INLAID BUTTERFLY PATCH • THEN AND NOW • A THREE-WINGED JEWELRY BOX

AMERICAN WOODTURNER

Journal of the American Association of Woodturners
August 2022 vol 37, no 4 • woodturner.org

HARD WOOD AND HOT STEEL
ROY HOLMBERG COMBINES TURNING AND BLACKSMITHING

JOLIE KARNO
ONE GOOD TURNER DESERVES ANOTHER

BRIDGING THE GAP
2022 AAW MEMBER EXHIBITION

LEVITATING SPHERES

Professional Outreach Program

Instant Gallery Awards

Chattanooga Symposium 2022

Photos by Andi Wolfe.

Each year at the AAW International Symposium, the Professional Outreach Program (POP) celebrates accomplishment in woodturning by awarding select works on display in the instant gallery, where all attendees can show their work. Following are the works chosen for this special recognition from this year's AAW Symposium in Chattanooga, Tennessee.

For more on the POP, visit tiny.cc/AAWPOP

Excellence Awards

Hans Weissflog, Germany

Saturn Bowl, 2022, African blackwood, boxwood, 5" × 3" (13cm × 8cm)

Don Rawlins, Georgia

Swamp Wood Still, 2022, Swamp wood: Sycamore, poplar, cherry, Chroma Craft Rustina™ Metallic Paint Aging System, lacquer, 52" × 32" × 16" (132cm × 81cm × 41cm)

Every part of *Swamp Wood Still* is made from wood, including the nuts, bolts and latches.

Derek Weidman, Pennsylvania

Chipmunk (Pennsylvania Wildlife Series), 2022, Holly, cherry, ebony, boxwood, 5" × 5½" × 4½" (13cm × 14cm × 11cm)

Jim Scarsella, Michigan

Untitled, 2022, Cherry, African blackwood, acrylic paint, 5" × 5" (13cm × 13cm)

Mark Jundanian, Illinois

Sedona, 2022, 2020, Cocobolo, 4" × 8½" (10cm × 22cm)

Youth Awards

Liliana and Evelyn Scholz (ages 11 and 13), Pennsylvania

Our Family, 2022, Maple, acrylic paint, largest: 2⅜" × 1" (6cm × 25mm)

Karlyn Theobald (age 11), Wyoming

Desk Lamp, 2022, Cascara, 12" × 7" (30cm × 18cm)

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Journal of the American Association of Woodturners

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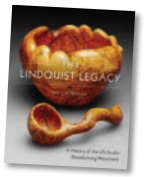

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Cover – Ken Conte, *Levitating Sphere*, 2020, Figured maple (surround), maple burl (sphere), salvaged overhead electromagnet, surround: 10" × 10" × 4¾" (25cm × 25cm × 12cm); sphere: 4½" (11cm) diameter

Back cover – Chris Miles

Editor's Note

The thing that delights me most about woodturning (and the AAW) is the wide array of sub-interests it encompasses. Under this big tent, woodturning welcomes those passionate about the natural beauty of wood, surface embellishment in its many forms, boxes, bowls, pens, hollow forms, ornamental turning, segmented turning, collaboration, artistic expression, utilitarian woodware, teaching, publishing, history, succession, and so much more. And then there is the simple pleasure of making shavings fly with a freshly sharpened tool. Who doesn't love that?

Add to this diversity a host of personalities, friendships, and acquaintances among the ranks of both amateurs and professionals willing to share ideas freely, and you have a truly remarkable community. It is astounding that all of this stems from the use of one machine in the woodshop—the lathe.

What delights you most about woodturning? And in what ways do you share this enthusiasm with others? Please write me at editor@woodturner.org and let me know.

—Joshua Friend

From the President

Chattanooga 2022

As I write this, I have just returned from Chattanooga, Tennessee, where we held the first in-person AAW International Symposium since 2019. With over 1,000 attendees, almost 100 vendors, dozens of demonstrations and programs presented by many of the best in woodturning, this was a lot of fun and an educational event to experience. For the first time, a portion of the program was filmed, with the intention that it be edited for online viewing later in the year. In addition, the AAW auctions and sales of donated items raised money for many of the important AAW programs supporting our mission throughout the year. The instant gallery, where we saw the work of our fellow members on display, and the exhibitions of work by our best professionals, were a tremendous inspiration. Our Beads of Courage lidded boxes and the Empty Bowls donations both continued our tradition of giving back to the community. Our youth turning programs resumed, and we were even able to teach a few of the AAW staff (some of whom had not turned before) a few basic techniques.

The AAW is of course more than just a producer of a woodturning journal and an annual symposium. Both activities, however, establish relationships with turners, artists, vendors, and other organizations that remain important throughout the year and beyond.

This was my first exposure to the Annual AAW International Symposium from the inside, so to speak. It is much more than a three-day series of demonstrations of woodturning. Volunteers, staff, committee, and Board members all begin gathering onsite almost a week in advance of the event, but more than a year of planning had already occurred—choosing demonstrators, evaluating venues, figuring out tool needs of demonstrators, handling cancellations of same, checking inventories audio/video equipment, etc. Once all the attendees left on Sunday afternoon, these same individuals made sure everything was packed up and out of the convention center by 8:00 p.m. Sunday evening. On behalf of the Board and staff, I want to thank each and every one of you who helped.

It is great to get back to one of the most enjoyable aspects of our avocation—the face-to-face interactions—but the pandemic has accelerated changes that will be with us for the foreseeable future. We all, including individual demonstrators, the AAW, clubs, and other organizations have had to adapt to remote interactions and learn new techniques for meetings and providing content for interested parties. The result has been a rapid elevation of content and presentation quality. It will be interesting to see how our interactions continue to evolve in the coming years. The AAW is committed to working with members and affiliated clubs to make this continued transition into our new reality successful.

Upcoming Board elections

On pages 6-7 in this issue of the journal, you will find short candidate profiles for each of the individuals running for the three vacancies on the AAW Board. Your nominating committee, led by Linda Britt, worked very hard to develop an outstanding slate of candidates, and each of them would bring their own unique skills and talents to the Board. Please take the time to review their profiles (also available online at tiny.cc/BoardVote, along with candidate video statements) and vote during the month of August. As in previous years, the membership will elect two individuals and the Board will appoint a third to ensure a good mixture of background and skills to meet the needs of the organization.

Keep turning,

Mike Summerer
President, AAW Board of Directors

SAVE THE DATES!

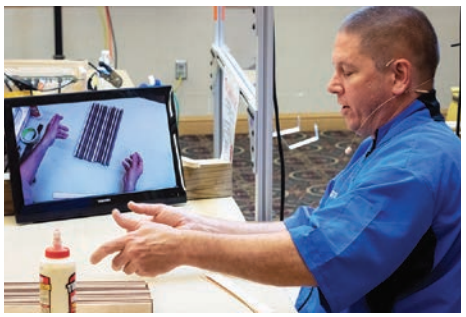
Photos by Andi Wolfe

2022 FALL SYMPOSIUM

AAW'S FALL 2022 VIRTUAL SYMPOSIUM

October 15-16, 2022

- Whether you are turning wood as a new hobby or plan to become a pro, the projects, techniques, and tips from this Virtual Symposium will help you build foundational woodturning skills.
- Learn beginner and intermediate skills and projects from some of the best woodturning instructors from around the world, **right from your home**.
- Save the Date to learn from:
  - Helen Bailey
  - Ernie Conover
  - Keith Gotschall
  - Rudolph Lopez
  - Jim Rodgers
  - Malcolm Tibbetts



DETAILS COMING SOON! Please visit tiny.cc/AAWPresents or scan the QR code to find the latest information and to register for the event.

AAW'S 37TH ANNUAL INTERNATIONAL SYMPOSIUM

Louisville, Kentucky
June 1-4, 2023

Join woodturners from around the world for the valued Symposium experience you look forward to:

- More than 100 compelling presentations and demonstrations over three-and-a-half days
- Learn from world-class demonstrators
- Evaluate and buy the latest tools and wood at the tradeshow
- Share your work in the instant gallery
- Get inspired by professional and AAW member exhibitions
- Collect gorgeous, unique work from the auctions and instant gallery
- Make new woodturning friends!

Learn from some of the best!

Nick Cook teaching the next generation, Chattanooga 2022.

Darryl Jones demonstrates at the Robert Sorby booth, Chattanooga 2022.

Symposium Venue
Kentucky Exposition Center
937 Phillips Ln.
Louisville, KY 40209

As the location of our abruptly cancelled Symposium in Spring 2020, Louisville is ready to host woodturners from around the world once again! The Expo Center is close to the airport and has nearby options for RV camping.

Save the date and make this trip a highlight for 2023!

MORE DETAILS TO COME!

For the latest info, watch this space in future issues of *AW*, look for AAW communications, and visit our Louisville Symposium webpage, tiny.cc/AAW2023!

2023 Board Candidates

The Nominating Committee is pleased to present the following six candidates, who are running for the AAW Board of Directors. A nine-member Board volunteers its time and energy to represent the membership in moving the AAW forward. Board members may serve two consecutive three-year terms.

You may vote for up to three candidates. **Voting is by electronic ballot only**, available on the AAW website at **tiny.cc/BoardVote** (case sensitive). Your vote must be cast between August 1, 2022, and midnight CDT August 31, 2022.

In keeping with AAW bylaws, the two candidates receiving the most votes will be elected to serve three years. The third Board member will be appointed by a two-thirds majority vote of the Board of Directors. The ability to appoint one Board member helps to ensure a healthy diversity of talent, so that all areas of expertise remain fulfilled.

We encourage you to participate in the voting process and hope you will help make this election turnout significant.

—Linda Britt, Chair, Nominating Committee

Cody Walker, Virginia

As a lifelong "maker" and lover of wood, it was only natural that I would evolve into a woodturner. I became seriously interested in woodturning after buying a turned mechanical pencil while on vacation. After studying the pencil, I wanted to learn how it was made and turned to the Internet, bought a lathe, and taught myself how to turn a pen. That led to a bowl, a larger lathe, more tools, and joining the Richmond Woodturners club, where I learned many new techniques and how to embellish my work. In trying to repay the Richmond Woodturners, I eventually became the club's treasurer and worked through the process of incorporating and obtaining nonprofit status for the club. I have also done demonstrations for the club as well as for other Virginia-based woodturning groups.

Joining the AAW and attending various symposia taught me even more and provided me access to the AAW's fantastic resources. I would love to have the opportunity to give back to the AAW if given the opportunity. I have an educational background in engineering and many years of experience in business-related activities, which have given me strong communication and people skills. I believe these skills would be beneficial to the AAW if I were to become a Board member.

If given the opportunity to be a Board member, I would try to assist the AAW in attracting new generations of turners, supporting local chapters with regard to organizational matters, increasing the diversity of the turning community, and exposing more non-turners to our art. I would also like to support the AAW's efforts in helping turners with disabilities.

Dale Lowe, Saskatchewan, Canada

I have been a member of the AAW since 2009 and cannot think of a more worthwhile and valuable organization that I would like to be an integral part of. My professional life was as a technical sales rep for a construction material supplier in Saskatchewan, Canada. I traveled extensively, advising engineers, architects, and industrial plant-maintenance personnel on a variety of technical solutions to problems and products. I have served on the board of my local and Provincial Construction Associations and as board chair of my local Association for two terms. I have also served as chair on the board of the Saskatchewan Craft Council. This Council serves 400 members and includes professional craftspeople, patrons, students, and affiliated marketers. I am a founding member of the South Saskatchewan Woodturners Guild. As the first chairman of the Guild, I helped lay the framework to become a nonprofit organization, and we now have 100 members. This Guild, along with Hub City Turners in Saskatoon, alternates in organizing and operating the annual Western Canadian Woodturning Symposium.

As a Board member, I would like to assist the AAW in continuing to advance the skills of its members, and to encourage younger people to experience the rewards of woodturning and become the next leaders in woodturning by creating opportunities at the club level where they can excel. I would like to help increase AAW awareness to club members, who may be unaware of the wide variety of services the AAW provides. In closing, I would ask for your support and vote to allow me to serve you as an AAW Board member.

KC Kendall, Ohio

As a woodturner and AAW member since 2007, I have helped the incredibly gracious woodturning community learn to turn and plan to continue doing so, hopefully as a full-term AAW Board member.

While president of the Ohio Valley Woodturners Guild, I championed the development of a permanent turning studio, then led its operations. I began our Empty Bowls program, organized exhibitions, and co-chaired two regional symposia.

I had the opportunity to work with Linda Ferber to build AAW membership on her Membership Development Committee. Currently, I lead the Demonstrator Selection Committee, serve on the Symposium Committee, and was appointed to fill a vacancy on the AAW Board for 2022.

Our Demonstrator Selection team produces the widely viewed monthly AAW Presents IRDs and created last year's two very successful Virtual Symposia. We make recommendations for the featured demonstrators for the annual in-person Symposia. And we review the applications and select those talented demonstrators who will complete the programs.

If elected, I hope to continue on the Demonstrator Selection and Symposium committees. We are working to elevate the quality and content of the IRDs to better attract viewers and offer useful, engaging, and inspirational content. I am exploring how to improve the AAW's fundraising programs to support specific projects and strengthen the AAW's financial position. I hope to continue this work.

I am honored to be considered for a full-term AAW Board position and hope to continue working with the other dedicated Board members and volunteers on our committees. My background, experiences, and skills, developed in part as an executive at Procter & Gamble, enable me to contribute meaningfully in AAW committees and on the Board. If elected, I will do my best to support the excellent operation of the AAW and contribute to future improvements.

VOTE NOW!
tiny.cc/BoardVote
August 1 – 31!

CANDIDATE VIDEOS

To view video interviews with each of the candidates, visit tiny.cc/BoardVote or scan the QR code with your mobile device.

Reid Zimmerman, Minnesota

I grew up in a pile of wood shavings and sawdust. My father was an industrial arts teacher, and my grandfather built cabinetry aboard luxury yachts. While I inherited their tools and love of wood craft, their knowledge and skill only passed on tangentially. So I am a learner, and the last several years as an AAW member have taught me about the joy (and frustrations) of turning wood. I'm getting better as a turner and want to help AAW grow as the premier turners' group in the world, sharing that joy with others in service as a Board member.

The last thirty years of my professional career have been dedicated to working with nonprofit organizations across the continent. In addition to being certified as a Fund Raising Executive (CFRE), I've served as an executive director, vice-president of development, grant writer, board member, author, and as a professor of practice, teaching nonprofit leadership and management at several universities in Minnesota (Hamline, Capella, St. Thomas, and, most recently, Mankato State, where I have been recruited by one of my former doctoral students to teach another fundraising course!). My consulting and academic work have centered around evaluation and considering the ways an organization measures its success.

Lori and I built our log home thirty years ago on acreage adjacent to her family's dairy farm in central Minnesota. We have three daughters (Ali, a PhD candidate in English literature, Megan, a doctor of physical therapy, and Hannah, an LICSW), who, with my older daughters, have blessed us with a total of six grandchildren. In addition to our kids and grandkids, we cater to two golden retrievers, enjoy wilderness canoeing, camping, and gardening. Lori is an avid quilter, and I am a woodworker and turner currently serving on the BOD of the Minnesota Woodturners Association.

Ron Day, North Dakota

Having recently retired from thirty-plus years in the energy industry and most recently as a public and government affairs manager, I can commit the time to serve as member of the AAW Board of Directors.

Since joining the AAW and becoming a member of my local AAW chapter (the Dakota Woodturners) in the early 2000s, I have volunteered for numerous activities in both organizations. It has been my way of "paying it forward" for the enjoyment and knowledge that these organizations have and continue to provide me in the world of woodturning. I have volunteered during AAW National Symposia as a mentor for the Youth Hands-On sessions and as a videographer/demonstrator helper. At my local chapter, I perform monthly demonstrations, participate in public outreach events, and help lead kids' turning classes at the Bismarck High School Career Academy.

I have served the Dakota Woodturners AAW chapter as their newsletter editor, vice president, and two terms as president. A key highlight of my time in the leadership roles with the Dakota Woodturners is the development and growth of our annual "Hands-On" symposium. This symposium is unique in its approach and delivery of educational information to our membership.

I would commit to the AAW, and its members, my professional work experiences, my experience of serving on other nonprofit boards, and my passion for the world of woodturning. I would be honored to serve on the Board of Directors of the AAW.

Sally Burnett, England

I was honored to be appointed to the AAW Board in September 2021 to fill an unexpired term. Work began immediately, and I became a member of the Long-Term Planning Committee, POP Committee, and chair of the Exhibitions Committee and Turners Without Borders. Combining this with my committee duties at my local woodturning club, this has been a busy and exciting twelve months.

My life has revolved around the world of craft and the world of sailing. Both have provided an income, taught me a wide range of skills, and provided an incredibly supportive community. Twenty-five years as a partner in a ceramic design company, eight years as secretary general of the International Optimist Dinghy Class, a global not-for-profit organization, and more recently eight years building a business as a maker in wood enable me to bring diverse creative and management skills to the AAW Board.

I appreciate the opportunities that the AAW has been able to provide me in my journey from novice maker in wood to full-time professional artist and would like to enable others to benefit from what the AAW has to offer. The Covid pandemic has brought many changes to the way that the Association delivers services to its members, particularly the growth in IRDs and Virtual Symposia. Turners Without Borders has been active in supporting Spanish-language IRDs and promoting woodturning in South America.

Our woodturning community has become closer as we embrace technology for IRDs, virtual club meetings, and symposia. This, in turn, increases the global reach of the AAW, which provides an exciting opportunity to increase membership and combine the actual and the virtual, increasing participation and providing real value for all members.

I would consider it a privilege to serve again on the Board and continue to promote the AAW worldwide. Thank you. ■

AAW Annual Financial Statement for 2021

Dear AAW Members,
In 2021, we started to see the light at the end of the tunnel, but we remained cautious. There was a successful Virtual Symposium and many well-attended IRDs. We steamed ahead, planning for an in-person Symposium in Chattanooga in 2022.

The numbers shown here are due to the great work of the AAW Board, its committees, and staff, which had positive financial results and an increase in net assets. The Association was able to secure both a Paycheck Protection Loan (PPP) and an Economic Injury Disaster Loan (EIDL) in 2021. Both loans were forgiven, strengthening our financial position.

Our reserves will be important as we come out of the pandemic and strategically plan for the future. We realize that the path ahead will involve change. Your continued support has allowed us the flexibility we need to adapt to the new environment we now inhabit. We could not have done any of this without you, the AAW members.

The path ahead looks promising. We hope to see you in Louisville in June 2023.

—Chuck Lobaito, AAW Treasurer

Revenues and Expenses

Income

Annual Dues	$802,255
Symposium	230,062
Publications & Products	304,041
Contributions	126,354
Government Grants	87,388
Other Income	26,367
Investment	116,956
Total Income	**$1,693,423**

Expenses

Symposium	$302,850
Publications & Products	449,509
Gallery & Exhibitions	58,786
Scholarships	12,950
Professional Outreach	26,083
Other Programs	94,593
Administrative	268,956
Fundraising	2,580
Member Development	278,355
Total Expenses	**$1,494,662**
Net Income	**$198,761**
Restricted Portion	**$54,392**
Unrestricted Net Income	**$144,369**

Balance Sheet (as of 12/31/21)

Assets

Checking & Savings	$534,435
Accounts Receivable	3,632
Grants Receivable	–
Inventory	25,766
Prepaid Expenses	47,629
Investment Securities	1,325,535
Total Art Collections	448,690
Property & Equipment	56,485
Total Assets	**$2,442,172**

Liabilities

Accounts Payable	$6,130
Accrued Expenses	69,971
Deferred Revenue	555,987
Total Liabilities	**$632,088**

Net Assets

Without Donor Restriction	$1,355,275
With Donor Restriction	454,809
Total Net Assets	**$1,810,084**
Total Liabilities & Net Assets	**$2,442,172**

2023 POP ARTIST SHOWCASE OPPORTUNITY

Application period: August 15 to October 1, 2022

Each year the Professional Outreach Program (POP) showcases two wood artists at the AAW's Annual International Symposium. They are either experienced artists who have made significant contributions to the woodturning field but have not received appropriate recognition, or emerging artists who have the potential to make significant contributions to the field.

