WOODTURNING FUNdamentals

AAW EDUCATION

Publication of the American Association of Woodturners
May 2015 vol 4, issue 3 | woodturner.org

PROJECTS

Turning a Bottle Stopper
Chad Dawson

Turning Pail Handles
Denis Delehanty

Tool Rack Project
Ken Capie

Old German-Style Top
Tom Pearson & Earl Culham

VIDEOS

Safely Transporting Your Tools
Les Casteel

Bleaching Wood
Joe Fleming

TECHNIQUES

Finishing Options
Mark Palma

TIPS

Woodturning FUNdamentals
TABLE OF CONTENTS

AAW EDUCATION

May 2015 - Volume 4: Issue 3 Features

Welcome from Executive Director Phil McDonald 1

Projects

- Turning a Bottle Stopper, Chad Dawson 4
- Turning Pail Handles, Denis Delehanty 7
- Tool Rack Project, Ken Capie 10
- Old German-Style Top, Tom Pearson and Earl Culham 13

Tips

- Finishing Options for Woodturners, Mark Palma 16
- Simple Photo Gear, John Lucas 25
- Snagging, Pinching and Crushing Fingers, Harvey Rogers 27
- Sandpaper Tip, Floyd Anstaett 28
- Sandpaper Rack, Bruce Holden 28
- Shopmade Faceplate, James L. Pruitt 29

Video: Tip for Safely Transporting your Tools with Les Casteel 30

Video: Tips for Bleaching Wood with Joe Fleming 31

Members' Gallery 32

AAW 29th Annual International Symposium in Pittsburgh 36

Woodturning FUNdamentals
a bimonthly publication by the American Association of Woodturners
222 Landmark Ctr.
75 5th St W
St. Paul, MN 55102
phone 651-484-9094
website woodturner.org
Exec. Director: Phil McDonald
phil@woodturner.org
Program Director: Linda Ferber
linda@woodturner.org

A Note About Safety: An accident at the lathe can happen with blinding suddenness. Respiratory and other problems can build over years. Take precautions when you turn. Safety guidelines are published online at http://www.woodturner.org/?page=Safety Following them will help you continue to enjoy woodturning.

Cover photo: Earl Culham

WELCOME

A Note from the Executive Director

In this edition of *Woodturning FUNdamentals*, we are happy to offer projects, tips, videos, and information for those of you who are looking to advance basic skills or are new to woodturning. This issue offers four projects, two videos, and plenty of tips to keep you turning! If you're looking for even more, I'd like to remind you that past issues of *Woodturning FUNdamentals* are available for download or viewing at http://www.woodturner.org/default.asp?page=FUNdamentalsRes.

The AAW continues to identify opportunities to better meet the needs of our members through education, information, inspiration, and community. I'd like to tell you about two exciting new services AAW has recently launched based on recommendations from the AAW's Chapter Relations Initiative (CRI) work group.

AAW Connects

AAW Connects is a one-stop, web-based map tool that "connects" users with information about international woodturning schools, woodturning organizations, exhibitions, and symposia, as well as AAW chapters, chapter events, and demonstrations. AAW Connects was built using an easy-to-navigate Google Maps application that enables users to click on an area of the globe, zoom in, and obtain relevant information for specific woodturning venues, such as website address, contact information, dates, times, etc. So far, the response is very favorable.

This visual tool can help woodturners around the globe connect with turning resources in their regions. Accuracy of source data is a priority, and we need to rely a great deal on AAW chapters and others in the greater woodturning community to help ensure the data is accurate and complete.

You can try out the new AAW Connects map tool at

http://www.woodturner.org/?page=AAWConnectsMap

AAW Woodturning Marketspace

Woodturning Marketspace is an online advertiser hub that consolidates all AAW's business supporter logos onto one webpage list. The logos are hot-linked and users may "click-through" directly to advertiser websites, which makes finding information about woodturning products and services easy. What's more, AAW's business partners can extend offers and discounts exclusively to members through Woodturning Marketspace. Over the coming months, members will see a growing range of special deals featured on the Woodturning Marketspace. The Marketspace is intended to make locating information about woodturning-related businesses and services a simple process. Additionally, it provides a means for woodturning suppliers to connect with customers, as well as extend discounts not otherwise available elsewhere to AAW members. Take a look the Woodturning Marketspace at http://www.woodturner.org/?page=Marketspace2

As always, we welcome your questions, tips, and projects!

Sharing your woodturning experiences, issues, and solutions through *Woodturning FUNdamentals* is a great way to help everyone! Please send your questions, tips, and projects to us at linda@woodturner.org.

I welcome your feedback.

Respectfully,
Phil McDonald
Executive Director
phil@woodturner.org

COME SEE HOW TO GET ALL YOUR TOOLS RAZOR SHARP

Booth #319

Are you going to this year's AAW Symposium? If so, stop by **Booth #319** for a demo on the Tormek Sharpening System in action.

While you're there, learn how **you can win** this Custom Tormek T-7 Sharpening System as well as Tormek accessory kits, rotational base and sharpening station, **a $2,000 retail value**.

Come see the Tormek difference.
Visit us at the AAW Symposium
Booth #319 for a live demo.

For more information visit
www.tormekus.com
or call **866-588-0395**

TORMEK®
Sharpening Innovation

AAW | woodturner.org

MADE IN SWEDEN

proudly distributed in the USA by AFFINITY TOOL WORKS

BOTTLE STOPPERS

Turn Wine Bottle Stoppers to Hone Your Skills and for Gifts

On January 13, 2015, Don Lum was the featured presenter for the monthly meeting of the Central New York Woodturners.

It is a small project that makes a good gift – wine bottle stoppers. Don Lum talked about design and materials that could be included in making a wine bottle stopper while he demonstrated how to proceed. Don makes all his stopper parts on the lathe except the silicone gasket that is used in his design. The materials he used were:

- A hardwood blank 1.5” by 1.5” and 3” long.
- A 2”-long piece of ½”-diameter oak dowel.
- A silicone gasket for the stopper stem.

Don first turned the hardwood blank between centers so that it had a round tenon on one end. That tenon was used to hold the blank in a chuck while a 5/16”-diameter hole was drilled in the other end ¾” deep using a drill chuck on the tailstock. After the drill chuck was removed, the tailstock was pulled up with a cone center put into the drilled hole. The drilled end of the blank was turned to the diameter wanted, finish sanded, and removed from the chuck.

The next step was put the piece of dowel in a chuck with tailstock pulled up and turn it down to fit inside the drilled stopper. That end of the dowel should be slightly shorter than the drilled depth and the dowel roughed up to hold glue. The dowel is then reversed in the chuck and tailstock and the other end turned down to 5/16” and of the correct length to hold the silicone stopper. The dowel is then glued into the stopper and allowed to dry.

The stopper is then put back on the lathe with the stopper end into the chuck and the tailstock pulled up for support. The stopper is then turned to the desired design. The tailstock is pulled away as the stopper top is completed. The stopper is then sanded and finished and removed from the lathe.

The final step is to glue the silicone gasket onto the dowel using CA glue.

Don also suggested that you could add a decorative piece – wood, stone, plastic, etc – to the top of the stopper before sanding and finishing.

If using a wooden decoration, the process is to drill your hole in the top of the stopper and make a small recess around it. Then measure your drill bit and turn a tenon on the contrasting wood piece to the size of the drill bit that will be used to create the recess for the wood insert. Drill the hole. It doesn't have to be super deep but should at least match the length of your tenon. (If your tenon is too long, cut as needed.) Glue the piece in. Then turn your decorative wood to incorporate it into your stopper.

If using stone or plastic cabochons measure the cabochon and turn an appropriate size area for the piece to be inserted. Make sure you make the recess deep enough. Glue the cabochon in and then finish your stopper.

The discussion at the demo and later Saturday at the bottler stopper workshop was about the overall design and size that seemed to fit the hand and appeal to the eye. Generally, a diameter of around 1" to 1½" and a length of 1½" to 2½" seemed to appeal to most turners. The embellishments in the design were many, from multiple wood glued blanks to wood inlays or plugs added to the end of the blank. During the Saturday workshop, the 12 attendees discussed suggestions for stopper kits and other types of gaskets (stainless steel stems with silicone gaskets, premade oak stems with cork gaskets) and multiple outlets recommended. On the Saturday following club meetings, a workshop is held to allow members to practice what was taught at the meeting. This is a photo collage of the bottle-stopper workshop.

In order to reinforce and hone the skills and information taught during the monthly demonstration, the club also holds a monthly challenge with a People's Choice and Participant award given monthly as well as year-end awards given at the holiday party. The average number of participants in each monthly challenge is 10 to 15. The bottle stopper challenge resulted in 21 entries, with several showing a display of more than one stopper. Several were very creative and unique.

~ Written by Chad Dawson
Vice President
Central New York Woodturners
Photos are by Andy LoConte and Barbara Raymond-LaPrease

HANDLES

Pail Handles

I admit it, I collect empty plastic pails for use around the house and shop. I use them to carry fertilizer, potting soil, crushed stone, sand, and of course water. In the shop I use them as waste containers, sawdust collectors, storage for small cut-offs and portable storage for my moving straps. I even use plastic pails to carry my turning tools to classes. *(Photo 1)*

Photo 1

I have only one complaint. The little plastic tubes that are used for hand grips are woefully inadequate. They split and fall off in no time. Carrying two five-gallon pails of water by nothing but the bare wire is no fun. Recently, it came to me that all the pails I remembered from my childhood had wood handles. Coal buckets, milking pails, even the woodstove ash pail all had wood handles. They ranged from simple to elaborate shapes. This presented an opportunity to solve a problem and spend time at my mini lathe in the process.

Here is a brief description of how I turn wood replacement handles. First, I suggest you design them to fit the user. Turn comfortable, larger-diameter handles for larger hands or smaller handles for small hands. This is in keeping with the wood handles I make for my turning tools, pizza cutters, and ice cream scoops. I turn handles that are comfortable for my use.

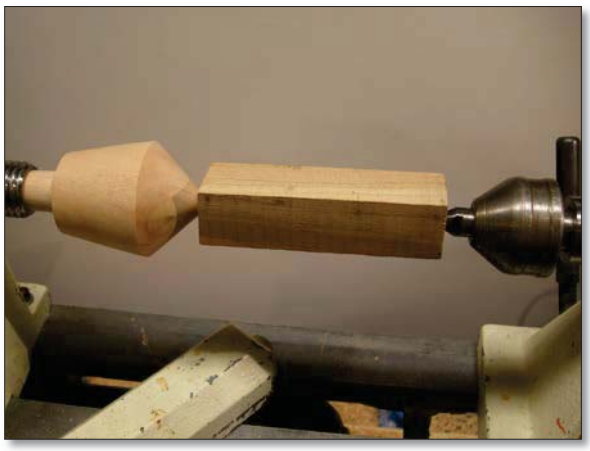


Photo 2

Start off with a piece of straight-grain hardwood. My handles are about the length of the straight section of the wire on pail handles, which is approximately three-and-three-quarter inches long. The rough diameter of my turning stock was

slightly greater than an inch. Old wood broom and rake handles make great raw material for smaller spindle projects like this one. In the first step drill a ¼" hole lengthwise through the middle of the stock material. Next, turn the handles in whatever shapes and diameters you feel will work best for you. The most comfortable diameters at the center of my handles are between three-quarters and seven-eighths inches. In the process, I used a handmade, wood, cone-shaped drive center (more later) and a metal cone shape on the live center end. *(Photo 2)*

Photo 3

In the third step use a counter-sink bit for wood screws or the end of a large drill bit to cut a 1/8" taper (funnel shape) in each end of the handles. *(Photo 3)* If the ends of the holes are left squared off, the pressure from the pail wire is more likely to split the wood handles.

