C. Most spools of nichrome wire come in lengths of 50 ft which will last many, many people, many, many lifetimes. A group purchase is recommended.

e. Safety Equipment

Donna indicated that when using a burner to carve, the heavy smoke poses a significant health hazard.

For those who do little carving of this sort, you could use a small fan to draw the smoke away. A fan from a desktop computer provides a relatively effective and inexpensive option. The fan must be positioned on the far side of your work to draw the smoke away from you. Otherwise, the air current will cool off the pen tip.



Alternatively, you can purchase a commercial smoke extractor with appropriate filters. An internet search reveals dozens of models ranging in price from \$60 to \$500.



Donna also recommends wearing a leather glove to protect your fingers from burns. For hand control, it should be relatively tight fitting. A golf glove is a popular option with many pyrographers.



II. CARVING TECHNIQUE

1. Wood Species

For this type of project, she works with dry wood which has straight, closed grain and is of medium hardness which allows her to "carve" with a wood burner. While cherry is her preferred choice, she also uses poplar, birch, and a "soft" maple. (Our local big leaf maple qualifies as the last of these.)

2. Design

Once she settles on a pattern, she uses a pencil to draw this on the turning. The drawing tends to be "free form" and she frequently changes the outlines when it comes to burning.



Comment: When selecting a pattern, ensure that you leave enough clearance between adjacent sections for your rotary burr or burner tip to fit. The intersection of the segments in the drawing at left will make it very difficult, if not impossible, to access cleanly. Compare this with the pattern she adopted on Glacial Tides right.



While Donna uses a single burn line to outline the pattern, you may want to consider using a thin (1/16") double line. The resulting "ridge" will minimize the chance of cutting through it when, as discussed below, you undercut it. It will be an easy task to sand the ridge to a "point" if desired.

3. Initial Carving



For the initial excavation of wood, she uses a rotary carver with either a round or tapered burr.



To excavate up to the "ridge" and to roughly level the "interior" surface, she recommends a tapered carbide bur from *Burs for Carving*. (FG-699L) (US\$3.15).



Dixie Biggs Tip: Most burrs come with cutting teeth on the nose as well as the sides. If you are relief carving against a "ridge" or "wall", the tip can damage this surface. Accordingly, she "dead heads" the burr by grinding off the tip teeth which allows her to "depth carve" right up to the "ridge".

4. Finish Carving

To finish the "interior" segments she uses her burner and a homemade tip to highlight the ridges by undercutting them and then textures the surface by rotating it on the surface.



The tip that is closet to her design is a spear shaped shader which has a 45-degree bend and a narrow point for getting into tight places. The photo shows the Razertip tip Heavy Duty 5 SP-L Long Spear Shader (\$8).

It is important to note that she is not looking to produce a smooth surface. Rather the intent is to provide a "mottled" surface which will "pop" when painted producing a more organic appearance. (right)



Note: Smooth Surface

If a smooth surface is desired, you should consider the following sanding solution from Dixie Biggs.

Using various sizes of rotary tool mandrels, she removes the screw and attaches small sandpaper disks to the face using double-sided tape. The coarsest grit she uses is 180 – which is surprisingly aggressive in a micromotor.



Several Guild members who have adopted this idea, prefer to attach adhesive-backed sandpaper to a sheet of adhesive-backed craft foam.



They then use hollow punches to create different sized discs of various grits.



These must be used at a slow speed, and you should avoid applying heavy pressure. Otherwise, the heat generated will "melt" the adhesive and send the disk flying off the mandrel.

5. Cleaning

To remove the ash, Donna uses a **soft bristle** brass brush which can be found at most jewellery supply stores. Alternatively, you could use small nylon brush or even a toothbrush.

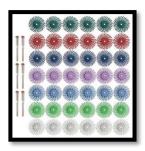
Do not use the brass brush which is typically sold in a set of 3 brushes by hardware stores. The bristles are far too stiff and will score the work.





She indicated that in some cases, she uses radial bristle discs.

While the most common brand is *Scotch-Brite* from 3M, they are very expensive. (Amazon: \$27 plus import fees/5 discs). Accordingly, she uses "knock-off" discs from Amazon.



