

WOODTURNING FUNdamentals

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AAW
EDUCATION

Turning a Hair Pin



Wooden Stool as a Skill Builder



Wazzos



Dying for a Great Color Finish



Singing the Green Wood Blues

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Cover photo: Denis Delehanty

Introduction

Our enjoyment of woodturning grows with our skills. Skill-building is fundamental and finding the path to further our learning is key. This issue's project articles offer skill-building and inspiration for your next projects, as well as a chance to improve your turning capabilities—Beyond the Basic Apple, Turning a Hair Pin, Wooden Stool as a Skill Builder, and Wazzos. You will also enjoy the techniques section where several pros share their tips to save green wood. The article includes valuable information about their climates, so you can compare it to your own.

I hope this issue will help you find the ideas and encouragement for a productive visit to your shop!

As always, *Woodturning FUNdamentals* invites you to submit your questions, tips, projects, and problems. Every turner develops techniques that work. They also run into frustrating obstacles from time to time. You're not alone. Please send your submissions to us at linda@woodturner.org.

I welcome your suggestions and concerns.

Stay Sharp and Turn Safe,
Linda Ferber
linda@woodturner.org

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BEYOND THE BASIC APPLE

Filling a Fruit Bowl

By Ed “Sonny” Jones

Like all woodturners, I started out turning bowls, and soon after bought a larger lathe so I could turn larger bowls. Whenever I would give a large bowl to friends, they would put it on their dining room table and fill it with fresh fruit. I then started turning apples, and when my daughter asked for a bowl of apples she got a bowl full of turned brown wooden apples. A fellow member of the turning club I belong to presented a demonstration on dying bowls with Aniline dye. That progressed into coloring and dying fruit.

Dying the fruit

In Photo 1 the apples are dyed red. Aniline dye powder, Homestead’s TransTint liquid dye, and/or basic water colors may be used for dying wood. A combination of all three may be used to achieve a desired effect. Make sure to work in a well-ventilated area and follow all safety instructions on the products used. Have blank pieces of wood available to use as a practice canvas before applying color to the finished pieces because different wood species will color differently.

Aniline powder: Mix ¼ teaspoon powder with 1 ounce of water. Adding more or less powder will alter the intensity of the color. After sanding, apply color with a sponge brush. If mixing colors; start with the darker color first.



Photo 1: Wooden apples for a wooden bowl.

Apply dye liberally and allow the color to dry for about ten minutes. Wipe down with a wet paper towel. Allow to dry. The water-based dye will raise the grain. A light sanding will be necessary before proceeding to the next color (if using more than one color) or before applying final finish.

TransTint liquid dye: Liquid dyes are easier to use than powders because they do not have to dissolve. According to the directions, mix 1 ounce of TransTint dye to 1 quart of tap water, distilled water, or alcohol. TransTint dye can also be added directly to any water-based finish or solvent lacquer for a top coat finish. A quart is a lot of dying liquid. For smaller amounts, use distilled water in a plastic cup and add a few drops at a time. Apply powdered or liquid dye as described above, but be sure to wear rubber gloves, goggles, and a respirator.

Complete safety instructions are on the back of the product and can be found at

HomesteadFinishingProducts.com.

Water colors: Water colors can be purchased at any art supply store. With water color, apply the lightest colors first. If the color is too vibrant, paint can be removed with a wet brush. Place a bit of each concentrated color on a plastic plate and use a wet paintbrush to blend the colors until the desired shade is reached. Apply paint directly to the wood. An apple might be painted mostly red and shaded with yellow or light green for different highlights.

After the apples are dry, use a wipe-on poly for that waxed fruit look. The peaches shown below were not sanded so that the raised grain would resemble peach fuzz.



Photo 2: Wooden fruit

Beyond the basic apple

A bowl of wooden apples may enhance your dining room table, but why stop there?

Turning a strawberry

Turn cylinder round then turn a tenon on one end sized to fit your chuck.

1. Turn a smaller cylinder for the strawberry, 1 in. diameter and 1-½ in. long. Round over end to make a pointed cone (Photo 3).
2. Dimple the strawberry cone with a Dremel or rotating tool (Photo 4).
3. Part off the strawberry. Hollow a 1 in. diameter hole into the remaining larger cylinder ½ in. deep. Make sure strawberry fits into the recess (Photo 5).
4. Shape stem and carve bracts using a Dremel or coping saw (Photo 6).
5. Test fit berry in stem (Photo 7).
6. Finish by applying dye/color to strawberries (Photo 8).

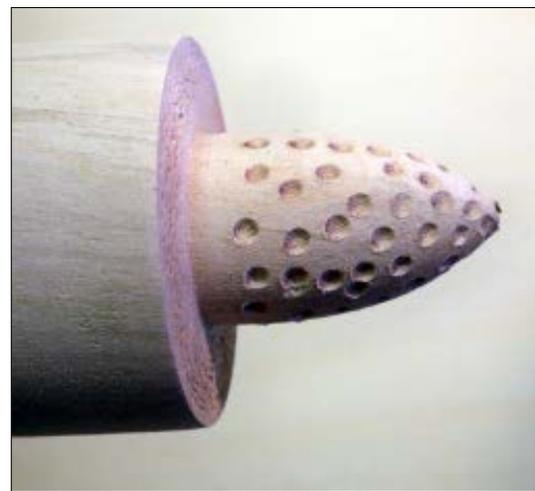


Photo 4



Photo 5



Photo 8



Photo 6

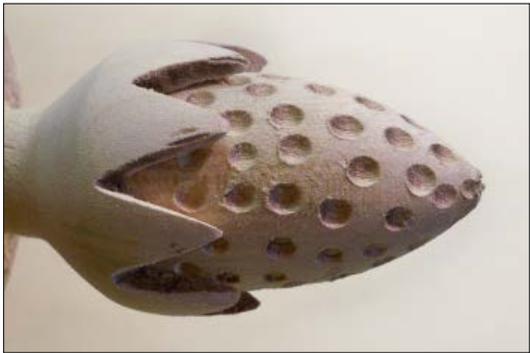


Photo 7

Turning an orange

Turn cylinder round. Turn a tenon on one end sized to fit your chuck.

1. Shape cylinder into a round, orange-sized ball. Drill a small hole, approximately 3/16" in diameter, into the tailstock end (Photo 9).
2. Dimple the orange with a Dremel or rotating cutting tool (Photo 10).
3. Part off, reverse, and mount in a shopmade screwchuck that I call a bottom jig (jig is shown below) with a screw (Photo 11).
4. Finish by applying dye/color to the orange. The dyed brown stem fills the screw-mounting hole (Photo 12).



Photo 9



Photo 10



Photo 11



Photo 12

Turning a peach

Turn cylinder round. Turn a tenon on one end sized to fit your chuck.

1. Shape cylinder into a round, peach-sized ball. Notice that the end is turned inward, or slightly concave (Photo 13). Drill a small hole into the tailstock end.
2. Saw a groove into one side of the peach about ¼ in. deep (Photo 14).
3. Expand the groove with power bits or hand carving tools. Notice the groove extends into the far side, but only at the top of the peach (Photo 15).
4. Finish by applying dye/color. Peaches are not sanded so that the raised grain resembles peach fuzz. The dyed brown stems fill the screw-mounting holes (Photo 16).



Photo 14



Photo 15

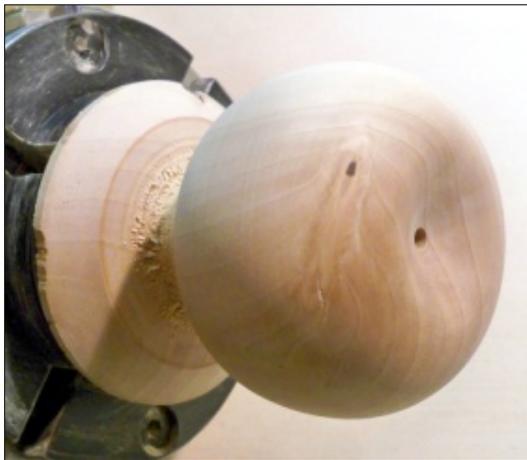


Photo 13



Photo 16

Turning stems

Turn cylinder round. Turn a tenon on one end sized to fit your chuck.

1. Turn the spindle down to about ¼ in. in diameter. A series of stems can be shaped at one time. Part off and finish the top of the next stem. Stems are easily painted/stained brown or can be cut from dark wood (Photo 17).



Photo 17



Photo 18



Photo 19



Photo 20

The bottoms

To create a jig for turning and sanding the bottoms of fruit, cut a tenon on one end of a piece of scrap wood sized to fit your chuck.

1. Drill a hole through the center of the jig and insert a screw. The screw can be glued in place (Photo 18).
2. Cut a round piece of leather to protect the finished side of the fruit (Photo 19).
3. Screw the piece of fruit onto the jig and mount in the chuck. You will have complete access for finishing the top of the fruit (Photo 20).
4. The bottom hole should be plugged with a small bit of brown wood. A whole clove also works well.

Various other fruit

All it takes is imagination. The cherries are small round balls of wood dyed red. Use a twig from a branch for the stems (Photo 21). A pear is similar to an apple but with a slightly different shape and dyed a different color (Photo 22). I cut the banana on the bandsaw and shaped on a bench sander. For the color, I used a yellow highlighter. (Photo 23).



Photo 21

TOOL AND SUPPLY LIST

Wood: Turning stock of various species and diameters. Twigs (optional)

Tools: 4-jawed chuck, live center, roughing gauge, 3/8 in. spindle gouge or detail gauge, parting tool, skew (optional) or turning gouge of choice:

- Assorted grits of abrasive paper
- Cyanoacrylate glue or wood glue
- Dremel tool with dimpling bit (for strawberry and orange)
- Dremel cutting disk or coping saw (for strawberry)
- Aniline Dye, TransTint dye, water colors, or highlighters in various colors.

Please refer to all manufacturers' labels for proper product usage.



Photo 22



Photo 23

Author

Ed “Sonny” Jones is a retired chef who enjoys turning culinary projects with practical applications. His website also features “whimsical wood” projects. Sonny’s Snowman Project was featured in the Winter 2011 #28 issue of *Woodturning Design*. He is a member of the AAW, Lehigh Valley Woodturners, and the Wyoming Valley Art League. His work can be seen at the Art on Main Gallery, 71 South Main Street, Pittston, Pennsylvania. Visit www.sonnyjoneswoodturner.com for examples of his work. Sonny may also be reached at edsonnyjones333@gmail.com.

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TURNING A HAIR PIN

Spindle Turning Practice with a Practical Bent

By Walt Wager



Photo 1

At a regional symposium in Florida I met Linda Ferber, AAW Program Director. We were talking about the *Fundamentals* publication and articles for beginning turners. One set of skills involves spindle turning: roughing to round and turning beads and coves. She suggested that making hair pins would be a practical application of those skills. Hair pins? What are hair pins? Well, it turns out there are all kinds of hair pins, and after Googling hair pin images, I determined that the straight ones are about 6 to 7 in. long, and they have some sort of decoration on one end. They taper from the decoration down to a rounded point at the end, and women (and some men) might wear them to hold a bun or knotted hair together, or just for adornment (Photo 1).

To me, a hair pin looks a lot like a finial, and to turn a finial I would start with a stick of wood about ½ in. square and 8 in. long. I'd put one inch into a scroll chuck with spigot jaws and support the other end with a live center. I would then rough it to round using a skew or spindle roughing gouge and taper it from the head stock down toward the tail stock, and then

add the beads and coves at the head stock end before sanding and parting it off. But what if I didn't have a scroll chuck with spigot jaws? How would I turn a hair pin between centers? One thing I love about woodturning is that it is a problem-solving environment. There are always a number of ways to accomplish the same thing. A new turner would have received a spur drive and live center with the lathe, so that's what I'll use in this article.