The two selected artists give two demonstrations each and participate in a panel discussion of their work led by David Ellsworth. Artists receive a complimentary Symposium registration; a featured display in the Special Exhibitions area; demonstration and panel compensation; three days of lodging at the AAW host hotel, and up to $300 in travel expenses.

Artist applications are invited for the 2023 AAW Symposium in Louisville, Kentucky, June 1-4, 2023. Applications will be juried by the POP committee. The application period is August 15 to October 1, 2022, and applicants will be notified by October 31, 2022. See online application at tiny.cc/Calls.

Call for Online Presentations: "AAW Presents"

Are you demonstrating online? If you have experience creating high-quality, effective, and interesting demonstrations, have access to the technical capability for a live interactive presentation, and would like to reach a large and enthusiastic audience, we want to hear from you. Consider applying to be part of the AAW's online series, AAW Presents. For full details and application, visit tiny.cc/Calls. Questions? Contact Tib Shaw, tib@woodturner.org.

2022 Best Chapter Website/Best Chapter Newsletter Contest Results

Congratulations to the following AAW local chapters for winning the website contest (fifteen entries):

1st Place

Silicon Valley Woodturners Guild
svwoodturners.com
Ray Hari, Webmaster

2nd Place

Nutmeg Woodturners League
nutmegwoodturnersleague.org
David Heim, Webmaster

3rd Place

Bay Area Woodturners Association
bayareawoodturners.org
Steve Griswold, Webmaster

Congratulations to the following AAW local chapters for winning the newsletter contest (eighteen entries):

1st Place

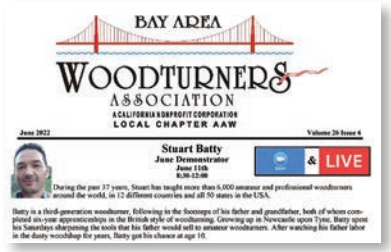
Chicago Woodturners
chicagowoodturners.com
Phil Moy, Editor

2nd Place

Catoctin Area Turners
catoctinareaturners.org
Janet McCormick, Editor

3rd Place

Bay Area Woodturners Association
bayareawoodturners.org
Louis Silva, Editor



Want to enter next year's competition?

Visit tiny.cc/chapterwinners to find contest rules and to submit your newsletter or website. Links to the websites of past and present winners are also posted on this webpage.

Prize Drawing for AAW Members

One of your many membership benefits with AAW is the monthly prize drawings. Prizes this year include gift certificates, tools, kits, books, DVDs, event registrations, and online education. Member winners are randomly selected at the beginning of each month and notified of their prize.

Thank you to the many businesses that continue supporting AAW members with these engaging prizes. If your business would like to contribute a prize, contact memberservices@woodturner.org.

When you patronize these woodturning businesses, please thank them for their support of AAW members.

- Carter and Son Toolworks (carterandsontoolworks.com)
- David Ellsworth (ellsworthstudios.com)
- Glenn Lucas (glennlucaswoodturning.com)
- Hunter Tool Systems (huntertoolsystems.com)
- Mike Mahoney (bowlmakerinc.com)
- Nick Cook Woodturner (nickcookwoodturner.com)
- Niles Bottle Stoppers (nilesbottlestoppers.com)
- Preservation Solutions (preservation-solutions.com)
- Rockler Woodworking and Hardware (rockler.com)
- Tennessee Association of Woodturners (TAW) (tnwoodturners.org)
- Thompson Lathe Tools (thompsonlathetools.com)
- Trent Bosch (trentbosch.com)

Businesses will be updated throughout the year.

Fractal Burning Kills; AAW Reiterates the Dangers

The AAW Board, through its Safety Committee, wants to re-emphasize the dangers associated with the process known as Lichtenberg, or "fractal," burning, an embellishing technique that uses high-voltage electrical current to burn patterns on wood. This often unsafe and life-threatening practice has once again surfaced in the news and on social media, following a two-victim incident in April 2022.

In 2017, the AAW Board of Directors voted to ban any fractal-burning demonstrations and equipment sales at AAW-sponsored events. The ban prohibits displaying fractal-burned pieces at any AAW-sponsored event and promoting the practice via articles in AAW publications. Sadly, since the AAW Board adopted its policy on fractal burning in 2017, there have been thirty-three reported deaths directly attributed to fractal burning, and an unknown number of injuries and close calls.

AAW Chapters Take Note

The AAW Board's 2017 policy explicitly extends its position to its chapters: **"AAW-chartered chapters are strongly urged to refrain from demonstrating or featuring the process in chapter events."** Yet the practice persists at the chapter level. The AAW Safety Committee, with endorsement from the Board of Directors, requests once again that its members and chapter leaders join in the AAW's efforts to discourage the use of fractal burning. Do not promote the practice via newsletter articles or social media posts, and do not allow fractal-burned pieces to be displayed in instant galleries, exhibitions, at chapter meetings, or on chapter websites.

Further, due to liability concerns, **the AAW Board has decided to disallow chapters that promote, demonstrate, or allow the use of fractal burning to be eligible to obtain, or renew, insurance through the AAW for their chapter.** ■

—AAW Safety Committee: John Beechwood III (Chair), Steve Pritchard, Kevin Jesequel, Kent Crowell

Learn About the Hidden Dangers

Fractal burning poses a significant hidden risk of electrocution. It speaks volumes that there are no UL-rated fractal burning units commercially available. Many of the YouTube videos that show how to build these devices at home do not adequately address the inherent safety concerns. Many users think they are being safe, but the number of serious injuries and deaths says otherwise.

To learn more about what makes fractal burning dangerous, visit tiny.cc/AAWfractal or scan the QR code. This webpage lists known deaths, the AAW's official position on fractal burning, as well as other resources.

Apply for an AAW Grant

AAW Grants are available to individuals, chapters, schools, and non-profit organizations. Examples include but are not limited to outreach programs and/or events to encourage youth and under-represented populations (women, minority, disabled, etc.) to learn and pursue woodturning, support of existing or developing unique woodturning programs, educational workshops or class participation, professional development opportunities, chapter projects, etc. In addition to monetary awards, up to ten mini-lathe packages are available for award each year.

Regular AAW Grants are awarded on an annual basis. To be eligible, applications must be received by December 31 for grants given in the following year. However, Women in Turning (WIT) grants and others for under-represented populations, events, and exhibitions are awarded quarterly.

Find detailed grant descriptions and application information at tiny.cc/aawgrants. If you have questions, please contact the AAW office by calling 877-595-9094 or emailing memberservices@woodturner.org. ■

FROM THE EDITOR'S INBOX

Send emails to editor@woodturner.org

In April, a group of enthusiastic women met in Broken Bow, Oklahoma, for a weekend of woodturning and fellowship. We gathered on Friday evening, and the three instructors (Mary Brewer, Sarah Clinesmith, and Janice Levi) introduced themselves and showed the women what they would be turning Saturday and Sunday. Two of the women had never turned before, and the remainder were fairly new to turning.

The retreat was made possible by a grant from Women in Turning (WIT)/AAW and by contributions from the Southeast Oklahoma Woodturners and the Ark-La-Tex Woodturners. Some of the WIT grant money was used to offer a scholarship to a high school turner. Wood was provided by the Southeast Oklahoma Woodturners.

Over the weekend, the women turned a mallet, an ornament, and a bowl. An evening class featured woodburning, and each student was able to complete a simple project.

Thanks goes to WIT/AAW for providing grant money to help make retreats like this possible. The program was so well received that the contributing clubs and instructors plan to offer a similar retreat next year.

—Janice Levi, Texas

Canadian turner/sculptor Michael Hosaluk recently told me that only 5-10% of the turners he knows turn spindles. And the content of the woodturning media suggests that amateurs currently do little spindle turning. Why is spindle turning apparently on the nose?

1. Few turners have the machinery needed to produce dressed blanks. Woodturning clubs should consider adding such equipment.
2. Bowls are typically designed as they are turned. Spindles are typically more detailed, turned in multiples, and therefore usually designed in advance. Many who take up woodturning have no experience or training in design, which may put them off spindle turning. Perhaps designing needs to be included in any course that includes spindle turning.
3. If something ceases to be offered, demand for it declines. A major factor in the decline in spindle turning by amateurs is the shrinking availability of its quality teaching. In part to counteract the belief that woodturning means bowl turning, the six-lesson course I teach starts with three lessons on spindle turning, and bowl turning is covered last.
4. Spindle turning is reputed to be less fun, less glamorous, and more demanding of commitment. What is fun? It's enjoyment that has required little effort. I'm all for it. But isn't the satisfaction and sense of achievement derived from gaining competence in all hand-turning techniques something that should be emphasized? It is more demanding to achieve competence in spindle turning, but it's not much more demanding. If taught well, this competence can be achieved in about ten hours of teaching and ten hours of committed practice—not too great a commitment.
5. With the decline in interest in spindle turning, the average length of turnings has declined, as has the availability of larger turning tools. Among my most-used tools is a ¾" (19mm) detail gouge, which is, alas, no longer made. And I'd really like a 1" (25mm) one.

Is the decline in spindle turning good or bad? The bulk of amateur turners are in or nearing retirement, and most have adult children with families of their own. How many wood bowls and art turnings do these turners and their families really want? I suggest not many, yet an amateur can produce many bowls in less than a week. My experience is that items of domestic woodware such as table lamps, occasional tables, and stools—all of which typically include spindle turning—are greatly welcomed. But unless a turner is a reasonably competent spindle turner, such items are unlikely to be made. Further, if a turner's skills are limited and there is little desire for the items being produced, that turner will likely abandon turning, and others will realize there is little point in taking it up.

Woodturning manufacturers, suppliers, teachers, etc., are financed not by the few high-profile turners, but by the mass of amateurs. By sidelining spindle turning and its teaching, turning will rapidly lose relevance and adherents, and this will adversely affect even those professionals who specialize in bowls and art turning.

—Mike Darlow, New South Wales, Australia

In Memoriam, Bill Luce

Bill Luce, a popular woodturner based in Renton, Washington, known for his relentless pursuit of the "perfect form," died on May 28, 2022. Following are some remembrances of Bill.

In 2005, I visited Bill Luce (left) in his workshop in Renton, Washington. In his storeroom, he had in excess of 3,000 bowls. On the floor was a piece he was staining black to help him study the form. I am a much more diverse turner, but his striving to produce the "perfect" form was impressive.
—Thys Carstens

Bill opened my eyes about seeing objects. He was giving a demo on the "perfect bowl." I wondered how a bowl could even have a perfect shape. Bill held up two bowls and asked which was better looking. He then replaced the audience's least-liked bowl with another. He did that several times and, yes, we could all see that the next one was always slightly more pleasing than the last. Finally, he came to what he felt was perfection, and it was agreed by everyone that this bowl was a true thing of beauty. I was stunned. Bill said it took him 4,000 bowls to find the perfect shape, and this is no exaggeration; I have been to his shop and seen the 3,999 others.

Bill made a graduated set of three "perfect" bowls, and I bought them. He tried to buy them back several times, but I declined. I told him to just make more. But he said he couldn't—he had lost the intensity needed to reproduce them. Bill was off to the next pursuit of excellence.

Bill Luce, 2006, Monkey puzzle wood, Largest: 8" × 15" (20cm × 38cm)

—Ron Gerton

I saw Bill Luce demonstrate the "perfect bowl" at the Utah Woodturning Symposium. He spent a large portion of the session discussing form rather than process, and his insights were inspirational. Bill was relentless in his drive for the perfect form. He was most critical of his own work and constantly shared his passion with others. To me, Bill's legacy for the woodturning community is the reminder to always strive for better.
—Joe Fleming

I watched Bill Luce and Richard Raffan turn round-bottom bowls. Bill was adamant about the process of hollowing: "You *must* start with a 35-degree gouge, then go to a 45, then a 60, and then an 80 to finish the bottom." In his opinion, that was the only way to do it. Immediately after his presentation, Richard turned a bowl with whatever gouge was available, and when that angle ran out, he pulled out a scraper to blend the bottom. Bill probably never held a scraper in his life and that's just how he was.
—John Beaver

In Memoriam: David Springett, 1948-2022

British woodturner David Springett, known for his inventive creations and intriguing books (*Woodturning Wizardry*, *Woodturning Full Circle*, *Woodturning Magic*, and, with Nick Agar, *Woodturning Evolution*), passed away unexpectedly April 3, 2022.

Researching complex woodturning works is a passion of mine, and the man who inspired me in this was David Springett. His book, *Woodturning Wizardry*, turned my idea of the art of turnery upside down. He made special devices and jigs for elliptical turning, "twisted" boxes, ornamental work, spoons, split-turning, streptohedrons, and other complex items—many of which have been featured in *American Woodturner*. His creations solve conundrums and demonstrate that the capabilities of the lathe are endless.

I was fortunate enough to be able to visit David at his home shortly before his death. I learned that he became engrossed with turnery many years ago, when he decided to make bobbins for his wife Christine's lacemaking. From there, his passion for woodturning only grew, and over the years, David taught master classes in England, Europe, the United States, Canada, and Australia.

I could tell that David's curious spirit was all around his workshop. The shelves were sagging under the weight of his collection of rejects and experiments, blueprints and illustrations, photos, projects, and self-made contraptions. Interestingly, David approached complex projects simply: he felt that any jig or tool can be made using plywood and readily available supplies, without the use of complex machines.

—Konstantin Gusev

SWAT Celebrates 30th Symposium

A humble beginning

The large regional woodturning symposium known as SWAT (Southwest Association of Turners) has quite a heritage. It got its start in October 1992, when a modest group of turners decided to get together under some large live oak trees near the Colorado River in Columbus, Texas. They couldn't have imagined then that they were starting what would become the second-largest woodturning symposium in the world. That early gathering became known as A Texas Turn or Two and continued for ten years under that name.

The gathering was conceived by a group of turners who met at the home of Bob Rubel in San Marcos. Among those attending were Gary Roberts, Clay Foster, James Johnson, Larry Roberts, and Mark Potter. They envisioned a regional symposium that could be attended by those who had neither the time nor the money to go to a national event.

On the day of the first event, folks began to wind their way down the dirt road to Mark Potter's shop in Columbus. Soon there were motor homes, trailers, pop-ups, and tents scattered all around under the big live oak trees. The event was a success, with about eighty attendees. The event returned to Columbus the next year, with John Jordan as the first invited featured demonstrator. A Texas Turn or Two quickly outgrew Mark Potter's shop!

Continued growth

From 1994 through 2000, A Texas Turn or Two was held at Maricopa Ranch RV Park, west of New Braunfels. Eventually, attendance became so large that just accommodating everyone at the demonstrations was a major challenge. Add to that a ferocious rainstorm that very nearly swamped the event in 2000, and it became obvious that larger facilities were needed. The event moved to San Angelo for 2001 and to Wichita Falls in 2002, when it was reorganized as the Southwest Association of Turners.

The 15th-annual SWAT Symposium, sponsored by eighteen woodworking clubs in Texas and Oklahoma, was held in Temple in 2006. This was the largest and most successful gathering yet, with some 580 attendees requiring two separate buildings, pushing the limits of what the facility could handle.

The 16th-annual SWAT Symposium (2007) moved back to Wichita Falls. Our association now included twenty-two woodturning clubs in Texas and Oklahoma. The event featured six lead and twelve regional demonstrators, with a total of fifty-eight demonstrations. The event was now drawing attendees from Alabama, Arkansas, Arizona, California, Colorado, Florida, Illinois, Kansas, Minnesota, Missouri, Mississippi, Nebraska, Oklahoma, Tennessee, Texas, and Washington. That year, we ran into space problems and needed to look for yet larger facilities.

In 2008, the Waco Convention Center became the site of the 17th SWAT Symposium, and it has been our home since. The first year in Waco, the attendance was 582, but the larger convention center allowed growth in attendees and a larger group of vendors. By SWAT's 25th-annual Symposium, in 2016, we reached a new record—more than 1,000 attendees and seventy-eight vendors.

SWAT's 2021 instant gallery featured more than 400 boxes made for donation to Beads of Courage.

Clay Foster and Mark Potter at the first A Texas Turn or Two Symposium, 1992, which would evolve into SWAT.

Photo: Tracy Marshall

An exciting event

Several things make SWAT Symposia attractive, including world-class demonstrators and an outstanding gallery of art. The registration fee, which includes lunches, is one of the lowest in the nation. There is also a Saturday-evening banquet, classes and activities for spouses, a large number of quality vendors, and a popular 3-for-1 raffle with valuable prizes, including multiple lathes, scholarships, turned artwork, tools, and wood. This year, the big lathe giveaway will be an American Beauty from Robust Tools.

SWAT also supports the Beads of Courage program, and in 2021, attendees donated 419 boxes, which were delivered to various area hospitals.

Since the event was not held in 2020 due to the pandemic, the 2022 event will be the 30th SWAT Symposium. We are looking forward to an exciting experience, meeting old and new friends.

For more information and to register for the 2022 SWAT Symposium, visit swaturners.org.

—Tom Beatty, SWAT President

Utah SkillsUSA Holds Inaugural Student Woodturning Competition

Photos by Joshua Luchs.

Student contestants, from left: Tracen Robertson, Tristan Burnham, Casey Ingo, Dylan Olsen, Aislynn Bingham, Gage Day, Gavin Porter, Logan Stephan, Evan Walker, and Andrew Jensen. Not Pictured: Ashlynn Bascom. Kneeling: Competition organizer Kip Christensen.

Andrew Jensen, 1st Place Winner, Brighton High School
"The SkillsUSA woodturning competition is great because it allows the participants to design, create, and document a piece of work and view the work of other contestants. I really enjoyed the [event] and think it is a great experience for anyone who likes to turn wood."

Paul Otterstrom, Brighton High School Teacher
"As a woodturning enthusiast and teacher, I am so excited that SkillsUSA has provided this opportunity for my students. This year's competition was a great success, and I'm sure it will improve each year."

Ashlynn Bascom, Contestant and Member of Utah SkillsUSA State Officer Team
"The woodturning competition was an incredible opportunity for woodworking students to showcase their artistic abilities in the same way welding sculptors have done for years. This gave more students a chance to compete who may otherwise not have. It was exciting to see the interest in this competition for being only the first year. During business proceedings, students also made a motion to continue this competition in future years and to petition SkillsUSA to make it a national competition."

Gage Day, 2nd Place Winner, Corner Canyon High School
"It's great to compare work and see the creativity of other students across the state."

Timothy McNeill, Corner Canyon High School Teacher
"It's great to have a statewide competition (potentially nationwide) that my students can aspire to and find inspiration from. This will be a great tradition for us."

Look over the crowd at any large woodturning event and you are likely to observe a sea of bald or gray heads, with a sprinkling of younger men and a few women. In past years, the AAW has tried a variety of ways to reach out to young people and women to help them discover woodturning. That effort may have taken a significant step forward with the first-ever SkillsUSA woodturning competition held in Utah.

SkillsUSA, a national nonprofit, is "a partnership of students, teachers and industry working together to ensure America has a skilled workforce." The organization serves middle-school, high-school, and college/postsecondary students preparing for careers in trade, technical, and skilled service occupations. Each year, SkillsUSA conducts a national competition, with more than 100 contests in areas such as additive manufacturing, computer programming, cosmetology, nurse assisting, television production, welding, and more. However, thus far, woodturning has been absent from this list of trades.

Enter Utah SkillsUSA

On March 25, 2022, the first state-level SkillsUSA woodturning competition was held in Utah. The competition had a modest but solid start. It was limited to students in grades 9-12 and included eleven contestants from ten high schools and seven school districts. The requirements were challenging and rigorous: students were evaluated on a 1,000-point scale and were assessed in project design, project quality, notebook/portfolio, an interview, and a written test.

This inaugural state-level competition had enthusiastic support from key people and organizations. Craft Supplies USA in Provo and the Woodcraft store in Sandy both

Competition winners

1st Place
Tulips, by Andrew Jensen, Brighton High School

2nd Place
Dizzy Vase, by Gage Day, Corner Canyon High School

3rd Place
Cactus, by Logan Stephan, Orem High School

donated gift cards, which allowed all contestants to receive a gift. The project judges were Woodcraft's Mitch Odgen and Craft Supplies USA's Kirk DeHeer. The AAW provided each of the three winners a one-year membership. The contestants' interviews and notebooks were judged by John and Valerie Donley of the Weber School District.