Sand and finish your handles so they are reasonably smooth. I wiped on a couple of coats of Tung Oil to prolong their life. You can paint or use permanent felt tips to color-code your handles so that you never grab the bunny-cage waste-collection bucket to water the chickens.

Photo 4

Before splitting the handles, place a temporary mark or tape on one end of each handle. Split the handles lengthwise into two halves through the center hole using a sharp chisel. Straighten the pail wire if needed and put a little oil on it so that the glue is not likely to stick to the wire. I used urethane, epoxy, and wood glue. Time will tell which works best. Sparingly put the glue on the split face of one-half of a handle. Using the mark you placed on one end, correctly match up the ends of the halves. Carefully glue the two halves together around the pail wire. Use two clamps to hold the halves together until dry. If you wipe off any excess glue as soon as the halves are clamped, you will have little, if any, sanding or scraping to do later on. *(Photo 4)* shows the assortment of handles I made out of scrap walnut and cherry.

Photo 5

I friction-burned a few details on one handle. Notice the burn line on the drive center used to preheat the wire. *(Photo 5)*

Photo 6

Making A Cone-Shaped Wood Drive

I turned an M2 taper on one end of a five-inch-long block of wood that was two inches square. I checked my progress by using a handmade jig *(Photo 6)*. Alternately, use these dimensions to turn an M2 taper. The small end of an M2 taper is .58 inches, the larger end is .7 inches and the taper is 2.4 inches long. It is best to have the taper fit well to the headstock. If you cannot achieve a perfect fit, it is better to have the two ends of the taper cleanly touching the inside of the taper of the lathe headstock with a slight cove in the center. A fat middle in the taper will cause the taper to sit improperly. Do not use a wood drive center that is not well-seated or vibrates. Once the taper was turned, I tapped it into the drive center of my lathe.

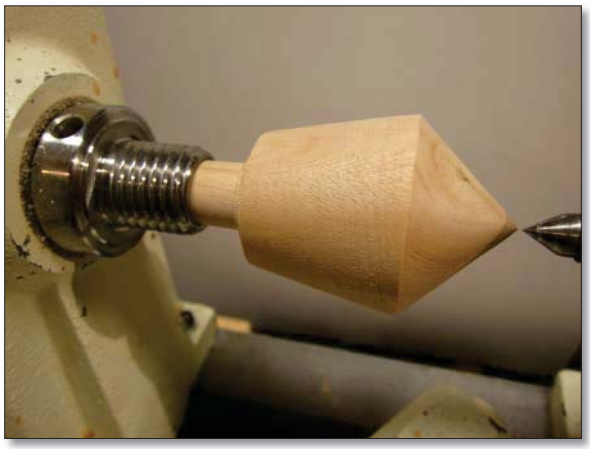


Photo 7

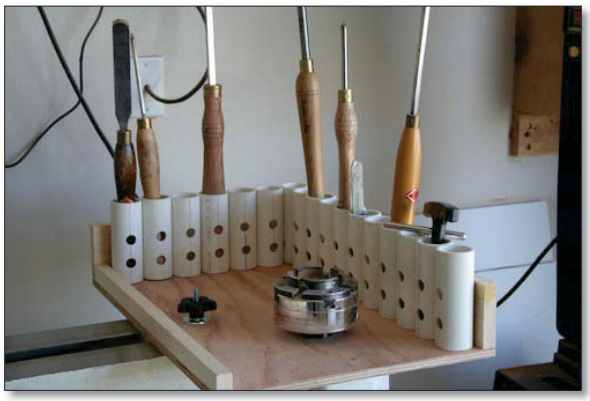
I turned a sixty-degree cone shape on the other end of the jig. I advance my live center to within a fraction of an inch of the work while shaping the cone-shaped end. This was done to ensure that it would not go far if the block loosened in M2 taper of the lathe. *(Photo 7)* This is a great drive center for beginners. If you get a catch, the wood just slips on the wood drive center. Advance the live center to tighten things up and continue turning. Occasionally, reshape the cone of the drive. I re-turn my wood drive every time I put it on the lathe to ensure that it is centered.

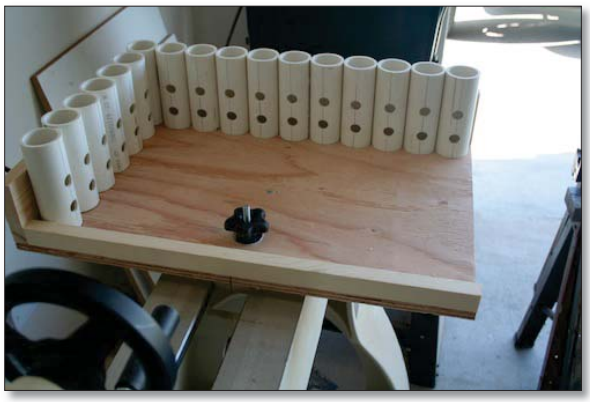
~Denis Delehanty
Purcellville , VA

TOOL RACK PLATFORM

Building a Lathe-Bed Workspace Platform

Background
When first working with Tom Arcoleo (my mentor), I noticed he often placed his tools on the lathe bed and just as often quickly ran out of space for his tools. They would sometimes fall off the bed, or he would have difficulty finding a tool he had to lay down somewhere else. Thus, I came up with the idea of building a simple yet extremely practical storage platform that could temporarily and very securely attach to the lathe bed and could effectively hold a number of tools in an upright position as well as provide additional space for other things such as pencils, chucks, other tools, etc. I have made several iterations of the project and now have one that I think should be part of every woodturner's work area.





The project is as follows:
One of the major problems in woodturning is where to lay down one tool when selecting another when turning a workpiece. The lathe bed is the most convenient place for temporarily depositing tools. However, the amount of space available on any lathe bed is very limited and in some ways not really practical or even safe. Tools placed on a lathe bed don't always remain in place. The obvious solution to this problem is to somehow gain additional work space on the lathe bed and at the same time, create a system to ensure that the tools stay securely in place. Simply put, a platform should be constructed that can securely hold tools and provide additional temporary storage space.

For practical purposes such a platform should meet at least 5 criteria:

1. It should be easily attached and removed from the lathe bed,
2. It should be very secure,
3. It should be large enough to temporarily hold most of the tools normally used when turning a workpiece, as well as providing extra storage space,
4. Its size should be manageable, and
5. It should be reasonably easy and inexpensive to make. This project meets all of the above criteria.

Most of the needed materials, such as glue, screws, and wood pieces might be found in your shop, while some will need to be purchased at a local supply store. The tools required include a drill press, power drill, small drill bits, 1/2 inch (1.3 cm) Forstner bit, table saw, cut-off saw, small nail gun (optional), a modified V block for drilling holes in the pipe longer than the cut pieces, a piece of 3/4-inch wood at least 6 inches (15 cm) long used as a straightedge, and assorted hand tools.

Project Overview:
This project consists of three (3) basic parts:

1. A plywood platform with two 3 1/2-inch(8.9cm) high wooden sides and one side about 1 inch (2.5 cm) high .
2. A series of 1 1/2-inch PVC pipe upright tool holders cut to a length of 5 inches (12.7cm) and secured upright to the two 3 1/2-inch wooden sides.
3. A mechanism for temporarily securing the platform to the lathe bed, consisting of a 5-inch (12.7cm) or longer, 1/4-inch (0.64cm) standard threaded bolt, a threaded thru-hole knob to fit the bolt, three 1/4-inch (0.64 cm) steel fender washers, and a short piece of 3/4-inch hardwood 1 1/2 inches wide (3.8 cm). The length is determined by your lathe bed.

Figure 1: Plywood platform with two high wooden sides

Figure 2: PVC pipe cut to length

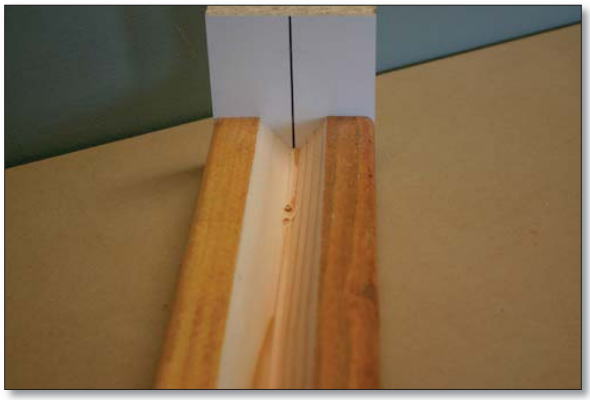


Figure 3: Jig for drilling PVC

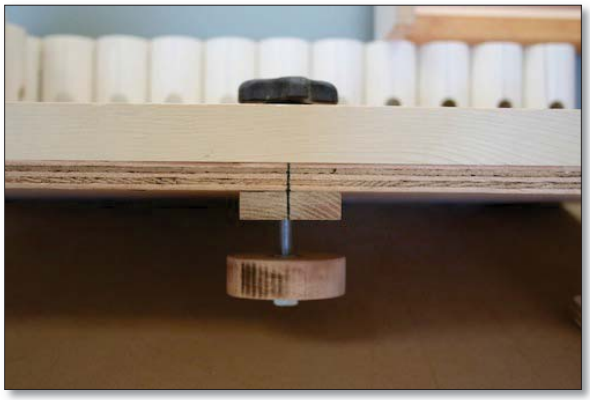


Figure 6: Standard threaded bolt, threaded thru-hole knob to fit.

Figure 4: Drilling PVC

~Ken Capie
Chico, CA
kensuecapie@frontiernet.net

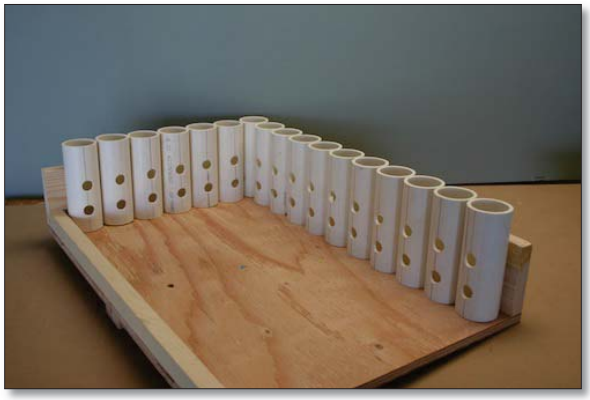


Figure 5: PVC on platform

SPINNING TOP

Old German Design Spinning Top

Tom Pearson introduced his demonstration of making a spinning top with the comments that the design was probably hundreds of years old and was an old German design.

The parts needed to make the spinning top.
To make this Old German design spinning top you will have a handle, wheel, shaft and toggle. We have included a dimensional drawing to illustrate with creation and assembly.

Three pieces of wood will be required: Handle, 33mmx33mmx170mm, Shaft2mm x20mm x100mm, Wheel 80mm dia. x 20mm thick. You will also need Nylon Cord 1.6mm x 300 and a small round-head nail.

The Handle
Tom had mounted a piece of wood 33mm x33mm x170mm on the lathe, with a predrilled hole 20mm through one face and a 12mm hole drilled through the other direction. It is important to ensure that the 12mm hole is located in the centre of the 20mm hole; otherwise, when the string is wound around the shaft of the spinning top, it will bind on the sides.