Photo 2

**Photo 3**

One consideration is that a hair pin is quite thin; turning a long, thin piece of wood between centers becomes problematic. Any pressure from the tail stock is going to cause the wood to bow as it becomes thinner. A catch of any kind can quickly cause it to break. The scroll chuck with spigot jaws solves this problem because it supports the wood without a great deal of pressure from the tailstock, but a spur drive requires a certain amount of pressure to keep it engaged. Cutting a couple of grooves in the headstock and tailstock end of the blank (Photo 2) will support the wood enough in the spur drive without a lot of pressure from the live center (Photo 3).

**Photo 4**

Roughing the blank to round

Start by using the spindle roughing gouge to make the blank uniformly round (Photo 4). Notice the angle of the roughing gouge to the spindle, about a 45° angle. Keeping the bevel on the wood you will get a peeling cut similar to a skew.

**Photo 5**

Tapering the blank

Taper the blank from the middle toward the tailstock. The principle is to support the blank as much as possible as it gets thinner, cutting “downhill,” with the grain. The final diameter at the end is about 3/16 in. Notice that I am using my finger behind the spindle to steady it as I cut (Photo 5).

Keep tapering, moving back toward the headstock and cutting downhill to complete the taper. This is a good time to sand the taper, starting with 100 grit, 240 grit, and finally 400 grit.

**Photo 6**

Turning the Beads and Coves

After the spindle is tapered, it is time to cut the beads and coves. Here I have marked the location of beads and coves on the blank, starting with a bead on the right end toward the tailstock (Photo 6).



Photo 7

Start by resting the bevel of the spindle gouge on the center of the bead with the flute at the 12 o'clock position (Photo 7). Form the right side of the bead by rotating the gouge clockwise while lifting its handle. When finished, the flute will be at the 3 o'clock position (Photo 8).



Photo 8

Turn the left side of the bead in a similar manner, starting with the bevel in the middle of the bead and rotating the gouge counterclockwise while raising the handle. When finished, the flute will be in the 9 o'clock position (Photo 9).



Photo 9

One principle of turning is that the bevel faces the direction of the cut. This means that you point the bevel in the direction that you want to make the cut. With regard to the cove, you want to point the bevel toward the bottom of the cove.



Photo 10

To turn a cove, start with the bevel on the wood, with the flute in the 11 o'clock position just to the right of the center of the cove (Photo 10). Lift the handle and cut from the top down toward the center of the cove. Make the same cut from the left side of center down toward the center of the cove (Photo 11).

**Photo 11**

Repeat this process, moving the gouge back toward the right edge of the cove and make the same cut, then from the left. Repeat until the cove is as wide and deep as you want it. Others have likened the process to scooping out ice cream—scooping from the top to the bottom, rotating the gouge with the flute going from a closed (2 or 10 o'clock) position on the outer edges of the cove to a more open (1 or 11 o'clock) position at the bottom of the cove.

To set off the bead from the cove, cut a small flat spot, called a fillet, between the cove and the bead. The fillet can be cut with the spindle gouge by turning the flute to the 3 o'clock (right) or 9 o'clock (left) position in the cove and cutting toward the bead (Photo 12). After cutting the fillet, you may have to touch up the edges of the cove or the bead or both.

**Photo 12**

Parting off the hair pin

The final step is to part off the hair pin from between the spur drive and the live center. The easiest way is to simply cut off the waste at both ends with a thin saw (Photo 13).

**Photo 13**

However, the pin can be parted off on the live center end with the spindle gouge, as you taper the hair pin to a rounded point. You will still have to cut off the waste from the spur drive end with a saw. Smooth the ends with sandpaper. Apply a finish of your choice.

**Photo 14**

Author

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WOODEN STOOL AS SKILL BUILDER

Function and FUNdamentals

By Denis Delahanty



Wooden stools are a great skill builder for new and intermediate turners. You can alter the height, width, style, and number of legs to meet your preferences.

This article provides the sequence of steps and a list of tools needed to complete a stool. The effort does not involve a lot of time and it is easy to prepare the materials. Plus, you are turning a functional item that may be used for generations.

TURN A STOOL SEAT

Select the material

Poplar is a common, versatile wood that will allow you to make a sturdy stool at minimal expense. I use poplar because it is readily available and easy to turn.

Poplar is also a good paint grade material and it is often used when multiple pieces are glued together to make larger architectural and furniture pieces. Gluing multiple pieces together will result in a more stable piece over the long term.

Prepare the material for glue-up I started with rough sawn 6/4 (1-½ in. thick) boards. Rip 2 in. wide strips from the boards on a bandsaw or table saw. I run the 2 in. wide sides of the strips through my planer to assure that the glue faces are smooth and the strips will be uniform thickness.

Tip - Utilizing strips of even thickness makes turning the top and the bottom of the seat into a flat surface much easier.

Lay out the strips

Lay out the strips so that the seat will be 2 in. thick. I glue an odd number of pieces, (typically seven) together for two reasons. First, I want one of the three legs placed dead center on the middle strip. Secondly, utilizing an even number of strips would require you to drill the hole for the screw chuck between two pieces, which may cause that glue joint to fail. Using an odd number of pieces also allows you to set the compass in the center of the middle piece to lay out the stool top circumference and the location of the leg holes from the edge of the seat.

Tip - I choose strips for the top that have a balanced combination of color and grain texture. If the top looks great after turning, I may decide to use a clear finish to show off the interesting grain instead of painting the stool.

Lay out the top for gluing

Lay out the tops so that all the pieces for the bottom of the stool seat are very flat in relation to one another. This will prevent the stool top from wobbling when mounted on the screw chuck.

I let the glue set up overnight to assure a good bond, and I use four $\frac{3}{4}$ in. pipe clamps, two under the strips and two above the strips, to provide equal pressure to both surfaces.

Tip - Protect your work from black spots that are caused by a reaction between the glue and the pipe clamps by placing plastic or wax paper between the wood and your clamps.

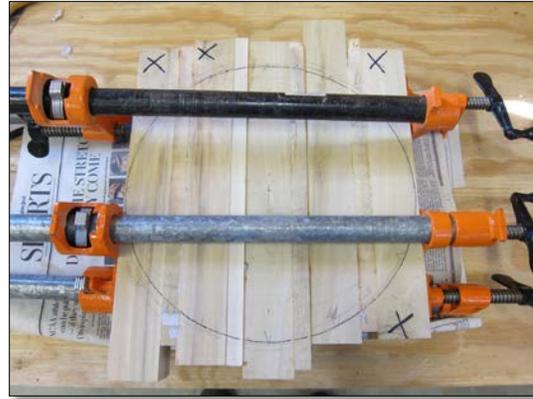


Photo 1: Glued-up seat

Lay out the seat dimensions

Using a compass, draw a circle 11 to 13 in. diameter, defining the width of the seat. The center point for the circle is in the middle of the center strip. Draw a second circle, using the same center that is 2- $\frac{1}{2}$ to 3 in. smaller in diameter than the top. On this line, lay out six equally spaced points along the circumference of the smaller circle to mark the leg locations. The first point should be in the center of the middle piece of the glued-up seat.

The holes for the legs will start with the first point and then land on every other point you have located on the circle.

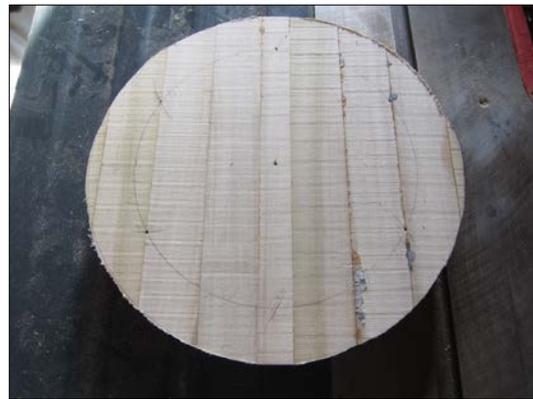


Photo 2- Legs and center points predrilled

Remove the waste material

Remove any excess glue from both surfaces, using a chisel or scraper. Use a bandsaw to cut the stool seat close to the diameter you selected. On the side that will be the bottom of the stool, drill holes approximately ¼ in. deep using a 1/8 in. diameter drill bit at the three locations you have selected for the stool legs and at the center of the stool seat. This will provide permanent leg locations for later use. Drill a 5/16 in. to 3/8 in. hole in the center of the stool seat bottom.

Tip - Use the screw chuck manufacture's recommended hole size and depth for your chuck screw. I drill the hole 1/16 in. smaller on soft woods to insure a better grip.

Tip - If there is any likelihood that your screw chuck hole may protrude too far into the seat, you may need to place a spacer between the chuck jaws and the stool seat. A round piece of lauan or thin plywood slightly wider than your chuck jaws will do the trick. Cut a hole in the center slightly larger than your screw chuck.

TOP OF SEAT

Mount the seat to the screw chuck

Mount the stool top to the screw chuck. Be sure the stool top is firmly threaded onto the screw until it seats firmly against the chuck jaws. Using a bowl gouge, flatten the top of the seat, the outside edge, and the bottom of the stool seat.

Tip - I use a medium to large chuck with the largest diameter jaws I have for that chuck. I keep the jaws closed during turning.

Tip - I keep a metal ruler handy to regularly check the flatness of the workpiece.



Photo 3 - Seat with top and edge turned

Turned embellishment

At this point, you may wish to add turned embellishments, such as beads or coves to the outside edge of the seat or round over or taper the outside edge of the top and bottom while still in the screw chuck (outside the diameter of the holes for the legs).

Tip - The seat top needs to be flat in order to reverse mount the seat to a faceplate utilizing double-faced tape.

SEAT BOTTOM

Clean up the seat

Once the edge and top of the seat are turned and sanded to your satisfaction, remove the stool seat from the screw chuck. Flip the stool seat over and remount it to a 5 in. or larger faceplate utilizing heavy duty double-faced tape. I recommend using 2 in. wide double-faced tape that has a cloth core. Use a compass with pencils on both ends to lightly draw a circle slightly larger than your face plate. Center the circle on the seat before you remove the seat from the screw chuck. Drawing this circle makes it a lot easier to locate the faceplate.

Tip - It is amazing how secure the double-faced tape will hold the stool seat in place. You may need to pry the seat off the faceplate using a length of lumber.

Using the tailstock, apply pressure to the seat for 20 minutes to be sure the double-faced tape is well adhered to the wood. You may wish to protect the surface by placing a small block of wood between the live center and the stool base.

See Janet Levi's shop tip, "Using Spacers to Protect the Wood," in this issue (May 2017) of Woodturning FUNDamentals.

Use a bowl gouge to clean up as much of the bottom of the stool seat as you can reach, then back off the tailstock. Turn the area that was behind the block. Remove the stool seat from the faceplate.



Photo 4 - Use a scrap block to apply pressure to the double-faced tape

Drill holes for the legs in seat bottom

I have read numerous articles that suggest the legs for three-legged stools should flare out at an angle, 10° to 15°. The angle is personal preference; however, a larger angle adds stability to the stool. I use a 15° angle on the short 12 to 14 in. tall stools.



Photo 5 - Drilling fixture side view and drilling fixture top view



Photo 6 - Drilling fixture side view and drilling fixture top view

Build a drill fixture

I built a 15° fixture that is 12 wide × 15 long × 3-1/8 in. high on the short end and 7-1/4 in. high on the high end. Everything is made out of 3/4 in. medium density fiberboard (MDF). The 4 × 4 × 5-1/2 in. triangular blocks on the bottom two corners are made from two layers of MDF. The blocks are exactly the same shape and placed on the bottom two corners of the fixture. Draw a center line on the top of the fixture from the top to the bottom edge. You must drill every hole to the same depth, otherwise the stool will not sit level.

Tip - Drill the holes for the legs about 1-1/2 to 1-5/8 in. deep. The exact depth isn't critical, as long as all three holes are the same depth. If they aren't, the stool won't sit level. Wrap a piece of tape around the drill bit for a depth gauge.

If you marked out the six equally spaced points on the bottom of your stools, then this is where the three unused points come into play. Draw a line from the center of a leg hole you are about to drill, through an unused location 180°

on the opposite side of the stool and down the side of the stool edge. If this line is placed at the center line of the fixture (existing), then the leg hole to be drilled will be top dead center on the fixture assuring the leg hole will be drilled correctly. Drill the holes for the legs about 1-1/2 to 1-5/8 in. deep. The exact depth isn't critical, as long as all three holes are the same depth. If they aren't, the stool won't sit level. Wrap a piece of tape around the drill bit for a depth gauge.