Several others donated their time to make the event successful, including the AAW Youth Committee and high school teacher Rex Burningham, who helped establish the initial structure. Members of Utah SkillsUSA leadership were also supportive, including Richard Wittwer, SkillsUSA State Director; Savannah Costello, SkillsUSA State Site Director, and Jared Massic, Woodturning Cluster Chair.

Richard Wittwer stated, "We look forward to future woodturning competitions and recognize the potential of expanding this contest to other states and, eventually, the organization of a woodturning competition at the National SkillsUSA Leadership and Skills Conference."

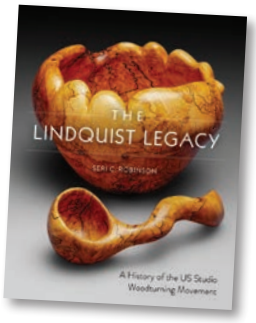
Looking ahead

The Utah SkillsUSA woodturning competition was initiated and organized by Kip Christensen, who patterned it after the national SkillsUSA Welding Sculpture competition. The welding competition started in Utah in 2018 and has since been adopted by SkillsUSA as a national event. Kip hopes that there will be enough interest in the woodturning competition that it also will be added to the list of national SkillsUSA competitions.

Ashlynn Bascom, Uintah High School, with her entry, *Frozen in Time.*

If you are interested in organizing a SkillsUSA woodturning competition in your state, contact Kip Christensen at kc@learningturning.com or visit skillsusa.org. ■

Book Review: *The Lindquist Legacy: A History of the US Studio Woodturning Movement*, by Seri C. Robinson, Schiffer Craft, 2021, 224 pages, hardcover



As the title suggests, *The Lindquist Legacy: A History of the US Studio Woodturning Movement* offers an in-depth account of the impact that Mel and Mark Lindquist had on contemporary woodturning. This lavishly illustrated, well-written book reveals how a father and son set the stage for modern-day studio woodturning. Passages of text with accompanying images alternate with sumptuous full-page galleries. However, also true to its title, a broad, inclusive overview of the field it is not. The author, Dr. Seri Robinson, casts Mark Lindquist's work as the skeleton upon which a great deal of current work hangs.

The book credits Mark Lindquist and his father Mel as the first makers to establish and explore many of the tenets, attitudes, processes, and materials that are taken for granted by many current turners. For example, they elevated spalted wood to an art-worthy material, were the first to explore natural-edge bowls, and established the acceptability of (and apparent preference for) forms that incorporate natural imperfections. Notably, these explorations flew in the face of what had been acceptable: utilitarian bowls that were smooth and mostly symmetrical.

The book offers a persuasive alternate narrative to the accepted lore of "first- and second-generation" turners, who incrementally forged the turning world we now inhabit. The author's position seems to be that this generational model is an age-based fiction that unfairly relegates Mark Lindquist to the shadows of second-generation makers. Robinson goes to great lengths to stake Mark's rightful role in the genesis of contemporary woodturning.

Indeed, Mark's work was instrumental in moving the field from simple vessels to expressive sculpture, and current woodturners would benefit from learning how the current scene came to be. Mark boldly explored texture, movement, light/shadow, scale, and new applications of tools and processes—from the first carbide-tipped tools to his legendary chainsaw carving methods. Like any history, *The Lindquist Legacy* comes from a specific perspective with its own bent, but its telling is impressively fashioned, and it is a story well worth considering. ■

—Steve Loar

Mark Lindquist, *Ascending Bowl #7,* 1987, Walnut, 13½" × 21" (34cm × 53cm)

Photo: Randy Lovoy, courtesy of Lindquist Studios

"I began focusing on sculpture within the confines of the bowl rather than creating craft within the context of utility. So the pieces began to become rough textures and extremely controversial." –Mark Lindquist

TIPS

Tips

Demagnetize tools

I have an ancient Stanley screwdriver magnetizer/demagnetizer that I use from time to time (*see Photo*). It looks like a hand-held pencil sharpener. To magnetize a screwdriver, you just pull it through the hole. This is helpful for getting a screw to stick to a screwdriver when you can't support the screw with your other hand. To demagnetize it, you turn the unit around and pull the screwdriver through from the other end.

Tools become magnetized when they are moved over iron/steel, and moving them in the opposite direction can demagnetize them. If you store your turning tools on a magnetic tool bar, you might have noticed they have accumulated a magnetic charge over time. This charge can create unwanted drag when you move a tool across the toolrest during a cut. Luckily, you can reverse the polarity, just as I do with a screwdriver. If you store your turning tools with the handle down, below the magnetic bar, just take each tool and swipe it across the magnetic bar a couple of times with the handle up. This should remove the magnetic charge.

Another idea: If you have hoarded old audio items from the days of reel-to-reel and cassette tapes, you might have an old tape degausser sitting in a closet somewhere. You can also use one of these to demagnetize your tools.

—Rich Sabreen, Connecticut

Save on sanding disks

I power-sand a lot and unfortunately am tempted to use sanding disks too long because of their cost. To save money on sanding disks, I started buying quality 6" (15cm) no-hole, hook-and-loop disks—a fifty-pack for about $17.00 (Dura-Gold brand). That is about $0.34 per disk, but each disk can be cut into seven 2" (5cm) disks, which is the size I typically use at the lathe. That is about $0.05 each! Now I am more relaxed about throwing used disks in the trash.

I used to trace all the 2" disks on the back of the 6" disk, mark the grit, cut them out, and store them for later use. Now I just cut out disks as I need them, in the size I need them, and mark the grit only if they are still usable after the first use.

—Carl Whitaker, Massachusetts

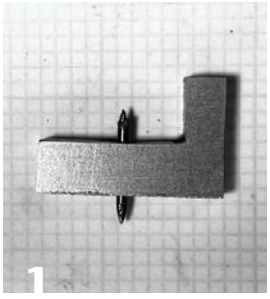
Two-way tenon gauge

I don't cut tenons often enough to have developed an eye for the optimal dimensions. The width or depth of my tenons can almost always be better. To get more consistent results, I made a little marking tool. My tenon gauge is made from aluminum, but it could also be made from any hardwood.

The gauge comprises an L-shaped piece with a protruding nail sharpened at both ends (*Photo 1*). The location of the nail determines the size of the tenon. Dimension A marks the depth of the tenon, and B marks its diameter (*Photos 2, 3*). This effectively shows the area of wood that needs to be removed (*Photo 4*). I've settled on a ⅜" (9.5mm) depth and a diameter halfway between the jaws being fully open and fully closed. This gives me wiggle room to true up the tenon after the piece dries and goes out of round.

Dimensions A and B can be adjusted to individual preferences and chuck requirements. Note that dimension B will depend on the size of your live center. Deduct the live center's diameter from the desired tenon diameter, then divide the result in half. It is then a simple matter of holding the gauge against the live center to mark the diameter of the tenon.

—Harvey Fein, New Jersey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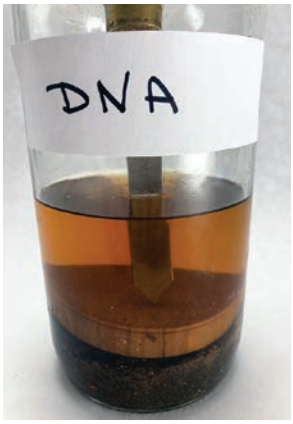


Denatured alcohol cleans hot-melt glue

I do a number of small turnings where I use a wasteblock and hot-melt glue to mount the work. More often than not, the glue melts onto parting tools and gouges when I'm parting the work off or turning a fresh face on the wasteblock. To help remove the glue from my turning tools, I soak them in denatured alcohol (DNA). After a few minutes, I can easily slide the glue off the tool.

To contain the DNA bath, I use a large, straight-sided jar with about 1" (25mm) of sand in the bottom to keep the jar from tipping over. I turned a wood disk that just fits inside the mouth of the jar. In a matter of days, the disk became saturated and sank to the bottom and now provides a soft surface for the tool tip. Alternatively, the jar could be epoxied to a piece of wood for stability. The only problem so far was when my daughter, who is a professor of microbiology, was visiting and questioned why a woodturner would have a jar labeled DNA in her shop!

—Kathleen Duncan, Washington

"Spindle-turned" sidegrain bowls

I recently made a set of six small, nearly identical bowls. I was not particularly excited about the one-at-a-time process of mounting between centers, cutting tenons, shaping, remounting, hollowing, etc. My solution was to glue up a "sidegrain spindle blank," which allowed me to shape the outside of all the bowls without having to mount each one individually.

Here are some pointers for using this method:

1. Joint and plane the top and bottom of each bowl blank to about ⅜" (10mm) thicker than the desired bowl height. Cut the blanks round on a bandsaw and mark the endgrain on one side. Glue and clamp the blanks together, keeping the endgrain marks aligned (*Photo 1*). I glued just two at a time, then glued the whole bunch together.
2. Mount the blank on the lathe between centers, and use a bowl gouge—not a spindle-roughing gouge, as this is a sidegrain turning—to turn the blank to a cylinder (*Photo 2*). Carefully measure the widest diameter you want your final bowls.
3. Mark all of the glue joints and cut a groove to one side of each. You do not want the glue joints in your final bowls. Form a chucking tenon for each bowl just above each glue joint (*Photo 3*).
4. Measure and mark equal lengths for the elements of each bowl (foot, ogee, bulge, rim), and shape the bowls to their final outside profiles. Lightly sand the bowls (*Photo 4*), then make parting cuts part-way through below each tenon. Complete the parting cuts with a hand saw with the lathe off. Remount each bowl, one at a time, in a scroll chuck to hollow them.

—Carl Whitaker, Massachusetts

Finger cots protect skin

Finger cots are like a disposable glove for one finger. I like to use them when a five-finger glove would be overkill—like when spreading cyanoacrylate (CA) glue with my finger. I typically glue the pith at the bottom of my hollow forms to prevent cracks.

You can buy finger cots from your local pharmacy or online. They are used in the medical world to keep finger bandages from getting wet. ▸

—Carl Ford, New York

Simple photo box

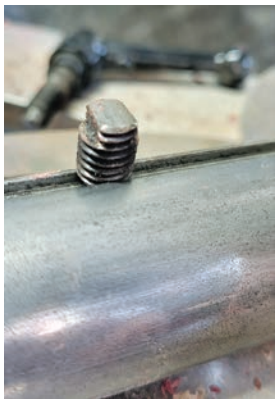
Here is an idea for a simple photo box for shooting images of small turned items. You will need three pieces of white paperboard, a few pieces of masking or painter's tape, some paper towel, and your cell phone camera.

Find a window that offers plenty of light; I use the kitchen window. Tape the paperboard to form a side, bottom, and back of a box, creating an open box facing the window. Use the paper towel to diffuse the light if it is too bright.

Place the item in the box and take a picture, making sure the photo is level with the bottom of the box.

—Dave Bleil, Pennsylvania

Improved set screw for tailstock quill



When drilling with the tailstock, either with a drill chuck or a drill bit with a Morse taper stem, sometimes the set screw that keeps the quill from twisting has an insufficient hold. When this happens, you can get an unwanted burr on the quill, which can hamper its normal operation. My solution was to simply grind two flats on the sides of the set screw. Now, when installed, the set screw indexes to and slides in the keyway of the quill, dramatically increasing the bearing surface area and providing a better hold.

—Lyndal Anthony, Iowa

Simple lighting upgrade

I wanted more light in my shop and discovered a simple solution. I replaced a single bulb with a two-bulb adaptor, which screws into the fixture just as a single bulb would. *Be sure not to exceed the light fixture's wattage rating by adding another bulb.*

—Tim Heil, Minnesota

Stabilize logs at the bandsaw

I've seen various commercial jigs for holding short logs when cutting them into useful turning stock at the bandsaw, but I often look for the simple, homegrown approach. Besides, I hate spending money for things that take up space when not in use, and I tend to be too impatient to wait for the UPS driver to arrive with things I didn't really need in the first place.

The risk of an unsupported log twisting or rolling during a bandsaw cut suggests we should reject a purely free-hand approach as unsafe. Cutting round objects at the bandsaw without a stabilizing jig sitting flat on the table is unsafe; it can jam the blade or pull your hand into the blade.

My very simple solution requires only a piece of ¾"- (19mm-) thick plywood or medium-density fiberboard (MDF) and two screws long enough to pass through the plywood and bark and into the denser wood in the log (*Photo 1*). A bit of masking tape applied along the log guides the cut (*Photo 2*). With the log supported by the plywood, twisting or rolling is avoided, and you won't have to wait for the UPS truck to arrive before you get started.

For cutting small logs like this, I use a ¾"-wide skip-tooth blade in the bandsaw. ■

—Doug Stowe, Arkansas

Calendar of Events

Send event info to editor@woodturner.org. October issue deadline: August 15. See AAW's online Remote Demonstration Event Calendar at tiny.cc/IRDCalendar.

Colorado

CANCELLATION NOTICE: The Rocky Mountain Woodturning Symposium, The Ranch Larimer County Fairgrounds, Loveland, will not be held in 2022. "There are still too many uncertainties for us to ensure we can bring you the quality program we know you expect. We have not given up, just put things on hold a bit longer. We are still planning to return in September 2023." For more, visit rmwoodturningsymposium.com.

Florida

January 6, 7, 2023, The South West Florida Wood Art Expo, Charlotte Harbor Event Center, Punta Gorda. An annual event that showcases the work of wood carvers and woodturners.

Suzy Wahl, Undated, Polychromed wood, 4" (10cm) diameter

AAW Permanent Collection, donated by Lois Laycraft

Photo: Tib Shaw/AAW

VIRTUAL EVENTS

AAW Presents

View interactive demonstrations and presentations from the comfort of your own home. Visit tiny.cc/AAWPresents for more details and to register for upcoming sessions. Join AAW for a fall full of virtual programming.

2022 DATES

- September 17: Glenn Lucas
- October 15-16: Virtual Symposium
- November 19: Nick Agar
- December 17: Rebecca DeGroot

One of the premier wood art shows in the country since 1986, it is a dynamic show with hundreds of entries for competition, vendors, demonstrations, raffle, artist displays, silent auction, and sales. For the latest info, entry forms, and more, visit swflwoodartexpo.org.

Illinois

September 22–25, 2022, The 7th Segmenting Symposium, Crowne Plaza Hotel, Northbrook. Demonstrators to include Malcolm Tibbetts, Jerry Bennett, Curt Theobald, Tom Lohman, Robin Costelle, Jim Rodgers, and Bob Behnke. Event to include instant gallery, companion activities, and tradeshow. For more, visit segmentedwoodturners.org.

Michigan

October 8, 2022, Detroit Area Woodturning One Day Symposium, Central United Methodist Church, Waterford. Event to include sixteen demonstrations, instant gallery, tradeshow, door prizes, and more. For the latest info, visit detroitareawoodturners.com.

Minnesota

Multiple 2022 exhibitions, AAW's Gallery of Wood Art, Landmark Center, Saint Paul:

- September 4-December 28: *Bridging the Gap: The Craft and Art of Woodturning* (AAW member exhibition)
- Ongoing: *Touch This!; Around the Hus—Turning in Scandinavian Domestic Life*; vintage and historic lathes and turned items

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

Montana

September 16–18, 2022, Yellowstone Woodturners Symposium, Roaring 20s Club House, 7400 Grand Avenue, Billings. Featured demonstrator/instructor Doug Schneiter (Loveland, Colorado) will cover small hollow forms, a basketry illusion bowl, rough-turning a green bowl, turning tool handles, and segmented turning. For more, visit Yellowstone Wood Turners on Facebook or call Jane Kelly at 406-696-8777 (mjkelly08@gmail.com) or Dr. Van at 406-545-0777 (drvan@bresnan.net).

Pennsylvania

September 23–25, 2022, The Mid Atlantic Woodturning Symposium, Lancaster Marriott Hotel and Convention Center, Lancaster. Featured demonstrators to include Nick Agar, Keith Tompkins, Rudolph Lopez, Mark Gardner, Kimberly Winkle, and Laurent Niclot. For more, visit mawts.com.

Tennessee

January 27, 28, 2023, Tennessee Association of Woodturners 34th Annual Woodturning Symposium, Marriott Hotel and Convention Center, Franklin. Featured demonstrators to include Rebecca DeGroot, Stuart Batty, Nick Cook, John Beaver, and Tom Wirsing; additional demonstrators to be named later. One of the longest-running and most successful regional symposia in the U.S., the 2023 symposium will feature a tradeshow, instant gallery, people's choice award, and Saturday night banquet with auction. For more, visit tnwoodturners.org or email David Sapp at symposium@tnwoodturners.org. Vendors, contact Grant Hitt at tawvendorinfo@gmail.com. Registration opens September 1, 2022.

Texas

August 26–28, 2022, SWAT (Southwest Association of Turners) annual symposium, Waco Convention Center, Waco. Lead demonstrators to include Trent Bosch, Barry Gross, Mike Mahoney, Dennis Paullus, Martin Saban-Smith, Craig Timmerman, Andi Wolfe, and others. For more, visit swaturners.org.

November 18–20, 2022, Gulf Coast Woodturners Annual Hands-On Retreat, Deer Park, Houston. Club members teach a variety of classes for beginners, intermediates, and masters. Two, three-hour sessions on Saturday, one on Sunday. Each session offers eight choices of classes. Membership ($25) required due to insurance concerns. Registration and details become available in July at gulfcoastwoodturners.org.

Virginia

CANCELLATION NOTICE: The Virginia Woodturners Symposium, which was scheduled for November at Expoland, Fishersville, will not be held in 2022. "Due to unforeseen circumstances, the VWI Board has voted to cancel the 2022 Symposium. We look forward to hosting a Symposium in 2024." For more, visit virginiawoodturners.com.

A Three-Winged Jewelry Box

Michael Hamilton-Clark

A while ago, I was idly twisting a small cube of maple burl by its corners and went on to explore what shape could be made if a cube were held this way on the lathe. The result was the "triangular" bowl featured in the October 2021 issue of *AW* (vol 36, no 5, page 18). It was while making another such bowl that a further idea came to mind—if the profile at the base started as round and continued outward to the tips of the cube, this would leave three "wings" as the top. The center could then be hollowed, for a three-winged bowl. My wife suggested making it into a jewelry box by adding a lid with a finial. Here is the process in detail.

Mount the cube

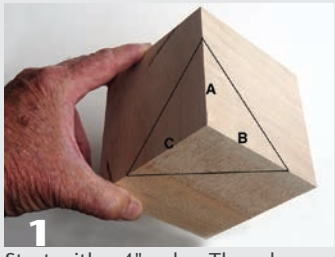
Begin with a 4" (10cm) cube of hardwood. To get the "wings" to come out at the desired flare, draw a 4"-long line across the three faces at the corner to be held by the tailstock. To do this, make a mark 2 13/16" (7cm) along each of the three edges, then "connect the dots" by drawing lines across the cube faces. Each of the three lines will be 4" long (*Photo 1*).

A three-jaw drill chuck mounted in the headstock serves as a drive, and a live center with the point removed provides tailstock support. Fit the tailstock corner of the workpiece into the live center cup, and bring the tailstock forward so the opposite corner engages in the drill chuck. Lock the tailstock and advance the quill to press the cube securely in place (*Photo 2*).

Turn the outside shape

Position the toolrest so that it will clear the bottom edges of the cube, and begin to round the lower section, taking light cuts with a bowl gouge (*Photo 3*). Cut in the direction of the tailstock. Initially, you will be turning across the edges of

Mark and mount cube between centers



Start with a 4" cube. The edge distances A, B, and C are each 2 13/16". Connect the points across the three faces, resulting in three 4"-long lines.

Mount the cube on the lathe with the marked corner in the tailstock's live center cup (point removed). A drill chuck serves as the drive in the headstock.

Turn outside profile

Begin turning at the headstock end using a bowl gouge. Make a flared shape toward the top of the box, stopping the wing tips at the lines.

Establish the foot

Measure and draw a line around the piece 2" down from the "scoop" of the box rim. This line denotes the base of the box.

Part in at this line to a diameter of 2", and carry this flat farther to the left.

the cube. To avoid tearout, set the lathe at around 2000 rpm, if you can do so without excessive vibration.

