IWG News

The Newsletter of the Island Woodturners Guild March 2021

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

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The IWG gratefully acknowledges the support of the following companies:
Artisan Wood to Works
Chipping Away
Industrial Plastics & Paints
Island Blue Print
KMS Tools
PJ White Hardwoods
Richelieu Hardware

THE PRESIDENT'S TURN

Like a lot of things, it has been a year since our Guild meetings have been drastically altered. I thought it would just be a month or two and yet, here we are. I am sure I am not alone when I say that I dearly miss our monthly, in person meetings. However, during this time, the Guild has managed to evolve and adjust into our current meeting format. I feel that we have been able to keep our Guild engaged and entertained with some top-notch woodturning demonstrators, local demonstrators included! And being able to incorporate our Show and Tell is an added bonus.

The idea of remote demonstrations was just starting to gain momentum prior to last year and now is very much the method of choice for instructional demos. There are now many amazing demonstrators that have developed the additional skills to present well rounded and entertaining demos.

The Executive has been actively researching the many choices and making decisions that we think will be of interest to a majority of our members. I hope everyone has found something of value in the choices we have made. And I would like to thank all the members of the Executive for their continued enthusiasm in making the Guild as great as it is.

And on that note, I look forward to seeing everyone on Saturday for the Martin Sabban-Smith demonstration. I know that you are going to read this more than once but please note the early time start! 11 am! Early for some, I know, but at least you do not have to dress up.

See you all on Saturday morning!

Cheers,

Tim

NEXT MEETING: SATURDAY MARCH 27: 11:00 a.m.

Our next meeting will feature a live remote demonstration by Martin Sabban-Smith live from the village of Four Marks in Hampshire, England.

The author of over 150 YouTube videos on turning, he is well known for his clarity, enthusiasm, and humour.

You can find more information on Martin on his website at:
https://www.msabansmith.com/

NOTE THE SPECIAL START TIME: 11:00 A.M.

APRIL MEETING

The April meeting will feature a live remote demonstration by Michael Keh.

A turner and carver for over 27 years, Michael has a well established national and international reputation for works that are inspiring and highly creative.

FEBRUARY RECAP

Nick Agar provided an interesting demonstration which focused on the use of various texturing tools and colouring. The following are the highlights.

A. TEXTURING TOOLS

1. Commercial Tools

Nick began by demonstrating the Sorby Spiralling/ Texturing tool (LV: $260). The angle of presentation and lateral movement can produce a wide range of patterns.

For instruction on how to use this tool, check out Nick's video at: https://www.youtube.com/watch?v=qEIbEQyTnrQ

The following are some other popular texturing tools.

Crown Spiraling and Texturing Tool (Amazon: $202)

Similar to the Sorby tool, this one is significantly cheaper.

One difference is the design of the indexing attachment (platform). At the following site, Carl Ford explains why he prefers the Crown tool as well as offering several helpful hints for using a spiralling/texturing tool. http://carlford.info/blog/2020/04/crown_sorby_spiraling/

Henry Taylor Decorating Elf (Elite Tools: $78)

This tool is a compression burr which produces spiral pattern.

For information on how to use this tool, check out the following video by Nick:
https://www.woodturnerscatalog.com/p/49/4555/henry-taylor-Decorating-Elf-4-Piece-Set

Wagner Texturing Tool (US$45)

For instruction on how to produce a variety of patterns, see the following video by Sam Angelo aka Wyoming Woodturner.
https://www.youtube.com/watch?v=YTkra9TG1Lg

2. Shop Hand Tools

Nick uses various shop tools to produce a range of different textures.

a. Screwdriver

He grinds a chisel edge on an old screwdriver and with a hammer uses this as a punch to produce short linear depressions.

b. Wire Wheel/Brush

To produce a textured pattern, Nick will often use a wire wheel. This works particularly well on coarse grain woods such as oak and ash.

Caution: He emphasized the importance of wearing eye protection as wire strands will frequently fly off.

c. Lathe Knockout Bar

Held on a 45-degree angle to the workpiece, the working end of the bar produces a series of intermittent small-arc depressions.

d. Leather Stitching Tool

He also demonstrated using a leather stitching tool which he uses at a very slow speed – around 50 rpm.

A single wheel stitching tool is available from Lee Valley ($48).

e. Birds Eye Punch

Used by bird carvers, this tool allows Nick to produce various sizes of circular depressions.

A similar result could be obtained using modified nail punches.

