THE BB STAVE SYSTEM • STAINED GLASS PORTHOLE BOWL • MAKE A ZIGZAG-ROUTED ORNAMENT

AMERICAN WOODTURNER

Journal of the American Association of Woodturners

December 2020 vol 35, no 6 • woodturner.org

DONNA ZILS BANFIELD: ATTORNEY TURNED WOODTURNER

TURNING CHOCOLATE

NESTED SIBLING BOWLS

Roger Bennett Ireland

Photo: Shane O'Neill

Untitled Pendant, 2009, Maple, water-based dye, silver, 2" (5cm) diameter

Photo: Trevor Hart

I love wood, the uniqueness of each piece, the history of the tree's life preserved in the ring patterns and figuring. I delight in the daily interaction between maker and material, the magic of shaping, turning argument into conversation.

I dream of making a bowl as strong as an eggshell, as heavy as a whisper. Of capturing and fixing the colors which so move me—drake mallard green, oil on water, dandelion yellow, midnight in midsummer.

And with silver I can indulge my love of order, impose my markings on the wood's surface, complementing the natural flows and eddies of the grain with my precise patterns of dots.

A completed bowl should satisfy all our senses. Line and form above all else, traced by eye and hand, from rim to base and all around. The smell of wood and oil. And when a bowl is right, it sings... ■

For more, visit rogerbennettwoodturner.com.

Untitled Bowl, 2016, Sycamore, water-based dye, silver, 2" × 4¾" (5cm × 12cm)

Photo: Roland Paschhoff

Untitled Bowl, 2015, Sycamore, water-based dye, silver, 3½" × 10¼" (9cm × 26cm)

Photo: Jonathon Cuff

The Daniel Collection

Untitled Bowl, 2007,
Sycamore, water-based dye,
silver, 1½" × 6¼" (38mm × 16cm)

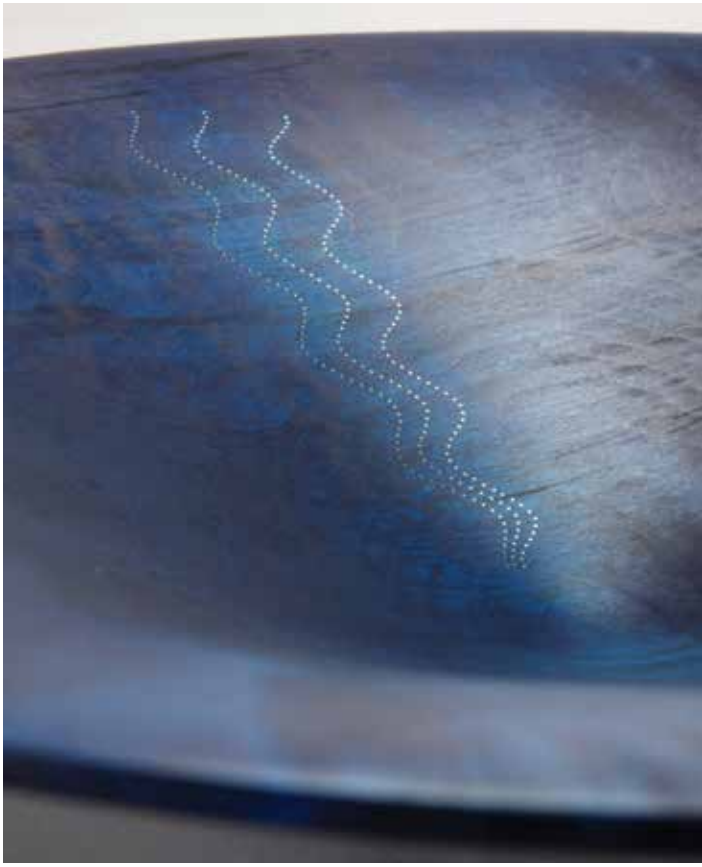
Photo: Estelle Barrett-Morgan

Untitled Bowl, 2020, Sycamore,
water-based dye, 2¾" × 8⅝" (7cm × 22cm)

Photo: Roger Bennett

Untitled Wall Piece, 2015,
Sycamore, water-based dye, silver,
15" (38cm) diameter

Photo: Jonathon Cuff
The Daniel Collection



Untitled Bowl, 2011, Sycamore, water-based dye, silver,
3⅛" × 15⅜" (8cm × 39cm)

Photo: Rory Moore
Permanent collection of the National Museum of Ireland

AAW | AMERICAN ASSOCIATION OF WOODTURNERS

Dedicated to providing education, information, and organization to those interested in woodturning

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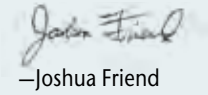
Editor's Note

I hope this note finds you and your family members safe and healthy. It certainly has been a challenging year on many levels, and my heart goes out to those who have lost loved ones this year—to COVID-19 or other causes.

Throughout all of it, the positive, sharing spirit of woodturners has prevailed. We've seen lots of examples of chapters finding ways to stay engaged with one another virtually, such as friendly turning contests, Zoom coffee hours, and online shop tours. Local clubs and the AAW have stepped up, offering IRDs (interactive remote demos) by top experts. Here's another offering I've seen more of lately: virtual art exhibitions, including 3D tours of an exhibition space with the ability to zoom in on particular pieces. See page 9 for examples and links. No, it's not the same as being there in person, but for now, I find it a comfort knowing that the spirit of woodturners—that urge to create and share—remains irrepressible.

Finally, I am deeply saddened by the recent passing of Mark Baker, who was the editor of England's *Woodturning* magazine and a universally loved international demonstrator. Paul Hannaby, Chairman of the Association of Woodturners of Great Britain (AWGB), offers a heartfelt testament to Mark's woodturning legacy on page 11.



—Joshua Friend

From the President

The $64,000 Question

Any of you remember the 1950s TV program, *The $64,000 Question*? Sadly, or fortunately, I do and today at AAW, the big question is, "Will we have a live Symposium in Omaha next July?"

Like most of you, I sure hope so. I'm still turning, but I miss our chapter meetings. I miss seeing what others are making. I miss sharing ideas. I miss my friends, and I want us to be normal again. I want this virus issue to disappear, and I want to see you in Omaha. Our recent survey tells me you want to go to Omaha. Rest assured, your AAW leadership is planning on being with you next July. We realize many members will have concerns and may choose not to attend. Attendance scenarios are under consideration in our present planning, as are plans for accommodating social distancing in our activities. We are working with the convention centers, hotels, and food vendors, so you can be assured your health and well-being will be our primary consideration. Jay Brown, our Symposium Chair, brings years of experience from working on the Utah symposium. He and our volunteers will make sure you are entertained, educated, and get that big dose of social interaction we all need. Let's plan for the best and plan on an Omaha Symposium in July.

Virtual events

So, what about the rest of 2021? By now, I hope you've seen AAW's interactive remote demos (IRDs) by David Ellsworth and John Jordan. Those two guys are hard to beat, but we are planning ten similar presentations in the upcoming year. Most will be IRDs, but others will include panels on issues such as art, form, sales and marketing, and even business concerns. We may do a Virtual Gallery tour and show work from AAW's permanent collection. When we charge a fee, we plan to keep it as low as possible; many of the presentations will be provided to AAW members at no charge. WIT Presents, put on by Women in Turning, is a great example of this service, provided at no cost to our membership. If you haven't seen these, you are really missing great presentations. Watch your inbox for email invitations from AAW, and sign up! By the way, a lot of this is new to us and we're learning as we go. If you have comments on presentations, pricing, or anything, let us know. We really do aim to please.

I'm excited about our plans for a mini-Virtual Symposium presented in Spanish. As part of our Turners Without Borders committee efforts, a number of Spanish-speaking demonstrators will present, hopefully, to a worldwide audience. This presentation, patterned on a smaller scale after this year's Virtual Symposium but in Spanish, will be provided at no cost. By the way, all you English-speaking members should definitely attend. You're all "Wood Whisperers," even though you can't speak "tree."

What about another full-scale, English-language Virtual Symposium, like we had in July? You can bet on it; 4,000 attendees can't be wrong. Online presentations are no longer in the future, distance is no longer an issue, and the cost of reaching out to our membership is no longer a problem.

We may still be named the American Association of Woodturners, but we are truly an international organization.

Looking forward,

Greg Schramek
President, AAW Board of Directors

SAVE THE DATE

Omaha, Nebraska • July 15-18, 2021

AAW'S 35TH ANNUAL INTERNATIONAL SYMPOSIUM

PARTIAL DEMONSTRATOR LINEUP (TOPICS TO BE ANNOUNCED):

- Nick Agar
- Stuart Batty
- Dixie Biggs
- Michael Blankenship
- Trent Bosch
- Michael Hosaluk
- JoHannes Michelsen
- Dan Tilden
- Craig Timmerman

Photo: Courtesy of Visit Omaha

SYMPOSIUM VENUE

Photo: Brad Williams

CHI Health Center Omaha
455 N 10th St., Omaha, NE 68102

The convention center, CHI Health Center Omaha, is near the airport, and close to the riverfront and the Old Market Entertainment District. A glass-enclosed skywalk connects CHI Health Center to the Hilton Omaha. Just down the street is the Omaha Marriott Downtown hotel.

HOST HOTELS

Omaha Marriott Downtown at the Capitol District
222 N 10th St., Omaha, NE 68102

Hilton Omaha
1001 Cass St., Omaha, NE 68102

REGISTRATION

Information about AAW Symposium registration and reserving a hotel room will be coming soon.

VISITOR HIGHLIGHTS

- **Henry Doorly Zoo and Aquarium**, a 160-acre facility and home to Dome Desert, the largest indoor desert in the world, as well as the Lied Jungle, the largest indoor rainforest in North America.
- **Old Market District**, in downtown Omaha, features cobblestone streets, interesting cafes, and galleries.
- **Durham Museum**, originally one of the nation's busiest train stations, showcases the history of the local area.
- **Spirit of Nebraska's Wilderness and Pioneer Courage Park**, one of the most unique permanent outdoor art installations in the nation.

Photo: Courtesy of Visit Omaha

Henry Doorly Zoo and Aquarium

AAW leadership is moving forward with its plans for an in-person 2021 AAW Symposium in Omaha, despite the uncertainties surrounding the COVID-19 pandemic. Leadership is approaching arrangements for a live event cautiously, while monitoring pandemic developments, and will consider contingency plans as needed. AAW membership will be kept informed of developments and changes.

AAW
AMERICAN ASSOCIATION OF WOODTURNERS

AAW Board of Directors

Call for Nominees

The AAW offers much to its members, and we are looking for a few good people who can contribute something in return. Do you have the time, energy, and ideas to be a part of AAW's operations, as well as a willingness to help make it a better organization? Be a part of moving the AAW forward—run for a position on the AAW Board of Directors.

The AAW elects a volunteer nine-member board to represent the membership and move the organization forward. If you have been a member in good standing for the past three years, you are eligible. The nominating committee will select the six best candidates. From these six, members will elect three candidates to serve a three-year term, beginning in January 2022.

For information on the duties of board members, call any current Board member or visit the AAW website at tiny.cc/Board for details.

If you are interested in serving on the board, please email the following to the executive director (phil@woodturner.org), no later than May 1, 2021:

1. A statement of intent, including qualifications and reasons for applying
2. Letters of recommendation from two individuals who can attest to your organizational and leadership abilities
3. A high-resolution photograph of yourself

The nominating committee will review application materials and conduct phone interviews. Candidates will be presented in the August issue of *American Woodturner,* and voting will occur during the month of August. Election results will be announced in late 2021.

Call for Entries *Elements*: 2021 POP Exhibition and Auction

Application Period: December 1, 2020, to January 15, 2021

Application details

- Full application/submission details can be found in the August 2020 issue of *American Woodturner* (vol 35, no 4, page 7).
- Apply online at tinyurl.com/POP2021.
- Application period: December 1, 2020, to January 15, 2021, 11:59 p.m. CST. All artists will be notified by January 31, 2021.
- For more, check the woodturner.org Calls for Entry page, tiny.cc/Calls, or contact Tib Shaw at gallery@woodturner.org. To see past exhibition catalogs, visit galleryofwoodart.org.

Call for Videographers—AAW Symposium 2021

The AAW seeks videographers for its 35th International Symposium in Omaha, Nebraska, July 15-18, 2021. Applicants must have experience with video camera equipment, possess technical competence, and be able to make decisions regarding what is being turned, camera position, shooting angle, etc. The application process will be open from December 15, 2020, through February 15, 2021. Videographers are required to help set up or tear down and do six rotations to receive a free Symposium registration. Selected videographers will be notified by March 2021. For more information or to apply, visit tiny.cc/CallVideo.

Call for Entries *Finding the Center*: 2021 AAW Member Exhibition

Application period: January 1 to March 15, 2021

Application details

- Full application/submission details can be found in the August 2020 issue of *American Woodturner* (vol 35, no 4, page 6).
- Apply online at tinyurl.com/AAWshow between January 1 and March 15, 2021, 11:59 p.m. CST. All artists will be notified by March 31, 2021.
- For more, check the woodturner.org Calls for Entry page, tiny.cc/Calls, or contact Tib Shaw at gallery@woodturner.org. To see past exhibition catalogs, visit galleryofwoodart.org.

Chapter Scholarships on Hold

The AAW annually offers financial assistance to selected chapter members for quality woodturning instruction at either Arrowmont School of Arts and Crafts or John C. Campbell Folk School. Note that new scholarship awards, typically solicited now, are on hold until 2021 due to the effects of the COVID-19 pandemic. Chapter leaders, please monitor the new AAW Chapter Leadership Community on the AAW website for official updates.

New Content Available on AAW Website: Should I Stand or Sit?

Chris Grace

Where to Look

The new information can be found in the **Turning with Physical Limitations** section of the AAW website (woodturner.org), under the tab, **Stand or Sit?** For quick access, type in the URL, tiny.cc/standorsit, or scan the QR code.

The AAW website is an amazing resource, made even better by its recent update. New content is being added all the time. Recently, we added new pages offering help and advice to turners who, for whatever reason, have difficulty standing at their lathe for as long as they'd like.

Turning while seated need not be a significant limitation, and most types of turning can be accomplished with a few relatively simple adjustments. You might even find a good excuse to buy another tool to expand your capability. However, most of the tools, techniques, and equipment I use as a seated turner are the same as those used by any other turner.

Not one-size-fits-all

There isn't a one-size-fits-all solution to the stand or sit question, so we've broken the new information into manageable chunks. Tips and techniques abound on these new pages that may be helpful to all (seated or not), so reading each of the pages is worthwhile, even if you are initially drawn to one of the topics. The new pages include:

- **I can't stand turning!** takes an overview and looks at possibilities for turning when you can't stand all the time at your lathe, including adaptations to equipment, techniques, and tools.
- **Let's sit down and think about this** offers options for those who need a more stable lower seat. An office chair and a wheelchair are just two possibilities considered, alongside techniques to get around any challenges they create.
- **I can't get to grips with these tools** offers solutions to problems with reach, dexterity, and tool grip, issues often faced by seated turners.

Join the conversation

We plan to include other resources on these web pages as they become available, including videos showing how different people approach their turning, so check back periodically to find new content.

We welcome your thoughts on these topics and would love for you to share your solutions, so others have a good starting point and won't have to reinvent the wheel. Contribute to the discussion on the AAW Forum by using the link under "Join the Conversation" on the main **Turning with Physical Limitations** landing page.

Remember: An obstacle is merely a challenge waiting to be overcome. ■

Chris Grace is a woodturning demonstrator, tutor, and author, who just happens to use a wheelchair. He can be reached at Chris.Grace@NotJustRound.com.

A perch bench gives you something to rest on, while enabling you to move sideways easily and stand when required.

A supportive hollowing rig does most of the tool holding for you and can be adapted to non-hollowing cuts.

