

TURN A MAGNETIC PENCIL HOLDER • SPUR DRIVE SEATING TOOL • SPLASH TOPS

AMERICAN WOODTURNER

Journal of the American Association of Woodturners

October 2015 vol 30, no 5 • woodturner.org

**TURNING YOUR FIRST
SEGMENTED BOWL**

.....

FRENCH HORN

.....

EMMET KANE

GLENN LUCAS
ONCE UPON A TIME IN IRELAND

Helga Winter

Washington

My favorite turning wood is unseasoned Pacific Madrone, a wood that is unpredictable. As it dries after being turned, warping occurs, allowing the wood to take back its own shape after I had turned it into something momentarily round. Even *Sea Shell* (below) arrived at its final shape naturally and without manipulation. The drying process is delicate and bespeaks a sense of mystery, balance, fragility, and movement.

I make objects with materials that I harvest respectfully, utilizing the trunk of the tree, branches, and roots. I use trees that have been felled because of storms, disease, or construction. People leave salvaged, local woods in my driveway and share stories about their tree.

I attempt to create objects that are pleasant to be with and call to be touched, held, and investigated.

The process of my work is self-discovery. The pieces are felt and become known to me—only to be discovered anew through the beholder's imagination, which questions and decides the function of the piece. I use color and patterns to invite a closer look. The vessel, when given a new appearance, allows a quiet conversation to take place. Who am I really? How does my appearance, my attitude, affect my inner being? Does it enhance the self or cover it up? Through these processes, I strive to show the pureness of the wood—the essence of being.

For more, visit helgawinter.com.

Photos by James Klose, except as noted.



Sea Shell, 2008, Madrone crotch, dyes, 4½" × 13½" × 9⅜" (11cm × 34cm × 24cm)

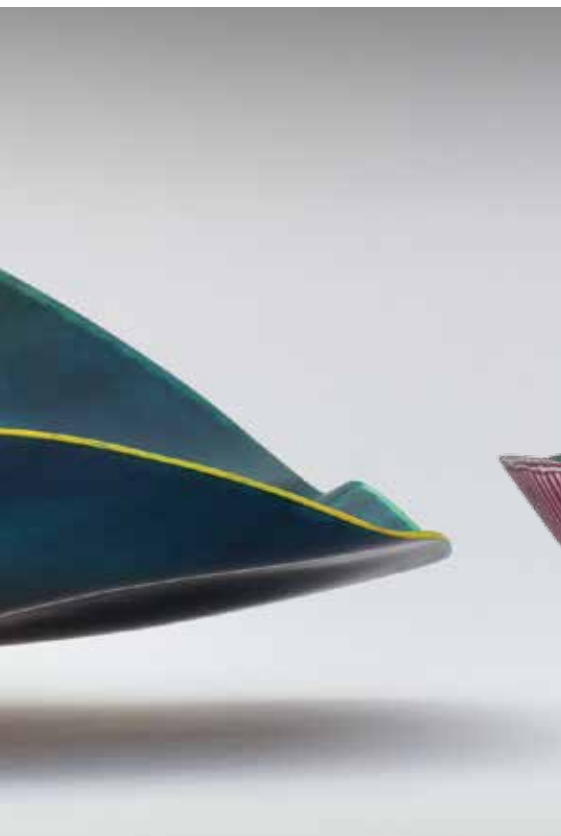
Story Pages, 2009, Madrone,
dyes, unpigmented bees wax,
paper transfers, 4¾" × 13" × 12½"
(12cm × 33cm × 32cm)



Everything, 2014, Madrone, dyes, acrylics, paper
transfers, 4" × 9¼" × 8½" (10cm × 23cm × 22cm)
Photo: Carmen Anderson



Rosso, 2010, Madrone,
dye, acrylics, porcupine
quills, seaweed stand,
8" × 6½" × 6¼"
(20cm × 17cm × 16cm)



Terra Nullius,
2012, Madrone crotch,
dyes, oil paints, acrylics,
6¾" × 13½" × 12¾"
(17cm × 33cm × 32cm)

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information, and organization to those
interested in woodturning

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email: inquiries@woodturner.org
website: woodturner.org
gallery website: galleryofwoodart.org

Executive Director Phil McDonald
Program Director Linda Ferber
Curator Tib Shaw
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AMERICAN WOODTURNER

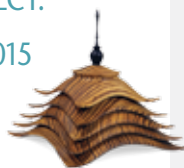
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Photo: Rory Moore

Back Cover – Ed Kelle



woodturner.org

EDITORIAL

Editor	Joshua Friend editor@woodturner.org
Editorial Advisors	Betty Scarpino Terry Martin Stuart Batty John Kelsey Malcolm Zander
Journal Production	Albarella Design Linnea Overbeck Art Director Production Management

EDITORIAL SUBMISSIONS

Send article ideas to:
editor@woodturner.org

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tiny.cc/AWsubmissions*.

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ADVERTISERS

For rates and specifications, contact:

Pierre Productions & Promotions, Inc.
Erica Nelson
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Betsy Pierre
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A NOTE ABOUT SAFETY

An accident at the lathe can happen with
blinding suddenness; respiratory and other
problems can build over years.

Take appropriate precautions when you
turn. Safety guidelines are published online
at tiny.cc/turnsafe*. Following them will help
you continue to enjoy woodturning.

*Web address is case sensitive.

Editor's Note



I have been an AAW member since 2006. I had been attending the meetings of my local AAW chapter, the Nutmeg Woodturners League, whose leadership persistently encourages club members to join the AAW. I admit I initially joined because I wanted to have *American Woodturner* delivered to my door, but it didn't take long for me to realize that the value of my AAW membership went far beyond the journal. Today, I am as closely tied to the journal as anyone and am extremely proud to have become its editor, but I'll be the first to point out the AAW is so much more than just the journal.

To see an index of some of the direct, tangible benefits of an AAW membership, see pages 8–10 of this issue. AAW membership is a great value proposition, even without considering the many intangible factors, including an incredible woodturning support network of like-minded people who

are eager to share their expertise. If you are already an AAW member, I invite you to look over that index to see a more complete listing of offerings, including resources that might be new to you.

Also in this issue are insightful pieces on two very different Irish woodturners, Glenn Lucas and Emmet Kane, written by Terry Martin and Roger Bennett, respectively. Glenn, a professional bowl turner, has mastered the nuances of efficiency and precision, while Emmet finds wood the perfect canvas for his expressive art. They, like most AAW members, share a deep love of woodturning. That their focus and manifestation of work are different makes the woodturning world go 'round. The AAW has a lot to offer and welcomes all under its big umbrella.

—Joshua Friend

From the President



Fulfilling a mission

AAW's stated mission is simple: "... to provide education, information, and organization to those interested in turning wood." But with that simple state-

ment come the practical challenges of delivering on a promise to a vast membership with significant differences. Aside from having geographic, political, and language disparities, AAW members comprise all skill levels—from spin tops to fine art. How does the AAW fulfill its mission? Since it is a member-driven organization, the AAW is only as active and engaged as its members and therefore relies on the enthusiasm and activity of its 353 chapters throughout the world to deliver its message.

How do you fit in? The AAW counts on you, its members, to actively promote woodturning, both inside and outside of your chapter. Member participation in chapter meetings and community outreach programs is the heart of the AAW. From doing county fair turning demos to raising money for charitable organizations to mentoring the Cub Scouts and other membership groups, you are the AAW's best representatives. Your cheerful, enthusiastic demonstrations excite and encourage potential newcomers to woodturning. A youngster who has never turned might see you turning a top and want to try it herself. Or someone

who took woodshop many years ago could be reminded of the joy of woodturning and take up the gouge once more. The AAW office in Saint Paul is there to support your outreach efforts with sample journals, brochures, and other promotional material. If you display your work and demonstrate publicly, please be an ambassador for woodturning and use the available literature from the AAW to help inform and attract new members/practitioners.

Even when you are not directly involved with chapter events, you can still be an ambassador of woodturning. Think of how a casual conversation with a fellow shopper at your woodworking supply retailer can raise awareness of the AAW and your chapter. A simple invitation to a club meeting may be all it takes to start someone on the path of woodturning enjoyment. Recommending AAW's easily remembered website (woodturner.org) might be the eye-opener needed to expand a woodworker's skills into woodturning. Everywhere you go, you can be an ambassador who promotes the craft. When you sign the hotel register while traveling for vacation or business, the clerk's admiration of your turned pen could be a wonderful opening for you to explain that you turned it. You never know who might be interested in hearing about woodturning.

Share the joy

The joys of woodturning that you experience are far too valuable to keep to yourself.

Please be willing to share that joy with others through your enthusiasm. The AAW is here to support you however we can, but it is your face and your personal contact and sharing that gets the job done. Chances are, someone did you the favor of getting you involved with woodturning. Whether they brought you in from the clear blue or just rekindled your curiosity about turning, I'll bet it was the personal touch that made it happen. Regardless of the methods we develop and use in publications, regional symposia, galleries, and other events, our best access into the potential membership population is directly affected by you and your willingness to assist.

I encourage you to get, be, and stay involved in the sharing of woodturning. Your enjoyment can be multiplied by watching a new turner complete her first pen, top, or other turning. The turner you volunteer to mentor or the audience at the charity fundraiser at the county fair will remember you as the spark that got them going. So simple to do and with such a powerful effect—share your enjoyment with others to begin their woodturning journey. I am grateful to those who got me involved, so I do my best to pay it forward and do the same for others.

Best,

Kurt

Apply for an AAW Educational Opportunity Grant

AAW's Educational Opportunity Grant (EOG) fund continues to be strong, thanks to the wonderful generosity of donors and buyers at our annual symposium auction. Funds are available for worthy proposals. **To be eligible for a 2016 grant, applications must be received by December 31, 2015. All AAW members are eligible to apply** (except for recipients of grants in 2015). You can complete the application form and review the guidelines at tiny.cc/EOG (case sensitive).

The committee will not consider applications that are incomplete or vague, so please take care when applying. The following tips will help you with your application:

- Complete the application online at tiny.cc/EOG. Only online applications will be accepted. Submit well before the deadline!
- Provide sufficient information so EOG committee members can clearly

understand what you are requesting and how you intend to use the funds. Be concise; make your points directly and clearly.

- Include details of how you will use the funds. Specific needs should be itemized. Funds will not be granted for miscellaneous, incidental, or unspecified expenses.
- Explain your educational goal or experience you wish to obtain. Keep in mind these grants are intended for educational purposes. In particular, explain how others will benefit as well.

Grant amounts are limited: up to \$1,000 for individuals and students and up to \$1,500 for local chapters, schools, and nonprofit organizations. Your total budget may exceed these amounts; however, your grant request should not exceed EOG limits. For special situations, at the discretion of the EOG committee and the AAW

board, grants of larger amounts are occasionally available. In addition to EOGs, the committee will award ten certificates for registration to AAW's 2016 international symposium.

If you have questions, contact Rob Wallace, EOG Committee Chair, at rob@woodturner.org or the AAW office. The AAW board encourages you to take advantage of this member benefit. ■

Call for Demonstrators AAW Symposium 2016

The AAW's 30th annual international symposium will be held in Atlanta, Georgia, June 9–12, 2016. To apply to be a demonstrator, visit tiny.cc/CallsforEntry (case sensitive) between July 1 and October 15, 2015. For more information, call the AAW office in Saint Paul, 877-595-9094 or 651-484-9094, or email inquiries@woodturner.org.

Arrowmont, John C. Campbell Scholarships Available to AAW Members

The AAW is pleased to continue offering financial assistance for quality woodturning instruction. Scholarships will be awarded to selected AAW chapter members to attend classes at either John C. Campbell Folk School, Brasstown, North Carolina (folkschool.org), or Arrowmont School of Arts and Crafts, Gatlinburg, Tennessee (arrowmont.org). Under the program, the AAW Endowment Trust Fund (ETF), in combination with the two schools, will make available funds for the scholarships.

Scholarship nominees must be AAW members and be chosen through a process authorized by their AAW chapter officers. Star Chapters will be allotted two nominations for the first fifty members and one additional nominee for each additional fifty members. All other chapters will be allotted one nomination for the first fifty AAW members in the chapter. After that, each additional fifty AAW members will allow another nomination. If more members are nominated than the total number

of available scholarships, a drawing will determine the winners.

The program provides tuition only for courses directly related to woodturning. Room, board, and travel are the responsibility of the winners. All awards will be for courses in 2016. Chapters must provide the names of nominees, the number of chapter members, and the number of AAW members in the chapter to Phil McDonald by November 15, 2015, using the online application found at tiny.cc/chapterscholarships (case sensitive). Winners will be notified by December 1, 2015. ■

Prize Drawing for AAW Members

One of the many benefits of membership in the AAW is our monthly prize and year-end grand prize drawings. Thank you to the vendors who donated this year's prizes, which include tuition scholarships, \$100 certificates, sanding supplies, DVDs, chucks, grinding jigs, symposium registration, and lathes! Contact Linda Ferber if you would like to contribute a prize, linda@woodturner.org.

When you patronize our vendors, please thank them for their support of the AAW. To see a listing of each month's prizes and winners, as well as hyperlinks to the vendors' websites, visit tiny.cc/AAWDrawings (case sensitive).

At the end of 2015, we will draw another name from our membership roster to give away a Powermatic 3520B lathe. That winner will name a local chapter to win either a JET 1642 or five JET mini-lathes. The Powermatic and JET lathes are donated by Powermatic/JET. Included is free shipping in the continental USA, or up to a \$500 allowance for international winners.

2015 Donors

(Others may be added during the year.)

David Ellsworth

Easy Wood Tools

Hunter Tool Systems

John C. Campbell Folk School

JET/Powermatic

Mike Mahoney

North Woods LLC

Tennessee Assn of Woodturners

Thompson Lathe Tools

Totally Turning Symposium

Trent Bosch



POP News



What is POP?

AAW's Professional Outreach Program (POP) promotes a greater understanding of professionalism within the field of contemporary woodturning. Open to any AAW member, hobbyist to professional, POP sponsors many activities for our membership, including an annual exhibition, panel discussions at our symposiums, biennial merit awards and fellowship grants, a showcase for emerging or less-recognized artists, excellence awards and critiques at the symposium's Instant Gallery, and a professional directory. Funding for these activities comes primarily from the sale of pieces in our annual exhibition.

All AAW members are eligible to join POP at no extra cost beyond AAW membership. You do not have to be a professional woodturner to benefit from POP resources and programs. Registering is a simple online process during which you can indicate your areas of specialty/interest. The information you provide is used for member communication and for compiling POP's professional resource directories. For more information, visit tiny.cc/AAWPOP (case sensitive).

2016 POP exhibition and artist showcase

The POP committee is once again opening its traditionally invitation-only annual exhibition to a limited number of juried pieces. The theme for the 2016 exhibition is **Patterns**. The application period is October 1, 2015, to December 31, 2015, with jurying and shipping of the accepted pieces immediately afterwards.

The POP committee is also accepting applications for two artists to be showcased at AAW's 2016

international symposium in Atlanta. Applicants should be experienced artists who have made significant contributions to the woodturning field but have not received appropriate recognition, or emerging artists who have the potential for making significant contributions to the field. The two selected artists each give two demonstrations and receive free symposium registration, plus a small honorarium. Their work will be displayed prominently in the Instant Gallery. The application deadline is December 1, 2015.

More details on both of these opportunities can be found at tiny.cc/CallsforEntry (case sensitive).

2016 POP fellowship grants

POP is accepting applications for its 2016 fellowship grants. The purpose of these biennial grants is to encourage creative growth, research, or inspiration for new directions in turned wood art. Applicants could be interested in pushing their work creatively in a new direction, working in collaboration with another artist, or exploring the use of new materials. Potential ideas for grant use are limited only by one's imagination. POP fellowship grants are funded by proceeds from the annual POP auction at AAW's annual international symposium.

Fellowship grants are open to turners of all skill levels, though applicants must be AAW members in good standing. For more information and the online application form, visit tiny.cc/POPGrant (case sensitive). Applications will be accepted online through May 1, 2016.

If you have questions about the POP and any of its initiatives, email pop@woodturner.org.

2015 AAW Symposium Youth Lathe Winners

The Youth Turning Program, as part of AAW's annual international symposium, began in 2004 thanks to the leadership of John Hill, who at that time was chair of AAW's Chapters and Membership committee. AAW members recognized the need for a program that would help generate future generations of woodturners. Since the program's inception, more than 530 youth have participated in classes taught by experienced instructors. The program also awards the equipment used in the classes each year to participants through a drawing. Over the eleven years the program has been in effect, 273 lathes—with tools, chucks, and safety gear—have been awarded. Winners of this year's twenty-five lathe packages are as follows:

Nolan Adcock	Adam Lund
Mark Anastas	Lily Mueller
Kevin Bratina	Shawn Myers
Alexander Brown	Eryn Nichols
Roman Bufalini	Jace Nichols
MacIntyre Duxbury	Max Paterni
Parker Duxbury	Annelise Rhoads
Emma Farrington	Ethan Romagnoli
Benjamin Furlong	Joshua Steele
Hailey	Nate Summers
Girvan-Mushinski	Zoe Usher
Justin Grosko	Brendan Zentner
Christopher Haddix	
Jacob Harp	



Joe Ruminski demonstrates during the first youth room session at the 2015 AAW international symposium in Pittsburgh.

Photo: Andi Wolfe

Generous supporters

This highly successful program would not be possible without the generosity of the vendors who provide equipment and supplies for the classes. The following vendors have supported the program from the beginning:

- JET/Powermatic (mini lathes and stands)
- Crown Hand Tools (tool sets)
- Teknatool International (chucks and safety drives)
- Woodcraft Supply (faceshields)

In addition, the following vendors/people contributed to the 2015 program:

- Arizona Silhouette (pen and kaleidoscope kits)
- Craft Supplies USA (texturing tools/project supplies)

- Easy Wood Tools (tool sets)
- Hunter Tool Systems (garden trowel project supplies)
- Kip Christensen (ice cream scoop kits/project supplies)
- Penn State Industries (project supplies)
- Robust Tools (toolrests, drive centers)
- Tennessee Association of Woodturners (project supplies)
- Vince's WoodNWonders (abrasives)

Finally, individual volunteers put in many hours of their personal time in various capacities to make this program work. They are Jeff Brockett, Joe Ruminski, Larry Miller, Rick Paterni, John Ellis, Kip Christensen, Steve Cook, Barry Gross, Carol Ruminski, and Judy Miller. ■

— Larry Miller

Call for Entries 2016 Juried Member Exhibit

The theme for AAW's 2016 juried and invitational exhibit is "Turning 30," in celebration of our 30th anniversary. For three decades, the AAW annual exhibitions have encouraged members to present their finest work. Sometimes that means new and innovative ideas and techniques, sometimes presenting perfected techniques and classic forms. This is a

proud tradition, and we are excited to bring that spirit forward into our fourth decade.

As always, the theme is open to interpretation. Certainly, turning thirty is a milestone in our culture, or one could turn thirty of something, or make a piece with thirty different wood species, but a simple yet excellent piece would also reflect AAW's spirit of sharing, which has been a constant practice these thirty years. It is up

to you—and all AAW members are eligible to submit entries.

Complete guidelines can be found at tiny.cc/Turning30 (case sensitive) and in the August 2015 issue of the journal (page 8). Entry dates are November 1, 2015 to February 1, 2016. Questions? Contact Tib Shaw at the AAW Gallery of Wood Art, tib@woodturner.org.

LEARN. CREATE. CONNECT.

Stay plugged in to the worldwide woodturning community.

A membership with the American Association of Woodturners (AAW) is much more than just a subscription to the *American Woodturner* journal. AAW is the world's leading resource for woodturning information, inspiration, and instruction. AAW members have access not only to the journal, but also to publications including *Woodturning Fundamentals*, *Safety for Woodturners*, and mentoring publications, as well as a variety of complimentary services, website tools, grant opportunities, and specialty programming. We'd like to remind you about some of these publications and services that will help you stay plugged in to the worldwide woodturning community.

AAW | AMERICAN ASSOCIATION
OF WOODTURNERS

PUBLICATIONS INCLUDED WITH MEMBERSHIP

American Woodturner journal, six issues annually, each packed with feature articles, projects, photos, tips, techniques, and news. **New for 2015**, the AAW has introduced online videos to complement selected journal articles. tiny.cc/AWJournal

Past issues: Online archive of all past issues dating back to 1986 (tiny.cc/AWArchive) with a searchable online index (tiny.cc/AWIndex).



New for 2015: The AAW App, a downloadable tool used to read the journal on devices, including iPads and Android tablets. Download from the App Store or Play Store for your device.