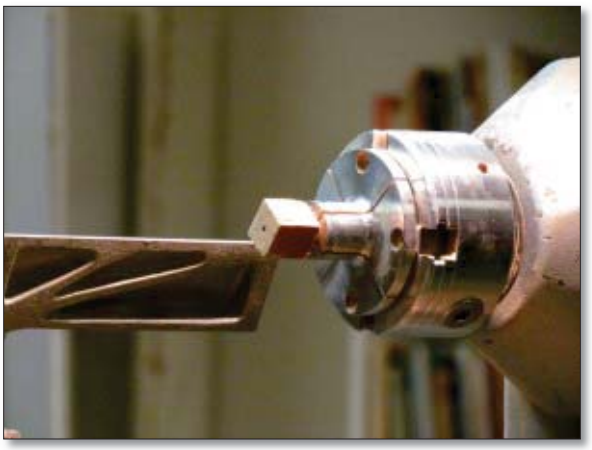
- Turn to round.
- Mark the end for the head of the handle.
- Shape and sand to finish.

The Wheel
Tom had made a jam chuck to hold the wheel, which had been predrilled with a 12mm hole. Tom's tip--Use hard wood for your jam chuck. It holds better and

lasts longer. Shape the first side, sand, and texture if you wish Remove the wheel and refit into the jam chuck and shape the second side. Sand and texture if you wish.

The Shaft
Mount the shaft (20mm x20mm x100mm) in pin jaws. One end of the shaft becomes the toggle. Tom then drilled holes for the string.

- Mark the length of the toggle.
- Mark the wheel position and turn to an exact 12mm.
- Reduce the remainder of the shaft to smaller than 12mm so that it will spin easily in the handle.
- Remove the toggle and reposition the shaft in the jaws so that you are able to shape the spinning end. At this stage Tom suggests that if you are going to use a rivet, put that in now and then shape the end.



Remove from the chuck and assemble.
As the instructions on the SAWG website suggest, a piece of string 300mm long is about right, but in good New Zealand fashion, surely if 300mm works well, a longer piece of string will work even better. Not so! It gets jammed in the head of the handle! Tom suggests that a smear of super glue on the free end of the string will make it last better.

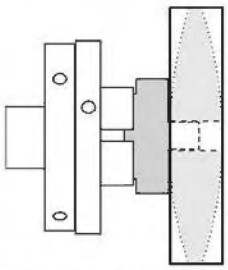
~ Demo by Tom Pearson
Report by Earl Culham
South Auckland Woodturners Guild

WOODTURNERS
SOUTH AUCKLAND WOODTURNERS GUILD INC
Turning Tomorrow's Treasures

A Spinning Top

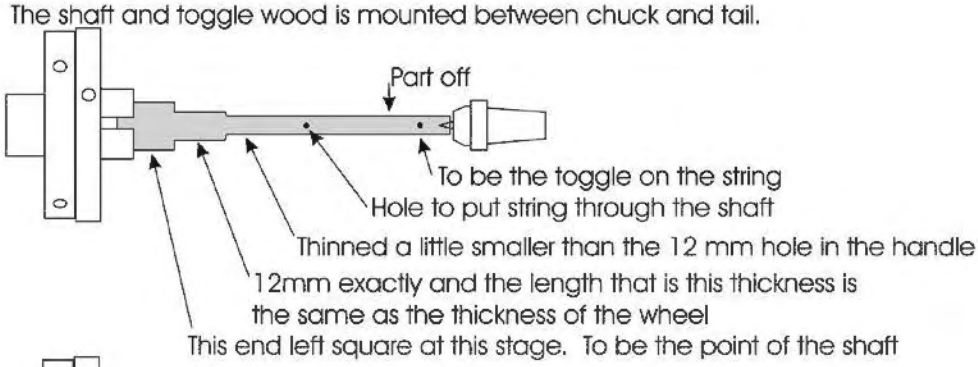
Parts List:
Shaft & Toggle 20 x 20 x 100
Handle 33 x 33 x 170
Wheel 80 dia x 20 thick
Nylon Cord 1.6mm x 300
Small round-head nail

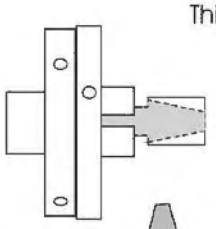
The wheel has a 12mm centre hole.
A jam chuck is the best way to mount the wheel for accurate results.
The handle is prepared by drilling 1 x 20mm hole anc 1 x 12mm hole as shown in the drawing below.



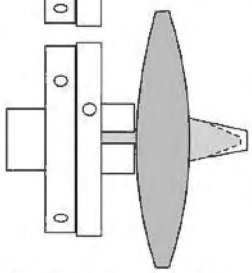
The wheel is firmly fitted onto the jam chuck by its centre hole.
One side is shaped and then the wheel is turned around and the other side is shaped.
Lines, spirals, and other decorations can be added.

The shaft and toggle wood is mounted between chuck and tail.



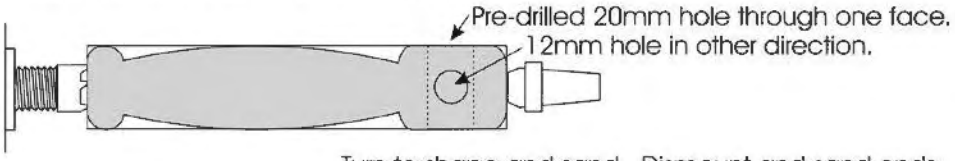


Reverse the wood and remount with most of the length inside the lathe head.
Start to shape the point, particularly the part that will be close to the wheel. Do not complete the point.



Glue the shaft into the wheel and remount.
Give the point of the shaft a final cut down to size.
Drill a small pilot hole into the exact centre of the end of the shaft.
Knock the round-head nail into this hole.

Mount the handle wood between centres.

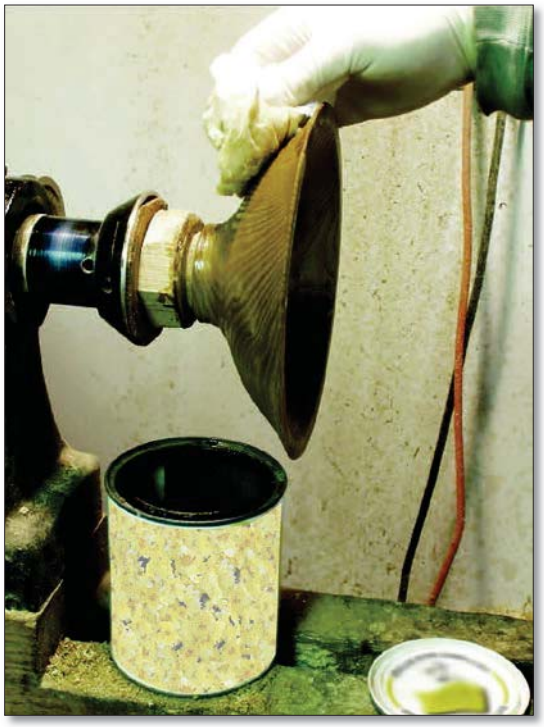


Turn to shape and sand. Dismount and sand ends.

This project sheet was printed from www.sawg.org.nz

FINISHING

Finishing Options for Woodturners



Finish brings an element of visual interest and protection to your woodturning. Many times wood- turners fall into one of two categories when it comes to finishing: (i) "McFinish Users,"[1] and "Miracle Finishers." McFinish Users put the same finish on everything, no matter the type of wood, the purpose of the piece, or any other variable. They have one finish which they have found to work, and they stick to it no matter the circumstance. Miracle Finishers think that some company makes something that they can apply to any piece of wood, no matter how poorly sanded, and it will miraculously look perfect.

Choosing a proper finish is no accident, but with a little thought you can achieve a finish that works. So let's look at some factors to achieving a good finish on some woodturned items.

IMPACT OF WOOD SPECIES, DESIGN, AND USE

The type of wood[2] you choose for your turning project will open and close doors to finishing options. Open-grain woods (oak and ash) respond differently than closed-grain woods (cherry and maple). Highly figured wood and burls will absorb and react to finish differently within the same blank. Some oily woods (rosewood and lignum) may need no finish at all due to the natural oils they contain. If you are using a wood species new to you, take a scrap and try a finish on it before you turn it, so you can take what you learn from the test and apply it to your work.

Design also impacts finish choices. Some designs that require multiple chucking may limit or prevent you from using certain finish options. For example, if you are finishing the inside of a lid, your ability to reverse chuck it to turn the outside without damaging the finish may be a problem with some types of finishes. So think through finishing early on in the design of the piece. Also think about whether or not the finish "matches" the design. An organic shape may not look right in glossy polyurethane varnish. Use is often overlooked in the consideration of finish choices by some woodturners. If something is going to sit on a shelf, the world is your oyster and

[1] I mean no disrespect to McDonald's Corporation, and instead I pay them a compliment on product consistency.

[2] I am not addressing non-wood materials such as acrylics in this article.

you can choose any finish (or no finish at all).[3] If I am making a utilitarian piece that will be knocked around the kitchen, a simple, reparable, utilitarian finish is my first choice, and I will pick a "forgiving" wood to make the piece from so that the finish and the wood help me get years of service. For example, the zebrawood peppermill that we use in our kitchen looks as good today as when it came into the house from the shop 3 years ago. It has a very simple design with no sharp ridges (to collect dirt or body oils). It was sanded to an 800 grit and given a simple oil and wax finish.

THE NAUGHTY WORD – "SANDING" AND ITS ROLE

I must stand up for sanding. I do not know why it gets such a bad rap in the woodworking world! Why is sanding "bad" and hogging out a rough-turned bowl "good"? From roughing through finishing you are involved in a process. Sanding makes or breaks the end result and should be part of the process. Sanding cannot cover up poor design or execution, but it can take a good piece and make it better, if done correctly.

Think about details before you sand. I often leave out small grooves and areas until the overall sanding is done. Then I add the small details (wire-burned grooves, for example) and then go back and blend in that area with the highest grit I left off with before I proceed to the next step. There is no rule that you cannot return to some detail turning after you have sanded. Go back and forth as the piece needs.

Turn down your lathe speed while you sand. If your paper is getting hot, it is either old or you are sanding too fast. Use dust-extraction equipment and wear a high-quality dust mask[4] at all times while sanding. Watch the dust flowing off the piece into the dust collector. When the dust slows down, the paper is no longer cutting efficiently.

On the topic of sandpaper, it is cheap[5] and it gets dull, so change out the paper more frequently. Rarely do you throw away "good" paper; usually you burnish the wood with dull paper and only generate heat and problems. If you have good tool control and if the wood is being

[3] Although you may want to consider dusting and UV protection qualities.

[4] Cheap dust masks usually have one strap, where better ones have two straps. It isn't a universal truism, but it will point you in a better direction. This is not a place to save money. Store dust masks in a plastic bag when they are -++++++++-++-not being used and throw them away when they look dirty. Learn about dust and protecting your health.

[5] I am not suggesting that all sandpaper is cheap, just in the grander scheme of what you pay during a year in wood working; sandpaper is not the biggest expense item. I am a proponent of purchasing "expensive" brand name paper (for example, ever hear of a little local company called 3m?) and have never been let down by high quality product.

understanding and forgiving, you may avoid the lower-grit papers. Start where you need to, depending on the situation. If you start with 120, then progress without skipping a grit until you reach your final sanding grit (120, 150, 180, 220, 320, 400…). Depending on use and finish, you may stop at 320, or I may go to 800[6]. Daily use knock-around pieces rarely benefit after 220 (other than using 320 and then a non-abrasive pad as a burnisher). A show piece may require a minimum of 800 grit, or even more!