One option is a set of 42 discs plus 6 mandrels for CA\$25. It includes 6 discs of each grit ranging from 80 to 2500.

(You can find these by searching the Amazon site using: "fppo 42 piece radial disc".)

III. DRY BRUSH COLOURING

1. Introduction

Rather than conventional painting where a brush is loaded with enough paint to produce a smooth brushstroke, in dry brushing (or more accurately "scumbling") a dry brush is loaded with a very small amount of paint which is applied to the surface with a rapid "back and forth" movement. The result is a series of coats that are near-microscopic in thickness which allows previous coats to show through. The result is a more "misty" and atmospheric effect.

While examples of this technique date back to ancient Egypt, it was used in a much more sophisticated manner in China beginning around 1,000 CE.





In Western circles, Rembrandt was one of the most famous artists to employ this technique to achieve unique lighting effects.

(Is it just me or does this look a bit like Steve W the morning after a bender?????)

2. Black Base Coat

The colouring process begins with an application of black to the entire piece. While some turners use India Ink, it will fade over time. Accordingly, Donna prefers to use leather dye which is lightfast.



While it can be applied with any inexpensive brush or an acid swab, you must ensure that the entire surface is covered including the recessed areas. If necessary, Donna uses a compressor or airbrush to make sure.

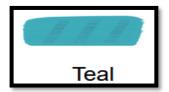
3. Paint

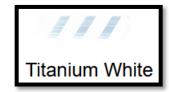
You need to use a Heavy Body Acrylic Paint. The two most popular brands are Golden and Liquitex Professional both of which come in a wide variety of colours. (Island Blue: \$12 less 10%)



The colour palette for Glacial Tides was Golden's Cobalt Turquoise, Teal, and Titanium White







3. Brushes

Donna recommends using a flat or deerfoot synthetic bristle artist's brush.

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





4. Colour Mixing

After the black ink or dye has dried, the colours should be applied from darkest to lightest. As Donna demonstrated, she applied a number of coats of the first colour full strength and then gradually added white to lighten the colour.

She recommends using a non-waxed paper plate as a palette and a palette knife to add a small amount of the white to the dominant colour. Consider applying a strip of masking tape to the bottom of the paper plate to keep it from sliding away.

The paper plates can be easily retained as a record of the colours used. You might also want to write the paint colours on the plate for future reference.



Colour Vision Deficiency

It turns out that 1 in 255 women and 1 in 12 men suffer from some degree of colour vision deficiency which affects their ability to select appropriate colours and progressions. An on-line test for this can be found at http://www.xrite.com/hue-test)

5. Technique

To achieve multiple coats of paint that are near-microscopic in thickness, the paint is applied using a very rapid and light back and forth movement of the brush. In the words of one artist, the tip of the brush should just "kiss" the surface. Each coat is so thin that it dries very quickly, and you will be able to immediately apply the next one when you return to the starting point.

The following are important points to keep in mind.

- i. The brush must be **completely dry** when starting. Any water (or other solvent) will smear the paint.
- ii. Load a **very small** amount of paint on the brush. Practice on a spare piece of wood will quickly enable you to determine how much paint to load. If in doubt, err on the side of too little. Keep a paper towel handy, to remove any excess paint from the brush.
- iii. If you apply too heavy a coat and there is a "streak of colour", do not attempt to remove it using water. It will simply smear the paint. Donna stated that you might be able to remove the excess by carefully scraping with an X-acto knife. Otherwise, you will have to go back and reapply previous colours to the affected area.

iv. Finally, and most importantly, **patience is essential**. As was evident during her demonstration, it was only when she applied the 4th coat of the initial cobalt turquoise that the colour was even visible.

6. Topcoat

While not necessary, Donna applies a spray coat of lacquer as further protection.

7. Other Examples of Dry Brushing



Donna Zils Banfield: Fireflower



Laurent Niclot: Crater





Jacques Vesery (Yes, it is wood!)

Jacques Vesery

MULTIPLES: VARIATIONS ON A COMMON THEME

Introduction

This note was prompted by this set of turnings that Dave Blair brought to a recent meeting of Group 5. They were all made from the same piece of wood and Dave reported that he found it an engaging and enjoyable challenge to turn these forms each of which is "similar but different".