Woodturning Fundamentals, six digital issues annually loaded with projects, techniques, tips, videos, and information to build essential woodturning skills, as well as an online archive of past issues (non-member price is \$26.94). tiny.cc/WTFUNDamentals



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Joseph M. Herrmann
(Non-member price \$9.95)
tiny.cc/GotWood



Setting Up Your Woodturning Workstation, Rob Wallace
(Non-member price \$9.95)
tiny.cc/Setup



Safety for Woodturners, a 66-page digital book to help woodturners build strong skills while learning best practices and safety (non-member price \$14.95 for the printed edition). tiny.cc/WTSafety



Sharpening Woodturning Tools: 72-page digital book full of useful articles on sharpening tools for woodturning (non-member price: \$16.95 for the printed edition). Related online video, **Fundamentals of Sharpening**, 90 minutes of sharpening guidance featuring Bonnie Klein, Alan Lacer, John Jordan, and B. Johnston (non-member price \$29.00 for the DVD). tiny.cc/DVDSharpening



MENTORING RESOURCES INCLUDED WITH MEMBERSHIP

New for 2015: Teacher's Resource and Project Guide:

A 76-page digital handbook to help educators develop programs to teach woodturning skills to students. Includes important safety guidelines, best practices, lesson plan tips, and 18 projects to build basic skills (non-member price is \$29.95). tiny.cc/MentorTeach



New for 2015: Pen Manufacture

Enterprise: A 30-page digital teacher's guide adapted from a manufacturing unit taught by Kip Christensen, Ph.D., to provide students with a brief or extensive pen manufacturing experience (non-member price is \$29.95). tiny.cc/MentorTeach



Let's Go for a Spin: A digital seven-part lesson plan series for instructors, designed to provide beginning and advanced students with a well-rounded set of turning skills (non-member price is \$87.70 for the set). tiny.cc/MentorTeach



Planning and Presenting a Successful Demonstration:

A 23-page digital training manual and series of eight online videos, developed by Frank B. Penta and the Chattahoochee Woodturners, to help experienced woodturners build or improve their demonstration skills (not currently available to non-members). tiny.cc/MentorTeach



Teaching Woodturning Basics: A 53-page digital reference to help intermediate and advanced turners learn to teach others (non-member price is \$4.95 for the download). tiny.cc/MentorTeach



SERVICES INCLUDED WITH MEMBERSHIP

New for 2015: AAW Connects is a web-based tool that enables AAW members to search the globe for AAW chapters and woodturning symposia, demonstrations, exhibitions, events, organizations, and schools. tiny.cc/AAWConnects



New for 2015: AAW's Woodturning Marketplace is an online hub that allows AAW members to click-through

to sponsor websites for information about woodturning products and services, as well as exclusive deals. tiny.cc/Marketspace

Directories: AAW's online directories provide contact information for members (tiny.cc/AAWMembers), local chapters, demonstrators, and other woodturning resources (tiny.cc/AAWDirectories).



Events calendar: AAW's Woodturning Calendar lists upcoming chapter and demonstrator events, exhibitions, classes, symposia, and more. Chapters and members may submit woodturning-related items for inclusion in the calendar. tiny.cc/WTCalendar

Video library: AAW's expanding online video collection helps to make the learning process more engaging. tiny.cc/AAWVideo



AAW Forum: This member-moderated online community is ideal for sharing work and ideas, obtaining feedback and assistance, and connecting with other woodturning enthusiasts. Upload photos of your work to the "Gallery" for critique. See your piece selected for the "Turning of the Week." Take part in discussions on topic areas such as tips, techniques, how-to, and more. tiny.cc/AAWForum



Prizes: Each month, AAW members are automatically entered into drawings for sponsored prizes, including lathes, woodturning supplies, jigs, DVDs, classes, gift certificates, etc. Annually, a name is drawn from AAW's membership roster to receive a Powermatic 3520B lathe, and that winner names a local chapter to win either a JET 1642 or five JET mini-lathes. tiny.cc/WTDrawings

EOG program: Members and chapters may apply for AAW's Educational Opportunity Grant (EOG) program, which offers funding to selected applicants for woodturning education projects. tiny.cc/GrantEOG

POP fellowships: Members may apply for Professional Outreach Program (POP) fellowship grants, which offer funding to selected applicants for research and projects that encourage creative growth or provide inspiration for new directions in turned wood art. tiny.cc/GrantPOP

Exhibition opportunities and calls for entry: AAW members may apply and enter work for member exhibitions at the annual international symposium, the Gallery of Wood Art in St. Paul, and other venues. (Some opportunities require an entry fee.) tiny.cc/CallsforEntry

Specialty programming

For members with special interests and needs.

Students: AAW's Young/Student Turners and Turning to the Future programs offer information and resources especially for teachers and students aged 10 to 25. tiny.cc/Students

Disabilities: AAW's Woodturning Beyond Barriers offers techniques and adaptations to help people with disabilities and other obstacles turn safely. tiny.cc/WBB

Global outreach: AAW's Turners Without Borders delivers woodturning information and services to the wider woodturning world. tiny.cc/TWBorders



Professionals: AAW's Professional Outreach Program (POP) fosters and promotes high standards of professionalism in woodturning through a variety of activities. tiny.cc/POPProgram

Women: **New for 2015,** AAW's Women in Turning brings together women worldwide who share a passion for woodturning to help further their skills and increase their participation in the field. tiny.cc/WomenWT



ADDITIONAL LEARNING RESOURCES

Resource books

AAW's entire collection of resource books may be viewed at tiny.cc/AAWResourceBooks.

Getting Started in Woodturning: 224 pages of shop-tested insights and detailed, practical advice for a great start in woodturning. Member price: \$18.95 tiny.cc/GettingStartedWT



Lathes and Turning Tools: Learn how to select a lathe, what turning tools to buy, and what chucks and other accessories you'll need to get started. Member price: \$14.95 tiny.cc/LathesTurning



Learning at the Lathe: 65 pages of useful articles for beginning woodturners, featuring expert, shop-tested insights and advice. Member price: \$14.95 tiny.cc/LatheLearn



Continued on next page

ADDITIONAL LEARNING RESOURCES CONT.

Practical Woodturning Projects:

64 pages of woodturning projects that build skills with shop-tested instructions and illustrations.

Member price: \$14.95

tiny.cc/WTPProjects



Turning Holiday Ornaments:

19 fun holiday projects to help build turning skills and create great gifts. Member price: \$14.95

tiny.cc/Ornaments



Turning Bowls and Platters:

Skill-building articles, safety tips, and step-by-step instructions for bowl turning, from blank to finish.

Member Price: \$14.95

tiny.cc/BowlsPlatters



Making and Using Turning Tools:

Practical, technical articles for making tools. Member Price:

\$14.95 tiny.cc/TurningTools



DVDs – Woodturning Masters Series

Learn about some of woodturning's most visionary makers.

David Ellsworth, The Spirit of Woodturning: 55 minutes. Member price: \$19 tiny.cc/DVDEllsworth



William Hunter, Innovator/Sculptor: 90 minutes. Member price: \$19. tiny.cc/DVDHunter

Dale Nish, The Woodturner's Mentor: 55 minutes. Member price: \$19 tiny.cc/DVDNish

Rude Osolnik, Dean of American Woodturners: 55 minutes. Member price: \$19 tiny.cc/DVDOsolnik

Ed Moulthrop, Woodturning Pioneer: 55 minutes. Member price: \$19 tiny.cc/DVDMoulthrop

Palmer Sharpless, The Johnny Appleseed of Woodturning: 55 minutes. Member price: \$19 tiny.cc/DVDSharpless

Ray Huskey, A Turning Tradition: 90 minutes. Member price: \$19 tiny.cc/DVDHuskey

Myron Curtis - Architectural Woodturner and Teacher: 90 minutes. Member price: \$19 tiny.cc/DVDCurtis

DVDs for skill-building

Expert advice and instruction to help build solid woodturning skills.

An Introduction to Bowl Turning by Rus Hurt:

84 minutes of informative bowl turning instruction and advice. Member price: \$19 tiny.cc/DVDHurt

Turning Projects from Scrap with Bob Rosand: Learn to make a confetti oil lamp, ring holder, lidded box, birdhouse ornament, and holiday ornament in 93 minutes. Member price: \$19 tiny.cc/DVDRosand

Skill-Building Projects with Mark St. Leger:

90 minutes of popular skill-building projects. Member price: \$19 tiny.cc/DVDStLeger



CHAPTER SERVICES

The AAW offers a variety of resources and services to help chapters be successful.

Officer information kit: New for 2015, a digital toolbox for chapter officers, which includes job descriptions, operational information, tips, and best practices to help prepare new officers for their roles. tiny.cc/ChapterOfficers

Chapter Bulletin: New for 2015, a monthly digital chapter update, which includes announcements, board news, new educational resources and information, and more, to help chapters communicate more effectively with their members about the AAW. tiny.cc/ChapterOfficers

Best practices library: Includes topics such as programming, demonstrations, scheduling, mentoring, meeting protocols, youth education, financial guidance, charitable initiatives, and more, shared by successful AAW chapters. tiny.cc/AAWBestPractice

Grants and scholarships: Chapters can apply for Educational Opportunity Grants (EOGs) to help fund educational projects. They can also apply for annual chapter scholarships for members to attend woodturning schools, such as Arrowmont School of Arts and Crafts and John C. Campbell Folk School. tiny.cc/GrantEOG

Insurance: AAW offers two affordable general-liability insurance options designed especially for U.S. chapters. AAW's "Group Plan" enables chapters to be named in the AAW nonprofit commercial general-liability policy for a \$95 contribution. The "Private Plan" is a private general-liability policy available for purchase by chapters for a premium of \$425. As is typical of any insurance policy, there may be restrictions on chapter eligibility and coverage. tiny.cc/InsChapters

AAW is eager to support you

Your interest in woodturning and membership in the AAW are key elements in promoting woodturning worldwide. The AAW board and staff are grateful for your continued commitment to preserving this wonderful art and craft for future generations and are eager to support you in your woodturning endeavors. If you have questions or thoughts to share, please contact us at 651-484-9094, toll-free 877-595-9094, or by email at memberservices@woodturner.org.

Turning to the Future 2015

The AAW is proud to announce the results of its first annual student competition and juried exhibition, Turning to the Future, developed in collaboration with the Association of Woodworking & Furnishings Suppliers® (AWFS®).

Open to high school and post-secondary students, the finalists' work was exhibited in conjunction with Fresh Wood, a well-respected student furniture design/build competition that is part of the biennial AWFS Fair™ in Las Vegas.

First prize in the high school and post-secondary divisions was \$500 and a Rikon 70-220VSR midi-lathe. The winners and finalists were selected by jurors Christian Brisepierre, turner, teacher, and woodworking store owner; Jimmy Clewes, professional turner and woodturning instructor; Linda Ferber, program director, AAW; Beth Ireland, professional woodturner, artist, and educator; and Tib Shaw, curator, AAW.

Special thanks to Jimmy Clewes, the Las Vegas Woodturners local chapter, and Woodworker's Emporium for demonstrations and equipment; to AWFS® for our booths; and to our prize sponsor, RIKON Power Tools.

Turning to the Future 2016 will be held at AAW's annual international symposium in Atlanta. For more information on next year's show, visit tiny.cc/CallsforEntry.

—Tib Shaw

Other competition finalists

Jason Coggins	Alexandra Salyers
Nichole Cross	Matthew Shiplett
Scott Davies	Ian Surman
Will Everett	Nickolas Valerio
Kyle Kreitzman	Carter Zufelt
Ruby Lopez	

High School Level



First Prize
Michael Andersen,
Twisting Wings,
Zebrawood, Gabon
ebony, 5½" × 5¾" × 5"
(14cm × 14cm × 14cm)

Photo: Robert Andersen

Second Prize

Kailee Bosch, *Discover,* Recycled books,
epoxy resin, 7" × 13" × 9"
(18cm × 33cm × 23cm)



Honorable Mention

Miguel Ingles, *Triple Helix,*
Walnut, padauk, largest is 12" × 4" (30cm × 10cm)



Photo: Alan Harp

Post-Secondary Level



First Prize

Carrie Etherington, *African Box,* Narra,
walnut, ebonized holly, aluminum powder,
8" × 3" (20cm × 8cm)

Photo: Barry Thornburg

Second Prize

Taima Krayem, *Rings Bowl,* Walnut,
cherry, 4½" × 10"
(11cm × 25cm)

Photo: Lance Patterson



Honorable Mention
Danielle Heckman,
Candlestick, Cherry

Photo: Alan Harp

Tips

Nut chucks for small turnings

A common way to mount a small end-grain workpiece on the lathe is to glue it to a waste block. A shopmade nut chuck is an easy way to hold the waste block on the lathe. It is inexpensive, so you can make several to have on hand for quick use. I learned of this idea from Bonnie Klein, who shared it with the Island Woodturners in Victoria, BC, during a demo.

Making a nut chuck

Purchase a stainless steel nut with inside diameter and threads compatible with your lathe spindle. The ones I buy are locknuts, and I like to remove the nylon gasket by threading the opposite end of the nut onto my lathe spindle and turning away the gasket. I then thread that end onto the spindle all the way to check that it seats well against the spindle collar. With a file, roughen the outer surfaces of the nut for better glue adhesion.

For the nut chuck body, turn a piece of hardwood about 1½" (4cm) thick by 2½" (6cm) in diameter with the grain running perpendicular to the lathe ways. Grip it in a four-jaw chuck and drill or cut a hole that will just accept the nut. Make sure the nut does not protrude from the hole, or it will become too tight against the lathe spindle during use.

Before setting the nut into the hole, seal the inside end with a bit of duct tape, so epoxy will not seep into the threads from the bottom. Mix some



Easily made, reusable nut chucks work well for mounting small, endgrain workpieces.

epoxy and set the nut in the hole, taped end down. Fill the surrounding space with glue, being careful not to get any on the threads.

When the epoxy has cured, thread the new chuck onto the lathe spindle and true it up. Fasten a trued-up, crossgrain, sacrificial block onto your new chuck with wood glue (for strength in repeated use). When the glue has cured, true up the whole assembly and it is ready for use.

In use

Use a thick, or gel cyanoacrylate (CA) glue to fasten an endgrain workpiece to the waste block and start turning. It is a good idea to use the tailstock for added security when possible. When your turning project is completed and parted off, cut the remnant from the waste block, re-flatten, and you are ready for the next workpiece. Replace the waste block when it is nearly exhausted, to protect the nut chuck.

—Phil Cottell, Canada

Rough-shaping tapered spindles

I was faced with turning more than fifty tapered spindles for the backs of Windsor chairs. As Thomas Moser notes in his classic *Windsor Chairmaking*, "These slender turnings will whip in the lathe, even with a center rest." I came up with an alternative solution for rough-shaping these flexible spindles: a 4½" (11cm) angle grinder with 100-grit resin disks.

It may seem sacrilege to use an angle grinder as a cutting tool at the lathe, but it removes wood quickly and does a good job of counteracting the issue of the spindles flexing. Turning at high speed and using a rapid back-and-forth action with the grinder allowed me to "bounce" over the inevitable flex. I had to find the right balance between too much forward pressure, which would bow the spinning piece, and too little pressure, which would not remove enough wood. I was able to rough-shape a nicely tapered spindle in less than five minutes.

A lot of dust is generated with this method, so a dust extractor is necessary. Remove the toolrest from the lathe's banjo so it won't be in the way. I also recommend wearing thick leather gloves to protect against accidental finger-grinding.

—Peter M. Smith, New Jersey



An angle grinder can be an effective tool for tapering thin spindles.

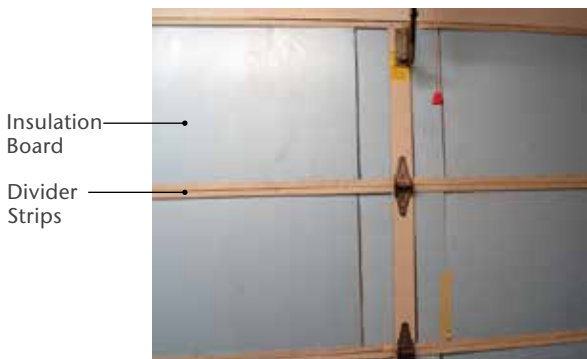
Share your turning ideas!

If we publish your tip, we'll pay you \$35. Email your tips along with relevant photos or illustrations to editor@woodturner.org.

—Joshua Friend, Editor

Easy insulation for garage shop

Many woodturners create shop space in their garage. Uninsulated steel garage doors are a major source of heat loss, but insulating them is easy. Most home centers carry ½" - (13mm-) thick sheets of insulation board. The inside of a steel garage door typically has a divider strip on the top and bottom of each panel,



forming a lip that can hold sheets of insulation. Cut the insulation board slightly bigger than each panel, gently bend it, and insert it into the panel lips. This will make a big difference in heating and cooling your shop.

—Paul Kaplowitz, South Carolina

Jig for flat-grinding skew chisels

I liked the article by Jim Scarsella in the April 2015 issue of *American Woodturner* (vol 30, no 2, page 28) on skew sharpening and decided to try my hand at the flat grind he recommended. I soon learned, as the author stated, "...it is hard to consistently produce a flat bevel freehand on a grinder." So I set about making a jig to grind the skew on my disc sander, whose flat sanding surface would naturally create a flat bevel on a skew chisel.

First, I placed the disc sander on a sheet of plywood and removed the sander's table. Then I made the skew-sharpening jig, which is simply a scrap of wood with a V-groove cut down the center, aligned parallel to and at a pre-determined distance from the sanding disc. This distance, represented as "d" in the photo, is measured from the face of the disc to the bottom of the V groove



and establishes the bevel angle that will be ground. A greater distance will produce a blunter bevel angle; a shorter distance will produce a sharper bevel angle. The block is held in place with double-sided tape.

A calculation is required to determine d. If L is the total length of the tool, and α is the desired bevel angle, then $d = L \times \sin(\alpha)$. My skew is 10¾" (27cm) long and I wanted a 20° bevel, so my equation was $d = 10\frac{3}{4} \times \sin(20^\circ)$. Since $\sin(20^\circ) = 0.34$, $d = 3\frac{5}{8}$ " (9cm). For a skew of a different length, just plug the length into the equation $d = L \times 0.34$ and you will be grinding a 20° bevel. If you want a different bevel angle, you will need to look up the sine of the new angle (a quick Internet search will provide the correct value) and plug it into the equation. As long as the end of the tool handle is held in the V-groove, the skew can be moved anywhere along the jig and the desired angle will be ground.

To avoid the possibility of the skew digging into the paper of the sanding disc, position the jig so that the disc is rotating away from the cutting edge.

—Bill Wells, Washington

Improving an older pump's performance

As many turners do, I often use a vacuum chuck for holding a workpiece on the lathe. Some turners opt for a used pump, which can be a good option, but the use history and wear factor may be unknown. I noticed on my used pump that the vacuum achieved had slowly decreased. A friend asked if I had replaced the vanes and told me where to purchase new ones. My pump vacuum had dropped to about 19 inHg (48cmHg). When I replaced the vanes, the vacuum went up to 27 inHg (69cmHg) and provided all the vacuum I needed. If your pump is losing vacuum, replacing the vanes might be a quick, simple fix.

My pump is made by Gast, but vane replacement on other brands would be similar. Remove the bolts from the outlet end of the pump and remove the plate to expose the vanes. The pump vanes reside in slots. Simply slide the old vanes out and replace with new ones.

One source for replacement vanes is Combined Fluid Products, of Lake Zurich, Illinois (phone number 800-521-2083). Be sure to buy vanes that fit your particular make and model pump, as vanes vary in size and number for various pumps. The cost is about \$17.00 per vane—a reasonable investment to revitalize an older pump.

—Bob Gunther, North Carolina



Replacing the vanes of an older vacuum pump (indicated by the arrows) could boost the pump's performance.

Photo: Mariah Gunther

We Are Wood



In March 2015, AAW's Turners Without Borders (TWB) sent a contingent of six woodturners to Eskişehir,

Turkey, to take part in a week-long celebration of wood and humanity capped off by an event coined World Wood Day, hosted by the International Wood Culture Society (IWCS). With more than 300 attendees comprising sculptors, musicians, folk artists, furniture makers, and scientists from ninety-three different countries, the world truly came together with a common appreciation for wood, a material rooted deeply in our human experience.

AAW members in attendance included Derek Weidman, Cynthia Carden Gibson, Jacques Vesery, Andy Chen, Michael Gibson, and Kathleen Duncan. Other woodturners at the event included

Kenan Çiçek and Adnan Güçlü of Turkey and Hassan El Farissi of Morocco.