FROM THE EDITOR'S INBOX

Send emails to editor@woodturner.org

Since late spring, the Alamo Woodturners (San Antonio, Texas) and the Hill Country Turners (outside of San Antonio) have been joining each other's Zoom meetings, giving club members multiple opportunities for woodturning interaction each month. With the generous support of the Majestic Ranch Arts Foundation, we have virtual demonstrations from top demonstrators.

Since the pandemic put the service project opportunities we had planned for this year on hold, our clubs designated October as "Beads of Courage" month and challenged each member to make as many boxes as they could during the month for "bragging rights" in South Texas.

—George Taylor, President, Hill Country Turners

—Debbie Hokanson, President, Alamo Woodturners

BoC box by George Taylor.

BoC box by Jim Hokanson.

After seeing the Beads of Courage (BoC) display at the AAW Symposium in Raleigh (2019), Smith Mountain Lake Woodturners of Moneta, Virginia, decided to get involved. We turned eighteen boxes for BoC in late 2019/early 2020. In March 2020, the boxes were put on display in the Westlake Library. When pandemic hit, the library closed with the boxes still on display. We were able to retrieve them in August, when restrictions eased, and deliver them to Brenner Children's Hospital in Winston Salem, North Carolina.

—Alan Detrick, Smith Mountain Lake Woodturners

Photo taken March 1, prior to mask mandates, from left: Don Riggs, Mike Maloney, Mike Moore, Alan Detrick, Chuck Koyanagi, and Dan Madar.

It is time for another reminder of the dangers of fractal burning. It is a wood burning technique, in which high voltage electricity is applied, with electrodes, to wood soaked in salt water. The result is a burnt branching design, Lichtenberg figure, on the surface of the wood. Though stunning, mixing electricity and water can be a deadly combination.

Over the past four years, there have been more than thirty identified accidents using fractal burning, including twenty-four fatalities. Four of these deaths have occurred in 2020, along with another incident in which three were severely injured.

In 2017, the AAW established a policy prohibiting the use of fractal burning at any AAW-sponsored event. For more about the dangers of fractal burning, including the AAW policy in its entirety as well as descriptions of these accidents, visit tiny.cc/AAWfractal.

—Ron Goldman, Publisher, Woodworker West magazine, California

In a typical year, the Woodworkers of Central New York (WCNY) holds a club-wide contest during November. When the event had to be cancelled this year due to the pandemic, our club's Board sought more ways to keep members engaged. The solution? Virtual Contests!

Ed Siegel's maple wood-burned pencil holder won first place.

Our first contest had a "Fall/Halloween" theme. While we had only nine entries, we are hopeful our second contest, themed "The Holidays," will be more popular. The WCNY Board expects to continue the contests into 2021, as we don't expect to begin meeting in person until summer, due to continued facility shutdowns.

We use Salesforce software, with the Non-profit Service Pack, to maintain our membership information, and leveraged its survey functionality for the contest voting. For more details, visit woodcny.org/fall--halloween-virtual-contest.html.

—Barbara Raymond-LaPrease, WCNY

CAW Exhibition Celebrates 25 Years of ITE Residency

In 1995, Albert LeCoff, Co-founder and Executive Director Emeritus of the Center for Art in Wood (CAW), launched the first residency program designed for artists working with wood. Now in its 25th year, the Windgate International Turning Exchange Residency (known as "The ITE") is a sought-after stop in the careers of artists interested in delving into the creative possibilities of wood, communing with peers, and making piles of wood shavings.

The ITE's alumnus body now numbers 166 artist, photojournalist, and scholar fellows, all notable in their fields. In many cases, their works have become part of CAW's permanent collection and thus are held in the public trust for study and inspiration. Seventy-five of those works are on view in a special exhibition, *allTURNatives: Form + Spirit–25 Years of the Windgate ITE Residency Program*, curated by Jennifer-Navva Milliken, CAW's Artistic Director.

Cha Jong-Rye, *Expose Exposed 1 80726*, White oak, 12" × 14" × 8½" (30cm × 36cm × 22cm)
Photo: John Carlano

The exhibition runs through January 23, 2021. It is available for viewing at the Center (check opening hours) or online; visit tiny.cc/FormSpirit or scan the QR code.

CFC's Messler Gallery Exhibition: *Out of Bounds: The Art of Croquet*

A striking exhibition of artist-made mallets and balls, *Out of Bounds: The Art of Croquet,* will be on view at the Messler Gallery of the Center for Furniture Craftsmanship, in Rockport, Maine, through January 6, 2021.

Curators of the smashing exhibition are Jennifer-Navva Milliken, Artistic Director at the Center for Art in Wood, and furniture maker Silas Kopf, both of whom are amateur devotees of the sport. In reimagining the ball and mallet, the show's twenty-one exhibitors explore a wide range of topics, from personal artistic concerns to contemporary social issues, with clarity and wit.

The exhibition pieces, as well as a virtual tour of the exhibition in the Messler Gallery, can be viewed at tiny.cc/ArtofCroquet. Or scan the QR code with your mobile device.

—Victoria Allport, Center for Furniture Craftsmanship

DAC Offers Virtual Tour of *Tree Spirits* Exhibition

Members of three Maryland clubs—Mid-Maryland Woodturners, Montgomery County Woodturners, and Chesapeake Woodturners—joined artistic forces with local artists for an exhibition of handcrafted woodturning presented alongside tree-inspired paintings, carvings, and photographs. *Tree Spirits*, whose onsite viewing at The Delaplaine Arts Center (DAC) in Frederick, Maryland, has ended, can still be viewed online in a virtual 3D tour.

The woodturning portion of the *Tree Spirits* exhibition was juried by Jeffrey Bernstein and Judy Chernoff. See the virtual exhibition by visiting tiny.cc/TreeSpirits or scanning the QR code with your mobile device.

—Dave Swiger, Mid-Maryland Woodturners

Viewers can "tour" the exhibition space and click on individual items for a closer look.

Photo: Mark Juliana

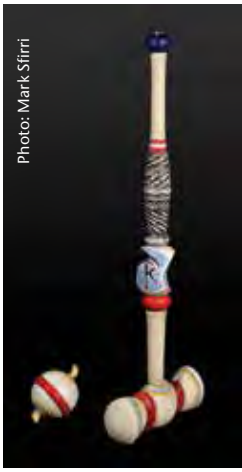


Photo: Mark Sfirri

(*Left*) **Annie Evelyn,** *Sparkle Princess*, 2020, Ash, vintage jewelry finds, found ball, Swarovski crystals, faux gold leaf, paint, polyurethane, 36" × 9" × 2½" (91cm × 23cm × 6cm)

(*Right*) **Mark Sfirri,** *Crow-K Mallet*, 2020, Cherry, western yellow cedar, paint, 30¾" × 10½" × 3¼" (78cm × 27cm × 8cm)

CWT Continues Instruction for Beginners

One of the special benefits of being a member of the Chicago Woodturners (CWT) is the classes we hold annually for new turners. The goal is to jump-start beginners' progress by teaching a wide variety of techniques, proper use of the various tools, sharpening, and lathe safety. This is accomplished in a hands-on environment, with multiple volunteer club mentors guiding the participants through the day's projects.

The first class focuses on lathe basics and spindle turning. Being proficient with spindle turning is the cornerstone for all the other techniques. The second class focuses on how to use a four-jaw chuck, bowl turning, and platter turning. This class covers concepts from sourcing and preparing bowl blanks through different work-holding methods and reverse-chucking for finishing the foot. At the end of the day, students leave with a number of projects they made as they honed their skills.

We have offered this series of classes annually for the past few years, and they always sell out. Each class is just $60 and covers all materials—the best woodturning deal we can think of. Due to current health department recommendations concerning COVID-19, this year we limited class size to six, and everyone had to wear a face mask at all times. ■

Mentor Al Miotke offers guidance to Steven Bossert.

The Chicago Woodturners holds its beginner classes at the Chicago School of Woodworking.

Lou Skydell displays his newly turned bowl.

—Andrew Kuby, President, Chicago Woodturners

From Dumpster Diving to a Club Meeting Place

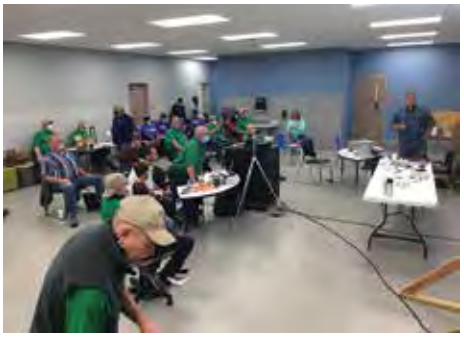
On a cold day in January, I was riding around in my pickup looking to see what was in the dumpster at a construction project at the old K-Mart in Lubbock, Texas. I didn't get any steel or wood that day, but I did leave knowing that the YWCA of Lubbock had purchased the large parcel and was starting to remodel it.

In March, several members of the South Plains Woodturners (SPW) met with Glenda Mathis, CEO of the Lubbock YWCA, for a tour of the facility. We explained what we had been doing with adult and youth classes and our need for a permanent meeting location. We found that the YWCA and SPW have several goals in common, including exposing youth to STEM (science, technology, engineering, and math) topics and related career options. Our mission to promote woodturning aligned nicely with the YWCA's vision to support women, children, and families in Lubbock.

We now have a monthly meeting place in the new YWCA facility, with a large indoor space, WiFi, a loading dock, and storage (at no charge to us). In exchange, our club has agreed to teach youth once or twice a month. We are planning a successful STEM, woodworking, and woodturning experience to meet the needs of our kids. We plan to use the AAW's *Woodturning FUNdamentals* digital publication as teaching materials. ■

For more, visit southplainswoodturners.org.

An old K-Mart building-turned-YWCA in Lubbock, Texas, led to a mutually beneficial relationship with the SPW.



In October, the YWCA Lubbock brought nine youth ages 12 to 16 to the SPW's monthly meeting, which included a beginner woodturning show-and-tell session, a game of "Spin Tops," and a demo by Don Ward.

—Kent Crowell, President, South Plains Woodturners

In Memoriam: Mark Baker, 1966-2020

The woodturning community has lost a truly significant ambassador, with the passing of Mark Baker on October 2, 2020.

Many woodturners know of Mark as the long-time editor of *Woodturning* magazine, published by England's GMC Publications. Mark started his career as a carpenter and then gained experience in metal fabrication. He went on to become a product manager for toolmaker Robert Sorby before working for GMC, where he was Group Editor, responsible for all of GMC's woodworking magazine titles, including *Woodturning*.

Mark was also a favorite among woodturning demonstrators, having shared his talents frequently around the world at turning clubs and symposia. He also authored numerous articles and books on woodturning, including *Woodturning Projects: A Workshop Guide to Shapes*, *Weekend Woodturning Projects: 25 Simple Projects for the Home*, *30-Minute Woodturning: 25 Quick Projects to Make*, and *Woodturning: A Craftsman's Guide*.

I always found Mark to be approachable, and over the years, stopping for a chat at woodturning events became a regular feature. Later, I became a contributing author to *Woodturning* magazine and found Mark's support and guidance invaluable. If I was running close to a deadline, he still came across as calm and helpful. Mark was also supportive of the Association of Woodturners of Great Britain (AWGB), always interested in hearing our news and promoting our activities.

Mark was an accomplished and respected turner and teacher. Every time I saw him turn—at demonstrations, seminars, or events—I was impressed by his skillful explanations. He had a knack for communicating at everyone's level, teaching us while we thought we were just being entertained. ■

—Paul Hannaby, Chairman, AWGB

Mark demonstrating at the 2018 AAW Symposium in Portland, Oregon.

Photo: Andi Wolfe

IN THEIR OWN WORDS...

"Mark was a leader in the woodturning community, and his depth and thirst for knowledge, in and around the subject of woodturning and its history, was second to none. This came through clearly in his many articles, books, and demonstrations, where he sought to share this."
—Richard Findley

"As there are captains in industry, so Mark was a captain in the craft of woodturning, who promoted the craft wherever he went. He will be missed for many years to come."
—John Boyne-Aitken, Chairman, Register of Professional Turners

"Mark's legacy is an important one. Through his work—and the standard of his work—he has been an ambassador for woodturning and an encouragement and inspiration to countless turners. Mark was the most unassuming man: kind, quiet, considerate, and incapable of not sharing his passion for woodturning."
—Andy Coates

"Mark was passionate about the craft, which came over in his editorials and personal demos. His contribution to the woodturning world during his years with the magazine was immense. Mark enriched the lives of countless people and leaves a lasting legacy to the world of woodturning."
—Phil Irons, President, AWGB

Cocobolo Vessel, 2013, Cocobolo, 8⅞" × 4¾" (23cm × 12cm)

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

Lidded bowl with bronze effect.

Tips

Quick and easy point tool

Point tools are useful and versatile. They excel at cutting fine details, cleaning up small flat surfaces, even rolling beads. A shopmade version can be made easily at minimal cost. I recently made a ⅜" (10mm) and a ¼" (6mm) tool, using scrap hardwood for handles, scrap copper tubing for ferrules, and a little epoxy. I bought a couple lengths of stock M2 high-speed-steel (HSS) rod online for a few bucks each (*Photo 1*).

I rough-turned a wood handle, then bored an appropriately sized hole about 1" (25mm) deep to receive the tool rod. I also narrowed the "neck" down to receive the ½" (13mm) long ferrule, sneaking up on the fit with frequent tests. Turn the shape of the handle to your liking (*Photos 2, 3*). I then glued the steel into the hole and the ferrule onto the handle using epoxy.

Grinding the point took a little time, but I ended up with three roughly even faces, merging to a sharp point (*Photo 4*). The whole process didn't take much time or expense, and without sweating lots of details and measurements, I now have two new point tools that cut beautifully.

—Steve Forrest, California

JOURNAL ARCHIVE CONNECTION

EXPLORE!

For a more careful and systematic approach to point tools, see Stacey Hager's Fall 2005 *AW* article, "Make Your Point Tool" (vol 20, no 3, page 32).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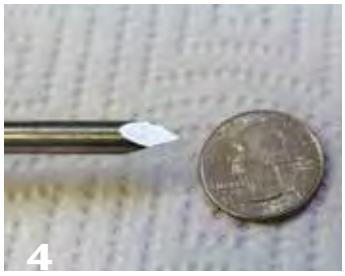
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Windshield washer steel as clamp

Here is a great way to repurpose old windshield wipers: remove the spring steel portion of the wipers, and tape them together to create a flexible arc clamp for those awkward spaces where standard clamps won't fit. If you want to increase the tension or length, tape more pieces of spring steel to the bundle. I have come across four different sizes of spring steel from different makes of windshield wipers, and each works well for different applications.

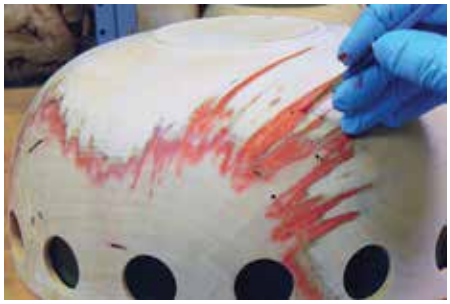
—Steve Daechsel, British Columbia, Canada

Balloon as holding device

As I make ornament globes, I like to apply the finish prior to assembly. This prevents excess finish from filling the detail of the icicle (upside-down finial). To hold the globes during finishing, I use a balloon (the type sold as small water balloons). Simply inflate a balloon inside the globe and tie it off at the top. Then hang the globe by tying a string to the balloon knot. This works great with either brush-on or spray-on finishing products, as you don't have to touch the piece being finished. After the finish has dried, pop the balloon and pull it out of the globe. This has possibilities for other small hollow forms as well.