3. Power Tools

The following tools are used with the lathe off and, where appropriate, the spindle lock engaged.

a. Ball Burrs

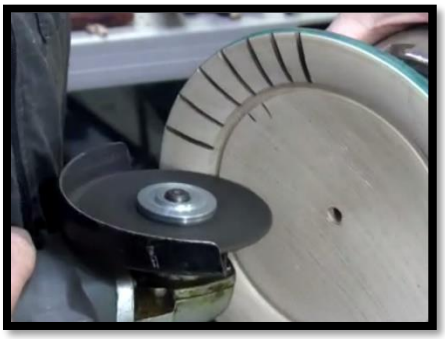
For concave depressions, Nick uses a variety of ball burrs in either a rotary carver or die grinder. For fast stock removal he uses fine grade burs from Saburtooth.

b. *Orbicut*

For concave depressions he also uses an *Orbicut* which is designed to be used in an electric hand drill (Langevin Forest: $110). It has 2 high speed blades which create small shavings rather than scraping dust.

c. *Merlin Mini Grinder*

Grooves on a rim can be cut using a mini grinder such as that sold by King Arthurs Tools (Amazon: $530).



Nick noted that a far cheaper option is to use a metal cutting disc or a 36-grit sanding disc in an angle grinder.

4. Pyrography

Finally, Nick noted that a variety of textures and patterns can be created using various pyrography tips.

Using a tip made by Graeme Priddle, Nick showed how to burn a modified “infinity” symbol.

B. COLOURING

Nick has a sponsorship agreement with *Chroma Craft* which means that he highlighted many of their colouring products in his demonstration. At the present time, there is no Canadian distributor, and the company has no plans to offer its products in Canada. Accordingly, they must be ordered from the U.S.

However, all the products that Nick used are flammable and must be shipped by ground transport which can be very expensive. For example, one supplier noted that the shipping charges for a small container of liquid wood dye (Cad$9.60) would be approximately Cad$35. On top of that, one might also face Canadian custom charges. Accordingly, the following notes include references to alternative products of equal quality that are available from Canadian sources.

Nonetheless, if you decide that you want to order these products, you may wish to consider doing so from *Spirocraft* whose owner was particularly helpful in providing information. (https://spiracraft.com/)

1. Preparation

Once a piece has been textured, Nick removes any rough edges by burnishing with shavings. He then sands to 400X. He noted that sanding with a higher grit would seal the pores and prevent the dye from penetrating.

2. Base Coat: Dye

For the base coat, Nick used black dye which he applied with an air brush.

Nick used Liquid Wood Dye from Chroma Craft which is a UV-stable dye in an alcohol base (US$7.60/4 oz). Unlike water-based dyes, alcohol will only slightly raise the grain.

He then applies a coat of Clear Acrylic Spray Lacquer to seal the dye.

Alternative Product:

A much cheaper and equally effective option is *ColorFX Liquid Dye Concentrate* from *Wood Essence* in Saskatoon. It can be mixed with alcohol (or water) and as a metal-complex dye it is also UV-stable. A 15 ml container ($10) will make approximately 16 ounces of dye which is 4 times that of the *Chroma Craft* product for the same cost.
https://www.woodessence.com/Dyes-Pigments/ColorFX-Dye-Concentrates/ColorFX-Dye-Individual-Bottles

3. Sealer Coat

Nick then uses Chroma Craft Clear Acrylic Spray Lacquer to seal the dye before applying the metallic finish (US$11).

Alternative Product

As an alternative, you could use *Krylon Acrylic Crystal Clear* spray which is available locally from many retailers. ($10).

3. Metallic Finish

Nick uses *Chroma Gilt* which contains fine metal particles in a polymer-based paste (US$13). It comes in 6 different colours: brass, copper, bronze, gold, silver, and verdigris.

He began with verdigris which he applied using a toothbrush to ensure that the entire surface was coloured. The excess was then removed with a paper towel.

Using nitrile gloves, he then applied a light coat of gold to the turning.

He places a small amount on his forefinger and then rubs it with his thumb to produce a **very thin** coat of finish. It is then gently applied to the turning with a circular motion.
He emphasized that care must be taken to ensure that no gold ends up inside the depressions.

Once dry, he seals the metallic finish with a coat of *Chroma Craft* Urethane spray.