Turn a cover for the screw chuck hole on the bottom of the seat

Mount a length of hardwood between centers and turn a mushroom-shaped cap on one end; on the other end, a stem about 3/4 in. long and the same diameter as the screw chuck hole. (Measure the depth of the hole and cut the stem to fit.) Put a little wood glue on the sides of the hole and tap the mushroom stem into the seat until the top of it is flush with the seat. Protect the mushroom from damage in the process with folded paper or cloth. Some turners use the top of the mushroom for placement of their signature.



Photo 7- Mushroom for the seat

TURNING THE LEGS

Turning the leg entails a traditional spindle turning set up with the blank secured between the headstock and tailstock with the wood grain running parallel to the lathe bed. Using a spindle roughing gouge, round the stock to nearly a finished diameter of 1-½ in.

Utilizing planing cuts with a skew, smooth all the areas that will remain flat to their final 1-½ in. diameter. The tenon is usually placed at the headstock end of the lathe with a diameter and length that will fit the holes drilled earlier. There are two easy ways to size a tenon: 1) use an open-end wrench the same size as the hole, or, 2) make a sizing gauge by drilling hole in a piece of 1/8 in. plywood with the same bit used to make the hole in the seat, then cut through the center of the hole with a bandsaw to make a half-circle gauge. I recommend removing the leg from the lathe a number of times to ensure the tenon is turned for a tight fit into the stool seat.

Tip - To check to see if your work is round with the lathe running, place the back side of your spindle roughing gouge (or a wooden dowel) on the turning workpiece. If you feel any vibration, your turning stock is not yet round.

Make a story stick

To make identical legs, create a story stick—a gauge that you can use to mark important dimensions and transitions identically on each leg. Your story stick should include all of the dimensions for all the design details along the leg as well as the high (thick) and low (thin) spots.

To learn more about story sticks see the following article, “[Duplicating Spindles](#),” by Janet Collins. (You must be logged in to the AAW website to access these articles.)



Photo 8 - Story stick on the workpiece

Lay out the work and rough turning

I turn stool legs with the foot of the leg at the tailstock end of the lathe and the tenon that fits into the stool seat at the headstock end (I typically use 1-¾ in. tenon). Start laying out the work with the story stick at the tenon end of the leg. There will be no scrap material on this end. Add an inch or two of waste material beyond the foot end of the leg. Always begin your significant wood removal at the tailstock end of your workpiece. As the work progresses and more material is removed, there is a greater likelihood of introducing vibration into the workpiece.

You can place the bottom or the top of the leg toward the headstock, but remember to place your work, in this same orientation for each leg. Make

sure each leg is turned to the same length.

Turning speed when turning between centers

Never run a lathe at a speed at which you are uncomfortable. I turn spindle work (between centers) between 2,000 and 2,500 rpm (revolutions per minute) when the work is secure between centers, well balanced, and less than a couple of inches in diameter.

Maintain leg thickness

Wherever there is a design feature that will remain the full thickness of the leg, I leave a light pencil line at that point. This ensures that all of the high points on the work maintain the same diameter. I remove the pencil lines during final sanding before any finish is applied.

Delineate useful landmarks

If there are locations where you can cut shallow grooves with your skew to delineate useful landmarks in the leg, do so at this time. After locating those landmarks, I cut bird-beak design features (a half bead joined to a half cove) using a spindle gouge.

Assemble the stool

If the stool legs fit tightly into the stool, I use good wood glue, like Titebond II, for assembly. I spread a thin coat of glue only on the walls of the drilled hole. If you use too much glue, it may keep the legs from properly bottoming out in the drilled holes. Before assembly, I tape the area around the drilled holes with painters' tape to prevent any glue

from ending up on the seat. It is hard to sand off excess glue at the point where the seat meets the legs.

Finish for stools

Traditionally, stools were painted. They are also a great pallet for embellishment. Use different colors for the legs and the top, stencil your favorite design on top or have the owner's name laser engraved in the top of the seat. If you apply finish before assembly, avoid getting any finish in the leg holes or on the tenons where the legs fit into the seat.

To read about using milk paint, we recommend, "[The Magic of Milk Paint](#)," by Kimberly Winkle.

To learn more about turning stools, we recommend, "[Turn a Windsor-Style Footstool](#)," by Janet A. Collins.

(You must be logged in to the AAW website to access these articles.)

TOOLS USED TO TURN A STOOL

- Center finder
- Center punch
- ½ in. spindle gouge
- 3/8 in. spindle gouge
- ½ in. bowl gouge
- Spindle roughing gouge
- Three-sided point tool to cut beads in the edge of the seat (optional)
- Round-nosed negative rake scraper to turn coves in the edge of the seat (optional)
- 1 in. skew
- Scroll chuck with a wide set of chuck jaws (#3), screw chuck drive, and chuck wrench
- 5 in. diameter face plate
- Drill driver and bits: 1/8 in., 5/16 in., 1 in.
- Compass
- Bandsaw
- Plane to smooth top of stool (optional)
- Fixture, or jig, to drill the proper angle for the stool legs. Or alternately, stack scrap wood under one end of a flat board firmly clamped to your drill press table to drill the necessary 15° stool leg holes.
- Adjustable clamps
- 12 in. ruler to check flatness
- Tape measure
- Pencils
- Double-faced tape width and cloth center
- Hammer or mallet

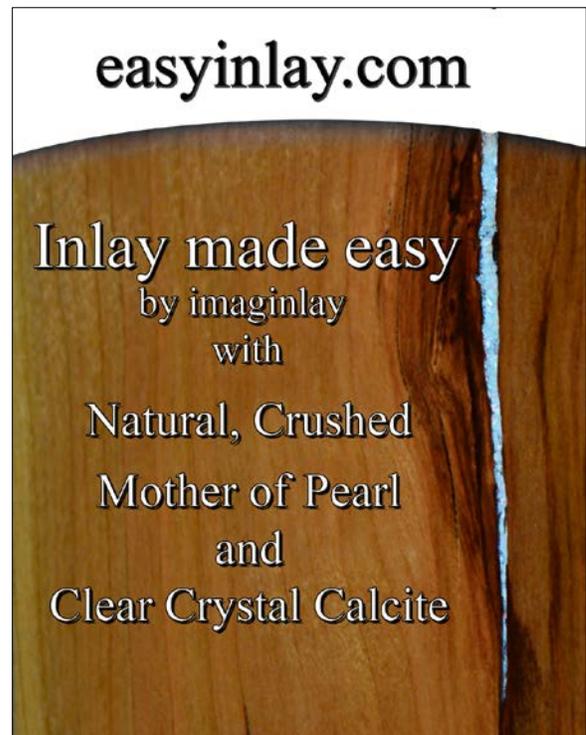
Tip: *In most instances I use more than one of each tool to avoid having to repeatedly sharpen a single tool.*



Photo 9 - Busy at the lathe

Author

Denis Delehanty served on the AAW Board of Directors and has been chair of the Woodturning FUNdamentals committee. He has a turning class room in Purcellville, Virginia.



WAZZOS

Simple but Effective Bird Forms

By Michael Hamilton-Clark



This article describes how to make simple but effective bird forms, called Wazzos. Why such a name? Well, my family is bilingual English/French, the French word for bird is *oiseau*, and that, to an Anglophone, gets pronounced as “wazzo,” so voila!! They are called Wazzos.

The fun of the form is that the head can be placed in a multitude of positions from "shy" with beak down to one side, "attentive" with beak above horizontal and "off somewhere else" with beak well up and off to one side. Then, of course, there can be pairs and groups.

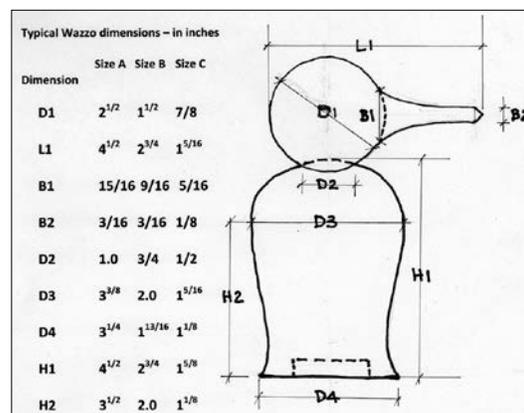


Figure 1

Figure 1 shows some typical sizes. The head should sit in a spherical recess on the body so that friction is developed. Another is that the beak should not be overly long. Otherwise, its leverage will cause the head to always be pulled downward.

Any kind of wood can be used, but it's a good idea to use different ones for the body and the head. In this regard, the body looks nice if a grain pattern to emulate feathers is used, whereas the head looks nice with a straight grain. Black walnut for the body and yew for the head are good choices.

Now for some practical points

The recess at the top of the body needs to match the profile of the head as near as possible. To accomplish this, make the head first, so it is available to test the fit on the body.

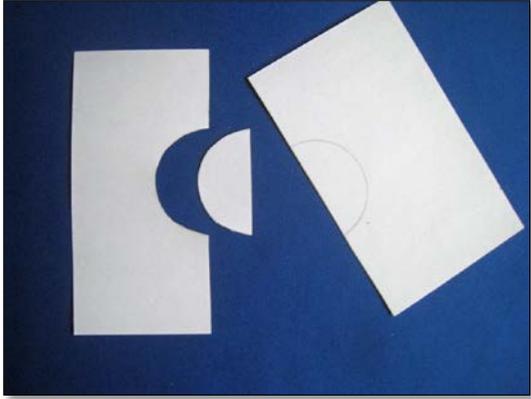


Photo 2

It is helpful to have a head template. Draw a circle of the required diameter on a piece of card. Cut across on the diameter and then make a cut around the circumference. This will be the template for the spherical part of the head (Photo 2). Keep the half-circle; it will be useful when forming the recess on the body.

The head

You can turn the head with the beak at the outer end or vice versa. I find it easier to have the head at the tailstock end. It is easier to get the spherical shape there and it uses a bit less wood, so I'll describe the process that way.



Photo 3

The blank should be about 1 in. longer than the finished head and 1/8 in. or so larger than the finished diameter. Mount between centers. Turn a 1/2 in. tenon at one end to fit for clamping in chuck jaws. Turn the remainder to the head diameter. Make four pencil marks on the blank. The first will be 1/4 in. from the tailstock end, a second mark at half the head diameter, the third one at the overall head diameter, and the fourth mark at the overall head plus beak (Photo 3).



Photo 4

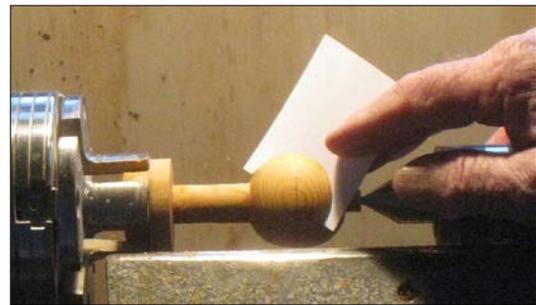
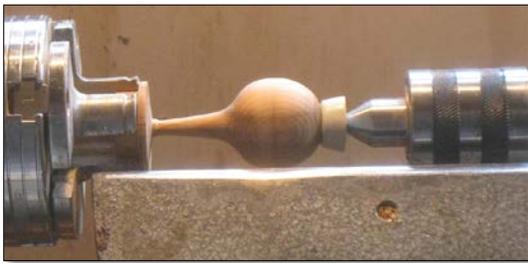


Photo 5



Photo 6

*Photo 7**Photo 8**Photo 9**Photo 10*

Start at the tailstock end by turning the back of the head. Turn a 1/4 in. diameter support stub at the first mark on the tailstock end of the blank. Then move to the third and fourth marks, and use the parting tool to reduce the diameter to exactly 5/16 of the head diameter (Photo 4) whatever that may be for your bird's head. Use a spindle gouge to begin turning a spherical profile at the second mark that will form the head. Use the template to check from time to time (Photo 5). Finally, disengage the tailstock and remove the 1/4 in. diameter support stub. Use the template to get a truly spherical profile (Photo 6). Sand with 200 grit then 400 abrasive. Temporary support should now be provided. Install a small cup on the tailstock; a rubber tip as used on chair legs is ideal (Photo 7). Now cut an additional 1/4 in. away at the fourth mark and down to the beak tip diameter according to dimension B2 (Photo 8). Cut away from the third mark position toward the chuck and go on to smooth in the beak line (Photo 9). Do overall sanding as needed, using 200 grit then 400 abrasive. Polish as required. At the beak tip point, make a bevel cut or chamfer to form a point (Photo 10). While holding the finished piece, make the final parting cut. Sand to round off the beak tip.