Aim for a diameter of about 2" (5cm) adjacent to the drill chuck, then form a gentle sweep out towards the three corners at the tailstock end. Stop cutting when the wing tips reach the pencil lines (*Photo 4*).

Measure 2" back down the slope and draw a pencil line to mark the base of the box (*Photo 5*). The diameter here should be about 2¼" (6cm); if it is wider, re-work the profile to bring it down and re-mark the base line. Now cut straight in at this line and trim the area to the left down to 2" diameter (*Photo 6*).

Using a thin parting tool, cut part-way in about ⅜" (9.5mm) back from the base line, then finish parting the work using a handsaw with the lathe off (*Photos 7-9*).

Remount the workpiece in a scroll chuck. To ensure the tenon shoulder sits tight against the face of the chuck jaws, use the tailstock to push the work into the chuck before tightening the jaws. Proper contact of the tenon shoulder to the jaw faces will add important stability for when you are hollowing with the tailstock removed. As there may be a slight eccentricity once the chuck is tightened, take a cut or two on the outside profile to re-true it, then sand the outside. It will not be practical to do this later.

Hollow the box

With the lathe stopped, add two pencil lines on the three unturned cube faces, one ⅛" (3mm) from the curved edge and the other, 3⁄16" (5mm) from the curved edge (*Photo 10*). Position the toolrest so it is parallel with the edges running in to the tailstock, and begin to hollow the box. Since, as before, you'll be cutting across the cube's edges, I suggest at least 1500 rpm with gentle cuts. And since the tailstock is still in place, a central spindle will remain, which I cut away with a handsaw before continuing to hollow (*Photos 11, 12*).

To ensure a minimum base thickness of ½" (13mm), I prefer to drill a depth-indicator hole before continuing the hollowing (*Photo 13*). When hollowing near the outer edges, take care when approaching the pencil lines on the three faces. I cut away the inside line and preserve the outer line, cutting the wall parallel to the outside ▸

Part off

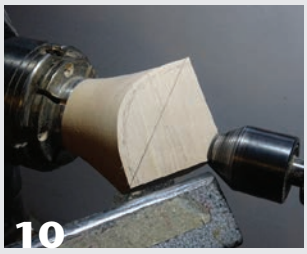

7


8


9

Use a thin parting tool to cut in part-way, leaving about ⅜" below the base as a chucking tenon. With the lathe off, complete the cut with a small handsaw.

Remount in chuck, begin hollowing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(*10*) With the box now mounted in a chuck, draw pencil lines following the scoop in the rim. These lines will serve as a visual aid when approaching final wall thickness.


11


12

(*11-12*) Begin hollowing, leaving the tailstock in place as long as possible. Cut away the remaining spindle, then remove the tailstock for full access to the box interior.

Drill depth hole, complete hollowing


13

(*13*) Use a drill chuck mounted in the tailstock to drill a depth-indicator hole. Leave at least ½" thickness at the bottom of the box.


14

(*14*) Hollow the remainder of the box, using the pencil lines at the rim as a guide to wall thickness. Sand the interior carefully!

Sand scooped rim by hand


15

Lock the lathe spindle and use a sanding block to smooth the scooped box rim.

Mark and form a shoulder

(*16*) To mark a 3"-diameter shoulder inside the box, cut a cardstock disk of that width, glue it to a dowel chucked in the tailstock, and advance it until it meets the box walls. Draw a line around the disk.

(*17*) Use a straight-edged tool, such as a parting tool or bedan, to form the shoulder that the lid will rest upon.

profile. With the relatively thin walls and increasing depth, it is not practical to try smoothing cuts, as chatter marks are likely to form. The bottom of the box should curve in to meet the bottom of the depth-indicator hole (*Photo 14*).

When the hollowing is completed, sand if necessary, but take care not to catch the wing tips. Sand the rim edges by hand, with the lathe off; to avoid rounding the edges, use a sanding block (*Photo 15*).

The final step is to cut a shoulder for the box lid to sit on. The lid will be 3" (8cm) in diameter. Cut a disk of this width out of stiff cardstock and a simple dowel handle attached with a dab of glue. The dowel can then be fitted into a drill chuck in the tailstock and the disk brought up to contact the inner wall. Scribe a pencil line around the cardstock (*Photo 16*). The shoulder can then be cut with a straight-edge tool, just 1⁄16" to 3⁄32" (1.5mm to 2.5mm) deep (*Photo 17*).

Shopmade chuck for reverse-mounting

A simple donut chuck holds the winged box so the base can be completed. Turn at a slow speed, and take light cuts with a sharp tool.

Complete the base

Remove the workpiece from the chuck. To reverse-mount the box and complete the bottom of the foot, I use a shopmade donut chuck (*Photo 18*). The chuck features a scrap faceplate held in a scroll chuck. The workpiece is held quite securely to the faceplate by a ring of thin scrap with a hole in the middle and hold-down screws. To avoid marring the piece, the ring should be made of hardboard or similar material, and the hole should be chamfered to match the outside slope of the box.

Turning at a slow lathe speed and taking light cuts, clean up the bottom of the box, shaping it to a slight concave profile and sanding as needed.

Make the lid and finial

The lid can be in matching wood or another for color/grain contrast. It should be formed as a ½"-thick disk from stock that can be final-turned to just over 3" in diameter; this will allow for fine-tuning the fit of the lid to the shoulder. I turn a 2"-diameter recess in bottom of the lid, so it can be mounted on a scroll chuck in expansion mode. Once mounted, the diameter can be trimmed to a comfortable fit on the box shoulder. Use a caliper to confirm dimensions. A central 5⁄16"- (8mm-) diameter hole in the top of the lid will anchor the finial. To avoid drilling through, place a piece of masking tape on the drill bit to mark ¼" depth. The top of the lid can then be profiled/decorated per your preference (*Photo 19*).

The function of the finial is twofold: to hold rings and to serve as a handle for lifting the lid. After some experimenting, I found that an overall finial height of 3", plus the ¼" tenon to anchor the finial in the lid, looks nice. A ⅞"- (22mm-) diameter bulge near the bottom of the finial is about right to catch the rings (*Photo 20*). I use holly for finials, as its close grain takes colorants well. If you do add color, this is best done before installing the finial.

Finishing

Apply your choice of finish to the box and lid. On this piece, I applied dye and then wipe-on polyurethane to the finial, and walnut oil to the box and lid. Glue the finial tenon into the lid, and the project is complete. A three-winged jewelry box makes for a unique gift. All it needs now is some earrings inside and a ring or two on the finial. ■

Turn the lid and finial

(*19*) Turn a 3"-diameter lid, and decorate the top as you like. The author added a bit of chatter work. Drill a centered hole 5⁄16" in diameter.

(*20*) Turn a finial with a 5⁄16"-diameter tenon at the bottom for gluing the finial to the lid.

Michael Hamilton-Clark, a retired civil engineer, has been turning wood for seventeen years. He lives in the Fraser Valley, British Columbia, and uses local woods to produce a variety of items. He is a member of the Fraser Valley Woodturners Guild, the AAW, and the Craft Council of British Columbia. For more, visit alberystudiowoodturnings.com.

Add Beauty and Strength with an Inlaid Butterfly Patch

Ed Pretty

Over the years, I have admired butterfly patches (also known as dovetails, dutchmen, bowties, or pewas) in turned pieces. Aside from becoming a primary visual feature, they add value to the piece by demonstrating the maker's skill. Additionally, being able to turn a finished bowl with a crack in it extends your usable wood inventory.

Adapting to a curved surface

Butterfly inlays are common in flat work. Traditionally, the maker scribes around a hand-cut butterfly, drills or routs out most of the recess, then uses a chisel to work to the line for a perfect fit. But I wondered how to transfer that process to the curved surface of a bowl. I was doubly impressed with turners who had used butterfly inlays in turned work.

SAFETY NOTE!

EXPLORE!

Turning wood with cracks in it carries inherent risk, and not all wood with cracks is salvageable. It can be dangerous or even deadly to turn wood that is not structurally sound, so evaluate the turning blank carefully. If cracks run all the way through the wood, eliminate the workpiece as a viable option. Wear appropriate personal protective equipment (PPE), such as a full faceshield and/or helmet, and use the lathe's protective guard if it has one.

The AAW's online archives has valuable resources on this subject. Log in at woodturner.org and use the Explore! search tool.

- "Safety Matters: From the Eye of a Survivor," by Lynn Yamaguchi, June 2014 (vol 29, no 3, page 27)
- "Avoiding Cracks in Bowls and Hollow Forms," by David Ellsworth, August 2015 (vol 30, no 4, page 17)
- "When Good Wood Cracks," by Dennis Belcher, August 2015 (vol 30, no 4, page 20)

The opportunity for me to learn came when I offered to repair a broken bowl for a desperate customer. A bowl (made by another turner) had been dropped and all but broken in half. I researched various methods of repair and landed on the one I knew I could do with the tools I already had. I decided to use butterfly patches using a router with an inlay guide-bushing set and a pattern to make both the recess and the insert (*Photos 1, 2*).

I chose a different bowl to illustrate the process in this article (*Photo 3*). ▸

Repairing an existing bowl

The author's repair job on a customer's bowl, which had been dropped and broken. These dovetails are "blind"—only visible from one surface. The customer appreciates the beauty of the repair and now displays the bowl upside down.

A good candidate

This rough-turned bowl had a crack even before it was cored, but the glued-on wood "bridge" prevented further cracking during drying. A blank like this, with a surface crack that doesn't go all the way through the wood, is still structurally sound.

The right router for the job

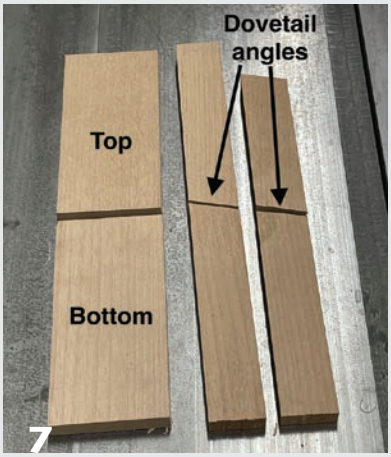
A small router can be maneuvered by holding the base rather than handles, allowing for greater control. The ability to advance the bit while it remains centered is key.

Guide bushings and router bits

(*5*) A typical inlay bushing with removable collar. Leave the collar on for routing the recess, and remove it for routing the butterfly inlay.

(*6*) Downward spiral router bits work well. Be sure to match the bit diameter to the bushing size.

Materials for a butterfly pattern



The author uses ⅜"-thick hardwood for a pattern. The 15-degree angles will form the dovetail, or butterfly, shape.

Note that the grain of the butterfly inlay must run 90 degrees to the crack to give it full strength. If it runs the same direction, the butterfly itself could eventually break. Usually, I prefer the butterfly to be of a contrasting wood, but that is a matter of preference. Choose wood that is strong but relatively easy to work by hand because you will typically have to do a little tweaking with a chisel or knife. I usually use black walnut for dark patches and birch for light patches.

Router considerations

I originally used an old Craftsman router with good success, but its motor was often misaligned, and it required a lot of care to advance the bit and keep it in the same relative position. Although the handles were fairly high on the base, I didn't find it a problem, but when I tried a friend's small plunge router (trying to solve the misalignment issue) with even higher handles, I found it had a very "top heavy" feel and was hard to maintain fine control.

I decided to get a new router, a smaller one for ease of handling, with as much power as my old router, and handles as low as possible. Variable speed and a soft start are also nice features. But most important of all, it had to be able to stay on center when I advanced the bit. While there were several choices on the market, I bought a Bosch Colt (*Photo 4*).

Inlay bushings and router bits

Inlay bushings are made to attach easily to most router bases, with the face flush

Glue and trim pattern

(*8*) A simple clamping jig features a base and cauls covered with cello tape to prevent the glue squeeze-out from adhering to it. The angled shims, at right, apply ample clamping pressure, and the clamps and cauls prevent the pattern from buckling.

(*9*) Glued and clamped. The small block between the points of the dovetail ensures all four angled pieces will come together at the same distance apart.

(*10*) Once the glue is set, it's a simple matter of trimming off the excess to square up the sides.

to the bottom of the base. A centered protrusion around the bit follows a pattern and has a removable collar that allows for negative and positive shapes (recess and insert). Leave the collar in place to create the recess, and remove it to make the insert (*Photo 5*). Before you purchase an inlay-bushing set, confirm that it will work with your router base. In my case, I used the lathe to turn a custom router base from ¼"- (6mm) thick acrylic, so it would accept the bushing with a perfect fit.

While it would be possible to make the cuts using a bit with straight flutes, spiral cutters make much cleaner cuts (*Photo 6*). Downward spirals leave a very clean cut at the surface but tend to load the recess with shavings. Upward spirals clear the chips better, but they tend to rip the surface of the wood. So if you find yourself installing a butterfly in a finished bowl, an upward spiral would be a poor choice. My preference is the downward spiral cutter; I simply clear the chips between levels of cut. Router bits are available in ⅛" (3mm) and ¼" diameters, so you must take that into account when choosing a removable collar for an inlay bushing.

Make an inlay pattern

As far as I can tell, all commercially available inlay patterns are made from acrylic, so I had a friend with a laser engraver make my first one. I found pretty quickly, however, that I wanted more sizes because the inlays should be in proportion to the turned piece. So that I wouldn't have to constantly go cap-in-hand to my friend's shop, I came up with an easy method of making the router patterns from wood. Choose a hardwood like hard maple, oak, or similar.

A pattern should be large enough for the router to ride on it securely without rocking. About 3" × 5" (8cm × 13cm) is good, as it will work for most "bowl-size" butterflies and still provide a stable platform. If you had to make a significantly larger butterfly, consider increasing the outside dimensions to maintain stability. I now make my patterns ⅜" (10mm) thick, rather than the more common ¼", for two reasons. First, I found (sadly, during an IRD) that because the pattern was barely thicker than the inlay bushing, the router teetered on the bushing on a small-diameter bowl, messing up the cut. Second, a thicker pattern allows more room for shavings, which helps to prevent build-up.

An inlay pattern requires a top, bottom, and four center sections cut to your preferred dovetail angle for the butterfly (*Photo 7*). After some trial and error, I chose to make my dovetail angles 15 degrees.

Make a simple clamping device and glue and clamp the components, as shown in *Photos 8* and *9*. *Photo 10* shows the completed inlay pattern, trimmed and ready to use.

Rout the inlays

As described earlier, the router bushing set has a removable collar. Take the collar off, leaving the small-diameter "follower" when cutting inserts. Before adhering the pattern to the wood with hot-melt glue, I put masking tape on both the pattern and the wood being machined. This allows for easy removal of the pattern and the hot-melt glue.

Rout as many inserts as you can get from a piece of waste wood, making them as thick as you want. I make mine at least ¼" thick, from wood that is at least ½" to ¾" (13mm to 19mm) thick. You'll have to re-attach the pattern for each insert. When you have as many routed as you want, cut the inserts out at the bandsaw (*Photo 11*). If you don't have a bandsaw, this can be done with a handsaw or table saw with a zero-clearance table insert.

Rout the recess

Butterfly inlays are generally "blind," meaning they don't go all the way through the vessel wall. If you have a ▶

Rout the butterfly inlays

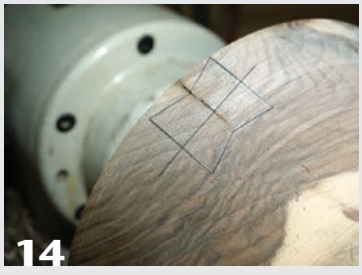
11 Once several butterfly inserts have been routed, remove them from the parent wood using a bandsaw or table saw with a zero-clearance insert.

Hold the bowl for routing

12 Mount the bowl (on or off the lathe) in such a way that the cracked work area is horizontal.

Scribe butterfly shape on bowl

13



14 Scribe around the inner portion of the pattern to mark the placement of the butterfly inlay.

thin-walled vessel, where the butterfly does go right through, be aware that the small amount of handwork in fine-tuning the recess must be precise. Any cuts that aren't 90 degrees to the surface of the bowl can show up as a gap on the inside.

I like to re-mount the bowl on my lathe at an angle, using the face of the chuck and the tailstock to position the work area as horizontal as possible (*Photo 12*).

Determine where you want the butterfly inlay, place the pattern on the crack, trace around the inside of the pattern with a pencil, then check to see if the shape, orientation and proportions are to your liking (*Photos 13, 14*). Place masking tape outside those lines in any place you expect to place hot-melt glue (usually the full outside dimension of the pattern). I use blue painter's tape because it tends to conform to the compound curve of a bowl nicely.

Apply a spot of hot-melt glue at the two points that form the "waist" of the butterfly, and secure the pattern in place. Once it is in place, glue wedges under the four corners, or wherever possible, to provide adequate support while routing (*Photos 15, 16*). *Important: Be careful to maintain the angle of the pattern so that it is tangent to the surface of the bowl.* I usually have a selection of wedges at the ready, dry-fit them, then apply a dab of glue on the top and bottom of the wedges before affixing them. Having long wedges keeps your fingers away from the hot hot-melt glue.

Butterfly inlays just ⅛" thick will provide adequate strength, so I rout the recess at least that deep, plus an allowance for any finishing cuts on the bowl during turning. After setting the router-bit depth so that it is contacting the surface of the bowl, I put a piece of tape on the router's depth scale at the full depth to make it easier to see. I like to use one of the corners for the "home" corner, extend the bit while the router is running, then move the router clockwise around the pattern (*Photo 17*). Be sure to remove any wood remaining in the center as well. I usually take a ⅛"-deep cut, remove the router to clear the chips, go back to the home position, then lower the bit the rest of the way. If you can't lower the bit while the router is running (like my old Craftsman), extend the cutter away from the pattern and enter the cut somewhere away from the edge before moving it to your home corner. *Always* let the bit come to a full stop before removing the router from the pattern.

After routing the recess, it will be necessary to cut the dovetail corners to a sharp angle, as the router will leave them rounded (*Photos 18, 19*). Alternately, you could leave the rounded corners as is, in which case you would have to not only round the corners of the insert to match but also do all the fine-tuning on the insert, not the recess.

Adhere pattern, rout recess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16


17

(*15-16*) Apply masking tape to the area where the pattern will be adhered. Use a good-quality hot-melt glue to affix first the pattern at the dovetail's waist points, then wedges to hold the pattern level.

(*17*) Rout the recess. Note the tight control of the router with the author's hands down low on the router base.

Refine routed corners


18


19

The recess cut by the router will have rounded corners. The author uses a mortising chisel ground to fit tightly into corners to clean up the butterfly tips.

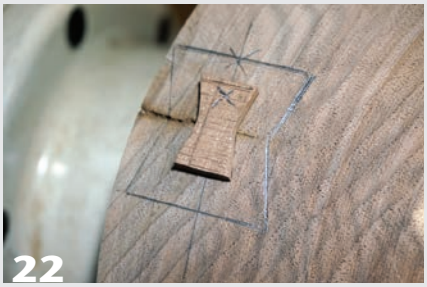
Fit and glue the inlay

Test the fit of the inlay in the recess to see which way it fits the best, then mark an "X" on one end so you will always test the fit in the same position. The inlay bushing creates a fit that is actually "too" exact, so the fit will have to be relaxed a bit. Place the insert over the recess, hugging one side of the recess with one side of the insert, and scribe around the other side and both ends with a sharp craft knife (*Photo 20*). Use that line to locate the chisel to take off fine shavings as required. Alternately, you can work the sides of the butterfly insert to adjust the fit. It is safer and allows greater accuracy to hold the insert with a clamp while making these cuts (*Photo 21*). You can touch the ends on a belt sander or use your chisel. I've

Fine-tune the fit

Use a sharp knife to scribe a fine line on the bowl, indicating how much material to remove from the sides of the recess for a good fit.

The author holds the insert with a C-clamp while chamfering the corners to ease the fit. When dry-fitting the inlay, don't push it in too far, as it will be difficult to remove without damaging it.



taken both approaches and have found that adjusting the recess is easier.

Chamfer the inside edges of the insert to make for an easy entry into the recess. The fit should be a nice push fit or even a tap fit. Don't put it all the way in until you apply glue, as it probably won't come back out (*Photo 22*) without damage.