World Wood Day celebrates wood as an integral part of our culture from which our humanity has grown. Wood is at the heart of our meals via dinnerware, our tables, and historically our heat; wood comprises the bones of our gatherings, via the dwellings we build, the places we sit, the spirit of our music via the various anatomies of musical instruments we use; and of course wood is used in the art we love. In many ways, we are wood. During the event, wood was not the backdrop, providing unseen, basic structure as it often does in our lives, but instead was the guest of honor. Likewise, the makers from around the world were not just the magic hands behind the scenes—their wizardry was on full display, with tools both modern and as old as recorded time. By demonstrating the making of beautiful objects, participants revealed the beauty

of making itself. The motto of the week, simple and profound: wood is good.

The modern lathe, a place for us

The World Wood Day event in Eskişehir put on stage several disciplines related to wood. In one area were the sculptors, woodcarvers from around the world, each artist's work flavored by his or her own country's visual languages and sensibilities. It was enriching, even completing, to see all of the different tones and nuances of the collective voice of human expression through woodcarving. Many of the aesthetics were both unique to each artist and identifiable to their place of origin. This identity clearly runs deep and points to long-standing local traditions, while allowing for consistency through many cultures.

Interestingly, then there were the woodturners, a smaller group but still multicultural. One turner, Hassan El Farissi from Morocco, demonstrated one of the oldest lathes ever devised. He powered the lathe with his arm and used his feet to supply pressure on the wood in tandem with the tailstock, as well as to help guide the cutting tool. This method was in stark contrast to our modern electric lathes, which have over the last few decades propelled an art movement that continues to seek its place in the story of wood culture. This is why it is important for the



Hassan El Farissi, from Morocco, shows off his dexterity and skill as he turns with a great deal of help from his feet. While still considered woodturning, this method seems otherworldly and almost magical.



German sculptor Paul Brockhage designed and carved the figures, while AAW board member Kathleen Duncan added the turned sphere—an internationally completed sculpture with the theme of unity on earth.

AAW to continue working with IWCS to celebrate wood and all of its many possibilities. In this time of woodturning's growth as a cultural and art/craft movement, coming into its own when global travel and communication have never been better, woodturners have developed an aesthetic not just of one region, but of the earth. It seems poetic, then, that our machine of choice, the lathe, is well suited to producing spheres. ■

For more on IWCS, visit iwcs.com, woodculture.org, and worldwoodday.org. For more on AAW's TWB program, visit tiny.cc/TWB.

Special thanks to JET Tools and The Woodturning Store for donating equipment and lathe accessories for our use in Turkey.

Photos by Michael Gibson.

—Derek Weidman

See the IWCS Video, *The Turn*

The IWCS is a non-profit, non-governmental international network of wood enthusiasts dedicated to the research, education, and promotion of wood culture. An IWCS film crew documented the woodturning aspect of the 2015 World Wood Day event in Eskişehir, Turkey, in an inspiring video called *The Turn*. The video can be viewed at tiny.cc/theturn, or by scanning the QR code with a mobile device:



California's AVWA Continues to Support Beads of Courage

For the second year in a row, the Antelope Valley Woodturners Association (AVWA) has donated turned boxes and money to Beads of Courage. Jean Baruch, Executive



Don Mourton delivers turned boxes and a financial donation to Jean Baruch, Executive Director and Founder of Beads of Courage.

Director and Founder of Beads of Courage, personally accepted our donation. She told me that only a small number of children receive the donated boxes because there are not enough available for all the participants. Only the children at the greatest health risk are given the boxes. As to our financial donation, Jean said they were short on some of the beads and our donation would allow them to order more.

My thanks to the members of AVWA for their support of this activity. Our efforts will help to enhance the lives of some very ill children and their families. ■

—Don Mourton, President AVWA

For more on Beads of Courage, visit beadsofcourage.org.

Chicago Woodturners Supports Beads of Courage

The Chicago Woodturners (CW) has been involved in charity events such as Empty Bowls and Pens For Troops for many years. At the beginning of 2015, we agreed to support another wonderful program, Beads of Courage. The thought of providing handmade bowls to children who are facing long-term treatment for serious illnesses like cancer or leukemia opened the hearts of our membership.

CW members challenged themselves to make as many lidded bowls for Beads of Courage as we could in five months. By mid-year, we had produced sixty-five bowls that were donated to the oncology department at Lurie Children's Hospital in Chicago, one of the largest and oldest children's hospitals in the country.

It was heartbreaking to realize that we cannot possibly keep up with the

number of bowls/boxes needed for kids in the Beads of Courage program, but it was heartwarming to know we put a smile on the faces of sixty-five kids. There was overwhelming support by our chapter to make this program an annual activity, and we fully expect that 2016's donation will surpass what we produced this year. I would encourage every AAW chapter to support the Beads of Courage program. ■

—Al Miotke



Al and Brenda Miotke delivered sixty-five lidded bowls to Noe Mohica (right) at Lurie Children's Hospital in Chicago.

Calendar of Events

December issue deadline: October 15

Send information to editor@woodturner.org

Australia

March 18–20, 2016, Turnfest Australia, SeaWorld Resort, Gold Coast, Queensland. An Australian international woodturning symposium, featuring demonstrators Mike Lee, John Jordan, Cynthia Gibson, John Wessels, Tom Wirsing, Chris Pytlik, Guilio Marcolongo, Vaughn Richmond, Richard Raffan, Neil and Liz Scobie, Neil Turner, Marilyn Kunde, and Helen Toms. For more, visit turnfest.com.au.

Arizona

February 26–28, 2016, The 7th Biennial Desert Woodturning Roundup, Mesa Convention Center, Mesa. Symposium will have a large vendor area, instant gallery, and banquet with live and silent auctions. Vendor area and instant gallery open to the public. Lead demonstrators to include Glenn Lucas, Curt Theobald, John Beaver, Betty Scarpino, Rex Burningham, Andi Wolfe, Art Liestman, and Jason Clark. For more, visit desertwoodturningroundup.com.

Florida

February 5–7, 2016, Florida Woodturning Symposium, Lake Yale Baptist Conference Center, Leesburg. Featured demonstrators to include John Beaver, Jimmy Clewes, Ashley Harwood, Joe Ruminski, Andy Cole, Al Hockenbery, Rudolph Lopez, and Walt Wager. For more, visit floridawoodturningsymposium.com.

Illinois

July 22–24, 2016, Turn-On! Chicago 2016 Symposium, sponsored by the Chicago Woodturners, The Conference Center at the University of Saint Mary of the Lake, Mundelein. Featured demonstrators will include Nick Agar, Rex Burningham, Robin Costelle, Steven Hatcher, Clay Foster,

Frank Kobilsek, Rob Nelson, Graeme Priddle, Mark Sfirri, Mark St. Leger, Rob Wallace, and Molly Winton. Also featuring hands-on pen turning, a tradeshow, meals, a banquet, and an auction. For more, visit turnonchicago.com. Online registration opens January 1, 2016.

Minnesota

October 28–November 1, 2015, Fresh Cut - Green Woodturning Symposium, North House Folk School, Grand Marais. The symposium will include multi-day coursework, demonstrations, speakers, mini-courses, and community gatherings. Featured demonstrators to include Robin Wood, Michael Hosaluk, and Michael Cullen. For more, visit northhouse.org.

Ongoing exhibit: “Touch This!” featuring fascinating facts about wood and woodturning, as well as pieces you can touch. For more, visit galleryofwoodart.org.

Montana

October 17, 18, 2015, Yellowstone Woodturners Symposium, Billings. Featured demonstrator/teacher will be Alan Carter, who will demonstrate turning long-stem goblets, suspended vessels, split-bowl vessels, and design, so you can find your own creative voice. For more, visit yellowstoneturners.org or call Ron Velin at 406-679-0902.

New York

April 2, 3, 2016, 13th Annual Totally Turning Symposium, hosted by the Adirondack Woodturners Association (AWA), Saratoga Springs City Center, Saratoga Springs. Featured demonstrators will be Glenn Lucas, Hans Weissflog, Jimmy Clewes, Binh Pho, Mark Baker, Steve Sinner, Derek Weidman, Kurt Hertzog, and Linda Ferber. For more, visit totallyturning.com.

North Carolina

November 6–8, 2015, North Carolina Biennial Symposium, Greensboro Coliseum, Greensboro. Featuring sixty-three demonstration periods in nine rotations. Featured demonstrators include Nick Agar, Jimmy Clewes, Don Derry, Ashley Harwood, Mike Jackofsky, Al Stirt, and eight regional demonstrators. Large tradeshow, instant gallery, and banquet with live auction. For more, visit northcarolinawoodturning.com.

Ohio

October 9–11, 2015, Ohio Valley Woodturners Guild’s Turning 2015 Symposium, Higher Ground Conference Center, Cincinnati. Featured demonstrators to include Mike Jackofsky, Chris Ramsey, Neil Scobie, Mark St. Leger, Malcolm Tibbetts, and Derek Weidman. Event will feature a vendor area, auction, instant gallery, onsite lodging and meals, and a spouse craft room. For more, visit ovwg.org.

Tennessee

January 29, 30, 2016, Tennessee Association of Woodturners’ 28th Annual Woodturning Symposium, Marriott Hotel and Convention Center, Franklin. Featured demonstrators to include Clay Foster, Rudolph Lopez, Glenn Lucas, and Bob Rosand. Event includes two days of demonstrations, an instant gallery, a large, well-stocked vendor area, and Saturday night banquet and auction. For more, visit tnwoodturners.org/symposium. For vendor information, contact Grant Hitt at voldad18@comcast.net. For symposium questions, contact Jeff Brockett at symposium@tnwoodturners.org or 615-973-3336.

Virginia

November 5, 6, 2016, Virginia Woodturning Symposium, presented by the Virginia Woodturners (a group of ten Virginia clubs), EXPOland, Fishersville. Featuring international and regional demonstrators. For more, visit virginiawoodturners.com. ■

East Texas Woodturners Aids in Tornado Relief

On May 10, 2015, a tornado tore through the East Texas town of Van, killing two people, injuring more than forty, and causing more than \$40 million in damage. The next day, Kelvin Burton, a Van resident and member of the East Texas Woodturners (ETW), was out with

his chainsaw helping to clear downed trees. He thought of how the cleared trees were going to a landfill and wondered if they could be repurposed to some good. Kelvin came upon the idea of a fundraiser where, in return for a donation, donors would receive a pecan turning blank of tornado wood.

The ETW's steering committee approved Kelvin's request to make this a club project, and a fundraising website was set up and advertised via ETW's Facebook page. The project was expanded to include items turned by chapter members as an alternative gift for donors. These items included pens, bowls, pepper mills, vases, and platters.

There was a lot of support from the Van community, with ten special requests for objects turned from tornado wood. In addition, one family brought their children to Kelvin's shop to see destruction being turned into something beautiful. In all, 113 contributors participated in the fundraising effort. This was a great community project and team-building event for members of the ETW.

—Dennis Lorenz, President,
East Texas Woodturners



In July 2015, Dennis Lorenz (far left) and Kelvin Burton (far right), both ETW members, presented a check for \$8,450 to Van Ministries to aid in tornado-relief efforts.

HVW Supports National Kidney Foundation

For the last three years, the Huron Valley Woodturners (HVW) has held an annual holiday sale/benefit event to raise money in support of a peer-mentoring program of the National Kidney Foundation of Michigan (NKFM). This cause appealed to HVW members because of their commitment to community and personal connections of several members whose lives have been impacted by kidney disease.

HVW's benefit event, December 5–6 at the Webster Church Crossroads Community Center in Dexter, Michigan, will feature lathe demonstrations by chapter members, who will turn tops, snowmen, and other

ornaments throughout the weekend. A percentage of all sales of turned items will be donated to NKFM, and thus far HVW has donated more than \$2,000 to the organization.

HVW is committed to holding the event every year, in part to continue supporting NKFM but also to showcase woodturning and provide outreach education to the community. The annual event has helped us attract new chapter members and has generated interest in the craft of woodturning.

—Dan Konyn, President,
Huron Valley Woodturners

For more on the National Kidney Foundation of Michigan, visit nkfm.org.

Wisconsin Valley Woodturners Helps Wounded Warriors

The Wounded Warriors in Action Foundation (WWIA) helps Purple Heart recipients in their healing process by sending them on world-class sporting and other events. For the past four years, Tony Kopchinski of the Wisconsin Valley Woodturners (WVW) has hosted several Purple Heart Warriors for a week-long woodturning event in Wisconsin. While receiving woodturning instruction, the Purple Heart recipients get a valuable opportunity to relax and heal.

WVW also generously donates hand-turned items to WWIA that we use as thank you gifts for other event hosts. We would like to offer our heartfelt thanks to WVW members Tony Kopchinski, Bob Stavran, Dick Hanke, Mary Bowden, Susan Long, and Chuck Jagodinski for helping with the healing process of America's wounded heroes.

—Pam Plager, WWIA Executive Assistant

For turners who have never tried segmented turning or for those who would like a refresher on the basic concepts, here is a simple, easy approach to turning a segmented bowl. This quick, accurate method will acquaint you with the fundamentals of segmenting, which you can then apply to more complex pieces. The bowl presented here makes use of a solid layer of wood for the foot and four progressively larger rings, each one comprising multiple segments cut at predetermined angles.

Segment-cutting sled

As you would imagine, segmented projects require careful attention to creating a blank prior to turning. The table saw is my preferred tool for cutting segments, and a sled with a fence set at the correct angle is the best way to produce identical segments. Some time invested up front creating a good sled will help you far into the future. I recommend making and using a Wedgie Sled, a simple fixture designed by renowned segmented turner Jerry Bennett. Plans and instructions for building this sled, as well as helpful videos, can be found at Jerry's website, segeasy.com. Regardless of the sled design you choose, the goal is to be able to cut desired angles accurately and with repeatability.

JOURNAL ARCHIVE CONNECTION

Jim Rodgers has written previously in *American Woodturner* on segmenting. His 2005 article on cutting accurate segments (vol 20, no 4, page 24) offers helpful information, including an alternate sled design and tips on gluing segments into rings. AAW members can access all past journal articles online at woodturner.org.



Turning Your First SEGMENTED BOWL

Jim Rodgers



Selecting wood

You will need to determine which wood species to use; I had some very dry Eucalyptus cut a few years ago from a friend's yard. Mill the wood to the desired thickness you want for each level, or ring. I chose $\frac{5}{8}$ " (16mm) thickness. It is important that you select wood that is thoroughly dry, with moisture content of six to twelve percent. Using green, or unseasoned, wood introduces a greater likelihood of wood movement, which will cause glue joints to fail.

Plan your bowl

Unlike other kinds of woodturning, segmented projects require detailed planning of the piece you wish to create. For this project, I decided on a small popcorn bowl that would fit in your lap—about 3" (8cm) tall by 7" (18cm) diameter.

Make a drawing

Make a full-sized drawing of your bowl on graph paper with your desired profile. This drawing will help you determine the ring diameters and thicknesses as well as the segment sizes required. Allowing for extra wall thickness now will help you minimize any problems you might have later in aligning the rings or turning the bowl. Next add horizontal lines to indicate the foot and ring thicknesses, based on the thickness of the wood you will be using. Add a centerline to the drawing and number each level, or ring, of the bowl from the base upward (Figure 1).

Note that drawings made with sophisticated software or using trigonometry functions will render more accurate results, as a simple two-dimensional drawing cannot account for the three-dimensional aspect of the bowl's curvature. This is why allowing for extra wall thickness

Plan your segmented bowl

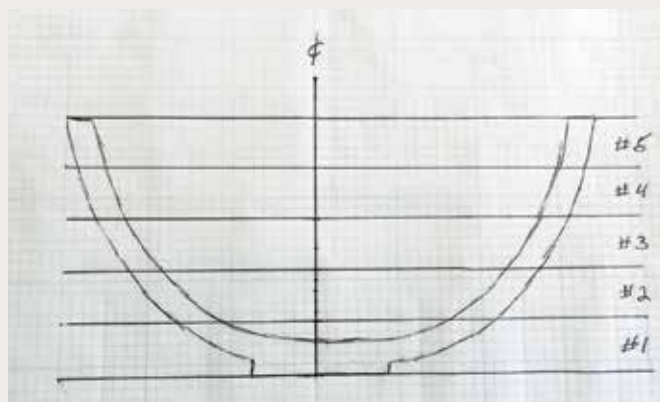


Figure 1. Start with a full-sized drawing of your desired profile, then indicate the thickness of each segment layer, or ring, with horizontal lines.

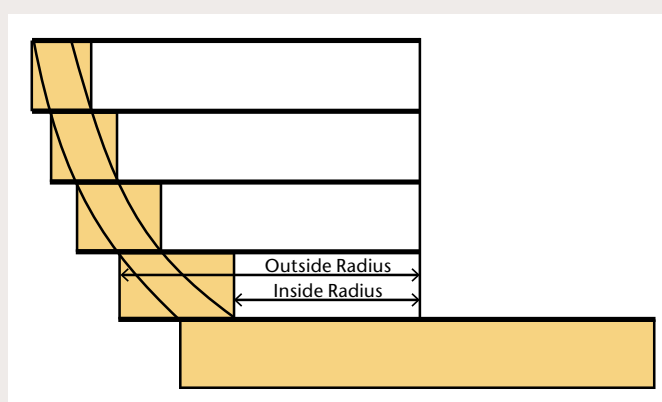


Figure 2. Measure the required width of each segment by subtracting the shortest inside radius from the longest outside radius. Note that the foot layer is a solid circle of wood, not a segmented ring.

is especially important when using a two-dimensional drawing.

Determine board length

Planning your bowl requires a few simple calculations based on your initial drawing. As you make the calculations, record the results in a table for easy reference. First, you will need to determine the board length needed to cut the right number of segments for each ring. The board length is equal to the circumference of each ring (plus about 4", or 10cm, for safe holding during cutting). To find the circumference of each ring, measure its diameter (d) on your full-sized drawing and multiply that number by 3.14 (Pi, or π)—since the circumference of any circle = $\pi \times d$.

Determine segment length

In order to cross-cut the individual segments on your sled, you will need to determine the length of each segment's longest, or outside edge. This is found by dividing the ring's circumference by the number of segments in that ring. In my example project, each ring is made up of twelve segments, so I divided each

ring's circumference by twelve to get the length of each segment's long, or outermost edge.

Determine segment width

You will also need to know the width of the wood strips that will make up each segment. To make this determination, go back to your drawing and measure both the longest outside and shortest inside radii of each ring, using the centerline as the point from which to measure. Subtract the inside measurement from the outside measurement and record

the resulting number as the width of each strip (Figure 2).

Cut your stock

With all of the critical calculations made and recorded, you will have a cut list you can use to begin preparing the wood, first by ripping the timber to the needed width, then by cross-cutting the strips to overall length. Label the strips as you rip them so you can easily see which rings they are to be used for.

Set up the table saw to cut the individual segments to the correct length ►

Cut the segments



1 Use a 30/60/90 triangle to set the fences on your table saw sled to the desired angle.



2 Cut the individual segments. The length of all segments is made identical with the use of an adjustable stop (bottom right of photo).

Glue the segments



3
Glue the segments into rings, using a band clamp to apply even pressure.

True it to glue it

Use a waste block attached to a faceplate as the base on which to assemble your segment rings. A straightedge held across the face will help you determine its flatness, which is critical to a good glue joint (*Photo a*).



A flat board with 80-grit abrasive resting on the toolrest for support works well for flattening each ring prior to gluing on the next ring. Keep the lathe speed low, about 600 rpm, during this process (*Photo b*).



and at the correct angle. My setup includes a zero-clearance throat plate, a good quality finish-cut saw blade, and a stop for cutting multiple segments at the same length. You also need to set your table saw sled to cut the segments at the desired angle. The included angle is determined by dividing 360° (a full circle) by the number of segments. So, for example, any twelve-segment ring, regardless of its circumference, will require 30° angles on each individual segment.

Cutting segments using the Wedgie Sled is a little different from cutting on an average table saw sled: the Wedgie can be adjusted to cut different angles

by pivoting its two fences. The angle between those fences is set to the necessary included angle for the segments; the first half of a segment is cut using one fence and the second half, using the other fence. When you cut the segments, there is no flipping the strip, as you would have to do with single-fence sleds. To realign the segments with the greatest precision during glue-up, mark the top face of each wood strip with a continuous line prior to cutting and also mark one edge. An easy way to set the fences for a 30° cut is to use a commonly available 30/60/90 triangle. Place the triangle on the sled with the 30° angle

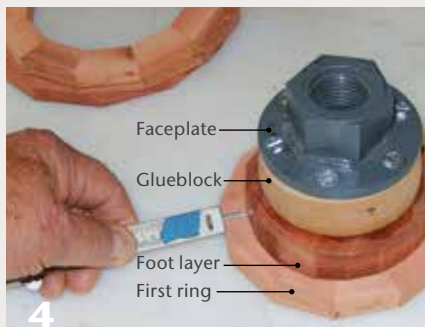
between the two fences. Move the fences until they touch the edges of the triangle, then tighten down the fences (*Photo 1*).

