Ice Cream Scoop • Scraper Sharpness • Shopping for a Lathe

The Journal of the American Association of Woodturners
Winter 2008 Vol. 23, No. 4 • woodturner.org

American Woodturner

Across the Pond

New work from UK and Irish turners

Pages 36 and 40

Revisiting Clocks

Page 30

14>
7 25274 88247 2
$7.50

Creative Couples

Right: David and Cindy's "Diamonds on the Soles of Our Running Shoes"; holly and African blackwood; 14×7". This collaboration reflects the couple's experiences of and commitment to ultrarunning. Cindy chose her "Goddess Series" profile and then David added a design that represents a rock-strewn trail where the two run in Colorado's mountains. Hidden diamonds inside the piece and "on the sole" are the mental focuses that an ultrarunner needs to call upon from within to go the distance.

Above: Cindy's lidded vessel, "Pele, Hawaiian Goddess of Fire"; red mallee burl and African blackwood; 16×9". *Left*: David's "Diamonds Are Forever"; African mahogany; 25" diameter. *Below*: David and Cindy after a 50k (31-mile) run to celebrate David's 61st birthday.

David Nittmann and Cindy Drozda

In Cindy's words

How lucky we both are to have a partner who is a self-employed woodturner! Actually, it isn't luck. It is a conscious choice, and it's not for everyone. On one hand, we have a sympathetic ear and knowledgeable critique. On the other hand, there is no avoiding the reality of the decisions we make; neither having a "real" job to guarantee paying the bills every month means compromises abound. One great thing about having another woodturner for a partner is that there is never an argument about spending money on tools and wood. And tracking chips throughout our living space is never a problem.

Collaborating on a piece of artwork is a real challenge. For the piece to be successful, we both need to be willing to relinquish control of part of the process and design decisions. We are fortunate that our strong points are different. David's signature is surface treatment. My signature is a style of turning. David's decoration on my turning is a natural synergy.

A partner to bounce ideas off is very valuable. We encourage each other to stretch our limits, and together we explore the fine points of business decisions, ethics, and techniques. Often one brings the other back to reality.

American Woodturner

Vol. 23, No. 4 Winter 2008

20 The Scoop on Ice Cream

Still working on holiday gifts? Turn a handle for this brass ice cream scoop and please family and friends.

How Does He Do That? 23

Learn how Bill Holland developed the process for his attention-grabbing steam-bent vase.

26 Eccentric Trees

David Reed Smith shows you how to add a splash with eccentric turning when you create a forest of ornaments.

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

American Woodturner (ISSN 0895-9005) is published quarterly by:
American Association of Woodturners
222 Landmark Center
75 W. Fifth Street
St. Paul, MN 55102-7704
off ce: 651-484-9094
fax: 651-484-1724
e-mail: inquiries@woodturner.org
website: woodturner.org

Executive Director	Mary Lacer
Office Administrator	Linda Ferber
Gallery Coordinator	Tib Shaw

Yearly membership in the American Association of Woodturners is $45 USA, $50 Canada, and $60 overseas and includes a subscription to *American Woodturner*.
Send dues to:
American Association of Woodturners
222 Landmark Center
75 W. Fifth Street
St. Paul, MN 55102-7704 USA

Periodicals postage paid at St. Paul, MN, and additional mailing off ces.

POSTMASTER: Send address changes to AAW, address listed *above*.

Publications Mail Agreement No. 40064408
Return undeliverable Canadian addresses to:
Express Messenger International
P.O. Box 25058, London BRC
Ontario, Canada N6C 6A8

Printed in the USA by
Colorfx, Inc., Des Moines, IA 50322

Featured on this issue's cover

Irish woodturner Liam Flynn's double-rimmed vessels are his signature design. See "Journey to Abbeyfeale" on *page 40*. See Bob Rosand's clock project on *page 30*.

Photos: Brendan Landy and John Hetherington

woodturner.org

EDITORIAL

Editor Carl Voss
1922 Ingersoll Avenue
Des Moines, IA 50309
515-288-9545
carlvoss@mac.com

Art Director Ray Neubauer

Contributing Editors Phil Brennion, Nick Cook, Alan Lacer, Bob Rosand, Neil Scobie, Jacques Vesery, Kevin Wallace

Editorial support: Babs Klein, Carrie Krier, Sheila Mauck, Ellen Modersohn, Bob Settich, Jan Svec

EDITORIAL SUBMISSIONS

Betty Scarpino is the new journal editor:
editorscarpino@gmail.com

For tips on article submission and photography requirements, visit woodturner.org/products/aw.

MEMBER SERVICES

For address changes or damaged issues received through the mail, please contact the AAW office at inquiries@woodturner.org or 651-484-9094.

Index to previous articles:
Download a free complete *American Woodturner* index (PDF format) at woodturner.org/products.

To order back issues:
Order past issues of *American Woodturner* at woodturner.org/products or call 651-484-9094. Back issues are also available in PDF format on CDs. For more information, see sources *above*.

ADVERTISERS

For rates and specifications, please contact Associations Inc. at 515-280-7313 or e-mail Tonya Vitzthum at tvitzthum@associationsinc.us.

AAW does not endorse any product featured or advertised in this journal.

A NOTE ABOUT SAFETY

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

Take appropriate precautions when you turn. Safety guidelines are published in the *AAW Resource Directory*. Following them will help ensure that you can continue to enjoy woodturning.

When I first started serving on the board, this day seemed like a very long way off, yet it feels like we arrived here in the blink of an eye. I have heard it said that the older you get, the faster time passes. That is certainly true for me.

There has been an unprecedented amount of change within the last five years or so, and I firmly believe that the success of any politician (don't think for a minute that we board members are not political animals—we are) is determined by the skill of his or her predecessors. In which case, I have many people to thank for their good work. Any success we have had as a board during my tenure as president is due largely to the work of others.

One of the people who stands out in my memory is, of course, **Phil Brennion**. His outstanding work as our previous president made the board's current course an easy one. I thank him for his wisdom and foresight. **David Ellsworth** has been a constant force since the beginning of the AAW. His strength of moral character, insight, and advice have been essential to the successes of this board. Whenever I could not work out an issue, I called **John Jordan** for an "in-your-face" opinion. I could always count on his honesty, objectivity, and clear vision.

Jacques Vesery was always available to lend an ear. His help has been noble and righteous. **Mark Sfirri** was a resident intellectual for me. He seemed to have the politically correct answer or viewpoint on everything I asked. **Bonnie Klein** lent a sympathetic ear with an endless supply of kindness. **Mark St. Leger** has been a stalwart supporter throughout my time on the board. It is his countenance and rock-solid personality I wished to emulate while I served on the board. I hope I did him justice.

John Hill, when he was a board member and even now, has a boundless supply of energy and ideas. I hope that he will contribute well into the future.

Last but not least are **Alan** and **Mary Lacer**. Together they have provided an unmatched sense of history and memory for the AAW. For more than two decades, Alan and Mary could always be trusted to provide good advice based on their experiences with this association.

I've named only a few people who sprang to mind. I apologize to the many others I have not credited. I extend a sincere thank-you.

And finally, I would like to send a big shout-out to **Larry Genender**. Shortly after he left the board this autumn, Larry suffered a serious fall, breaking his leg and tearing up his knee. He is just starting physical therapy after spending many weeks flat on his back. I enjoyed Larry's time on the board; he has a very funny personality and always kept us laughing. Please join me in sending Larry warm get-well wishes for a speedy recovery.

Angelo Iafrate
President
iafrateturns@cox.net

AAW NEWS

Members elect 3 AAW board members

Dale Larson

Binh Pho

Cassandra Speier

During fall elections, AAW members elected Dale Larson, Binh Pho, and Cassandra Speier to serve three-year terms on the AAW board of directors. Congratulations to all who agreed to stand for office.

Thank you to Corey Anderson, Al Hockenbery, and Angelo Iafrate, whose terms end Dec. 31.

New executive director, editor assume positions

Mary Lacer has been named executive director, taking Larry Sommer's place. The board thanks Larry for his strong guidance through a turbulent time of board restructuring and wishes him well on his future endeavors.

With the Spring 2009 issue, Betty Scarpino (editorscarpino@gmail.com) assumes editorship of *American Woodturner*. She, too, has had a long and enduring history with the AAW, including a stint as the journal editor. We eagerly anticipate her new ideas and style.

Don't forget to renew your membership

If you want to be listed in the *2009 AAW Resource Directory*, your membership renewal must be postmarked by December 31.

You can also renew online by visiting our website (woodturner.org). So far, about 45 percent of members have renewed online.

More Opportunities For Turning Exhibits

A special subcommittee of the AAW exhibitions committee, chaired by Pete Kekel, has been created to promote a new program called WOOD (Woodturned Objects on Display). The purpose of this program is to identify first-class galleries and museums across the country and bring woodturning exhibitions to them and, by extension, to their patrons and collectors. The intent is for these exhibitions to foster a greater awareness and appreciation of turned wood in and by itself, and as a collectible art form.

The WOOD committee's first action was to contact the 455 professional turners who have registered with the AAW's Professional Outreach Program (POP) and ask them to identify venues that they believe could, or would if asked, host a fine woodturning exhibition. Unlike other AAW-produced exhibitions, the AAW will simply act as a facilitator providing a service that connects the venue with the artists to help bring an exhibition to fruition. There will be no fee for this AAW service.

Once a venue commits to having an exhibition, they will send out a call for juried entries. It will be the responsibility of the venue to form a jury to select pieces. The selected artists will, at their expense, ship the piece or pieces to the venue. The venue will insure the pieces, properly display them, possibly create either an online catalog or a printed catalog and, if it is a sales venue, divide the sale price of an object with the artist. In the event there is no sale, the venue will ship the piece back to the artist. This will be a win-win situation for the artist, the venue, the viewing public, collectors, and buyers.

The Grovewood Gallery (grovewood.com) in Asheville, North Carolina, will host the first exhibition titled *Turning to the Future: A Fresh Look at Wood Art* during the April 2009 meeting of the Collectors of Wood Art (CWA). The five notable jurors are Annie Carlano, director of craft and design at the Mint Museum; Gretchen Keyworth, director of Fuller Craft Museum in Brockton, Massachusetts; Arthur Mason, distinguished collector; Sherry Masters of Grovewood Gallery; and Brent Skidmore, woodworking artist and director of the University of North Carolina Art Campus. A call for entries has gone out to the POP membership.

At the same time that this exhibition is going on, there will be an invitational exhibition in Asheville at the Blue Spiral 1 Gallery (bluespiral1.com). These two exhibitions should be a forerunner of more fine exhibitions to come.