On the topic of sanding disks, they get dull fast. Depending on the type of wood and composition of the disk, they may have a life measured in seconds! If you think I am kidding, hold a piece of 220-grit paper up to cocobolo! If the disk is building up with dust and debris, either clean it or change it out, but do not bear down on the paper with your drill on high speed and think you are doing something positive.[7]

I always burnish with a non-woven, non-abrasive pad (kitchen scrubbers from the dollar store work as well as the expensive commercial ones I used to buy). I find they smooth out any last "fuzz" in the piece and give a uniform surface for finish.

Now I must mention another ugly fact – not all sanding can be done on wood spinning on a lathe! Sometimes you must take it off the chuck and hand-sand it to get it right. Put on some good music, relax, and do it when you feel like putting the time into the work. I have a demo piece by a nationally renowned turner that I received unfinished. It took 10 hours of hand-sanding to get the piece ready for finishing. So buck up, and know that sometimes you just need to put in the work.

A CLEAN SHOP MAKES A BETTER FINISH

I recognize that there is a certain sense by some woodworkers and woodturners that a messy shop is a rite of passage in the craft. Setting that aside, take a lesson from professional cabinet shops and have a clean finishing area. If dust is hanging from lights and other surfaces, it will contaminate some types of finish and give you a poorer result. So if you want a messy shop, pick finishes that do not require longer drying times or do not collect dust as they dry.

Setting tidiness aside, having a finishing area in your shop is a good thing. Store finishes in a safe location to prevent fires. Keep your supplies in an organized area so that you can find them when needed. A side benefit of organization is that you will buy less as items will not get lost in the general abyss of the shop! Watch the life of products and properly dispose of old finishes. Yes, a big can is cheaper per ounce; however, will you use it during its shelf life? Avoid the temptation to use an old finish on something that you have crafted. More than once I have had to sand it all off and start over.

[6] Well, I have gone to 12,000, but let's not talk about my obsessive behavior!

[7] As I boy scout I was taught to start a fire by rubbing two sticks together over some kindling. See any similarities?

FINISHES ON THE LATHE

The lathe is a very versatile tool and lends itself to a broad spectrum of on-the-lathe finishing techniques. As most on-the-lathe techniques are designed to be fast drying, the size of the piece that can be finished on a lathe is generally limited to smaller items (pens, bottle stoppers, very small bowls, and other items generally less than 3 inches in diameter and modest in length.[8])

Finishes used on the lathe seem to fall into the following categories:

- Highly sanded and buffed pieces with no finish at all.[9]
- A dedicated "woodturners finish."[10]
- Oil.
- Oil and wax.
- Wax on bare wood.
- Wax and abrasives in a mixture.
- Shellac-based finishes.
- Lacquer-based finishes.
- Paint pens.[11]
- CA-glue finishes.[12]
- Some combination of the above.

On-the-lathe finishes are fast, provide great results, can result in a phenomenal shine, and provide instant gratification to the turner, so what is not to like! I find some woods respond well to them as do certain types of work (there is no better way to finish a pen or a bottle stopper). However, they have their limits.

Here are some tips:

- Use only paper towels to apply on-the-lathe finishes. Cloth fibers can wrap around a spinning lathe, creating a dangerous situation.
- Cover your lathe bed, ways, and anything else you care about, as spinning wood can throw the finish all over the shop.
- Use slow speeds for application and speed up the lathe for buffing and polishing.
- Use sanding sealer (either water, lacquer, or shellac base) before you apply finish.
- Work from one end of the piece to the other and push or flow the finish across the piece. That way you get a

[8] I am sure someone has done a 12" CA-finished bowl and can prove me wrong; however, as a general rule you can only get the finish on so fast with these techniques before the CA starts drying and impacting finish performance.

[9] Some woods have a high natural resin content that allows them to be sanded to a high gloss and buffed out to great results. Some man-made products such as Dymondwood® also achieve the same result.

[10] For example, General Finishes makes a water-based woodturners finish that dries fairly quickly (30 minutes per coat) and has no odors. It takes a little longer than lacquer- or shellac-based finishes but if you want a low odor and durable finish, it seems very hard after application.

[11] These work for embellishments or small objects, but are not really a viable finish for large areas. Some people use ink markers, but again they are of limited use other than enhancing chatter work or a simple groove.

[12] "CA" is the abbreviation for "cyanoacrylate" or the active ingredient in Super Glue, a registered trademark of the Super Glue Corporation, who holds various trademarks on its products.

more even finish and give your finish a path to avoid build-up in the middle.[13]
- Stop the lathe and check your progress. Fix problems as they are spotted (even if it means going back to re-turning an area or, heaven forbid, sanding!
- Finish the ends after you part it off and do any manual touch-up.
- Wear proper personal protective equipment and understand that a dust mask is not safe for protecting you from finish vapors.
- Be careful if you spray finishes on the lathe, as they "gum up the works."[14]

FINISHES OFF THE LATHE

The world is your oyster[15] when you finish off of the lathe! You can use any type of finish (other than a CA or "friction" finish designed to be applied on the lathe) on your work. If there is a problem with off-the-lathe finishes, it is that the options are so numerous and staggering that one can become confused and therefore just grab a finish and hope, rather than plan, for success.

I break down finishes into categories, but there are many approaches. If you like a finish category, refine your thinking within the category. If you have had trouble, try a different category and maybe your result will get better. Beauty is in the eye of the beholder.[16] Some people like to feel wood in their hands, and want the tactile warmth of the wood. Others like the shine of a car hood and want maximum gloss. Some want reparability. Others seek environmental friendly or "green" alternatives. All are fine. Figure out where you want to go and then move in that direction. Some options include:

- Nothing--sanded, bare wood is nice to hold.
- Wax (or colored wax) on bare wood.
- Oil family of finishes (tung, danish oil, walnut, mineral, linseed, Tru Oil (gun finish), other oil blends).
- Water-based finishes for wood turners.
- Polyurethanes (vary in types, sheens, thicknesses, and drying times).
- Lacquers (either clear [various sheens] or colored)
- Shellac (premixed, flake, and various levels of color from clear to amber).
- Milk paint[17].
- The home brews (ink, vinegar and steel wool, and a whole host of blends of various finishes).

[13] I find this technique particularly effective with Hut wax sticks and you can actually watch the wax flow across the piece.

[14] This phrase's origin is a reference to the sweet gum tree (or red gum tree) located in the eastern United States. Apparently children and early American settlers chewed the sap as we do sticks of gum. However, it was supposedly impossible to harvest the gum without creating a very sticky mess. Hence the phrase we now enjoy today.

[15] Thank you to Shakespeare for bringing this phrase to our lives.

[16] Or the judge or the person parting with their cash to buy what you are selling.

[17] Milk paint is a fascinating finish and I suggest you try it. It comes as a dry powder so it has an indefinite shelf life. You mix only what you need and it is extremely durable when dry. It has no odor and it comes in a wide array of colors.

I blend my own wiping varnish using a fairly typical blend that has many variants and names. It goes as follows:

First Coat :

- 1/3 Fast Dry Polyurethane (Gloss)[18]
- 1/3 Boiled Linseed Oil
- 1/3 Mineral Spirits

(Please note I mix only what I will use for that first coat so the quantities are small.)

Middle Coat(s)

- 2/3 Fast Dry Polyurethane
- 1/3 Mineral Spirits

Final Coat[19]

- 1/2 Fast Dry Polyurethane
- 1/2 Mineral Spirits

FOOD SAFE?

I am now embarking on one of the most controversial areas of finishing. So let's start at the end of the analysis--common sense should prevail. People are not dropping dead in mass from finish on dinnerware. The Centers for Disease Control has no outstanding dinnerware alerts due to the malevolent action of woodturners. In fact, dinnerware on a global level is often not washed, or if washed, not in potable water. Those people seem to live. So, if we apply common sense, if a modern finish is applied to wood and allowed to fully cure you will be fine.[20]

Most of the dialog seems to focus on cure time. I have read two ideas that seem to make sense to me. When in doubt, wait a month after finishing a piece before you put food in it. Any modern finish that is fresh, properly applied according to directions, and has not failed in some way will be cured in 30 days. The second test is the smell test. When you smell the piece, if you smell finish you are really smelling the vehicle evaporating from the finish. So if it smells, it hasn't fully cured. That is what curing is, getting the vehicle out.

[18] You cannot increase the gloss of semi-gloss or flat finishes as they contain dulling additives. You can decrease the sheen of gloss at the end so I always use only gloss finishes.

[19] Prior to my last coat I sand with 400 or 600 grit serrate paper and wipe the whole piece down carefully, avoiding skin oils and other contaminates. The last coat is thinned to just fill in those final sanding scratches. It also dries faster due to the higher vehicle content so I get less surface dust attraction. This coat is usually put on late at night or early in the morning when the shop is still and I am not stirring up dust in the air.

[20] I am not advocating putting helpings of polyurethane in your coffee, or shellac in your tea. The quantities of vehicle that could be left after 30 days in a cereal-bowl-size piece are so small that it will not be harmful to a full-grown adult. Sure be safe with toddlers and kids, I wouldn't let them chew on a bowl, but need I write this comment down, or have we lost the common sense rule?

Some finishes seem to be more frequently mentioned as food safe and they include:

- Leaving the wood bare.
- "Salad Bowl" finishes (which seem to be polyurethane-based if my nose is working right).[21]

- Walnut oil, mineral oil,[22] butcher block oil, and some of the other "food safe" oils. Avoid salad oil, olive oil, or cooking oils, as the general consensus seems to be they can go rancid in wood.
- Fully cured polyurethane, shellac, Danish oil, and lacquer.[23]

COLOR AND BEYOND

I must profess that I am new to coloring wood and some would say it goes against my grain.[24] Normally I look for wood with great grain and leave well enough alone. Lately I have been experimenting with color and find it has its place in my turning toolbox. Color comes in many forms from paint, milk paint, dye, stain, charring, bleach,[25] and lacquer. Play around and see if it works for you. Remember to wear personal protection equipment (eyes, gloves, and an apron). Otherwise you will look like a Smirf.

WHEN SOMETHING GOES WRONG[26]

Yes, things go wrong, and with finishing woodturnings, it will happen. You are between finishing problems, not through with them. Hopefully they happen less frequently and the reparability of the problem is more easily accomplished if you sort through this approach to problem solving.

Here are areas to use in diagnosing what went wrong with your finish:

- **Old finish**. If there is a first place to look, it is cruddy, crusty, out-of-date finish. Here is a tip-- buy smaller cans and use it up. I believe there is false economy in purchasing vats of finish and having it sit around for years.[27] I buy the smallest size that meets my needs for the next 30-60 days. That may mean I buy a pint or quart of something four times a year. So stop, buy a latte, purchase new finish, and be happy. Finish has a shelf life that starts ticking at the time of manufacture, not when you buy it. If the can is dusty, do not buy the can. I cannot read date codes on finish, so I buy from sources that turn the product frequently and I do not stock up on finish, even if it is on sale. In magic marker mark the date on the can when you brought it home and use it up (you can always finish your jigs if you are getting near the bottom of the can).[28]

[21] For example, General Finishes "Salad Bowl Finish" states to wait at least 72 hours after the last coat before use. I have used this finish on several occasions with good luck, and find that it does create a pleasing finish.
[22] Why did my great grandmother make me swallow a tablespoon of this when my stomach was upset?
[23] I wouldn't eat out of something covered in latex paint, but that is just me.
[24] Sheldon is my humor coach, ah ah!
[25] Wood-bleaching products remove color but I lump them in here.