Cut all the segments for each ring, keeping the top surface of each strip (marked with a pencil line) facing up (*Photo 2*). I find it helpful to organize the rings in labeled plastic bags to avoid confusion over which segments are for which rings. Carefully sand each segment to clean up any frayed edges, being careful not to round over corners or touch the face of the cut edge.

Glue segments into rings

Dry-fit the segments of each ring together, keeping the top surface pencil

Simple centering methods



4
Three methods of centering a ring when gluing it to the previous layer. Use a ruler or your fingers as a gauge, or mount the ring in large chuck jaws mounted on your tailstock.



lines facing up and the edge lines alternating, with one facing inward, the next outward, etc. A rubber band will hold the segments together while you check the quality of the glue joints; shine a light from behind the ring—no light shining through indicates good joints. When you are satisfied with the fit, apply glue to the edges and use a band clamp to apply pressure (*Photo 3*). Do this for each ring.

If gaps appear during your dry fit, it is possible you have allowed the strips to slip while cross-cutting the segments, or frayed edges or stray sawdust may remain. It may be necessary to clean up the edges further or recut the segments for that ring more carefully.

Make a bowl blank

When all of your segment rings are glued up, the next step is to glue them together to make a bowl blank, starting with the solid foot layer on the bottom, then adding the rings from smallest to largest as you go toward the rim of the bowl. I recommend assembling your bowl blank on a glueblock attached to a faceplate. Flatten the glueblock, verifying its flatness with a straightedge before adding the bowl's foot. Glue on the solid layer that will become the foot. Now build your bowl blank one ring at a time.

As you glue on each successive ring, rotate it by half a segment's width to alternate the vertical glue lines and create a "brick-laid" pattern for strength. You may want to mark the center of one segment with a pencil line to ensure the next ring aligns at the halfway mark accurately.

Flatten one side of each ring on a sanding disc or flat sheet of 80-grit abrasive. After flattening the foot, glue the smallest ring onto it, taking care to center the ring the best you can. Centering each ring can be done in several ways. If you do it off the lathe with a ruler or by gauging centeredness with your thumbs

(*Photos 4, 5*), be sure to true the ring's diameter on the lathe before adding the next ring to minimize "creeping errors" of subsequent rings. On-the-lathe methods can provide more centering accuracy. If you own a tailstock live center system that has headstock threads, you can mount a scroll chuck with large jaws on your tailstock (*Photo 6*). This will center the rings very accurately for gluing, and you can use the tailstock crank to apply gluing pressure.

After the glue is dry on your first ring, true up the exposed face before adding the next. An easy way to do this is to sand the surface on the lathe using a flat board with abrasive glued to it (*See Sidebar*). Continue this process until all of your segmented rings are glued on and you have a rough segmented bowl blank (*Photo 7*).

Turn your bowl

Shape the exterior of your bowl first by following the drawing and ignoring the "steps" between the rings. If you follow the shape, the steps will disappear as the shape is achieved. Keep the base oversized for extra support until the last steps (*Photo 8*). Next, work the interior from the rim downward one or two rings at a time. After completing the interior, reduce the base to proper dimension and cut a clearance groove at the bottom of the defined foot to allow access for sanding the bowl's foot (*Photo 9*).

I prefer to sand and finish both the interior and exterior while the bowl is still mounted on the lathe for ease of handling. When you are satisfied with your finish, part off or cut the bowl from the glueblock. Sand and finish the bottom of the foot by hand. ■

Jim Rodgers is president of the Segmented Woodturners, a virtual AAW chapter (segmentedwoodturners.org). He also offers information on the basics of segmented turning at his own website, jlrogers.com, and can be reached at jlrogers@aol.com.

Turn and finish



7 A completed bowl blank built from four segment rings and a solid layer for the bowl's foot.



8 The outside profile turned. Leave the foot material thick for added stability during turning near the rim.



9 Sand your segmented bowl, apply finish, and part or cut it off the lathe.

TURN A MAGNETIC PENCIL HOLDER

Art Scott

A turned magnetic pencil holder is a great way to keep pens, pencils, and scissors within easy reach in your shop, office, or kitchen. The design can be as simple or as elaborate as you like. I like to turn mine to mimic more familiar objects such as an apple, mushroom, or pear. The idea is simple: after you have turned your desired shape and hollowed a cup, cut away a portion of one side on the bandsaw, leaving a flattened area into which magnets can be embedded. This flat surface will sit flush against a metal surface.

Wood selection

If you choose to turn a pencil holder that resembles a natural object, you may be able to choose a wood that lends itself well in color and grain. For instance, padauk, bubinga, and African mahogany will mimic, to varying degrees, the characteristics of a Red Delicious apple. To my eye, a mushroom looks better if the wood is spalted; an apple is improved by a wood whose grain mimics the striations and color in the skin; and a pear looks natural in a yellow-colored variety like yellowheart or Osage orange. Of course, the color of wood within a given species may vary widely, some woods will darken with age, and the type of wood is less critical when turning a box, vase, or other shape.

The minimum diameter of a blank that holds six pens, pencils,

and a typical pair of office scissors is about 3" (8cm). For a box or vase-like container, this dimension is fine, but for an apple or pear, a larger blank size is better, as it allows for greater variation in shapes and features. The length of your blank is determined by the proportions and special design features of your pencil holder. The finished holders featured here are less than 4" (10cm) long. For the apple design, I left the blank an extra $\frac{3}{8}$ " (9.5mm) long to allow for carving the natural lobe shapes on the bottom (*as shown in Photo 16*).

Mounting your blank

I like to use a glueblock to hold the workpiece on the lathe. You are able to use every last bit of a blank when using a glueblock, as you do not need to sacrifice wood to a tenon that is held in a scroll chuck. Thick CA (cyanoacrylate) glue provides an ample bond for turning small items.

The glueblock I use is a 5" (13cm) square of Spanish cedar, 3" thick, attached to a 3" faceplate. I rounded the corners of the glueblock to reduce their reach toward my knuckles but kept a portion of each of the four sides flat (*Photo 1*). Keeping flats on the glueblock provides a solid holding method for cutting the flat on the bandsaw, preparing holes to accept the magnets, and sanding away blade marks from the bandsaw. It would be difficult to hold the



Magnetic pencil holders can be affixed to a file cabinet, fridge, lathe, or any metal object. I enjoy making them in shapes that mimic natural forms, such as this apple made from padauk.

workpiece steady without it being attached to a glueblock with these flats. But most importantly, the flat sides assist in orienting the grain of your workpiece so you can choose which side of your blank will face front in use and which side will be sliced off.

Before gluing your workpiece to the glueblock, mount it between centers and turn it round. Rounding

Mount your blank on a glueblock



1 A glueblock with flat sides helps in holding the workpiece steady during later operations, such as cutting it on the bandsaw and drilling holes for the magnets.



2 If the width of your blank is very close to the final measurement, only true up the end of the blank that will attach to the glueblock.



3 With the lathe running slowly, draw concentric circles on the face of the glueblock at $\frac{1}{8}$ " (3mm) intervals using different colored pencils. The close proximity of the lines and the different colors will greatly aid in affixing the blank accurately.



4 Place the faceplate/glueblock on a flat surface and test-fit the blank to see which ring you will use as a centering reference. If grain orientation is important to the turning, use one of the flats on the glueblock as a reference to align your chosen grain on your workpiece. Glue the workpiece to the glueblock.

only the end of your blank that will be attached to the glueblock will minimize the amount of lost material during the truing process, as you won't have to true it again after gluing it to the glueblock (*Photo 2*).

Select the side of your workpiece that you want to face forward and position it in line with one of the flat sides of your glueblock. There will be times when a clear choice of the best side is not readily evident. You can reconfirm this choice after the turning is complete and just before slicing off a flat on the bandsaw.

A helpful tip for centering a workpiece on a glueblock is to draw concentric circles over the very slightly concave face of the glueblock (*Photo 3*). Test-fit the position of your workpiece before applying glue and mark the appropriate alignment ring in several places for quick and accurate repositioning (*Photo 4*). Place a bead of thick CA glue around the outer edge of the blank, seat it with firm pressure, and spray accelerator. Applying glue to only the outer edges of the rounded blank means the center will be free of glue, making it easier to remove the remnants of the

blank and ready the glueblock for the next blank.

Turn the outside shape

With your workpiece mounted firmly on a glueblock, begin to turn the outside shape of your pencil holder, first by truing it round (*Photo 5*). Shape the outside of your pencil holder according to the design you have chosen. With the apple shape, I used a golden ratio gauge to help me decide where to place the greatest width and then refined the shape by comparing my turning to an actual apple (*Photos 6, 7*). ►

Shape the outside



5 I use a large skew, which has a slightly curved cutting edge, to bring the blank from square to round.



6 A golden ratio gauge can be helpful in determining proportions. For my apple shape, there was no substitute for the real thing as a model.



7

Hollow the cup



Hollow the cup with a Forstner bit. Select the bit diameter based on the size of your workpiece, considering you will later cut off a flat from its side.

Hollowing the cup

Consider the depth and width of the hollowed part, or cup of your pencil holder. If the cup depth is less than 2½" (6cm), scissors can be easily bumped out. When using a 4" long blank, the depth cannot be much deeper than 3¼" (8cm) and still have sufficient thickness for the floor of the cup. I have found the ideal cup width to hold a pair of scissors and a half dozen pens and pencils is 1½" (4cm), though the width you use may vary depending on your chosen shape. The pear, for example, with its narrower portion at the top, will result in a narrower cup width, which is fine but will hold fewer items.

If the wall thickness is much less than ¾" (19mm), the flattened area created by the bandsaw cut will be very narrow, offering little stability and minimal room for the magnets. The thicker you leave the wall, the wider your seating surface will be. The magnets I used are ⅛" (mm) thick, and allowance must also be made for the point of the Forstner bit. Taking all of this into consideration, the minimum thickness of the remaining wall after the slice is made is ⅜".

Place a Jacobs chuck in the tailstock and insert the appropriately sized Forstner bit. Use slow speed during drilling to avoid heat build-up, which can burn the wood and dull the bit. Proceed slowly, advancing only a few revolutions at a time and backing out of the cup completely to clear the chips and allow the bit and wood to cool (Photo 8).

After you have drilled the cup, slightly round the entry of the hole and use a scraper to smooth the inner wall. Sand the entire piece while it is still on the lathe. If you don't like the unfinished look left by the Forstner bit in the bottom of the cup, one solution is to use a thin piece of closed-cell foam (available from hobby stores) inserted to cover the bottom.

Another option is to turn the bottom smooth using a scraper.

Cut a flat on the bandsaw

When you have completed the shaping and hollowing of your pencil holder, remove the glueblock (with the workpiece still attached) from the lathe. Determine the side of your pencil holder you want to face out and mark the opposite side for cutting on the bandsaw. Use calipers to mark the ⅜" minimum wall thickness that will remain after you cut the flat (Photo 9).

At the bandsaw, present the glueblock's flat sides against fence and table. Adjust the fence so that the blade aligns with your mark and make the cut. A little sanding will remove any marks left by the bandsaw blade (Photos 10–12).

Add the magnets

I routinely use three ½"- (13mm-) diameter rare-earth magnets. If I feel the turning is a little heavier than normal or if it has an extra-large cup, I'll add one or two extra magnets. If you use three magnets, you minimize the tendency of the pencil holder to rotate during use.

Lay out and mark the spots where the point of the Forstner bit will be placed. In the widest area of the flat you have cut, align the two magnets

Cut the flat



Indicate your desired wall thickness.



The flat-sided glueblock comes in handy now for stable handling at the bandsaw.



Adjust the bandsaw fence so the blade is lined up with your mark and cut the flat.



I use a sander to remove the blade marks on the flat left by the bandsaw.

so they are $\frac{3}{8}$ " from the sides. For the bottom magnet, I usually center it $\frac{3}{8}$ " up from the bottom.

Mark the magnet thickness (in this case, $\frac{1}{8}$ ") on the side of the drill bit as a depth gauge. Using either a drill press or handheld drill, create holes for recessing the magnets into the flat. Confirm the depth by dry-fitting a magnet in the hole. The goal is for the magnet to be flush with the wood's surface. I use a towel under the turning to prevent marring the front of the pencil holder while preparing the magnet seats. Glue in the magnets (*Photos 13, 14*).

Final steps

Since the workpiece is still attached to the glueblock, re-mount it on the lathe for final shaping near the bottom. Then part it off (*Photo 15*).

Carve any features into the pencil holder, such as I did with the bottom of my apple shape (*Photo 16*). The lobes on the bottom of the apple add a subtle bit of realism to the finished turning, even though you will see only a small portion of them when the holder is in use. I did this final shaping with a rotary carving tool.

Apply the finish of your choice and you are ready to begin using your magnetic pencil holder. ■

Add magnets



13

Drill holes in the flat to recess rare-earth magnets.



14

Part off and carve details



15

Take the turning back to the lathe and finalize its shape near the bottom, then part off with a thin parting tool. Since you applied glue to only the outside edge of the pencil holder's bottom, you will not have to cut all the way to the center to part off the piece.



16

Carve any final details on your pencil holder. Shown here, the bottom of my apple shape.



Magnetic pencil holders in a variety of woods and shapes, from left: a vase of unknown wood, a simple box of Burmese rosewood, a pear of Osage orange, and a mushroom of spalted pecan.

Art Scott enjoys enhancing his creations with a power carver and has begun exploring pyrography. He is a member of the Bayou Woodturners, which meets in Ponchatoula, Louisiana. Art can be reached at folsomart@bellsouth.net.



HORN WITH A *French Twist*

Murray Stein

Murray Stein's all-wood three-valve French horn actually can be played. If stretched out straight, the yellow pine tubing would be 12' (3.7m) long.

Photo: Richard Bender

I am not a musician, but my fascination with musical instruments led me to make a playable French horn whose tubing has wooden walls $\frac{1}{16}$ " (1.5mm) thick. I like challenges and have made five other music-themed sculptures. This French horn was a big challenge because it has so much plumbing, and it also required working valves. To add to the challenge, and also to accommodate my nutty whim as a sculptor, I wanted to turn the wood so thin it would be translucent.

Since a real French horn is made of metal, mostly brass, by using pine I have created a new type of woodwind. A project like this probably has never been undertaken before, and few readers are likely to try to duplicate my sculpture. But the key techniques—for making and assembling hollow curves, tubes, and circular arcs with thin

walls—could be useful to other artists and may lead to new creative work.

The exponential bell

As a retired engineer, I began by making a sizing diagram for turning the simplest part, the bell (*Photo 1*). It transfers acoustical energy from the instrument to the room. For efficiency, the transition needs to be smooth and gradual, and an exponential curve does this. The contour of the bell is not critical; I drew the shape by eyeballing a photo of a real French horn. Though initially quite curved, the shape soon eases into an almost straight line, so I only needed to diagram its first two inches.

I chose yellow pine gleaned from my builder's scrap pile and never intended for a work of art. The pine has a warm glow when turned thin and, when

finished with polyurethane, gleams golden-yellow. However, it is very uneven in hardness from one piece to the next and also from one growth ring to the next, so to avoid tearout one needs extremely sharp and freshly honed tools, and I felt more at ease with scrapers rather than with gouges (*Photo 4*). Softwood like this cannot be shaped by sanding, as the grit just digs into the pulpy early-wood, so after turning I just touched it up with 220- and 400-grit abrasive.

The photo panel "Making the bell" shows the steps, minus routine squaring and planing, for turning the eight-segment output end of the horn. After this straight section, the horn begins to curve while its diameter tapers down to $\frac{1}{2}$ " (13mm) to meet the inner curved tubing. I decided to assemble and turn this section as a straight taper (*Photo 6*), then to create

an angle on one end of each segment to make the curve.

This take-apart-and-reassemble strategy meant I could not glue the segments together before turning. While one could glue it up with paper separators, I chose to bore $\frac{3}{8}$ " (9.5mm) holes through each segment and build a stack on a hollow, threaded steel rod such as those used in table lamps. The $\frac{3}{8}$ " nuts and washers provided great compression and gave me a rigid assembly for the lathe. The photo panel "The tapered curve" shows the sequence.

The tricky part was determining the angle between the turned segments, though absolute precision was not necessary. I drew an 11½" (29cm-) diameter circle and marked off a few chords of approximately 1" (25mm). Then I set a sliding bevel on

How horns work

An experiment with a drinking straw demonstrates how a horn transfers acoustical energy. Cut a vee in one end, compress with lips, and blow. This is a simple double-reed instrument. The sound will be tinny. The small amount of acoustical energy inside the straw needs to be matched to a larger volume, the room. Place a small paper cone or funnel on the output end of the straw and blow again. The sound will be astonishingly loud. The French horn's exponential curve has the same effect but transfers the acoustical energy more efficiently.

the drawing to replicate the included angle, set the guide on my belt sander accordingly, and proceeded to bevel one end of each cylinder. Of course I tested this with scraps before sanding my good pieces (*Photos 8, 9*).

Before gluing the segments in pairs, I rebored each with progressively sized Forstner bits to approximate the internal taper. In gluing, it is important to line up the segments

so they will be tangent on the inside of the curve, leaving a tiny step on the outside where it can be sanded smooth easily. This occurs because the sanded ends are oval with the long axis slightly larger than the unsanded matching surface. The glue-ups can be clamped with rubber bands, adjusting tension to be greater on the outside of the arc so as not to pull the pieces inward. ►

Making the bell



1 A glued pair of 2" x 6" shorts makes the 11" (28cm) mouth of the bell. The sizing diagram shows how the exponential curve transitions smoothly to an almost-straight line.



2 Seven small 2" x 6" rounds form the bell, glued with the grain at right angles from one to the next. With the small end mounted in a scroll chuck, the outside could be turned.



3 The bell is ready for hollowing. For stability, the live center should be kept in place as long as possible.



4 The yellow pine is uneven in hardness, so scraping with a newly honed gouge tears out less than cutting with a gouge.



5 A Forstner bit makes short work of waste wood in the narrow section.

The tapered curve



Progressively smaller disks, each center-bored $\frac{3}{8}$ " (9.5mm), make the tapered section of the horn, here assembled on a hollow threaded rod for turning.



Careful turning ensures smooth continuity of the exponential curve as it tapers down to meet the $\frac{1}{2}$ " (13mm) tubing in the middle of the instrument.



The segments are about an inch long, and sanding an angle on one end of each would allow them to follow a curve.



I drew an $11\frac{1}{2}$ "- (29cm-) diameter circle to map out the eleven segments. A sliding bevel was used to replicate and transfer the angle from the drawing to the belt sander.

Curved tubing

My first thought when I saw a French Horn as a child was, how did someone bend that maze of tubing? While the horn could be made as one straight tube, it would be about 12' (3.7m) long and be as unwieldy as an alpenhorn. So how does a woodturner bend all that tubing? Use wood from a rubber tree—that is what I like to tell visitors at an exhibition. The next question is, how does one hollow out a curved piece of wood? You do have to be a bit flexible.

A turner develops many skills on the journey through the path of wood chips. One of my significant teachers was a man I never met, the genius Albert Einstein, who said, "Imagination is more important than knowledge." What a simple premise, but so powerful.

So I began by imagining how I could create a hollow, thin-walled toroid. I thought, "Thin hollow bagels" because that is what toroids are called in my family, and I saw an instant solution in the image of a bagel sliced in half for the toaster.

I needed to define what size toroids I would need. The tubing is a uniform $\frac{1}{2}$ " in diameter, with wall thickness of $\frac{1}{16}$ ". I drew the horn tubing full-size and used that to take off dimensions and make templates. The drawings allowed me to define the largest toroid at $11\frac{1}{2}$ " diameter, and all the others down to the smallest at $1\frac{1}{4}$ " (32mm) diameter.

I turned the toroids from disks of pine mounted on a faceplate, as shown in the photo series "Turning curved tubing." If you tend to be lazy like me, you soon find yourself turning multiple toroids from the remaining waste material on an already-used disk. Each toroid will be sliced in half with a thin parting tool. To compensate for the waste lost by parting, the toroids can be turned extra thick. I made

the parting tool by grinding down an old hacksaw blade; the steel is hard and holds an edge very well. Sanding the glue surfaces brought each half-toroid down to a perfect $\frac{1}{2}$ " diameter.