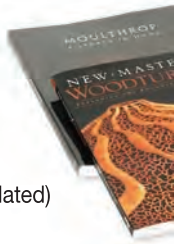
The AAW looks forward to facilitating these exhibitions throughout the country. AAW members are encouraged to submit pieces when invited, and CWA members are encouraged to volunteer to serve as jurors along with others. We look forward to an exciting and bright future for turned wood art.

—Bill Haskell, 2008 exhibit chair

Treat your favorite turner to a new book or video

The search for woodturner gift ideas ends here. Turners and publishers were busy this year, producing a slew of new titles to advance skills at the lathe and appreciation of the craft.

Books



The Art of Turned Bowls
by Richard Raffan, 160 pages

Ellsworth on Woodturning
by David Ellsworth, 247 pages

Making the Chinese Ball (updated)
by Fred Holder, 64 pages

Moulthrop: A Legacy in Wood
by Kevin Wallace, 168 pages

New Masters of Woodturning
by Terry Martin and Kevin Wallace, 197 pages

1000 Woods
by Gianni Cantarutti, 1078 pages

Tops: Making the Universal Toy
by Michael Cullen, 128 pages

Turning Boxes (revised and updated)
by Richard Raffan, 154 pages

Turning Boxes with Friction-Fitted Lids
by Bill Bowers, 154 pages

Turning Wood (updated and expanded)
by Richard Raffan, 218 pages

Vacuum Kiln Drying for Woodworkers
by Joshua Salesin, 64 pages

Woodturning: A Foundation Course
(new edition) by Keith Rowley, 177 pages

Photos: John Hetherington

Videos

Cindy Drozda's Finial Star
by Cindy Drozda, 2 hours

Projects Along the Woodturning Trail (2-DVD set)
by Alan Lacer, 4 hours

The Turning Process
by Fred Holder, PDF version

William Hunter: Woodturning Innovator/Sculptor
by the AAW, 90 minutes

Woodturning Projects: Volume 3
by Kip Christensen and Rex Burningham, 76 minutes

Woodturning Projects: Volume 4
by Kip Christensen and Rex Burningham, 69 minutes

Woodturning Shopmade Tools and Jigs by Alan Lacer, 130 minutes

EOG Deadline Approaching

The AAW Educational Opportunity Grants (EOG) fund continues to be strong due to the generosity of both donors and buyers at the annual symposium auction.

Funds are available for worthy proposals. To be eligible, entries must be postmarked by January 15, 2009. You can obtain the application form and grant guidelines at the AAW website (woodturner.org) or by contacting the AAW office (651-484-9094).

Every year, the committee rejects many applications that are incomplete, illegible, or vague. Here are a few tips to help you with your application submission:

• Download the application form in Microsoft Word format from the AAW website (go to the Resource page), and then complete the form on your computer, print, and mail. If you must submit a handwritten application, it should be neatly hand-printed.

• Provide sufficient information so the EOG committee members can clearly understand your needs and the intended use of the funds. Please be concise and make your point directly and clearly.

• Include details of how you will use the funds. Specific needs should be itemized. Funds will not be granted for miscellaneous or incidental unspecified expenses.

• Remember, these grants are for educational purposes. You must detail the benefits of the educational goal or experience.

Grants are limited to $1,000 for individuals and students, and $1,500 for chapters and others (schools and nonprofit organizations). Your budget may exceed these limits; however, your grant request should not exceed these limits. For very special situations, at the discretion of the EOG committee and the AAW board, grants are available in larger amounts.

If you have questions about the process, contact the EOG committee chairperson as listed on the AAW website or contact the AAW office.

The AAW board encourages you to make the most of this membership benefit.

—Malcolm Tibbetts, 2008 EOG chair

Have tools, will travel...

LACER COMPLETES DEMO IN 50TH STATE

As this issue goes to press, Alan Lacer is scheduled to conduct a workshop in Curt Theobald's studio in Pine Bluffs, Wyoming. But this isn't just another weekend gig for Alan: Wyoming represents the 50th state where he has demonstrated or taught. Alan demonstrated in Omaha, Nebraska (his 49th state), enroute to Wyoming.

Alan's first demo was in 1979 in Norman, Oklahoma. Until recent years, several states didn't even have active woodturning groups or AAW chapters.

SWEAT EQUITY PRODUCES CHAPTER JEWEL

Think big! The Quad Cities chapter pours more than 2,800 volunteer hours into a new turning studio.

The new turning studio in the DeSoto Arts Center in Rock Island, Illinois, provides seven lathe stations for members of the Quad Cities Woodturners.

After 12 months of toil and more than 2,800 volunteer hours, the Quad Cities Woodturners (QCWT) chapter is bursting with pride over its new turning studio and meeting space in Rock Island, Illinois.

Before the chapter members arrived with demolition tools, the long-neglected building was an abandoned DeSoto auto dealership. Today, it's enjoying a second life as the DeSoto Arts Center.

The QCWT (qcwoodturners.org) and a local potters group each have 3,400 square feet in the brick building. (The Willard Baxter Woodturning Studio at John C. Campbell Folk School is 2,500 square feet.)

Part of arts district

The QCWT, organized in 2003, met for several years in rented space in a Davenport, Iowa, office building. After a couple of years, parking problems and insufficient space for a growing membership prompted a search for a new location.

Across the Mississippi River, the city of Rock Island had acquired the DeSoto building in an arts neighborhood known as The District. Fortunately for the chapter members, the Rock Island city fathers are a forward-looking group with a firm commitment to encouraging the growth of the city's arts enclave. Together the public and private sectors have invested $12–$15 million in the neighborhood.

The QCWT and the potters group proved to have the right chemistry for joint use of space.

"I never doubted their ability to pull this off," said Greg Champagne, Rock Island community and economic development director. "This has been a terrific partnership. And the DeSoto Arts Center is in an area where art is a destination. There are lots of galleries and restaurants nearby, plus new housing."

Rock Island agreed to provide the materials and equipment to refurbish the building, while the QCWT and the potters agreed to supply most of the manpower for build-out. The city made an investment of more than $150,000, including the roof and HVAC systems.

Ambitious project

Demolition began in late July 2007. Volunteers gutted the interior and removed an uneven and broken concrete floor. Recycling was a watchword and was practiced throughout the project. For example, 220 tons of concrete (32 truckloads) from the old floor were recycled and placed to grade. After two new handicap-accessible bathrooms were roughed in, the city hired a contractor to pour and finish a new concrete floor.

Earlier this year, the chapter received a $1,200 AAW Educational Opportunity Grant to help defray construction costs.

QCWT members volunteered time and equipment, including tractors, end loaders, and scaffolding. A

contractor-member laid out the walls, and a core group of members framed the interior and installed ceiling insulation, furnaces, air conditioners, and drywall. Exterior work included labor-intensive tuck-pointing of the brick walls.

By July 2008 everything was ready except for a thorough cleaning and sealing of the floor and the exterior brick wall.

The chapter now has access to two large rooms. The turning studio (1,700 square feet) easily accommodates seven Jet mini lathes for mentoring sessions plus peripheral machines and supplies.

The general membership room (1,350 square feet) includes the QCWT library, critique table, raffle corner, and ample demonstration space. Videographers will have plenty of room to move cameras and provide excellent viewing.

Photo: Andrew Link/QUAD-CITY-TIMES

Joe Meiraeghe of Orion, Illinois, works on a napkin ring at the DeSoto Arts Center

Side benefits

The chapter anticipates side benefits from this upgraded space. These include gallery displays, educational classes, and greater access by chapter members.

This project serves as an example of a win-win situation for the chapter, potters, and Rock Island. For a token annual lease payment, tax liability, and utility costs, the QCWT gains a splendid meeting place with room to grow its membership. The target is to have more than 100 members by the end of 2009. (Current membership hovers around 80.)

The Quad Cities Woodturners signed a five-year lease with an optional extension of five years.

Quad Cities Woodturners tore the interior back to bare walls. The project took about 12 months to complete.

The project could not have been accomplished without the donated time and equipment, estimated to be worth approximately $140,000. QCWT member Mike Moseley chaired the planning committee, met with the city's representatives, attended nearly all work sessions, ran errands for materials, and tracked volunteer hours and expenses.

QCWT members hope that the success of its venture will encourage other chapters to explore a similar partnership in their community.

WHAT ARE THE QUAD CITIES?

Four major communities situated along the upper Mississippi River comprise the Quad Cities area (27 communities in all). In Iowa, these include Bettendorf and Davenport. Rock Island and Moline sit on the Illinois side of the Mississippi.

Vesery Captures Top French Award

Jacques Vesery's "Him and Her" won the Professional Juror's Award in Breville, France.

In August, Jacques Vesery received the Professional Juror's Award at a wood-art competition in Breville, France. His award was the highest recognition during "Art and Passion du Bois," a 10-day festival near Cognac.

During a two-day contest period, six invited wood artists were required to complete a juried entry representing male and female. Criteria included technique, creativity, relationship to the theme, and emotional provocation.

Jacques is the first artist outside of France to be invited to the competition. Winning the Professional Juror's Award includes an invitation to return to Breville as president of the jury for the 2009 event.

Experiencing *Une Petite Conférence Française*

A French symposium in an up-close-and-personal fashion

By Jacques Vesery

As many people realize throughout life, bigger is not always better. In our fast-paced "larger than life" American society, we miss out on many opportunities to experience events on a personal level. I had the pleasure to be part of *Petites Journées de L'arrondi* (Small Days of the Round- Off), a small symposium/conference in May in the beautiful village of Puy St. Martin in France's Rhône-Alpes region. Eighty participants from at least seven countries enjoyed two days of good wine, cheese, warm weather, and woodturning in a wonderful setting.

In an intimate atmosphere, seven artists shared their views, experiences, and techniques of turning through a variety of demonstrations and lectures. Benoît Averly, Christophe Castelle, Jean-François Escoulen, Yann Marot, Christophe Nancey, Pascal Oudet, and I covered topics from boxes, bowls, and spindles to sculpture, textures, and color. We shared four rotation spaces in and around the town hall.

In the past, organizer/artist Jean-François Escoulen has produced several larger events such as this in his hometown. (Artistic Woodturning Worldwide 2003 drew more than 400 participants.) But even as a smaller conference, this event took the same amount of hard work and dedication to assemble, and it showed in all aspects like a well-oiled wood lathe.

A cherry bowl made by Julia Klag was chosen for an Instant Gallery award.

It takes more than one woodturner to accomplish such a task, and Jean-François could not have done this without help from his wife, Monique, also a wood artist, and woodturner Jocelyne Naigeon. They make a formidable team with great attention to detail, right down to the pad and pencils issued to each attendee with *Petites Journées de L'arrondi 2008* printed on both.