While turning a number of **identical** pieces such as spheres or spindles is common practice for many turners, the focus is typically on developing tool control. Turning a series of "diverging multiples" provides an opportunity to explore the visual impact of variations based on scale, form, colour, and/or texture, which can be invaluable in developing your own aesthetic.



For a demonstration of how noted turner Ashley Harwood employs this technique, see her video *Woodturning: The Design Process* at

https://www.youtube.com/watch?v=iiMtZPuv Nc

(You might want to fast forward through her sponsor acknowledgement: 4:35 – 5:35).

In addition to putting small pieces of wood to good use, an assembly of such multiples can also offer a unique and attractive display. One commentator suggests that multiples can produce a heightened sense of visual and mental engagement as the eye (and mind) rapidly shifts back and forth between the recognition of similarity and difference. While each individual piece may be appealing in its own right, a grouping can provide a visual illustration of the notion that the whole is greater than the sum of its parts.

The following are some illustrations of three common types of "variations": variation in scale, form, and colour.

A. VARIATIONS IN SCALE

Variation in scale is perhaps the most popular techniques for a set of turnings. In some cases, such as spheres, the task, while certainly not easy, will be relatively straightforward.



Brad Moss

However, for other forms it will be much more challenging to maintain a consistent proportion between the various turnings. The following are some examples.



Greg Gallegos



Mike Mahoney



Thys Carstens



Joshua Salesin



André Robin

Maintaining proportion will be even more challenging in the case of a set of multi-axis turnings.

(It is a shame that André's skill at photography does not match his remarkable turning skills as this photo does not do justice to this set!)

B. (SLIGHT) VARIATIONS IN FORM

Variations in form typically involve minor modifications in a series of turnings – often involving non-proportional scale - with a view to identifying attractive forms. In his set, Dave focused on different rims, while others may focus on changed curves, beads, coves or embellishment. While these efforts may provide a valuable learning opportunity, as the following photos reveal, they can also result in an extremely attractive product.



Richard Raffen



Takehito Ichikawa



Elizabeth Weber



A highly innovative form of variation in form is this set titled *An Apple a Day*!

Merryll Saylan

C. VARIATIONS IN COLOUR

Variation in colour may arise through the use of different species of wood, as illustrated by Elizabeth Weber's boxes, above, or by the application of a colourant.



Brad Moss



Tim Soutar



Merryl Saylan began turning in the early 1970's and is widely acknowledged as a pioneer in the use of colour in multiples.

Merryll Saylan

One of her most famous turnings is the 2001 *Tower of Bowls* which consists of 15 bowls of slightly different forms and colours, each one sized to fit in a 4" x 4" space. The photo at right shows only a portion of the 77" tall tower.





Gord Kifiak



For an explanation of how Gord creates his amazing flowers, see the note in the September 2018 newsletter.





Melissa Engler and Graeme Priddle

John Volcko

D. PRESENTATION

One of the challenges of showcasing a set of multiples is settling on how to present them.

ENA DUBNOFF



In this stunning piece, Ena's presentation bowl with its reducing "steps" mimics her use of scale as a variant in the set of small bowls.



The use of a "boat" form, to hold his multiples in this classic piece from 2003, has subsequently been employed by a variety of turners.

MICHAEL HOSALUK

E. LAST ILLUSTRATION

This turning was a collaborative effort as part of the 2022 Virtual *Women in Turning* eXchange. It is an example of a molinological device which uses power – in this case a hand-turned crank – for mechanical purposes. You can find a short video of the "device" in operation, at the following: https://www.turningpntstudios.com/projects-6



As an example of "variations on a common theme", the spindle array at the top of this piece is striking. While the 3 larger spindles have a different form than the smaller ones, the finials, small spheres and colouring combine to produce a unified and incredibly attractive vision.



Alex Bradley, Jessica Edwards, Heather Marusiak

PARTING OFF

Thanks to the members of the Executive and a special thanks to those who show up early and stay late to set up the meeting hall. Your help is much appreciated.

CONCLUDING THOT



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