With half of the toroid still on the chuck, I undercut the inner and outer radii to leave a thin rib still securing it. Then I used another homemade tool, ground down from a file to make a $\frac{1}{8}$ " (3mm) semi-round scraper, to hollow out the half-toroid (*Photo 12*). Backlighting the piece helped me see when the wall thickness was a uniform $\frac{1}{16}$ ". Finally I cut away the rib, also with the parting tool, to free the half-toroid. A bit of hand sanding cleaned it up for the next steps.

I made the base piece, still mounted on the faceplate, into a chuck for dealing with the other half of the toroid. I cleaned up the severed rib and formed a concave surface to fit the shape of the half-toroid. Using the wood immediately adjacent, I mounted several cleats, held in place with screws, and tightened them over the unhollowed half-toroid (*Photo 14, 15*). The cleats must not protrude into the space where hollowing is to take place, so they just barely grip the $\frac{1}{16}$ " wall-to-be.

Each time I made a matching pair of half-toroids, I would sand the faces lightly and glue them together with the grain carefully aligned.

I made the straight tubing by drilling lengths of pine with a long $\frac{3}{8}$ " bit, then mounted them on the lathe to be turned down to $\frac{1}{2}$ " outside diameter. I inserted a length of the threaded steel tubing so pressure from the tailstock would not spread and crack the thin wood. After light sanding, I had a collection of skinny toroids and tubes for sawing to length and assembly. All pieces were carefully marked according to my drawings, then cut to size on the bandsaw. The pine tubing is fragile,

Turning curved tubing



10

Turn a faceplate-mounted block of pine to the outside radius of the torus, cut a slot to define the inside radius, then excavate the center waste.



11

Round the squared toroid and sand it smooth, leaving a web of wood connecting it to the base disk.



12

After dividing, the half-toroid can be hollowed using a small homemade semi-round scraping tool and is ready to be parted off.



13

A small toroid can be turned in the waste of the large one. Turn them a smidgen thick to allow for parting.



14

The waste disk is the right size to become a chuck for the opposing, unhollowed half-toroid. Small cleats grip the flipped workpiece on its $\frac{1}{16}$ " wall-to-be, where they won't interfere with hollowing. The two hollowed halves are then glued back together to make a hollow curved tube.



15

but a wrap with blue masking tape minimizes the risk of shattering on the bandsaw.

Gluing up

To glue all the pieces into a cohesive structure with relatively strong joints, I needed internal splints. I decided to use $\frac{1}{2}$ " lengths of thin plastic tubing from a hobby store, nominally $\frac{3}{8}$ " in outside diameter. I coated half the splint with glue, inserted it into a section of tubing and waited for it to set before gluing the other half and uniting the sections. A piece of the white splint can be seen in *Photo 17*. I matched the pieces of tubing with the respective parts on my drawing, but did not follow a predetermined assembly sequence. ►

Gluing up



16

Delicate sections of tubing can be held in place with finishing nails and clamped with rubber bands while the glue dries.



17

A wooden block stands in for the valve assembly as the horn comes together. Short lengths of white plastic tubing act as splints that strengthen the joints between sections.

I used finishing nails to hold the pieces in place on a block of pine with rubber bands for clamping pressure. When I had to connect the bell end of the tubing with the mouthpiece end, I used a dummy block $4\frac{3}{4}$ " (12cm) long to represent the valve assembly. Surprisingly, the pine tubing was wobbly like a slinky, so I made replicas of the brackets and studs used in real horns to stabilize the loops. I did not glue the mouthpiece until the very end, to facilitate progressive testing.

Valve assembly

A horn without valves has a fixed geometry. Its length and taper generate a fundamental sound or pitch. A slightly longer horn would produce a slightly lower pitch, so a combination of eight different fixed-length horns could generate a whole octave, though it would be too unwieldy to play. But a set of three valves can create eight combinations of length ($2^3 = 8$) by channeling the main air passage into different sections of tubing. Pressing a valve or combination of valves changes the length of the horn and consequently its pitch.

To simplify fabrication, I designed my own three-valve mechanism, as shown in the photo sequence "Valve assembly." The valves in a real horn are much more complex, and a double horn actually has a fourth valve (two octaves, $2^4 = 16$).

The valves were turned to just under $\frac{7}{8}$ " diameter to fit holes bored with a $\frac{7}{8}$ " Forstner bit. I used hard maple to minimize the risk of sticking and adjusted the pistons so they would rotate smoothly through 90° to the closed position when a key is pressed. A maple linkage operates the mechanism, which returns to the open position via a simple cantilever spring made from a coping saw blade. Even so, humidity affects proper operation and next time I would use rosewood because it is more impervious to moisture.

The eight remaining holes in the block are all $\frac{3}{8}$ " diameter, and each hole has a shoulder $\frac{1}{2}$ " in diameter, with a depth of $\frac{1}{16}$ ". This allows for firm gluing of the three tunable tubes, as well as the two main ducts (Photo 18). Three tie rods connect each lever and piston so that pressing a key translates into 90° of vertical rotation.

Postlude

The horn is played by putting one's lips against the mouthpiece and buzzing them, in effect, a raspberry. The mouthpiece and bell translate the air vibrations into a mellow sound. The first thing I played on the horn was a few measures of the allegretto from Franck's "Symphony in D Minor." It was written for an English horn, but I tried it anyway. The second and last piece was the first few notes from "When the Saints Come Marching In." Why so little music? Saliva and wood do not like to coexist; a real horn has a spit valve to get rid of saliva. My instrument, made for display, doesn't really need one. ■

Photos by the author except as noted.

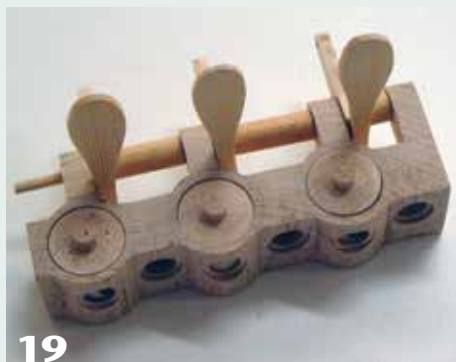
Murray Stein, a World War II veteran and computer pioneer, is a retired professor of electronics engineering now living in north Texas. His numerous loves include nature, animals, woodturning and sculpting, classical music, archeological research, and his wife Carol (also a woodturner), though not in that order. Murray belongs to the Dallas Area Woodturners. His turnings have been exhibited in five different museums, including the Smithsonian.

Valve assembly



18

Three different loops of tubing connect with the valve block. Each loop is assembled from short lengths of straight and toroidal tubing.



19

The complex valve block has dozens of smoothly working parts. Pressing a valve key rotates its corresponding mechanism via maple linkages.



20

The maple valves rotate to redirect airflow through the block assembly and tubing. Three valves enable eight possible combinations of air passages, a full octave.



A simple, shopmade seating tool will protect the Morse taper of your spur drive.

SPUR DRIVE SEATING TOOL

Jim Duxbury

A common way to mount a bowl blank on the lathe for shaping its outside profile and forming a tenon is between centers. This entails “seating,” or pounding a spur drive into the wood prior to mounting on the lathe to ensure a positive, non-slipping grip. Many turners use a large hammer or mallet to do the job. Whether the wood is freshly cut or kiln dried, pounding on the end of a drive center can quickly mushroom over the end of a Morse taper. Using a drive with a damaged Morse taper in the headstock spindle of your lathe can wear and damage the spindle drive socket. And if the drive’s spurs are not driven deep enough into the wood, the spurs will spin in the wood, tearing a hole, plugging the flutes, and becoming totally useless.

I devised a simple tool to seat my drive center firmly in the wood without damaging the Morse taper of the drive.

How it’s made

Only the head of the spur drive has to be seated in the wood, and since the head has a larger diameter than the Morse taper shaft, a ¾" - (19mm-) diameter by 3" - (8cm-) long steel pipe nipple held with a pair of locking pliers can be an economical solution. A convenient improvement is to add a handle made from a ¾" tee pipe fitting and a turned wooden grip. Here is how I made mine:

1. Put the tee in a vise and tighten the nipple into it (*Photo 1*).
2. Rotate the tee in the vise and cut the nipple off flush with the tee; then file the cut surface smooth (*Photo 2*). This

will make a good, durable surface that you will strike with a hammer during use.

3. Screw the remaining full threads on the opposite end of the pipe nipple into the opposite opening of the tee.
4. Mount a straight-grained piece of hardwood about 1¼" (3cm) square by 7" (18cm) long between centers on the lathe and turn it round. Form a tenon on one end ¾" long and the same diameter as the outside threads on the pipe nipple.
5. Shape the handle and decorate with burn lines if desired. Sand smooth, finish with wax, and part it off (*Photo 3*).
6. Clamp the wooden handle in a vise and thread the tee fitting onto the handle’s tenon with the aid of a pipe wrench (*Photo 4*). When the tee is about halfway on, remove it and wax down the new threads with candle wax. Then thread the tee on all the way.

In use

Before using the tool to seat a spur drive, remove an area of bark from the blank if bark remains on the wood. Position the spur drive where you want it. Feed the threaded nipple portion of the tool over the Morse Taper. Holding the tool by the wooden handle, strike the upper part of the tee fitting to drive the spur into the wood, as shown in the *opening image*. You will be amazed how well this simple tool works. ■

Jim Duxbury, a woodturner and inventor, prides himself on creating wooden items that function with precision and stimulate creativity, while retaining the qualities and beauty of the wood grain. For more, visit duxterity.com/ec.



1 Thread a steel pipe nipple into a tee fitting.



2 Cut the nipple off flush with the tee and file the surface smooth. This will become your striking surface.



3 Turn a handle.



4 After threading the uncut end of the pipe nipple into the opposite end of the tee fitting, thread the tee onto the wooden handle.

TAMING A LARGE SLAB WITH A ROUTER



To make this *Medusa Shield*, I selected big leaf maple burl for the main body. I used Honduran mahogany for both the outermost segmented rim and the inside border around an ebony centerpiece, which I inlayed with brass, mother of pearl, and abalone.



Vince Wilson

As a unique challenge, I decided to design and turn my own version of a large ceremonial Greek shield. I started with a burl slab 3" (8cm) thick and 31" (79cm) in diameter. The project required working to pre-determined specifications and creating an accurate, glueable surface at the outside diameter to get a clean glue line between the body and a segmented rim. Needless to say, large burl slabs are expensive, so to reduce cost I purchased a slab just large enough for the project, leaving little tolerance for error.

To maximize my chances of success, I decided to use a router to transform the rough burl slab into a large stepped disc. The "steps"

would provide accurate reference surfaces from which I could hand-turn the final curves of the shield (*Figure 1*).

The router jig

I used plywood to construct the jigs needed to mount the router on the lathe—in essence, transforming the lathe into a large mill. Rather than building the jigs prior to mounting the slab on the lathe, I found it easier to visualize how the jigs were going to work by mounting the slab first. Fortunately, the banjo on my lathe comes with T-slots machined into its sides, which allowed me to use hex bolts to secure the jig's base to the banjo for easy positioning (*Photo 1*).

If you were to try a project like this and your banjo does not have T-slots, then it would be necessary to modify the base jig so it could be mounted directly onto the bedways, as suggested in *Figure 2*. This modification would simply involve doubling up the original bottom rib and relocating it at the jig's base. The jig could then be secured in position by tightening a bolt that runs through the bottom rib and a hardwood block mounted under the bedways.

The router itself is mounted onto a second part of the jig that slides along a T-track on top of the base jig (*Photo 2*). This configuration allowed me to do all the machining at the front of the slab. I set the height of

the router-holding jig so that the router bit would cut at the center of the lathe's spindle. To ensure the router would slide and cut perpendicular to the bedways, I positioned a spacer block between the end of the lathe and the banjo.

Milling the "steps"

On a piece this heavy, I would normally bring the tailstock up for support. However, in this instance I was using the bed extension and movable headstock to allow me to approach the turning from the end of the lathe. Using the tailstock would have interfered with this access—not to mention with routing operations. Therefore, in the absence of using a tailstock, I relied on a heavy-duty faceplate to secure the slab firmly to the lathe. Plus, the actual turning would occur at very low speeds.

My original intent was to run the lathe at the lowest possible speed while using the router to machine the slab. But I found that even at the lathe's slowest speed there was not enough time for the router bit to

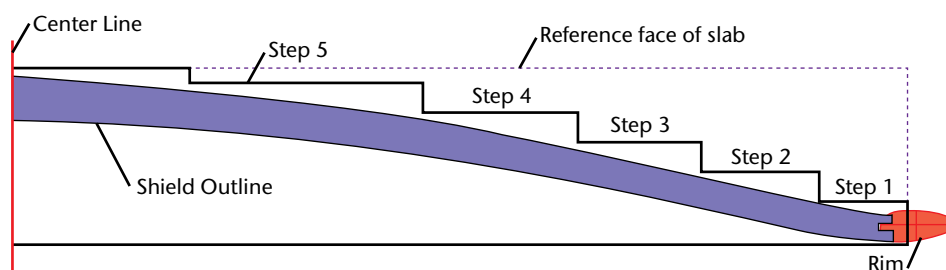


Figure 1. Prior to hand turning, the large slab was roughed into "steps" using a router. I started with the outermost, or largest-diameter, step and worked toward the center.

remove the wood. Instead, it was necessary to do all the milling by rotating the slab by hand.

I first milled the front to create a completely flat surface, which would act as a reference point for subsequent milling. Each step was milled by routing a maximum depth of $\frac{1}{8}$ " (3mm) per pass. To cut the largest, outermost step, I cut a horizontal path from the outer rim to the outside diameter (OD) of the step, then rotated the slab by hand 360 degrees to cut a full circle. I then moved the router back toward the outer rim by a little less than the full

width of the router bit and again rotated the slab 360 degrees. I continued in this manner until I reached the outer edge of the slab and the first step was milled. I used the same process to mill all of the other steps, working from the outside toward the center of the shield.

For all the milling operations, I used a $\frac{1}{2}$ "- (13mm-) shank, straight-cutting, double-fluted router bit with a 1"- (25mm-) diameter cutter. To reduce milling time, a larger-diameter bit could be used if your router is powerful enough.

True the outer rim

One final jig was used to mill the outer rim to final diameter at exactly 90 degrees to the step faces. This jig extended the reach of the base jig and provided a T-track that ran parallel to the bedways, ►

Mounting the router



1 Mounting the base jig onto my lathe's banjo provided a solid platform and a convenient way to move and lock the jig in place.



2 The router is mounted on an upper jig with a hardwood runner that slides along a T-track recessed into the top of the base jig.

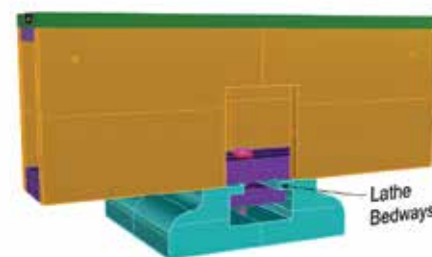


Figure 2. An alternate way to secure the base jig without using the banjo: bolt it directly to a movable block under the bedways.

allowing for cutting on the outer rim (Figure 3).

I used a parting tool to cut a groove, or mortise, that would accept tenons formed on each of the sixteen rim segments (Photo 3). After the rim segments were glued in place, I trued the rim using the router setup (Photo 4).

Turning the shield to final shape

Now came the fun part—hand turning this large shield to its final shape. At

this point, the slab was more or less balanced, so I could run the lathe at a higher speed than if I were trying to true up an unbalanced slab. With the router and jigs removed, I proceeded to shape the shield's profile with a large bowl gouge. It would have been possible to use the corners of each step to guide the cutting, but I used pre-made templates of the project profile referenced off the flat surfaces of the steps to accurately match my intended design.

Prior to final sanding, I had to prepare the center for reverse chucking so I could

later turn the back. My design required a mahogany rim around the center inlay piece, so I turned a flat recess into which I glued a piece of mahogany. I then turned a smaller recess for a second faceplate and detailed the border to its final shape. This second recess served the dual purposes of providing an accurate reference for the faceplate (which I felt would be more secure than using a four-jaw chuck) and forming a mortise for the center inlay piece (Photo 5).

Once the front was completed and the smaller faceplate was screwed in at the center recess, I flipped and remounted the shield so I could turn the back side. The only router use required at the back was to machine the surface absolutely flat, as was initially done for the front. The back could be turned freehand, without using templates, but as with the front, I chose to use templates to guide my work. I had to be careful not to remove too much material and expose the faceplate screws. Fortunately, everything worked out according to plan (Photo 6).

After the back was sanded, all that remained was to remove the faceplate, glue in the center inlay piece, and apply a finish. Using the router to create reference surfaces allowed me to maintain the level of accuracy required to turn my design concept into reality. Even if you do not choose to create a shield of this design, hopefully the router setup I have described will spark some creative ideas for your turning. ■

Vince Wilson's background in industrial arts is the basis for his current multimedia approach to craft. While he produces projects ranging from furniture to bottle stoppers using wood, metal, and glass, turning is his primary area of interest. Vince also teaches woodworking and turning at the Red Rocks Community College Fine Woodworking program in Colorado and runs his own woodworking/craft business. For more, visit facebook.com/glacialstudio.

Addressing the rim



To add a decorative rim of a different wood species, I cut a groove, or mortise, into the outside diameter of the shield.



A supplementary jig was attached to the base jig to allow for cutting the outermost rim, shown here after the decorative, segmented rim was glued on.

Turning the back



At the center of the shield's front face, I added a mahogany rim piece, which would later highlight the inlaid accent piece I made (see opening image inset). But for now, the rim served as a guide for affixing a faceplate, which was used for remounting the shield so I could turn the back.



Here the shield is shown remounted and still in progress for turning the back. My main concern during this step was not to cut too deeply and thereby expose the faceplate screws.

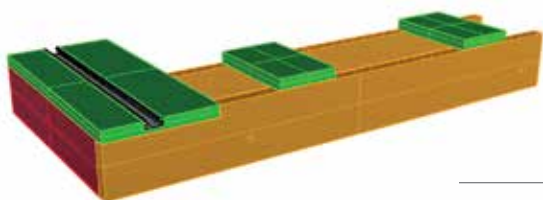


Figure 3. The jig used for truing the outer rim had T-track running parallel to the lathe's bedways. Note: This part of the jig is shown in use in Photo 4.

I enjoy making spinning tops and look for ways to decorate them without interfering with their spin quality. Here is a simple technique I recently found while searching for more intensely colored felt-tip pens. Similar to children's spin art, this method involves adding color to a spinning canvas—your workpiece—making use of centrifugal force to spread the paint.

Turn and prepare the top

Turn a top to your design. It is best to use a straight-grained, defect-free, dense, light-colored wood, such as maple, birch, pear, or madrone. Leave enough holding wood at the handle end to resist pressure from the splash pen later. If your cutting tool is sharp and producing a good surface, you may be able to sand with only 500-grit abrasive. I like to polish the wood further with high-grit, diamond-coated, pen-buffing pads and then burnish it with wood shavings and buff with a paper towel. Slow the lathe and apply a shellac-type sealer/finish, which acts as a base on which to add color.

Apply color

When the sealer has dried, apply a series of colors using felt-tip pens (I use Permapaque® brand). Run the lathe slowly, as before, and touch the pen to the spinning wood to create circular lines (*Photo 1*). You can also add spiral lines by pulling the pen across the turning surface at a consistent pace. You can do this with a variety of colors prior to adding the “splash” effect.

To achieve the spin-art look, where the color is spread onto the wood by the forces of the spinning wood, use a high-flow acrylic paint pen or marker (some brands include Molotow, Montana, and Golden). I have used 15mm broad-tip markers in black and white. They are also available in yellow, red, blue, green, and pink, as well as with narrower tips. The tips take a beating from this application,

SPLASH TOPS

Phil Cottell

but they are reversible and exchangeable. The markers can be refilled.

When the high-flow paint is applied to a spinning workpiece, it readily sprays outward from centrifugal force, creating the radiating lines, or “splash” effect. Ensure the paint is flowing well by plunging the tip of the acrylic pen/marker against a paper towel; keep the tip pointed downward. With the lathe speed at about 3000 rpm, press the tip of the marker onto the spinning top, near its center. Stop the lathe and examine the result (*Photos 2, 3*). Touch up at slow speed with felt-tip pens if needed.

Allow the paint to dry (this does not take long), then apply a compatible wax, such as the microcrystalline variety made by Renaissance, buff, and part off. Hand-sand the tip of the handle, apply wax, and *voila!* The combinations of top design, color, and splash patterns are limitless.