You might be thinking, "OK, so what makes this event different from

***Top*: Maple figures turned by Manon Deletraz were singled out for an award.**

***Bottom*: The winning piece from the Instant Gallery, "Pas de Deux" by Belgian turner Pierre Dupont, was inspired by a Tango demo at the symposium the previous year.**

any other regional symposium?" For me, the big contrast is the pace of the event. Everything seemed more relaxed, yet the same number of demos were available at a more enjoyable speed.

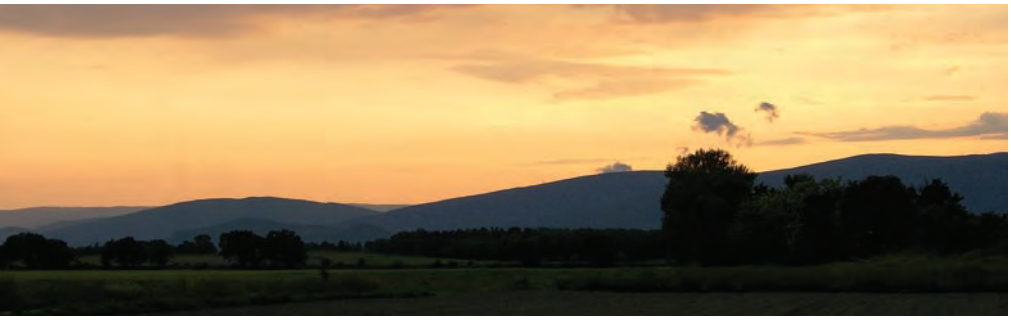
There is also a vital element that relates to French culture: Meals during the event were just as important as the demonstrations and became great moments for conversation. Of course the food was delicious and meals lasted as long as or longer than the rotations.

There was also time to visit the Instant Gallery and actually see everything on display in a reasonable period of time. This event also has a competitive element as part of the gallery in which a jury gives awards to the top pieces on display.

The French had a different spin on Saturday night entertainment. Swiss turner François Prudhomme took the stage to create a small wooden lampshade in subdued light with a light source on the interior of the woodturning while French music played in the background. This was an appealing and amusing end to a great day. No speeches, no auction.

On Sunday, we had the pleasure of welcoming into this world Jean-François and Monique's first granddaughter, Anouk. Midway through an afternoon demo, there was an interrupting announcement of her birth, and cheers of delight were heard from every corner of the conference. It stopped me midsentence in my presentation and it took us a bit of time to get back to the demo. I thought, "Now that's a first. How many demos get a birth announcement interjected in them?" It was a magical break in the action, and everyone was proud to be part of the moment and their precious family.

As a fitting end to the symposium and the arrival of Anouk, the champagne flowed Sunday night.



Sunset near the village of Puy St. Martin, France.

Petites Journées de L'arrondi was a great way to end a month of teaching in France. What could be better? Going back next year! *Vive le tournage sur bois en France* (Long live French woodturning), *Petites Journées de L'arrondi, et Jean-François!*

Jacques Vesery (jacquesvesery.com) is an *American Woodturner* contributing editor. He lives in Damariscotta, ME.

In one of the demo areas, Yann Marot assists Benoît Averly.

NEW REGIONAL EVENT EARNS HIGH MARKS

If you have not taken the time to travel to a regional woodturning symposium, it's high time to do so. The AAW annual symposium is a great experience for any woodturner. A big difference between each type of event is the place in which we get to participate. A new symposium, "Turn On! Chicago," held July 25–27, was an amazing regional event, one of the best I have experienced as a demonstrator or attendee. More than 250 attended.

Organizers Marie Anderson and Janice Shotola pulled off this first-time event without a hitch. On the idyllic grounds of the University of St. Mary of the Lake in Mundelein, the facility was comfortable, the food delicious, and the rotation schedule relaxing.

Unlike some demonstration spaces separated by a curtain, we were blessed with classrooms with no spillover of noise from the adjoining group.

And talk about volunteers! The Chicago Woodturners put together quite a team. Every request for a demonstration room was handled promptly. Need another extension cord? We'll send our extension cord coordinator right over. "The planning that went into the details was unbelievable," veteran demonstrator Alan Lacer echoed.

Chicago organizers are planning a biannual event (next held in 2010), which will place them in alternating years with the biannual event sponsored by the Ohio Valley Woodturners Guild in the fall.

—Jacques Vesery

MORE STORIES NEEDED FOR AAW BOOK

Have you participated in an AAW special project such as introducing woodturning to youngsters? The editors of the AAW 25th-anniversary book invite members to submit short essays about good works and worthwhile AAW projects in which they've been involved.

If you have a good story to tell, please try to do it in 500 words or less, and send one or two photos along with your writing. Please e-mail your essay, and any other advice you've got about this project, to John Kelsey (editorkelsey@gmail.com).

Enchanted Opportunities

Albuquerque and New Mexico, which proudly proclaims itself "The Land of Enchantment," play hosts to AAW members seeking to be educated, entertained, and enchanted at the 23rd Annual AAW National Symposium in Albuquerque.

Be sure to read comments from the 10 featured demonstrators on these pages. Then look for a complete list of more than 50 demonstrators and panelists in the Spring 2009 issue.

The complete symposium schedule will feature more than 120 rotations, a dozen more events targeted for professional/studio turners, and Special Interest Night for penturning, segmented work, ornamental turning, and more. Please join us at the Albuquerque Convention Center.

Nick Cook

Marietta, Georgia

Dynamic Plates and Platters
Turning for Profit

Turning Pepper Mills With Pizzazz

Please sit in one of my demos. And, don't miss this opportunity to see some of the best woodturners in the world. Watch them demonstrate their techniques for turning, carving, coloring, and marketing. You will also get to meet the suppliers of tools, equipment, and materials for making your own turning more fun and efficient. The Instant Gallery will showcase the widest collection of turnings you will ever see in one place. Join us for the event of a lifetime!

Virginia Dotson

Show Low, Arizona

Secrets of Laminated Woodturning
Natural Perspectives
Weather Reports

My unique approach to woodturning combines imagery from nature with stack-laminating techniques. This is a rare opportunity to attend my demonstrations; I last presented for AAW more than 10 years ago, and I'm not getting any younger!

J. Paul Fennell

Scottsdale, Arizona

Seeing Your Way to Signature Work
Hollow Vessels: Techniques and Form

Hollow Vessels: Importance of Form After the Form

In my rotations, we will look at creating hollow vessels with emphasis on the exterior form, and investigating subtle changes in line and form that contribute to outstanding work. We will also take a hard look at what constitutes signature work, that is, work that is unique and expressive to the maker. Audience participation will be encouraged.

Peter Hromek

Sinntal, Germany

Spindle: An End-Grain Hollow
Flower: A Multiaxis Form
Capsula: Multiaxis Form

I'd like to invite you to see how to hollow a spindle vessel with a bowl gouge and a hook. I will show you that you can develop a completely new feeling of the form by enlarging the opening and sculpting. I would also like to share my knowledge about how to develop multiaxial turned sculptural receptacles.

Emmet Kane

Castledermot, Ireland

Texturing
Experimenting With Woodturning

Ebonizing and Guilding

The first symposium I attended was in 1989 in Ireland. I came home with so much excitement after all I had seen and heard. And I'm still excited about symposiums! I have also made so many lifelong friends from around the world that I have met at symposiums. I would encourage anyone new to woodturning to attend AAW symposiums—you won't regret it.

In the ebonizing and gilding rotation, I will show how to ebonize oak and how to use gold leaf. Be sure to stop by and grab a chair!

Mike Mahoney

Orem, Utah

Turning Family Heirlooms (Bowls, Plates, and Platters)
Coring Using the McNaughton Center Saver

Burial Urns With Threaded Lids

Please come by and see my demonstrations. I will pack a lot of information into an hour and a half and discuss my 20 years of production turning.

Rolly Munro

Manakau, New Zealand

Very Thin Deep Vase Form
Carved Hollow-Form Surfaces

A marine theme has run through my more sculptural work. I can probably put that down to a childhood fascination with the sea. I spent as much time as possible in the tide playing with boats or exploring rock pools. The forms of marine creatures, designed to cope with an often turbulent, dense liquid medium, have interesting reverberations with human inventions. Often my sculptural pieces amplify these links between natural and man-made forms. Another theme characterizing my work and also stemming from my childhood is the desire to expose interiors or internal workings such as weathered shells.

David Nittmann

Boulder, Colorado

Basket Illusion: The Cutting Technique
Basket Illusion: Process and Inspiration
Airbrush Basics: Creating Perspective
Airbrush Basics: Shading
Airbrush Basics: Understanding Color

The 2009 location in New Mexico fits especially well with my signature work, which is heavily influenced by Southwestern style. My presentations will give expression to that tradition. The interest in surface decoration of turned art has encouraged the use of the airbrush, but little information has been available for the student wishing to learn. I will be doing demonstrations that will encompass three topics.

David Springett

Warwickshire, United Kingdom

Spheres & Turning Inside Them
6-Point Star Inside a Cube
Streptohedrons: Plain-Turning With a Twist

I have been fortunate, for when I felt there was nothing new to be discovered in woodturning, I came upon a remarkably novel approach. In my "Streptohedron" (yes, I know it's a mouthful but don't be put off) demonstration I will show you new shapes and forms that twist and spiral. All are created from plain, simple turning. I will explain how these shapes can be made into various types of boxes, sculptural art forms, and puzzling tricks. I feel I'm just scratching the surface of one's ideas. Come and see how you can take these ideas forward.

John Wessels

Bisbee, South Africa

Sheet Pewter as Surface
Cast and Turning Pewter
Woodturning in South Africa

"Ex Africa semper aliquid novi"—always something new from Africa. Come to the AAW symposium in Albuquerque and catch my different approach to surface enhancement in using pewter to decorate my turnings. I will demonstrate the use of sheet pewter as well as the techniques that I'm developing for using cast pewter with woodturning. The annual AAW symposium is a wonderful forum for catching up on old friendships, while offering the opportunity to meet the big names in the international turning world and learn from the experts, encouraging normal turners to push the boundaries of their own woodturning experience.

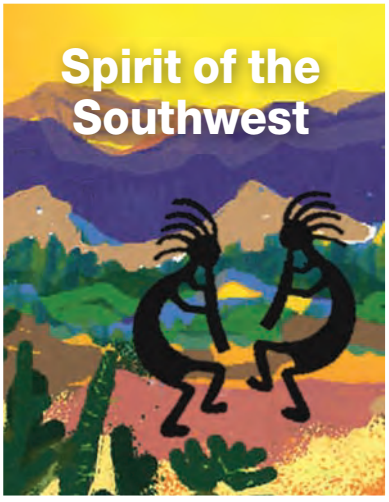
Special Events in Albuquerque

In addition to a loaded schedule of demonstrations and panel discussions, there are plenty of special events awaiting you in Albuquerque. Be sure to allow time beyond your symposium sessions to explore these shows and special events.