While cyanoacrylate (CA) glue is acceptable, I prefer regular woodworking glue, as I feel it offers a more permanent hold. If possible, drive the inlay home with a clamp, making a glue bond at the bottom of the recess (*Photo 23*). Depending on the glue brand you use, clamping is usually required for an hour, with full strength in 24 hours. However, there is very little stress on a well-fit butterfly while turning, so it is reasonable to turn in an hour. I have never had an insert move during turning.

With regular glue, there is usually some squeeze-out into the crack. I try to "dam" the crack with a sliver of wood to prevent that, as shown in *Photo 24*. You could also remove the squeeze-out with a series of pointy blades, slivers of wood, and/or dental picks.

With the butterfly inlay glued in place, continue turning the bowl as you normally would.

Closing thoughts

Generally, cracks that need a repair are obvious, but some aren't. My feeling is that when the wood's moisture content has reached equilibrium with the surrounding atmosphere, as with a rough-turned bowl that has sufficiently dried, it will not move or crack further. So if a crack is clearly minor, while others on the same bowl have been patched, most people will understand that the bowl will remain stable in its current state.

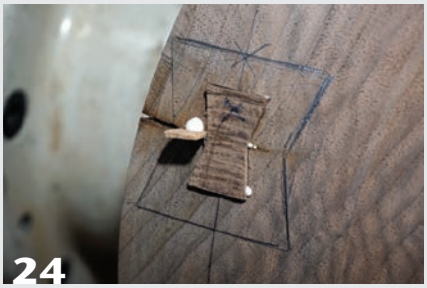
I am often asked if filling a crack (along with using a butterfly) is a good idea. If you have a salad bowl with a crack low on the walls, filling the crack would maintain the bowl's functionality. But for more aesthetic pieces, I would leave it unfilled. You may also just simply *want* to fill it. In either case, I would fill after inserting the butterfly, in case the placement of the butterfly breaks the bond between the filler and the wood.

When I teach new turners, I emphasize the need to honor the wood, to give it their best effort. Using butterflies to salvage a broken piece or to make use of wood with natural imperfections is a way of honoring the wood. The Japanese call the art of repairing broken pottery vessels *kintsugi*. Cracks are part of the "scenery" and history of a vessel and should be honored, rather than disguised. A butterfly repair on wood is no less attractive than figured grain and becomes part of the story of a wooden vessel. ■

Ed Pretty has been turning wood for more than sixty years, initially learning traditional spindle techniques from his father. After retiring from a thirty-six-year career as a professional firefighter, Ed now turns full time. Ed offers an interactive remote demo (IRD) on crack repair in turned bowls. Learn more at edswoodturning.com.

Glue in butterfly inlay

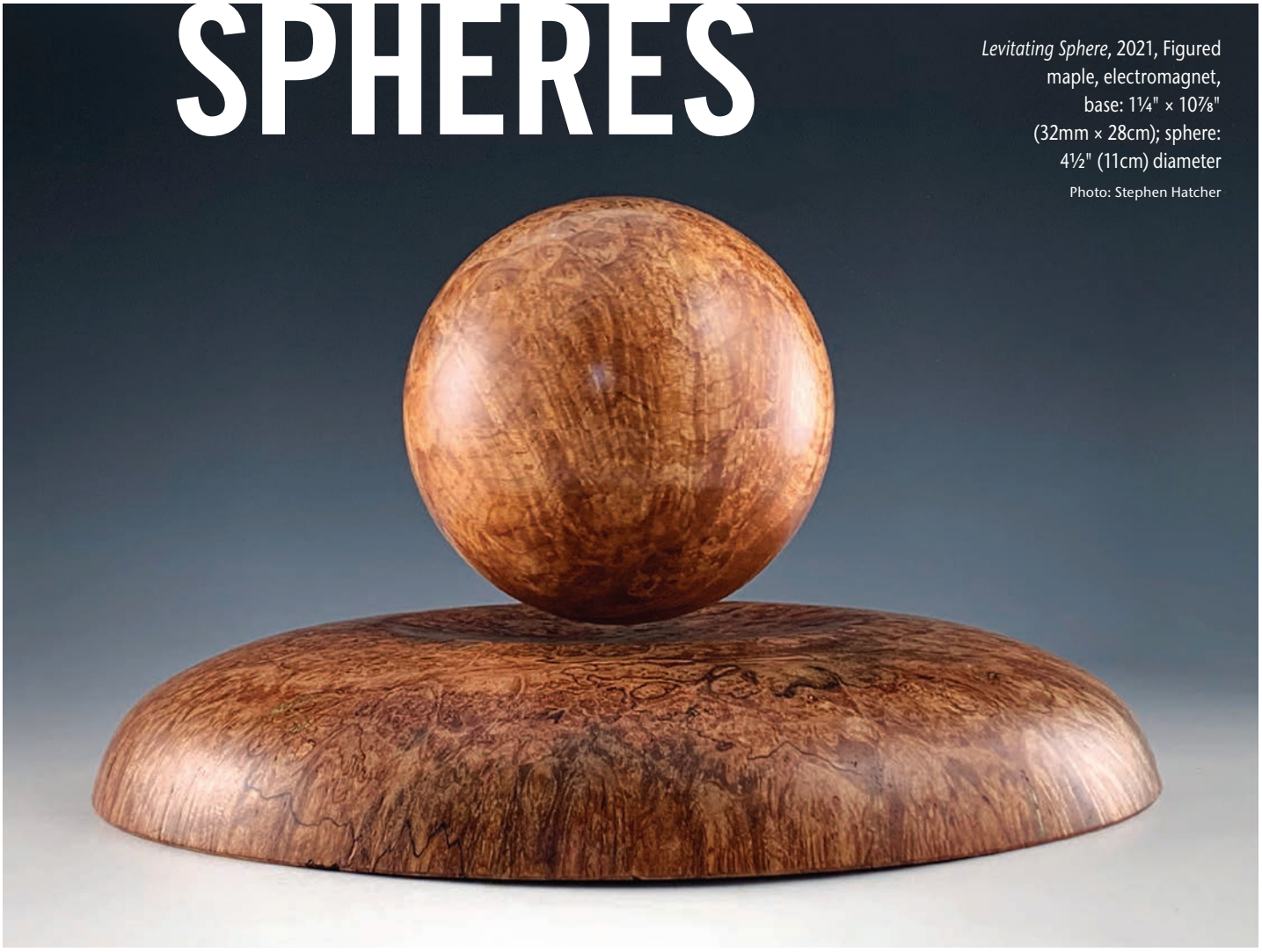
With glue applied, set the inlay into the recess. If the patch is near the bowl rim, a clamp will do the job; if not, gently tap in the inlay.



A wood wedge, or splinter, is used as a dam to prevent glue from squeezing into the crack.

LEVITATING SPHERES

Ken Conte



Levitating Sphere, 2021, Figured maple, electromagnet, base: 1¼" × 10⅞" (32mm × 28cm); sphere: 4½" (11cm) diameter
Photo: Stephen Hatcher

I started turning fourteen years ago. For most of that time, I've enjoyed turning spheres, and I've always wanted to find a way to levitate a sphere in the air. This article explains how to do just that.

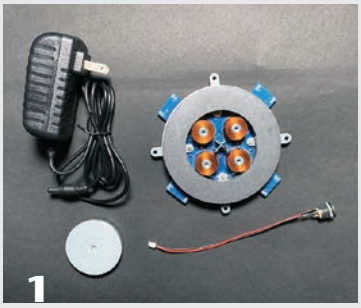
Electromagnets

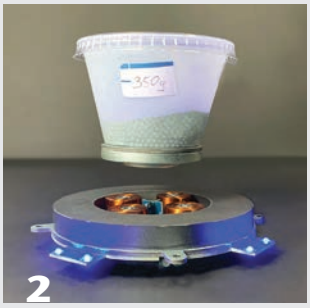
If you hold two dipole magnets close together, you'll find that opposite poles attract and like poles repel. It would be nice if you could levitate one magnet above one or more strategically arranged magnets. Unfortunately, dipole magnets alone are too unstable to do this, and one magnet will fly off very quickly if you try. You can, however, accomplish stable levitation with the use of electromagnets (*Photo 1*). The base unit consists of four electromagnets powered by an AC adapter. A single disk magnet is levitated above the base.

The key to stable levitation with electromagnets is a series of sensors in the base that constantly monitor the position of the levitating magnet. When the power is on, the sensors detect any movement in the levitating magnet and prompt the appropriate electromagnet to return it to the correct levitation spot.

There are two basic types of electromagnets. One type sits below the levitating magnet, effectively pushing it up to a stable position, and the other sits above the levitating magnet effectively pulling it up to a stable position. While I've incorporated both types in woodturning projects, my focus has been more on the former, as they are much easier to find. The overhead units I have used were salvaged from commercially sold products.

Test your electromagnet





(*1*) The Lusya load-bearing magnetic levitation module.

(*2*) The author confirms the weight capacity of the electromagnet using a non-magnetic material such as lead shot.

SAFETY WARNING

Strong magnetic fields can impact medically implanted devices. People with such devices who wish to work with electromagnets should consider consulting a physician first.

A quick internet search for "magnetic levitation module" will reveal several systems on the market that levitate a disk magnet above an electromagnet base. Some are kits that require you to assemble the base unit. I would avoid these unless you are quite electronically inclined. It is much easier to start with a base that is assembled and ready to use. There are a few key things to look for when deciding which unit to buy:

- **How much weight can be levitated?** This is critical because it will be a significant factor in determining the size of the sphere you plan to levitate. There are units on the market with a variety of maximum weight capacities.

- **What is the diameter of the levitating magnet?** The larger the diameter of the levitating magnet, the larger you will have to make your sphere.

- **How high above the base will the object levitate (suspension height)?** This factor has a significant visual impact on your finished piece.

The suspension height is impacted by the weight placed on the levitating magnet. A heavier load will reduce the height. Also, and importantly, when you place a board or nonmagnetic object between the levitating magnet and the base, the suspension height does not change; you are simply filling the space. So, as you plan your project, you will want to make the sphere as light as possible and to have as little wood as possible between the levitating magnet and the electromagnet base.

For the project shown in this article, I used a Lusya load-bearing magnetic levitation module with LED lights. Similar units sold under various brand names can be found at aliexpress.com, Amazon, eBay, and from other suppliers. Mine has a weight capacity of 17.6 oz (500 grams) and a suspension height of 0.7" to 1" (18mm to 25mm). The levitating magnet is 2" (5cm) in diameter. It comes with a 12-volt 2-amp AC adapter. With this system, I can levitate spheres 4" (10cm) in diameter or larger. The measurements used to make the sphere and base are based on this system. If you purchase a different product, you may need to adjust the measurements accordingly.

Note that many levitation systems come with LED lights, which serve different purposes, one of which is to help you find the levitation spot. But they are not necessary to the system working. Once the electromagnet is incorporated into a wood base, you'll have to find the levitation spot without the help of the LED lights.

Test your electromagnet

Once you get your electromagnet system, you should practice levitating the magnet above the base, focusing on doing so by feel. ▸

Levitating Sphere, 2020, Madrone (base); holly (threaded box sphere), electromagnet, base: 7" × 8¼" (18cm × 21cm); sphere: 3 5/16" (8cm) diameter

Photo: Stephen Hatcher

It's helpful as well to test levitating different weights to get a sense of the stability at different weights and how the weight will impact the suspension height. ***A word of caution: These are powerful magnets, so you should keep gouges and other metal objects out of range.*** Also, protect the base magnet by placing a thin piece of cardboard or foam over the electromagnet base. If the levitating magnet slips, it can crash into the base with enough force to damage the system. A good method of testing the weight capacity and separation height of your unit is shown in *Photo 2*.

Sphere considerations

The greatest challenge with this project is placing the levitating magnet in the sphere then turning the sphere to a predetermined diameter. The minimum sphere size is dictated by the diameter of the levitating magnet. To maximize the suspension height, the levitating magnet has to be as close as possible to the bottom of the sphere without breaking through. And you will need to hollow the sphere to keep it as light as possible. The larger the sphere, the more hollowing you will have to do.

Once you've decided on the diameter of the sphere, you can determine where to locate the magnet. And once the magnet is in place, you are committed to turning a sphere of that diameter. If you go smaller, you run the risk of exposing the magnet. If you go larger, you will be adding additional wood at the top and bottom of the sphere, reducing the amount of separation space.

There are options for placing the magnet inside the sphere. One option is to rough-turn the sphere, leaving a tenon on top to hold the sphere in a chuck so you can turn a recess in the bottom for the magnet. You can then hollow the sphere through this recess, glue in the magnet, glue in a plug to cover the magnet, and then finish turning the sphere. This method is not my preference because the plug rarely matches the grain and is fairly obvious, but it's fine if you plan to paint the wood or otherwise cover up the glue line and natural grain.

I prefer natural wood spheres and the mystery surrounding how the magnet got in there. So my preference is to divide the sphere blank in half, create a recess for the magnet from the inside, glue the magnet in place, then glue the blank together and finish turning the outside. A good glue line with matching grain is not immediately obvious.

TURNING SPHERES

EXPLORE!

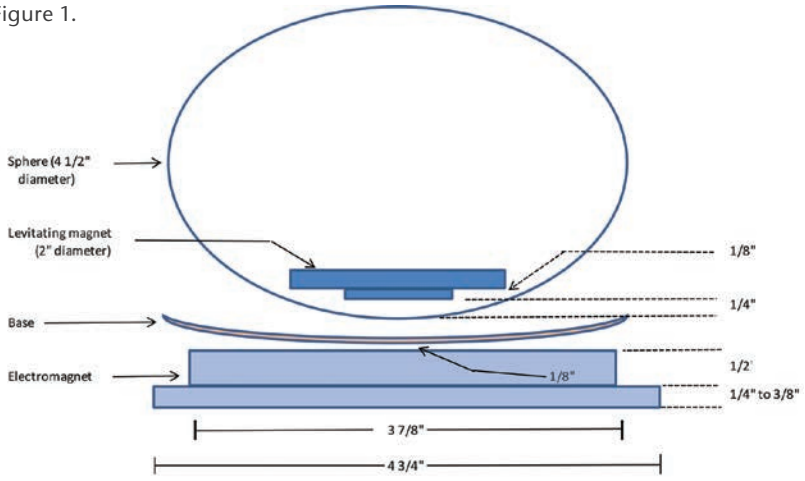
To learn more about turning spheres, find helpful resources in the AAW archives. Log in at woodturner.org and use the Explore! search tool.

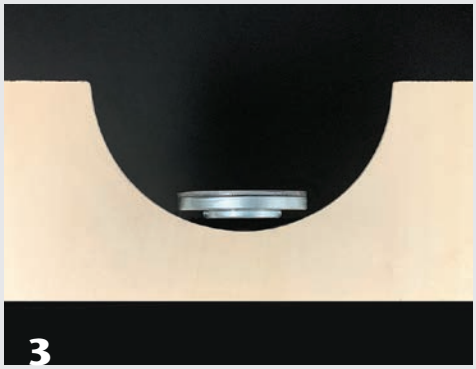
- "How to Turn Perfect Hollow Sphere - No Jig," video by Alan Stratton

- "Making Spheres," by John Brewer, *AW* Summer 2001 (vol 16, no 2)
- "Build Your Skills and Train Your Eye by Turning a Sphere," by Kip Christensen, *AW* August 2016 (vol 31, no 4)

Placement of magnet in sphere

Figure 1.





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A scale drawing and model template are useful in determining the distance between the bottom of the magnet and the bottom of the sphere (in this case, ¼"). The template is useful, too, as a gauge when turning the sphere to its final, predetermined size.

Make the sphere

Determine sphere size

A scale drawing or model (*Figure 1* and *Photo 3*) helps to visualize the placement of the 2"-diameter magnet in the bottom half of a 4½"- (11cm-) diameter sphere. The levitating magnet should be as close as possible to the bottom of the sphere, while leaving enough wood at the outer edges so it won't break through.

Choose a blank long enough to turn a tenon on both ends with a little extra room for adjustments. A blank 6½" (17cm) long works well for a 4½"-diameter sphere. Place the blank between centers and turn it down to a cylinder 4½" in diameter. Turn tenons on both ends. Mark the center, top, and bottom of the sphere with the top and bottom lines each 2¼" (6cm) from the centerline.

Next, determine how far above the bottom of the sphere to locate the levitating magnet. To do this, use a scale drawing or model to measure the distance from the bottom of the sphere to the bottom of the magnet, as shown in *Figure 1* and *Photo 3*. For a 4½" sphere, placing the bottom of the levitating magnet ¼" (6mm) from bottom of the sphere allows about ⅛" (3mm) clearance at the outer edge of the levitating magnet. Place a mark on your blank ¼" from the mark representing the bottom of the sphere (*Photo 4*).

Weigh your blank to get an idea of the starting weight, bearing in mind that you will want the sphere to be as light as possible when finished and certainly lighter than the maximum capacity of the electromagnet. In this case, the rough blank in *Photo 4* weighed 27 oz (765 grams); recall that the weight capacity of my electromagnet is 17.6 oz (500 grams).

Hollow sphere, affix magnet

Divide the blank in two, trying to retain as much wood as possible, especially on the bottom half. To do ▶

Rough-turn sphere

Sphere blank turned to a cylinder with a tenon on each end. Mark key locations on your blank: A: bottom of sphere; B: bottom of magnet; C: center of sphere; D: top of sphere.

Halve sphere

Cut the sphere blank in two at the centerline. The author cuts partway in and completes the cut at the bandsaw. Note the horizontal pencil line across the center to help realign the wood grain when the two parts are rejoined.

Levitating Sphere, 2021, Madrone burl, electromagnet, base: 2¾" × 15" × 11" (7cm × 38cm × 28cm); sphere: 4½" (11cm) diameter

Photo: Stephen Hatcher

Hollow sphere, glue in magnet

A stepped recess inside the bottom of the sphere accepts the magnet. The deepest part of the recess stops ¼" from the bottom of the sphere.

Glue and clamp the magnet in place, using tailstock pressure with a length of scrap wood.

this, I start the cut with a parting tool just to the top side of the centerline to avoid later adjustments to the bottom mark, which will impact the distance between the levitating magnet and the outside of the sphere (*Photo 5*). I like to complete the cut with a bandsaw to minimize loss of wood from the cylinder. *For safety at the bandsaw, use a V-block jig when cutting the cylinder. Never cut an unsupported round object on a bandsaw.*

Hollow the top and bottom halves of the sphere using your tools of choice. On the bottom half, stop hollowing ⅝" (16mm) from the bottom, then use a parting tool to carefully hollow the 1⅛"- (29mm-) wide recess for the smaller base of the levitating magnet. This recess should go to the depth of ¼" above the bottom of the sphere, per your original mark on the blank. Once you have formed this recess, come up ⅛", the height of the smaller base of the levitating magnet, and turn the 2"-wide recess to accommodate the larger part of the magnet (*Photo 6*).

Glue the magnet into the recess. I use a two-part epoxy rated for wood and metal and apply clamping pressure with the tailstock (*Photo 7*).

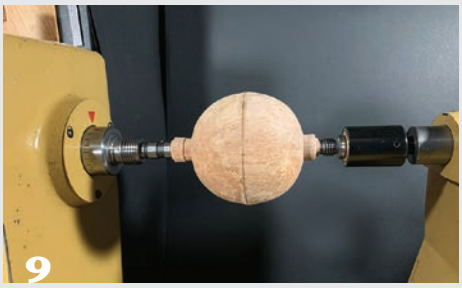
Complete the sphere

Prepare the glue surfaces of both halves. Take care with this, as you want as fine a glue line as possible. I leave a generous gluing surface ⅜" (10mm) across for strength since the glue line will be stressed when I finish turning the sphere. Glue the two halves together, clamp, and allow it to dry (*Photo 8*). I use standard wood glue for this application. Hollowed, the cylinder now weighs 22 oz (624 grams), including the 4⅛ oz- (117 gram-) weight of the levitating magnet.

When the glue has cured, remeasure the bottom, center, and top marks on your cylinder. The distances may be short since you lost some length when you parted the blank in two and from preparing the glue surfaces. Ideally, the bottom is still at or very close to 2¼" from the centerline. In order to maintain the distance of the levitating magnet relative to the bottom of the sphere, try to make any needed adjustments to the top of the sphere by marking a new top line 2¼" from the centerline (the glue line). Note: The centerline doesn't have to remain exactly on the glue line. If the glue line is substantially short of 2¼" from the bottom mark, you can measure up 2¼" from the bottom mark and establish a new centerline and then another 2¼" to establish a new top line.