Alternative Products

As these *Chroma Craft* products are also flammable, you might want to consider two alternative metal effects products.

a. Gilding Wax

This is the product that Nick used for many years before switching to *Chroma Craft*. As is obvious from the title, the binder in this product is wax (beeswax + carnauba) with an acrylic resin. While it will dry to the touch within minutes, it takes about 4 hours to fully dry and requires approximately 4 days before buffing.

While there are many brands, two of the more popular ones are *Rub and Buff* (Island Blue: $13/15 ml) and the highly rated *Pebeo* (Amazon: $25/30 ml.)

Colours include various shades of gold and silver.

The method of application is the same as Nick used for the *Chroma Craft* product. A very small amount rubbed between forefinger and thumb and a light application. Once dry to the touch, excess wax can be removed with a cloth or paper towel. You can thin this product with mineral spirits to create a glazed effect.

Note: As Nick pointed out, since this is a wax product it cannot be top coated. While this would be a concern for turnings which are subject to frequent handling, it is unlikely to be a concern with purely decorative items.

b. Iridescent Paint

Iridescent paint consists of mica flakes with a microscopic coating in an acrylic binder. Coatings of titanium dioxide, iron oxide or metallic "pigment" are used to produce various colours. They produce a very realistic looking metallic colour which will not fade and does not need top coating.

One of the leading manufacturers, Golden iridescent paints are available in 8 metallic colours: bronze*, copper*, gold*, micaceous iron oxide, pearl*, silver and stainless steel.

(Those with an asterisk are available in fine and coarse. The former produces a "highly reflective metal sheen" while coarse will produce a "burnished metal effect".)

Note: **Modifying Iridescent Colours**

You can make a variety of "metallic" colours by mixing in a small amount of a standard acrylic colour. For example, mixing a small amount of green with Iridescent Copper will produce an antique copper effect.

The photo at right, shows the effect of adding a small amount of blue (left) and red (right) to Iridescent Gold (Fine).

WHAT IS A BEDAN?

1. History

While it looks somewhat like a parting tool on steroids, the bedan is a traditional **spindle** turning tool. It has been used for hundreds of years in France and Germany where it was widely used in production turning due to its versatility as discussed below. The reduced loss of time switching tools, meant faster production.

In the early 2000's, it attracted considerable attention in North America due to its use by French master turner, Jean-Francois Escoulen.

2. Configuration

The tool has a single bevel – typically 45 degrees – and there are two common width sizes: 3/16" for fine work (often called a bedan parting tool) and 3/8" for general work (LV: $80/85).

While the French-style tools have parallel sides, a number of English-made bedans have a trapezoidal shape (right). The latter shape minimizes binding in deep cuts when it is used as a parting tool.

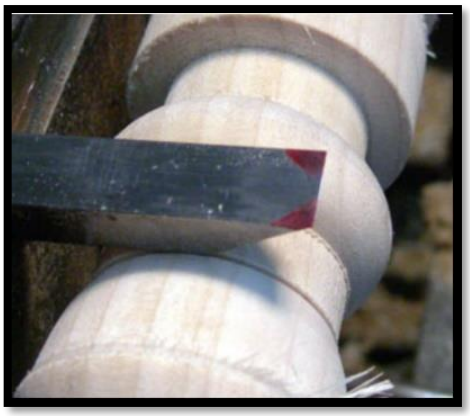
However, French turner Laurent Niclot notes that if you intend to use the tool for tasks other than parting, you should purchase the French-style. The trapezoidal shape does not work well when the tool is used for other cuts.

3. Orientation

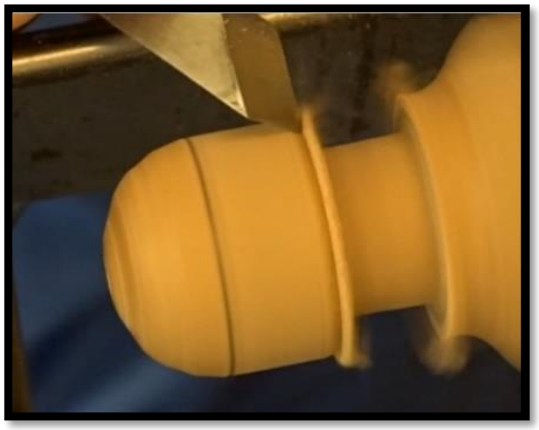
Traditionally, the tool is used in a bevel up orientation which means that a "razor-thin" portion of the flat "bottom" provides the "supporting bevel" for a cut. As a result, a bedan rides much higher on the work than even a skew. Needless to say, users report that it takes considerable practice to achieve even basic competency.