Spirit of the Southwest
The AAW's 2009 juried exhibit will focus on the Southwest. The pieces will be on display at the symposium site.

The Spindle
This special gallery, organized by the Professional Outreach Program (POP), will represent the work of more than 50 invited woodturners. These spindles will be auctioned at the symposium.

Resident Artist
The resident artist program is in its second year. For details about the work of Jean-François Escoulen, see *page 16.*



Get involved! Enter the competition for our 2009 themed exhibit "Spirit of the Southwest." Be challenged and creative, and reflect on this theme in a way that captures the history, environment, flora, fauna, or various past and present cultures of the Southwest. This is a turning and creative adventure you can be a part of and come away with a rewarding experience.

There is still time to enter this annual event. The entry deadline is February 7.

Accommodations

The Hyatt Regency Albuquerque (800-233-1234) will host the AAW symposium. Room rates are $135 for a single/double. Be sure to mention the AAW when you call for reservations at any of the hotels.

Alternative hotels: Doubletree Hotel Albuquerque (505-247-3344); $139 for a single/double.

Plaza Inn Downtown Albuquerque (505-243-5693); $99 for a single/double.

AAWWEB

For more details on the AAW symposium, see **woodturner.org/sym/sym2009**.

TOOL SALE ADDS $4,225 TO BRENNION ACCOUNT

If you ever met Phil Brennion, you can understand why so many AAW members and chapters dug deep into their pockets to support the recovery of a past president of the AAW.

In addition to a well-publicized raffle of a Powermatic lathe and other turning equipment, the Minnesota Woodturners Association created a fund-raising event of our own. After Mike Hunter of Hunter Tools donated the steel for 30 tools, 11 members went to work to create custom tool handles.

The response was beyond our expectations. The hollowing tools were sold at chapter meetings and at the AAW Symposium in Richmond. When we added up the sales, we were pleased to discover that we contributed $4,225 to the special checking account for Phil's family.

Bob Jensen, a member of our chapter, supplied much of the exotic wood incorporated into the handles.

For more details about Phil's recovery, see the AAW website.

WEBSITE WINNERS

German-Style Ring Turning

"Norway Maple" by Melissa Bishop. Spalted Norway maple; 3¾×3½".

First Place: Melissa Bishop, Setauket, New York
Second Place: Bernie Hrytzak, Chatham, Ontario, Canada
Third Place: Craig Magera, Simpsonville, South Carolina
Judge: Tim Yoder

"Years ago, our neighborhood planted Norway maples along the streets. When a neighbor had his cut down, I asked the landscaper to deliver the trunk to my house.

"With ring turning, there is a learning curve in only seeing an object from the outline (try visualizing your neighborhood with a topographic map). As soon as I saw the face of the leaf, several dozen new ideas popped into my head and I immediately started on my second ring of a butterfly." —*Melissa Bishop*

NEXT CONTEST: Turned Clocks

Deadline: Jan. 2. For more details, go to woodturner.org, then follow the links to the AAW online forum.

So little time, so many choices

Special Interest Night Draws Crowds

How's a woodturner to choose? That was the dilemma many members faced with 10 outstanding activities lined up for Special Interest Night at the Richmond symposium. Fortunately, the discussions in adjoining areas made it easy to dash from one session to another.

When the convention center staff closed the doors at 9 p.m. Friday, many of the conversations continued in nearby hotels, restaurants, and bars.

Seven groups provided reports of the two-hour sessions.

Boxturners

Ed Moore organized the first gathering of boxturners at the symposium. He recruited an all-star panel that included Benoît Averly, Kip Christensen, Mark St. Leger, Richard Raffan, and Mike Stafford. More than 200 attended this session, the largest gathering of the night.

Nearly 100 boxes were on display. After the box exhibition, Ed moderated a Q&A session. Questions involved wood choices, finishes, lid fitting, tools, and marketing.

—Mike Stafford

Penturners

The beauty of our session was that the skill levels ranged from pen-turning wannabes to professionals making a portion of their living by turning pens. With that range of experience, the mix of ideas and techniques engaged the audience. We were fortunate to have Kip Christensen join us as he shuttled between the boxturners and our group. Discussions dove deeply into finishing techniques, marketing and sales techniques, and problem-solving solutions.

—Kurt Hertzog

Segmented turners

Bill Smith, Curt Theobald, and I presented views and personal preferences on a wide variety of topics. We talked about everything from glue to wood to plagiarism. The topic of consistent wood grain orientation was of particular interest to everyone and opinions varied regarding what was acceptable and what should be avoided.

We were pleased with a crowd of about 75 segmented enthusiasts.

—Malcolm Tibbetts

Hollow turning

Jim Vogel and Al Kiebert, members of the Tidewater Turners of Virginia, moderated the discussion group for hollowing vessels. After a basic introduction to hollowing, the discussion jumped into the forces at work while hollowing, rotational torque (twisting force on the tool), vibration from tool length, cutting versus scraping, and the best cutting angle for a tool. Several types of hollowing tools and how tool design helps the turner deal with those forces were discussed.

—Al Kiebert

Collectors of Wood Art

The annual AAW symposium has become a fixture on the calendar of the Collectors of Wood Art (CWA). We were gratified by the high turnout for our discussion. CWA president Pat McCauley and many of the others present explained what CWA accomplishes and how we work to help young artists get started selling their work. We talked about the annual forums where we have speakers, tours, auctions, and a great time. The next forum opens April 3 in Asheville, North Carolina.

—Arthur Mason

Woodturning & disabilities

Because this was a first meeting, there was lively discussion about disabilities. Those attending expressed an interest in continuing the discussion and forming ways to continue meeting. After the Richmond meeting, six proposals were drafted and forwarded to the AAW board of directors. The proposals suggested ways to improve opportunities for disabled turners.

—Richard Alderfer

Ornamental turners

The majority of our meeting was a free-form demo, steered by the audience's queries. Most were how-to techniques for the MDF rose engine published in the Spring 2007 issue of the journal. The obscurity and lack of equipment for OT also means that we fielded numerous questions about where to obtain and how to use OT attachments and gadgets.

OT enthusiasts got a close look at two additional rose engines brought into the room—a small user-built machine and a new commercially available machine.

—Jon Magill

POPNews

"The mission of the Professional Outreach Program (POP) is to promote a greater understanding of professionalism within the field of contemporary woodturning."

Escoulen selected as resident artist for symposium

The Professional Outreach Program (POP) committee has selected Jean-François Escoulen as the 2009 Resident Artist at the AAW symposium in Albuquerque. Jean-François began his turning as an apprentice in his father's cabinetmaking shop, where he gained a mastery of tools and materials. In 1982, he received a Best Craftsman Award from the French government, entitling him to hang a shingle outside his door proclaiming that there was none better.

Jean-François began demonstrating his craft in 1991. At a European conference in 1995, he met Albert LeCoff of the Wood Turning Center. Albert invited Jean-François to be part of the International Turning Exchange in 1996, which opened for him a new world of creativity.

In a profile article on Jean-François, Terry Martin wrote, "Suddenly, Escoulen exploded into a frenzy of creativity. Once he let go, all the fantasies which had teased him for years while he stood at the lathe poured out. 'When I was younger,' J-F said, 'I thought technique was everything. Now I have to ask myself if I wasn't a prisoner of technique.'" Jean-François now combines amazing technique with exceptional creativity to produce a wide range of objects.

As the resident artist, Jean-François will create new work in an open "studio" during most of the symposium. The resident artist program is an opportunity for an established turner to create more complex, time-consuming projects than are possible in regular demonstrator rotations at the symposium. Jean-François will be set up in a high-traffic area of the symposium so that attendees can watch the progress of his work and talk with him about his techniques and processes. His resident-artist pieces will be included in the Saturday night symposium auction.

Photo: © Yves Regaldi/AFTAB

"***Il Est Temps de Couper le Cordon***" by Jean-François Escoulen of Puy St. Martin, France. Cherry and boxwood; 20" high. "The piece is about the need for a mother to find again autonomy with her two teenagers."

'A Tip of the Hat' to John Jordan and Betty Scarpino

John Jordan and Betty Scarpino are two of 11 artists selected to create a miniature for the CERF's 11th Collection of Miniatures.

The mission of CERF (Craft Emergency Relief Fund) is "to strengthen and sustain the careers of craft artists across the United States." CERF is a nonprofit, tax-exempt organization and is the only one of its kind in the USA (craftemergency.org).

This year's collection features 14 hats, each designed and made by a prominent crafts artist and displayed on a custom wall-mounted hat rack.

Photo: Glenn Moody

"Antique Motorcycle Helmet" by John Jordan

Since 1998, CERF's Collection of Miniatures has been an incredibly popular fund-raising event. The pieces are created and donated by top artists who agree to work within the size specifications and theme of the collection. Funds are raised through the sale of raffle tickets, and the winning ticket is drawn at SOFA Chicago every fall.

POP Resources on the AAW Website

Want to be better connected to the POP and the ongoing commitment to professionalism? Sign up today to keep informed and take full advantage of POP resources.

All AAW members are eligible to register and will receive monthly updates to events, announcements, and opportunities available through POP. If you are interested in learning more about POP, visit woodturner.org/community/pop.

Events & Deadlines

POP Fellowship Grants will be awarded in 2010 and 2012. Details and application requirements can be found in the POP section of the AAW website (woodturner.org). The deadline for submission is June 1, 2009.

It's Crete to Me

In the ancient land of Greece and on the island of Crete, Nikos Siragas, the AAW's only Greek member, has carved out a niche in this tourist area. Nikos, a 30-year veteran, has a small shop and a fine gallery in Rethymno, just off the main drive along the Sea of Crete.

In good weather, you can find Nikos demonstrating outside on the street in front of his gallery. Selling woodturnings anywhere is a challenge at times, but Nikos has discovered tourists like to take home items that represent Greece. More than 95 percent of his sales are to non-Greeks, with most items selling for between $10 and $100. His work includes ring stands, bracelets, fruit, bowls, and sculpted turnings. Nikos (siragas.gr) has also published a book, *From Tree to Gallery*.

One of Nikos' great selling points is that most of his turnings are from olive, among the most beautiful and great turning woods in the world.

Nikos fights (as all wood artists have at times) the view that wood is for fire or building purposes, not for art or fine crafts. His mother once heard some local residents say just outside his gallery, "This poor man is trying to make money from wood."