Photo 11

The body

When making the body, once the basic cylinder has been turned, grip it in the chuck and turn a socket on what will be the foot end. This socket should be sized so the piece can be held in standard 2 in. diameter chuck jaws or 1 in. diameter jaws for smaller bodies. Once the socket is formed (Photo 11), turn the piece around and place the socket over the chuck jaws. Engage the tailstock in the hole left from the initial cylinder turning and expand the chuck to grip. Do not over-tighten or the socket may split.



Photo 12



Photo 13

The profile should have a distinct shoulder and then taper toward the foot. You can make a slight flare there. This gives a subtly different look (Photos 12, 13). The body can now be sanded and polished as desired.



Photo 14

**Photo 15**

The final task is to create the spherical recess to accommodate the head. This should not be made too large, otherwise there will be a "hunched" look. Use the semicircular piece of card that was cut out to make the head template (Photo 14) and then trial-fit the head. A slight trim may be necessary to get a good seating. Do not polish the recess; friction plus gravity keep the head in position. To be sure of the fit, leave the body in the chuck, remove the chuck from the lathe, stand it on a level surface, and trial-fit the head (Photo 15).

It should stay when placed in any position. If the head falls, the beak is too heavy, so trim a small amount off the tip and try again. Repeat as necessary until the head stays put.

**Photo 1**

So, there you have it. There's plenty of good tool practice to be had—roughing gouge for the initial cylinders, then spindle gouge or, even better, skew. Once you've made one and have gotten a feel for the spherical part, the next one will be easier. And then you will be making different sizes and groups (Photo 1). Enjoy and have fun! Nobody can resist turning the heads this way and that, and if you fancy something a little different, try making a cat.

Author

Michael Hamilton-Clark, Fraser Valley Woodturners Guild, B.C., Canada.

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SINGING THE GREEN WOOD BLUES

The Journey of Flowing Ribbons of Green Wood to a Piece of Firewood

By Janice Levi

To a woodturner, there is nothing more exhilarating and satisfying than turning green wood. Those long, flowing ribbons of wood hurtling through the air are as exciting to watch as fireworks on the Fourth of July! But, depending on where you live in this great world of ours, those fireworks may soon turn to firewood. In no time at all, huge cracks and checks begin to appear, the wood begins to collect mold and mildew (and you wanted to save that nice unblemished piece for pyrography), and that big beautiful bowl you were envisioning has now turned into three tool handles, if you are lucky.

You're now singing the Green Wood Blues. And, depending upon which part of the world you call home, the blues can arrive really quickly. While some of you may have a week or two before you start singing, the dreaded day will come when "snap, crackle, ruined" visits your green wood.

FUNDamentals feels your pain. Expert turners from across the country have been asked what they do, based on their part of the world, to protect green logs from cracking and what they do to prevent turned green wood from checking. Following are some of their solutions.



BARBARA DILL

- *Virginia*
- *Temperature: 80s in summer, a low of 30s in winter*
- *Humidity: High year-round*
- *Rainfall: 43-44 inches*

I have always preferred using green wood. I turn a bowl to the thickness that I want it to be and then either put it in a paper bag for a few months, or I put it in the microwave at the highest setting and slowly increase the time and frequency of heating it until it is dry.

I also use green wood for my multiaxis projects. They usually don't check if they are small projects.

The larger forms do check and that is fine with me. The joy of using green wood is worth it.

Barbara Dill is known for her multiaxis turning, and she regularly uses green wood for turning them.



MOLLY WINTON

- *Washington (Western)*
- *Temperature: Summer highs in the 70s, winter lows in the 30s*
- *Humidity: High, ranging from mid-60% to mid-80%*
- *Rainfall: 34 inches*

Depending upon the general stability of local woods, sealing endgrain with Anchorseal or wax for blanks works well. Storing them where they get even ventilation and out of direct sunlight works effectively.

If bowls and vessels are rough turned, they can be stored in a similar environment without sealing them. Sealing rough turned pieces can lead to mildew and mold.

To prevent cracking in fairly unstable wood (madrone, fruit woods), it is recommended that you boil the rough turnings immediately.

Boiling the wood reduces the amount of moisture in the cell walls and works on most woods, particularly those with irregular grain patterns, knots, or wood close to the pith. The boiling process involves covering the rough turnings with water (such as in a large stockpot) and bringing them to a rolling boil. Allow them to boil for a minimum of one hour and up to three hours. When the time is up, turn off the heat and allow the pieces to cool while still in the water, then store them as described previously for stable woods. Wrapping the cooled pieces in paper bags is also a good option. You will find some color fading but it does not go much below 1/16 in.

Molly Winton turns bowls and platters that she uses for further enhancement.



KEITH GOTSCHALL

- *Colorado*
- *Temperature: Summer highs reach 90, winter lows down to -20*
- *Humidity: 10% to 15% in summer, may reach 80% in winter*
- *Rainfall: 9- 1/2 inches*

It's so dry that a green turned bowl will crack by morning if not treated right away.

Rough turn the wall thickness to 10% of the diameter, and then apply green wood sealer to the whole blank. Stack the bowls in a pile and air dry them for six months or longer.

An option is to put sealed bowls in a dehumidification kiln and slowly extract the moisture over 6-7 weeks. Several designs for these kilns exist, including using an old refrigerator or freezer unit with holes drilled in the bottom and top. An incandescent light bulb is placed in the bottom. The holes will allow the air to draw up and through the bowls, spaced slightly apart.

Sometimes, I finish turn the green bowl and blowtorch it to remove surface water. Sand the bowl after torching but leave the foot with tenon intact. Turn the bowl upside down on a concrete floor to dry for a week or more then re-turn it to remove the foot.

Keith Gotschall is known for both his furniture and his woodturnings.



DAVID HOLLEY

- *Texas (Central)*
- *Temperature: 90s-100 in summer, lows of 20s-30s in winter*
- *Humidity: 40%-50%*
- *Rainfall: 25-30 inches*

To keep a green turned bowl or platter from warping, put it in a bucket with a solution of 50:50 water and dish washing liquid (don't use the blue or green soap as it will discolor the wood). The soap is a surfactant, and it works by dispersing and removing the moisture from the wood cells, thereby conditioning and stabilizing. Do not remove the tenon from the bottom. Leave the turning, which will need to be weighted down, for 2-4 days. Remove it from the liquid and let it dry thoroughly for 3-4 days, longer if needed. Return the piece to the lathe and sand it, then remove the tenon and finish the bottom. The bowl or platter will not warp or check.

After twenty years, David's bowl (pictured to the lower left) has never warped or cracked after his 50:50 treatment.

For more information about the treatment of green wood, see "[The Sawmill Project](#)," by Joshua Friend, *American Woodturner*, April 2010. (You will need to login as a member to the AAW website to access this article.)

You can find the average moisture content for your area on the Forest Products Laboratory website, at: <https://www.fpl.fs.fed.us/>

Author

Janice Levi is a past president of both the Brazos Valley Woodturners in Waco, Texas, and the Southwest Association of Turners (SWAT). Janice teaches hands-on classes and demonstrates at various clubs throughout the Southwest. For more, visit janicelevi.com.

PERSONAL PATH

My Journey of Repetitive Turning

By Linda Ferber

I started turning fifteen years ago. First, I joined the local Minnesota Woodturners chapter. The local chapter members encouraged me to join AAW, too. This resulted in a wonderful learning environment, fostering my understanding of woodturning techniques and skills. Although fifteen years may sound like a long time, I discovered that many factors limited the actual time I could devote to the craft of woodturning. This forced me to find a method to develop my turning techniques and express my creative ideas within the restriction of available time.

As a beginner in woodturning, I would be at every monthly meeting, attend every hands-on class, and read every article in the *American Woodturner* journal. I wanted to absorb all the information about woodturning. I found stumbling blocks in the learning process. The sharpening and grinding of tools, for example. A demonstrator would have a project-specific preference for tool shape. The demonstrator would ask to reshape my tool. Of course, I would answer, "Yes." However, because of the multiple changes in grind and bevel, I frequently was unable to get any good cuts turning in my shop the next week. I had the desire and tools to learn, but not the turning time necessary to master it.

I often heard people say that after you have made a dozen or more of a project piece, you will understand and acquire the skills. That sounded almost impossible to me. First, I had only about four hours a week available to turn. Second, this sounded very limiting, with all the exciting things I was reading about and seeing in demonstrations. I did not want to limit myself creatively. I fell into a pattern of undisciplined turning for two or three years. I felt I had not made any noticeable advancement or improvement.

A comment from a chapter member, asking, "Are, you still making firewood?" hit home. After my bruised ego recovered from having my work classified as firewood, I realized I needed a plan. Since my time at the lathe was limited to weekends, I decided to turn one type of project a year.





The first year was platters. This idea was not as limiting as I initially thought. During the year of the platter, I experimented with each component: tenons, feet, rims, ogee curves, and recessed tenons. I made one platter a week. This gave me time to develop each component and find the combinations that were pleasing to me.

There are benefits to repetition. In addition to improving my tool skills, I was building confidence. During this first year, I expected to lose interest and not follow through. Yes, I admit I turned a bowl or two, but I no longer went to the shop on Saturday morning wondering what would I do.

Implementing a goal, planning ahead, and having material available became my focus. I could research projects, such as this 2005 journal article, "[An Eye for Platters.](#)" (You will need to login as a member to the AAW website to access this article.) I won't claim I made an award-winning platter. In fact, I have very few of those platters still around for firewood. What I did keep is muscle memory and the joy of discovering the impact of small changes.



After the year of the platter, I went on to boxes and bowls. The year of the boxes resulted in the concept of the, "[Bracelet Box,](#)" *American Woodturner*, December 2010. (You will need to login as a member to the AAW website to access this article.)

I have kept up this practice of concentrated skill development. Two years ago, I decided to explore pendants, which typifies how my discovery has developed and expanded. I was confident that I could turn a small disk. However, the disk or pendant became the platform for utilizing other design aspects including carving, burning, and painting with an emphasis on shape. I found that with this smaller platform I could experiment more with less time invested in the turned item. A platter may take a couple of hours to make, but a 2 ½” disk needs less than fifteen minutes. This allowed me more freedom to experiment. I could discard fifteen minutes of work without much angst.



The pendant year has been a turning point for me. When I am designing a project, I often visualize the finished piece or component. This happened with the bracelet box and with pendants. I saw the turning on more than one plane. When you turn with a [joyner jig](#) you are creating a turning that is off-center but on one plane. (You will need to login as a member to the AAW website to access this article.) I saw it differently, because I visualized the

finished piece with multiple planes. I had to work backward to determine how it could be accomplished. As a part of the process, I made a jig to help create the desired shape and was very pleased that the results were as I imagined. This first pendant was not glamorous and needed further development, but the concept was sound. I further developed and expanded the pendant design as new ideas emerged. For the first time, I did back-to-back years with the same concentration on pendants. The pendant years taught me more than the turning: my tool skills improved dramatically, I started developing further design ideas, and I began to explore the impact of an 1/8 in. or ¼ in. deeper or shallower cut.

This process has been a personal path, a way to acquire skills through repetitive work, and a path to staying engaged and challenged. I discovered that I like simple elements with clean lines. The repetitive work has changed from drudgery to the joy of executing my creative ideas.