However, it can also be used with the bevel down. In this orientation, it functions like a skew which – relatively speaking – is much more forgiving.

4. Cutting Edge



While it can be used "straight on", for most cuts the cutting action takes place at the corner edges of the tool (photo right). This makes it particularly effective at producing a fine finish on end grain.



This photo shows Niclot using the tool in place of a spindle gouge to round over a cylinder. Note that only the lower tip of the bevel is engaged with the wood.

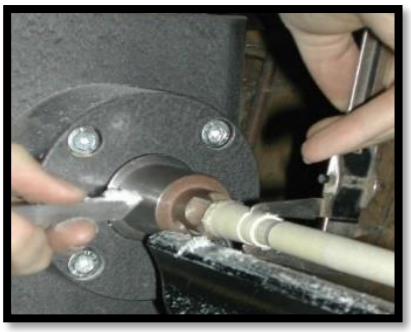
6. Wood Likes and Dislikes

The bedan excels on straight grained wood. However, given that only a microscopic edge of the bottom of the tool provides support, it does not like knots, burls or heavily figured wood. A spindle gouge (or skew) should be used on these woods.

5. Applications

The tool can be used for a variety of applications including:

Sizing
(Straight on)

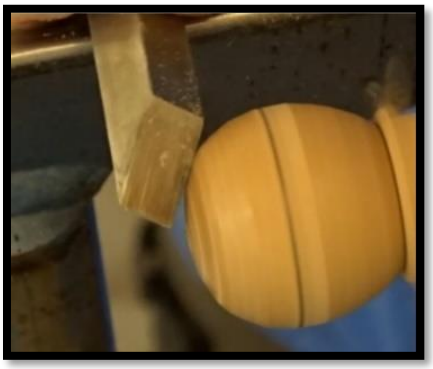


Smoothing
(Using centre portion of bevel akin to a skew)

Beading
(Edge tips only)

Peeling/Parting cuts
(Straight on)

Shear scraping
(Centre of bevel at 45-degree angle)



6. Bedan Parting Tool

For more information on the bedan parting tool, check out the video by Brian Havens at:
https://www.youtube.com/watch?v=XN8Mok5MJIk

BANDSAW SAFETY

[The following is a modified version of a note from the January 2016 Newsletter. It is included as a reminder of the potential dangers posed by the bandsaw]

"The most dangerous thing about a bandsaw is that it's so safe."

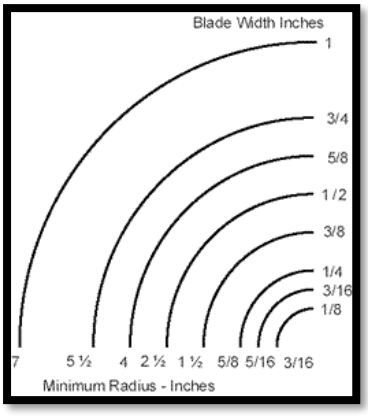
If measured in terms of workshop accidents, the band saw is clearly safer than a table saw, or mitre saw. However, this does not mean that it does not pose dangers.

With a relatively small blade and quiet operation, it is easy to forget that the blade on an average 14" band saw moves at over 3,000 fpm (feet per minute) which is over 50 feet per second.

And in most uses, the operator's hands are near the blade. Accordingly, it is not surprising that when band saw accidents do occur, they most commonly involve amputations of finger(s).

The following are some points to keep in mind.

1. Radius and Blade Width



Never try to cut a radius that is too small for your blade. Using an oversized blade puts tremendous pressure on the blade (and your machine) and poses a very real danger of the blade binding/twisting, or worse yet, shattering. The diagram on the right shows the absolute minimum radius for various blade widths.

The 5 minutes it takes to switch over a blade is a small price to pay to retain all your fingers.

2. Teeth per Inch (TPI)

Rarely, if ever, will a turner need a nicely finished cut on a blank. Therefore, forget about blades with many TPI (teeth per inch) which pose a particular risk with green wood.