—Gary Mrozek, Minnesota

Dye prolongs beauty of boxelder maple



I like to use boxelder maple because of its dramatic red streaking. The striking coloration is very popular with customers, and boxelder pieces sell well. Unfortunately, the red coloration fades to a pale brown in a matter of months due to the effects of UV light and oxidation. So, I have started dyeing the red to prolong its beauty. This method was suggested to me some years ago by Binh Pho. I use a small brush and carefully dye the red streaks using Star NGR transparent lacquer-based dye, which is colorfast and permanent. I have also used alcohol-based dye, such as Transtint.
—Wes Jones, Georgia

Magnetized tray holds water

For turners who use water-soaked micromesh to finish their acrylic or cyanoacrylate- (CA-) covered pens, there is always the problem of the water dripping on the bed ways and causing discoloration or rust spots. I previously balanced a small tray on the banjo to hold the water and the micromesh pads, and to catch the drips as I worked through the grit sequence. Occasionally, the tray would tip and the water would spill out! The solution was easy—I epoxied three small rare-earth magnets under the tray (*Photo 1*), and now it stays secure as I use it. I also cut the micromesh into short pieces, each labeled 1-9, making it easy for me to identify the grits at a glance (*Photo 2*).
—Bob Kahane, Virginia

Sanding/shaping sticks

Many of us like to embellish our work with a little carving now and then. But shaping and sanding details can be laborious. I recently finished a project that required a lot of broad-area shaping and used a trick I have employed for a long time—a simple sanding stick.

I made my sanding sticks using ordinary paint sticks as the stiff backing (*Photo 1*). Lengths of hook-and-loop fastener glued to the sticks allow me to easily apply various grits of hook-and-loop sandpaper. After rough-carving, I use 100-grit strips to smooth out the surfaces and then follow with finer grits to finish. I found this speeds up detailing/finishing substantially, and it's easier on my hands, wrists, and fingers. For smaller details, the same tool can be made using ice pop sticks.

It works great on forms that can't easily be sanded with the lathe on (*Photo 2*). But I also find it handy to use sanding sticks on fully round pieces with the lathe turning, to knock off ridges and sand an area uniformly flat.
—Gary Miller, Ontario, Canada

Lathe-bed sawhorse combines best features

I liked both sawhorse tips in the June 2020 issue of *AW* (vol 35, no 3, pages 17 and 18). Harvey Fein's design is a good match for the outboard ways of my Oneway lathe. Bill Gray's plan for sacrificial 4" × 4"s and wedge to facilitate cutting logs longitudinally made great sense. I combined the two ideas to make a lathe-mounted sawhorse that makes cutting longitudinally much easier.

On my version, the equivalents of Mr. Gray's sacrificial blocks comprise thin plywood glued onto small blocks, which are friction-fit to the sawhorse. I attached the plywood to the blocks with glue to prevent chain saw damage. The blocks can be replaced easily when they get too cut up, and they can be removed for crosscutting operations.

My sawhorse is not as pretty as either of the two shown in the June issue, but that is fine with me, since it is apt to collect chain saw badges of honor anyway.
—Rob Stewart, Manitoba, Canada ▸

TIPS

Lathe doubles as pen press

Pressing pen parts together is the final step in turning pens. There are fairly inexpensive pen presses on the market, but if you are turning wood, you already own one. All it takes is a couple of scraps of wood and a little time to adapt your lathe to the task.

Turn two "press blocks." One end of each block should be tapered to fit into the Morse taper cavity of your headstock and tailstock. The other end of each block (the faces) should be cut square so they make even contact with the pen parts (*Photo 1*).

To use the press blocks, insert one in the headstock and the other in the tailstock. Ensure the pen parts are held perpendicular to the blocks, and use the tailstock handwheel to advance the quill and apply pressure as needed (*Photo 2*).

An optional step is to drill a shallow conical hole centered in one of the press block faces to aid in aligning the narrow pen tip.

—Jim Putnam, Wisconsin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2

Embossing powder as filler

Some turners like to fill voids in their work with crushed turquoise, calcite, or other mineral fillers mixed with epoxy or cyanoacrylate (CA) glue. But these minerals can be expensive and hard on tools. As an alternative, I started using embossing powders to create faux turquoise and other mineral effects. Embossing powders are like very fine glitter, and they come in many different colors and levels of iridescence (*Photo 1*). You can find them at your local craft or hobby shop.

To make a faux mineral filler, mix the paper-craft embossing powder with epoxy and colored pigments. For the colored pigment, choose the dominant base color you want to show off—turquoise for example. Add the pigment sparingly, as you don't want to overwhelm the effect of the embossing powder. Mix enough to fill the voids in your turning or to create a lip on a bowl (*Photo 2*).

When choosing embossing powders, pick ones that will mimic the natural "grain" pattern of your target mineral. In the case of turquoise, you might complement the turquoise epoxy base color with black flecks, some whites, other blues, and even silver. Then add enough of each embossing powder to the colored epoxy to achieve the mineral effect you want.

Generally, what you see when the mixture is wet is what the final product will look like. So be sure to get your colors and textures right before pouring the mixture into your piece. When you're happy with the mixture, add it to your piece and set it aside to cure. Once the epoxy has fully cured, turn and finish the piece as you normally would.

—Rich Sabreen, Connecticut


1


2

Pouring aid for StopLossBags®

StopLossBags effectively keep your woodworking finishes fresh, but I find them very messy to fill and use. I solved the "fill" problem by making a bag holder out of a piece of plywood, notched to accept the bags' top spout (*Photo 1*). This holder can be clamped to a workbench or table and is easily stored. Just hang the StopLossBag on the plywood holder, and use a funnel to fill the bag with your finish (*Photo 2*).

I solved the "use" problem with empty yogurt cups. I cut the top of the cup down to the level of finish needed, fill it from the StopLossBag, and apply finish directly from the cup. After finishing, I simply let any leftover liquid dry overnight and then toss the cup. ■

—Mark Heatwole, Virginia


1


2

Calendar of Events

Send event info to editor@woodturner.org. February issue deadline: December 15.
See AAW's online Calendar at tiny.cc/AAWCalendar.

Canada

July 16–19, 2021, Saskatchewan Woodturners Symposium, Regina Trades and Skills Centre, Regina. Sponsored by the South Saskatchewan Woodturning Guild, this event features an instant gallery, wine and cheese gathering, banquet, lunches, auction, and demonstrations. Demonstrators to include Jean-François Escoulen, Nick Agar, Jason Breach, Michael Hosaluk, and others. Early registration cutoff is March 31, 2021. For the latest information, visit southsaskwoodturners.ca.

California

January 9–April 24, 2021, *Making Waves: Craft on Water Ecology*, Craft in America Center, Los Angeles. An exhibition focused on works by artists who deal with various ecological and human-generated threats to our oceans and water systems in a variety of media. Artists include Po Shun Leong, Joan Takayama-Ogawa, Jennifer McCurdy, Christopher Edwards, and others. For more, visit craftinamerica.org.

Colorado

September 17–19, 2021, Rocky Mountain Woodturning Symposium, The Ranch Larimer County Fairgrounds, Loveland. For more, visit rmwoodturningsymposium.com.

Illinois

September 23–26, 2021, 7th Segmenting Symposium, Crowne Plaze Hotel, Northbrook. Event to include world-class segmenting demonstrations, instant gallery, tradeshow, and spouse activities. For more, visit segmentedwoodturners.org.

Maine

September 18, 2020–January 6, 2021, *Out of Bounds: The Art of Croquet*, Messler Gallery of the Center for Furniture Craftsmanship, Rockport. An exhibition in which twenty-one artists reimagine croquet's ball and mallet, curated by Jennifer-Navva Milliken and Silas Kopf. See an online virtual tour of this exhibition at tiny.cc/ArtofCroquet.

Minnesota

Multiple exhibitions, AAW's Gallery of Wood Art, Landmark Center, Saint Paul:

- September 8–December 29, 2020: *Step up to the Plate—Second Inning* (AAW member exhibition)
- January 3–March 7, 2021: *Art from the Lathe—Selections from the Permanent Collection*
- March 14–June 13, 2021: *Elements* (POP show also featuring works from the American Tapestry Alliance)
- June 20–August 29, 2021: *Art from the Lathe—Selections from the Permanent Collection*
- September 5–December 19, 2021: *Finding the Center* (AAW member show)
- Ongoing displays: *Touch This!* family-friendly education room; gallery gift shop; and vintage and reproduction lathes.

For more, visit galleryofwoodart.org or email Tib Shaw at tib@woodturner.org.

New Jersey

October 4, 2020–January 10, 2021, *From the Ground Up: Peters Valley School of Craft*, an exhibition highlighting the impact and history of the 50-year-old school, Hunterdon Art Museum, Clinton. The show includes works in various media and multiple artists-in-residence. Woodworker Janine Wang, current visiting instructor at Peters Valley, will focus on woven and turned baskets during her residency in December. Other artists include Karl Seemuller, John Sheridan, Carolyn Grew-Sheridan, Joyce Anderson, Emil Milan, and Andrew Willner. Curated by Elizabeth Essner. For more, visit hunterdonartmuseum.org.

Pennsylvania

October 22, 2020–January 23, 2021, *allTURNatives: Form + Spirit–25 Years of the Windgate ITE Residency Program*, The Center for Art in Wood, Philadelphia. A retrospective exhibition celebrating twenty-five years of the Center's Windgate International Turning Exchange (ITE) Residency, curated by Jennifer-Navva Milliken. The exhibition will be on view at the Center gallery during its current public hours, and images are available for viewing at tiny.cc/FormSpirit.

September 24–26, 2021, Mid Atlantic Woodturning Symposium, Lancaster Marriott Hotel and Convention Center, Lancaster. For more, visit mawts.com.

Tennessee

CANCELLATION NOTICE: Out of an abundance of caution for the health and safety of attendees, demonstrators, vendors, and symposium volunteers related to COVID-19, the Tennessee Association of Woodturners 33rd Annual Woodturning Symposium, originally scheduled for January 29 and 30, 2021, has been cancelled. Please visit tnwoodturners.org, symposium tab, for information and updates about the 2022 symposium, January 28 and 29, 2022.

Peter Exton, *Hidden Fields*, 2009, Bleached maple, 12" × 4" × 4" (30cm × 10cm × 10cm)

AAW Permanent Collection

TURN AN *Umbrella Ornament*

Kurt Wolff-Klammer

I have been making traditional hollow-globe ornaments for a while and realized they can be visually deceptive; it is hard to tell their weight just by looking at them. I wanted to create an ornament that looked airy and lightweight. After trying a couple designs and ideas, I developed the umbrella-style ornament shown here. This ornament comprises a small, upside-down natural-edge bowl (the umbrella) and top and bottom finials. *Photo 1* shows these components.

For the natural-edge bowl part of the ornament, you'll need a piece of branch stock about 3" (8cm) in diameter and 4" (10cm) long. I prefer wood whose sapwood contrasts its heartwood, such as walnut, willow, and mulberry. For the lower finial, start with a piece of wood 6" (15cm) long and about 2" (5cm) square. The upper finial can be made using the wasteblock from the lower finial.

Three ornament parts

1

A small natural-edge bowl is affixed upside-down between upper and lower finials.

Halve the branch wood

2

Cut a section of branch wood in half along the grain.

BANDSAWING ROUND OBJECTS SAFELY

EXPLORE!

Always ensure the workpiece has a "flat" securely registered on the bandsaw table to avoid the piece being caught by the blade and "rolling" into it—a definite safety hazard. For more, see Betty Scarpino's February 2016 *AW* article, "A Jig for Bandsawing Round Objects" (vol 31, no 1, page 20.) Log on at woodturner.org.

Turn the "umbrella"

Look at the endgrain of your branch wood and draw a line through the pith so that the rings appear symmetrical on both sides. With the flat end of the wood securely registered on the bandsaw table, cut the branch in half (*Photo 2*).

Mount one of the halves on the lathe between centers, with the bark facing the headstock and perpendicular to the drive center (*Photo 3*). Center the work crosswise on the pith and lengthwise so that the "peaks" of bark at both ends are at the same distance from the toolrest when the piece is rotated by hand. During turning, this will ensure the wings of the bowl are balanced. If both peaks are not at the same distance from the toolrest, adjust the tailstock live center on the flat side of blank as needed.

Turn a tenon, sized to fit your chuck jaws, on the tailstock side of the workpiece, then shape the outside of the bowl (*Photo 4*). As you form the bowl's outside profile, confirm that the two lowest and two highest points of the bark edges, respectively, are equidistant from the toolrest. If they are not, leave the drive center alone and adjust only the location of the tailstock live center. Strive for a constant curve when shaping the bowl, with the bottom of the bowl being only about ¼" to ½" (6mm to 13mm) below the lowest bark edge.

Remove the bowl from between centers and remount it in a four-jaw chuck. Hollow the bowl with a bowl gouge, working from the outside edge toward the center. I like to use a light placed behind the work to "see" the thickness of the bowl by translucence (*Photos 5-7*). Try to make a ¾" (19mm) flat area in the center of the bowl because that is where the lower finial will be attached.

To aid in reverse-mounting the work on a jam chuck, drill a ¼"-diameter hole through the thickness of the bowl (*Photo 8*). Before drilling the hole, adhere a piece of double-sided tape inside the bowl. I made a jam chuck from scrap wood, with a ¼" spigot. A friction-fit of this spigot in the hole and the hold of the double-sided tape help secure the work on the jam chuck ▸

Mount and turn bowl profile


3


4

The small half-branch is mounted between centers, bark facing the headstock, in preparation for turning the bowl profile and a mounting tenon.

Hollow the bowl


5


6

The bowl is remounted in a four-jaw chuck, so hollowing can begin.


7

The author places a light behind the work, as the wood's translucence is a good indicator of its thickness.

Drill through the bowl


8

Bore a ¼"-diameter hole through the bowl and just into the tenon. A piece of double-sided tape inside the bowl will help in reverse-mounting it on a jam chuck.

(*Photos 9, 10*). With the tailstock in place for added support, turn away the tenon. Remove the tailstock for the final passes, leaving a ¾" flat for the top finial (*Photo 11*). Sand and then remove the bowl from the jam chuck.

Turn the lower finial

I started the lower finial using a 6" length of maple, 2" square, though 1" square would provide enough material. Start by turning the blank round, and form a tenon on one end. Cut the tenon so that the wood will sit squarely against the ends of the chuck jaws, as shown in *Photo 12*. Mount the finial blank in the chuck, retrue it, and begin reducing its diameter at the tailstock end (*Photo 13*). Continue cutting and shaping the tip of the finial, working it down until you cut all the way through the blank, separating it from the tailstock.

Shape the end of the finial, working on only the last inch of the blank. For maximum support, it is best to work in short sections, cutting and sanding each section before proceeding left toward the headstock. I used a skew as a parting tool to create a fine detail where the tip transitions to the finial stem (*Photo 14*).

Using a bowl gouge, cut the stem of the finial down to final diameter in short increments. To reduce vibration in the wood, use a freshly sharpened tool and make light cuts. Continue for

Jam chuck for reverse-mounting


9


10


11

A custom jam chuck is turned from scrap wood, with a ¼" tenon to accept the hole of that size in the bowl. The double-sided tape and the tailstock live center also help hold the bowl in place.

Turn away the tenon, then remove the tailstock so you'll have access to complete the bottom of the bowl.

A proper tenon


12

Finial stock mounted in pin jaws. Note that the tenon shoulder sits flush against the end of the jaws, and the tenon does not bottom out inside the chuck.

Turn a finial


13


14


15

Begin turning the finial with tailstock support, until you've pared away the end to a point. For maximum support and to reduce vibration, work in small increments toward the headstock, shaping and sanding as you go.


16


17

Finial design

(*16*) The author's lower finial design. Consider coves, beads, and tapers to achieve an interesting look.

(*17*) An undercut base will make contact with the underside of the bowl. Not shown: a ¼"-diameter tenon is formed just left of the base for mounting the finial to the bowl.

about 3", allowing the stem to taper up and into a bulb shape (*Photo 15*).