Author

Linda Ferber has been woodturning for more than fifteen years and enjoys the creative possibilities and personal challenges it provides. She is on the board of Minnesota Woodturners and the Program Director of American Association of Woodturners.

DYING FOR A GREAT COLOR FINISH

My Experiences with Adding Color to My Bowls

By Mark F. Palma



Wood is often beautiful in its own right and that beauty is best presented by a clear finish.¹ However, sometimes you may desire to color the wood using a dye.² I frequently use dye and other colorants on the tops of my small lidded vessels and some bowls. This compensates for the lack of grain structure.

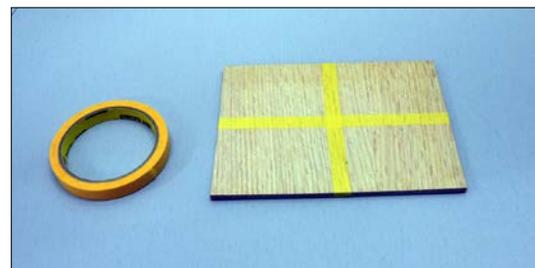
¹ By the term "clear finish," I am referring to any finish that is transparent even if it may darken the wood or enhance its grain yet leave it in its natural state. So in this category I include water-based varnish, shellac, oils (in all their variants) varnish, lacquer, and similar products.

² I distinguish a dye from a stain, or paint. I will differentiate the categories in more detail later.

I have experienced good beginner's luck with the dyes and colorants I have historically used, but have often wondered if I was using the "best" dye. It was always hard for me to differentiate between manufacturer's claims and advertising "hype" so I just closed my eyes, picked one, and took a chance. Besides that, I had a nagging feeling; a few old time turners swear by a certain product. Unfortunately, sometimes I wasn't thrilled with their work. So, I decided to be scientific³ and conduct an experiment.

The test

I chose a piece of quarter sawn oak plywood as my test board. Quarter sawn oak exhibits medullary rays (or flecks) that radiate through the surface of the wood. I was hoping that the distinct grain pattern⁴ would add one or more additional elements to the test.



Making a test board

³ Or as scientific as a tax lawyer can be!

⁴ Besides the fact that it was in my scrap pile!

I sanded the test board through 320 grit.⁵ I chose 320 grit as a balance between the range of grits that a woodturner may sand their work through. The coarser I left the work, the more absorption I anticipated. Oak is more porous than some other woods and it is often described as an open grain domestic wood, so I thought it would be a fair grit to use in order to measure the dyes. I accidentally picked a good stopping point as half of the products sat on top of the wood and four were absorbed into the wood.

I divided the plywood into eight identical squares with 3M 2460 masking tape. I chose this masking tape over a lesser grade of tape or even 3M "blue" tape as I find it cuts a finer line and doesn't allow as much bleed through in most applications.⁶

Why eight squares? Well, it was about the right size of test areas for the size of the board that I found in my scrap pile⁷.



The dyes and colors tested

⁵ For you fussy engineers, that is the US grading scale not the European "P" scale.

⁶ The bleeding I experienced later was an accidental benefit of using oak as the wood in this test. Since I didn't consider it in designing the test, it wasn't any brilliance on my part.

⁷ See why NASA never used tax lawyers for their scientific team?

Next I chose the following eight different products to go into the test areas:

1. General Finishes Water Based Dye
2. Craft Supplies Artisan Alcohol Dye
3. Chestnut Spirit Dye
4. Folk Art Ultra Dye
5. Premixed Rit Fabric Dye⁸
6. Milk Paint (Original Powdered formula from the Old Fashioned Milk Paint Company) diluted with water to create a wash
7. Latex paint diluted with 3 parts water to one part paint
8. Mixol universal tint mixed with Danish oil



Test board

I should confess going into this test that I have used the Craft Supplies and Chestnut dyes extensively in my turning projects, including Ultra Dye on several toy cars and milk paint on several bowls and other projects.

So that gave me a balance of two alcohol dyes, two water-based wood dyes, one "home brew," and three other products. Rit dye is water based, Milk Paint is casein based, and Mixol was used in oil for this test.⁹

⁸ Two of my "old school" club members seem to swear by this product and scoff at me for not using it in my work.

I chose one color, blue, for each of the test samples, just to eliminate one variable that could be caused by using different colors.¹⁰ I chose blue because it is (a) a primary color, (b) not red, and (c) I already had most of these products in blue (I am cheap).

I actually read and followed the manufacturer's instructions for use of the various products¹¹. By following the instructions, as noted later, one of my "favorite" dyes gave poorer performance than I experienced in real life due to my own shop techniques, which may modify the application instructions to achieve my desired results. I thought it was unfair to use any of the rabbits I keep up my sleeve in my own shop.

For an applicator, I used a new, clean flux brush for each finish. In my own shop, I use flux brushes for water-based and alcohol-based dyes, but not for other finishes. Usually, I use foam brushes for milk paint and diluted latex paint. I have no experience with the rest.

I put all eight finishes on the board in the same session so that temperature and humidity would be a constant.

⁹ Mixol is a universal colorant so it could have been used in water as well for purposes of this test.

¹⁰ I recognize that using another color such as red or yellow could have reached a completely different result, but I chose blue.

¹¹ I am sure all you readers always do that.

Criteria for Evaluation

Prior to putting any finish on wood, I needed to establish my criteria¹² for judging the various products. I didn't consider any of the following:

- The shade or value of color achieved. I wasn't trying to decide what was a pretty blue, just was it blue.¹³
- Cost
- "Monkey Business." I didn't judge any product based on ease of mixing, use, or clean-up.
- Toxicity
- How colorfast the product may be
- Smell
- Drying time
- Availability¹⁴

So what were my criteria for evaluation? Well, I judged on the following:

- **Clarity.** Could I clearly see the grain and the medullary rays in the wood after the application of the color to the wood?¹⁵
- **Bleed-through.** I didn't consider bleed-through a negative, as the best performing dyes all bleed or follow the grain of the wood, or flow through the pores. As the solids within dyes are measured in microns, the dye can actually flow through the cell structure of the

¹² These were my criteria, I respect you may choose differently.

¹³ Remember I am a tax lawyer and a CPA. Would you really want me to decide what is pretty to anyone?

¹⁴ I think the internet makes everything readily available.

¹⁵ I recognize this is a somewhat subjective test, but it was actually fairly clear cut in reality.

wood. Since dyes work on a molecular level (unlike stains which have "huge" suspended particles compared to dye.) I expected the best performing dyes to have the smallest particles: the vehicle used to suspend the particles (oil, water or alcohol) allows the dye to travel well through the wood and impart the color into the wood. So I knew that even my premium masking tape would succumb to many of the true "dye" products.

- **Vibrancy.** Regardless of the shade of blue, some colors are quite bold, others in the middle, and some not very pretty. Although it was a subjective standard, it wasn't hard to find the outliers either in terms of being very bright or very dull.
- **Absorption.** The alcohol dyes instantly wicked into the wood. On the other end of the spectrum, three dyes seemed to sit on top of the wood like a puddle and didn't want to absorb into the wood. I pushed those three around the test area and it seemed as though it wasn't even making any difference how long I let them sit on the wood.



A little dye goes a long way. Try to apply it evenly.



Tone down the dye by briskly rubbing with a soft cloth.



Before wash down with alcohol spray



Wash down with alcohol spray



Sand back the finish

The Results

First, this wasn't an easy test! Quarter sawn oak wouldn't be the wood of choice for many turners.¹ Secondly, since I didn't use any tips, tricks or other skills to help one finish over another, the finish's ultimate performance was limited to just what the instructions yielded.¹⁶

The alcohol-based dyes made bright vibrant colors and were instantly absorbed into the wood. The Chestnut dye gave excellent clarity right out of the bottle.

I can achieve the same results in my shop with the Craft Supplies Artisan dye if I wash the surface with alcohol and wipe down the wood to remove some of the dye after it is applied. However, since I didn't "cheat" on this test, I left the Craft Supplies dye on in full strength.¹⁷

¹⁶ Please note that milk paint came with extensive instructions (really a booklet), and the home brew latex paint directions were clearly not on the can.

¹⁷ Craft Supplies has an article on its website that explains this process, however, I used the

Both alcohol dyes flowed right through the cells of the wood into the margin area. So keep this in mind if you want an entire project to turn blue!¹⁸

The water-based dyes varied in their performance. The General Finishes dye performed well. It absorbed into the wood, had minimal bleed through and gave a clear view of the medullary rays, and gave medium brilliance. On a subjective scale, it was the third place performer after the two alcohol dyes and really surprised me for being a well behaving water-based product. It didn't raise the grain or in any way misbehave.

The Folk Art Ultra dye had been a favorite of mine for toy making. I have had great results on pine and maple. It performed poorly in this test on each criterion, other than bleeding.

Rit dye has been used by some old time turners for years. It performed poorly in this test. Rit dye absorbed poorly, gave a muddy color, and the grain and rays were hidden. In fairness to the product, it is a fabric dye and I was clearly not using it for the intended purpose.

The latex paint and water technically would be considered to be a stain and not a dye. However, it out-performed Ultra dye and Rit dye in this test. I was very impressed with how well this simple home brew did. It was very close to General Finishes product in terms of how it looked after it dried.

instructions on the bottle. I still love this product and will continue to have it be a staple in my coloring repertoire.

¹⁸ Always wear gloves or you will look like a Smurf!

Milk paint was an outlier in the test. It really was a paint wash, not a dye. In fairness to the Milk Paint Company, they never intended or advertised this product for the application I used it for. It gave a nice grain filler effect to the wood and provided a blue tint. Not surprisingly, it is a paint, so its clarity was poor. It did not absorb well, however, in fairness to the product, you would not sand through 320 and try to paint something (more like 180 grit to 220 tops). So I will continue to use this product for painting bowls, and maybe as a wash, but its particles are too large for use as a dye.

Mixol mixed with oil gave a middle of the road result. The oil allowed it to absorb into the wood, and the oil gave excellent clarity to the oak's medullary rays. However, as a colorant Mixol lacked any vibrancy. It seemed dull in its color, which was unexpected. I really thought this one would set the bar for the non-alcohol finishes, but it did not. Mixol is a product where you add drops of colorant (it is very concentrated) to a base (water, oil, etc.) to create a finish. I used four drops in a teaspoon of oil, so I was expecting a color explosion. It didn't happen.

My Conclusions

- A great colored finish can make a poorly figured bowl or turned object come to life, but use restraint. I also learned that a great finish takes work. Proper surface preparation is critical. Sanding scratches or tear-out will jump out when dye is applied.¹⁹
- Manufactures provide instructions on a label for a reason—to be read and carefully considered. Certainly safety and disposal instructions must be carefully followed. However, application instructions are a guideline based on a wide range of product applications. If you go to company websites, you will often find additional suggestions, articles, tips, or helpful data for the application you are trying to color.
- This is an area of experimentation, and do not just grab a product so expect magic. These products have properties that must be explored, understood, and sometimes manipulated to achieve an effect.
- Use a name brand, high quality masking tape designed for making a fine line and tape carefully. Having said that, masking tape cannot prevent a flood, or stop a dye (which enters the wood at a molecular level) from migrating past the tape.
- It's better to wreck a few sample boards, rather than a stack of 12" bowls. DO NOT take an untested dye (or any finish) to turned product you care about. Make a sample of not only the color but also with the top coat, before you dye and finish a bowl or other masterpiece from your lathe.
- Not every topcoat is compatible with every dye. Test, test, test! Watch temperature and humidity, as well as dust if you want a great finish.

¹⁹ I admit I know this from experience, however, that is why I have a woodstove in my shop. There is no proof of my mistakes to be found.



A little dye goes a long way. Try to apply it evenly.

- Take care of your health. Although I didn't use toxicity as a factor in this test, I am very careful with personal protection and ventilation in my shop. Do the same in your shop and always be safe. You can buy a lot of safety equipment for a fraction of the cost of one emergency room visit.²⁰

Author

Mark Palma is a tax lawyer by day and a woodworker whenever he finds that “spare” time that isn’t spoken for. He thanks his family for allowing him to have a shop, a tool allowance, wood stash, and the time to pursue his addictive hobby.

