

Volume 28 Issue 6 February 2024

# The Turning Point

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The next meeting of the Nova Woodturners' Guild will be held at Lee Valley Tools, 150 Susie Lake Crescent, Halifax Sunday, February 11, 2024 at 2:00 PM

At the February meeting:  $\implies$  Turn or Burn: what to do with that piece of wood  $\implies$  Bring in your recent turnings for Show and Tell

### The President's Report

Gary Landry

Hello. I trust you are dealing well with our typically crazy weather.

We have begun the process of improving the sound quality of our webcasting of meetings and demos. Some lapel microphones that will communicate directly with our video camera are on order. We hope that this will remove some of the background noises from the meeting getting through to our at-home viewers. We will also see if they are a solution to the lag between the audio and video feeds. If they don't then we will have to take a different approach.

Last month's IRD with Jeff Hornung went well. At one point the attendee number reached 13 and perhaps we had even more and I missed noticing it. Jeff presented a very interesting demo that not only produced a square bowl with a beaded foot but showed the techniques and tools that he employs to do so. Jeff will be sending us an edited copy of the demo to put in our video library for those who missed it and those who need a refresher.

This month we will meet on Sunday, February 11th. Doors open at 1:30 PM with the meeting going from 2 PM to 4 PM. We will have a demo by one of our founding members, Stephen Zwerling. The title of his demo is "Turn or Burn: Wood Use Decision Making". Stephen always presents thought provoking demos and talks so I would encourage you to attend either in person or via video.

Finally, I want to advise you that we have committed to hold our Annual Turning Competition this year. A final timetable for entries, exhibition, display and judging is being worked on by Bill Maes, our VP, and will be released as soon as we fix dates. The only date I have to share at this point is that the results, trophies and prizes will be announce at our meeting on June 9th. However, I want to remind all members that it is not too soon to start on your entries for this year. The sooner you start the easier it will be for you to get entries in on time. We have all had the experience of hoping that last coat of finish on an entry will dry in time to meet the closing date for drop-off. A word to the wise...

Please turn some wood, stay safe and have fun.

## Notes from the January Meeting

Meeting on Zoom platform for online demo. Meeting brought to order at 2:00pm with 12 members present

#### Announcements:

- Today's presentation will be recorded and made available through the Guild library for member use.
- Upcoming meeting topics:
  - $\circ~$  February Stephen Zwerling Wood use decision making
  - $\circ~$  March ~- Dave McLachlan ~- Turning a "wave" bowl
  - April Leo Westhaver Turning fine finials (pre-recorded demo)
- SIA Abrasives is looking for feedback on the new SIA Strong sandpaper included as samples in the most recent sanding kits donated by SIA to the Guild. Please send any thoughts or feedback to Bill Maes so he can send them on to SIA.
- We will acquire a wireless lapel microphone for use during demonstrations to enhance the sound quality.

#### Main Presentation:

The main presentation was an Interactive Remote Demonstration by **Jeff Hornung**, based in St Louis, Missouri. Jeff's topic was "Square Plate with Beaded Foot".

If desired the blank can be decorated with contrasting wood plugs:

- cut plugs of desired species from some flat stock with desired size of plug cutter using a drill press;
- drill matching size holes at the desire plug locations;
- seal wood blank with a good wood sealer; and
- glue plugs in place using either standard wood glue (PVA) or medium or thin cyanoacrylate (CA).

Jeff used a "Roadsidea" blank from a box of unknown hardwood for this demonstration.

Starting with a  $1^{1/2}$ " or 2" thick blank of desired size, drill a centre hole of correct size for a worm screw held in chuck jaws. To ensure the blank is held straight on the chuck with the worm screw, use two hands — one holding the blank at 90 degrees to the lathe bed and the other hand to turn the wood threading it onto the screw. The blank must make good contact with the chuck jaws, but don't overtighten, to avoid stripping the threads in the hole making an insecure attachment. Also, don't drill the hole too deep for the worm screw or the damage at the bottom of the hole may be hard to remove.

The blank needs to be properly squared before starting so that the resulting plate will be correctly square.