Your finial design is a good place to create interest. Note that when the ornament is assembled, the top of the finial will be obscured by the lower "wing" of the upside-down bowl but can be seen through the "valley" of the rim profile. Here, my design includes, from tailstock to headstock: the tip, a long taper to a bulb, then a cove, a ball, and another cove (*Photo 16*).

Next, create a base feature—about ¾" in diameter and slightly undercut—that will join the finial to the inside of the bowl (*Photo 17*). Use a parting tool to form a ¼"-diameter tenon that will fit into the hole drilled in the bowl. Cut the finial from the waste wood, leaving the tenon about ⅛" long.

Turn the top finial

The waste wood remaining in the chuck can be used to make an upper finial. The short stub of ¼"-diameter tenon remaining will fit into the hole in the top of the bowl. Bring the diameter of the edge above the tenon to about ¾"; this will become the base of the top finial. Test-fit the top of the bowl on this tenon (*Photos 18, 19*).

I used a ¼" collet chuck to hold this small turning, grabbing the ¼" tenon stub in the collet and leaving the larger tenon available as material for the upper finial (*Photo 20*). In designing the top finial, I formed a small cove that could be held using a thumb and pointer finger. Once you have shaped and sanded the finial, drill a 1/32" (1mm) hole in the end to accept a screw eye hook. It is helpful to start the hole using the long point of a skew chisel to prevent the bit from wandering (*Photo 21*).

Assembly

Test-fit the pieces, making sure the tenons on the upper and lower finials do not touch in the middle of the hole in the bowl. If they do touch, sand down one or both tenons as needed. Use a small amount of glue in the final assembly of the umbrella ornament, attaching both tenons into the hole in the bowl. *Photo 22* shows the completed ornament.

This project is fun because you can customize it and build both your spindle- and bowl-turning skills. I have created different variations of the project by using figured wood, natural-edge burl, and crotch pieces. I have also embellished the ornament with woodburning and piercing (*Photo 23*). ■

Kurt Wolff-Klammer, a hobby woodturner and member of the Chicago Woodturners, started turning ornaments to sell at a local church Christmas sale. Then he began exploring his own ornament designs. Follow Kurt's journey on Instagram, @wkswoodworking.

Waste wood for upper finial


18


19

The waste wood left in the chuck from the lower finial can be used to make a small upper finial. Check the fit of the remaining tenon in the hole in the bowl.

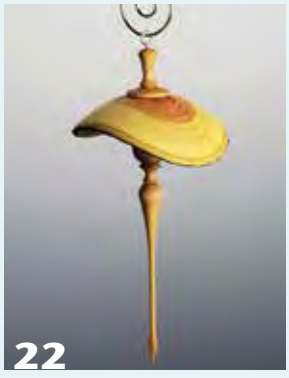
Turn upper finial


20


21

Flip the waste wood around and mount it in a collet chuck. The original tenon now provides material for the upper finial.

The completed umbrella ornament


22

A canvas for embellishment


23

The author has added woodburned designs to accentuate the heartwood area on top of this ornament.

Make a Zigzag-Routed Ornament

John Lucas

Each year, I try to come up with a new ornament style. I've made so many that this quest is getting more and more difficult. Lately, I have been doing demos on how to use a router at the lathe and decided to see if I could use a router to enhance the look of an ornament. I came up with a "zigzag" design, which involves routing V-shaped grooves at the ends of two globe halves, which are then joined together and turned to create an interesting effect. As you can see in the *opening image*, your ornament globe can be just about any shape you like.

Begin by turning a cylinder from wood mounted between centers. For this example, I turned a cylinder about 1¾" (4cm) in diameter, but you can adjust the width (and length) to accommodate the shape of the ornament globe you want. Form a tenon on each end of the cylinder to fit your chuck, then use a parting tool to cut the cylinder in half.

Mount the bottom half of the ornament globe in the chuck. True up the end and hollow into the endgrain slightly, so you'll be routing only the outer edges.

How many V-grooves?

The next step is to determine the number of V-grooves to route. You'll want to pick a number of grooves that can be spaced evenly around the circumference of the workpiece and referenced easily on your indexing wheel. Here is a simple way to do this.

Wrap a piece of masking tape around the workpiece, and cut it so its length matches the circumference exactly (*Photo 1*). Peel the tape off and adhere it to a piece of paper. Now draw straight lines up from both ends of the tape, as shown in *Photo 2*. Position a metric ruler between the two upright lines such that a given number of even increments (centimeters) fall between the lines. The more increments, the steeper the angle. I decided to consider sixteen, twenty, and twenty-four increments. When you draw parallel lines straight down from

JOURNAL ARCHIVE CONNECTION

EXPLORE! To learn about the basics of using a router at the lathe, see John Lucas's February 2020 *AW* article, "Using a Router at the Lathe" (vol 35, no 1, page 26). John covers how to build a router carriage and a lathe-mounted table on which the carriage rides, and offers helpful information about indexing wheels. AAW members can access all past journal articles online at woodturner.org.

each increment, you can compare the width of the spaces. I chose twenty-four V-grooves for this ornament globe.

To ensure even spacing around the workpiece prior to cutting, I used my indexing wheel to help me draw twenty-four pencil lines on the wood. In this case, I used a wheel with 120 indexing holes, so I had to skip five holes each time. These lines also help as a visual guide and confirmation when you start routing. I made a jig to hold my pencil at the same height as the tip of my router bit (*Photo 3*).

Router setup

I used a straight bit in my router and mounted the router on a 45-degree carriage, so just one corner of the bit did the cutting (*Photo 4*). You could also use a V-shaped bit positioned at 90 degrees to the work. In either case, the router table needs to be adjusted so the cutting tip is at dead center height.

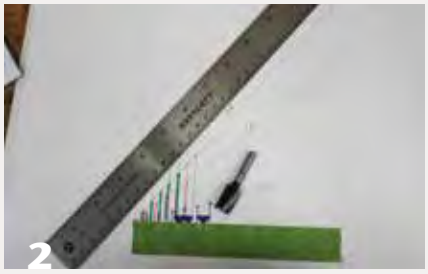
When I first tried making these zigzag ornaments, I was going for a direct wood-to-wood gluing surface of the zigzags. I routed the grooves perpendicular to the lathe bed (90 degrees to the endgrain of the work). But I found that the peaks and valleys of the V-grooves weren't parallel, leaving almost no wood-to-wood gluing surface. Also, the raised portion at the center of the turning did not allow the outer edges to touch. Hollowing the center helped, but I still had a tapered groove with only minimal wood-to-wood contact. The solution was to swing the router table about 5 degrees out of parallel. This, combined with hollowing the center, allowed me to get a sufficient gluing surface.

For this example project, I opted to use epoxy clay in the joint, so alignment of these surfaces was not critical.

A depth of cut of 3/16" (5mm) is about right for the zigzags. To set the cutter at this depth, I positioned the router on the table, cutting tip just touching the workpiece, with two craft sticks between the router carriage and the fence (*Photo 5*). Removing the sticks ▸

Spacing the V-grooves


1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3

(*1-2*) Masking tape the length of the work's circumference aids in determining desired even spacing.

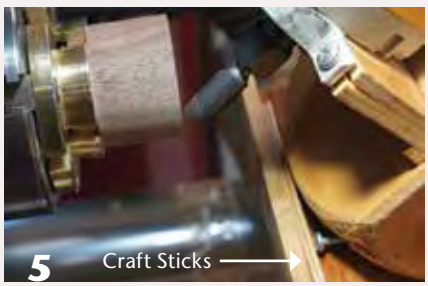
(*3*) The author uses a height-adjustable pencil holder to mark out cutting locations at center height. The indexing wheel ensures even spacing all around the piece.


4

Angled router, straight bit

A 45-degree router carriage rides on a level router table with guide fence, mounted in the lathe's banjo.

Set depth, route V-grooves



5

(*5*) Depth of cut is set by a low-tech method. Two craft sticks are placed between the table fence and router carriage, with the bit just touching the wood. The sticks are removed prior to cutting, allowing the bit to advance to the desired depth.

(*6-7*) Route the zigzag V-grooves.


6


7

prior to cutting ensures the bit will cut at the proper depth. I set this depth after swinging the table 5 degrees from parallel. It might take a couple of tries to get both settings just right. In this project, the depth of cut isn't as critical as offsetting the table angle.

Rout the zigzags

Make a few passes with the router and check the depth of cut (*Photo 6*). There should be a sharp peak on the top of each cut. If there isn't, move the table slightly closer to create this peak. When you have achieved the right depth, make all of the rest of the cuts, advancing the work on the indexing wheel between each pass (*Photo 7*).

Now use a Forstner bit to drill a small flat area in the bottom of the hollow (*Photo 8*). This drilled recess will accept a short dowel that will help determine spacing during glue-up.

Remove the routed workpiece from the chuck and mount the other half of the ornament globe. Repeat the setup and routing process on this piece, sneaking up on the correct depth of cut. It helps to make a series of cuts that are too shallow at first. Test the fit using the already-routed piece, and make adjustments as needed. Ultimately, the bottom half should seat completely in the zigzags of the half you are cutting.

After the routing is complete, drill into this half with the Forstner bit, just as you did before.

Drill for spacer dowel

Drill a cavity to accept a spacer dowel.

Spacing, alignment, glue

Now the fun begins. The spacing, or gap, between the two pieces is determined by the length of a center dowel inserted in both. You can decide the width of the gap or whether you want any gap at all—none, small, or wide. Turn a dowel to the appropriate diameter and length.

More choices! When you do finally glue up the two halves, you are in control of how to align the zigzags. *Photo 9* shows the V-grooves with their peaks and valleys aligned. You can also twist them slightly to produce a pattern with a thin and thick side, as shown in *Photo 10*. Yet another choice is to align the peaks so that little squares are the result (*Photo 11*). Ensure that the dowel spacer is cut to the correct length for the effect you are going for.

It is important to seal the routed cuts with shellac or lacquer before you glue everything together. Colored epoxy will weep into unsealed wood pores and leave a nasty look. Sealing the endgrain of the wood will stop the bleeding (*Photo 12*).

With the dowel spacer cut to length, it is time to glue it in (*Photo 13*). I like to use epoxy because I will be hollowing later and don't want the dowel wobbling around inside.

To glue the two globe parts together, I like to use Milliput® epoxy clay, which comes in several colors (*Photo 14*). I chose white and added some green tint. The product has two parts that are mixed together to form an epoxy

Alignment choices!

You can twist the two halves slightly to arrive at quite different effects. Determine the pattern you want and cut a spacer dowel to the correct length to achieve it.

that you can shape like clay. I mixed them together in a cup and added the color. Then, wearing protective gloves, I rolled it between my fingers to form an epoxy "snake."

I wrapped the epoxy clay around the turning and pushed it into the V-grooves. Then I put a little dab on top of the spacer dowel and pushed the two halves together. If you cut a little of the epoxy clay away, you can see the pattern created. Twist the halves to produce the pattern you want. You may have to smear the epoxy clay around or add more to fill any gaps. Let it cure for twenty-four hours, and you are ready to turn your ornament globe (*Photo 15*).

I then turned and hollowed the globe in my usual fashion and made top and bottom finials (*Photo 16*).

You have to be really careful in the depth of cut and in the alignment of the indexing wheel to get the pattern you want, but it's a lot of fun and satisfying when you complete a successful ornament. I imagine there are lots more possibilities for this method, and I hope you enjoy exploring it for yourself. ■

John Lucas, a retired photographer, has been working in wood for more than thirty-five years and also dabbles in metalworking. He enjoys modifying machines, making tools, and sharing his knowledge through written articles and videos. He has taught classes at John C. Campbell Folk School, Arrowmont, and The Appalachian Center for Crafts.

Alternative Gap Filler

If you would rather have wood in the gap between the two halves rather than epoxy clay, simply turn and route a contrasting wood. Glue it in place while the first half is still in the chuck. Then turn and route the second half and glue it to the other pieces.

Seal endgrain, glue in spacer dowel

12

The exposed endgrain of the router cuts is best sealed with shellac or lacquer prior to gluing.

13

Glue in the spacer dowel.

Glue together with epoxy clay

14

Colored epoxy clay fills the gap between the two halves of the ornament globe. After it has cured, the workpiece is ready for turning and hollowing.

15

Completed zigzag ornament

16

NESTED SIBLING BOWLS

Robin Dustin

At the beginning of my turning journey, I lacked sizable chunks of wood to turn. I found that gluing pieces of wood together in a single layer to make a larger blank for a plate, tray, or platter was an easy solution to my shortage of large stock. I made several pieces in this fashion and occasionally found wide boards for the same purpose, but I wanted to get more thickness to make deeper bowls. I spent a few sleepless early morning hours thinking about how to stack layers to create a thick blank. That simple enough task was complicated by a critical factor: I wanted to build blanks that would make the most economical use of my material and minimize the waste in the center, which would only end up mulching my shop floor.

The design

To determine the thickness of material I would need to build up the vertical outside curves, I made a scale drawing of the cut-away profile of each bowl (*Figure 1*). This elevation drawing includes the approximate size of each recessed foot for my chuck jaws. I did make a slight departure from this design and left the vessel rims thicker than shown in the drawing.

Because these bowls were conceived as a set, the design aesthetic I wanted to achieve would make the stacked bowls appear to be identical, but the unstacked set would reveal each bowl's unique design (*Photos 1, 2*). I was aiming for siblings, not identical quintuplets! This all happens naturally due to the process, since the top layer of each bowl is cut from the same disk and therefore reveals the same patterning. The center blank from that disk becomes the smallest of the vessels, so it automatically will match the rim pattern of the other bowls.

Select material

Most of my wood comes from scraps and off-cuts from visiting furniture makers. For this set, I used walnut, cherry, butternut, oak, and maple, arranged more or less from dark-to-light tones.

To make a set of five bowls, you'll need to create five glued-up layers from which to cut disks for your turning blanks. In this example set, each disk was ¾" (19mm) thick and 12½" (32cm) diameter. After cleaning up each layer following glue-up, you should have layers at least ⅝" (16mm) thick. I started by jointing and ripping each board to width. The number and arrangement of strips in each layer reflect my own design sense, balanced against any limitations imposed by the materials I had on hand.

I decided to use poplar veneer (dyed black) between the boards to accent the joint (*Photo 3*). I also added thin strips of contrasting woods to further highlight the joints.

Plan the design

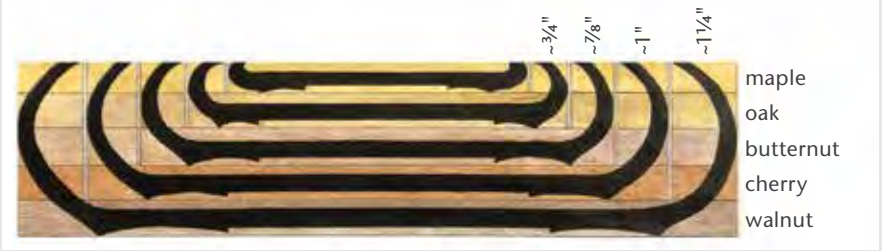


Figure 1. The rim thickness for each vessel decreases with the size of the form, an important detail when cutting the rings from their respective blanks.

Glue up the layers

The gluing process is tedious and messy, but this is where the colors and grain patterns start to emerge. This step is a bit like constructing a puzzle. Start by laying out a sheet of plastic or plastic-coated freezer paper to prevent each form from becoming a permanent part of your bench after the glue dries. Then select and arrange your pieces of wood (and veneer if you choose to use it).

When you are satisfied with the arrangement of your selected timber, brush wood glue on the inside jointed edge of the outermost piece. Good adhesion demands an even coat of glue on both surfaces to be joined, with no gaps in the glue coverage. Since I was using veneer, I then brushed glue on both sides of the first piece of black poplar veneer. This takes some juggling, as the veneer is thin and wants to curl until both sides are coated, after which it is just plain messy!