Rejoin halves, turn sphere

The two hollowed halves are glued back together with wood grain carefully aligned. Clamp the pieces between centers and allow the glue to cure.

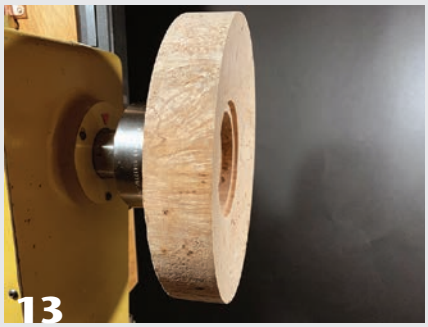


Turn the sphere, being sure to stick to the predetermined diameter (in this case, 4½"). The glue line is nearly imperceptible.

Form chucking recess on top of base

The base is turned to overall size, with an expansion recess turned on top.

Form stepped recess in bottom of base



With the base remounted in the chuck in expansion mode, turn a stepped recess in the bottom to accept the electromagnet. The base is scooped slightly (made concave) to allow for a good fit of the chuck in expansion mode in the wider recess.

Once you have made any needed adjustments to the top and center marks, finish turning the sphere between centers (*Photo 9*). I use a small spindle gouge and an occasional touch with a negative-rake scraper to complete the sphere. As you get close to the magnet at the bottom of the sphere, you will begin to feel it pulling your gouge into the wood. This isn't a big problem, but as you proceed, you may have to hold the gouge carefully so the magnet doesn't pull your gouge tighter into the wood than you want. My completed sphere weighed 9 7/8 oz (280 grams), including the weight of the magnet (*Photo 10*).

Sand, embellish if you care to, and use your finish of preference to complete the sphere.

Make the base

The base has to be large enough to accommodate the electromagnet. You will need to keep as thin a layer of wood over the electromagnet as possible to maximize the separation height.

Turn a stepped recess

Select a blank at least 6" (15cm) in diameter and a minimum of 1½" (38mm) thick. Place the blank between centers or use your chuck's woodworm screw in the bottom so you can access the top surface. Using your tools of choice, turn the top surface flat, then turn a recess ¼" deep so you can hold the blank using your chuck in expansion mode. For my serrated No. 3 jaws, I made this recess 4" wide (*Photo 11*).

Reverse-mount the blank, so you'll have access to the bottom of the base, where you will turn a stepped recess for the electromagnet. Once the base has been turned flat on both sides, carefully measure the thickness of the blank from the bottom of the top recess (now in the chuck) to the bottom of the base. My base measured 1⅝" (4cm) thick.

Using a small bowl gouge and then a box scraper to straighten the sides, turn the first recess 3⅜" (10cm) wide and to a depth that will position the top of the electromagnet ⅜" below the surface of the expansion recess on the top of the base. For my base, this recess was 1¼" (32mm) deep. Turn the bottom of the recess as flat as possible.

Now turn a second recess 4¾" (12cm) in diameter to a depth ½" (13mm) above the bottom of the first recess. This wider recess will be used to attach the electromagnet to the base and as a chucking expansion recess to complete the top. Test the electromagnet for fit and adjust if necessary. The top of the electromagnet should sit just short of touching the bottom of the first recess, and the four tabs used to attach the electromagnet should rest squarely on the upper recess (*Photo 12*).

If necessary, undercut the bottom of the blank, making it slightly concave, to ensure a good fit for your chuck (*Photo 13*). This also helps reduce the weight of the base. Sand the bottom to prepare it for the finish of your choice. ▸

Shape top of base

With the base remounted once again, turn away the expansion recess in the top, leaving a concave depression with a final thickness ⅛" or less in the center. Finish shaping the top of the base.

Levitating Sphere, 2022, Dyed alder (base); figured maple (sphere), electromagnet, base: 14½" × 6" (37cm × 15cm); sphere: 6½" (17cm) diameter

Complete top of base

Reverse the base in the chuck, now expanding the jaws into the wider recess on the bottom. Using your tools of choice, shape the base to your preference. Turn away the top expansion recess, and form a concave depression in the top center of the blank. Measure the thickness frequently as you turn this depression area to a thickness of not more than ⅛" in the center (*Photo 14*).

Sand, embellish if you care to, and prepare the top of the base for the finish of your choice.

Make a wiring channel

Return to the bottom of the base and use a power carver or other tools to create a channel to accommodate the adaptor plug and wires. The adaptor plug will be attached to the bottom, back side of the base. Using a disk sander, flatten a small area at the back of the base to mount the adapter plug (*Photo 15*).

Drill pilot holes to accept screws on the surface of the wider recess, corresponding to the four tabs on the electromagnet.

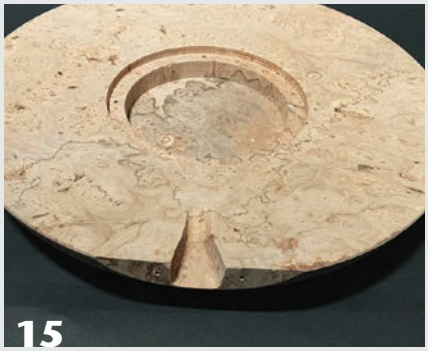
Test-fit the electromagnet, wiring, and adaptor plug to make sure everything fits properly. A thin piece of laminate and two screws hold the adaptor plug in place nicely (*Photo 16*). Remove the components to apply a finish, then do the final installation of the electromagnet and adaptor plug.

Final thoughts

Once you're comfortable turning a sphere to a predetermined diameter with the levitating magnet close to the bottom and making a base with a very thin top surface, you can add any number of interesting variations. Embellishing the sphere and base presents endless creative possibilities. I hope you've found this article interesting and that it adds a unique challenge to the list of things you can do with a sphere! ■

Ken Conte retired in 2013 after a thirty-five-year career in Washington State government. He took up woodturning in 2008 and has been a member of the AAW and the Woodturners of Olympia since then. Ken has served on the Board of the Woodturners of Olympia since he started turning and served as club president from 2014 to 2018.

Cut wiring channel, install components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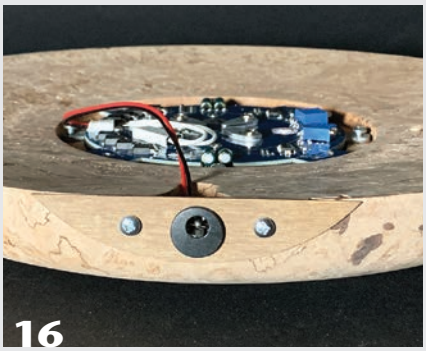
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Carve a channel on the bottom of the base to accommodate the adaptor plug and wires. Test-fit the electromagnet and adaptor plug before applying a finish.

You read the article—now see the video!

Ken Conte has created a helpful video, covering how to install and work with the electromagnet components of this levitating-sphere project. View the video at tiny.cc/Levitate or scan the QR code with your mobile device.

PLATE JAW EXTENDERS

Tim Heil

For completing the bottom of a bowl, I reverse-mount the work on my Oneway plate, or jumbo, jaws. But they hold bowls only up to 10" (25cm) in diameter. To accommodate larger bowls, I made a set of larger jaws from medium-density fiberboard (MDF) and attached them to the plate jaws using the existing threaded screw holes. This idea will also work with other manufacturers' jaws, but you'll need to customize accordingly.

Lay out, cut, and drill

My lathe has a 24" (61cm) swing, so I started by drawing a 22"- (56cm-) diameter circle on a 1"- (25mm-) thick piece of MDF. Making the jaws 2" (5cm) smaller than the lathe swing allows for a comfortable amount of clearance.

Next, I drew intersecting lines to divide the large circle into pie-shaped quadrants. I also drew a circle 4" (10cm) in diameter in the center, which, when cut out, will allow access to the chuck jaw screws.

To locate where the gripper holes would be drilled, I drew circles ½" (13mm) apart. I then used the compass on each circle to divide each jaw into thirds, indicating the locations for two equally spaced, ¼"-diameter holes (*Photos 1, 2*).

Cut the circle out as marked, then cut out the four pie-shaped jaws. Also cut out the inner 4" circle.

The four pie-shaped quadrants (the new chuck jaws) must be drilled so you can screw them to the existing jaws. I located the screw holes by using the original jaws as a locator jig (*Photo 3*). These holes are ¼" (6mm) in diameter and countersunk so the screw head will be flush with the MDF.

Mark quadrants and gripper hole locations

1

2

(1) After dividing the large circle into quadrants, use a compass to draw circles to locate where the grippers will be placed. Don't have a compass large enough? Make one using paint stir sticks, a nail, and a marker.

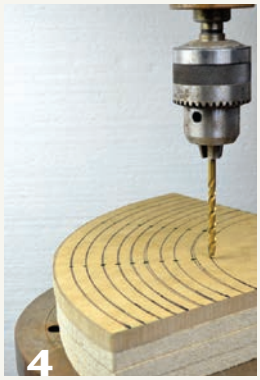
(2) Use the compass to divide the circles on each quadrant into thirds. This will locate the holes for two grippers per jaw.

Locate jaw-mounting holes

3

After cutting out the circle and each of the four jaws, use the original plate jaws as a locator jig and mark where holes should be drilled to attach the new jaws.

Drill holes for grippers



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Align and hold all four jaws together using double-sided tape. Drilling the gripper holes at the same time will improve accuracy.

My Oneway jaws called for flathead metric machine screws, M6 × 12.

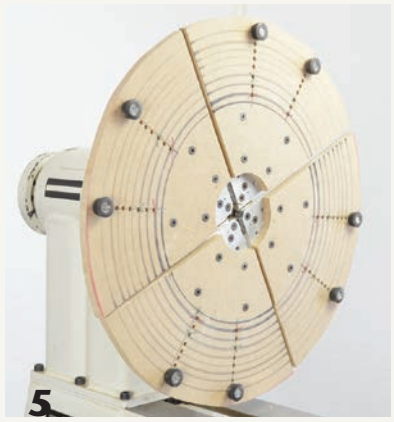
To ensure accuracy when drilling the gripper holes, I stacked all four sections and held them together with double-sided tape. Each jaw is drilled to accept two grippers, for a total of eight grippers (*Photo 4*). I used #10-24 × 1½" flathead machine screws and matching nuts to secure the grippers.

In use

With the grippers in place and the new jaws secured tightly to the plate jaws, you are ready to trim the foot of a bowl (*Photo 5*). I suggest using the maximum number of grippers to guarantee the most holding power. Depending on the shape of the bowl rim, it may be necessary to stack the grippers at double height.

When using jumbo jaws, keep the lathe at a slow speed and take light intentional cuts with a sharp tool. Bring up the tailstock to help secure the bowl for as long as possible. ■

Ready for use!



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Mount the new jaws to the existing plate jaws using screws with threads that match the threads in the existing holes. Attach the grippers using screws with nuts located at the back side.

Tim Heil was introduced to woodturning in junior high school woodshop in 1966. He joined the AAW and the Minnesota Woodturners in 2002, and that put his woodturning skills in high gear. His favorite wood is lilac.

BRIDGING THE GAP

2022 AAW Member Exhibition

Photos courtesy of the artists.

The theme for the AAW's 2022 member exhibition is *Bridging the Gap: The Craft and Art of Woodturning*. Twenty-seven artists from four countries and sixteen states had their work showcased at the AAW Symposium in Chattanooga, June 23-26, and the show will be on view at the AAW Gallery of Wood Art in Saint Paul, Minnesota, September 4 to December 28, 2022.

Bridging the Gap is an all-juried show with no invited artists, and entries were judged without identifying information. The three-member panel consisted of artist Max Brosi, Ireland; collector Jonathon Cuff, U.K.; and artist and professor of woodworking Karen Ernst, U.S., who separately considered 120 submissions individually for the first round, then met online to determine the final selections. The fruit of their labor is an exhibition that spans many aspects of contemporary turning, from a classic footed walnut bowl to a funky collaborative assemblage.

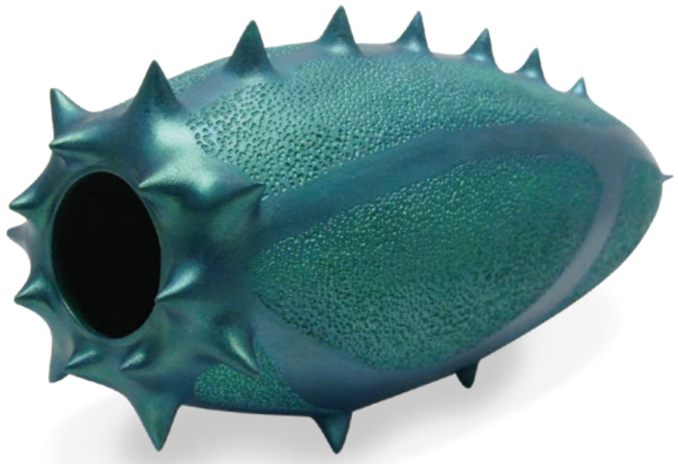
Reflecting the increasing number of women entering this once primarily male field, this year's show set a new member exhibition record: 35% of the works are by women turners, a significant increase from past years.

Two prizes were awarded at the AAW Symposium in Chattanooga: Master's Choice, $300, went to Ena Dubnoff (page 40), and People's Choice, $200, went to Andi Wolfe (page 41). Congratulations to all of the artists selected for this show. ■

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

Elizabeth Weber, *Rocky*, Wood, graphite, acrylic paint, varnish, 3¼" × 5½" (8cm × 14cm)

This piece is an abstract representation of karst topography I encountered when I lived in East Tennessee. During my time studying and working in civil engineering there, locating these features was important in construction, where and how you could develop, where you could not. Bridging the gap between human enterprise and nature is essential in everything we do.



Tom Hale, *Septoid II*, Maple, acrylic paint, 4½" × 11" × 3½" (11cm × 28cm × 9cm)

Thematically, this piece has a personal reason as to how it is "bridging the gap." As with so many others, my life has been radically altered over the past two years by the pandemic. Two years ago, I was over-the-moon ecstatic about having a piece accepted into the AAW's POP exhibit. But then the AAW Symposium was cancelled, and life as we knew it seemed cancelled. The disappointment of the cancellation, in combination with so many other new limitations, threw me into an extended creative funk. It has only been over these past few months that I have fought my way back to a new normal.

Cory White, *Expansion*, Orange wood, 6½" × 11½" × 6½" (17cm × 29cm × 17cm)

A tree bears the weight of massive branches, and with proper soil, irrigation, and nutrients, there are no limits to how far those branches may spread. Woodturning branches from young and old, male and female, craftsmen and artists. This environment encourages us to blossom and grow. Bridging the gap is about embracing the innovative change that is already in motion, and when craft and art no longer exist in isolation, there are no limits to how far our branches may spread. Grounded first in tradition as a vase, then springing forth as a flower, this piece symbolizes the connection between craft and art, from the predictable to the enchanted.

Jerry Prosise, *The Gravity of Bubbles*, Monkey pod, cream gilt, 9½" × 10½" (24cm × 27cm)

To most, a bridge conjures a thought of water. To some, water conjures a thought of bubbles. Bubbles are the free-flowing centerpiece of this series. In contemplating the general shape and size of bubbles, there is a realization that the size of a bubble is directly related to where it is on its journey. Is it just starting out or is it about to pop? Can it move without obstruction, or is something in its way? Is it still under water, or is it in the air? The gravity of that bubble definitely relies on these questions. For me, this theme was a study in creative randomness.

Phill Sikes, *Black Walnut Bowl no. 2201*, Black walnut, 4" × 9¼" (10cm × 23cm)

The idea of "bridging the gap" challenged me to look at my work and see how it has evolved over time. Each piece is an iterative change and step forward into new ideas about process and shape. This piece represents that growth in my work. It's a simple but intentional vessel with a carefully considered form and subtle details. In the broader context of my work, it represents the shift in my design aesthetic from simple utilitarian bowls to more refined vessels with appealing forms.

Heather Marusiak, *Captive Goblet*, Cherry, 2½" × 10" × 2½" (6cm × 25cm × 6cm)

The confluence of craft and art is illustrated in a playfully subversive manner, whereby the object's perceived function is undermined by its form. For better or worse, the traditional goblet is, ironically, freed of its utilitarian purpose by the carved unbroken chain. In woodturning, one may feel bound by the confines of their own technical skill, bound by the confines of the lathe, bound by the idea that an object must be functional, or a vessel, or made from a single piece of wood. How do we expand beyond these confines, break these chains?

Donna Zils Banfield, *Wood Ffolkkes: a Community*, Maple, cherry, basswood; acrylic paint, lacquer, 4½" × 4½" × 3" (11cm × 11cm × 8cm)

We are formed and drawn together by our sameness, but different as a result of our experiences. We have different moods, personalities, wardrobes, loves, and hates. Yet, we are all created from the same core. (The small, yellow/green egg? That's Newling. Where did you think Wood Ffolkkes came from?)

Betty Scarpino, *Woven with the Wind*, Hackberry, fiber paper, 9" × 7½" × 7" (23cm × 19cm × 18cm)

Layers of fibrous paper, woven and adhered to the inside of a turned-and-carved vessel, reference wood as the origins of paper. The openness of the vessel reveals inked messages of inner strength.

Mark Jundanian, *My Scars Are Me*, Unknown woods, 4½" × 9" (11cm × 23cm)

Initially, I worried that this wood's defects would yield a rough and frail piece that might not take the form I had envisioned. On further reflection, I realized these "defects" were more than visual interest, they were in fact what made the wood, its substance, what composed it. Just like you and me, it is the sum of its scars, the slings and arrows endured that are the niduses of our creation. This piece bridges the gap between the before and the now. We would not be, without our scars.

Joshua Salesin, *Ornamental Wand*, Imitation ivory (Resin-Ivory™), ¾" × 11" × ¾" (19mm × 28cm × 19mm)

Ornamental Wand *was created entirely on a 186-year-old Holtzapffel lathe. Ornamental turning has a fascinating history, and I enjoy bridging the gap using tools and techniques of the past to fashion contemporary designs that capture the imagination.*

Michael Gibson, *Caught in a Whirlwind*, 2021, Pear, pyrography, airbrushed acrylic paint, 5½" × 6" (14cm × 15cm)

To make this piece, I turned a thin vase, cut the body into leaves, textured, pyrographed, and painted each one. I then glued them together to form this whimsical group of leaves to appear they had been caught in a whirlwind. I bridged the gap taking the piece from a functional turning into a whimsical piece.

Cheryl Lewis and Greg Gallegos, *Bees and Trees: a Collaboration*, Black oak, beeswax, tree sap, pigment, 5½" × 7" (14cm × 18cm)

Our survival depends upon nature thriving. Without the pollinating gift of bees and the life-giving oxygen and carbon-dioxide-cleansing of trees, we could not exist. This piece pays homage to those contributions with an ancient form of art: fused-wax painting on a wooden substrate.

Karl Hansen, *Too Many Choices*, Hard maple, India ink, 2½" × 10" (6cm × 25cm)

Ancient societies have always intrigued me. Even though it was a daily struggle just to survive, the people of those civilizations still felt it important to record their lives through art. Baskets, vessels, pottery all painstakingly created, not just to serve their needs but also to make a statement about their lives. Taking inspiration from those ancient societies to create my basket-illusion pieces bridges that gap for me.

Michael Hosaluk, *Nurture*, Bronze, 4" × 6" × 6" (10cm × 15cm × 15cm)

I have made this style of turned object for the past twenty years. Experiencing bronze casting for other work made me realize that these forms would read stronger in this material. Turned sculptural forms were made in order to form a mold for casting in bronze. This process took woodturning into a new realm that bridged the gap between material and form.

John Jordan, *Maple Burl Vessel*, Sugar maple burl, 10½" × 11" (27cm × 28cm)

This piece bridges the gap between health and wellness and was turned several years ago while I was having health issues. Two-and-a-half years ago, just as Covid 19 was taking hold, I had a liver transplant. This was the first major piece I worked on during my recovery, and exhibiting it now completes the bridging of the gap. My thanks go to my friend Chris Ramsey, who has given me more than a few great pieces of wood over the years, and this was no exception.