Safety Tip: The corners of a spinning square blank are sharp and dangerous. Mark the extent of the corners by placing some masking tape on the tool rest to mark the "no go" zone and help keep fingers clear. Rub the shaft of a gouge over the tool rest to scrape the tape away in the contact area of the tool rest so that tools will slide smoothly along the tool rest.

Calum Ewing

Whenever turning blanks with corners, wings or very thin walls, you will get the best cut surface turning the lathe at the highest speed you are comfortable at.

#### Starting to shape the blank:

- Measure the inside diameter of your dovetail chuck jaws in the fully closed position with calipers.
- With the lathe running as fast as you're comfortable and the tail stock in place for extra support, start making some light draw cuts across the bottom to flatten the base.
- Using a pencil, mark a few circles on the base as a guide to help laying out the foot diameter.
- Begin making pull cuts to shape the bowl / plate bottom and foot/tenon, being careful not to apply too much pressure when in the 'wing' area at the corners.
- Pull cuts will result in fewer torn out fibres in the corner areas.
- To clean up tool marks and torn grain, use a negative rake scraper or a skew chisel with a radiused edge (lying on its side), taking light passes to smooth out any tool marks. Jeff also uses a carbide scrape (carbide cutter set on a tool bar with an angled face to create a negative rake cutter).

#### Shaping the Foot:

- Using a small spindle gouge, start to form the bottom curve of the foot bead, using pull cuts.
- With the bevel of the gouge riding the lower surface of the bowl, cut into the top of the foot with the tip of the gouge to round the top of the "bead".
- Keep the bottom and top curves of the foot/tenon matching so that it looks like a proper bead.
- As the blank is on a worm screw, you can remove the tail stock to allow finishing the inside of the foot.
- Undercut the foot to continue the illusion of the beaded foot.

#### Sanding the Outside:

- Sand the underside of the plate, sanding through the grits with the lathe turned off and the spindle locked.
- Sanding with the lathe running will result in the corners being rounded over more than the rest of the bowl.

#### Shaping the Interior:

- Remove the blank from the worm screw and reverse on the chuck. Grip the tenon/foot with **smooth-faced** dovetail jaws on the chuck. Ideally the gap between jaws will be 1/8 to 1/16 inch when gripping the tenon. Make sure you have a good grip on the plate but do not over-tighten the chuck to avoid damaging the finished foot.
- True up the inner face so it is flat.
- Using light push cuts (pushing towards the headstock), make a series of cuts starting at the outer corner, down to your desired finished thickness.
- The secret to thin turning is to make light cuts down to the finished thickness, working in small steps. In this case, work in small steps of 1 to  $1^{1/2}$  inch, working in from the corners towards the centre.
- Use a negative rake scraper to remove any tool marks from the inner surface. Apply very light pressure as the corners will deflect away from any pressure at this thickness.
- Next cut down to the finished thickness in the next "step" area.
- Once you are clear of the corner areas, you can take more aggressive cuts as your are turning in solid wood all the way around (no air spaces).

- Lean over towards the headstock so that you can see the curve of the bottom surface and ensure consistent thickness from corner to centre.
- When only the centre stem is left, reduce it down using a spindle gouge until it can be removed. Remove the tailstock and clean up the centre area with the bowl gouge.

*Tip:* Remember that all cutting force should be lateral to the piece, not pushing towards the headstock (except when hogging out large amounts of wood in rough cuts) — let the cutting edge of the tool and the speed do the work for you.

Sanding Inside:

- Using sandpaper on a firm backing pad (e.g., see Vince's Wooden Wonders; https://vinceswoodnwonders.com), support the wood with a hand on the back surface to prevent flexing or breakage while sanding the interior.
- Also sand the outside edges to make sure they are smooth and flat, working through all the grits.
- You can also sand in a slight curve or dip into the outside edge to emphasize the corners. The edge curves do not need to be exactly even as the eye will be tricked into thinking they are all the same.