All the pieces should be flush with the bench top; otherwise, the resulting uneven surface will require more work to achieve a smooth surface after the glue dries. I stood the glue-covered veneer against the adjacent glue-coated surface and made sure the bottoms of both pieces were flush with the bench top. Smaller pieces in the assembly are especially prone to exerting their independence by trying to slip out of alignment. There are plenty of details to track as the glue speeds to tackiness, but the good news is the ends of the forms need not be aligned; the ends will be waste material after the disks are cut from the glued-up boards.

Total open time for the wood glue I was using (Titebond II) is about ten to fifteen minutes, so I worked as quickly as I could to glue and position each component in the layer. When the entire layer is glued up, apply clamps and leave the assembly overnight to dry (*Photo 4*).

After the glue dried, I ran each layer through a thickness planer and sander (*Photo 5*). I am lucky to have a friend with this equipment, but with more effort, the same results could be obtained with a belt sander, hand planes, and cabinet scraper. The layers do not need to be the same thickness, but each layer must have smooth, uniform, glue-ready surfaces on both the top and bottom.

Cut out disks

Using a compass, draw a 12½"-diameter circle on each layer, then cut out the disks. For my set, the walnut disk would form the bottom of the largest vessel. The other four disks would produce multiple rings, so being able to reset the compass leg in the center of the disks is important. Make sure the point of the compass leg leaves a detectable indent, and circle it with a pencil for good measure. ▸

Blood relatives

1

Completed and stacked, this bookmatched sibling set shows how the upper rim creates the visual bond that unites the forms.

2

The same set, unstacked, emphasizes the differences in wood tone and arrangement.

Photos: John Ducsai

Construct the layers

3

(*3-4*) After jointing and milling stock to a uniform thickness, glue up the boards and clamp them until the adhesive has dried.

4

(*5*) Clean up the boards to remove glue squeeze-out and address any surface unevenness. The result should be glue-ready surfaces on both the top and bottom.

5

Mark the remaining four disks to provide rings to build up the walls of the five vessels, and a bottom for four sequentially smaller vessels (*Photo 6*). I marked the cherry disk for one ring and one bottom. The butternut disk would yield two rings and a bottom. The oak disk, three rings and a bottom. And the maple disk, four rings and the smallest vessel form.

A key detail is that each rim ring is cut to a different width, depending on which of the vessels it is intended for, *as shown in Figure 1*. There are no rings cut from the walnut disk, as its full diameter will become the bottom of the largest bowl. From the second disk (cherry), I cut only one outside ring at 1¼" wide. From the third disk (butternut), I cut an outside ring 1¼" wide as well as a second ring 1" wide. From the fourth (oak) disk, I cut an outside ring of 1¼", then a 1" ring, and finally a ⅞" ring. And the fifth (maple) disk has four rings cut from it: 1¼", 1", ⅞", and ¾", leaving a small solid center. The pattern emerges: all the rings of a common width and diameter comprise the wall height for a single bowl. This may seem fussy, but varying the ring widths optimizes the use of the material, ensures the vessels will nest, and provides adequate wall thickness for the bowl profiles. It is helpful to track where you are in the process; I used sticky notes on each blank to help keep me focused through this step.

Origin of the species

Cut the layers into five disks. Predominant wood species in each, clockwise from upper-left are walnut, cherry, butternut, oak, and maple. Each disk is labeled according to how many rings it will yield.

Next, I cut the rings from each disk with a jigsaw (*Photo 7*). To provide a small opening for the jigsaw blade to enter the blank, I drilled three adjacent holes with a 1/16" (2mm) drill bit and removed the fibers between the holes with the side of the rotating bit. By taking my time and carefully following my lines, I extracted ten neat circles with little material lost to the kerf (*Photo 8*).

Assemble the blanks

With the rings cut from each disk, it is time to arrange the puzzle pieces (*Photo 9*). As becomes evident from the cut rings and bottoms, each smaller bowl decreases in height by one ring. The smallest vessel is a platter just one layer thick, made from the remaining center of the maple disk. I stacked the rings in the same order on each blank with the same grain orientation, topping each with a maple ring, and firmly establishing the sibling relationship. Now—before gluing all the pieces—is a good time to experiment with ring position and orientation. I chose a parallel grain orientation, but you could try the rings in different configurations and ponder the results.

Satisfied with my arrangement of components, I moved on to gluing the segments together (*Photo 10*). If there is such a thing as having enough clamps and you find yourself in that situation, you can glue up all four disks at once. Otherwise, the task will need to be done in stages. One way or another, the result will be five blanks ready for mounting on the lathe (*Photo 11*).

Turn the bowls

My ultimate goal was to affix each vessel to the lathe with the jaws of a scroll chuck expanded into a recess in the base. But several steps are necessary to get to that point.

I used different techniques to mount each blank, depending on the blank size. I found that large plate jaws fit the second largest blank and allowed me to turn much of the outside of the form (*Photo 12*). Another alternative would be a jam or vacuum chuck. For all of these techniques, the tailstock should be brought up for additional support.

Regardless of your chucking method, start by shaping the lower half of the outside profile of the vessel. Check the wall thickness periodically with a caliper, which in my case conveniently fit between the slightly expanded plate jaws (*Photo 13*). After turning the recess foot for the expanding jaws, I sanded the bottom and lower half of the outside of the form to completion. Some blending of the upper and lower sides will need to be done later, but it is wise to address the bottom as much as possible while it is accessible.

Cut rings

Mark and cut rings from each disk to create the sides of the bowl blanks using a jigsaw or scroll saw. Use a drill bit to create the initial kerf for the saw blade.

I could have continued using the plate jaws, either expanding from the inside of each blank or contracting from the outside, but the jaws limit access to the upper rim. Therefore, I employed a different strategy for chucking the three smallest vessels. I cut ¾"-thick disks from scrap lumber (hardwood is best) to fit the contracting jaws of my chuck. I glued one of these sacrificial disks centered on the inside of each blank (*Photo 14*).

The trick to centering a sacrificial disk is to drill a small through-hole in the center of the disk. Then spread glue on the bottom surface, insert a pin or thin nail (or the drill bit used to make the hole), and align its point with the center mark on the bottom of the bowl blank. You did put one there, remember? Let the adhesive dry overnight. These sacrificial disks will be turned away when the inside of each vessel is shaped.

Other than overcoming some chucking challenges, nothing about turning these forms deviates from standard bowl-turning techniques. A bowl gouge works well for most of the work, and a ½" (13mm) scraper is handy for reaching under the curved rims.

When the bowls are completed, their constructed geometry allows them to nestle neatly together, and few people can guess how they were made (*Photo 15*). ■

Robin Dustin earned an MFA in weaving and metalsmithing. She built her home in New Hampshire while working as a carpenter. In 2006, Robin lucked into woodturning club meetings, quickly outgrew her midi-lathe, purchased "Puff, the Magic Powermatic Dragon," and hasn't stopped spinning wood since. She can be reached at robindust@gmail.com.


9


10


11

Assemble the blanks

(*9*) Place the rings on the vessel bottoms. This is the final opportunity to experiment with design, by keeping the grain aligned or varying grain direction relative to adjacent layers.

(*10-11*) Glue and clamp the blanks.


12


13


14

Chuck and turn each vessel

(*12-13*) Jumbo, or plate, jaws provide access to the vessel bottom and the option of measuring wall thickness as turning progresses. Not shown, turn a recessed foot in the bottom to accept your chuck jaws in expansion mode.

(*14*) An alternative chucking method is to turn and glue a sacrificial spigot into each vessel. The spigot can be held in a chuck so the outside bottom and sides can be turned.

Close family

After completion, the stacked set of siblings shows off its bloodlines.


15

JOURNAL ARCHIVE CONNECTION

EXPLORE!

To trace the evolution of Robin's blank glue-up technique, check out her October 2016 *AW* article, "Glued-up Tray" (vol 31, no 5, page 27). AAW members can access all past journal articles online at woodturner.org.

A Closer Look at COLORANTS

Choose Pens and Markers Carefully

Carol Hall

In art school, I learned that Jackson Pollock's paintings are often framed with special shelves at the bottom that can be slid out to recover the paint chips that fall off every day. Those fragments are collected for use in their continual restoration. Despite this condition, the last Pollock sold for over $140 million.

Not all of us will be lucky enough to have our work in museums, with curators struggling to keep each piece intact. We all want our art, whether in the possession of a friend or a collector, to remain in the same condition it was in when we signed it. By using lightfast, archival, and artist-grade materials, your art has the potential to outlive you.

How long is permanent?

Embellishing wood is more popular than ever, and woodturners often grab the materials they are most comfortable with. Skillfully using a paintbrush or airbrush can feel daunting. We've all had pens or pencils in our hands for many years, so we have muscle memory with those tools. That's why it feels natural to grab a Sharpie permanent marker or become enamored with Copic markers as a means of coloring our turnings. But artists should know that these types of markers have a relatively short lifespan on artwork.

The ink in some pens is considered *fugitive*, meaning it is a color that will fade, shift in tone, darken, or disappear over time. These products can still be labeled and marketed as professional and/or artist quality because they were developed for the graphic arts world, where the rendered piece is just a single step toward the finished product. If you go to the website for Sharpie (sharpie.com/faqs) or Copic (copic.jp/en/support/f3-3), you'll see that each company clearly states that their products are not lightfast. In this case, the word *permanent* does not mean forever—it's just a guideline, not unlike "Five-Minute Epoxy."

The promise of a "permanent" marker implies the ink will not move or change on the surface once applied. In fact, many of today's wood finishes will cause these markers to bleed and migrate, especially lacquer and alcohol-based products. Under normal indoor light exposure on a porous surface such as wood, their color is not expected to last more than a few years. Black Sharpies are also particularly susceptible to *mesmerism*, where the color's appearance changes in different illumination. Because black Sharpies are not a true lamp black, but are actually a dark purple, their pink tinge will become more evident over the years.

Better choices

Fortunately there are solutions. You just need to populate your studio with better choices. Information on a product's lightfastness is often readily available on the label. Ratings of I (excellent) or II (very good) are based on official testing by the ASTM (American Society of Testing and Materials). Some products may require you to dig farther on the manufacturer's website to find useful information.

- **Sakura Pigma Micron Pens** are archival quality, acid-free, fade-proof against sunlight and UV rays, and waterproof. The company offers a set of eight colors that are lavishly pigmented and quite permanent. Their

Colored pencil on wood

(*Above*) **Mark Hall and Carol Hall**, *About Time* (three views), 2020, Holly, clock gears and hands, thermoplastic, contact lenses, acrylic paint, powdered colorants, colored pencils, 6" × 5" (15cm × 13cm)

(*Left*) Colored pencils can be used on turned wood to delineate shapes within forms or simply to add color. Here, the author layers Inktense pencils, which are activated with water to create painterly effects.

nib size is fixed, and the color choices give you only a limited, rather dark palette, but this is a very handy pen for signing your completed work.

- **Zig Memory System Twin Tip Calligraphy Markers** are a beautiful set with eight painterly color choices that have both broad and fine nibs. With only eight colors, you will need to practice your color theory. Their translucent waterproof finish allows you to layer colors, creating a more complex palette.
- **Faber-Castell Pitt Artist Set**, offering ninety pens with assorted nibs, is a magnificent solution. This set has an astounding number of color options and the ink is lightfast, waterproof, and PH-neutral. This set is a great creative solution, but it is a pricey investment.
- **Refillable markers** are a good alternative that require just a little more effort. There are numerous manufacturers, and most have several replaceable tip options (nibs or brushes). You can use any professional-quality medium to fill them—from permanent, waterproof inks to high-flow acrylic paints. Chroma Craft, Golden, and Dr. Ph Martin's Bombay India Inks all offer densely pigmented lightfast colorants for use with a brush, airbrush, or a refillable marker. Golden makes special caps that convert their bottles of high-flow paint into markers—brilliant!

Colored pencils

There is also a large variety of colored pencils available. Prismacolor, Lyra, and Caran d'Ache all offer sets with different lead types. But beware; within any set, there can be a mixed batch of colors with varying degrees of archival permanence. This is because each pigment responds to UV rays in its own way. Manufacturers try to offer the highest lightfast rating possible, but some colors are inherently fragile. You can easily check the statistics on most materials by searching the Internet for the product and "lightfast rating." Then it is just a matter of throwing away those few pencils that are fugitive colors and keeping the rest of the set.

The pencil brand I prefer is Derwent Inktense, whose water-activated pigment can create beautiful, painterly effects. Unlike watercolor pencils, the colorant in Derwent Inktense pencils becomes immobile when thoroughly dried, so they can be layered on the surface of your project. Ninety-percent of their seventy-two colors are lightfast as a dry medium; however, extreme dilution can impact their archival rating. Sealing the work with a UV-protective finish, like Chroma Craft Clear Acrylic Lacquer FD, will prolong the colors' vibrancy.

Process matters

Even the best supplies can have bad results if they are used incorrectly. Remember, your woodturned items are the sum of all their parts. Being aware of the effects that your process may bring to any material's permanency is important. In particular, providing the correct substrate and topcoat is vital. Be sure any layers above or below your colorants are complementary. As we all know, every wood artist has special processes and techniques that get their work from tree to art. Running a test with your combination of products is vital.

Buyer be aware

It is not enough to simply shop for "artist-grade" materials. Some manufacturers have shifted their focus to offering non-toxic options. These healthier options do not always have the advantage of withstanding the test of time. Health and durability should both be priorities, so be sure to check all your materials' packaging for the attributes you are seeking. Like determining nutrition values in food products, choosing art supplies is a matter of reading labels (and sometimes searching websites).

In the end, having your artwork last a long time is the best reward. Was it Stradivari's goal that his violins should last hundreds of years? His attention to materials and process assured him that position in history. You, too, can create works that will be enjoyed by multiple generations. ■

Carol Hall has been a fulltime artist for thirty-four years, along with her husband Mark. She has a BFA in fine arts and a teaching degree from Tyler School of Art. Carol has been a demonstrator for the AAW National Symposium, a juror for the N.J. State Council for the Arts, and has work in many collections and museums, including the Guggenheim. You can contact her at carol@thecarolhall.com.

Susceptibility to wood finishes

A permanence trial between a Sakura Pigma Micron pen and a Sharpie permanent marker. With one coat of spray lacquer, the Micron pen stays true, while the Sharpie blurs and bleeds. This test was done over shellacked poplar.

Mesmerism

Mesmerism can ruin a piece by reflecting a tone that changes in different light and becomes bolder over time. The purple component of Sharpie's black ink (instead of being a dead lamp black) imparts a pink tinge you might not have intended on your final product.

The BB Stave System: Exploring A New Approach

Ted Beebe

The discovery

A friend and I were visiting a barn to look at a large maple burl that had been there for years. Off to the side, I noticed several wedge-shaped boards, about 30" (76cm) long, 8" (20cm) wide, 2" (5cm) thick on one edge, and ¾" (19mm) thick on the other edge (*Photo 1*). Being a segmented turner, I kept thinking about the wedge angle and how that might be utilized in bowl construction. I now know that the angle was about 15 degrees and the wood was quarter-sawn spruce. The boards had once been used to make book-matched backs for mandolins.

After a few days of contemplation, it occurred to me I could tweak the boards to cut curved, wedged staves for a bowl. I wanted to keep the 2" edge and bring the other edge to a point, giving me a 20-degree angle (*Photo 2*). To do this, I cleaned up the edges of each board and ran them through my thickness planer on a shopmade 20-degree sled. I would need eighteen staves, at 20 degrees each, to form a bowl blank, so I marked out a bowl profile for the staves using a template (*Photo 3*).

With the bandsaw table tilted to 10 degrees, I cut out the staves. Cutting the stave shapes with the bandsaw table tilted ensured the cuts would be parallel to the wide edge of the board. I then added a notch toward the bottom of each one to assist in clamping the bowl while gluing (*Photo 4*). The final step in stave preparation was to sand off the fuzzy edges so they wouldn't interfere with the glue joint.