[26] I am a husband, father of two children, and a guy; yes, I admit things do go wrong.
[27] Tip: the same holds true for glue, but alas, I am getting off topic, a frequent problem.
[28] Always properly dispose of old finish. Don't get lazy, do it for your children and grandchildren.

- **Contaminants in the can**. You are not supposed to dip a brush (or applicator) into a can and apply finish from an original can. Pour finish into another container and do not return the unused portion to the original can. If you see junk in the can, strain it or properly dispose of it, but do not use it on your fine work.

- **Environmental problems such as temperature and humidity**. When you buy a can of finish, it is not like gasoline--there is no summer blend or winter blend.[29] So the manufacturer is forced to make a compromise in what they sell. That is why you must evaluate if you use finish as mixed by the manufacturer or thin it (or add something else to it) based on your application. Some days where I live it is too humid to spray lacquer without "blush" occurring in the finish. So wait until the humidity drops. Similarly, if a finish has a minimum temperature recommendation, do not put on a coat of poly in a shop that is 42 degrees! Use common sense and pay attention to temperature and humidity factors.[30]

- **Insufficient drying time**. Ever read that little label on a can of finish? There is a section called "Drying Time," catchy name! Ironically if a finish takes 2-4 hours to dry, it doesn't always like to have the second coat put on in twenty minutes because you are in a hurry. Most finishes are made up of two major components, the part you want to leave on the wood (think of the solid part) and the "vehicle" (oil, water, alcohol, or something else that allows the finish to be a liquid and to spread). The vehicle needs to evaporate before the finish is really dry. By the way, dry to the touch and dry is not the same thing. Most finishes dry from the outside in, so there may be a dry skim coat on top and wet finish below. That is why the manufacturers define drying time as something other than "if you want to smear on another coat, go ahead."

- **Environmental contaminates**. Dust, bugs, and certain chemicals (such as silicone) are not your friend when you finish. If your finish isn't smooth, it's probably a result of either dust or bad technique. If you have specks in the finish, look for contaminants in your finish or bugs.[31] Round circles of unfinished wood are usually caused by silicone contamination, commonly referred to as "fish eyes."

- **Incompatible finishes**. If you are layering on finishes by using for example (i) a sanding sealer, then a top finish; or (ii) an on-the-lathe finish and then something after it comes off, and something goes wrong with the second finish-- look at finish incompatibility. I have had finishes get "gummy," pull away from the base finish, crack, become an alligator skin, and never seem to dry. In short, it can happen. When it does, read about the finishes you used and find out why it happened so you know for next time.

[29] Did you know your gas is blended differently throughout the year and has different amounts of something or other in it depending on the time of year to help your car run better?

[30] I am no chemist, but it seems as finish ages it becomes more susceptible to environmental factors.

[31] Seriously, I just sprayed a coat of lacquer as I was writing this paragraph and laminated a mosquito into a tool handle, ugh!

- **Bad technique**. I know, I know, your technique is perfect, but hear me out. If your finish fails and you have eliminated all of the above, maybe, just maybe, you have to look in the mirror. Seriously, too much finish in one coat (trying to do one heavy coat in place of several proper coats), too much oil in one coat,[32] using dirty applicators (lint[33], dust, and dirt transfer), using the wrong finish for the situation, using the wrong applicator, not maintaining a "wet" edge, not reading the product instructions, improper mixing or application, all can result in failure.

Whenever you have a finish failure, walk away for a minute, say those few choice words,[34] then diagnose the problem, get to the bottom of it, and find a solution so that it isn't a recurring event.

~ Mark Palma
Cameron, WI

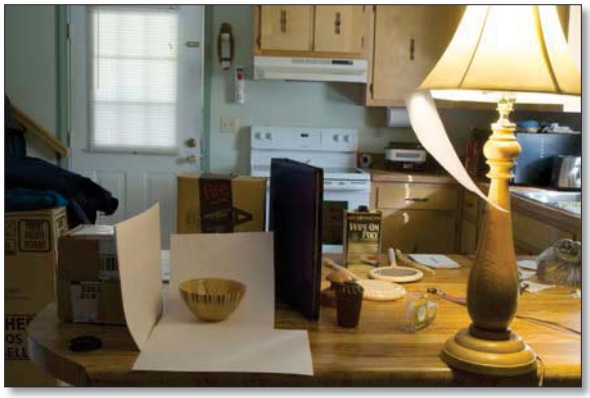
Mark Palma is a tax lawyer by day and a woodworker whenever he finds that "spare" time that isn't spoken for. He thanks his family for allowing him to have a shop, a tool allowance, wood stash, and the time to pursue his addictive hobby.

[32] Often called "bleeding" results in finish coming to the surface in open grain woods for days or weeks.
[33] Of course, if you are using a cloth instead of paper towels, you are finishing off the lathe and never on the lathe. Safety Reminder #1 --never use a cloth on a spinning lathe. Safety Reminder #2 -- always properly dispose of applicators and solvents. Charring wood should be intentional, not part of a conflagration that consumes your shop.
[34] I grew up in a strict Catholic family so that resulted in a trip to the confessional for some Our Father's and Hail Mary's, but use your own tension-release mechanism of choice. The point is to get past being mad and start to diagnose the problem.

SIMPLE PHOTO TECHNIQUE

Getting Started with Minimal Gear

As a university photographer I was often put in a situation where I had very minimal gear and very little time and still needed to produce publication quality work. Consequently I learned to work with whatever light was available. It's mostly about understanding some basic principles about light and then learning to see how the light shapes the object. Here is a very simple technique for photographing your work.



All you need is one light, some typing paper, and a camera and tripod. The most important thing is to be able to hold the camera steady so you have an accurately focused, sharp photo. Use a tripod and either a cable release or the camera's self-timer. This allows you to properly frame the photo, focus accurately, and not have camera shake, which can blur the image.

The second important step is to know what kind of light you have so you can properly match your camera's white balance setting. Most cameras today have an adjustable white balance setting, which is usually Auto, Tungsten, Daylight, Fluorescent, and sometimes a few others. I suggest going to the store and buying one of the new FLD bulbs. Don't buy daylight or warm balance bulbs--you don't really know what that means and neither do I. Buy one that has a color temperature listed on the box, listed in Degrees Kelvin. 2700K is close enough to the tungsten setting and 5000 or 6500 is close enough to the daylight setting to work well. The best way by far is to use Custom White balance if your camera has that.

For this simple technique I use a piece of white printer paper as my background. If your pieces are larger, use bigger paper. I taped it to a cardboard box so I could make the background paper sweep in an arc down to the table. I moved it back far enough on the table that I could take a standard table lamp and be able to move it forward in front of the piece and to one side. It's important to be able to move the lamp around the piece so you can learn to see what the light is doing. Usually you want the top and front of the piece illuminated.

Position the lamp to show off the piece's best features. Usually the lamp will be higher than the piece and forward enough to light the front. To cut down on nasty reflections and to soften the shadow, I taped another piece of printer paper to the lampshade and the lamp. This acts like a diffuser and gives a better-looking light. Now you need to soften the shadow side so it's not as harsh. I did that by taping another piece of paper (in this case a bill I hadn't paid yet) to another small box so I can bounce light back into the shadow side of the piece. For bowls it might also be necessary to put another piece of paper on the table in front of the piece to bounce light back into the bottom.

Shoot several photos, checking the focus carefully. Bracket your photos. By this I mean over- and under- expose the shots so when you get to the computer, you can pick the best one. You can do this on fully auto cameras by using the +/- exposure button.

Fortunately with today's digital cameras you can see the image immediately. Shoot one set, move the light, and try again. The more you do this, the more you learn to see what the light does on that piece. Each piece will photograph differently so you may need to move the light a lot and experiment with different places for the reflector fill. You may also have to move the light up or down, so be prepared for that option.

In this shot I had to close the blinds on the windows because they were too bright. I also had to put a binder up on the right side to block the reflection of the window above the sink. Your exposures will be quite long but the tripod should take care of that. My exposures were in the 1- to 3-second range. I used a bulb marked 6500K and set my camera to the daylight setting. Then it was just a matter of focusing the camera accurately and shooting the photo.

~ John Lucas, a retired photographer, has been working in wood for about 35 years and also dabbles in metalworking. He also enjoys modifying machines, making tools, and sharing his knowledge though written articles and videos. He has taught classes at John C. Campbell Folk School, Arrowmont, and The Appalachian Center for Crafts. johnclucas@charter.net

SHOP TIPS

Snagging, Pinching, and Crushing Fingers

Things happen on the lathe incredibly quickly. One moment you are turning happily, and an eye-blink later your emerging work of art is kindling or a useful body part is damaged.

I've written about some of my woodworking injuries, and what stands out most in my mind is how quickly they occurred. I didn't realize I was about to get hurt, and when things went wrong, I didn't have time to react. I was fine and then I was hurt.

Because things happen on the lathe so quickly, we can really only avoid injury by avoiding putting ourselves in situations where injury is likely to happen. We have to avoid the situation, because we won't have time to get ourselves out of the situation if things start to go bad.

Happily, there are lots of injury-causing situations that are easy to avoid. One such situation is getting your fingers snagged, pinched, and crushed when you touch sandpaper, finishing cloths, or other material to the spinning wood. If the paper, cloth, or other material is long enough to wrap around a finger, the spinning wood can catch the material, wrap it around a finger, and draw your finger and the rest of you into the spinning wood.

If your finger is simply pulled into the spinning wood, that is bad and it can hurt a lot. But it can be much worse if you haven't bothered to move your toolrest away from the spinning wood. If the toolrest is close to the spinning wood and your finger gets pulled into the spinning wood, the paper, cloth, or other material may drag your size ten fingers through a size two gap between the toolrest and the spinning wood, causing a very uncomfortable resizing of one or more perfectly good fingers and their attached hand.

There are two easy steps we can all take to avoid this kind of injury:

1. Before you hold sandpaper, a cloth with finish, or any other material up to the spinning wood, move the banjo well away from the spinning wood, and *take the toolrest out of the banjo*. If the toolrest isn't there, the lathe can't pinch your fingers between the toolrest and the wood.

2. When you hold sandpaper, a cloth with finish, or any other material up to the spinning wood, make sure the piece of material is so small it cannot wrap around a finger or any other body part.

Your fingers and hands are already the perfect size; don't let the lathe change them!

~ Harvey Rogers, Portland Oregon
harveyrogers@gmail.com

SHOP TIPS

Sandpaper Rack

I made this rack for my sandpaper from a picture Vern Bunn, an Internet friend in Australia, sent me. I knew it would work for me. I was right—I use it every day I am on the lathe.

The base is a magnetic stand with an on/off switch, which makes it portable, a threaded rod, pipe, wood spacers, and steel strapping bent to make the fingers that hold the paper. I don't have to mark the paper with sizes, I simply use the next piece in line.

~ Bruce Holden
Collinsville, OK

Sanding Tip

During sanding of a bowl, wet it down and let it dry when you are at about 180 grit sanding and again when at about 280 or 320 grit. This will raise the grain and should help to improve the final finish.