If you happen to be traveling in that part of the world, Nikos and his wife, Frances, will warmly greet you.

—*Alan Lacer*

Photo: Photo Rethymno

Photo: Frances Wildey

***Above*: "Genie Goblet," one of Nikos's signature pieces, is inspired by the Sea of Crete. Olive; 7¾×2⅜". Collection of Dale and Norene Nish. *Left*: Olive root; 9⅞×9x2¾".**

Photo: Juhani Viitanen

When demonstrating outdoors, Nikos turns at a 70-year-old metal lathe converted to woodturning.

"Eel Vase;" is also inspired by the sea. Olive; 8½×5". "I used to go fishing with my father and I remembered the movement of the sea eels we sometimes got on the boat. This inspired the fins on the sides of this carved vase."

A Family Reaching Across 9 States

Southern Highland Craft Guild

By A. J. Hamler

***Above*: The Folk Art Center, headquarters for the Southern Highland Craft Guild, offers collections and other research sources for Guild members. *Opposite*: The Allanstand shop is one of five Guild stores offering members' work for sale.**

The Southern Highland Craft Guild has served its members for a long time for good reason: They've been around a *very* long time. Chartered in 1930 (only the Boston Society of Arts and Crafts is older), the Guild has roots going all the way back to the 1800s. Today the Guild is one of the largest organizations of its kind dedicated to serving the craftsperson.

Guild membership covers nine southeastern states; find the portion of the Appalachian Mountains below Pennsylvania on any map, and you've essentially found the overall Guild region. Its members include 900 artisans in a variety of disciplines from woodturning to leather, from glass to metal. About 180 claim woodworking as a primary craft.

The Guild is headquartered at the Folk Art Craft Center along the scenic Blue Ridge Parkway in Asheville, North Carolina. Juried Guild members can display their work at the center's Allanstand Craft Shop, which has served as an outlet for craftspeople since it was created by Guild co-founder Frances Goodrich in 1895. The Guild also operates four additional craft stores in the Southern Highland region—two more in North Carolina, and one each in Tennessee and Kentucky.

Among those taking advantage of the shops is North Carolina turner Jim McPhail, who joined the Guild in 2000. "My life as a craft artist has never been the same since. I had no idea what an impact Guild membership would have on my professional life," Jim says.

Jim, an AAW member, credits shop sales with nearly half his income. "Guild membership is required to be in the shops, but not guaranteed. A member's work must sell well to continue in each shop."

In addition to helping promote members' work through the retail outlets, the Guild sponsors major crafts shows in July and October; 2009 will mark the 62nd year for the biannual events.

Another AAW member, Ray Jones of Asheville, a boxmaker and occasional turner, joined the Guild in 1991 and has shown at the fairs every year since. Ray has found the shows profitable for him, and appreciates how the Guild makes it easy for members new to exhibiting to take part, acting as a learning experience for members as they branch out to other regional and national shows.

"Over the years I have seen the Guild fairs act as 'incubators' for craftspeople just starting out. It is easier to do a show with a supportive administration, which is the Guild itself, and then move up to some of the other shows that expect

their participants to be experienced professionals." For example, Ray notes that the show's booth fee includes all drapes, electricity, and a knowledgeable staff available to answer questions and lend a helping hand. "With most other shows, your fee only pays for a 10×10' space on a bare floor."

Educational outreach

Although finding buyers for members' work is important, the Guild isn't just about sales. Educational resources abound for members, giving them access to literature and collections at the Folk Art Center and online.

• The Robert Gray Library Collection contains more than 7,000 books and catalogs, more than a 100 video resources, and dozens of crafts-related periodicals.

• A Permanent Collection Gallery displays more than 200 examples of traditional crafts in all media. Pieces date from the mid-19th century to the present day, with some of the oldest items personally collected by co-founder Frances Goodrich.

• The archives, which contain all historical Guild documents, are available for member research.

• The *Craft Revival Project*, one of the Guild's newest educational efforts, is an online collection maintained at Western Carolina University in Cullowhee, North Carolina. The website (craftrevival.wcu.edu) contains several sections, all devoted to the history of both the people and the crafts of the region. The project, funded by the state, includes support from the John C. Campbell Folk School and Penland School of Crafts.

The center also supports Crafts Days during the summer, with each devoted to a different medium such as metal or wood. No selling takes place at these events, which are instead geared toward outreach with exhibits and hands-on learning related to that medium. During a recent "Wood Day," Jim demonstrated lathe techniques to introduce the craft to young people in attendance.

A sense of family

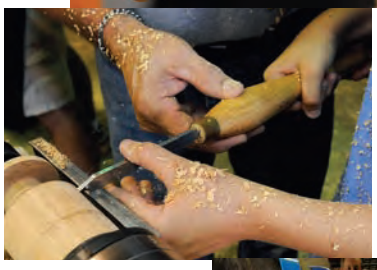
The Southern Highland Craft Guild maintains an attractive and inviting website (southernhighlandguild.org) with a schedule of events, along with descriptions and information on Guild activities and benefits. Web visitors can view members' work available in the Guild shops and follow links to members' personal websites categorized by medium; more than two dozen relate to woodworking. Looking at some of the sites, it's clear that members take a lot of pride not only in their own membership, but in their fellow members as well.

"I enjoy the sense of community and camaraderie within the Guild," Ray says, adding that no matter where else he may do a show around the country, he can count on being in the company of other Guild members.

Jim agrees. "Southern Highland Craft Guild membership has been a major element in my success as a professional craft artist. There's a real sense of both pride and family as a Guild crafter."

SOUTHERN HIGHLAND CRAFT GUILD

Jim McPhail demonstrates woodturning at the Folk Art Center's "Wood Day." The center sponsors four similar events annually.



Photos: Stewart Stokes

***Above* and *right*: "Wood Day" at the Folk Art Center provides children a chance to try their hand at using lathe tools.**

A. J. Hamler (AJ@AJHamler.com) writes about woodworking topics from his home in Williamstown, WV.

The Scoop on Ice Cream

By Matthew Hill

Several years ago this article would have started with the following three steps: Drive to the nearest Wal-Mart or Target and buy an ice cream scoop with a plastic handle. Remove the handle by placing it on the lathe bed and striking it with a hammer to shatter or crack the plastic. Pick up plastic pieces flung far and wide across the shop.

For this effort you'd have been rewarded with a lightweight plated scoop with a skinny tang that was no match for a tub of hard ice cream.

Fortunately, you can now buy an unhandled solid-brass scoop with a confidence-inspiring tang (item #29848; $9.99 from Rockler Hardware; rockler.com, or 800-279-4441). The kit includes a brass ferrule so you won't have to scrounge the Ace Hardware plumbing aisle. So skip the three steps and begin here.

Get started

At the lathe, you will need a 1¼" spindle roughing gouge, a parting tool, a ⅜" spindle gouge, and two 1" skews, one with the traditional straight grind and the other with a radius grind. You'll need a cup center (Oneway markets this as a safe driver) and a revolving cone center. In the event of a tool catch, the turning blank "stalls" on a cup center, preventing damage to the workpiece and possibly you.

For stock, select a 1¾×1¾×6½" dense, close-grained wood blank.

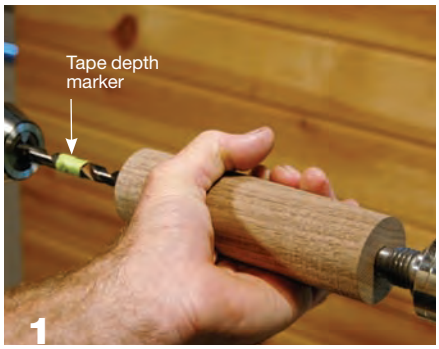
Prepare the blank

Mount the blank between centers. Turn the blank round with a spindle roughing gouge. Remove the blank and mount a drill chuck in the headstock. Chuck in a ⅜" brad-point bit and mark a 1¼" drilling depth by placing a piece of masking tape on the bit (¼" deeper than the length of the 1" scoop tang).

Remount the blank between centers using the drill bit as the headstock center. Advance the tailstock slightly while turning the blank by hand to start the drill bit into the wood. With the lathe set at a slow speed (about 500 rpm), turn on the lathe. To drill, stop the blank with your left hand and advance the tailstock quill with your right hand (**Photo 1**). If you need to clear chips from the hole, stop the lathe, back off the tailstock, and twist and pull the blank from the drill bit.

To mount the blank for turning, remove the drill chuck from the headstock and replace it with your cup center. Mount a revolving cone center in the tailstock and mount the blank between centers. The cone center fits into the drilled hole, and all subsequent turning centers on this hole. If you don't have a cone center, you can make a cone-shaped

Photo: John Hetherington

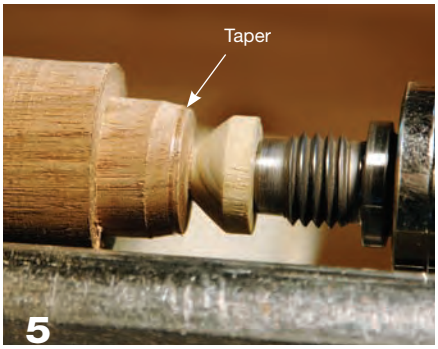


Hold the block with the left hand while advancing the quill with the right hand. To stop the drilling, remove your left hand.

If you don't have a cone center, turn shop-made cone-shaped covers to fit over your revolving cups.

One option: Turn a cone that fits on the end of your cup center. The cone should taper down to a diameter less than ⅜".

With a parting tool and calipers, size the tenon with the lathe running. Set the calipers to the outside diameter of the ferrule.



A small burnished area on the taper at the end of the tenon establishes the finished diameter of the tenon.

Use the skew as a scraper to size the tenon to match the diameter marked by the ferrule. Take light cuts and test the fit frequently.

cover to fit over your revolving cup center (**Photo 2**). For a simpler but less permanent option, turn a cone that simply fits on the end of your cup (revolving) center (**Photo 3**).

Fit the ferrule

Mark the length of the ferrule on the blank. Begin sizing the ferrule tenon by setting calipers slightly larger than the inside diameter of the ferrule. Place the calipers on the spinning blank, and cut with a parting tool until the calipers slide over the tenon (**Photo 4**). Turn the remaining tenon length to this diameter. Make sure the caliper tips have been carefully rounded and smoothed at the ends. (Any small point or roughness could cause the calipers to catch and be thrown toward you.)

Fitting the ferrule is a process of trial and error, repeatedly cutting and testing until you reach the desired fit. Begin by cutting a small taper on the end of the tenon (**Photo 5**). Try to force the ferrule onto the taper using a twisting motion as though threading it on. This creates a mark close to the finished diameter of the tenon.