Gluing can be a challenge if I try to do too many pieces at once. I can glue up several pieces and use the notch for clamping, but it gets tricky. A more cautious approach is to glue up two or three staves at a time, taping them together and/or using rubber bands, then do a few more (*Photo 5*). With this method, I glue nine staves together for half of the bowl, and then the other nine, with spacer dowels inserted between the bowl halves (*Photo 6*). After the glue dries, check the last two mating surfaces. If they are off at all, rub each half on a sheet of sandpaper taped to a flat surface to improve the joint. Draw pencil marks on the surfaces to be glued; when the pencil marks are sanded off, the last joint is ready to be glued.

The notch I had cut toward the bottom of the staves now served as a tenon for mounting the workpiece on the lathe. The turning went well, but it is certainly different from a traditional segmented bowl. All of the glue joints are sidegrain to sidegrain, and you are ultimately turning an "endgrain" bowl (*Photo 7*). ▸

An idea is born

The original found boards sparked the idea for the BB Stave System. The author modified the wedge angle so it came to a point, but only because he prefers that they meet at the center point in the bowl bottom. Other turners might prefer to mount the staves on a separate solid bottom, thus eliminating the need for a pointed wedge.

Curved wedge staves!

The staves are marked out and cut at the bandsaw. Tilting the bandsaw table to the appropriate angle ensures the curved cuts are on plane with the wide edge of the board.

A notch is added to aid in clamping and to double as a tenon.

The staves are glued together in sections, not all at once.

Glue-up and turn

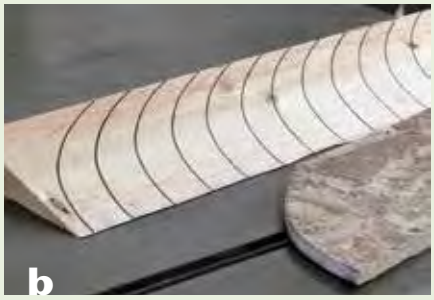
Gluing the stave segments in two halves with a spacer allows for adjustment before final gluing. Dry-fit the segments first to assess your glue joints. If they appear to be "spot on," it may not be necessary to glue the two halves with a spacer.

The final turning reveals interesting grain patterns.

Make a BB Stave Bowl

Here are the basic steps to make a bowl using this method from 2×6 dimensional lumber. This example entails twenty-four staves, each one with a 15-degree wedge angle.

Resaw a 4' (122cm) length of a 2×6 board at the bandsaw with the table tilted to 15 degrees, bringing one edge of each resulting board to a point. Clean up the bandsawn surface with one pass on the jointer.



Mark the staves on the wedge-shaped board using a pattern, so all the staves are the same shape and size.

Cut the staves at the bandsaw, with the table tilted to 7.5 degrees.

Glue the twenty-four staves together, and turn the bowl.

Endless possibilities

I was very pleased with the bowl I had made with this new stave concept and started to wonder what else could be produced using this method. I quickly realized that the basic wedge-shaped board, shown in *Photo 2*, had much more potential than just making bowls. I began to see it as a blank slate with lots of possibilities.

To explore further, I turned four hollow forms by cutting four sets of eighteen staves (*Photo 8*). You can see from this picture that there were two scraps from each set of staves, one from the upper left and one from the upper right. When these scraps were positioned together, my wife Kathy thought they looked like a sunflower, so I proceeded down that road and made sunflowers (*Photo 9*).

I also made a nested set of five maple bowls by gluing up half spheres (twenty-one staves each). *Photos 10 and 11* show that this time I cut and oriented the staves in a different direction. I had set out to have eighteen staves in each half sphere, but apparently my wedged board was at an angle less than 10 degrees. The solution was to add three more staves, which got me close enough to continue.

At this point, I showed my stave system to my friend and mentor Paul Bartlett, an excellent segmented turner who is also very good with CAD systems. He was impressed and began exploring other applications. Using my newly discovered concepts, he made a set of nested bowls and then a nested set of eggs (*Photos 12-14*). Then Paul took it a step further by incorporating veneer, both vertically as he was assembling the staves and horizontally as he was preparing the original board (*Photo 15*).

Paul and I have made forms using eighteen, twenty-four, thirty-six, and forty-two staves, but there are lots more options, depending on the wedge angle of your initial board. We have determined other applications could include spheres, endgrain cutting boards, ribbons, and platters; we suspect we have not even scratched the surface. Paul and I named this new concept the BB Stave System after our last names, Beebe and Bartlett. We hope lots of other turners will continue to explore the possibilities. ■

Ted Beebe, living in both Fletcher, Vermont, and Port Charlotte, Florida, can be reached at teddy.beebe@gmail.com. Paul Bartlett lives in Englewood, Florida.

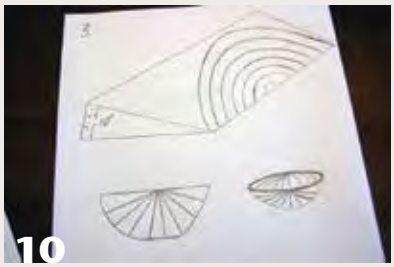
Other forms


8


9

After turning the initial bowl using this method, the author soon saw many more possibilities, including vase forms and even sunflowers.

Half-sphere bowls


10


11

Cutting multiple semicircle staves from a wedge-board resulted in a half-sphere bowl, with all of the stave points coming together at the rim.

Nested staved eggs


12


13

The author's mentor and friend Paul Bartlett turned a set of nested eggs using this newfound construction method.


14

Add accent veneer


15

Paul then created a set of hollow forms with veneer incorporated both vertically and horizontally.

SHOPMADE HANDLE FOR DOUBLE-ENDED TOOLS

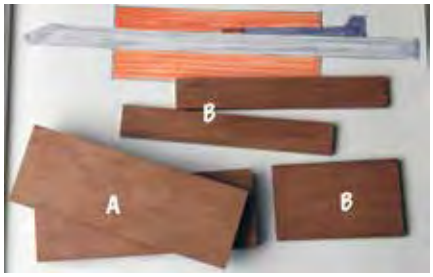
John Kelsey

You can grind your own flat, double-ended scrapers, straight or curved, regular or negative rake, from bars of tool steel, and lately double-enders have appeared on the market. Boxmaster Tools is one example. These finishing tools need a handle that allows for easy and secure switching from one end to the other. My shopmade solution comprises four pieces of wood glued up as a three-layer sandwich, using the tool itself as a spacing template. A wedge secures the tool steel in the turned handle.

John Kelsey is editor emeritus of Woodturning FUNdamentals and a member of the Lancaster Area Woodturners.

STEP 1 CUT PARTS

Cut and size to your own fist some flat, square, and smooth hardwood blanks. Mine were chop-sawn from an 8/4 plank of black cherry. A: Top and bottom pieces, 6" × 1¾" × ⅝" (15cm × 4cm × 16mm); B: Center strips and wedge material, about ¼" (6mm) thick, to suit tool steel.



STEP 2 SHAPE WEDGE AND MATING STRIP

Lay out, cut, and fit the wedge and its mating center strip first, using the tool itself as a template. The wedge's curved head helps release the tool with an easy thumb-push. Make sure the two center strips are a smidge thicker than the tool, so it can slide in and out without binding. The wedge should be a smidge thinner than the tool.

STEP 3 GLUE UP COMPONENTS

Glue and clamp the pieces in stages, cleaning up squeeze-out as you go. For accurate alignment, use the tool being handled to position the center piece with wedge cutout. Four clamps in the final stage ensure the top piece fits flat and tight.

STEP 4 MOUNT AND TURN

Mount the handle on the lathe, applying only moderate tailstock pressure to avoid invading the wedge space and splitting the glue-up. Turn the handle to suit. Here, a spindle-roughing gouge makes short work of the corners and cleanly turns a simple shape. Sand to 120 grit, but for a good grip don't apply a finish. Finally, glue in a wee scrap to plug the open end.

STAINED GLASS PORTHOLE BOWL

Wes Jones

Untitled Porthole Bowl, 2020, Boxelder maple, stained glass, 5¾" × 12¾" (15cm × 32cm)

I have been turning bowls for many years and am always looking for new ways to decorate and enhance them. I have used carving, burning, painting, dyeing, and inlaying with many materials. Using stained glass seemed like a natural way to add rich, vibrant color to a wood bowl. Stained glass comes in a huge variety of colors, shades, and hues and also in various textures. But there were a few problems to consider. I had to devise a way to allow for wood movement, given the rigidity of the stained glass pieces. Also the sharp edges of the glass had to be covered to allow protection and provide a finished look.

My first designs some years ago utilized a rabbet, or groove, around the bowl filled with rectangular stained glass pieces. Because light could not show through the inlayed glass, I used reflective glass to create the effect I was looking for. These bowls were interesting, but I wanted to find a way to let the light pass through. This idea developed into my porthole bowls, which evolved through several iterations before arriving at the process described here.

The process involves parting off a thin section of the bowl rim, drilling portholes through the walls, and forming a deep slot through the holes from the rim. Pieces of glass are then inserted into the rim slot to fill the holes, and the rim is glued back on. This method, although a little tricky, means rectangular pieces of glass can be used instead of circles, a big advantage. And the edges of the glass are totally enclosed within the wall of the bowl. Following are the steps to make a porthole bowl.

True a rough-turned bowl

Select a roughed out bowl that has been sufficiently air-dried. It should be sound with no cracks or other defects. To best display the glass portholes, pick a shape with high sides that curve up close to vertical. Remount the bowl to true up the outside profile (*Photo 1*). The walls of the bowl must remain thick enough after truing to house the stained glass pieces.

The diameter of your bowl will influence the number and diameter of portholes in your design. For this example, I used boxelder maple to make a finished bowl 5¾" high and 12¾" in diameter. I decided to incorporate sixteen portholes, each 1¼" (32mm) in diameter. These parameters can be adjusted to match the size of your bowl.

To true up the bowl, hold your bowl gouge with the handle down and the bevel rubbing to take light cuts (*Photo 2*). Work from the base of the bowl toward the rim for the best cut (for a sidegrain bowl). At this point, you may want to do some shear-scraping to smooth out any ridges left by your bowl gouge (*Photo 3*). This will reduce the amount of sanding required, which you should do now, before remounting the bowl in the chuck.

True up the tenon (*Photo 4*), then remount the bowl in a four-jaw chuck.

Using a bowl gouge, true up the inside of the bowl. Remember to leave enough thickness in the walls to house the glass pieces. Sand the inside of the bowl completely.

Remove rim, create portholes

With a freshly sharpened thin parting tool, begin to cut about ⅜" (10mm) off the rim (*Photo 5*). Cut straight across (perpendicular to the lathe bed). Pencil

True up rough-turned bowl


1


2


3

The author remounts a rough-turned, air-dried bowl so it can be trued up using bevel-rubbing and shear-scraping cuts.

True up tenon for remounting


4

True up the out-of-round tenon so it will sit squarely in the chuck jaws. If you have straight-walled chuck jaws, make a sharp, square corner at the bottom of the tenon. If your chuck requires a dovetail tenon, then make that shape instead.

Part off bowl rim


5


6


7

After beginning the rim parting cut, the author draws reference lines across the cut. This will aid in re-aligning the rim later, when it is glued back on. Carefully part off the rim without damaging it.

marks across the cut line will help match up the grain when you reattach the rim later (*Photo 6*). Use a medium lathe speed and lightly hold the rim as you cut, so you can catch it as it separates from the body of the bowl (*Photo 7*). Work carefully to ensure the rim separates cleanly, without tearing or cracking. You are now ready to lay out and drill your holes for the stained glass.

Scribe a pencil line 1" (25mm) from the rim, all the way around the bowl (*Photo 8*). This line represents the center of the 1¼"-diameter portholes,leaving ⅜" of solid wood to the edge.

Determine the number of holes to drill and the spacing between them. Lay out the hole centers. In this example, the circumference of the bowl measured 40" (102cm), so I placed the centers of the sixteen holes 2½" (6cm) apart, leaving 1¼" between holes (*Photo 9*). You may find it easier to use the index on your lathe (or an indexing wheel) to locate evenly spaced hole centers.

To drill the holes in the side of the bowl, I used my drill press with ▸

Lay out portholes


8


9

Lay out the drilling locations for the portholes, spaced evenly around the bowl.

a temporary cradle to support the bowl (*Photo 10*). Leaving the chuck attached to the tenon while drilling ensures the bowl will run true when it is remounted on the lathe. I originally tried Forstner bits to drill the portholes but had problems with the bit "breaking out" and damaging the wood inside the bowl. Now I use a 1¼" hole saw with much better results.

After all the portholes are drilled, remount the bowl on the lathe and ensure it is running true. Now it is time to cut a deep slot from the bowl rim through the holes. Using a freshly sharpened parting tool and a fairly high (but safe) lathe speed, slowly part in from the rim (*Photo 11*). I find it best to make the cut all the way down and then come back and widen it as needed. As the tool enters the cut-out circles, stop and make sure you are aiming correctly to stay in the center of the wall thickness. You will need to cut to about ⅛" (3mm) below the circles to hide the bottom edge of the glass.

Check the fit of the stained glass in the slot (*Photo 12*). In order to cover the 1¼"-diameter holes, the glass pieces were cut 1½" (38mm) square. The glass should fit snugly, without sloppiness or requiring undue force to be inserted all the way into the slot. If you need to widen the slot slightly, resharpen your tool and pare the edge of the slot as needed. Check the fit of the glass in several places around the bowl.

Now is a good time to sand the inside of each hole to remove any drilling marks or frayed edges. I used a small-diameter sanding drum on a flexible-shaft rotary device to sand with 320-grit abrasive (*Photo 13*). By tilting the sanding drum, you can also lightly chamfer the inside and outside edges of the holes. If you don't have this equipment, you can also sand the holes by hand.

Once you have installed the glass, it will be difficult to finish the wood surfaces inside the holes. So take this opportunity to pre-finish the holes using the same finish you plan to use on the bowl.

Install glass, reattach rim

After the finish is dry, it is time to install the glass squares. With the bowl upright on a table, slide all the glass pieces into place (*Photo 14*), centering each one in its hole. Ensure the edges of the glass are not visible from the holes.

To prevent the glass pieces from shifting in the groove, I applied a bead of thick CA (cyanoacrylate) glue on the top edge of each glass piece (*Photo 15*).

Drill portholes

10

A shopmade cradle clamped to the drill press table supports the bowl during drilling. The drill press table is tilted at an angle such that the holes will be perpendicular to the sides of the bowl. A hole saw produces good results.

Form groove, test-fit glass

11

12

Carefully part in from the rim all the way through the drilled holes. Test the fit of the stained glass and adjust the groove as needed.

Assemble glass in portholes

13

Prior to gluing in the glass pieces, sand the inside of the holes.

14

15

Slide the glass squares into the groove from above and secure them using a bead of thick CA or silicone glue.

Reattach bowl rim


16
Wood glue is used to reattach the rim to the bowl. The lathe tailstock acts as a handy clamp.


17


18
The author uses an electric drill with a small sanding disk to sand the glue joint flush.

A silicone adhesive would also work fine. Take care not to get any glue on the top edge of the bowl, where the rim will be reattached. Allow the glass adhesive to dry thoroughly.

Before reattaching the rim to the bowl, confirm that each glass tile is firmly glued in place. Coat the mating surfaces of the rim using wood glue, and align the rim on the bowl using the pencil marks you had drawn earlier. I used small pieces of masking tape to hold the rim in place while I remounted the bowl on the lathe. I then applied clamping pressure using the tailstock and a flat board pressed against the rim (*Photos 16, 17*). Allow the glue to dry overnight.

Remove the clamping board and sand the glue joint flush (*Photo 18*).