¹ Yes, I know that on most bowls you have an area of quarter sawn grain, but that isn't your overall view or all you see in the turned piece.

²⁰ By my count, this is my 257th footnote in a woodturning article. For anyone who has read them all, my sincere awe for your self-punishment.

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SHOP TIP

Wax Paper and Potatoes for Pen Turning



Jerry squirts a puddle of extra thick CA glue onto wax paper to make glue application to pen tubes easier.

I enjoy turning pens and I have discovered that common kitchen items, like wax paper and potatoes, come in handy. I now keep both in my shop while making pens. I used to hate gluing the brass tube into pen blanks. No matter how I tried to avoid it, glue or epoxy would end up inside the tube and required the barrel trimmer to remove it. I ran across a solution that works and cuts down on production time (I usually make ten pen blanks at a time).

After scuffing the brass tube, I insert one end of the tube into a potato, flip it over and do the same with the other end. I usually prick a small hole in one end to let the air in the tube escape. I can then apply the extra thick CA glue or epoxy to the tube and rotate it as I insert it into the pen blank. Once the glue or epoxy has dried, I simply use a nail to push out the potato parts. Simple, I know, but it works and I haven't had to use the barrel trimmer to clean out dried glue since.

Because I make several pen blanks at a time, I spread a piece of wax paper onto my work surface. Whether using either CA glue or epoxy, I apply a little puddle of the adhesive onto the wax paper. I can then apply the adhesive to all the tubes and insert them into the blanks without stopping to reload. I use the extra thick CA because it gives me enough time to rotate the tube in the blank to make sure good coverage is obtained. Neither CA glue nor epoxy will stick to the wax paper and the CA will not dry out on the wax paper.

~ Jerry Haynes
Brazos Valley Woodturners
Waco, Texas

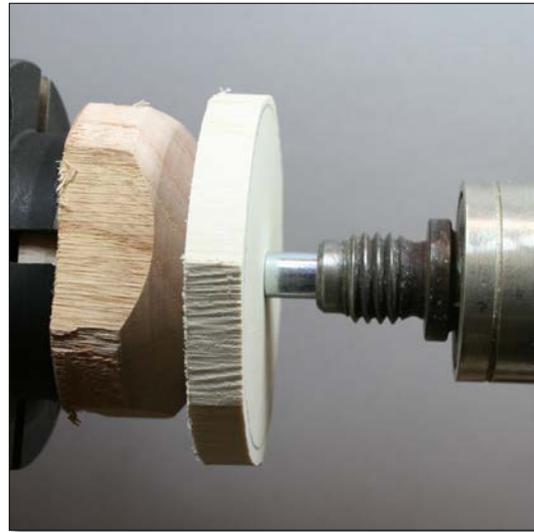
SHOP TIP

Using Spacers to Protect the Wood

I turn a lot of jewelry pendants, attaching the blank to a wasteblock with double-sided tape. I like to bring up the tailstock for added support, but I don't want to mar the wood with the point in the live center. Removing the point wouldn't work either; the cup would indent the wood just as badly. To cover the point, I have used little bits of wood, a cut off section of an art eraser, and folded up pieces of sandpaper. Heck, I've even used a golf ball. Although all of these work somewhat, the wood quickly splits, the eraser disintegrates, the sandpaper corners get in the way, and the golf ball is sometimes just too big.



Use a metal or nylon spacer when tailstock support is needed. The spacer covers the point in the live center, protecting the wood from being punctured.



I have discovered an item that is just the right size, that works every time, that is not too big, it is quick to use, and that does not have corners. It is a steel (or nylon works, too) spacer that can be purchased in large lumber/hardware stores in the specialty fastener section. I prefer the ½ in. length steel spacer. I stick it right to the side of my lathe with a small rare earth magnet. So, every time I need a little bit of tailstock support, but don't want to puncture the wood I'm turning, I reach for that little spacer.

Note that an old pen bushing will also work the same way as a spacer.

~ Janice Levi
Brazos Valley Woodturners
Gulf Coast Woodturners Association
www.janicelevi.com
jlevi@rightturnonly.net

SHOP TIP

Magnetism

The wonders of science can sometimes be both a boon and a bane in woodturning. Such is the case with magnetism, specifically magnetized tools. We love the ability of a magnetized screwdriver to hold on to those tiny screws used in installing peppermill mechanisms. But, we hate the drag it causes when we store our gouges and chisels on a magnetized bar, imparting some of its properties to the tool steel.



There is a way to have the best of both worlds! Enter the Magnetizer/Demagnetizer. Available in a wide variety of shapes, sizes, and colors, these devices allow you to add or remove magnetism from your hand tools and turning tools with a pass like a magic wand. You can readily find them online at [Amazon.com](https://www.amazon.com). Give them a try, and don't let "attraction" get in the way of your turnings.

~Bill Meador
Brazos Valley Woodturners
Waco, Texas

SHOP TIP

Wax the Forstner Bit for Smooth Sailing



In this photo, a floor paste wax, Johnson's to be exact, is applied to the bit with a cloth before drilling begins. There are also a number of soft waxes available in applicator tubes, such as those sold by archery suppliers for waxing bow strings that will also do the job well. When drilling deep, you might need to back the bit out a little, not all the way so as to disengage the teeth, and apply a second or even third coat as you proceed. Give it a try; not needing ear protection and a smoke detector makes drilling a pilot hole a lot more enjoyable!

~Bill Meador
Brazos Valley Woodturners
Waco, Texas

Drilling on the lathe with a Forstner bit can often produce singed wood and a screeching sound as though the fibers are screaming out in pain. The sound rivals the best of fingernails on a chalk board! The problem is the relatively large surface area of the bit sides rubbing the fibers as it bores deeper into the material.

You can relieve a good amount of this friction-caused stress with a simple application of a soft wax to the sides of the bit before drilling.

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SHOP TIP

Trim Your Sandpaper



When the bowl or box is too small to power sand, the remaining option is to sand the turning by hand. So you wad the paper, wrap it around your finger, or try to hold it against a foam pad. Despite everything you try, the abrasive manages to form little creases that end up marring the wood. Or worse, the sandpaper flies off your finger and your bare skin is doing the sanding!

That used to happen to me a lot but I discovered a little trick that helps. Fold the sandpaper into thirds and round the end so that when you sand down into a bowl or box, there are no corners to scratch or mar the surface. I also cut notches along the opposite end so I know what grit it is without unfolding it. I often have several grits that are the same color and this makes life much easier.

~Sally Ault
San Diego, California

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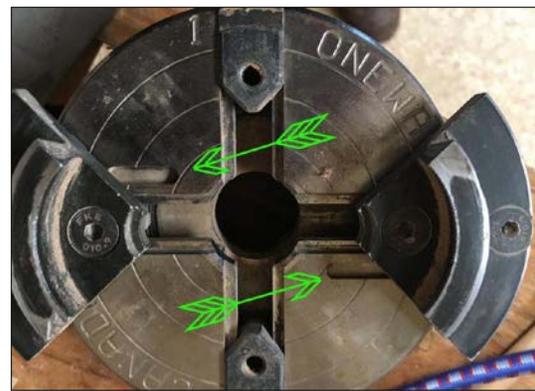
SAFETY FIRST

Safety and the Four-Jaw Chuck

By Harvey Rogers

Many years ago, I did a bit of simple turning. Back then there was a lot less information about turning and a lot fewer turning tools. I found a short article about chucks. It said you could mount wood on your lathe much more quickly than with a faceplate, and avoid screw holes in the blank as well. I found an ad for a big, crude, three-jaw chuck with independently adjustable jaws. It was really designed for machining metal and weighed about ten pounds, but it was cheap. I think it may have been made by the Knucklebuster Company. It was a pain to use (both figuratively and literally) but once it was adjusted it would sort of hold wood on my lathe. Eventually I splurged and got a small, four-jaw scroll chuck that was made in England. It weighed about a fifth of the three-jaw chuck, mostly left my knuckles alone, and made turning so much more convenient. These days I mostly hold wood on my lathe with a four-jaw chuck. Four-jaw chucks are wonderful, but like almost all wonderful tools associated with the lathe, they need to be used carefully. If you are thinking about buying one, check to see if the chuck is “reversible.” Lots of modern lathes have a switch that allows you to run them in reverse. Some turners reverse their lathes when they are sanding (you sand with the lathe running in one direction, then switch direction, sand again, then change grits). This can produce a smoother

surface. Other turners actually turn with the lathe running in reverse, with the tool cutting on the opposite side of the blank. A “reversible chuck” has a little threaded bit that tightens against the lathe spindle and keeps the chuck from unscrewing from the spindle. Reversing the lathe without tightening that threaded bit (or without using a reversible chuck) can make your chuck and the blank it is holding unscrew from the lathe spindle and roll about your shop. While this can be exciting, I know from personal experience that it is not fun. I read an interesting post the other day that reminded me about another important safety feature of modern, four-jaw chucks.



Most modern four-jaw chucks have something that keeps the jaws from coming out of the chuck when you open up the jaws all the way. I have a Oneway chuck, and it has a couple of slots on the face of the chuck body.

One slot is longer and it allows the jaws to open to the maximum, safe extent. The other slot is shorter, and it limits opening, so the jaws are less likely to bust your knuckles. One of the jaws has a pin that fits into one of the slots. Once that jaw is screwed into the chuck with its pin in a slot, the chuck can't be opened enough to let the jaws come out. On the previous page is a picture of my chuck, showing the slots (marked by green arrows) with two jaws (one with the pin in it). The turner who made the post was using just two jaws because he wanted to turn on more than one axis. Four jaws will force a round or square piece of wood to the center, but if you take out two jaws, you can hold the piece off-center. Here's a picture of that:



This turner was focused on holding the blank at exactly the angle he wanted, and he wasn't thinking about the slots on his chuck or the pin in his jaw when he took two jaws out. So he accidentally removed the jaw with the pin. He cautiously turned the lathe on, increased the speed, and made a couple of cuts. It worked great.

He shut the lathe off to adjust the tool rest and turned the lathe back on. Before the lathe reached 1,000 rpm the blank came out and one of the jaws went flying. The jaw travelled about fifteen feet through the air and gouged a hole in the top of a door frame in his shop. Fortunately the turner was standing out of the "line of fire" and was not hurt. The door frame, however, will be disfigured for the rest of its life. Use caution when using equipment for purposes outside of its original design.