#### **Discussion:**

- It does not make a lot of sense to spend much effort in making the blank exactly square before starting as there will invariably be tear-out or chipping at the leading and trailing edges of the corners during the turning that will need to be fixed after turning.
- Other shapes can be turned (e.g., triangles, hexagons, etc.) but need to be shaped on the blank before turning. You can also scroll saw more intricate shapes to the edges after completion.

After the demonstration concluded, the Zoom call was terminated and the membership resumed meeting with Jitsi.

#### Show & Tell:

Norm Jolivet	showed some finials that he has been turning in Walnut and Roasted Maple to use up small scraps and cut offs.
	He also showed off a set of coloured veneers in bright colours made from the wooden business cards available from Lee Valley, dyed with TintEx fabric dyes in a range of colours.
Bob Earle	showed off a nice friction powered rotary sander he made. He has made a separate sanding head/pad for each grit, in both 2 inch and 3 inch diameters. The trick can be finding a good foam that is dense enough to provide good support for the sandpaper. Garden kneeling pads can work well.

The meeting wrapped up at 5:00 PM.

### **Ebonized Red Oak**

Bill Maes

Here are two bowls I've recently made. The wood is red oak which has been ebonized. The first one is 10'' in diameter and  $2^{1}/2''$  high.



The second bowl (*Editor's note: also seen on the cover page and second last page*) is 7" in diameter and 3" high. The following picture shows a different view of both of these bowls.



Continued on the next page...

To create the ebonizing solution, use one ball of "00" steel wool and soak in enough white vinegar to submerge the wool. Leave in a plastic or glass container (a metal container will rust through) with holes in the lid for five days to a week. Pour solution through a coffee filter to clear any large particles.

Apply solution to finished wood (do not sand smoother than about 280 grit) with a brush or sponge and let dry thoroughly for about a day. The wood will turn black almost immediately. Wood with high tannin values (e.g., oak, walnut) will turn darker than other types of wood.

Deal with raised grain cautiously as ebonizing does not penetrate deeply. I recommend a light sanding with "00" steel wool if necessary. Polishing with a coating of bees wax and/or Tried and True works well.

### The Electrical Corner

#### Jim Diamond

As most woodworkers know, very fine particles of dust are one of the hazards we have to deal with. There are many products out there with grandiose claims of how they will save us... We are offered dust collectors, dust extractors, air scrubbers, shop vacs, and various other pieces of equipment, all with their own performance claims. These claims tend to be hard to verify, partially because measuring the number of invisible-to-the-eye particles in the air requires specialized equipment. Over the years I've considered buying equipment to measure the particles smaller than 2.5 micrometers (the so-called PM2.5 particulates), but any piece of equipment I could find which appeared to be accurate enough to bother with was also quite pricey.

In the spirit of continuing the "things with funny names that you can buy for a reasonable amount of money" series, this month I will talk about the VINDSTYRKA air quality sensor, available from a yellow and blue store for the low, low price (\*cough\*) of \$49.99. This sensor also shows you the temperature and relative humidity, and allegedly shows whether the level of volatile organic compounds (VOCs) is increasing or decreasing. The temperature and humidity readings seem to be reasonable. While I am suspicious of the VOC indication, that isn't what this article is about, so I won't talk about it any more.

(Also, for those into "home automation", note that the VINDSTYRKA can be connected to a phone app and other devices in your home; it would be nice if you could connect it to your workshop air cleaner (if you have one) but I don't know if anyone has done that yet.)

You need a USB charger or similar gizmo as a power supply; if you don't have a spare one you can get a SMÅHAGEL for the very reasonable price of \$3.99. However, a USB power bank will also power this device, as can just be seen at the upper left of this photo.

To test this device out, I decided to make a few cuts of SPF  $2 \times 6$  using my compound mitre saw (CMS) and see what happens. I took it into my shop and put it on my router table, about 5' from the blade of my CMS. Initially (see Figure 1), the sensor reading was 1, which I presume reflects the fact that my shop is dustier than my living room, as in the first photo. I then turned on my ShopVac, which was attached to the dust port on my CMS, and made two cuts. The reading went to 4, as seen in Figure 2 (I didn't press the button to light up the screen, mea culpa).