Final steps

The final turning step is to reverse-mount the bowl so you can remove the tenon and form a foot. Use a small spindle gouge to remove as much of the remaining wood as possible next to the live center (*Photo 19*) and form a concave foot so the bowl will sit flat on a table surface.

A small nub of wood will remain where the live center was holding the bowl in place. To safely remove this waste wood, place the bowl upside down on your workbench and use a small, flexible saw to cut it off. A thin piece of cardboard under the saw prevents any scarring of the wood (*Photo 20*). Then hand-sand the foot in the direction of the grain.

Finish the bowl using your choice of finish. On this bowl, I used Minwax Antique Oil Finish, then buffed and waxed the piece to its final sheen. ■

Complete the foot


19
With the bowl reverse-mounted, turn away the tenon and complete the foot.


20
A small saw is used to cut away the remaining waste wood.

Wes Jones has been a lifelong woodturner and woodworker. Living in Lawrenceville, Georgia, he is a member of three woodturning clubs in the Atlanta area. He has served as president of both the Chattahoochee Woodturners and Georgia Association of Woodturners, and many other officer positions. Wes has taught and demonstrated woodturning and has published more than a dozen articles on the subject. For more, visit wesjoneswoodturner.com, or contact him at wwjones@comcast.net.

Untitled Porthole Bowl, 2020, Bigleaf maple burl, walnut, stained glass, 4" × 13½" (10cm × 34cm)

Here, walnut is used as a contrasting rim because the burl bowl blank was not thick enough to accommodate a rim being cut from it.

TURNING Chocolate

INNOVATIONS OF A PASTRY CHEF

Scott Talbott Smith

Steve Day has translated his love of woodturning to his day job as chief pastry artist at Boca Raton Resort & Club. With a lathe in the kitchen and the ability to turn chocolate, he saves his employers thousands of dollars in custom chocolate molds and instead fills the need with his creative designs.

Photos courtesy of Steve Day.

Already an accomplished pastry artist with a job history spanning the globe, Cardiff, Wales-native Steve Day thought nothing of his friend Jimmie Bernal's invitation—"Come with me. I'm going to change your life!"—after one of their many lunches together. Bernal, a sports car enthusiast and accomplished woodturner, drove Day to a rural area of Broward County, about forty-five minutes northwest of Miami that is dotted with large, open ranch properties. Their destination was the incredible woodturning shop managed by the Gold Coast Woodturners on the property of longtime club member Ron Pursell. It's hidden away in several structures behind Pursell's home, nestled amid a jungle of lush tropical and native trees festooned with tall clumps of suspended staghorn ferns.

Impressed by what he saw, Day returned the following week and turned his first bowl in the shop, which features ten lathes and everything else a beginning woodturner needs—from raw wood and chisels to sandpaper, finish, and mentoring.

"I was hooked from the moment I put that chisel to wood," Day says

A bowl of chocolate

Day uses standard woodturning tools to turn chocolate forms like this bowl, made from a blend of dark, milk, and white chocolates.

To minimize the mess of "shavings" in the pastry kitchen at Boca Raton Resort & Club, Day had a clear plastic screen installed at the lathe.

with a Welsh accent he has retained despite living and working in the U.S. for twenty-six years.

"Hooked" was putting it lightly. Within two weeks, Day built his own little woodturning shop inside a purpose-built aluminum storage shed on a freshly poured concrete slab in his backyard. He got help from Bernal, who has been a massive ongoing benefactor to the club and its members, donating four lathes, among other significant contributions.

Within a couple months, this expert pastry chef's thoughts turned from wood to chocolate, a primary medium in his long career of making sweets that are as delectable to the eye as they are to the palate.

A seasoned pastry chef

In his regular job, Day is chief pastry artist for the storied Boca Raton Resort & Club on the Intracoastal Waterway in Boca Raton, Florida. The Resort was recently acquired by Michael Dell of Dell Computer fame. The computer mogul's investment company has injected cash and new life into the 94-year-old property, which has a large local membership and serves as a destination luxury resort for tourists the world over.

Day, 63, cut his dessert-making teeth at age 16 with two years of instruction at Cardiff College of Food Technology and Commerce, and went on to work and train at resorts and high-end restaurants in Europe and Israel, including names like the Hotel Rubens at The Palace in London; the original century-old Patisserie Valerie in London; Hotel Atlantic Kempinski in Hamburg, Germany; and Club Med in Elat, Israel.

Despite a lifelong struggle with severe dyslexia and a tough relationship with his father and teachers, who told him he was "unteachable," Day is now a widely-respected professional pastry chef and speaks German, French, and Hebrew, though not much Welsh, he admits. It was that dyslexia that prevented him from advancing into "uni," a British colloquialism for a four-year university. He says he made it only into what in America would be a junior or technical college "by the skin of my teeth." That disability may have steered Day's career path, but it never slowed his ambition and desire to grow his skills and creativity while advancing through premiere properties around the world.

A lathe in the kitchen

Day arrived in America on his birthday in 1994. By 1996, he was hired at the Boca Resort and has worked there since, living at the same home in West Boca with his wife, Karyn. Together, they raised their now 21-year-old daughter Kelsi, who ironically now lives in South Wales near Cardiff. She's the inspiration for Steve's growing Instagram feeds—@bocapastry and @bocapastryturnswood.

Resort management in Boca Raton created the "pastry artist" position specifically for Day. In addition to regularly creating signature desserts to serve hundreds, Day is tasked several times a year with designing and building huge, original centerpiece displays that must wow members ▸

Like turning air

A rough blank comprises several pieces of chocolate "welded" together and to a faceplate with tempered chocolate "glue." A tailstock-side wooden wasteblock minimizes marring. Day says the experience is like turning air, as the chocolate offers little resistance. Sharpening of tools is not necessary.

A freshly turned piece of green-tinted white chocolate. Note the lathe's standard faceplate, at left.

and guests alike—all delicately constructed from pastry, chocolate, and candy. The centerpieces are connected to major holidays or private events, like massive weddings that can run into six figures. His 2019 Christmas display covered about 200 square feet of the resort's lobby in a candy wonderland featuring more than a dozen handcrafted items, including a full-size chocolate guitar, drum set, toy train, toy cars, spinning tops, and tools you'd find in Santa's workshop—all made from sweets.

As he got more into turning wood, Day suggested creating displays for the resort from turned chocolate. He brought his first lathe to work—a Harbor Freight 12" model—and started experimenting with dark, milk, and white chocolates. All he had to do at that point was figure out how to get the chocolate mounted securely on the mandrel. With the HF lathe's minimum speed of 600 rpm, a relatively fast minimum speed, it would be a challenge.

Starting with the goal of producing simple chocolate bowls, he first tried using the HF lathe's stock metal faceplate, mounting the blanks just as you would a wood blank. The tempered chocolate didn't take kindly to screws, and his first pieces flew off. He fashioned a custom wood tenon and "welded" the chocolate blank to the wood by using melted tempered chocolate as glue, the whole thing held by a four-jaw chuck. But he couldn't separate the pieces from the wood tenon without sawing through the chocolate, which damaged the piece. Then he tried simply welding the chocolate to the faceplate, without screws. That was the ticket. A short blast from a torch to heat the metal and the finished piece slides right off the faceplate.

With the mounting issue out of the way, Day could focus on the creative artistry for which he's well known. He creates his blanks with rough molds, the biggest using large bowls. Those blanks can be hollowed out as standalone pieces or stacked together to make impressive towers built by turning various rough blanks in sections that are stacked and welded together. Turning the entire piece at once would be problematic for a variety of reasons, not least among them the limitations of the HF lathe.

His biggest pieces are turned with the headstock rotated. The largest final piece he has created so far was 24" (61cm) in diameter and about 3' (91cm) tall, built for a special wine and chocolate tasting event at the resort in October 2019, which included his first live demo of the process. It was such a hit that he incorporated chocolate turnings and more live demos as part of the resort's massive 200-square-foot Christmas display, all of which he designed and built himself.

As you might imagine, chocolate is a turner's dream because there are virtually no catches—so long as you don't get too aggressive, Day says. It's also much quieter. Perhaps best of all, there's no sanding, and you can eat the shavings. Finish is a simple spray application of candy shellac, the same glossy stuff that keeps M&Ms from melting in your hand. Chisels in Day's chocolate turning arsenal include a bowl gouge, skew, beading tool, various scrapers, and a vortex tool for fine details.

Keeping it cool

For a live club demo at the Gold Coast Woodturners, Day added a flourish of liquid nitrogen in the bucket that holds his chisels. It boils at room temperature, putting on an impressive show of cascading fog. When I first saw this, I assumed it was to cool his chisels to keep friction from ruining the tempered chocolate, which begins to melt at about 78 degrees Fahrenheit (stray chips don't sting, they melt!). But Day says friction isn't a problem. Because chocolate is such an easy, buttery turn, it doesn't generate much heat. "It's like cutting butter, like nothing's there," Day says. The liquid nitrogen was "a bit of frou-frou for the show."

Aside from demos, he does the bulk of his chocolate turning in the resort's pastry kitchen, which is chilled to 63 degrees. Cleanup is a breeze with a shop vacuum, and if he catches the shavings on his arms quickly enough, at that temperature he can shake them off before they melt. "Otherwise, your arms are dripping with melted chocolate," Day says.

The club demo was opened to members of neighboring AAW chapters, and it drew more than double the average attendance—including my own 7-year-old daughter, who keeps asking when Day will do it again. She and several other kids at the demo made out like bandits with the shavings.

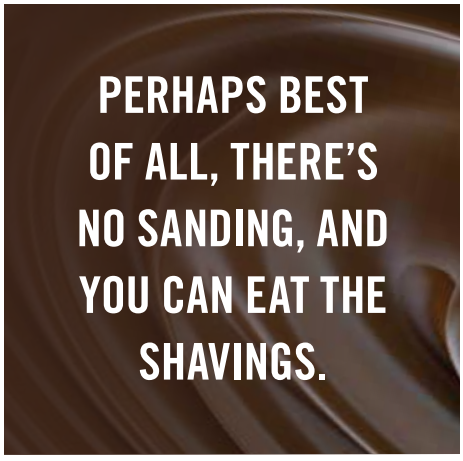
When he's not turning chocolate at the office, Day likes to turn lidded boxes, hollow forms, and pens using locally salvaged wood (live oak, Norfolk Island pine, Cuban mahogany, and others we are blessed with in South Florida), embellished with resin and various inlay techniques. He turns wood mostly at home but heads to the club shop to work on bigger pieces. Chocolate wouldn't work in either workspace since it's South Florida and fans provide the only cooling, though Day says he did test some techniques at his home shop on a couple cool mornings in December, making sure to clean up immediately to stymie local ants.

"I wouldn't turn chocolate at home again, it's too messy," he explains.

Day continues to experiment with chocolate turning, including new forays into creating blanks using pressure and vacuum pots, both of which his wife purchased as gifts. The latter creates an interesting blank riddled with holes, not unlike worm-eaten wood but much tastier. He says it reminds him of the popular British chocolate bar, Aero. ■

For more, see Steve Day's Instagram feeds: @bocapastry and @bocapastryturnswood.

Scott Talbott Smith is a recovering newspaper journalist now building a second career as a professional woodturner. He turned his first bowl (and funnel) in junior high shop class and wishes those classes still existed. You can find his work on Instagram, @ncwoodsmith, and at ncwoodsmith.com.



An elegant centerpiece

One of Steve Day's centerpiece displays, about 2' in diameter and more than 3' tall, comprising "glued" together sections of tempered chocolate. Even the lotus flower is chocolate.

Photo: Peg Lopata

DONNA ZILS BANFIELD

Attorney Turned Woodturner

Peg Lopata

Once an attorney with a practice focused on employment law and discrimination, Donna Zils Banfield has found success as a woodturning artist. Her achievements can be attributed to more than just native talent and hard work. She is athletic, artistic, creative, intelligent, inquisitive, and stubborn, or more kindly put, persistent. She's had her share of challenges, leaving her career as an attorney to become a woodturner, but Banfield says, "It was liberating." Though it was an unconventional choice for a woman at the time, she was used to choosing hobbies and careers dominated by men. "Woodturning was not an unusual choice for me at all," she explains.

An accidental artist

A descendant of Russian and Polish immigrants, Banfield grew up in Michigan but now lives in New Hampshire. Neither of her parents were woodworkers, and she has no formal background in woodworking or woodturning. However, her grandfather worked as a finisher in the furniture business. Says Banfield, "Sadly, he never knew of my interest in wood. I was told it was not something a young lady should pursue." Still, Banfield was a stubborn child and admits she was always drawn to doing things the boys were doing: "Things that boys did looked a lot more fun than what girls did."

Though her grandfather never knew his granddaughter became a woodturner, he did have something to do with her discovery of wood crafting. When he died, she inherited some pieces of his furniture and in the 1990s repaired and stripped the paint from them to make them suitable for her home. Refinishing his furniture taught her the differences between good and poor construction. She developed some interest in furniture but ultimately lamented a lack of connection with her grandfather: "There's no connection, but rather sadness. Neither my grandfather nor my father encouraged my interest in anything that was unconventional for women. It is unfortunate that neither lived long enough to see what I did with the furniture and today with woodturning."

On a visit with her husband Dave to the annual League of New Hampshire Craftsmen fair, Banfield was transfixed by the woodturners. Noting her keen interest, Dave, a man open to women doing work once considered unladylike, gave her a wood lathe and turning tools for Christmas soon after. Her artist's and craftsperson's soul was awakened. Still practicing law and feeling the stressful nature of that work, she found that wood refinishing and woodturning helped her to de-stress. Gradually, she noticed a decline in her interest in going to the law office.

Banfield found some early success selling her turned pieces, all utilitarian forms with no piercing or color, but continued working both as an attorney and a woodturner for a couple of years. Then Dave suggested she leave her law practice. "Before he finished encouraging me to close my practice, I was already mentally writing a letter to my

Banfield smooths the pierced edges of a patterned vessel.

Soul Series No. 10, 2018, Walnut, 23k gold leaf, 3" × 3½" (8cm × 9cm)

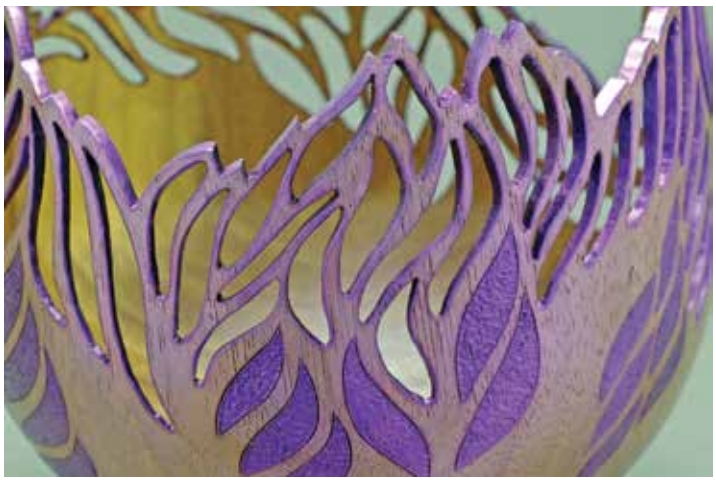
clients explaining my decision. I continued to teach and am still an adjunct faculty instructor at the University of Massachusetts, Lowell, but I closed my practice in 2003 and never looked back," Banfield explains.

Early days

As with anyone new to the craft, Banfield admits her earliest pieces were poorly made. She explains, "I made a lot of poorly turned 'things'—roughly finished, with tool marks and sanding scratches." As time went on, her skills improved. "I learned how to sharpen the tools to improve the surfaces. I learned better techniques in using abrasives. I struggled with understanding what makes good form and why," says Banfield. She persisted, but without proper instruction.