~Harvey Rogers, Portland, Oregon
HarveyRogers@gmail.com.
 Cascade Woodturners Safety Officer
 AAW Safety Committee

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VIDEO TIP

Putting a Knife Edge on a Scraper Tool



[VIDEO TIP: Putting a Knife Edge on a Scraper Tool \(TRT 2:11\) with Dale Larson.](https://vimeo.com/178845974)

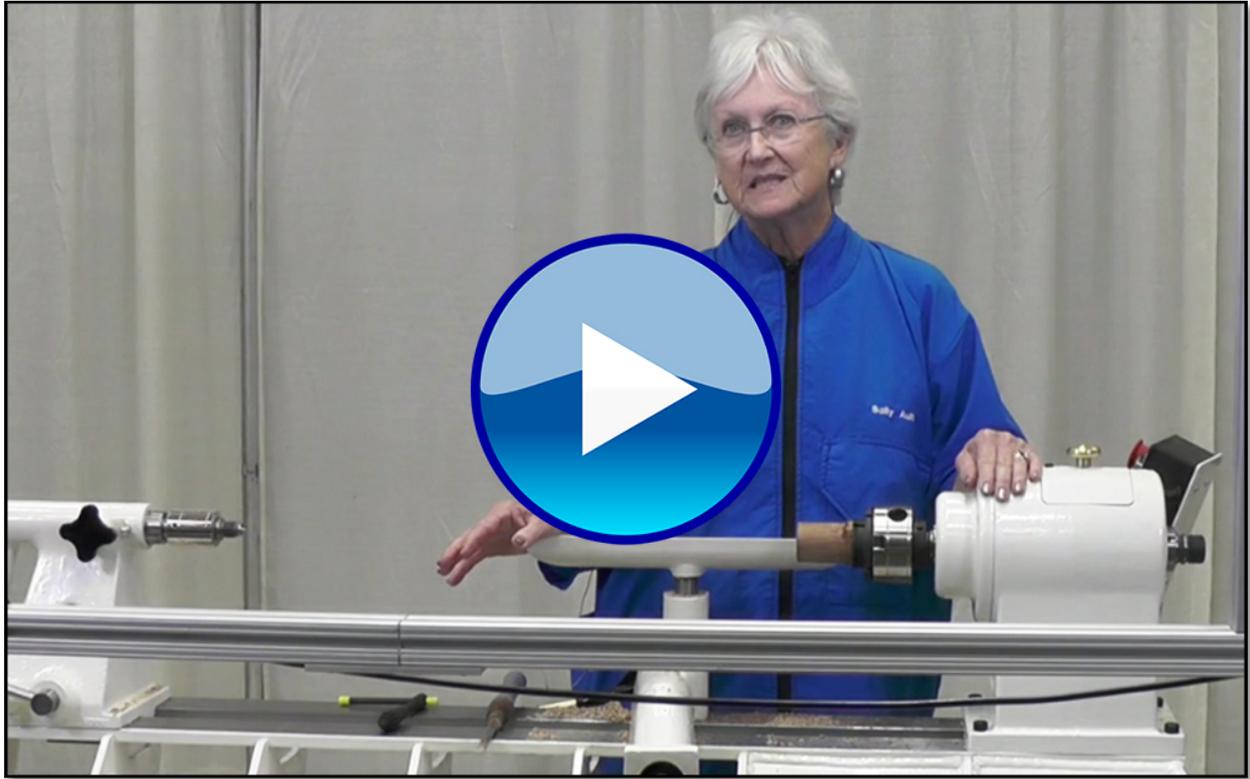
If you have trouble accessing the video, copy the following link and paste it into your browser: <https://vimeo.com/178845974>

A Note About Safety

An accident at the lathe can happen with blinding suddenness. Respiratory and other problems can build over years. Take the appropriate precautions when you turn. Among the most important of these is the use of face shields, safety glasses, and dust masks. It is important to observe all manufacturers' safety guidelines. Following manufacturer's safety guidelines and information will help you continue to enjoy woodturning years into the future.

VIDEO TIP

Tips to Becoming Comfortable with a Skew



[VIDEO TIP: Becoming Comfortable Using a Skew with Sally Ault \(TRT 2:01\).](https://vimeo.com/178844555)

If you have trouble accessing the video, copy the following link and paste it into your browser: <https://vimeo.com/178844555>

A Note About Safety

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MEMBER GALLERY

AAW Forum: "Turning of the Week"



1438 Fiddleback Maple
Kelly Odell



Two Hybrid Helmet Masks
George Watkins



Circular Rhythm #2
Cindy Pei-Si Young



Inca Copper
Raymond Puffer



Bud Vase
Tom Hale



Walnut Urn
Curtis Fuller

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DEMONSTRATORS AND PANELISTS

See the December 2016 and February 2017 journals for more detailed listings of the Symposium demonstrators, including rotation topics. The latest symposium information can be found on AAW's website, woodturner.org.

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AAW's Tool Bank is a success story. In each of the last six years, members have brought unwanted (new and lightly used) tools to the Annual Symposium for donation to help AAW programs such as Woodturning Beyond Barriers, Turning to the Future, and Turners Without Borders. Please bring your lightly used tools to the Kansas City Symposium. Bowl, spindle, and roughing gouges are most needed; chucks and other equipment are also welcome. Tool donations will be accepted at the registration desk.

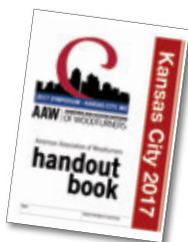


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PROFESSIONAL OUTREACH PROGRAM PANEL DISCUSSIONS



Panel discussions open to all symposium attendees.

- **Artist Showcase—Evolution of an Artist:** Keith Holt, Jim Sannerud, David Ellsworth (moderator)
- **Collaboration—Demo and Discussion:** Nathaniel Chambers, Michael Hosaluk, Mark Sfirri (moderator)
- **Digital Photography:** Rudolph Lopez, Kurt Herzog, John Beaver (moderator)
- **The Ego and the Soul: Why Makers Make:** Kristin LeVier, Sally Ault, Jennifer Shirley, David Ellsworth (moderator)
- **All About Craft Shows:** Mark Waninger, Chris Pytik, Keith Holt, John Beaver (moderator)
- **Plagiarism: Where is the Fine Line? Finding Your Own Voice:** Barbara Dill, Miriam Carpenter, Jennifer Shirley, David Ellsworth (moderator)
- **How to Become a Demonstrator—From Application Process Through Presenting an Effective Demonstration:** Andy Cole, Curt Theobald, Sally Ault, Jeff Brockett (moderator)
- **Gallery/Museum Curator's Prospective:** Michael McMillan, Derek Weidman, David Ellsworth (moderator)
- **Direct or Internet Sales: Tips, Tricks, and Traps:** Mike Mahoney, Cindy Drozda, Keith Holt, J. Paul Fennell (moderator)
- **Cultural Appropriation/Misappropriation?** Graeme Priddle, Derek Weidman, Clay Foster, J. Paul Fennell (moderator)
- **Where to Buy and Sell Wood Art in the Current Market:** Jeffrey Bernstein, Stephen Weinroth, Joe Seltzer, John Beaver (moderator)
- **Understanding Tool Steels and Grinders – A Technology Update:** Tom Wirsing, Stuart Batty
- **Woodturning with Disabilities:** Andi Sullivan, Gil Malave, Alan Zenreich
- **Intimate Critique:** An opportunity to receive valuable feedback on your work through one-on-one discussion with an expert. Expect encouragement, tips, suggestions, and a positive experience. Judy Chernoff, Alan Stirt, Michael McMillan

CELEBRATION DINNER AND BENEFIT AUCTIONS

Join us the evening of Friday, June 23rd for good company and the AAW live auction. Refreshments will be provided and a cash bar will be available. Over the past ten years alone, the Educational Opportunity Grant (EOG) benefit auctions have raised more than \$500,000 for woodturning education.

Also, don't miss the bidding at the Professional Outreach Program (POP) live auction Saturday afternoon!

Can't make it? Don't miss out! Both live auctions will allow you to participate via live, remote, online bidding. Auction items will be published online for advance viewing on May 26. To sign up for a reminder, go to tiny.cc/NotifyMe.

On Saturday evening, enjoy a celebration dinner and a slower-paced silent auction, where you can bid on a variety of turned works and other items. Funds raised will be used by the AAW to continue to develop and deliver woodturning education and service programs for our member community worldwide.

RETURN TO THE COMMUNITY

Each year, local chapter organizers select a project for fundraising during the Symposium. This year, we have two. Bring a turned bowl or other object for the Empty Bowls fundraiser, which benefits Variety, the Children's Charity of Greater Kansas City. You can also donate boxes to support Beads of Courage. For information on both, visit tiny.cc/2017Return.



YOUTH TURNING ROOM



Youth ages 10 to 18 are eligible to register for free hands-on woodturning instruction. Each registered youth must be accompanied by an adult who is registered for the Symposium. Students will make a variety of projects.

Volunteer teachers this year will include Steve Cook, Jim Rodgers, Rex Burningham, and Kailee Bosch.

On Sunday, fifteen young turners will win a complete turning package, including a lathe, tools, and faceshield.

- Powermatic/JET: JET mini lathes and stands
- Teknatool USA: chucks and revolving drive centers
- Crown Tools: sets of turning tools
- Craft Supplies USA: project supplies
- Hunter Tools: project supplies
- Vince's WoodNWonders: abrasives
- Robust Tools: toolrests and safety drives
- Easy Wood Tools: Easy Roughers and Easy Finishers
- Woodcraft: faceshields



Dennis Fuge instructing a young turner during the 2016 AAW Symposium, Atlanta, Georgia.

Photo: Andi Wolfe

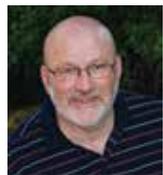
Donor list current as of time of publication. See tiny.cc/AAW2017KC for updated information.

Our heartfelt thanks to those who generously donated in support of this program. These vendors have also agreed to furnish a complete turning package for the visually impaired program and ten additional turning packages for EOG grants.

SPECIAL INTERESTS



AAW's International Symposium encompasses many special interest groups that are all part of our woodturning community. At no other event will you be able to sample such a broad range of interests. You will want to attend this year's Special Interest Night (SIN) activities on Thursday evening.



Come and meet Australian turner Richard Raffan at the AAW Symposium in Kansas City.

A special event will feature Richard Raffan presenting a retrospective of his work.

SIN activities are organized by AAW members to share common interests. Past SIN sessions have included Women in Turning, Segmented Woodturners, Principally Pens, Ornamental Turners, a teachers forum, and a remote video demonstration. If you are interested in organizing a SIN session at the Kansas City Symposium, contact Al Hockenbery at al@woodturner.org.

POWERMATIC LATHE RAFFLE!

A winning ticket will be drawn at AAW's International Symposium, in Kansas City, June 24, 2017.

Proceeds to support activates of the local AAW chapters in Missouri and Kansas.



POP SHOWCASE ARTISTS

This year's Professional Outreach Program (POP) Artist Showcase will feature Keith Holt and Jim Sannerud. In addition to their individual rotations noted below, Keith and Jim will participate in a POP panel discussion, "Evolution of an Artist."

Keith Holt

► A Decade of Inspirations

A journey of images showing the past decade of Keith Holt's and others' work, revealing key influences and inspirations.



Sweet Spot, 2015, Ebonized cherry, 4½" (11cm) diameter

Jim Sannerud

► Production Green Woodturning: From Log to Lager

Learn the fundamentals of green woodturning, from looking at logs to choosing grain orientation to turning and drying.



► Inspiration and Perspiration: Learning and Making
Learn how Jim Sannerud continually cultivates his creative voice.

Bowl Stack, 2012, Birch, milk paint, linseed oil, 23" x 14" (58cm x 36cm)

Photo: Tib Shaw/AAW

COMPANION PROGRAM



We are excited about the 2017 AAW Companion Program/Craft Activities—offering participants an outstanding mix of options, including tours and DIY projects. Craft projects include arm knitting, pressed flower cards, bracelets in copper and silver, and rings and earrings. Watch AAW website for class schedules and registration.

WOODTURNING EXHIBITIONS



Instant Gallery

The AAW Symposium Instant Gallery is the largest display of turned-wood objects under one roof. It is a great opportunity for any and all registered attendees to sell or just show off their work. There are no requirements: just bring up to three of your turnings to participate in this incredible display. To preregister your display pieces online prior to arrival, visit tiny.cc/AAW2017KC.

Special Exhibitions

Waves of Grain

This year's title theme honors Missouri's rich agricultural history. The *Waves of Grain* title was also chosen to provide a catalyst for other interpretations: from ancient grain goddesses to the amber waves of wood grain, it is a theme rich in possibilities. Two artist awards will be given during the Symposium: a Masters' Choice Award of \$300 and a People's Choice Award of \$200.

The Sphere – Second Round

Now in its eleventh year, the Professional Outreach Program (POP) exhibition series presents small-scale works by an international roster of emerging and established artists. This year, the exhibit will feature works by forty-eight artists from twelve countries and seventeen states. The creative thinking is big, yet the work is small, with a maximum size of 6" x 6" x 6" (15cm x 15cm x 15cm).

The work from this show will be auctioned live at the Symposium. Can't make it? Bid online! Proceeds support POP initiatives and programs, including panels, Instant Gallery awards, grants, and the Artist Showcase.



Pat Carroll, *Beauty in Decay*, 2016, Rippled sycamore, rust-finish paint, 6" x 6" x 6" (15cm x 15cm x 15cm)

Photo: Tib Shaw/AAW



Ron Fleming, *Echinacea*, 2000, Dogwood burl, maple tooth picks, 16" x 8" (41cm x 20cm)

2017 POP Merit Award – Ron Fleming

This year, POP honors Oklahoma artist Ron Fleming, a founding member of the AAW and a gifted sculptor, turner, and graphic artist.