Using the parting tool, cut down to the mark. Cut and test until the ferrule fits snugly over the end of the tenon. Now use a skew chisel as a scraper to cut the entire length of the tenon to this diameter (**Photo 6**). Keep the tenon straight by sighting it over the ways of the lathe bed. Avoid undercutting the tenon.

I like to push and twist the ferrule all the way on. It should be a tight fit but not so tight you can't remove

Remove the ferrule, then take light cuts with a skew to clean up the shoulder on the ¾"-wide tenon.

With the long point of the skew, make a series of V-cuts to part the handle from the lathe.

the ferrule to protect it during the upcoming sanding steps.

Before starting to form the handle, clean up the tenon shoulder using a skew chisel and a shoulder cut (**Photo 7**).

Shape the handle

With the ferrule fitted, the rest of the project is all about design and spindle-turning skills. Turn the coves and beads with the ⅜" spindle gouge. Rough out the large gradual curves with a spindle roughing gouge and refine the contour with a radius skew and a planing cut. Rough out the rounded ends with a spindle gouge and refine the shape with a radius skew and a rolling cut.

Before sanding, I like to finish-turn the end of the handle so there is about ¼" of wood still driving the piece. On a project where all of the turning can be done with cutting tools, I'll start sanding with 180 grit, move to 220, and finish with 400 grit (400-grit paper actually burnishes the wood, which feels good and produces a low sheen).

Before sanding, reduce the lathe speed to about 500 rpm. Be careful to preserve your detail. If you can't remove the ferrule, cover it with masking tape. The best method I have found for sanding contours is to apply the sandpaper to a ½"-thick foam pad using 3M Spray 77 or Spray 90. (Both adhesives release when placed under a 100-watt bulb for a minute or so.)

The 1"-thick foam sanding blocks sold at paint stores are an ideal density for sanding curves, cylinders, and tight radii. Cut them to the size you need and apply sandpaper over the existing abrasive with one of the adhesives mentioned above.

After finish-sanding, slide on the ferrule and clean up any torn grain at the top of the ferrule with the skew chisel and a shoulder cut. If you're using a wood cone center, cut all the way to the cone.

For the final step, part the handle from the waste. First, back the pressure off between centers. Then, using the long point of a traditional skew, make a series of light V-cuts (**Photo 8**). If you're careful you can turn down the waste to less than 1/16".

Now make the final parting cut slightly beyond the end of the handle so that no fibers break off inside the handle. Put a hand under the handle to catch it as you part through. Finish-sand the end of the handle.

Assemble and finish

To secure the ferrule, place a small bead of epoxy around the inside bottom of the ferrule. Slide it on and use mineral spirits to clean up any squeeze-out. Then spread a generous amount of epoxy in the hole and push the scoop in until it seats. There should be a little bit of squeeze-out to clean up with mineral spirits. After the epoxy cures, apply an oil finish. (I use mineral oil.)

Buy ice cream. Scoop, eat, and enjoy.

A few words about design

Design involves form and function, and function includes comfort and strength. The handle should feel good in the hand and not break when applied to a pint of Häagen-Dazs Swiss Vanilla Almond. A simple cylinder would achieve this. But we're after more. We're on a quest for beauty! We want to transform the commonplace, the everyday object. We want the ice cream scoop to be a source of inspiration for generations to come, the distillation of a mature and profound aesthetic.

I generally work more efficiently and have fewer dogs if I spend some time sketching designs on paper. I make full-size sketches so I can use them to establish critical diameters when I begin turning. Although drawings help, good design evolves through the process of making lots of things and then critiquing them. Critiquing your own work and the work of others is essential to the development of ideas and the refinement of design.

If you are at a loss for ideas, then copy a profile that you like. You can learn a lot this way. Remember: Creating a series of coves and beads on a cylinder is an exercise, not a design. Coves and beads are elements of design, often used to accentuate areas of transition.

—Matthew Hill

Matthew Hill (mhillturn@sbcglobal.net) is a woodturner and turning instructor who lives in Oklahoma City, OK.

Bent-stave vase

How Does He Do That?

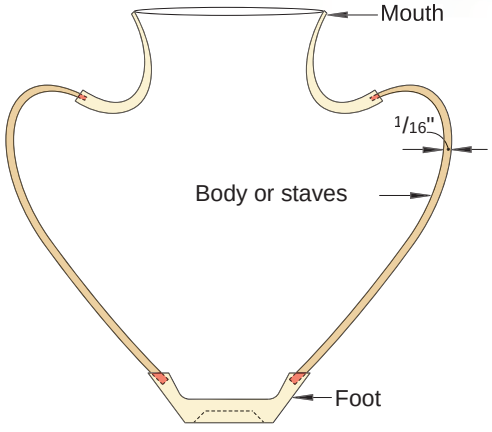
By William Holland

"Le Premier Genre" (Brazilian tulipwood; 13×13") is on display at the del Mano Gallery in Los Angeles.

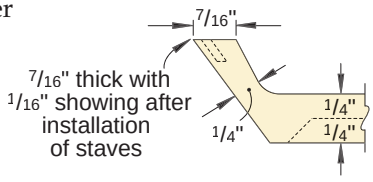
I always wanted to turn a large vase in exotic wood, but could never find an affordable blank big enough for the piece I envisioned. I ruled out a segmented blank because I wanted the wood grain to run parallel to the axis of the turning, as it would with a solid blank. To make the best use of a small exotic wood blank, I decided to form the body with steam-bent staves.

I thought about this design for 10 years, and finally pulled it off with the help of my friend Peter Schultheiss, a member of my AAW chapter and a brilliant theoretical mathematician.

I'll show you some of the basics of the 13×13" Brazilian tulipwood vase pictured here. Then you can use the same method to make one of your own designs. Even with Peter's help with the formulas for the curves, there are more than 200 hours in this piece.



Drawing A



FOOT DETAIL

Lay out the vase

First make a full-size cross-section drawing of the vase showing the wall thickness. Break the form into three sections—mouth, body (the staves), and foot, as shown on **Drawing A**. (I start with the lip of the mouth about 1/16" thick and gradually increase it to 7/16" where the staves connect.) To figure out the number, spacing, and taper of the staves, draw one circle on paper that represents the diameter of the mouth where the staves connect, a second circle that represents the maximum diameter of the body, and a third circle that represents the diameter of the foot where the staves connect.

Divide each circle into the same number of segments. Now mark off spaces between each segment. Make the spaces between segments the same dimension on each circle. This yields the stave width at the top, widest point, and bottom. Next, on your cross-section drawing, measure the stave length and the distance from the top or bottom end to the point of largest diameter. Drawing with a CAD program makes finding the true length of the curved stave easy. (Every change in

Photo: John Lucas Illustrations: Roxanne LeMoine

height and width requires a separate mathematical formula.) Now, using the three stave widths, the overall length, and the distance to the widest part, make a template out of ¾"-thick wood, like the one in **Photo 1**.

And yes, every wood species bends at a different rate.

Turn the mouth and foot

Referring to the drawing, turn the mouth "ring." With the shape complete, use a 1/16" parting tool to make a ½"-deep groove in the 7/16"-thick portion to accept the staves. Then use the indexing feature of your lathe and an awl to mark centerpoints on the mouth ring for the dowels that will pin the staves to the ring. Now form a dovetail recess in the foot blank, grip it with your 4-jaw chuck, and turn the foot to shape. As with the mouth, form a groove for the staves, and mark dowel centerpoints. Finish-sand the parts to 500 grit.

After relying on a computer-assisted drawing program to generate a pattern, bandsaw a template for the staves.

To steam the staves, build a box from ½" exterior plywood. An electric steam kettle generates the steam.

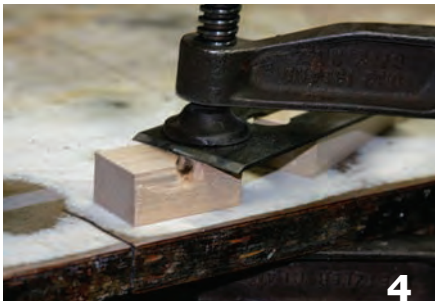
Make the staves

Rip 3/32"-thick stave blanks (1/32" oversized) on the tablesaw. Sand both sides of each stave until the thickness measures 3/64". (The finishing process will build the thickness to the desired 1/16".) Finish-sand the blanks to 500 grit. The staves should fit loosely in the grooves.

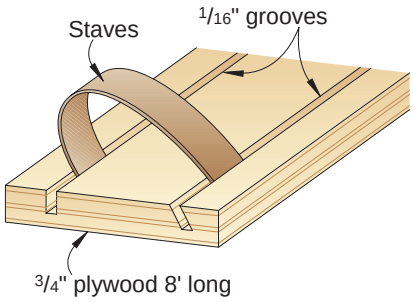
Adhere the staves, one at a time, to the template and flush-trim them to shape with a table-mounted router.

Referring to **Photo 2**, laminate a plywood blank for a stave steam-bending mold, making it thick enough to accommodate the stave width. Draw the stave profile on the blank, making the curve about 15 percent tighter than the actual profile to compensate for springback. Bandsaw the blank into two parts to create a mold that looks like the one in **Photo 2**. You may have to experiment with more than one mold to get the amount of over-bend necessary to produce finished slats that match the stave profile on the

A pair of molds provides the profile to bend and clamp the staves into the shape. A second set of molds speeds along the process.



To make dowels, auger 3/16"-square strips through a 3/16" hole drilled in hardwood. The plane iron peels the dowel stock.



Drawing B

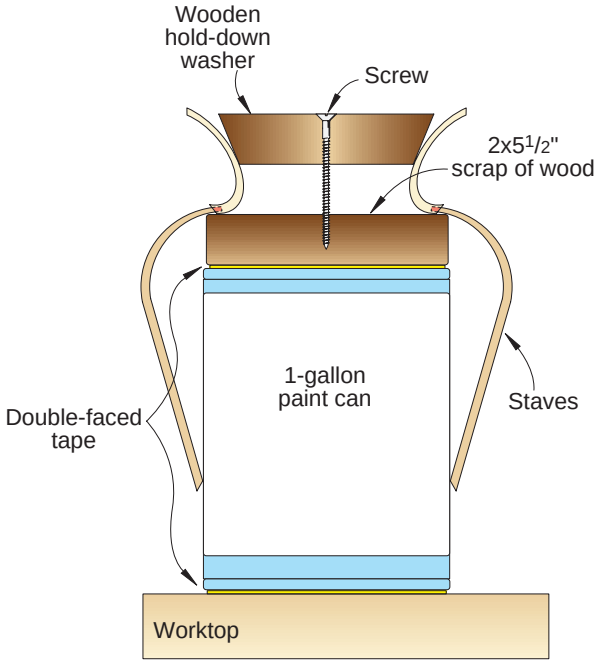
cross-section drawing. To speed the steam-bending process, make more than one mold. (I use ¾" lumbercore plywood for the molds.)