~Floyd Anstaett
Johnstown, OH
Central Ohio Woodturners

New Service from AAW

AAW | AMERICAN ASSOCIATION OF WOODTURNERS
AAW Connects

AAW Connects is a one-stop, web-based map tool that "connects" users with information about international woodturning schools, woodturning organizations, exhibitions, and symposia, as well as AAW chapters, chapter events, and demonstrations. This visual tool can help woodturners around the globe connect with turning resources in their regions. Take AAW Connects for a test drive today!

Shopmade Faceplates

Free up expensive faceplates by making inexpensive ones. Buy threaded nuts to match the threads on your lathe's headstock spindle. Use seasoned hardwood that is about 1 ½" (40mm) thick.

In the center of the blank, drill an appropriately sized hole for the nut to have a tight fit. Use a Forstner bit and drill deep enough so that the top of the nut will match with the stop collar on your lathe's headstock spindles.

If you do not have a Forstner bit that ideally matches the nut, drill a slightly undersized hole, then mount the blank, centered and with the hole toward the tailstock, onto a faceplate using double-sided tape. With tailstock in place, using a revolving center, true up the blank.

Enlarge the hole to allow a snug fit of the nut and cut it deep enough to encase the nut. Remove the blank from the lathe, rough up one face of a nut with coarse abrasive, and apply medium CA glue into the hole where the nut will rest. Press and hold the nut in the hole, using your drill press as a clamp.

After the CA has cured, fill the six open spaces around the nut with five-minute epoxy and allow the epoxy to harden. Remove excess epoxy from the face of the nut.

Mount the blank onto your lathe and true up the face and edge. (Caution – you may need to use a washer or spacer if the nut does not bottom out on the collar of the headstock spindles.)

Use these faceplates for sanding or honing disks. They are also useful for fluing small turning blanks or using double-faced tape to secure your turning stock.

~ James L. Pruitt
Mountain Home, AR

New Service from AAW

Woodturning Marketspace is an online advertiser hub that consolidates all AAW's business supporter logos onto one webpage list. The logos are hot-linked and users may "click-through" directly to advertiser websites, which makes finding information about woodturning products and services easy. Plus, Marketspace offers discounts for AAW members not otherwise available elsewhere. Visit the Woodturning Marketspace!

AAW | AMERICAN ASSOCIATION OF WOODTURNERS
Marketspace

WOODTURNING FUN VIDEO

Video Tip on Safely Transporting Tools

- A Method For Safely Transporting Tools By Les Casteel (TRT 4:42).
- Video link: http://vimeo.com/woodturner/review/107388859/9c54d8cd24
- Tip: If you have trouble accessing the video directly from this document, you may copy the video link and paste it directly into your browser.

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.

WOODTURNING FUN VIDEO

Tips for Bleaching Wood

- Joe Fleming with video tips for bleaching wood (TRT 1:33).
- Video link: http://vimeo.com/woodturner/review/107332028/c34cfd9ec5
- Tip: If you have trouble accessing the video directly from this document, you may copy the video link and paste it directly into your browser.

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.

MEMBER GALLERY

Richard Overby
La Center, Kentucky

This piece was inspired by Malcolm Tibbetts—a professional turner from out west. This piece is made up of 50 layers of segments and uses 10 different species of woods—the main portion being butternut. It has 2,153 pieces making it up. This is my first attempt at turning segmented bowls.

Janice Levi
Groesbeck, Texas

I began turning wood about 14 years ago and like most new turners, I turned every type of wood and every type of shape that I could imagine. I then began to decorate those turnings. During the past three years, I have concentrated on turning wearable art—jewelry and purses. These tiny bits of wood provide endless opportunities for shape and style and enhancement. And the best part is, I can wear them!

1. Jungle Barrel Style Purse: Mimosa is the unlikely wood used to create this purse. The natural grain is enhanced with pyrography. I began making this style of purse about three years ago in an attempt to create art objects from wood that could be worn, or in the case of purses, carried.
2. Navajo Medicine Bag Necklace: When I was invited to show some of my jewelry pieces in AAW's 2014 symposium in Phoenix in the Thomas Riley Gallery exhibit, I wanted to create something Native American-inspired. Leather Navajo medicine bags are common, and this is my version but in wood.
3. Merging: The holly and ebony wood droplets cascade downward until they merge into the zebra wood droplets. This 72-bead necklace will be on display in AAW's 2015 exhibit, *Merging*.

Sandy Huse
Los Angeles, California

I work primarily as a sculptor & mixed-media artist with wood being my most important material of choice in order to make pieces that have a personal narration for me. Often, I begin with a word or phrase that appears in my head & go forward with that in mind to illustrate, entertain or amuse.

Discussions often happen when people view my art. While my pieces are almost representational, there is a lot of wiggle-room about what they are or what they depict & I relish hearing what others see in what I have created. Even such simple items as bowls are planned & executed in order to have the viewer see "bowl" in a different light; not simply a container for fruit or cereal, but as an extension of the spirit of the tree.

I have also discovered wood's organic nature can add an element of surprise & opportunity. Despite all planning, cracks may open up unexpectedly, bark may chip off, an inclusion appears when the wood is carved. All of these force me to adapt continually & to see possibilities in potential disaster.

Submissions

Want to share your work in *Woodturning FUNdamentals*? Please send your high-resolution images along with title, size, and materials used to linda@woodturner.org.

Want to "pay it forward"? *Woodturning FUNdamentals* welcomes other content including tips, projects, and informational articles. Please send your content ideas to linda@woodturner.org. The deadline for submissions for the May issue of *Woodturning FUNdamentals* is April 13, 2015.

Please note: All content submitted may be subject to edit.

AAW 29TH INTERNATIONAL SYMPOSIUM

DAVID L. LAWRENCE CONVENTION CENTER
PITTBURGH, PENNSYLVANIA • JUNE 25-28

Our international symposium is an excellent opportunity to watch world-class demonstrators share their techniques, to find out about the latest innovations in tools and materials, and to be inspired by the Instant Gallery and other woodturning exhibits. Join us to experience in person the creative passion of woodturning while enjoying the company of others who share your interests.

DEMONSTRATORS AND PANELISTS

See the February journal for a listing of the featured demonstrators' rotation titles.

RICK ANGUS
MARK BAKER
STUART BATTY
JOHN BEAVER
JEFF BENNETT
JERRY BENNETT
JEFF BERNSTEIN
DIXIE BIGGS
MICHAEL BROLLY
JACK BROWN
CHRISTIAN BURCHARD
ZINA BURLOIU
KIP CHRISTENSEN
JASON CLARK
NICK COOK
BARBARA DILL
ANDY DIPIETRO
SHARON DOUGHTIE
CINDY DROZDA
DAVID ELLSWORTH
DICK GERARD
ASHLEY HARWOOD
STEPHEN HATCHER
BILL HAYES
DAVE HINKELMAN
LYLE JAMIESON
STEVEN KENNARD
JERRY KERMODE
CRAIG KIRKS
HUBERT LANDRI
JANICE LEVI
KRISTIN LEVIER
STEVE LOAR
ALAIN MAILLAND
JOHANNES MICHELSEN
PASCAL OUDET
BINH PHO
JOEY RICHARDSON
AVELINO SAMUEL
BETTY SCARPINO
TED SOKOLOWSKI
MARK ST. LEGER
ANDI SULLIVAN
JASON SWANSON
NEIL TURNER
JACQUES VESERY
HELGA WINTER
MOLLY WINTON
TIM YODER
MALCOLM ZANDER

Photo: Andi Wolfe

JOIN US IN PITTSBURGH, PENNSYLVANIA, FOR AAW'S 29TH INTERNATIONAL SYMPOSIUM JUNE 25–28

Our international symposium is an excellent opportunity to watch world-class demonstrators share their techniques, to find out about the latest innovations in tools and materials, and to be inspired by the Instant Gallery and other woodturning exhibits. Join us to experience in person the creative passion of woodturning while enjoying the company of others who share your interests.

SYMPOSIUM HOTEL

When you make a reservation, mention that you're with the American Association of Woodturners to ensure you receive the special group rate.

AAW group rates are also available at the **Omni William Penn Hotel** (a ten-minute walk to the David L. Lawrence Convention Center). The AAW group rate is $145 for a standard king or two double beds. Complimentary wireless Internet is provided in all guest rooms.

INVITED DEMONSTRATORS

Mark Baker, England

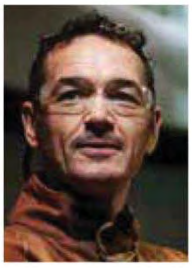
- Lidded vessels—repeated in each rotation with changes in surface enhancement for each
- Turned and surface-enhanced bowls
- Classical tazza
- Contemporary tazza

Classically Inspired Tazza, 2014, Figured sycamore, spalted beech, 12" × 15" (30cm × 38cm)

Contemporary Style Tazza, 2014, Burr poplar, ebonized sycamore, 11" × 15" × 15" (28cm × 38cm × 38cm)

Stuart Batty, Colorado

- Perfecting the Art of Cutting
- Bowl Turning with the 40/40 Grind
- The Seven Setup Fundamentals



Double Wing Bowl

Jerry Bennett, Texas

- Segmentology: taking the guesswork out of cutting accurate segments
- Wood sculpture techniques in large scale
- Open-aligned vessels

Twist and Shout, 2013, Mahogany, ebony, maple, steel, brass, nickel, 54" × 39" × 25" (137cm × 99cm × 64cm)

Michael Brolly, Pennsylvania

- Sandblasting for dramatic effect
- Sandblasting to tell stories

Let's Dance, 2014, Douglas fir, bronze, 12" × 11" × 11" (30cm × 28cm × 28cm)

Christian Burchard, Oregon

- 30 years of wrestling with wood: talk and slide presentation
- Turning spheres freehand, with simple surface decoration, centered and off-center
- Green-turned hollow vessels, with roots and root burls

3 White Pots, 2014, Bleached madrone root, 11" × 15" × 12" (28cm × 38cm × 30cm)

Nick Cook, Georgia

- Light up your life with turned table lamps
- Turned for use: production items for the marketplace
- Turning pepper mills and salt shakers

Pepper mills and salt shakers

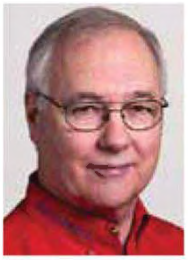
David Ellsworth, Pennsylvania

- Hollow form from a log using Ellsworth Signature gouge and hollowing tools of his own design
- Open bowl from half log using Ellsworth Signature gouge
- Natural edge open bowl from half log using Ellsworth Signature gouge

Sphere, 2013, Spalted maple, 9" × 9" (23cm × 23cm)

Lyle Jamieson, Michigan

- Foundations of bowl turning
- Foundations of hollow form turning
- Thin-walled goblet
- Advanced hollow form techniques

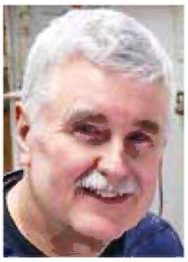


Mantle of Power, 2005, Elm, 10" × 7" × 7" (25cm × 18cm × 18cm)

Photo: Don Rutt

Steve Kennard, Canada

- Making a "teardrop" box from African blackwood
- Making a cylindrical box with decorative rings—Part 1 of 2: preparation and assembly of decorative inlaid rings
- Making a cylindrical box with decorative rings—Part 2 of 2: turning box blank, sizing and fitting lid, and hollowing to accept a burl lining
- Looking at surface embellishment using texturing techniques



Tower II, 2008, African Blackwood, cocobolo, thuya root burl, 5" × 3" (13cm × 8cm)