Figure 2: Reading after two cuts

I then turned off the vacuum, and the reading dropped to 2. I turned the vacuum back on, and the reading went up to 4. This could mean that the CleanStream<sup>®</sup> filter in my shop vac is leaking fine dust, but my guess is that it is more likely that the exhaust from the shop vac (which was about 3.5' from the VINDSTYRKA) was just picking up and blowing around fine dust which had previously settled.

I then made two more cuts with the shop vac on, and the reading varied from 3 to 4. I then turned the shop vac off and made two more cuts, and the reading went up to 6. I then made a few more cuts rapidly and moved the sensor to the chop saw table, where it went up to 26. By the time I grabbed a picture (Figure 3) the reading had dropped to 22.

I then turned on my air cleaner, which hangs from the ceiling about 11' away from my CMS. My air cleaner is an Emerson Electric AB760 (which LV used to sell); it has a three-stage cleaning system and two speeds, and I turned it on at the lower speed. After about 10 minutes the reading dropped to 2 (Figure 4). I got bored waiting for the reading to drop to 1 and decided to end the "experiment".

A scientific test this was most definitely not. However, it did indicate that the VINDSTYRKA does react fairly quickly to changing levels of particles in the air. Even when I tried to stir up some dust around my CMS, I didn't get a reading in the yellow or red. Whether this means that the meter reads low or that I didn't generate enough fine dust is an open question. However, even if its reading is not highly accurate, it does seem to provide some useful information about how much the fine particle levels change when generating dust.





Figure 4: After some air scrubbing

I should give it a try some day when I am power-sanding a turning. I expect power sanding will generate a lot more fine dust than a few cuts on a CMS. If I discover anything interesting I'll follow up in a future newsletter. And if anyone works in a lab setting where they could compare this against a piece of laboratory equipment, please get in touch with me.

### **Cover Photo**





#### Photo News

There are two items of note about photos this time. First, since the last meeting was on-line, we don't have any photos from the demonstration. I (Jim D) emailed the demonstrator asking for permission to post some relevant photos from his web site, but didn't hear back by the time I needed to distribute the newsletter. Maybe I'll get something for the next newsletter.

Second, after some discussion about compressing our newsletter PDFs with our intrepid webmaster Richard Ford, I discovered that I could considerably compress the JPEG images without apparent loss of quality. Up until now I have been shrinking the width and height down to until the images were not "too big" (in the sense of megabytes, not in the sense of inches), but this means that fine detail was lost; you might not have noticed that had you not tried zooming in. But now, if you want to see the close-up detail of some photographs, such as the bowl on this page, you can zoom in quite a bit before the photo becomes pixelated. Let me know if this new image format causes any problems.

## Nova Woodturners' Guild — 2023/24 Executive

All members of the executive, as well as committee chairs, can be reached by using the email address associated with that position. That is, a note sent to (for example) the president will go to whomever is president at that time. The following <address>es should be followed by @novawoodturnersguild.com to send mail to the person holding that position.

Position	<address></address>	Incumbent(s)
Executive	<b>executive</b> (sends the message to all executive positions on the list)	
President	president (or) pres	Gary Landry
Vice President	vice-president (or) vp	Bill Maes
Secretary	secretary	Calum Ewing
Treasurer	treasurer	Dave McLachlan
Director at Large	director-at-large	vacant
Committees		
Library	library	Jim Diamond C Richard Ford
Web Site	webmaster	Richard Ford C
Membership & Promotion	membership	vacant
Newsletter	newsletter $(or)$ news	Jim Diamond C
Competition	competition	vacant
Guild Photographer	photographer $(or)$ photos	Chris Palmer C
Fund Raising	raffles	vacant C
Members Group	members	members

A 'C' after a committee member's name indicates they are chair of that committee.

The members address forwards the email to all members who have signed up to be on the members list. To add or remove yourself from the members list, send an email to membersmeister@novawood-turnersguild.com requesting the change.

If you wish to send an email to **all** current members of the NWG, send your message to **secretary@no-vawoodturnersguild.com** with a request to forward your email to all members.