Other uses

A bit of useable wood will remain on the chuck after parting off the top. This can be used to make a splash button, pendant, brooch, or scarf keeper using the same technique and without having to do a separate glue-up. ■

Phil Cottell is a founding member of the Island Woodturners Guild, an AAW chapter. He turned his first bowl in 1998, after a career in forestry research and teaching. He studied forestry at the University of British Columbia and at Yale and is a life member of the Association of BC Forest Professionals. Phil lives near Victoria, BC, with his wife of 50 years, Donna, and their found dog Flower. He can be reached at plcottell41@gmail.com.



1 Add circular lines with felt-tip pens.



2 Use high-flow paint in a pen or marker to add the “splash” effect.



3 Centrifugal force will “throw” the paint outward from its point of application.



This method also works well on other small turnings, such as pendants, buttons, or Christmas ornaments.

- ADD ENAMELED ACCENTS - to Your Turnings



*White Ash Bowl with
Enamelled Tiles, 2013, White
ash, enameled tiles,
5¾" × 8½" (15cm × 22cm)*

Wes Jones

I am always looking for something new to make my pieces different and interesting. Over the years, I have used cut art-glass pieces, metals, contrasting woods, rock nuggets, crushed minerals, beads, fossils, and shells to decorate bowls and hollow forms. Given the materials I have tried, using enameled pieces on my turned work was a logical next step. Enameling involves melting glass and fusing it onto a metal substrate. You can enamel on gold, silver, and copper. The usual method is to sift finely powdered glass onto the substrate and fire the blank in a temperature-controlled kiln, but that is not the only method of firing.

I have always wanted to add the brilliant colors you can get by enameling, but I did not have a kiln to melt and fuse the glass. Then I learned, through a weekend enameling course at John C. Campbell Folk School, that

it is possible to do the firing with a torch. Ah, ha!

I had so much fun at the enameling course that I later took a week-long course on the subject. I started out like the rest of the class, making simple jewelry pieces, learning the techniques, and building my skill level. When I took the two courses, I arrived at class with a couple of bowls ready for the enameled tiles. The bowls had a ¾"- (19mm-) high recess cut around their periphery to receive the enameled tiles.

Cut and form the substrate

I use 24-gauge sheet copper (.021" thick) as the substrate because it is much cheaper than other metals. The underside of the tiles will never be seen, so there is no reason to use precious metals as a substrate in this case. For the first bowl I made with enameled tiles, I cut the copper

blanks ¾" × ¾" square. When you cut the recess, you can cut it flat from top to bottom, but it will obviously curve as it goes around the bowl. When I tried fitting the square blanks into the recess around an 8"- (20cm-) diameter bowl, I found the copper blanks needed to be formed into a slight curve to conform to the curve of the bowl. To make curved tiles, you will have to bend or form the copper blanks before you fuse the glass to them. If you try to form a completed tile, the glass will crack and break away from the substrate.

Twenty-four-gauge sheet copper is easy to bend, so you can shape the blanks with only finger pressure against a curved surface. I used a curved surface with a slightly smaller radius (tighter curve) than that of my bowl, so that with a little spring-back my formed blank would then closely match the curve of my recess.

Annealed or soft copper sheet will form more easily than hard or half-hard copper sheet.

For my second and all my subsequent bowls, I decreased the width of the copper pieces to avoid having to shape them. I made the blanks narrower so the flat pieces would more closely conform to the bowl's curved surface. I found that flat blanks $\frac{5}{8}$ " (16mm) wide work nicely around an 8"-diameter bowl.

To cut the copper pieces in my shop, I bought a small, inexpensive metal shear (*Photo 1*). It is not much more than a toy and will only cut 8"-wide material, but it works well for this application. If you do not have a shear, the copper sheet can be cut with tin snips. The strips need to be cut precisely with uniform width and clean edges. It may be possible for you to find someone with a shear to cut the blanks for you, or you can order them from a jewelry supplier.

Cut ten to fifteen percent more blanks than needed to allow for some failures and rejects during enameling. I suggest you also make a few slightly narrower blanks, so that you can completely fill the recess around the bowl without large gaps. Sometimes despite careful measuring and cutting, you might end up with a gap and having a few odd-sized tiles helps resolve this issue.

Bowl preparation

The procedure is to completely turn a bowl from a dry blank, complete with foot and recess. The bowl should be sanded, signed, and finished, except the recess should be unfinished.

The shape of the bowl or hollow form needs to be such that the recess can be cut on the largest diameter with the bottom surface of the recess parallel to the axis of rotation. This will ensure the circumference of the upper edge of the recess is approximately the same as

the circumference of the lower edge. To cut the recess, hold the bowl or hollow form in a chuck or between centers. The workpiece must run true and without wobble to get a recess with uniform depth. Use a parting tool to make a flat-bottomed recess. A small square scraper can be used to carefully flatten the bottom of the recess (*Photos 2, 3*). Make sure the scraper is angled down and take very light cuts. The recess can be pretty shallow, just deep enough to capture the copper blank. I like the enameled pieces to protrude slightly above the recess.

To determine the number of tiles required, measure the circumference of the recess with a flexible measuring tape and divide by the width of your tiles. For instance, if the circumference is 25" (64cm) and your tiles are $\frac{5}{8}$ " wide, you will need forty tiles. Dry-fit the copper blanks in the recess to ensure they have a slightly loose fit top to bottom.

Cleaning the copper blanks

The copper needs to be clean and free of oil. There are several methods you can use to clean it, but the simplest is to heat the sheet with a torch to burn off any oil and then scrub the surface with a fine abrasive pad, pumice powder, or scouring powder. If the copper sheet is bright, you may not



1 A small metal shear with an adjustable fence works well for cutting copper blanks.

need to do any cleaning, other than heating. Be careful to handle it by the edges to avoid leaving fingerprints on the surface.

Enameling procedure

If your copper blanks have a sharp edge from the cutting operation, make the surface with the sharp edges the underside and apply the enamel on top. Place the blanks on a clean sheet of white paper separated from each other on a worktable. To make it easier to pick up the blanks by the edges, you may want to lay out some sort of small spacers, such as small hexnuts, and place each blank on its own little pedestal.

Spray the blanks with Klyr-Fire™ adhesive solution (50% mixed with water). The Klyr-Fire™ acts as a bonding agent to help the melted glass adhere ►

Turn a recess



2 Use a parting tool to create a dado recess for the tiles. Clean up the recess with a small square scraper.

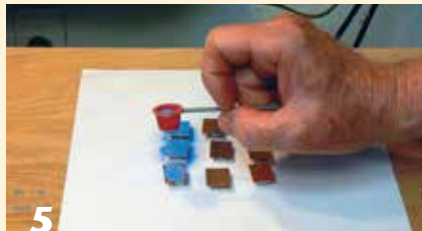


3

Prepare and fire the tiles



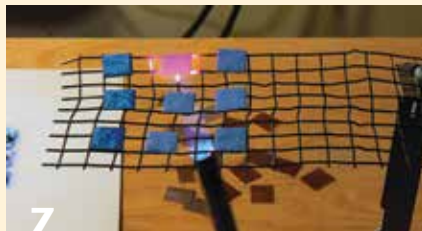
4 Spray the copper blanks with Klyr-Fire™ using a compressed-gas hand sprayer.



5 Use a small enamel sifter to cover the copper blanks with powdered enamel.



6 Place the tiles on the stainless-steel grid so the enamel can be fired.



7 After the tiles are dry, apply flame from a MAPP torch from under the tiles. Heat the enamel to a molten state so it will bond to the copper substrate.

to the substrate (*Photo 4*). I use a small compressed-gas hand sprayer to mix and apply the 50% Klyr-Fire™ solution.

Now it is time to put your enamel onto the prepared copper substrate. I use 80-mesh, ground-glass enamel from Thompson Enamel, Inc. (thompsonenamel.com). The mesh number is a measure of how finely ground the glass particles are. While the Klyr-Fire™ is still wet, use a small enamel sifter to put the enamel evenly onto each blank. The sifter has a twisted wire handle and by scraping your fingernail along the handle, the

vibration will cause the enamel to sift through the wire mesh (*Photo 5*).

Make sure to get good coverage on the corners and edges of the blank, but don't build it up too thickly or the glass may crack when it cools. It is better to do two thin layers of enamel in separate firings than to go too thick at once. For the first layer, the depth of the enamel should be approximately the same as the thickness of the copper blank. If the color of the copper can be seen shining through the enamel, then the coating is too thin. Only do one color of enamel at a time, so excess enamel that ends up on your white paper can be put back into your container and reused.

Note of caution: Eye and breathing protection should be used when working with powdered enamels.

Firing with a torch

A stainless-steel wire rack is used to hold the blanks for firing. I tried using a rack I made out of hardware cloth, but the flame (you need 1450° F to properly melt and fuse the type of enamel I am using)

caused the galvanized zinc on the wire to oxidize and swell up. Spend the money for a stainless-steel rack. The rack should be suspended above your work surface so you can apply heat to your tiles from underneath. Using a small spatula or your fingers, place the blanks onto the wire rack (*Photo 6*).

Let the blanks sit for a moment to let the water in the Klyr-Fire™ evaporate or carefully use the torch from the underside to apply a little heat. Once the blanks look dry, apply full heat from under the wire rack to one of the blanks (*Photo 7*). See sidebar, *Using a torch*. The glass will change color and begin to melt. As soon as the whole blank surface is molten, move on to the next blank. Overheating can burn the enamel. Underheating will create a rough, orange peel surface. Let the blanks cool in place on the rack. While they are cooling, another batch of blanks can be prepared for firing. A spatula or pair of metal tweezers can be used to remove the blanks while they are still warm.

To get the best-looking surface after the blanks have been fired, reapply the Klyr-Fire™ and another layer of enamel and then fire the blanks again. You will notice that the firing process has blackened the edges of each tile, providing a nice frame for the color. You may want to use a black marker or some black gesso in the recess of the bowl, so the wood will not show around the edges of the tiles.

Inlaying the tiles

When all the enameled tiles are finished, they should be dry-fitted in the bowl's recess all the way around the bowl (*Photo 8*). A large rubber band can be used to hold the tiles in place, as you are fitting them. This is where some of the narrower tiles may come in handy to completely fill the recess. A very small separation (.010" to .015") should be left between the tiles to allow for expansion and contraction of the bowl as it undergoes seasonal humidity changes. I learned how important this detail is some years ago. I had made a bowl with stone tiles glued into a recess. The bowl had been sitting in a gallery for some months, when



8 Dry-fit and then glue the enameled tiles on a black background, leaving a small space between them to allow for the natural expansion and contraction of the wood.

the gallery owner called to tell me the stone inserts were shattering and pieces were shooting across the room! The wood had contracted in the dry heat, putting huge stresses on the tiles. I had to take the bowl back and redo the inserts, leaving a little separation between them. You can't fight Mother Nature.

When you are happy with the tile placement, glue each one in place, again using the rubber band to hold them in position. A jewelry adhesive or thick CA (cyanoacrylate) glue works well. As you begin gluing the tiles around the bowl, mark the first tile so you will know when you have glued them all in place. Otherwise, it may be hard to tell the first tile you glued down as you work your way around the bowl. Use a sufficient amount of glue on the back of each tile to secure it, but try to minimize the glue squeeze-out between tiles. Glue squeeze-out is unsightly and glue in the gaps between the tiles negates the benefits of keeping the tiles slightly separated. The completed bowl is shown in *Photo 9*.

Thoughts on design

I have described using rectangular tiles in the bowl's recess. This is the easiest shape to make and will work well if the recess is positioned so that the circumference of the upper edge of the recess is approximately the same as the circumference of the lower edge. A slight variation can be compensated for as you position the tiles. Parallelogram

Using a torch

A commonly available MAPP gas torch (methylacetylene-propadiene propane) can be used to fire the enameled tiles by hand because it burns hotter than propane. You can buy a torch and MAPP gas canisters from most hardware or building-products stores. The unit I use (*Photo a*) has a built-in igniter to light the torch (note the gray trigger). This is very convenient for one-handed ignition when you need to keep turning the torch on and off.

CAUTION: Keep the canister upright during use and handle with extreme care. MAPP gas burns at 3670° F. As with any open flame, keep it away from combustibles and use in a well-ventilated area (preferably outside). Follow all instructions and safe-use precautions that came with the torch you are using.



a A simple MAPP gas torch is sufficient for firing enameled tiles.

and other shapes of tiles will also work. Two shapes that will work and fill the recess are triangles and trapezoids with every other tile turned upside down. If you alternate the tiles in this fashion, an even number of tiles must be used.

The bowl shown in *Photo 10* has corrugated tiles. The corrugated copper blanks were made using a metal toothpaste tube squeezer. Strips of 36-gauge (.005" thick) copper sheet were corrugated by cranking them through the tube squeezer. The strips were then cut into individual blanks and enameled. This technique adds an additional design element to the enameled tiles.

Powdered enamel is available from a number of sources in a wide range of colors, both opaque and transparent. Transparent colors allow some of the luster of the underlying metal substrate

to show through. I have made bowls with all the tiles the same color and also by alternating different color tiles. The color of the tiles can serve as a muted accent on the bowl or can make a bold statement. This is where your artistic vision and imagination are on display. ■

Wes Jones lives in Lawrenceville, Georgia, and has been a professional woodturning artist for seventeen years, specializing in large decorative pieces such as bowls, hollow forms, and vases. His work, which resides in private collections throughout the world, has been displayed at numerous venues and is available in a number of fine art galleries in Georgia. Wes teaches and demonstrates woodturning and has published a number of articles in American Woodturner and Woodturning Design. He is active in three AAW chapters in Georgia and is a past president of the Georgia Association of Woodturners and of the Chattahoochee Woodturners.



9 White Ash Bowl with Blue & Green Enameled Tiles, 2014, White ash, enameled tiles, 4" x 9" (10cm x 23cm)



10 Red Maple Bowl with Corrugated Orange Enameled Tiles, 2013, 5" x 8 1/4" (13cm x 21cm)



GLENN LUCAS

ONCE UPON A TIME IN IRELAND

Terry Martin

Behind the romantic image there is always the hard work.

Photo: Clare Mulvany

For many woodturners, the pursuit of turning is the fulfillment of a dream. Younger turners may aspire to making a living with their hands, while older turners may take up the gouge in search of the satisfaction that eluded them during their earlier careers. A large number of turners, perhaps even a majority, seem most attracted to bowl turning. A bowl has the built-in excuse of being useful, but I believe there is a deeper meaning behind why people want to make them—a wooden bowl is a deeply sensuous object, and for people who are not comfortable with such words, making a bowl is a simple way of embracing beauty.

In the early stages, most turners look to their heroes for inspiration, and

when it comes to bowls, Glenn Lucas is often the hero of choice these days. For many, watching Glenn at work evokes idyllic images of the earthy artisan, but he is also the savvy young guy who has mastered all the technical tricks. Glenn is one of the most skilled bowl turners in the world, but his fame is also due to the fact that he is the world leader at selling the bowl-turner fantasy. His followers are in love with his videos, his demonstrations, and his charming personality. Glenn is the consummate turner's turner.

Early years and inspiration

I have known Glenn since 1996, but to truly tell his story, I needed to meet him on his home ground. Everything in Ireland seems to begin with a

beautiful tale, and Glenn's story unfolded as we drove from his home in Carlow westward across Ireland. It was a gentle July morning, and we traveled along narrow lanes lined with lush summer growth—a green memory lane for Glenn: "Just going through this canopy of beautiful ash trees makes me feel like I'm at home. I've traveled a lot, but I don't find anything like this anywhere else. I grew up on a farm and spent my early life doing farm work, so I understand the land very well."

I asked Glenn if growing up on a farm explained why he is so able to turn his hand to many things. "Yes, it's true," he explained. "I loved my time on the farm, and my father involved us in everything. If something went

wrong with the plumbing, myself or my brothers would be brought in to solve the problem. From very early on, I felt I could try my hand at anything, so we took engines apart, we could weld, and our father showed us how to respect machines. Even as a child, I was tuned in to how a machine should sound. I always take great care of machines.”

I asked how he became interested in making things with wood. “Tommy Keyes inspired my love of working with wood,” Glenn replied. “He came knocking on my parents’ door one night because he had lost his home and was looking for a place to sleep. He ended up living on our farm for ten years. He was what we would call a journeyman, and I remember him setting off on his bicycle to different homes where he made built-in cabinets, windows, hung doors, and so on. He used to make us wooden toys and he was the first person to show me how to sharpen a chisel.” Glenn also cited his grandfather as a source of woodworking inspiration: “He used to make beehives, and he made us toys out of wood. I remember going to visit him and seeing all his hammers and chisels—just the smell of the wood and seeing him work really inspired me. Later, he was very proud of what I was doing.”

Glenn explained that he had learned woodwork at school: “After primary school, I went to a boarding school in Kilkenny. I was very homesick, so the one thing that made school bearable was woodwork, and our woodwork teacher saw that spark and was incredibly encouraging. The headmaster’s wife also saw that I loved woodwork and she would ask me to do repairs and projects for her.”

Glenn started to become aware of the wider world of turning when he saw Ray Key’s book *Woodturning and Design*. “It opened my eyes,” he said. “Seeing work by people like Dale Nish

and others amazed me. I liked what Ray was making, the platters and the bowls, but the process and the fact that he was a production turner really interested me. I recommended the school library to buy the book and I used to read it at night when I should have been doing my homework.”

Soon Glenn obtained his own lathe to use when he was at home on weekends. “It was fabricated from steel, the centers didn’t line up, and I couldn’t get a chuck to fit it. I fabricated a chuck from wood with hose clamps to hold my work on a wooden spigot, and I made salad bowls, boxes, and bracelets. I had to do my farm work during the day and at night I turned. I knew the lathe was holding me back, so I got someone to make me a new lathe. It had a Fiat gearbox and although it had a lot of faults, I could turn large bowls on it.”

Always with an eye to getting a return on his investments, Glenn began selling his bowls: “I used to put my salad bowls in the art room window at school. It was opposite the staff room, so the teachers frequently bought bowls from me. I was selling the bowls for about \$50, which was not a lot, but it was a fortune for me.”

Glenn still has plenty of boyish charm, so it is no surprise that many adults wanted to help this

bright-eyed, hard-working boy:

“The father of a boy at my school was Willie Stedmond, a very well-respected turner. I used to visit him and I took my own work with me so he could tell me what was wrong with it. One day he said, ‘That’s not bad,’ and that’s when I knew I was doing well. When I was seventeen, a new woodwork teacher named Peter Timmons came to our school, and he was very supportive. He did a one-day turning course with Willie and I told Peter I wished I could do the same. To my amazement, Peter arranged for the school to pay for me to do a day class. Willie taught me the basics of spindle turning and after that I bought my first proper set of woodturning tools from him and learned to use them correctly.”

A professional career emerges

Glenn certainly worked hard at his chosen craft, but sometimes the stars do line up and in 1992 they did so for Glenn in a way that changed his life: “My history teacher was a great supporter. In fact, he bought my first salad bowl. He was an organizer for Kilkenny Arts Week, so he suggested I apply for a space in the main display hall during the festival. I was accepted, made about \$1,400 in sales, and then ►



An early display of Glenn’s work for sale at Kilkenny Arts Week, c.1992.

Photo: Glenn Lucas

was able to buy my wish list of a new grinder and safety wear. I also received an award in recognition of what I was doing. I think that was when the idea that I could make a living from turning started to grow.”

With perfect timing, in that year one of the earliest international woodturning seminars was held at Dublin City University. Glenn excitedly attended: “I saw David Ellsworth and others, and I spent a lot of my time watching Liam O’Neill making the heavy cuts really quickly with the bowl gouge. I thought, ‘This is something I really want to do.’” Glenn bought a video of Liam’s demonstration and practiced until he could replicate his stance and cuts.

Soon Glenn had earned enough to buy a Union Jubilee lathe and that meant he could use proper chucks. “I was selling at craft fairs by this time,” he said, “so as well as bowls and platters, I made lamps, stools, and other things. Also, in my final year at high school I did a subject called Building Construction, so I proposed a woodturning project. I made about forty pieces for an exhibition in the school and I sold almost everything.”

It might seem that Glenn would have been isolated from the other students by his singular interest. Nothing could be further from the truth, as Glenn explained: “Sales were good but, even better, the turning also made me popular with the girls at school because after every weekend they would gather around me to see what I had made. They’d purchase rings, bangles, and little boxes, and even now I hear from some of them that they still have them.”