Next, make a stave-drying jig like the one shown in **Drawing B** by cutting ½"-deep angled grooves in an 8'-long piece of plywood. Refer to **Drawing A** for the groove spacing and angles.

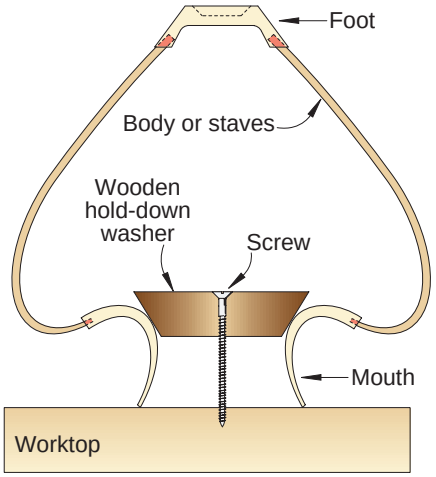
Steam the staves for 20 minutes in a steam box. (I made the simple steam box shown in **Photo 3** from ½" exterior plywood and waterproof glue.) The box holds two slats. Stainless-steel nails driven through the sides of the box form racks that keep the staves separated and off the box floor. A radiator hose connected to an electric kettle supplies steam to the box.) Clamp the hot staves in the molds and let them cool for 24 hours. Remove the staves from the molds, place them in the drying jig grooves, and wrap tape around the jig to firmly hold the staves in place. Let the staves dry for a week, checking them with a moisture meter. With the staves dry, remove them from the jig and finish-sand them again.

Turn matching dowels

The staves fit into the grooves in the mouth and base, and are pinned in place by thin 5/16"-long dowels. I like to use dowels of the same species as the vase, so I devised the simple dowel maker shown in **Photo 4** that consists of a hardwood block with a 3/16" hole drilled through it and a plane iron. Cut 3/16×3/16" strips



Drawing C



Drawing D

of wood, chuck one end of a strip into an electric drill, and taper the other end. Clamp the wood block and plane iron to your workbench, skewing the blade for a smooth shear cut. Insert the tapered end of the wood strip into the hole in the block, and with the drill running, push the strip through the block. The plane iron shaves the square strip into a smooth, round dowel. Experiment with the jig and scrap stock until the setup produces a dowel that snugly fits into an 11⁄64" hole. Then make enough matching dowel stock to make two 5⁄16"-long dowels for each stave. To cut 5⁄16"-long dowels, drill an 11⁄64" hole 5⁄16" deep into a hardwood block. Insert the long dowel into the hole and cut it flush with the surface of the block with a fine-tooth saw. Sand the dowel flush with the block, tap the block on the bench to free the dowel, and repeat. Make a few extra dowels.

Apply a finish

I finish all the parts with six coats of water-white lacquer. This is a museum-quality finish that does not turn yellow. It takes a week to apply all the coats. I then hand-rub the finish to achieve uniform results.

Assemble the vase

Drill a screw pilot hole into the center of a 2"-thick, 5½"-diameter wood disc, and attach it to the top of a gallon paint can with double-faced tape, as shown on **Drawing C**. Then adhere the can to your workbench with more double-faced tape. Turn a tapered hold-down washer to fit into the mouth ring. Carefully clamp the mouth ring to the disc with the tapered washer and a wood screw. Slip a stave into the mouth groove, centered on a dowel-hole centerpoint. Make sure the stave is bottomed out in the groove, and tape the free end to the paint can. Drill an 11⁄64" hole 5⁄16" deep into the mouth ring and through the stave. To make a simple depth stop, drill through a piece of scrap and adjust the drill bit so that when the scrap is against the chuck jaws, the bit protrudes 5⁄16". Glue a dowel into the hole and wipe away any excess glue. Repeat with all staves. Let the glue dry overnight.

With the glue dry, use the tapered washer to fasten the mouth/stave assembly upside down to your workbench, as shown on **Drawing D**. Fit the staves into the foot groove, but leave two staves out so you can remove the wooden washer. (Later, you will attach the last two staves.)

Carefully line up the foot dowel-hole centerpoints with the centers of the dowels in the mouth. Make sure the staves are centered on the hole centerpoints and that the spaces between the staves are even. Drill dowel holes as before, and glue in the dowels, *except for the ones in the two loose staves.*

Move aside the two loose staves, unscrew the tapered washer, and remove the washer through the gap. Reposition the two staves, drill the pin holes, and glue the dowels in place. Let the glue dry overnight. Sand the mouth and foot dowels flush and finish-sand to 500 grit.

Mask the staves and touch up the finish on the mouth and foot.

I sign, date, and record the wood species in the foot recess.

Bill Holland (wmhollan@optonline.net) is a furnituremaker, designer, and restoration artist. He is a member of the Long Island Woodturners and lives in Shirley, NY.

A variety of basic tree shapes provides plenty of creative variations to these ornaments turned on three eccentric positions.

Eccentric Trees

By David Reed Smith

Usually, I remember where I found the idea for a project. But this time, I don't. I started working on eccentric trees right after turning a batch of "North Coast" trees that Bob Rosand described in the Winter 2007 issue of the journal.

These are quick and inexpensive to turn from construction-grade lumber (unless you're trying to take the ornament upscale). They're easy to turn if you're comfortable with a skew and off-center mounting, and are good practice if you're not. If you're truly terrified of the skew you can use a different tool, although it will be slower.

Here's a quick overview of the turning steps: Mount the ornament between centers and turn a tree shape. Then mount the tree with the base slightly offset (eccentric) at three equally spaced intervals to create "branches." After accenting the branches with acrylic paint, re-chuck the ornament, clean up the tree profile, and turn the angel top and base.

You could turn the entire tree between centers, but I find it easier to do the last turning with the ornament mounted in a chuck. This allows me to finish, drill, and sand the angel's head on the lathe.

Get started

For turning tools, you'll need a 1" skew, a ¾" spindle roughing gouge, and a parting tool.

To make the best use of your time (unless you're making a big batch of ornaments) it helps to easily switch to the off-center positions without removing the chuck. I use a home-made drive center that mounts in my Beall collet chuck.

For the tailstock, it's nice to have a center that will limit penetration

and avoid splitting the stock. I used a washer, but there are other ways. (For a discussion of methods for chucking and tailstocks see my website at davidreedsmith.com.)

For turning stock, construction-grade pine or Douglas fir is ideal because it's light and inexpensive. For the first project, create a 1½×1½×6" block.

Turn the tree

Allow a generous extra amount for mounting a tenon in the chuck and a nub at the tailstock end that won't tend to split.

Take the time to make a clean crosscut on at least one end of the turning square, as it's easier to mount to a center you can see. Mark the center of the square at both ends. Dimple the mark with a centerpunch to help you find the mark on the lathe. On the tailstock end, draw three equally spaced lines radiating from the center mark (**Photo 1**). Then make a mark on each line equally spaced from the center. (After you turn your first tree, experiment with different distances to find what looks best to you; 3⁄16" is a good distance to start with.) Mark each distance with a centerpunch.

Mount the turning square between centers and use a spindle roughing gouge to reduce the square to a cylinder. Use a parting tool and calipers to size a tenon at the headstock end that will fit your chuck. Make another cut with the parting tool to mark the base of the tree. With a spindle roughing gouge or skew, reduce the full tenon to the marked diameter.

With a spindle roughing gouge, reduce the diameter at the tailstock end to a little more than the diameter of the finished finial (about ½"). Define the bottom of the finial with a parting tool or skew cut. Allow a generous extra amount for a nub that won't split (**Photo 2**).

Now shape the tree with a ¾" spindle roughing gouge. Pick any simple shape that you like. I think the trees look equally attractive with a straight, convex, or concave profile. It's a good practice to skim the surface with a skew.

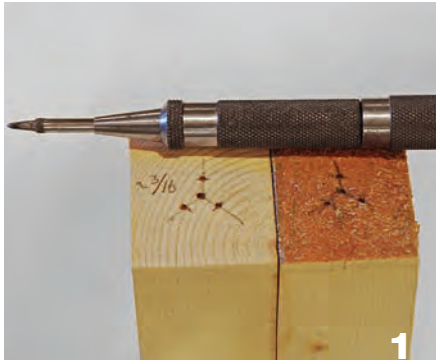
With a pencil, mark off intervals for the branches (**Photo 3**). You can use regular or graduated intervals; just don't make them random or much less than ¼" apart. (Experience has taught me that the trees look better when the branches are marked.)

Go eccentric

At the headstock end, remount the blank at one of the offset locations. Leave the tailstock at the same center, which will make the branches taper near the top. This also reduces the likelihood that you'll accidentally part off the top of the tree. Normally a 2-prong center is best for offset turning, but since the shift is small and pine is soft, a cup drive works fine. Rotate the lathe by hand to make sure the tree clears the tool rest.

Use your skew to make a V-cut at the branch location marked closest to the bottom (**Photo 4**). Keep the side of the cut at the tailstock side more or less vertical. Cut until it looks like you're cutting as deep as the ghost image. You actually cut about two-thirds of the way around the tree, which has a pleasing appearance. If you do end up cutting deeper than you planned, make adjustments during the last turning.

If you're uneasy about making V-cuts with a skew, you can create the V-cuts with a spindle gouge. Roll the gouge so that the flute faces straight to your right. Hold the gouge so that the axis of the shaft points straight to the axis of the ornament, point the



With a centerpunch, mark offset centers on the headstock end of the turning square.

Rough-turn the shape and add a 1" finial at the base and top of the tree.

Mark the branch locations at roughly equal intervals. You don't need the precision of dividers, but don't be random.

To make a V-cut with a 1" skew, use an underhand grip with your index finger hooked under the tool rest to anchor your hand.

bevel of the gouge where you want to go, and push in a little bit. Roll the gouge over so it points straight to your left and aim the bevel to about where the last cut ended up and repeat until the V-cut is as deep as you like. Practice this first on non-offset work.

Now skip two lines and cut a V-cut at the fourth line. Skip two more lines and make a V-cut at the seventh line, and continue in the sequence until you reach the top of the tree. Stop the lathe and have a look at the Vs to make sure they're cut cleanly.

For expediency, leave the V-cuts unsanded, as it's difficult to sand well with a constant air/wood transition. If you are compelled to sand the V-cuts, make a sanding aid by cutting a length of wood to a triangle the width of your V-cuts. With a spray adhesive, adhere sandpaper to the stick. Then use a back-and-forth motion to sand one side of the V. Flip the tool over and sand the other side.