Craig Kirks, Minnesota

- Curved design elements for segmented woodturnings
- Methods and jigs for accurate segmented work
- Making a torus (doughnut shaped) segmented vessel

Wings, 2012, Macassar ebony, bloodwood, curly maple, 6½" × 8¼" × 1⅜" (17cm × 21cm × 4cm)

Alain Mailland, France

- Turning and carving a carnivore flower, including use of Escoulen chuck, steam bending, hollowing, and carving
- Turning and carving a tree and flower from a French root burl
- Turning a coral nest using Escoulen chuck
- How I realize: a slideshow story of my inspirations and process
- Overview of French contemporary woodturning, slideshow

The Birth of the Viking Ships, 2014, Cherry graft, airbrush colors, 9" × 17¼" (23cm × 44cm)

JoHannes Michelsen, Vermont

- Full-sized wearable hats, different styles for each rotation
- Miniature hats
- Ancillary hat items: mirror frames from waste rings, wall racks, and stands for hats

Slouch Hat, 2003, Bastogne walnut, 18" × 14" × 15" on stand (46cm × 36cm × 38cm)

Pascal Oudet, France

- French dentelle (French lace) from green wood, with sandblasting
- Combining turning and carving: making of a teapot
- What's going on in France: slideshow of recent work by French woodturners
- Making an original box

Bowls, 2014, Turned and sandblasted oak, largest: 4¾" (12cm) diameter

Joey Richardson, England

- Thin-walled turning, piercing, and texturing from green wood
- Floral form design, texturing, and carving
- Airbrushing and color to capture the mood and story of each piece

My Habitat, 2014, Sycamore, cast glass, 9" × 5" × 6" (23cm × 13cm × 15cm)

Avelino Samuel, St. John, Virgin Islands

- Turning and layout of spiral-carved side-lying vessel
- Carving, sanding, and texturing a spiral-carved side-lying vessel
- Turning and layout of spiral-carved vessel with convex and concave segments
- Carving the spiral-carved vessel with convex and concave segments
- Turning finials, collars, and feet

Untitled, 2014, Mahogany, 7" × 5½" (18cm × 14cm)

Mark St. Leger, Virginia

- Rock-A-Bye box
- Square lidded box

Hanging in the Balance, 2008, Maple, 4" × 9" × 3½" (10cm × 23cm × 9cm)

Jacques Vesery, Maine

- The need for beauty in bowls; good form attracts good function
- Concepts in design and form; form trumps pretty wood
- Inspiration, challenge, and evolution; works by J. Vesery, image presentation and discussion

Une Triade de Mon Moi Intérieur (a triad of my inner self), 2008, Cherry, acrylics, dyed silver leaf, blackwood, bronze, 13" × 6" × 6" (33cm × 15cm × 15cm)

Seaspoon, Teaspoon... Same Difference, 2010, Cherry, dyed silver leaf, acrylics, 8" × 3" × 3" (20cm × 8cm × 8cm)

AAW | AMERICAN ASSOCIATION OF WOODTURNERS

Demonstrators

Rick Angus, Connecticut
- How Knife-Edge Tools Cut
- Endgrain Lidded Box

Untitled, 2014, Curly soft maple, cherry, 9" × 3½"

Jack Brown, Pennsylvania
- Scalloped Christmas Ornament with Five Points

Five-Point Ornament, 2014, Hard maple, 7" × 2"

Kip Christensen, Utah
- Principles and Techniques of Clean Cutting

Blackened Sepulcher, 2009, Russian olive burl, 5" × 5¾"

Jason Clark, Arizona
- Unconventional Hollow Form—Turning the Torus

Torus VIII, 2014, Redwood burl, 3½" × 9"

Barbara Dill, Virginia
- How to Understand Multiaxis Spindle Turning
- The Challenge and Magic of Multiaxis Spindle Turning (slide show)
- Using the Lathe as a Carving Tool

Close-up of Cluck, Clook, Click, 2014, Walnut, cherry, holly, 19" × 3½"

Cindy Drozda, Colorado
- Maximizing Burl Figure
- Fabulous Finials

Dance of Life, 2014, Coolibah burl, African blackwood, tallest: 12" × 5½"

Dick Gerard, Indiana
- Turning and Decorating Spheres

Boat Full of Balls, 2014, Maple, birch, walnut, bloodwood, padauk, bubinga, cottonwood, cocobolo, 6" × 24" × 3"

Ashley Harwood, South Carolina
- Turning for Jewelry
- Rim and Foot Design on a Bowl

Stephen Hatcher, Washington
- Creating Unique Bowl and Platter Accents
- Feet, Lid, and Finial Techniques
- The Half-Moon Form

Arctic Sun, 2014, Zircote, ebony, big leaf maple, mineral crystal inlays, dye, 18" × 14" × 3"

Jerry Kermode, California
- Natural-edge Bowls with a Stitch
- Beginning Bowls and Plates

Natural-edge Calabash, 2014, Box elder burl, 4½" × 7¾" × 7½"

Hubert Landri, France
- Manufacturing a Ladle
- Making a Tea Pot

Janice Levi, Texas
- Pyrography Basics

Colleen Okamura Turtle Necklace, 2014, Holly, 2⅝" × 4"
Photo: Tom Levi

Ted Sokolowski, Pennsylvania
- Making a Peppermill or Saltmill

Oriental Peppermill, 2013, Macassar ebony, spalted curly maple, bronze casting, 7½" × 5½"

Jason Swanson, Wisconsin
- Constructing a Staved Segmented Turning Blank

Salt and Peppermill Set, 2014, Curly walnut, curly hard maple, Honduras mahogany, 10" tall

Neil Turner, Australia
- Open Form with Coral Texture
- Sea Urchin Box

Sea Urchin Box, 2013, Jacaranda, 2¾" × 2½"
Photo: Suellen Turner

Molly Winton, Washington
- Making and Use of Homemade Pyrography Brands
- Intro to Surface Enhancements

Caballos Ascendentes, 2014, Camphor burl, 6" × 3½"

Tim Yoder, Oklahoma
- Video for Clubs and Demonstrators
- Catches

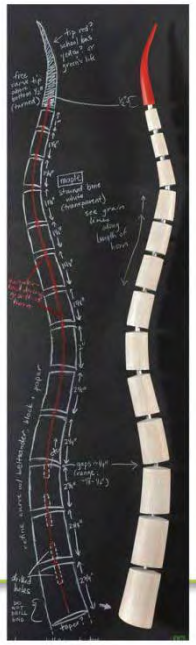
Forrest Floor, 2014, Maple, bubinga, lacewood, zebrawood, walnut, purpleheart, tallest: 8" × 1¾"

POP SHOWCASE ARTISTS

This year's Professional Outreach Program (POP) Artist Showcase will feature Kristin LeVier and Helga Winter. In addition to their individual rotations noted below, Kristin and Helga will participate in a POP panel discussion, "How We Got There," in which they will present their work and describe their own pathways toward recognition in the woodturning field. Helga is known for her elegant and fragile bleached or colored madrone pieces; Kristin for her flowing organic forms inspired by nature. Join these two outstanding artists and follow their artistic journeys, which have led to their selection by the POP committee for this prestigious honor.

Kristin LeVier, Idaho

- **Concept to Creation: The Process from Sketch to Finished Object**



Horn 4, 2015, Maple, aluminum, acrylic paint, pencil, 34" x 9½" x 3½"

Photo: Jonathan Billing, Archer Photography

Helga Winter

- **Surface Embellishments: Wax Resist and Encaustics**

The Sky Stealer, 2014, Madrone, unpigmented beeswax, fiber reactive dyes, encaustic gesso, seaweed, 5" x 12¼" x 11¾"

Photo: Carmen Anderson

AAW | AMERICAN ASSOCIATION OF WOODTURNERS

Craft Room

The Companion Program for this year's AAW symposium, including the craft room, is being coordinated by the Society of Contemporary Craft (contemporarycraft.org). We are excited about this partnership and will be able to offer attendees an outstanding variety of activities, including tours, demonstrations, lectures, and hands-on classes. The lectures and hands-on topics include Wire Crochet Bracelets, Lotion/Soap Making, Enameling, Polymer Clay Demo, Paper from Weeds, Assemblage Jewelry, Mug Rugs: Found Fiber, and Textured Metal Jewelry. There will also be guided tours of the Society of Contemporary Craft.

Visit woodturner.org for links to tours and to register for companion program classes.

SYMPOSIUM HOTELS

Host Hotel

Westin Convention Center Hotel, Pittsburgh

NOTE: DUE TO HIGH DEMAND BY SYMPOSIUM ATTENDEES, THIS HOTEL HAS ALREADY SOLD OUT

Other Hotels

Omni William Penn Hotel

Visit woodturner.org for updated hotel and group rate information.

POWERMATIC LATHE RAFFLE!

Winning ticket will be drawn at AAW's Pittsburgh symposium, June 27, 2015.

Proceeds support activities of the AAW Chapter Turners Anonymous and the Society for Contemporary Craft.

TWO LIVE BENEFIT AUCTIONS

Join us Friday evening to experience the EOG live auction benefiting AAW educational programs. Refreshments will be provided and a cash bar will be available. Then, on Saturday afternoon, show your support for AAW's professional outreach initiatives at the POP exhibit live auction, "Creativity in Construction: a Collaboration of Materials."

Both auctions include remote online bidding, allowing bidders anywhere in the world to participate via live web audio feed. All live auction items will be published for advance viewing in mid-May. Visit auction2015.woodturner.org for more information.

AAW BENEFIT DINNER AND SILENT AUCTION

Join us on Saturday evening and show your support for the Educational Opportunity Grant (EOG) Program by purchasing a ticket for the benefit dinner and special awards ceremony. The conclusion of the dinner and awards ceremony will offer you a final chance to bid in the EOG silent auction, which is free and open to all.

Over the past ten years alone, AAW member support for the EOG live and silent benefit auctions has raised more than $450,000 for woodturning education. ▶

MOBILE APP

guidebook The Guidebook app for mobile devices will again be available for use at this year's symposium. With this free app, you'll have all the rotations, demonstrators, tradeshow exhibitors, floor plans, and messaging at your fingertips. **Guidebook is ready for download now.** Save time by installing the app before the symposium. Visit tiny.cc/symposium for more information.

DONATE TOOLS TO TURNERS WITHOUT BORDERS

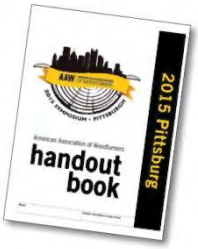
To help Turners Without Borders continue implementing global initiatives—and to support other AAW programs like Woodturning Beyond Barriers and Turning to the Future—please bring your lightly used tools to the Pittsburgh symposium. Bowl, spindle, and roughing gouges are most needed, but all other tools are welcome. Donations will be accepted at the registration desk.

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 Pittsburgh. You can also donate boxes to support Beads of Courage. For more information on both of these initiatives, visit tiny.cc/Charitable (case sensitive).

FREE SYMPOSIUM HANDOUT BOOK

Symposium registration includes this comprehensive symposium book, which features all the demonstrators, images of their work, and valuable how-to information of topics covered in demonstrations. Buy an extra copy for $25 to share with your woodturning friends back home!



PROFESSIONAL OUTREACH PROGRAM PANEL DISCUSSIONS

Panel discussions open to all symposium attendees.