We paused as Glenn negotiated yet another tiny village where the houses crowded down to the road and a sadly ruined church stood beside a sparkling stream. As we accelerated back into the countryside, Glenn told me that in 1993, after he finished high school,

he was offered an apprenticeship as a cabinetmaker with a large company producing furniture for hotels around the world. “I was put in the shop with two people who made the prototypes,” Glenn said. “It was a hands-on experience of furniture-making and although it was not what I wanted to make, I was learning all about process. Later, I moved to the main shop floor and sadly found there is nothing to be learned from sanding moldings for months at a time. At least I was able to attend short courses in Dublin where I learned the traditional skills, like cutting dovetails. I am proud of the fact that I was chosen from among my peers as Apprentice of the Year.”

In 1995, Glenn’s journey from hopeful beginner to efficiency powerhouse took a great leap forward when he was introduced to the realities of commercialism. He was sent to Germany for six months to travel from one hotel to another, installing furniture. “It really helped me develop my ability to work quickly,” he explained, “because we were paid by the number of rooms we fitted out. I jumped from a lowly apprentice’s wage to an awful lot of money for me at the time, so while I was still in Germany, I was able to place an order for two Union Graduate lathes—one long-bed and one short-bed.” Despite the earnings, Glenn’s experiences with the modern furniture world left him rather disillusioned: “By the time I returned from Germany, I could see that any future in that field would be restricted to mass production. So I decided I wanted to be a professional woodturner.”

Glenn had heard about an eighteen-month-long craft and design business course in Kilkenny, so he applied and was accepted. It was a significant step: “I don’t think I would be doing what I am doing today without that course. As well as marketing, accounting, and so on, I learned about what galleries expect

and how to professionally present myself and my work. The main thing was that all participants were given their own workshop on-site and that allowed me to concentrate on my own work without being distracted by the need to do farm work. We all developed a body of work to be presented at a final show in Dublin called *Showcase*.”

Glenn was already asking himself how he was going to survive as a professional woodturner. Yet again, the stars aligned: “At the exhibition I was approached by a U.S. company and they placed an order for fifty salad bowls. That was enormous for me, but to them it was only a sample order.” He completed the order on time and received a bigger check than ever before: “It paid for a new van that allowed me to collect bigger logs,” he said, “but within a week they placed another order for 150 salad bowls! A few outlets in Ireland also started placing orders for my work, so I became a production bowl turner at the age of twenty-two. I did that show in Dublin for thirteen years and because of it I had a full order book for almost all of each year.”

Building a business—and a life

The pieces of Glenn’s story continued to fall into place after he graduated: “I moved to Carlingford in the north and set up my own workshop. It was there that I really got to know my wife-to-be Cornelia. We had met before in Dublin when she was buying for galleries, so when she opened a gallery in Carlingford, we saw more of each other and things progressed from there. We’ve been together ever since.” Cornelia is an amazing woman—all bright smiles and energy, full of intelligence, wit, and good nature. Add her considerable business acumen, and she was the perfect partner for Glenn.

“In Carlingford, for the first time I was fully paying my own way—my workshop, electricity, materials, everything. I lived there for nine years, but space was restricted and whereas at home I had easy access to trees, in Carlingford I had to spend too much time traveling, cutting, hauling, and lifting wood.

So when Cornelia was offered a job in Kilkenny, we decided to move back to Carlow. My father gave me seven acres and I was able to build my workshop with access for heavy trucks and machines. All of that multiplied my efficiency many times.” Even today when he is faced with the need to rearrange the

landscape, Glenn is likely to go for a walk and re-appear a short time later driving a huge earth-mover. There are still advantages to having the family farm just down the road.

Learning efficiency

Glenn often talks about efficiency, and the arrival of their son and daughter ►

“ I see all the cuts [to make a bowl] before I start and I take no more cuts than required. —Glenn Lucas

(Clockwise from top left)

Glenn takes a heavy shaping cut on the outside of a salad bowl. Every cut is a calculated part of the process.

Efficiency and process matter very much to Glenn, pictured here after a day of coring.

Glenn prepares to fill his kiln with rough-turned bowls, which will dry for about eight weeks.

Routine breeds efficiency and confidence. Glenn has perfected every aspect of bowl-turning, here taking a well-practiced finishing cut.



Photo: Ashley Harwood



Photo: Cornelia McCarthy



Photo: Harry Reid



Photo: Glenn Lucas

A stack of bowls whose outside profiles have been shaped, ready for coring and drying.

Photo: Glenn Lucas



inspired him to find even more ways to save time: “I was spending so much time in the workshop that it was hard to find quality family time. I started bringing the wheeled skip into my workshop to catch shavings straight off the lathe and that saved me about an hour and a half every day because I did not have to bag shavings. What’s more, the shavings are taken away by a local farmer who uses them for bedding livestock. I sell the shavings, bowl cores, and offcuts, so while the bowls are still drying in the kiln, the material has already almost paid for itself. That helps with the cash flow, which is important when you are shipping internationally and payment takes time.”

When we paused to wait for an enormous tractor that filled the road ahead, Glenn told me of his search for efficiency that goes right down to the micro-movements of cutting on the lathe. “When I make a bowl,” he said, “I see all the cuts before I start and I take no more cuts than required. That allows me to get through massive quantities that I never thought were possible before. For example, the rough-shaping of a 15" (38cm) salad bowl takes about one minute and twenty seconds. To finish the outside of a dry bowl is

normally forty seconds—that’s one roughing cut and one finishing cut. I can repeat those cuts exactly on every piece and make precisely the same shape every time. In a good year, I have made around 2,500 bowls. When times are harder, I may do 1,000 bowls a year.”

One of Glenn’s best time-savers is the use of a drying kiln: “The rough-turned bowls go in the kiln for around eight weeks. A fan circulates the air and a heater brings it to around 85 degrees, but once it is at that temperature, it tends to maintain it without the heater. I get a gallon of water per day from the full kiln. The kiln is the body from a refrigerated truck and it holds around 700 bowls, a mix of 11" (28cm), 13" (33cm), and 15" (38cm).”

Teaching

Hard work does take its toll and Glenn decided to address the problem before it became severe: “Around 2006, I started to think about the effect the work was having on my body. I thought it might be good to start teaching as back-up work, so I purchased six Vicmarc lathes. The timing was good because the following year the recession hit and orders dropped. I was ready to

start teaching, and since 2007 I’ve really enjoyed sharing the skills that I’ve learned over the years. I decided to approach teaching the same way I had looked at turning. I analyzed the way I stood at the machine, how I sharpened the tools, and why tools cut in a certain way. One of the best things about it is that my turning skills have improved as a result of teaching,” he explained. “The other thing I have been able to do is invite people who influenced me and whose books, technique, or approach impressed me greatly at the start of my career—Richard Raffan, Ray Key, Liam O’Neill, Ciaran Forbes, and Terry Martin. Other wonderful turners who have run master classes here are Mark Baker, Mike Mahoney, Liam Flynn, Benoît Averly, Ashley Harwood, and Phil Irons. Sometimes I run three one-day workshops a week, but because my workshop is still used for production, I sometimes have no classes at all.”

Glenn’s efficiency also extends to promoting his classes. He has trained himself to be a skilled videographer and a search on the Internet will show how popular his videos are. Glenn explained how important this has been: “When I speak to people from other countries who attend my classes, many first noticed me on YouTube. That started me looking at other ways to earn an income and Cornelia convinced me to produce videos—first as DVDs, and this year we introduced downloadable tutorials that can be watched on a phone or iPad. They have been among the most enjoyable experiences that I have had because I liked the whole new set of challenges. Mastering editing, lighting, and a professional camera all took a lot of time. Each DVD takes about seven intensive weeks to make, and I’m proud of

the results.” He continued, “I also accept more invitations to demonstrate around the world these days. So far I’ve demonstrated in the U.S. from Alaska to Tennessee, Norway, England, Australia, New Zealand, Germany, France, Switzerland, and Finland.”

“Now I get so many emails from people who have purchased my DVDs, especially younger people who want to thank me because I have shown them it is possible to make a living from woodturning. Just now, trying to do what I have done would be difficult, but I remember that when I was sixteen, someone said to me, ‘Don’t do it,’ so I would never say that to anyone else. If you are good enough, you can find a way. When I am sixty, I can still see myself being a woodturner. It’s been my life and I enjoy it so much.”

Looking back

Glenn often regrets not having time to produce more one-off pieces. In 1996, he had obtained a travel

grant to attend the Alternatives Conference run by the Wood Turning Center at Ursinus College in Pennsylvania. “I met so many famous turners there, and I heard them speak and saw their work.” Such experiences are powerful for a youngster and for a while he struggled to decide which way he wanted to go. But he soon realized his heart was truly with production work. “Maybe it’s something to do with the work ethic of farm life,” said Glenn. “For me the challenge is how to make a process more efficient, so it’s not always about what I am making.” It is ironic that if Glenn had tried to make a living as a creative turner, he probably would have failed as most have. But he is now one of very few in the world who can make a living as a professional bowl turner. Glenn’s bowls need no commentary. They make simple and beautiful sense to anyone who is in love with the idea of the bowl—maker, admirer, or buyer.

At the end of our journey across Ireland, Glenn and I had arrived at

Glenstall Abbey to meet the legendary turner/monk Ciaran Forbes. That was to be a whole new Irish story, but as I looked back over our trip, I thought about how deeply Glenn’s story is entwined with his land, his culture, and his family—a truly Irish tale. Glenn’s story seems idyllic and he has become very good at selling the dream, but more than anything else his achievements are a testament to hard work. There are opportunities everywhere, but Glenn is one of the few who sees them all and takes them on. He is now in his twentieth year in business, and we all owe him our deepest respect. ■

For more, visit glennlucaswoodturning.com.

Terry Martin is a wood artist, writer, and curator who lives and works in Brisbane, Australia. He can be contacted at eltel@optusnet.com.au.



The mainstay of Glenn’s business: the timeless, well-turned salad bowl.

Photo: Glenn Lucas

“EBONIZING” AND COLORING

with Clean Lines

Garry Knox Bennett

Over the course of my career as a furniture designer/maker, I have had plenty of occasions to ebonize and add color to my work. In cases where I want clean line definition between colors, I use the simple process described in this article. Each time I use this method in my work, I have a nagging suspicion that it might prove helpful to my many woodturner friends since the technique would work just as well on turned work as it does on flat pieces. When done correctly, the technique leaves a crisp, clean line between colors.

Prepare the wood

I opted to use a flat poplar board to demonstrate the process, but the

Prepare the wood



Use a sharp blade to incise borderlines according to your chosen design.

Add color



The incised lines will confine colors to a defined area. Add color slowly and carefully to allow the dye to absorb up to but not farther than the cut lines.

concept is the same for wood of any shape. Tight-grained hardwoods, such as maple and walnut, work well for this process. Lighter-colored woods are best for adding color, and you can control the color's density with the number of applications. As with any technique, practice and experimentation are advised to ensure success.

Incise a line, design, shape, or outline using either a small box-cutter or hobby knife (*Photo 1*). A clean, sharply indented, even cut is important, as the gap between the two edges bordering the cut is what will stop the dye/color from migrating. After the design is inscribed, lightly sand the surface of the cut with fine abrasive to remove any raised areas on the edges of the cut. Then vigorously blow off the piece, making sure the inscribed line is clean—any dust remaining in the cut will “carry” the dye/color instantly beyond where it should be.

Apply color

For adding color, I use water-thinned, artist-grade gouache or watercolor paint because it can be lacquered over without compromising the color. For adding black, I use Fiebing's leather dye (USMC Black) as an alternative to traditional ebonizing methods. This dye really penetrates and I have found it to be far superior to various inks or other ebonizing techniques. The Fiebing's dye is an alcohol-based formula and performs better than acetone-based versions. Apply it with a swab, brush, or rag, but wear gloves, as it will take days to wash from your hands. I do not dilute this dye but use it full strength.

With a soft-bristle brush, begin applying the dye, starting a bit back from the

cut edge and working carefully toward it. Fill in the larger areas with long, even strokes. As you bring the dye up to the cut, it will stop abruptly at the line and will not fill or cross it. The technique is to gently and slowly “float” the color just to the edge. Notice when you start just how rapidly the dye bleeds/flows into the wood. This absorption rate will vary from one wood species to another.

When applying color inside an outlined area, use the same process, starting in the center and “floating” the color to the edges. The color will stop at the cut line (*Photo 2*).

Add a clear topcoat

Before finishing with a topcoat, let the colors dry completely. Then very carefully buff the surface with fine (0000) steel wool. If you are not careful, the buffing can cause the dye to transfer to other areas. If you notice this happening, stop buffing with the steel wool, wipe down the surface, and apply a light application of the clear topcoat finish you will be using. After this coat dries, then go again with the steel wool to get a nice, burnished finish. Complete with final coats of your preferred topcoat (mine is a clear lacquer).

Practice and experiment to reveal the possibilities of using this technique. ■

Photos by A.J. McLennan.

While Garry Knox Bennett is known primarily for furniture, he studied painting and sculpture at California College of Arts and Crafts. With regard to his furniture and jewelry, he is self-taught and enjoys pushing the limits to find alternative methods. Color and contrast have always been part of his lexicon, especially in furniture. For more, visit gkb-furniture.com.



*Lisnavagh 2/14, 2015,
Ebonized and textured
oak, blue pearlescent
ink, height: 8½' (2.6m)*

A JOURNEY —

Twenty-Seven Years of the Work of Irish Woodturner EMMET KANE

Roger Bennett

Photos by Francis Morrin.

A rippling cone of black with a channel of shimmering blue, it looks both ancient and modern—a long traditional cloak, perhaps, or a nod to space-age sleekness. This is *Lisnavagh 2/14*. It is an imposing sculpture, over 8½' (2.6m) in height: turned, textured, and ebonized oak, its smooth recess colored with blue pearlescent ink. It is one of the most recent creations by Emmet Kane, and it stands in the lobby of the National Museum of Ireland, like a sentry guarding the stairs of this former military barracks. Or a milestone, perhaps.

Upstairs in the building, the exhibition *A Journey — Twenty-Seven Years of the Work of Irish Woodturner Emmet Kane* opened to the public in January 2015. It is a groundbreaking event, the first solo exhibition in the museum by a contemporary craftsman. The title explains itself: the exhibition charts his life in woodturning over the years from his earliest tentative pieces to the assured presence of *Lisnavagh*. It is a huge honor for Kane, it consolidates his standing as a wood artist both nationally and internationally, and it tells an inspiring story.

A representative exhibition

A Journey shows the full range and scope of his work: open bowls, hollow forms, wall pieces, free-standing sculptures, whimsies in wood—from egg-shell delicate to massively monumental. Art critic ►



Hollow Form, 1994, Elm,
8" × 10 $\frac{5}{8}$ " (20.5cm × 27cm)

Gemma Tipton describes how Kane "developed a philosophy of ignoring rules, pushing boundaries, and following his nose when it came to the direction in which to take his work." (Tipton's entire review can be found at tiny.cc/GemmaTipton.) Chronologically, the exhibition is not strictly linear, as he regularly revisits techniques and designs used earlier in his career. But it does start at the beginning: the first display case contains bowls and lidded boxes in elm and cherry from the late 1980s and early 1990s, competent traditional pieces that already show his interest in form and texture. These were made on a lathe given him by his father in 1988, a little Myford ML8 that he pushed to the limits and beyond.

Kane comes from a long line of craftspeople. His father and grandfather were building contractors, and he remembers doors, windows, and other joinery pieces being manufactured in his grandfather's

Hollow Vessel, 2013, Ebonized and textured oak, blue pearlescent ink, 3 $\frac{1}{2}$ " × 5 $\frac{1}{2}$ " (9cm × 14cm)



big workshop. Kane has inherited the building contractor's essential capacity for problem-solving: he could not afford a bigger lathe, so with the help of his father he built one with a reinforced concrete body capable of turning up to 4' (1.2m) in diameter.

Influences and direction

By the early 1990s, Kane was well on his way: passionate, constantly absorbing techniques and ideas from books and magazines, from woodturners and other craftspeople. The annual seminars of the Irish Woodturners Guild, which Liam O'Neill had founded in 1984, were particularly exciting, with demonstrators from overseas opening his eyes to new possibilities, such as David Ellsworth's hollow forms, Merryll Saylan's and Giles Gilson's use of color, Jim Partridge's scorching and texturing, and Paul Clare's

split pots. These were all major influences, and over the years Kane has found continuing inspiration in the likes of Hayley Smith's fine texturing, Robyn Horn's and Stony Lamar's sculptures, Marc Ricourt's organic forms and surface treatments, and Jacques Vesery's carving and coloring. Kane's selection for the Crafts Council of Ireland's Business Development Course in 1996-7 (Glenn Lucas was a fellow participant) helped him to hone his design and marketing skills.

Repetitive production turning would not suit Kane's restless temperament. By his own admission, he can be easily bored, although he is also capable of immense concentration. The exhibits from the 1990s—all one-offs—exemplify the preoccupations that continue to underpin his work today: the use of sustainable, native Irish hardwoods such as elm, oak, cherry, holly; a love of burrs, and of flawed, irregular pieces of wood; a preference for turning green. *Hollow Form* is a fine example of his mastery of the hollow vessel, in which he makes a feature of the natural defects in the wood; it is interesting to compare it with a later piece such as *Hollow Vessel*, which he has embellished with color and



(Left) *Dún Aengus*, 1996,
Sandblasted burr oak,
18" × 19" × 4"
(46cm × 48cm × 10cm)

(Right) *Gealltanais*,
2002, Airbrushed and
ebonized oak, gold leaf,
slate, 30 $\frac{1}{2}$ " × 31 $\frac{1}{2}$ " × 2 $\frac{1}{2}$ "
(77cm × 80cm × 6cm)

texture. *Dún Aengus* is an early sculptural piece, its surface turned, carved, and sandblasted to evoke the curving stone walls of the prehistoric fort on the Aran Islands.

Kane's environment is a huge influence on his work, sometimes consciously, sometimes unexpectedly. His workshop—his grandfather's old cowshed—is in Kane's native place, Castledermot, in County Kildare. This town has an extraordinary richness of historical remains, including High Crosses and a Round Tower from the seventh century, a Viking hogback stone, a twelfth-century Knights Templar square tower, and the ruins of a Franciscan friary. Kane shares his parents' deep interest in and knowledge of archaeology—his father is an acclaimed local historian—and it is fascinating to discover in many of his pieces echoes of buildings and artifacts from the town and much farther afield.

Gealltanas is a striking example of this influence. The first dramatically eye-catching piece to be encountered in the exhibition, it is roughly circular with a broken rim, its surface textured with concentric lines and colored with multiple layers of airbrushed ink so that it resembles subtly variegated granite. At its center, a round hole, framed by gold leaf. "Gealltanas" in Gaelic means "promise" or "pledge," and this piece was inspired by an ancient swearing stone in the local churchyard, a stone with a hole through which people shook hands to seal deals or promises. Kane made it as a wedding present for his sister.

Texture, color, and scale

Texture and color fascinate Kane and are defining elements of his work. He loves the natural tactile qualities of wood itself, also of materials such as rocks, concrete, tarmacadam, rusty metal. He has researched and mastered an impressive array of techniques. His pieces are wire-brushed, chainsawed, carved, gouged, sandblasted, pierced, broken, textured with fine or coarse burrs; they

are ebonized, scorched, airbrushed yellow and blue and red, fumed with ammonia, gilded, lacquered. He loves experimenting, trying out new tools and products, "having a go."

Galactic is a wildly exuberant wall piece, its electric blue center surrounded by black spokes that Kane has cut radially with a chainsaw and then broken unevenly. Most of his ebonizing is achieved through the reaction between the tannins in the wood and a solution of vinegar and iron; alternatively, he sometimes scorches the wood with a blowtorch, then finishes with a wire or nylon brush.