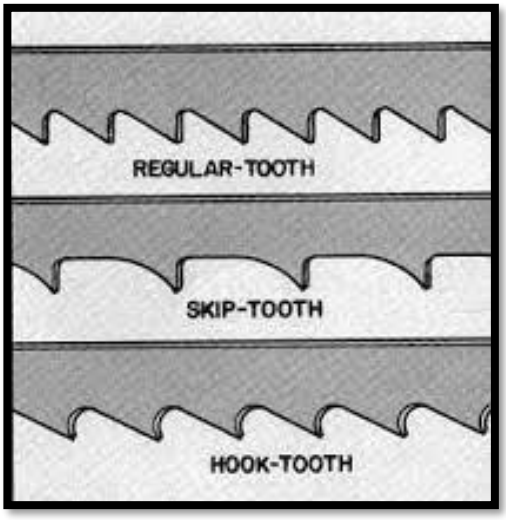
*I recently had a Man vs Bandsaw incident where the Bandsaw won. It was, of course, all operator error. On my newly purchased G0514X2 I had installed a Lennox bi-metal 1/2x14 blade to cut a number of dry blanks and boards. A while later I cut some green logs. The initial cuts looked like the wood was planed. Unbelievably smooth. So, I continued cutting more logs but noticed that they were getting harder to cut. Finally, one blank was not cutting so I began to push harder and harder and then...YOW. Blood. Got 2 knuckles on my right hand. Not bad enough to go to the hospital but a nasty cut anyway. I discovered that the teeth had clogged. The blade was … gumming its way thru the log. [**Sawmill Creek Forum**]*

For preparing bowl blanks, most professional turners recommend a blade width of between 3/8" to 1/2" with 3 or 4 tpi.

3. Hook Tooth or Skip Tooth

While band saw blades are available in many different tooth configurations, the most common ones used for turning blanks are the hook tooth and the skip tooth. A hook tooth blade has deeper gullets which means that it will clog less frequently when used on green wood.

However, it is aggressive cut will have a greater tendency to pull the wood into the blade. Conversely, a skip tooth cut will pull less than a hook tooth blade and thus will be easier to control. However, it may tend to clog more often on green wood. Be aware of which configuration you are using and these tendencies.



4. Use a sharp blade

The importance of sharp tools is not restricted to turning chisels. Periodically inspect your band saw blade to ensure that it is sharp.

Forcing a bandsaw blade through the cut with a dull blade stretches the back of the blade and compresses the front edge, allowing a bow to develop in the blade while attempting curved cuts. Once the blade begins to develop a bow, it becomes even harder to follow a curved line; there is so much pressure on the inside of the cut that the blade will tend to cut in a straight line instead of following the curve of the bowl blank. The more force the operator applies to turn and cut the blank, the more the blade begins to bow, and an accident is in the making. (Keith Tompkins, **Bandsaw Safety**)

5. Dress the back edge of the blade

The rear (non-cutting edge) of a bandsaw blade is square. Rounding over the back edge of the blade will minimize the likelihood of binding and produce a smoother motion.
While any abrasive can be used, most suggest a knife sharpening stone. While many suggest doing so with the saw running, since all you are doing is smoothing the edges, it only takes a minute to round both edges by holding a stone at a 45-degree angle while turning the (**unplugged**) saw by hand.

6. Set the Blade Guard

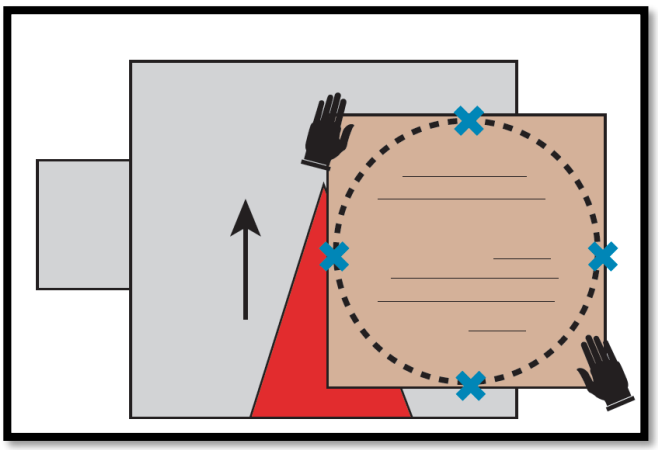
The guard should be set approximately 1/8” above the stock to minimize flexing of the blade. If you are cutting dimensioned stock (top and bottom are parallel) it will also provide some protection from a finger being pulled into the blade.

7. Adjust the Feed Pressure: End Grain and Cross Grain

In almost all cases, cutting a bowl blank involves cutting with the grain (rip cut) and across the grain (crosscut). As is the case in turning, ripping cuts require more force (since you are cutting end grain fibres) than when you are cutting across the grain. It is important to be aware of changes in grain cutting (and thickness of the log) and to adjust the amount of pressure you are exerting.