Artist Showcase—How We Got There: Malcolm Zander, Helga Winter, Kristin LeVier

Chasing Professionalism: David Ellsworth, Jerry Kermode

How to Critique, Evolve, and Learn from the Experience: Jacques Vesery

Signature, Branding, and Marketing: Derek Weidman, Ashley Harwood, Binh Pho

Significant Moments in Contemporary Woodturning: Steve Loar

What Is Art Anyway? Jacques Vesery, Zina Burloiu, Sharon Doughtie

Women's Perspectives: Betty Scarpino, Dixie Biggs, Sharon Doughtie, Steve Loar

Woodturning with Disabilities: Andi Sullivan, Jeff Bennett, Bill Hayes, Dave Hinkelman

Diversity in Wood Art: Going Beyond Boundaries: John Beaver, Jeff Bernstein, Andy DiPietro, David Ellsworth

Iterations of Work (POP lecture): Sharon Doughtie

Iterations of Work (panel discussion): Sharon Doughtie, Betty Scarpino

Instant Gallery Critique
Jacques Vesery, Steve Loar

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.

WOODTURNING TRADESHOW

You won't see a larger woodturning tradeshow anywhere else! Ongoing demonstrations let you watch tools and machinery up close and in action, so plan plenty of time to experience it all. Following is a partial list of tradeshow vendors. Visit tiny.cc/symposium for updated information.

Advanced Lathe Tools
Affinity Tools
Arizona Silhouette
Bone Mountain Bristlecone
Carter and Son Toolworks
Carter Products
Chucks Plus
Cindy Drozda
Conestoga Works LLC
Craft Supplies
Curt Theobald
Designs by Gjovaag
Doug Baldwin Photography
Earth's Watch
Federal Express
Flute Master LLC
Frugal Vacuum Chuck
Guild of Master Craftsmen
Hannes Tool
JET/Powermatic
John Jordan Woodturning
Kallenshaan Woods
Lathe Jigs.com
Lyle Jamieson Woodturning
North Woods Figured Woods
Oneway Mfg.
Peachtree Woodworking Supply
Reed's Woodworking LLC
Robust Tools
Rockler
Saburrtooth Tools
Schiffer Publishing
SS Niles Bottle Stoppers
Stockroom Supply
Ted Sokolowski Woodturning
The Center for Art in Wood
Thompson Lathe Tools
Trend Routing Technology
Trent Bosch Studios
Turningwood.com
USDA, Pennsylvania Dept. of Agriculture
Vince's WoodNWonders
Wildwood Design
Woodcut Tools, Ltd
Wood Turners Wonders

YOUTH TURNING ROOM

Youth ages 10 to 18 are eligible to register for free hands-on 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 include Joe Ruminski, Kip Christensen, Barry Gross, Steve Cook, and Larry Miller.

On Sunday, twenty-five young turners will win a complete turning package, including a lathe, tools, and faceshield. Our thanks to those who generously donated in support of this program.

Photo: Andi Wolfe

- Powermatic/JET, 25 mini lathes with stands
- Crown Tools, 25 sets of tools
- Woodcraft, 25 faceshields
- Vince's WoodNWonders, abrasives
- Teknatool USA, Inc., 25 chucks and safety centers
- Easy Wood Tools, 25 sets of tools
- Craft Supplies USA, texturing tools, Christmas tree ornament supplies
- Penn State Industries, pen mandrels
- Arizona Silhouette, wood and project supplies
- Tennessee Association of Woodturners, pen and kaleidoscope kits
- Kip Christensen, ice cream scoop kits and supplies
- Barry Gross, project supplies

*Donors listed as of March 1. See tiny.cc/symposium for updated information.

AAW AMERICAN ASSOCIATION OF WOODTURNERS 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. Special Interest Night (SIN) will be held Thursday, with some activities taking place during the day. Following is a sampling of special interest topics and activities that will be represented at the symposium:

- The Collectors of Wood Art, Society for Contemporary Craft (SCC), and Carnegie Museum of Art have scheduled a full day of activities at SCC headquarters three blocks from the convention center. Activities will include a panel and presentation featuring Suzanne Perrault of the Rago Auction House and frequent appraiser on the popular PBS television series *Antiques Roadshow*. An afternoon session will include presentations by Christian Burchard, Jerry Bennett, and Pascal Oudet on the latest direction of their work.
- The exhibits "Merging," "Creativity in Construction: a Collaboration of Materials," "Then and Now," and Jacques Vesery POP Merit Award will open at 6:00 p.m. and will include a welcome reception with refreshments.
- Several national AAW chapters will hold their annual meetings during SIN activities. These include Segmented Woodturners, Principally Pens, Ornamental Turners, and Women in Turning.

WOODTURNING EXHIBITIONS!

Instant Gallery

Bring up to three of your woodturnings and participate in the largest display of turned-wood objects under one roof. To preregister your display pieces online prior to arrival, visit tiny.cc/instantgallery (case sensitive). While you are at the instant gallery, vote for your favorite Chapter Collaborative Challenge (C3) entry, use the intimate critique to have an informal discussion about your work, see EOG auction items, admire award winners, and participate in ReTURN to the Community.

Creativity in Construction: a Collaboration of Materials

For the ninth annual Professional Outreach Program (POP) exhibition, forty studio artists from ten countries created small-scale works with a focus on material, either combining wood with other media or creating the illusion of multiple materials through surface manipulation. All works will be auctioned to raise funds for POP initiatives.

Merging

AAW's annual member exhibition showcases the diversity of ideas, techniques, and approaches being developed by both our amateur and professional members. This year's theme reflects the merging rivers that shaped our host city of Pittsburgh, as well as the merging of ideas or materials to form a new, greater whole.

2015 POP Merit Award: Jacques Vesery

The exquisitely carved and painted trompe l'oeil work of Jacques Vesery is unmistakable, despite subject matter as disparate as baseballs and nautilus shells. The small scale and rich detail draw the viewer into a world inspired by nature, but entirely the artist's own invention. The POP Merit Award recognizes Jacques' contributions as a teacher, mentor, and leader in the woodturning field.

Steve Loar: Then and Now

Educator, author, and artist Steve Loar uses themes and narratives—often drawn from popular rock songs—to guide him in creating evocative, layered compositions. "Then and Now" includes early and very fresh works, all reflecting Steve's impeccable attention to detail and craftsmanship. His collaboration with cast-off components from noted artists in the field will bring an added dimension to the informed woodworker.

The public is welcome to tour all of these exhibits; registration is not necessary. Please encourage local friends to stop by, see what woodturners make, and perhaps purchase a bowl or two!

Derek Weidman/Hannah Taylor, *Parts of the Whole,* 2015, Holly, ink, pigment, 8" × 8" × 8" (This piece will be included in AAW's "Merging" exhibit.)

ReTurn to the Community

Empty Bowls
AAW members donate bowls which are sold to raise money for a local non-profit. Large or small, each bowl costs only $25. 100% of the proceeds benefit a local charity. This year, the proceeds will go to **Variety the Children's Charity of Pittsburgh**.

Variety provides children with disabilities with adaptive and assistive technologies to allow them to gain the freedom to be as active, involved, accepted, and independent as possible. Examples of these devices include wheelchair ramps, lifts, adaptive car seats and strollers, specialized vans, scooters, adaptive bikes, iPads, etc. Additionally, Variety offers two specialty programs. Variety's **My Bike** program provides adaptive bikes to children in need with disabilities so they can experience the joy of riding a bike alongside friends and family. **My Voice** is Variety's newest program which helps children with disabilities communicate at home using the same technologies they have learned to use in speech and/or occupational therapy.

"There is no greater joy than watching a child overcome their challenges with adaptive equipment; their first bike ride with friends or their first words spoken to family."

☑ **Woodturners: Donate Woodturned Bowls**
Bowls may be any size and of any material.Bowls will be displayed by chapter, so include your chapter name with your bowls so they can be displayed with the appropriately.

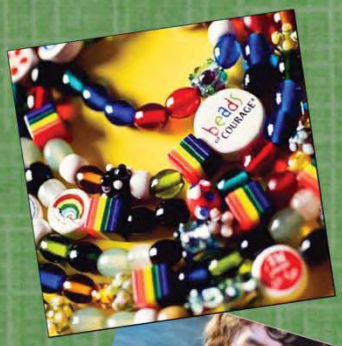
☑ **ReTURN to the Community Donations**
For those not attending the symposium, bowl and box donations may be shipped to:

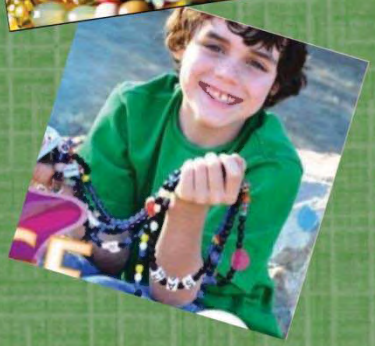
☑ **Until mid-May bowls may be shipped to:**
AAW
222 Landmark Center
75 W 5th Street
Saint Paul, MN 55102

beads of COURAGE®

beadsofcourage.org

Every bead tells a story of strength, honor, and hope.





Our Mission

We are growing every day, providing innovative, arts-in-medicine supportive care programs for children coping with serious illness, their families and the health care providers who care for them.

What is the Beads of Courage Program?

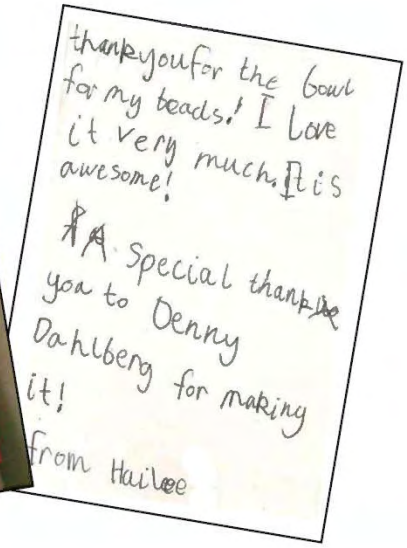
The program is a resilience-based intervention designed to support and strengthen children and families coping with serious illness. Through the program, children tell their stories using colorful beads as meaningful symbols of courage that commemorate milestones they have achieved along their unique treatment path.

How it works

Upon enrollment, each child is given the Beads of Courage bead color guide/tally sheet. Their Beads of Courage journey begins when each child is first given a length of string and beads that spell out their first name. Then, colorful beads, each representing a different treatment milestone are given to the child by their professional health care provider to add to their Beads of Courage collection throughout their treatment.

The Beads of Courage® Program is available for the following:

- Cancer and Blood Disorders
- Cardiac Conditions
- Burn injuries
- Neonatal ICU Families
- Chronic Illness



Beads of Courage® Bead Bowls & Boxes

Every child wishes they had their own treasure box to keep their bead collection.

For more information, please contact info@beadsofcourage.org

Thank you for helping make healing happen!

Beads of Courage gratefully thanks all woodturners who donate their one-of-a-kind, handmade bowls, and boxes to a child in treatment for a serious illness.

Guidelines

In order to hold the beads, turned boxes for the Beads of Courage program need to be about 6 inches in diameter (5 inches minimum), rectangular lidded boxes about 4 x 6 x 4 inches or round lids.

If possible, engrave or burn "Beads of Courage" in the lid or side of container. Sign your name and write "American Association of Woodturners" on the bottom.

Make sure the lids are easily removable. Any finials should be easy for a small child to grasp and not too elaborate (may break).

We ask that you refrain from painting the boxes or bowls. Instead, highlight the beauty of the wood with clear varnish, a stain, and/or burning on the bowl.

We have found that many woodturners like to use the Beads of Courage® ceramic logo bead in their design. Visit our website to place an order for beads.