The POP Merit Award is given to an artist whose body of work and career have contributed significantly to the growth of woodturning as an art form. Previous recipients: Giles Gilson, Stephen Hogbin, Mark Lindquist, Merryll Saylan, David Ellsworth, Richard Raffan, Clay Foster, and Jacques Vesery.

Visit the Special Exhibitions Area at the Symposium to see all of these shows, as well as the EOG live/online auction items and work by Artist Showcase presenters Jim Sannerud and Keith Holt.

The Special Exhibitions opening, including light appetizers and a cash bar, will be held Thursday, June 22, at 5:30 p.m.

WOODTURNING TRADESHOW



You'll see the latest and greatest woodturning products up close and in action. AAW's enormous tradeshow will be jam-packed with the newest woodturning products, tool and lathe manufacturers, and supplies. Following is a partial list of tradeshow vendors. Visit woodturner.org for updated information.

2 Tree Boyz Wood	Nave's Sawmill & Woodworks
Advanced Lathe Tools, LLC	Niles Bottle Stoppers
Advantage Lumber	Oneway Manufacturing
Airbrushing Wood	Parson Adhesives, Inc.
Arrowmont School of Arts & Crafts	Reed's Woodworking, LLC
Carter and Son Toolworks	Robust Tools, LLC
Carter Products Company	Stockroom Supply
Chefwarekits / EZ Jigs	Teknatool USA
Chroma Craft	Ten Seconds Studio
Cindy Drozda Signature Woodturning Tools	The Studios of Bradley R.M.
CPH International	The Walnut Log Studio and Supply
Craft Supplies USA	Thompson Lathe Tools
Curt Theobald Studios	Tom's Tools
Cuttermasters - Tradesman	Trent Bosch Studios, Inc.
Designs by Gjoavaag	TSDr. LLC - The Spin Doctor
Earth's Watch Wooden Watches	Turningwood.com
Easy Wood Tools	TurnTex Woodworks
Frugal Vacuum Chuck	Uneeda Enterprises, Inc.
Graeme Priddle	Vince's WoodNWonders
Hannes Tool LLC	West Penn Hardwoods, Inc.
Hunter Tool Company	WildWood Design
John Jordan Woodturning	Woodturner PRO
JPW Industries JET/Powermatic	Wood Turners Wonders
JT Turning Tools, LLC	Woodturning with Tim Yoder
Kallenshaan Woods	Woodworker West
Lyle Jamieson Woodturning, LLC	Woodworker's Emporium
MDI Woodcarvers Supply	

Glenn Lucas, Ireland

- ▶ Dublin Viking Thin Wall Bowl
- ▶ Traditional Irish Platter
- ▶ The Utility Bowl



Bowls, 2015, Ash, beech, largest is 6" x 15" (15cm x 38cm)

Andrew Potocnik, Australia

- ▶ Organic Forms Bent Beyond the Straight and Narrow
- ▶ Cheat's Guide to Creating a Hollow Form



Pod X, 2014, Pin oak, 21½" x 7" x 4" (55cm x 18cm x 10cm)

Tania Radda, Arizona

- ▶ The Traveling Woodturner
- ▶ Tea Time in Wonderland



Tea in Ipanema, 2016, Basswood, compressed ash, acrylics, 7" x 8" x 5" (18cm x 20cm x 13cm)

Richard Raffan, Australia

- ▶ Centerwork and Endgrain Hollowing
- ▶ Lidded Bowl
- ▶ Endgrain Box with Suction-Fit Lid



Rusty Verdigris Pot, 2015, Unknown wood, rust and verdigris faux finishes, acrylic, 8" (20cm) diameter



Mark Sanger, England

- ▶ Lidded Form with Carved Finial
- ▶ Textured and Colored Sculptural Form
- ▶ Offset Lidded Form with Carved Finial



Balance, 2010, Sycamore, acrylics, 7½" x 7" (19cm x 18cm)

Merryll Saylan, California

- ▶ Working with Milk Paint
- ▶ Multiples and Series—Or Is it Production Turning?



Tower of Bowls, 2001, Various polychromed woods, 77" x 17" x 15" (196cm x 43cm x 38cm)

Betty Scarpino, Indiana

- ▶ Turn! Cut! Carve!
- ▶ Embellished Wood Design
- ▶ A Journey from Bowls to Sculpture



Be Seeded, 2016, Cherry, Acrylic paint, 3" x 19" x 3" (8cm x 48cm x 8cm)

Photo: Wilbur Montgomery

Alan Stirt, Vermont

- ▶ Open Bowl Turning
- ▶ Sgraffito Platter
- ▶ Turned, Carved, and Painted Square Platter



Waves, 2015, Cherry, milk paint, 15" x 11" x 2¼" (38cm x 28cm x 6cm)

Derek Weidman, Pennsylvania

- ▶ Drawing with the Lathe
- ▶ Musings of a Wood Sculptor
- ▶ Life Moves (lathe-based sculptural performance)



Woodpecker, 2015, Holly, pigments, 12" x 12" x 4" (30cm x 30cm x 10cm)

John Wessels, South Africa

- ▶ Embellishing Woodturnings with Sheet Pewter
- ▶ Embellishing Woodturnings with Pewter Casting
- ▶ Embellishing Woodturnings with Solder, Wire, and Rod

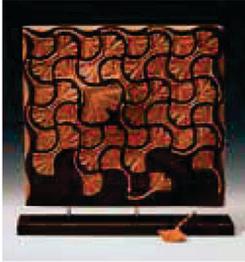


Jewelry, boxes, and bowl, 2011, Red and pink ivory wood, cast and sheet pewter, silver, silver rod, square box is 4¼" x 4¾" x 4¾" (11cm x 12cm x 12cm)

Photo: Tib Shaw

Dixie Biggs, Florida

- ▶ Simple Surface Treatments
- ▶ Need Some Relief?
- ▶ Adding Detail to Relief with Woodburning and Color

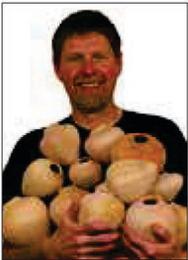


A Break in the Pattern, 2016, Cherry, brass rod, 8" x 8" x 2" (20cm x 20cm x 5cm)

Photo: Randy Batista

Trent Bosch, Colorado

- ▶ Revelations in Hollowing
- ▶ Vessels of Illusion
- ▶ Sunburst Platter



Facets Series (green), 2015, Maple, 6" x 6" (15cm x 15cm)

Harvey Meyer, Georgia

- ▶ Basket Illusion Demystified (Parts 1 and 2)



Lattice Weave Basket Illusion, 2015, Maple, India ink, 13" (33cm) diam.

Jimmy Clewes, Nevada

- ▶ Drinking Flask
- ▶ Colored Lidded Bowl
- ▶ Tri-Cornered Box with Lid



Drinking Flask, 2016, Maple, 7" x 5" (18cm x 13cm)

Kurt Hertzog, New York

- ▶ Penturning Tips and Tricks
- ▶ Afterturning Opportunities for Pen Makers
- ▶ Presentation Is Everything



Various designs, 2015 and 2016

Thomas Stegall, Illinois

- ▶ Thin-Walled Endgrain Bowls and Hollow Forms



Spalted Porcupine, 2011, Unknown spalted wood, 14" x 6" (36cm x 15cm)

Michael Hosaluk, Canada

- ▶ Endgrain Bowl with Decoration and Carved Feet
- ▶ Having Fun with Spindles
- ▶ Surface Design

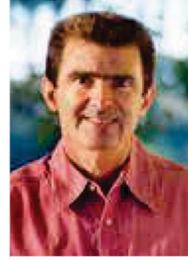


Various bowls, 2015 and 2016, Maple, birch, milk paint, largest is 7" x 5" (18cm x 13cm)

Photo: Trent Watts

Rudolph Lopez, Florida

- ▶ Natural Edge Wing Bowl from a Crotch
- ▶ Square to Round Bowls, Vases, and Hollow Forms
- ▶ Thin Stem Natural Edge Goblet



Bent Stem Goblets, 2015, Sycamore, ambrosia maple, taller is 13" (33cm)

Jason Swanson, Wisconsin

- ▶ Polychromatic Peppercorn Pulverizer (Stave Segmented Peppermill)



10" Salt/Peppermill Set, 2016, Leopardwood, sycamore, each is 10" x 2 3/8" (25cm x 7cm)

Photo: Cathie Swanson

Sam Angelo, Wyoming

- Fundamentals of Chasing Threads by Hand



Untitled, 2014, Acrylic,
4½" (11cm) long

Bruce Berger, California

- Tangential Twists



Classic Teapot, 2016, Box elder, holly, ebony,
9¾" x 9" x 6" (25cm x 23cm x 15cm)

Jason Clark, Illinois

- Offset Saturn Bowls



Torus VII, 2014, Oak burl,
3" x 8" (8cm x 20cm)

Janet Collins, Vermont

- Spindle Turning Basics w/focus on Spindle Duplication
- Inlay Techniques for Woodturners



Newel post caps,
Cherry, each is 8" x 5"
(20cm x 13cm)

Anthony Harris, Kansas

- Threaded, Eccentric Rocker Box



Off-Center Rocker Box,
2016, Walnut, boxwood,
3" x 3¼" (8cm x 8.25cm)

Michael Kehs, Pennsylvania

- Celtic Drinking Horn



Scaithian Leathair, 2014, Pine, copper, cherry,
steel nails, 12" x 11" x 3" (30cm x 28cm x 8cm)

Janice Levi, Texas

- Barrel-Shaped Purse



On the Prowl, 2015, Mimosa,
fabric lining, 6¾" x 4¾"
(17cm x 12cm)

David Lindow, Pennsylvania

- History of Ornamental Turning
- The Curvilinear, Using a Mini-Lathe for Finials and Other Forms
- Guilloché Using Metal and Wood



Pendant, 2014, African blackwood, silver, enamel
(enameling by Ron McGuire), 2" (5cm) diam.

Photo: Eric Spatt

CALL FOR STUDENT SUBMISSIONS 2017 Turning to the Future Competition



The AAW is pleased to announce the third-annual Turning to the Future competition, an opportunity for woodturning students and schools to show off their best work. The exhibition will be held in conjunction with FreshWood, one of North America's largest student furniture-making and woodworking competitions.

The competition is intended to encourage and support students in reaching for and attaining the

highest levels of skill in the use of the lathe. The contest is open to students in North America, and there is no entry fee.

Prizes include \$500 first-place and \$100 second-place awards in each division and category, and two lathes for the Best in Show piece in each division.

There are two divisions, High School and Post-Secondary, with three categories each: Functional, Small Turnings, and Open. Five finalists in each division category will be chosen to have

their work displayed at the 2017 AWFS® (Association of Woodworking & Furnishings Suppliers®) Fair in Las Vegas, Nevada. Work will be evaluated on craftsmanship, aesthetic appeal, creativity and/or utility, and process documentation. Application period opens March 1, 2017. Deadline for submissions is May 1, 2017.

If you know a student woodturner, encourage him or her to apply! Submission details can be found at tiny.cc/Calls.

Sponsor a Demonstration Room in Kansas City

We are offering the opportunity to express your support of AAW by sponsoring a demonstration room during the Kansas City Symposium. Whether as an individual member, an AAW vendor, or as a local chapter, this is a way to visibly display your support of the AAW and our programs. We especially want to thank all the individuals and organizations that have sponsored rooms in previous years.

Opportunities to participate in this fundraising program still remain. For more information, please contact Phil McDonald, Executive Director, at 877-595-9094 or phil@woodturner.org.

Call for Demonstrators AAW Symposium 2018

The AAW's 32nd Annual International Symposium will be held in Portland, Oregon, June 14–17, 2018. To apply to be a demonstrator, visit tiny.cc/CallsforEntry (case sensitive) between May 1 and August 1, 2017. For more information, call the AAW office in Saint Paul, 877-595-9094 or 651-484-9094, or email inquiries@woodturner.org.