8. Danger Areas and Hand Placement

In his article on band saw safety Keith Tompkins suggests that there are always 2 (and sometimes 4) danger points in cutting a blank.



As indicated by blue X's in the diagram to the right, they are the places where the blade exits from the wood. As the blade nears this point, there is a rapid drop in resistance and the blade jumps forward, potentially pulling the operator's fingers into it.

While he notes the importance of reducing/slowing feed pressure at these points, he also suggests that the safest course is to place your hands in the locations indicated in the diagram. In particular, the left hand is behind the saw blade as the blank nears an exit point. He adds that a slight bend at the left elbow will also ensure that the operator's arm is well away from the blank.

Alternatively, Alan Lacer prefers to have both hands on the "right" side of the blank, well away from the blade, and to rotate the blank from the side. He also suggests that you use a red marker to highlight the danger area on your saw's table as a visual reminder.

9. Keep the Workpiece Flat on the Table

Always ensure that bowl blanks (or any wood being cut) sit flat on the table of the bandsaw. Any gap between the blank and the table where the blade enters the wood will cause the wood to be pulled toward the table with enough force to damage or break the blade. [Keith Tompkins, **Bandsaw Safety**]

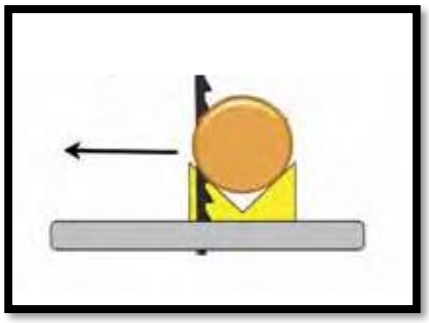
10. Templates

In order to assist you in preparing blanks, make a set of round templates in various sizes which can be secured with a nail to the workpiece. While you can use thin plywood, thick cardboard works fine.

Remember that the objective in a bowl blank is to get a rough round; you are not looking for a perfect circle.

11. Cutting Round Stock

Never cut round stock, such as a log or a turned cylinder, without using some holding jig to secure the workpiece. Otherwise, the stock will rotate into the blade with considerable force.



To cut a cylinder, use a v-block or better yet, a clamp with the clamp arm resting on the table.

For cutting doweling, a handscrew can be used to secure the piece.

The photo on the right shows a simple jig for cutting a log.

Note: the log should be secured to the upright fence with clamps or screws.

Robert David: WoodCentral

If cutting a hollow form or a bowl with partial cuts, you can use a device similar to the John Beaver Wave Bowl Jig that was discussed in the December 2015 newsletter.
For a short video showing the jig at left in operation, check this out:
http://www.aswoodturns.com/2015/09/bandsaw-jig/

Further Reading

Alan Lacer, *The Woodturner's Bandsaw*, American Woodturner, Fall, 2004
Keith Tompkins, *Bandsaw Safety*, American Woodturner, August 2011

WIT "WEBINARS"

Women in Turning (WIT) is a committee of the AAW which is dedicated to encouraging and assisting women in their pursuit of turning and to increasing participation of women in the field of woodturning.

Over the past year, WIT has organized a number of "webinars" featuring world class women turners. The format consists of the artist's presentation of her work, a Q&A session, and a tour of the artist's shop. The artists include Dixie Biggs, Betty Scarpino and Merryll Saylan.

While they all provide interesting insights into the creative process, one of my favourites is the one featuring Sally Burnett from England (left). I was fortunate to attend her excellent demonstration at the Portland Symposium and her webinar is equally engaging.

AAW members can access the video recordings at:
https://www.woodturner.org/Woodturner/WIT/WIT-Home-Page.aspx?WebsiteKey=c9100f02-c77e-4177-a9bc-7d3eb0216238&hkey=7f6a65b2-ec98-472f-a7b6-2ac573f7258d&New_ContentCollectionOrganizerCommon=7#New_ContentCollectionOrganizerCommon

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PARTING OFF

Thanks to the members of the Executive – especially Tim K and Vik P - for continuing to arrange outstanding remote demonstrations.

Special thanks this month goes to Lin Bayford who, in the absence of direct video, took the time to produce a “photo visit” of his shop. His shop puts everyone (other than Gord K) to shame in terms of how well organized it is!

CONCLUDING THOT