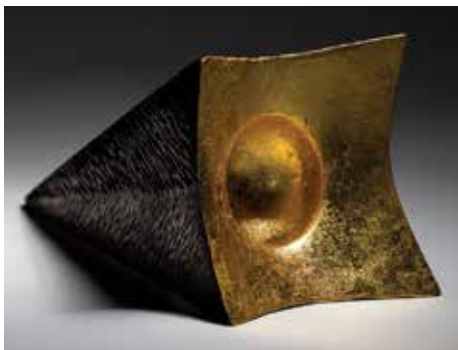
Emmet Kane is a tall, strong man, and his big wall pieces seem perfectly appropriate to his stature and extrovert personality. But much of his work is marvelously delicate and controlled; he says that making pieces for the annual Del Mano "Small Treasures" exhibitions (under 6", or 15cm) helped him to concentrate on detail and finish. For example, in his *Crock* series of oak vessels—inspired by a Paul Clare demonstration—he parts the walls into multiple flanges that dry in rhythmic waves and have a leathery texture when ebonized; their wells are either colored or gilded. ►



(Top) *Crock of Gold*, 2011, Ebonized burr oak, gold leaf, 7" × 8¼" (17.5cm × 21cm)

(Bottom) *Galactic*, 2002, Ebonized oak, blue pearlescent ink, 71" × 76" × 3¼" (180cm × 194cm × 8cm)





Wedge, 2011, Ebonized and textured burr oak, gold leaf, $2\frac{3}{4}'' \times 2\frac{3}{4}'' \times 5\frac{3}{8}''$ (7cm \times 7cm \times 13.5cm)



Murky History, 2011, Textured oak, gold leaf, nails, $8'' \times 8'' \times 16\frac{1}{2}''$ (20.5cm \times 20.5cm \times 42cm)

A pack of toothpicks from the Wood Turning Center was the unlikely inspiration for an ongoing series of spiked pieces: these are tantalizing hand-sized forms, which bristle with colored spikes inserted into their sides like the spines of a sea-urchin or the quills of a porcupine. Kane thinks he might be using these spikes to help confront past demons from his childhood. Born with a rare congenital condition, he spent several of his early years in and out of the hospital, and then, when he was five, he contracted viral meningitis—so it is hardly surprising that he should have an abiding horror of doctors' needles.

Two of these spiked pieces, *Cone of Gold* and *Cone of Color*, were to play a major role in his career. When he exhibited them at SOFA Chicago, they caught the attention of Dr. Jennifer Goff of the National Museum of Ireland “for their originality and eccentricity,” and they

became part of the Museum's collection. Jennifer Goff is the Curator of Furniture at the Museum, passionately and tirelessly committed to her role; she became fascinated by Kane's creations and followed his career closely, eventually offering him the opportunity to have this solo exhibition, which she herself has curated.

A woodturner by definition is pre-occupied by the circular, but Kane is increasingly drawn to exploring other shapes. He has made a number of large free-form sculptures, most of which are quite roughly hewn. His series of *Wedges*, however, are very different: like reclining pyramids, whose bases have become their faces, they are intensely tactile pieces, their sides sometimes finely incised with chevron patterning. The only turning is in the face, to shape the well for gilding.

Kane's interest in history and his ability to think laterally have resulted in some very imaginative responses to

specific commissions. He made *Murky History* out of timber from the original Rappahannock River Crib Dam in Fredericksburg, Virginia; the wood was sent to him by Historical Woods of America, for its *National Treasures* exhibition. The story resonated with Kane—the dam was built in the 1850s by immigrants who had fled the Irish Famine, and he treated the timber with respect and restraint. With *Murky History*, he left the original saw marks and nail holes, simply ebonizing the block of wood and placing a gilded well of optimism in the center; the piece stands on hand-forged nails from the dam.

Recent work

Two of Kane's latest pieces can be read as tributes to the much-admired Irish artists who inspired them.

P.S. 2014 evokes the very distinctive gold-leaf paintings of the artist Patrick Scott (1921-2014). Scott liked to use raw linen canvas, which Kane suggests by bleaching the wood; the routed lines radiating fan-like from the middle allude to Scott's delicate tempera rays; and the sun-like gilded center completes the act of homage. Kane's material is wood, not canvas, and the piece is very much his own: an area of dozed wood has been picked out, and Kane has balanced the resultant void with a glowing segment of gold. In *E.7.E.11*, Kane's inspiration is

Cone of Color (left), 2008, Textured burr elm, blue pearlescent ink, blue dyed spikes, $5\frac{3}{8}'' \times 5''$ (13.7cm \times 12.5cm)

Cone of Gold (right), 2008, Ebonized and textured burr oak, gold leaf, yellow dyed spikes, $5'' \times 5\frac{3}{8}''$ (13cm \times 13.5cm)





E.7.E.11, 2015, Ebonized and textured oak, red lacquer, 9" × 5" (22.5cm × 12.5cm)

P.S. 2014, 2015, Bleached burr oak, gold leaf, 22" × 23½" × 1¾" (56cm × 60cm × 4cm)



the lacquer work of Eileen Gray (1878-1976), who in the course of her long life had an extraordinarily prolific career as a furniture designer and architect. Kane has become very interested in Gray's use of lacquer: *E.7.E.11* is a very thinly turned oak vessel, whose textured, ebonized exterior contrasts with the smooth luster of the deep red lacquer interior. Lacquering is an extremely slow and onerous process; the traditional substances used by Gray are now unavailable for health reasons, so to his regret Kane has had to make do with modern substitutes. Although faster, these still require the application of up to forty layers, sanding between each coat. He consulted Jennifer Goff on this process, as she is responsible for the Eileen Gray collections at the Museum and has written the definitive book on Gray's work and career.

Kane is a natural communicator, yet another trait inherited from his politically active father. Throughout his career, he has "got involved"; his c.v. is most impressive, with lengthy stints serving as president and chairman of the Irish Woodturners Guild,

and as a board member of the Crafts Council of Ireland. He has taught and demonstrated in many countries, from Finland to Australia, including regular sessions in the United States.

A Journey is a superb exhibition; Jennifer Goff has curated it meticulously, and the pieces are beautifully displayed and lit. It is accompanied by a comprehensive catalogue in which Goff's detailed chronicling of his career is complemented by Kevin Wallace's biographical article and a thoughtful introductory essay by David Ellsworth. The exhibition ends with an informative video in which Kane is shown working and talking (search YouTube for "Emmet Kane Exhibition").

What next for Kane? He says, "I don't have a satnav [satellite navigation]!" but he is very excited about future directions. He recently acquired a huge lathe from Willie Stedmond, a father figure of Irish woodturning: this is capable of turning up to 17' (5m) between centers and 4' in diameter. *Lisnavagh 2/14* was one of the first products of this beast. So the potential is huge—literally.

For more on Kane's exhibition at the National Museum of Ireland, visit tiny.cc/EmmetKane (case sensitive). See also www.emmetkane.com.

Roger Bennett is an Irish woodturner. He specializes in making bowls, vessels, and jewelry, which he colors and inlays with silver. He is also co-editor of the online craft journal *Make Believe* (www.makebelieve.ie). In a previous life, he was a teacher of English and French. For more, visit rogerbennettwoodturner.com



Emmet Kane at work.

MEMBERS' GALLERY

Kalia Kliban, California

I love making bowls and plates that will get used, so I try to keep the details easy to clean, not too fussy, and pleasing to my eyes as well as my hands. There is a stack of wooden bowls in my kitchen, the first ones I reach for when I'm chopping onions or dishing up soup, and I appreciate how quiet they are on the counter and warm to the touch. Over the years, my turning skills have evolved, so my designs have changed as well, but I still prefer clean lines without too much "macaroni" on the surface.

Redwood Nebula,
2014, Redwood burl,
7 $\frac{3}{8}$ " x 13" (19cm x 33cm)



Kiwi, 2013, Russian birch, milk
paint, 5 $\frac{3}{4}$ " x 9 $\frac{1}{2}$ " (15cm x 24cm)



Spittler Family Bowls,
2013, Walnut, main
bowls are 3" x 7 $\frac{1}{4}$ "
(8cm x 18cm); baby
bowl is 1 $\frac{5}{8}$ " x 4 $\frac{1}{4}$ "
(4cm x 11cm)



Tom Gall, New Jersey

Early in my turning venture (1980s), I discovered the work of Stephen Hogbin. He instantly became my first woodturning hero. Although he is a designer of large architectural works, I was drawn to his turnings, which were cut up and reassembled in many ways, both symmetrical and asymmetrical. In the past twenty-five years, I have made only five or six "split bowls," where I cut a bowl in half and reassembled it, but, interestingly, three of them were in the last year.

To get a more interesting rim design on a split bowl, you have to turn some unusual details on the exterior and interior of your bowl. When it is cut in half and the original rim is glued together, you'll have an unusual-shaped bowl with an interesting rim design. I like to texture, carve, or burn the rim and areas around the glue line, then add color with gilders paste. The possibilities are limitless.



Split Bowl in Ash, 2014, Ash, gilders
paste, 4" x 7 $\frac{5}{8}$ " x 5 $\frac{1}{4}$ "
(10cm x 19cm x 13cm)



Split Bowl in Walnut, 2014, Walnut, gilders
paste, 4" x 10" x 8 $\frac{1}{4}$ " (10cm x 25cm x 21cm)

Larry Stevenson, Canada

Typically, turners focus on the exterior of hollow forms. Reflecting on this fact, I began to think of how the exterior is the focal point of many things, both inanimate and animate, and how we are quick to judge based on outward appearances. *Know the Soul* is my exploration into shifting the focus to the inside.

I hope viewers will make their own interpretations of the five pieces that

comprise *Know the Soul*, but for me, they reflect people, or perhaps aspects of the human soul. With a gold-leaf interior that radiates even in low light, *The Light* portrays a soul ever generous with counsel and compassion. The pāua shell, giving a pearlescent luster to the interior of *The Healer*, is said to encourage calmness and soothe emotions, as well as stimulate intuition,

imagination, and sensitivity. The irregular opening of *The Artist* reveals the vibrancy and special qualities inherent in us all. I used a light modeling paste to create peaks that would stay in *Meringue*. Mimicking the dessert, this piece is full of air—nice to look at but without a lot of substance. Finally, *Dark One*, whose alluring outside draws us in, reveals hurt and pain on the inside.



The Light, 2014, Fumed acacia, gold leaf, 4½" (11cm) diameter



The Healer, 2014, Fumed acacia, pāua shell, acrylic modeling paste, paint, gold dust, 4⅝" (10cm) diameter



The Artist, 2014, Fumed acacia, acrylic gel, paint, modeling paste, 5" (13cm) diameter



Meringue, 2014, Fumed acacia, foam insulation, modeling paste, acrylics, 4⅜" (11cm) diameter



Dark One, 2014, Fumed acacia, acrylics, razor blade, barnacles, broken glass, rusty barbed wire, thorns, 4½" (11cm) diameter

Chris Bowman, Indiana

I enjoy using salvaged materials for the inherent history they bring to the work. The patina tells a story, or nails and hardware still attached add to the significance of the piece. As rough and worn as the wood may be on the outside, it is always amazing to see how fresh and new it appears on the inside.

My *Oil Can Series* was inspired by my collection of oil cans. I have always admired their iconic shape and functionality and still use them in my studio. I look forward to seeing how each different piece of material presents itself in this form.

For more, visit chrisbowmanstudio.com.

(Left) *Oil Can Series*, 2015, Salvaged beech, nails, 10" × 4" × 4" (25cm × 10cm × 10cm)

(Right) *Oil Can Series*, 2015, Salvaged Douglas fir, door lock, 15" × 5" × 5" (38cm × 13cm × 13cm)



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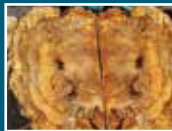


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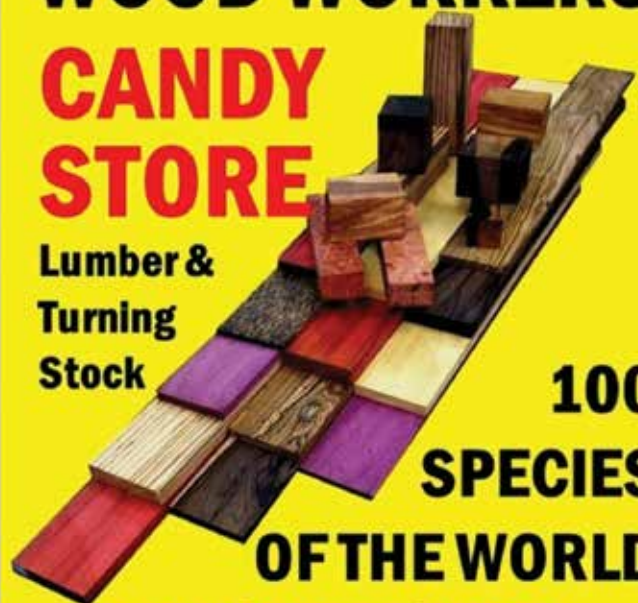
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About Hollow Forms Turning Systems



History

In 1996, Lyle Jamieson started producing a boring bar hollowing system with a laser-assisted measuring device that changed how hollow form turning is done. This was revolutionary. There were turners in that era that were using home-built boring bars that were so big and heavy that the turner could not hold the handle up and still have control and accuracy. Lyle took this stabilized platform approach and shrunk it down so anybody could afford to do hollow forms without sitting on the lathe and beating up their bodies in the process. To keep the price down, Lyle's system is low on glitz and high on function - it works! One important aspect of Lyle's boring bar is, it is MADE IN USA! There have been a number of boring bar systems that have come and gone in recent years. You can count on Lyle being around when you need help.

What's the difference?

Scale

The 3/4 inch diameter boring bars have been the standard for decades of hollowing. They allow the most flexibility for getting into relatively small mouth openings and can reach out over the toolrest to hollow without vibration in most traditional shapes. Lyle's straight bar creates stability, strength, and accessibility. It is safe to use with no moving parts that create pinch points. At the next symposium you attend, you can look out over the instant gallery room and know you can turn any shape you see out there. What's the difference?

Accessibility

It is important to open up possibilities with your tools, not limit them. Lyle's swiveling tip tool holder allows an infinite range of cutting motion for the efficiency of the 3/16 inch cutting tool to reach any shape vessel imaginable. The boring bar and backrest support are versatile enough to undercut shoulders without constant fiddling. Lyle has developed the cutters with 3 ranges of

reach with one boring bar. No need to purchase special boring bars to access the different shapes desired. What's the difference?

Torque Arrest

Lyle uses a "D" shaped handle torque arrest method because it spreads out the considerable twisting forces with a broad brush. When the cutter is positioned around to the left to undercut a shoulder or reach into that hard to reach spot through a small hole, the torquing forces can get intense. Lyle wants the fingertip control to clean up tool marks and smooth the inside contour of the vessel. What's the difference?

Physical Effort

It can't get any easier. The Jamieson system allows you to stand comfortably in front of the lathe with fingertip control to reach any desired hollow form shape. No need to get a stiff neck and sore back leaning over the lathe looking into the entry hole. No need to sit on the lathe and hang onto the handle with a death grip. It is all about the fun. You do not need to work hard hollowing any more. What's the difference?

The Laser

Everyone knows the benefits of laser measuring. It is no longer necessary to work blind in a shaving-filled hollow form. The laser puts you in complete control of the wall thickness. Never turn through the side of a vessel on which you have worked for hours to get the outside shape just perfect. The laser must be easy to set, quick to set, and accurately set. The laser, in real life use, must be reset often and accurately to do uniform, thin-walled vessels. Some lasers take three hands to set them. The laser can "see" through the waste wood and show the shape and depth of the inside bottom of your vessel. What's the difference?

Education and Backup

The Jamieson system has Lyle with it and

behind it. Lyle has been a respected, reliable educator for decades. He has a popular instructional DVD that covers the techniques of the boring bar system and the use of the laser measuring device. He publishes a monthly newsletter with tips and tricks on hollowing as well as a Question and Answer section covering a wide range of topics. Sign up for his newsletter at www.lylejamieson.com.

Lyle has been published many times in most of the woodturning publications with articles on subjects ranging from preventing catches to carbide cutter techniques. Lyle was a featured demonstrator at the AAW symposium in San José 2012 and participates at many regional symposiums either demonstrating, as a vendor, or both. People that have the

Jamieson System are considered Part of the Family. What's the difference?

Summary

As Joe Friday said: "Just the Facts, ma'am, nothing but the facts." The Jamieson hollowing system is the best, easiest to use, easy to set up, inexpensive, comes with instructions. Set up correctly it will never get a catch. Children and young turners have enjoyed it for years. One hundred percent satisfaction guaranteed. Ask anybody that has one, "What's the difference?"

Lyle Jamieson is a full-time woodturning sculptor & instructor from Traverse City, MI. He is President of the Northwest Michigan Woodturners (tcturners.org). Lyle is known for his

figurative sculptures & for the Jamieson boring bar & laser measuring system. He has been a featured demonstrator at many AAW & Regional Symposia across the country. For more about Lyle, visit: www.lylejamieson.com



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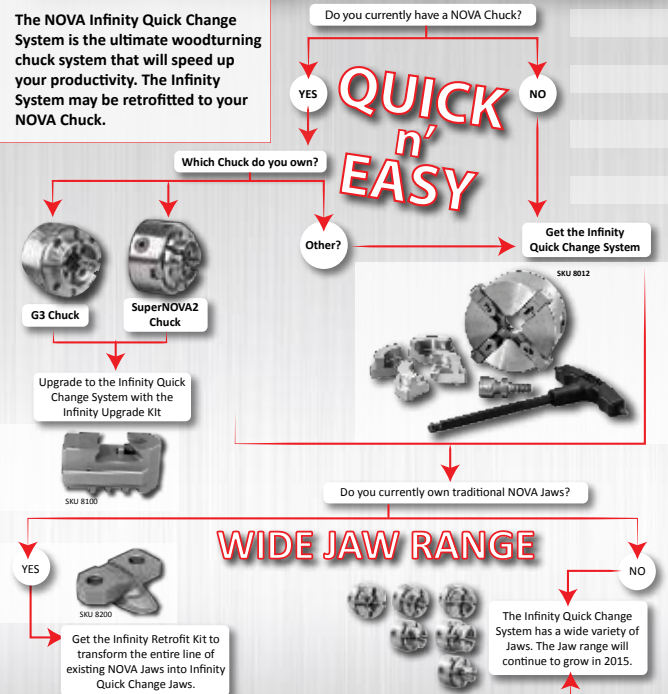
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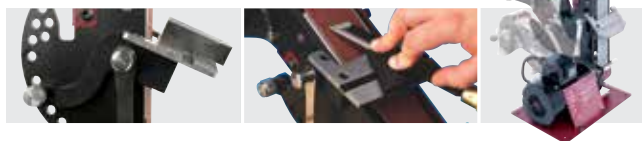
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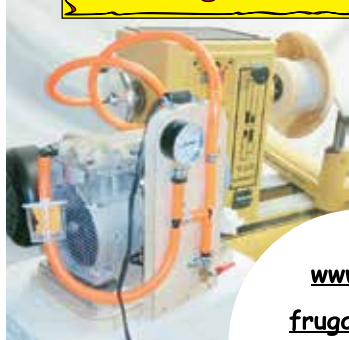
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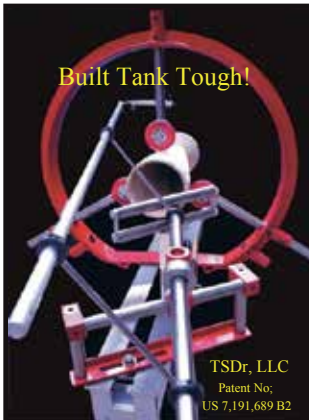
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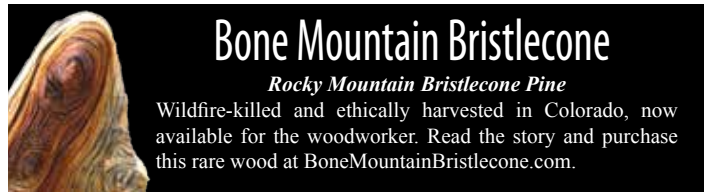
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(Top to bottom)

Take Me with You, 2014,
Cherry, 2¾" x 3"
(7cm x 8cm)

I Will Always Protect You,
2012, Cherry, 4" x 6"
(10cm x 15cm)

Hold Me, 2015, Maple,
sand, acrylic, mica flake,
1¾" x 3½" (4cm x 9cm)

Coral Blossom, 2009,
Bleached maple, slate,
2" x 3" x 2"
(5cm x 8cm x 5cm)



My sensibilities as a woodturner are linked directly to the material knowledge and experience I gained as a painter, sculptor, photographer, and designer. Of course, experience is gained gradually, and, like everyone else, I first focused on basic tool technique and form.

Preferring to work small, I aim to draw viewers in and invite them to inspect the work as closely as I do. Beauty is always found in the details.

For me, no turned work is complete without being photographed, and the photography is as important as the creation of the piece itself. Each of my pieces has a distinct, significant meaning to me, so I am compelled to bring it to life and invite contemplation through photographic portraits. Sometimes when I sell or give away a special piece, I complement it with a framed photograph, as I consider the portrait hanging on a wall to be the final manifestation of the creative process.

For more, visit kellewoodturning.com.

Photos by Ed Kelle.



JOURNAL ARCHIVE CONNECTION

Ed Kelle has written about photographing finished work in *American Woodturner* (vol 27, no 4, page 35). His article, "Stunning Digital Photos Show Off Your Turnings," is available to all AAW members at woodturner.org.