Linda Ferber, Sally Ault, Janice Levi, *Some Assembly Required*, Mixed media, 12" × 25" × 25" (30cm × 64cm × 64cm)

A child's toy. What is its purpose? Simply to help children bridge the gap between childhood and adulthood. Or is that gap blurred? Does a toy challenge the child within us all? Just as all people, child or adult, are different, so are the elements of this piece. Just as people interact with others in different ways, the rings of this "toy" can be re-arranged in many ways—using the various elements to create new looks, new directions, new results. Is it craft or is it art? It's both—The Craft and Art of Turning/Learning.

MASTER'S CHOICE AWARD!

Ena Dubnoff, *A World Divided*, Ash, maple, ebony, holly, rosewood, redheart, African blackwood, walnut, padauk, 4" × 6" (10cm × 15cm)

In a divided world, bridging the gap is essential to our survival. We're all on this small planet together, facing catastrophic challenges. We all come from the same source—we are family. Let's bridge the gap.

Sorin Manesa-Burloiu, *Game of Tops*, Wood, acrylic paint, 4¼" × 7" (11cm × 18cm)

When somebody buys one of my tops, there is an immediate connection between the two of us. With this interactive piece, the new owner can choose which top to spin. I imagine them watching as the top winds its way around and slowly falls into rest, then doing it again and again, getting better each time. It is the bridge between them and me at my lathe. I spin the top on the lathe, and they spin it with their hand, and both of us get a little better every time we do it.

Matthew Shewchuk, *Family*, Maple, magnets, 3" × 7" × 3" (8cm × 18cm × 8cm)

This piece was turned on the lathe as one piece, carved carefully, and delicately sanded by hand to its final form. Then it was fortuitously dropped on a concrete floor. Having broken at its most delicate point, it was concealed for years. Recently, a friend found it stored away and simultaneously inspired its new form. That friend also has a "broken" relationship with a family member; they haven't spoken in years. Broken but still connected, one balancing on the other, waiting to bridge the gap.

PEOPLE'S CHOICE AWARD!

Andi Wolfe, *Ambrosia*, Ambrosia maple, glass, 8½" × 11" × 10¾" (22cm × 28cm × 27cm)

I've recently been exploring mixed media pieces to combine my carved woodturnings with glass blowing and hot-glass sculpting. My primary motivation for learning how to work with glass was to be able to make the stands for my carved leaf sculptures. Glass has a long history in the contemporary craft arts, whereas woodturning as an art form is more recent. My explorations in combining these media serve as a bridge to a better appreciation of fine art in wood and glass.

Dewey Garrett, *Recursion*, Birch plywood, 4" × 5" × 4" (10cm × 13cm × 10cm)

This form was created by combining plywood layers cut on my home-built ornamental turning lathe using tool motions based on those of a traditional rose engine. Each original layer is cut to make a set of multiple concentric geometric patterns based on a simple rosette design. The individual layers are separated and reassembled to make a group of nested forms.

Ryan Butler, *Mulberry Burl Bowl*, Mulberry burl, acrylic paint, Danish oil, 7" × 10" (18cm × 25cm)

In making my wood art, I nearly exclusively use blanks with natural edges, hollows, and irregular surfaces. By doing so, I like to think that my pieces are bridging the gap between the wood in its pure, raw, organic form and pieces that are fully crafted with none of these remaining. This bowl is crafted from rescued wood from a downed tree. The tree was covered in small burls. I oriented the blank to create an undulating natural edge, which leaves a remnant of the very nature of the tree intact.

Bruce Trojan, *Still Life - The Old Barn Window*, Construction pine, basswood, maple, polycarbonate, acrylic paint, 17½" × 21" × 7" (44cm × 53cm × 18cm)

There have been many still-life paintings created by the world's greatest artists throughout history, but to my knowledge, no woodturner has created a still life. In its own way, this piece is bridging the gap between craft and art. It has been extremely pleasurable to create a still life in 3D. Everything except the window is made of wood, and the project was truly a challenge. In my estimation, this is a unique and out-of-the-ordinary piece that bridges the gap.

THEN AND NOW

Each issue of *American Woodturner* showcases masterful turnings. For years, I wondered if I could ever turn that well. Then it dawned on me that none of those master turners started as master turners. All turners go through learning stages, and we all have the potential to create our own masterpieces.

To make this point, I reached out to a group of turners whose work had been published in the journal. Each was asked to submit a piece from when they first started turning (Then) and a recent piece (Now). Each maker provided brief commentary about what they now see in their past work and how their new work is improved. It seems that after we become proficient with the various turning tools, the learning curve becomes how to see what can be improved in our own work. I hope these examples will serve as inspiration.

And remember, no one starts as a master turner.

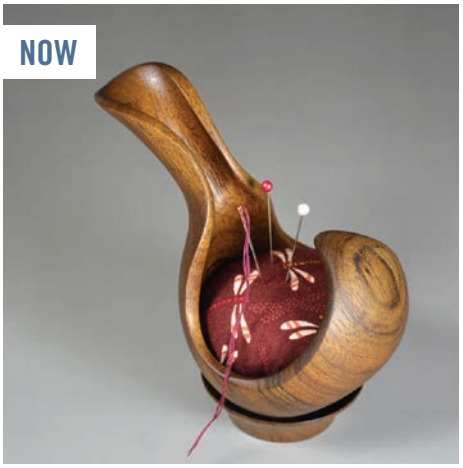
—Dennis Belcher (dennis.m.belcher@gmail.com)

Cindy Pei-Si Young

The 2009 bowl was one of the first I had ever made. The base and the wall thickness made this piece heavy, and the straight lines made the form rigid-looking. Early on, I turned straight lines rather than curved because I had fewer catches. Even with my preference for straight walls, I could have improved the form by tapering it into the base. Also, my outcome was not ideal, so I relied heavily on sanding. As a result, I had either rough areas left on the bowl, like this one, or I over-sanded and fine cracks appeared.

The pin cushion made in 2021 still has room for improvement. The lines and forms are better, and I am now more comfortable making curved lines. After I cut into the piece, I found that the thickness of the walls varies a bit, but the form was good enough for me to add some design to it.

Untitled Bowl, 2009, Purpleheart, 2½" × 3" (6cm × 8cm)



Pinned at a Tipsy Angle, 2021, Teak, cotton, 4½" × 5" × 3" (11cm × 13cm × 8cm)

Mike Mahoney

Untitled Bowl, 1986, Cedar, 5" × 5" (13cm × 13cm)

Untitled Nested Bowl Set, 2012, Madrone burl, 9" × 16" (23cm × 41cm)

In 1986, I did not know much about wood, wood grain, wood species, wood drying, or even riding the bevel. However, I knew I loved woodturning and sought out anything I could on the subject. I went to my first Utah Woodturning Symposium in 1989 and met Richard Raffan, Dale Nish, David Ellsworth, Vic Wood, and John Jordan. With their help, I became a professional woodturner.

Dennis Belcher

Untitled Bowl, 2004, Honey locust, 6" × 12" (15cm × 30cm)

Untitled Bowl, 2019, Hard maple, zipper, 10" × 12" (25cm × 30cm)

My "Then" piece came before I learned to sign and date my work. It was one of the first bowls I was able to fully complete. My eye jumps to the overly large base. I allowed the faceplate to determine the width of the base, resulting in a "lumpy" bowl. The 2019 bowl has a more refined form, with "lift" from the size of the base and the foot. Mounting-screw holes remain visible in the earlier piece, and the curve of the wall inward is in the wrong place. In 2003, I had not yet learned how to shape the rim of a bowl, nor how to properly balance the grain. My wood selection was based on what I could find—dense honey locust, which was not the best choice for a new turner. My 2019 bowl corrects those issues and shows how I am now able to add creative elements, and a bit of humor.

Janice Levi

I have always loved turning and experimenting with different media and new ideas. When I made the 2002 ornament, my mentor had encouraged me to experiment with new materials and concepts, but always with an emphasis on correct use of tools and safety. There were so many shapes to try, so many possibilities, but a lot of them, most of them, just didn't look right. Then my mentor began to talk about proportion and the Golden Mean. When I began to apply that ratio to my turnings, such as in the 2020 ornament, they began to look better and more refined. The proportions are more pleasing to the eye, and the finials are de-cluttered, but it took quite a while to reach this point. It has been an adventure, a challenge, but one that I have thoroughly enjoyed. ▸

(Left) Untitled Ornament, 2002, Tagua nut, African ebony, 4" × ¾" (10cm × 19mm)

(Right) Untitled Ornament, 2020, Poplar, African ebony, 7" × 2" (18cm × 5cm)

Eleanor Lakelin

THEN

Scorched-Edge Bowl, 2013, Spalted beech, 4¾" × 6¼" (12cm × 16cm)

NOW

Lidded Vessels I/II, 2021, Horse chestnut burl, larger: 18" × 18½" (46cm × 47cm)

When I made the earlier piece, I had been turning for about three years. I was still relying on the wood a tree surgeon had dropped off for me, so there was no real planning of what I wanted to make. I have no photograph of the under-side, but I am certain it would have the chucking dovetail and no maker's mark. Now all evidence of chucking is removed, and my initials branded on the bottom. I think the early spalted bowl is a little thicker than it needs to be, and I was not totally in control of how the pattern of spalting appeared—more luck than judgement. The form would have been improved by "pulling it in" a little toward the top.

The pieces from 2021 have a more refined shape and form. They are part of a series of work I have been developing over several years. Now I search for particular pieces of wood that can translate or develop an idea, and I think much more carefully about how to orientate the vessel in the material.

Joshua Friend

THEN

Rimmed Bowl, 2003, Cherry, pine, 3½" × 7½" (9cm × 19cm)

NOW

Rimmed Bowl, 2010, Maple, walnut, 5" × 13" (13cm × 33cm)

I've always enjoyed gluing up contrasting woods and turning them flush. When I made the early attempt (2003), I was excited about the result, but after many subsequent years of turning bowls, it now seems crude. The foot is too wide and too tall, and its curved transition to the bowl feels bulky. The upper sides of the bowl to the rim are vertical, which appears less elegant than an outwardly splayed profile. Early on, I employed more than my share of burn lines, which now seem too obvious a choice. In the 2010 example, I chose maple for a light-colored wood, rather than pine, which is too soft for a functional bowl. I have found that a few simple refinements can make a significant difference in the appearance of an object.

Kalia Kliban

Untitled Bowl, 2006, Green oak, 4" × 8¾" (10cm × 22cm)

Glisten, 2021, Curly bay laurel, 3⅝" × 6⅞" (9cm × 17cm)

The 2006 bowl was my first attempt. It's a horrible, lumpen thing, but I was thrilled because for the first time, I had created a bowl without the use of scrapers and profanity. It has torn grain, a bottom that's at least an inch (25mm) thick, lumpy curves, and a badly proportioned foot, but I will never part with it. Fifteen years and hundreds of bowls later, I've gained confidence, tool control, sharpening skills, and a critical eye. I am now able to make crisp beads, delicate rims, and shadow lines to create forms that please me.

A peer group of local turners has been hugely important to increasing my skill, providing priceless support, advice, and shop talk. The AAW has connected me with the wider community of turners. If I could go back and talk to the beginning turner I once was, I'd recommend seeking out in-person instruction and learning how to sharpen correctly. After that, connecting with a local club and learning how to use a chainsaw would be highest on the list.

Keith Tompkins

Saucer, 2002, Magnolia, black walnut, 9" × 6" (23cm × 15cm)

Untitled, 2019, Bradford pear, metal leaf, 6" × 4" × 6" (15cm × 10cm × 15cm)

My skill in woodturning evolved from my work as a professional woodworker and cabinet maker, primarily making furniture and repairing antiques. The 2002 piece has some fair curves and shows some technical skill, but the piece is unremarkable. Without a signature on the bottom, the turner's identity would never be known. Viewing the piece now after nearly twenty years, I would eliminate the heavy foot and make the wall thickness much thinner.

The 2019 piece combines my previous experiences, such as steam bending, with new ideas about form. I have discovered that my most successful pieces tend to exhibit a sense of motion; the shape of this piece invites you to look inward, while the spiral gives the illusion of motion. I enjoy a bit of mystery in my work, too; sometimes people wonder how my work was turned on a lathe. ▸

Steve Forrest

Untitled, 2005, Black locust, 5" × 4½" (13cm × 11cm)

Untitled Bowl, 2020, Red gum eucalyptus, 6" × 9" (15cm × 23cm)

By 2005, I had fallen in love with woodturning, and with making objects out of flawed wood. This became a fetish, to the point where I virtually rejected sound wood. Of course, I had no significant instruction in technique, sharpening, or design—all the things that actually make good work possible.

The early piece is made from scrounged black locust with giant irregularities. It has faceplate holes in the bottom. I used dull scrapers, being completely ignorant of sharpening technique or the proper use of a gouge. It is bottom heavy, with a poorly executed foot. The center was drilled, leaving plenty of tool marks. The walls are clunky and thick, except where they are super thin because of the asymmetry in the blank. I gave this piece to my wife as a gift. For all its flaws, there was something worth honoring there. The wood is innately beautiful. The surface is mostly smooth, with minimal tearout, sanding marks, or finish problems. And I was already engaged in exploring curves and form, however ineptly.

The skill evidenced by the red gum bowl stems from years of interaction with a host of master turners, feedback from my local AAW club, and attending the AAW Symposium in 2012. Becoming an AAW member has been critical to my growth. Ultimately, getting some good instruction was the single most important factor in improving my skill.

Harvey Fein

Untitled Bowl, 1999, Maple, 3" × 8" (8cm × 20cm)

Untitled, 2021, Cherry, cocobolo, 6" × 5½" (15cm × 14cm)

The earlier piece was one of my first attempts at a form other than a typical bowl. At that time, I had no concept of form or proportion. I thought "getting it right" would be easy. A class with Stuart Batty quickly disabused me of the idea. More classes and furniture design books gave me ideas, experience, and direction. I don't think I really got it right for years. Occasionally, something turned out right, but I didn't know how to make it happen. "Getting it right" seems to be an elusive target, even if you know all the rules. I gave the piece to my grandkids to color, which is the only reason it still exists. Obviously, I made some progress since that early attempt. I consider the 2021 piece to be right up there with my best work. ■

Hard Wood -AND- Hot Steel

ROY HOLMBERG COMBINES TURNING AND BLACKSMITHING

Wells Shoemaker

Photos by Wells Shoemaker, except where noted.

Out of the Ashes, 2020, Forest-fire-salvaged redwood burl, copper, 2" × 11" (5cm × 28cm)

At the "dawn" of human civilization, people made crude tools of stone. By "morning," humans began to use fire to soften metals and beat them into utilitarian shapes. By the "noontime" of our evolution, Egyptians were spinning pieces of wood on a lathe. Roy Holmberg, a Santa Cruz, California, craftsman now working in the cultivated, bright "afternoon" of humanity, has mastered both of these ancient practices and creates novel forms that merge wood and metal.

Roy trained on the lathe with Dale Nish and at the forge with friends. Encouraged by his colleagues in Santa Cruz Woodturners, he has created composite structures that often feature clasped metallic belts and sculptural intrigue.

Early interests

Roy got his first taste of woodturning as a young lad. He watched an "older guy" (in reality, probably a 30-year-old) use a wood lathe and simple tools. With some encouragement, Roy completed his first turning project at age 10—a peace pipe.

He also learned woodcarving during America's "tiki phase," which helped pay the bills and foreshadowed a lot of later artistic endeavors.

Roy enrolled in the forestry program at Pasadena City College but perceived that that path was going to lead to a largely desk-bound life. He switched disciplines and earned his two-year associate's degree in production-tool ▸

Old-school metalworking

Roy hand-forges the clasp for a metal band that will fit the rim of a turned bowl.

Making a statement with steel

A groove turned in the rim of a curly maple bowl accepts a hand-forged band with steel clasp, 2" × 11" (5cm × 28cm)

engineering. That training built his confidence in the machine shop, but with increasing automation, Roy figured this career avenue could begin to resemble "supply clerk."

Roy then enrolled in California Polytechnic State University (Cal Poly) to study mechanical engineering but once again switched disciplines. Landscape architecture offered a persuasive pull of artistic applications—interaction of plants, space, structures, color, and texture. After graduating from Cal Poly in 1968, Roy enlisted in the Navy and spent a year off the coast of Vietnam and a second year working as a machinist on a submarine tender in the U.S. These deployments gave him plenty of experience with a metal lathe as well as a respect for teamwork, both of which would last a lifetime.

Returning to civilian life, Roy also returned to the wood lathe, but for practical reasons. It was the early 1970s, and his cable-spool tabletop needed legs. A Shopsmith was the machine for the job.

Roy spent close to thirty years working for Los Angeles, the State of California, and the County of Santa Cruz, working outside, designing and overseeing large landscaping projects, and supervising large crews. Meanwhile, his personal time leaned steadily toward artistry, and his curious nature led him toward diversity of materials in his craft work.

Of metal and wood

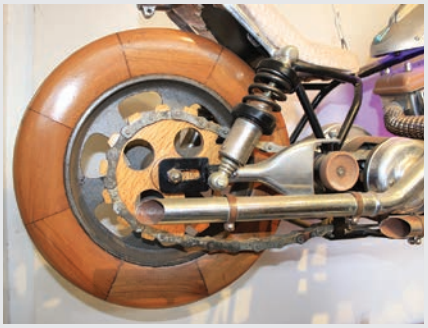
Blacksmithing emerged as one of those diversions. Roy took sculpture classes at Cabrillo Junior College, which naturally involved heating and shaping metal. The teacher recognized Roy's intrigue as well as his aptitude with fire, then nudged him into blacksmithing with a mentor, Vern Caron, from the University of California, Santa Cruz. Roy was hooked, and soon enough he bought his first forge and joined the California Blacksmith Association and the Artist-Blacksmith's Association of North America. Add to that his AAW membership, which began in the late 1990s, and we can begin to see his interests coalescing in an organized way.

Roy attended one of Dale Nish's legendary turning courses in Provo, Utah, in the mid-1990s. Roy mentions with a grin that the course brought some impressive attendees to Provo and to multiple Utah symposia. He rubbed shoulders with Mike Mahoney, Stuart Batty, and Richard Raffan—"Pretty amazing company," he quips.

I asked Roy how that course changed his approach to the lathe, and he answered quickly: "The goal was not perfection. The goal was learning. We cut our bowls in half to see where we could do better. Learning is more important than production. You can take that to places that aren't on the map."

The convergence of blacksmithing and the lathe came into focus soon afterwards. Roy contributed an

Hardly a Davidson



Hardly a Davidson, 2009, Oak, redwood, steel, vacuum cleaner parts, 31" × 73" × 20" (79cm × 185cm × 51cm)

Photo: Gary Luttringer

Shopmade turning tools

You can bet Roy makes his own custom tools to undercut the lip on his bowl forms.

> "Learning is more important than production. You can take that to places that aren't on the map.
> — Roy Holmberg

auction item to Santa Cruz's *Hearts for the Arts* benefit. This was his first effort to create a delicately undercut wooden bowl with a forged steel belt. He borrowed the concept of the clasp from an architectural feature from the Gamble House in Southern California. This multimedia bowl topped the auction with a $1,200 price, and apparently that was a persuasive validation.

Roy retired from government service shortly after the turn of the century and has been making artisan metalcraft commissions for municipalities as well as for private parties since then. In addition to merging woodturning and sculptural metal work, he also adds some ceramics on the side.

Roy sees "opportunities" hiding in stacks of discarded appliances, too. He fabricated his *Hardly a Davidson* from vintage vacuum cleaner parts with turned oak sprockets, segmented redwood wheels, and a custom-fabricated frame. This entry won the Best of Show "Golden Bear Award" at the California State Fair. Roy, who rides a real Harley on good days, cheerfully affirms that the *Hardly* is anatomically correct.

Roy now maintains a blacksmith shop in an industrial area of Santa Cruz and a woodshop in the coastal mountain home he built himself in Bonny Doon, California. He mentions that it's approaching time to downsize a bit, which is not going to be easy, considering the size of some of his machines.

Looking ahead

I asked Roy about his hopes for young people and the future of artisan crafts. He notes, "It's definitely harder now. There's less teaching opportunity—and you can't do this on a phone! School systems have dropped shop, and not just woodshop. Computer-controlled systems are taking over, and maybe there's less appeal to learn to do [craft work] with your hands. It's really hard to support a family with hand crafts."