The self-teaching route didn't work. "I had plenty of disasters before seeking out formal instruction," says Banfield. Her first teacher was woodturner and sculptor Beth Ireland. "Getting instruction from a good teacher makes a huge difference," she says, feeling there were no advantages to teaching herself. "Woodturning is not intuitive. If you look at a woodturning gouge and make an assumption of how the tool should be presented to the wood, it's almost always the opposite."

To keep afloat during this learning phase, Donna continued her law practice. "Don't quit your day job," advises Banfield to others new to woodturning. At this stage in her turning career, she was selling at craft shows. Banfield explains, "Things that sold varied from show to show and year to year, but the pieces were always utilitarian and lower-priced. To really make a living, one had to produce work at an efficient rate and do it well." But she knew she was not cut out for production work: "If I was turning something that I thought needed more time spent, I would spend that extra time, until the piece satisfied my obsessive-compulsive, anal-retentive brain." With a very supportive spouse and Donna teaching law classes, she was able to spend the time on each piece she felt was required, without concern for income.



Soul Series No. 11, 2017, Walnut, interference paint, 3½" × 4" (9cm × 10cm)

A proper workspace

As her woodturning career developed, so did her need for a proper space in which to work. So Donna put aside her craft for three years to build, with help from Dave and some members of the woodturning community, a two-story, timber-frame barn studio. This dedicated space, a short trot behind her house, features a spacious room with sectioned-off work areas for woodturning, carving and piercing (with a bench-top dust collector), pyrography, airbrushing, and painting.

A good workspace can improve anyone's productivity, but only so far as the worker conducts herself as a professional. As a one-time attorney, Banfield knows how to do this well, and she applies the same level of attention to her woodturning as she did to her law practice, always demanding of herself the highest level of skill she can achieve. To remind herself of these higher goals, she has tacked various inspirational quotes to the walls of her studio. A few examples:

- David Nittmann: "If you're not out there on the edge, you're taking up too much space."
- Wally Dickerman: "If you hear that little voice in your head saying, *That's good enough*, it probably isn't."
- Clay Foster: "That's going to take forever. Guess I better get started."

Finding a niche

To be out on that "edge," as Nittmann put it, Banfield felt she had to find ▸

Soul Series No. 19, It Satisfied My Soul, 2018, Silver maple, acrylic paints, 3" × 9½" (8cm × 24cm)

Soul Series No. 21, 2019, Cherry, copper leaf gilding, 3" × 9½" (8cm × 24cm)

her own niche. For her, that took the form of works with her very personal mark on them. She explains that her distinct style, which she developed over a decade, is "something buyers don't see elsewhere and can't purchase from another maker." An example is Banfield's *Soul Series*, which features her personal mark—a signature leaf pattern—appearing in a certain way on the turned work. "It is free-flowing, but also crisp, meticulous, and precise," says Banfield. Common in her work is a balanced artistry, a range of hues and color tones painted on with a variety of techniques, patterns that complement the shape of the piece, as well as pierced designs, which sometimes add texture.

Inside her timber-frame barn studio, Donna preps a turning blank at the bandsaw.

Another series Banfield explored is *Illusions in Wood*, inspired by the basket illusionists. "I wanted to create an entire body of work that could deceive the viewer into believing it was something that it was not," she explains. "It could [appear to be] ceramic, pottery, glass, or metal."

Finding a distinctive niche earned Banfield not only a good income from the sale of her pieces and from teaching woodturning, but a following. "Whether or not they are makers themselves, there are people who experience my creative process as I post my works in progress on social media," she explains. But she admits, "I don't make enough to support both me and my husband. And some years are better than others. I've had some really good years and some really lean years."

Donna notes that she has been inspired by and has learned from some of the best woodturners. "I am fortunate to have studied under some skilled and gifted artists," says Banfield. "One, however, had a profound and powerful influence on me, not just in art but in philosophy—Binh Pho." Pho, who died in 2017, was known for the storytelling he achieved through his painted and pierced works.

Banfield is grateful to be one of many artists and woodturners who learned from Binh Pho. "He taught me not just how to perfect my craft, but how to [express] life experiences—challenges, adversity, and triumphs—in my art."

As an expressive woodturning artist, Donna begins with ideas. She delves deep into history, design, form, texture, line, and color for each piece. After she explores the ideological, she makes preliminary sketches. Designs are drawn on flat pieces of wood, then on scraps of curved wood. She sees these steps as transitional. The process is slow—several months go by—but each transition allows for more thought to imbue the final product. It's not just about *what* she can create, it's about what meaning can be expressed through the work. Of course, on a more practical level, Banfield explains, this lengthy deliberation also reduces the chance of mistakes.

Woods and ways

Banfield uses local hardwoods. She admits, "In the beginning, like most woodturners, I got my wood from almost anywhere. If I heard a chainsaw running in my neighborhood, I jumped in my truck and searched for the source. I've often stopped and picked up discarded wood on the side of the road." But Donna explains that as she got older, this way of acquiring

wood took a toll on her body. She has had four surgeries thus far. "Today, I get wood from a landscape and firewood business," she says. "When they encounter large-diameter black walnut or cherry trees, they let me know." If she likes the trees being offered, the logs are delivered to her backyard, dropped right where she wants them. She then processes the wood with her sawmill to make her own turning stock. "As I matured, I've learned to work smarter, not harder," she says.

Her preferences for wood species depend upon the intended use. If the work is to be utilitarian, such as salad bowls, then cherry, walnut, and maple are preferred. If it is to be a decorative but unembellished piece, Donna prefers burl wood of any species. She says that close-grained, closed-pore woods are ideal for carving. "I guess the only wood I will not turn is pine—freshly cut or dry," explains Banfield.

Donna's process for making utilitarian bowls begins with milling the log on the sawmill. She then sections the slabbed wood with a chainsaw, cuts "rounds" at the bandsaw, rough-turns the bowls on the lathe, and sets them aside for one to two years to air-dry. She then re-mounts the rough-turned bowls on the lathe for a second turning, sanding them to completion. After signing the bottom of her bowls with a woodburning tip, Banfield applies an oil finish every twenty-four hours for a week. She allows the finish to cure for thirty days and then buffs it to her desired sheen.

Banfield carefully cuts frisket (a masking material) from patterned sections prior to airbrushing.

For more artistic pieces, Banfield says, "I treat the lathe as a tool to create my canvas. That means turning a specific form and sanding it." The artistry that makes Banfield's pieces highly distinctive comes next. "For artwork, I do all of the [same turning steps] right up to going into the finish room. In the finish room, I sketch patterns or images, and use the woodburning tips if needed. I sometimes carve pieces using oral surgeons' tools, then it's back into the finish room to apply color with the airbrush, using acrylic paint, oil pencils, or gilder's paste."

A clear-coat such as lacquer is Donna's preferred finish for artistic pieces. "For salad bowls," she explains, "it's a homemade finish, which is a mix of boiled linseed oil and varnish, with turpentine or mineral spirits to thin the mix." Her last step is to deliver the completed bowls to the galleries that carry her work.

Soul Series No. 22, Nautilus, 2019, Birch, acrylic paint, metal leaf, 2" × 9" (5cm × 23cm)

Steve Sinner/
Donna Zils Banfield
collaboration, 2017, Maple, paint, 8" (20cm) tall

The business and AAW

Donna notes that running her woodturning business, called Live a Life Less Ordinary, requires very different skills than being a craftsperson. She says, "There's a lot in making a living at woodturning that has nothing to do with actual woodturning and is boring administrative stuff." There are many tasks that must be attended to, such as writing press releases, a blog, or a website, applying to shows, photographing your work or paying someone to do it, delivering or shipping, bookkeeping, accounting, paying taxes, and tracking inventory. ▸

(*Above*) *Illusions in Wood Series, Hammered Gold Plate,* 2017, Walnut, gilder's paste, 1½" × 9¾" (38mm × 25cm)

(*Right*) *Illusions in Wood Series*, 2017, Maple, gilder's paste, largest: 5½" (14cm) tall

For Banfield, part of running a good business includes volunteering. "I volunteer my time and services frequently," she explains. "I annually donate pieces to auctions for several local and national non-profits."

She also is involved with the AAW. "The jaw-dropping images of work from turners I saw in the *AW* journal made me want to achieve what they could," says Banfield. AAW events connect her with other woodturners, especially other women woodturners. Regional and national symposia, as well as turning clubs and craft schools, have provided opportunities for Donna to teach, run workshops, and demonstrate. "I expanded my woodturning world," says Banfield, "from a local community to an international one. I now have friends and customers all over the world."

Teaching

Though not volunteer work, another way Banfield gives to the woodturning community is by teaching. She began doing this at local Woodcraft and Rockler stores. And when she completed her backyard studio, she began offering one-on-one instruction there. Donna aims to keep things relaxed and free from distractions. "Woodturning," she says, "especially for beginners, can be a white-knuckle experience. But it doesn't need to be, and what I teach."

The COVID-19 pandemic has affected her teaching schedule. All her 2020 classes were cancelled, and her workshop at Arrowmont School of Arts and Crafts has been rescheduled to October 2021. In response to these new circumstances, Donna is getting up to speed so she can offer interactive remote demonstrations.

Banfield has kept some of her earliest pieces to show her students where she began. "I have a couple of bowls made from purchased cherry blanks. Those bowls are the classic dog dish—thick, chunky, and clunky, with straight walls and a large bottom," she explains. "I could put those back on the lathe and turn them down, there's that much wood left in the walls and bottom. But instead, I use them as examples of what to avoid. It's important for students to see that my early work looked just like theirs, so they don't get discouraged."

Teaching is rewarding for Banfield. She says the best part is "seeing how a student's facial expressions and entire body relax when they find the sweet spot in the gouge."

Looking ahead

Banfield isn't worried that she won't be able to come up with new ideas. Her only concern is not having enough time. She keeps her concepts fresh, drawing in a sketch book that also has images she has saved. At the moment, she is exploring classic, iconic New England images. "If I live three more lifetimes, I will never exhaust all the ideas I have," she's happy to report.

Donna Zils Banfield will continue, as well, to be guided by her own personal philosophy. "I keep those early bowls I made because it's important for me to remember where I started," she says. "If I keep pushing the boundaries of what I know, each piece will teach me something new." ■

For more, visit Donna's website, livealifelessordinary.com; follow her on Instagram, @new_england_wood_artist, or on Twitter, @n_englandart; or find her on Facebook.

Peg Lopata is a freelance writer based in Somerville, Massachusetts.

WIT Presents: Donna Zils Banfield

In September, the AAW's Women in Turning (WIT) committee featured Donna Zils Banfield in its WIT Presents series of live online talks by women woodturners. You can view the recording of this session at tiny.cc/Banfield or by scanning the QR code. To access the video, you'll have to be logged in to your AAW account at woodturner.org.

French-Cleat PVC Tool Holder

Doug Stowe

Setting up a new turning studio at the Eureka Springs School of the Arts (ESSA), in Eureka Springs, Arkansas, I asked a volunteer to research tool holders for each turning station. One design the volunteer had found on Pinterest caught my eye: the photo showed my own arm lifting a tool rack into place! It was one I had made fifteen years ago for use at the Clear Spring School, where I still teach woodworking grades K-12. I guess the design not only works great, it's timeless, too!

The design relies on a French cleat for mounting, which makes it particularly easy to move, swap out, or put away. A French cleat makes use of two boards with opposing 45-degree angles; one is screwed to the wall, angle-side up and facing inward, and the other, screwed to the PVC tubes, bevel down and facing outward, slides over and rests on the wall-mounted board.

This rack holds the tools so their cutting tips are clearly visible, making tool selection easy.

Constructing the racks for ESSA was a snap, as I'd had practice a decade and a half before. ■

Doug Stowe has authored thirteen woodworking books and over 100 articles for various woodworking magazines. His latest book is The Guide to Woodworking with Kids. *Named an "Arkansas Living Treasure" by the Department of Arkansas Heritage in 2009, Doug is a founder of the Eureka Springs School of the Arts, where he teaches adults. Doug also teaches woodworking to kids at the Clear Spring School through his Wisdom of the Hands program. For more, visit dougstowe.com.*

STEP 1 CUT PVC PIPE

Use a compound miter saw to make angled cuts across pieces of PVC pipe. These angled cuts represent the top of the tool rack.

STEP 2 RIP FRENCH CLEAT AND BASE PIECES

Left: At the table saw, rip a 45-degree bevel in a piece of 1" × 6" (25mm × 15cm) dimensional lumber to form one part of the French cleat. *Center and Right*: A second cut with the blade at 90 degrees forms the second part of the cleat; the offcut forms the unbeveled base part to which the PVC pipe is secured at the bottom.

STEP 3 MOUNT PVC PIPE TO CLEAT AND BASE

Left: Use ¾"- (19mm-) long flathead screws to attach the top, angled ends of the PVC pipe to the French cleat. Countersinking these screw holes will help prevent scratching the tool handles as they are slid in and out. *Right*: Use longer screws to attach the bottom ends of the pipe to the lower, unbeveled base piece. To cushion and protect the butt ends of the handles, I pass these longer screws through plastic tubing.

Members' Gallery

Katie Mae Adams, Alabama

Material Exploration

By manipulating naturally established structures and repeated arrangements, I borrow metaphorical meaning from non-human organisms to expand conversations about health and disease. These forms are a visual manifestation of the emergence of patterns from complicated interactions within the body, the disruption of those patterns, and how both influence our sense of self.

An important aspect of my artistic process is the use of mixed media. Through material exploration, including casting in glass and silicone, I can demonstrate how pieces change and speak differently, depending on the materials I use to create them. Working in this way also allows me to select the material best suited to my ideas, rather than being restricted by the limitations of one material. ■

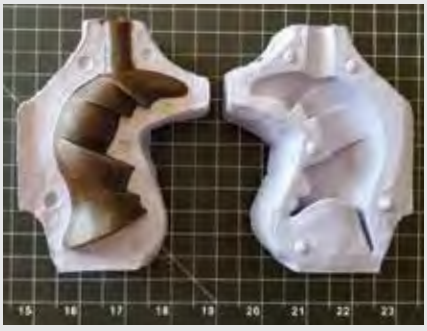
For more, visit katiemaeadams.com or view Katie's Instagram, @katie_mae_adams.

Systemic Biomorphism 1 and 2, 2020, Silicone, cherry, purpleheart, cast glass, colorants, each approx.: 9" × 7" × 5" (23cm × 18cm × 13cm)

Casting glass components

1) Forms are turned on the lathe using multiaxis techniques.

2) Two-part molds of the turned objects are created using a pourable silicone molding material.



3) A wax positive is cast in the silicone mold.

4) The wax positive is then encapsulated in a glass mold (a 50/50 mixture of molding plaster and silica) and then evacuated from the mold. The glass is then cast into the mold using kiln-casting methods, resulting in a glass positive form exactly the shape of the turned object.

Casting silicone components

A positive form is turned on the lathe and then sealed. Using a combination of dipping and airbrushing techniques, silicone is applied to the exterior. After the silicone has cured, it is removed from the wood manikin and retains its new shape.

Material Sources

- Smooth-On (smooth-on.com): silicone, molding materials, and colorants
- Bullseye Glass Co. (bullseyeglass.com): glass

Graeme and Mel with their Sweet 16

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Brent English, owner and designer, Robust Tools.

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Patent Pending

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ROBIN COSTELLE
KENTUCKY

I have created several pieces like the one shown here, each one more complicated than the last. And every time, I say, *No more, not another one of these!* The title, *Tempestuous*, came from the complicated emotions in crafting the work itself—designing it, choosing the woods, and just figuring out how to turn the darn thing safely. This piece was inspired by the work of Bud Latven.

Tempestuous, 2011, Curly maple, Honduran rosewood burl, zebrawood, 16" (41cm) tall

Makeshift support

Side supports act as a kind of makeshift steady rest during hollowing. The workpiece is securely attached to a faceplate, as are the supports. Duct tape covers the sharp edges of band clamps, which, along with hot-melt glue, further secure the supports to the workpiece.