However, Roy says he's encouraged that people in both of his craft disciplines—woodturning and blacksmithing—are making it a priority to pursue youth programs. We discussed the spectacular results seen in the AAW's Turning to the Future youth achievement awards and the youth turning program at AAW Symposia. "If we do not provide programs and encouragement for young people, many of these old-world crafts could become a thing of the past. The kids can learn just like they always did, but the mentors are getting older now," Roy says.

I asked Roy what he would do differently in his career if he had the chance. "Probably not much," he says. "You *can* do what you love. I love to make people smile." ■

For more on Roy, visit royholmberg.com.

Belted Burl, 2009, Redwood burl, steel, 2½" × 11" (6cm × 28cm)

Wells Shoemaker, MD, a retired pediatrician and healthcare quality improvement activist, is a past-president of the Santa Cruz Woodturners (2020-2021). He started turning in seventh-grade shop class and picked up steam, along with chucks and a better gouge, after reading Richard Raffan's books in 2000. He took a big leap forward in 2016, after taking multiple courses at Craft Supplies USA and now turns bowls for charity benefit.

One Good Turner Deserves Another

Jolie Karno Is All In with Lower 48 Woodshop

Steve Forrest

Jolie Karno, founder of Lower 48 (Oakland, California), poses with one of the humble school's initial graduating classes at its first location—a repurposed shipping container. Encouraging diversity in woodturning and providing opportunity for all are two of the school's underlying goals.

In some respects, Lower 48 Woodshop is like any other woodturning school. Blanks line the walls, ready for students to tackle new projects. Three lathes are lined up, each with a matching set of tools sharpened and ready to go. Shelves hold a library of books and DVDs to feed any student's interests and needs. The instructor eagerly anticipates introducing a crop of new students to the joys of woodturning.

But Lower 48 is different. It's not nestled out in the country, with lots of space for chainsawing and drying wood, as many turning schools are. It's tucked away in a multi-use light industrial building in a non-descript neighborhood in Oakland, California. The founder is Jolie Karno, a youthful 50-year-old woman whose hair always seems to be some playful new color. And the students defy stereotypes as well. A recent class included one young white man who was trading work time for tuition, a young black man who had metal working experience but had only dabbled in woodturning, and a middle-aged black woman who was a complete newcomer. That one small class was already more diverse than virtually any woodturning event I've ever seen. While Lower 48 welcomes everyone, it explicitly reaches out to women, people of color, LGBTQ students, people with limited means—folks who may not have felt very welcome in a woodshop before. In fact, Jolie is on a mission, and Lower 48 is her primary instrument.

Determination at work

Lower 48 got its name as an homage to the 48-foot shipping container that was its first home. Two containers were stacked up in Oakland, and Jolie rented the bottom one because she was desperate for a turning space. Lower 48 started just five years ago, but its roots go back much further than that. Jolie discovered woodturning in 2012 as she was recreating her life. A Jewish/Irish native of New Orleans, she came to northern California in 1991. She landed a job as a flight attendant and traveled the world. Always interested in extending herself, Jolie made a point of trying new things,

Like all good teachers, Jolie is a partner in her students' learning.

Jolie's own turning endeavors

Untitled, 2021, Walnut, oil finish, 4¼" × 8½" (11cm × 22cm)

Untitled, 2020, Afrormosia, dye, Pearl Ex powdered pigments, eyeshadow, 3" × 11" (8cm × 28cm)

even if they were a little scary at first. Around the time the airline she worked for folded in 2011, Jolie found herself hitting middle age without a job, so it was time for some personal taking stock.

Jolie had started painting pictures as a flight attendant, often working on pieces in hotels between flights. The nascent desire to make stuff was already present, but what to make? Fortunately, she landed at the Crucible, a seminal, comprehensive industrial arts school in Oakland. She didn't have much money, so she ended up volunteering in exchange for classes. Volunteering soon turned into teaching—as has almost everything since.

Jolie started her woodworking journey with flat work and joinery. She gained proficiency quickly, but once she discovered turning in 2012, she was hooked and hasn't looked back. She was so obsessed with woodturning, she stuck a lathe in her living room (with her supportive husband's blessing). Taking every class she could, she taught woodworking and turning at the Crucible, but ultimately she needed more space and time. By the end of 2016, Jolie found the key to her future, when she secured the shipping container and started turning there. True to form, she was soon teaching people in what had originally been her personal space. Before the year was up, she had incorporated as a nonprofit, Lower 48 had started advertising for students, and she completed her first class with an Indian family. She notes that the mom "had never touched a power tool before. I was hooked."

Continuing to grow

Opening Lower 48 may have seemed like a culminating act at the time—it was a huge undertaking for any one person to take on—but it turned out that that was just the start. Jolie continues to build the school, attracting attention, praise, and donations—of money, of equipment, and of time and expertise. People ranging from wood artist Merryll Saylan, Robust lathe manufacturer Brent English, production turner Mike Mahoney, and AAW curator Tib Shaw have met Jolie (often through her simply walking up and introducing herself) and found her story and personality compelling. They have been moved to contribute what they could to help her school grow and thrive. The day I watched her teach a class, a gift set of DVDs had just arrived from woodworker/artist David Marks.

For all that, running Lower 48 is a challenging proposition. All small businesses faced hurdles during the pandemic, the primary one for Jolie being making rent. But there are unique issues that arise directly because of Lower 48's explicit mission. Personal attention means small classes, but having small classes means reduced income—and limited reach. Jolie keeps the tuition costs low in order to encourage attendance, but she still discounts tuition further for a significant number of her students. Anyone who has ever tried to teach knows what an extraordinary supply of energy it takes. And that's not ▸

Fist-pumping joy, power, and satisfaction are evident all at once, as a student cleanly completes her cut. These are the moments that inform everything Jolie does with Lower 48.

Small classes

Jolie (far left) welcomes a new set of students to her introductory class. With more space than she had in the original shipping container, Jolie can now provide an even more professional and complete experience for students.

Urban sawmill

Around the corner from Lower 48 in Oakland, California, is an urban sawmill (emphasis on "urban"). It's a concrete landscape and has some rough edges, but the neighborhood features a diverse mix of homes, businesses, styles, and people.

even taking into account classroom prep and maintenance, proper business accounting, legal compliance, and the like. There's not much time left for personal turning and exploration. Jolie's batteries can definitely be drained low.

A personal journey

So why bother? Why take all this on, paying for school items out of her own limited funds, arriving early and staying late, prepping wood for students instead of working on her own projects? As she told her students at a recent beginner's class, the three things she enjoys most in the world are turning, teaching, and dogs. This way, she is immersed in two of them, and the third is her alternate source of income (as a positive-reinforcement dog walker). But it goes deeper than that.

Jolie Karno is a recovering alcoholic, sober for decades. She has faced any number of significant obstacles and challenges in her life. Woodturning has been a big part of why she's still sober and why her life is good.

There is a humane impulse to everything she does, a warmth and inclusiveness that's palpable, and that comes from her sense of humility. Turner and teacher Beth Ireland said Jolie is "egoless." For Jolie, woodturning demands that we pay attention. It forces us to slow down. It provides a sense of accomplishment and tangible proof of one's own ability. The self-realization that comes through creating something with your own hands is an inherent value. She says with cheerful bluntness that she wants to be someone who "makes things that don't suck." As a person in recovery, she is committed to learning and growth, to making mistakes and accepting them, and doing better the next time. And she is committed to not just *doing* better but *being* better. She has found deep meaning, significance, and personal joy through woodturning. Jolie has a drive, like so many woodturners, to share that joy of turning with others. But it's not just because it's fun. It's because it matters.

> "Jolie is changing the dynamic from how [students] *are* to how they *could be*. Jolie is having an effect."
> —Cindy Navarro

And it's even bigger than that. As a woman teaching woodturning, Jolie has faced her share of skepticism, and worse. As was true for virtually all women of a certain age, there were no shop classes for Jolie as a schoolgirl. She's still intensely connected to her experience as a total beginner who didn't know the difference between a screw and a bolt. So she identifies with people for whom turning is *terra incognita* in every sense. And as a dog trainer, Jolie comes from a perspective that learning is supposed to be fun, without fear of punishment.

A welcoming personality

Over and over again, this is what people responded to about Jolie—the blending of her dynamic personal qualities with her altruistic goals. Beth Ireland spoke feelingly about her own unhappy experiences with the sexism she has faced throughout her career. "People are hungry for this," she said, addressing Jolie's focus on inclusiveness. Jolie's "doing it, not just talking about it." Brent English was impressed with Jolie's "intrinsic love of helping others, and of woodturning." Former AAW President

Merryll Saylan was so impressed with Jolie's "chutzpah—doing what she was doing without lots of experience. She's just a remarkable person. Her work keeps getting better and better. I'm very impressed with what she's accomplished." Women in Turning member Cindy Navarro, a registered nurse and former auto mechanic, said of Jolie's students, "Jolie is changing the dynamic from how they *are* to how they *could be*. Jolie is having an effect." (Cindy was on site helping install a new dust-collection system, which had itself been donated—yet another example of the generous support Jolie has inspired and received.) Universally, people spoke of Jolie's lack of pretense, her genuineness, and her joyful spirit.

Why shouldn't more women feel the joy of peeling wood away at 1000 rpm? What about people of color who feel like outsiders surrounded by a sea of mostly older white men? What about people who don't fit the usual categories of gender and sexuality? What about young people, and people without much money? These are people who have, for whatever reason, gotten used to not seeing themselves in turning circles, to not feeling welcomed. Jolie Karno actively wants to include them. Yet she doesn't approach this mission from an exclusive or angry perspective. Rather, she embraces and enlists *everyone*. Merryll Saylan says, "She's so joyful. She's not doing this to benefit from it. She's just so fresh." Jolie actively pulls people in who might otherwise perceive themselves as outsiders, even as she generates support from the powers that be. As Saylan notes, "Turning doesn't have to be elitist. Jolie's bringing it to the community, not just to art school."

Tib Shaw says of Jolie, "All her students look so *happy*." But it's not just that her infectious, friendly manner helps her get along with every type of person. It's more powerful than that. With a unique blend of humility and charisma, Jolie engages others in an open, approachable way.

With significant experience with metalworking but limited exposure to wood, this student quickly gained confidence with spindle turning.

Prepped blanks line the shelves at the Lower 48 woodturning school. Treasures from students and guests are proudly displayed below, with equal respect and emphasis.

> **"Turning doesn't have to be elitist. Jolie's bringing it to the community, not just to art school.**
> **–Merryll Saylan**

She commands attention and respect without demanding it, in part because she so clearly listens to and respects the people around her. Her enthusiasm and drive, tempered by her humility, are a force of nature. Jolie is all in on woodturning for everyone—she's committed.

So there's a grand purpose to Lower 48. Jolie loves woodturning so much, she has received such important gifts through it, that she wants to do what she can to save it so it can be passed along. Tib Shaw spoke for everyone I interviewed when she said she's "excited by the pollination from multiple voices." Without bringing in new people both to learn and to teach, without expanding its base to include people who are so conspicuously missing from the symposia, Jolie and her supporters fear woodturning will, over time, wither and fade away. So, one diverse student at a time, Jolie Karno is on a joyful mission to invigorate woodturning. How? Simply by turning all sorts of people into "turning" people.

If you want to donate to, take classes from, or just find out more about Lower 48, visit lower48.org. See Jolie Karno's work on Instagram, @joliekarno. ■

Based in Sebastopol, California, Steve Forrest is a retired teacher and RN whose third act is as a woodturner and freelance woodturning journalist. See his work at steveforrestwoodturning.com and on Instagram, @steveforrestwoodturning.

Next generation turner!

With young students having positive experiences at the lathe, the future of woodturning is in good hands.

Members' Gallery

Gong Jianjun, Jiangsu Province, China

As a member of the International Wood Culture Society (IWCS), I am active in my hometown of Rugao as an "intangible cultural inheritor" in woodcarving. Aiming to protect traditional culture, I give lectures on carving at schools and local museums. In addition to woodworking, I provide the main labor for my family's farm.

It took me a year to make this turned and carved vase, which depicts aspects of the 5,000 years of Chinese civilization. The title, *Erudite and Informed*, is meant to suggest being conversant with both the past and present.

Carved into the vase are representations of ancient Chinese artifacts, including the jade dragon (held in the National Museum), the Simuwu rectangular ding (a Shang Dynasty bronze ding), the golden mask (unearthed in Sanxingdui), and the treasured porcelain plum vase (housed in the Nanjing Museum). Also represented are the Zenghouyi chime bells, which were unearthed in 1978 from the tomb of Zenghouyi in Suixian County, Hubei Province, and are now held in the Hubei Provincial Museum. These bells are a set of large-scale ritual instruments from the early Warring States period and are a national first-class cultural relic.

As a container, the vase implies safety and auspiciousness, and it has been a symbol of China for thousands of years. The national treasures represented on *Erudite and Informed* have witnessed the changes in history and culture and are the crystallization of the wisdom of the ancient people. By making this piece, I hope to share these treasures with everyone. I wish people all over the world safety, good fortune, and an early victory over the pandemic.

Translated by Su Jinling, IWCS.

Erudite and Informed, 2022, Siamese rosewood, 11¾" × 6" (30cm × 15cm)

Bill Clark, California

I have always been a serious woodworker and occasionally turned furniture parts and utility pieces. That all changed when I attended my first AAW Symposium in 2007. Walking into the instant gallery and viewing the work on display completely changed my direction. Utility pieces no longer interested me. Attending demos by Molly Winton, Andi Wolfe, and Matthew Hill inspired me to create surface-enhanced pieces.

At another symposium, John Jordan personally challenged me to seek my own signature style. I admired the work of Mark Sanger from the U.K., and exploring his work led me to search out Oriental ceramic and pottery forms. These early influences continue to shape my creative process. Early on, I struggled to create unique enhancement ideas, combine them with good forms, and keep everything in balance. Along the way, I learned how to tie different elements together and not overpower one with another.

My design process takes a great deal of time. I look for unique form ideas, many of which come from oriental vessels and boxes. I then draw them with different dimensions to find the perfect canvas for my surface enhancement. As my work evolves, pyrography, color, carving, and etching offer many creative opportunities. For me, pushing the creative envelope keeps my turning exciting and challenging.

Bamboo Haiku, 2019, Bigleaf maple, bamboo, airbrushed dye, pyrography, 5½" × 3½" (14cm × 9cm)

Dynasty Gold, 2021, Bigleaf maple, impact texture, black gesso, gilders paste, 3¾" × 5" (10cm × 13cm)

Evening at Lewis Creek, 2022, Bigleaf maple, airbrushed dye, pyrography, oil pencils, 7⅜" × 3¼" (19cm × 8cm)

Maples in Moonlight, 2015, Bigleaf maple, black gesso, gilders paste, branding, 7" × 4" (18cm × 10cm)

Linda Ferber, Minnesota

The environment and nature are the inspiration for my turning creations. Birds have been of particular interest, often with a starring role as embellishment on platters, bowls, and boxes. With every new series of work, I have refined my focus and style, while consistently using whimsy and color.

Recently, I have been studying Tai Chi, which suggests we direct our attention to the smallest details. The Tai Chi move "Grasp the Sparrow's Tail" intrigued me, as it prompted me to pay close attention to what is probably the least significant part of a very common bird. Applying the Tai Chi awareness to woodturned art seemed a natural progression. ▸

Trio of Birds (Bella, Sparrow, and Birdie), 2022, Various woods, clay, wire, beads, acrylic paint, largest: 8" × 5½" (20cm × 14cm)

Kelly "Odie" Odell, Montana

What an honor it is to be featured in the Members' Gallery! Many AAW members probably have similar beginnings as I have, in that I never thought I'd be so involved with woodturning. More than forty years ago, I was an art student learning oil painting, and around 1980, I bought a used Shopsmith at a garage sale. My first bowl came along two years later, and I was hooked!

That old Shopsmith is long gone now. I replaced it with a Northwood lathe with a Reeves drive, which in turn, was replaced in 1992 with an Australian Woodfast lathe. The Woodfast has been in service now for thirty years (with upgrades and bearing replacements).

I'm an oddball kind of guy, and the choice of wording on my webpage, eccentricoldguy.com, reflects that. It was a good friend who tagged me as the "Eccentric Old Guy," and I've adopted it as my theme.

Untitled Bowl, 2022, Goncalo alves, 1⅞" × 7½" (48mm × 19cm)

Untitled Bowl, 2022, Thuya burl, 2½" × 7¾" (6cm × 20cm)

Untitled Bowl, 2022, Red mallee burl, 2¼" × 9⅜" (6cm × 24cm)

Warren Gookin, Jr., Oregon

After working as a steamfitter/welder for UA Local 342 in Concord, California, for thirty-four years, I was injured on the job and was forced into disability retirement. I started woodturning as part of my recovery and enrolled in the woodturning intensive course at the Center for Furniture Craftsmanship in Rockport, Maine. Under the direction of instructor Beth Ireland, I decided to make *Pipe Dream* as my class project, inspired by the work I did throughout my career.

The project is a replica of a 900-pound flange and 8" (20cm) pipe. The flanges, pipe, studs, and nuts are all made to the specifications of the carbon-steel models I made. The "pipe" measures 8⅝" (22cm) outside diameter and 7⅝" (19cm) inside diameter, the same as regular schedule-80 carbon-steel pipe. The pipe was fitted to the flanges as a lidded box, but it has a raised section to represent the weld on the pipe, as if it were welded into place.

Pipe Dream, 2022, Birch plywood, birch, maple, 27" × 18½" (69cm × 47cm)

Jim O'Donnell, Florida

Being in the healthcare field, I chose this design to symbolize a powerful ribcage and a delicate (very thin-walled) heart. I chose not to fill voids and tiny holes on the redwood burl, but to leave imperfections on the surface of the "heart." As humans, we are frequently riddled with scars and imperfections. However, there is beauty in our past experiences, aging, bumps, and bruises. ■

For more, visit vaseturner.com.

Corazón, 2020, Redwood burl, ebony, stainless steel rod, 13¼" × 8½" (34cm × 22cm)

An Original American Beauty, 2005

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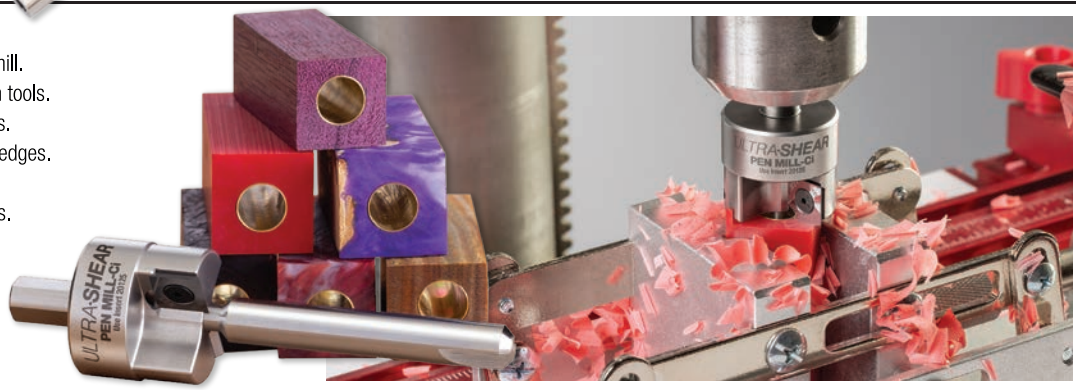

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CHRIS MILES
MAINE

I made this stool while doing a combined teaching assistantship and woodturning fellowship at the Center for Furniture Craftsmanship in Rockport, Maine. As an avid fly fisher and woodturner, with a woodshop that also houses my fishing gear and fly-tying desk, I wanted to incorporate the theme of fly-fishing into this stool's design. The legs were inspired by the traditional thread-wrapping on a fly rod, and the seat is reminiscent of a fly-reel spool. I used leather cord for the wrapping in both areas. I chose to leave this stool natural in color as a nod to the artistry of a traditional bamboo rod.

Fly-Fishing Stool, 2022,
Ash, poplar, leather cord,
polyurethane, 24" × 14"
(61cm × 36cm)