Remount the ornament at another offset axis. Check again to make sure the ornament doesn't hit the tool rest. (Make sure you really did pick an unused axis, not the one you selected earlier.) Make a series of V-cuts at the second, fifth, and eighth lines until you again reach the top of the tree. Then remount the ornament on the last axis and cut on the remaining lines.

Add color

Remove the ornament from the lathe and set up a painting station. You'll need a clear sealer to keep the paint from wicking into unwanted areas. (Choose clear spray paint, spray lacquer, shellac, or sanding sealer.) Be sure to seal the walls of the V-cuts. Allow the sealer to dry.

After the sealer dries, paint the inside of the V-cuts with green acrylic paint. Neatness doesn't count as you'll be turning away excess paint. Allow the paint to dry.

Remount the ornament in your chuck. Bring up the tailstock for additional support. Use your skew to skim the tree to remove paint and pencil lines. Stop the lathe to make sure you've removed all marks and excess paint (**Photo 5**).

Turn the angel

Reduce the finial area to the maximum diameter and height of the angel, leaving a nub for continued tailstock support. Use a ¼" spindle gouge to turn her head and shoulders/wing tops. Undercut the wing/shoulder area about 1/32".

Use a ¼" or ½" skew to make an undercut V-cut to define the bottom of the wing. Then turn the bottom of the angel's dress, blending it into the V-cut at the bottom of the wing. Turn a shallow cove with a spindle gouge to add some character to the wing (**Photo 6**).

With a parting tool, reduce the trunk to final diameter (⅜" to ½"). Take a finishing cut on the trunk by using the parting tool like a skew, or use a small skew or spindle gouge. Clean up the bottom of the tree and the top of the base with a skew (**Photo 7**).

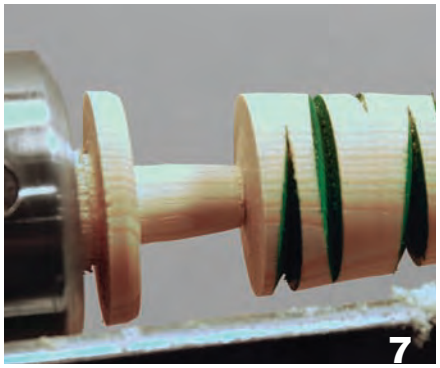
Finishing details

Sand the ornament with progressively finer abrasives, starting with a grit appropriate for the surface your tooling left. With sanding out of the way, remove the nub at the head and sand the top of the head.

Use the tailstock to dimple the head to drill for hanger/halo mounting. Then use a #55 bit to drill the hanger mounting hole. (Jump ahead to creating the halo and make a sample so you can measure the appropriate drill diameter.)

Skim the surface of the tree to remove excess paint and pencil lines.

Shape the side of the wing by cutting a shallow cove.



With a skew, clean up the surface of the trunk and base.

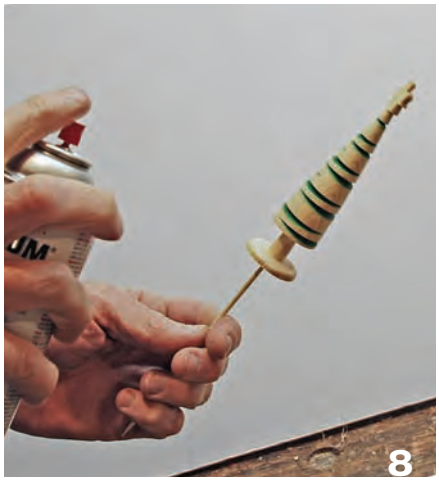
If you're turning a batch of ornaments, save some time by mounting the drill in a pin chuck. Then instead of swapping out the tailstock for a drill chuck, back off the tailstock, mount the tail of the pin chuck on the tailstock, line up the drill point, and then advance the tailstock while holding the pin chuck in place by hand. Part the ornament off at the base. Use a drum or disc sander to sand the bottom of the base flat.

Pick whatever part of the ornament looks best to you as the front and use a drum sander to sand the front of the angel almost flat. Don't sand into the tree, and stop short of the halo mounting hole in her head.

Apply the finish of your choice (I prefer lacquer or clear gloss paint).

To make it easier to hold the ornament during spraying, I find bamboo skewers (available in kitchen shops) are ideal (**Photo 8**). Measure the diameter of the skewer and use a drill of that diameter to drill a hole in the center of the base of the ornament.

Prepare a drying stand by drilling slightly larger holes in a scrap piece of wood—size the wood piece to accommodate all the ornaments in your batch.



Using a bamboo skewer to hold the ornament, spray a clear finish to the tree.

To form a halo/ornament hanger, twist 22-gauge wire around the shank of a ¼" drill.

Hold on to the skewer with one hand and spray the can of finish with the other. You can turn and angle the ornament with the skewer until the finish has been applied to the whole surface (even the bottom). Then set the skewer into the holder until the finish dries. Apply another coat if needed.

Angel needs a halo

Bend a halo/ornament hanger from wire. Select something smooth and round to match the desired diameter of the halo. (I use the shank of a ¼" drill.)

Cut a short length (about 2") of 22-gauge brass wire and clamp both ends in a vise. Insert the rod into the loop and turn the rod until the wire is twisted into a tight spiral. Unclamp the vise to remove the wire and slide the loop off the rod. Bend the spiraled wire so it angles below the center of the loop (**Photo 9**). At the point of the wire directly below the center of the loop, bend the spiral wire so it points straight down.

Trim the wire to length with wire cutters. Apply some cyanoacrylate (CA) glue to the tip of the spiral wire and insert the wire into the hole drilled in the angel's head. If you want to hang the now-finished ornament you can loop a hanger wire around the base of the halo.

Starting with the basic ornament you can make many changes, such as leaving off the base, changing or omitting paint, or changing the finial. Some of these are discussed in the Variations sidebar on my website.

Basement woodturner David Reed Smith (David@DavidReedSmith.com) lives in Hampstead, Maryland. He is treasurer of the Baltimore Area Turners.

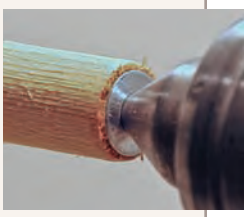
Limited Penetration Tailstocks

MODIFIED POINT

Most commercially available tailstock centers are suboptimal for small work in soft wood because a cup center is too large and a point center tends to split the wood. One way to solve this problem is to shape your own center with a finer point and flat area to limit penetration.

Early Oneway live centers use a tapered dowel pin as the center pin. You can take the center to a well-stocked hardware store and find a tapered dowel pin that fits and has the amount of extension you want. Mount the new dowel pin in the tailstock and then mount the tailstock in your headstock. Find a rod or nail about the diameter of the tailstock knockout pin and insert it in the live center cross hole to lock the tailstock. Tape the pin in place. Turn on the lathe at a slow speed and file the point however you like.

After filing a tapered dowel pin into a limited penetration center.



Use a small washer to prevent the tailstock from penetrating too far and splitting the soft pine.

Newer Oneway tailstocks use a #0 Morse taper as the center pin. You can do the same thing if you can find a suitable pin. An Internet search convinced me it would be easier to make a pin. Chuck a ⅜" rod on your lathe and file until it matches the taper of the pin that came with the chuck. Then mount the new pin in the tailstock center and shape the point.

WASHER

A V-point tailstock and a small washer provide a low-tech solution. If you get tired of chasing the washer across the shop, glue it in place with CA glue.

Revisit a favorite project

Classy Clocks


A


B


C

By Bob Rosand

Years ago, Tom Gall and I spent a lot of weekends together as crafts show exhibitors, each of us trying to eke out a living and make names for ourselves.

One of Tom's bread-and-butter items was this mini clock design. A few years ago, Tom was in a car accident and suffered multiple broken bones. Today, after extensive physical therapy, Tom is doing much better than anyone ever imagined, and he continues to recover. With his permission, I'll show you how to turn one of his best-selling designs.

These clocks require minimal wood and just a few tools. The clock inserts are inexpensive (about $10 each). Inserts are available from Craft Supplies USA (800-551-8876, woodturnerscatalog.com), Packard Woodworks, Inc. (800-683-8876, packardwoodworks.com), and Penn State Industries (800-377-7297, pennstateind.com). The 1½"-diameter clocks shown here require a 5⁄16" recess.

Get started

For turning tools, you will need a ¾" spindle roughing gouge, ⅜" spindle gouge, and a parting tool. Optional tools include a ½" skew and Sorby spiral texturing tool. At the lathe, you will need a 4-jaw chuck.

Select a 3×3" scrap about 1½" thick. The dimensions are not critical, but if the completed clock is too thin, it may not stand upright. It doesn't matter if you use end grain, side grain, or burl, but choose an attractive turning block.

Turn the clock

To make the best use of your blank, glue a round hardwood wasteblock to the back, centered. Grip the wasteblock with your 4-jaw chuck, and turn the blank to a 3" cylinder. Use a spindle roughing gouge on an end-grain blank or a spindle gouge on a side-grain blank.

With the blank turned to a cylinder, begin shaping the clock body. Don't remove too much material from the back of the blank (**Photo 1**) or it may fly off the lathe.

Detail tool: (A) spindle gouge; (B) spiral tool; (C) spindle gouge sharpened to razor point.

Install a Jacobs drill chuck into the tailstock quill, and chuck a 1⅜" Forstner bit. For the clock insert, bore a 9⁄16"-deep hole (**Photo 2**). When withdrawing the bit, hang on to the chuck. If the bit binds in the hole, it could pop the drill-chuck taper out of the tailstock with ugly consequences.

Texturing adds interest

You may choose to cut a series of coves in the piece, texture it with a needle scaler, turn a series of beads, or simply sand the clock body. The goal is to have fun with this project and to come up with as many variations as you can.

I textured one version with a Sorby texturing tool. This tool produces nice swirl marks on the surface and excels on end grain.

And if your cutting technique is good, you never have to pick up a piece of sandpaper.

To use the texturing tool, keep the speed of the lathe up (1,800 rpm or higher), angle the tool to about 45 degrees, and tip it down to keep the teeth from grabbing. Engage the tool in the wood at the edge of the movement hole and texture the front of the clock body (**Photo 3**). Keep the tool moving. You can move it back and forth a bit.

To texture the entire clock, run the texturing tool to the widest diameter of the clock body and stop.

Complete the back

Continue to shape the back of the clock body and part it from the wasteblock. To hold the clock body for completing the back, measure a tenon diameter on the wasteblock for a friction fit of the clock-movement hole (**Photo 4**). Instead of using the hardwood wasteblock from earlier steps, I recommend switching to pine because a softwood won't mar the turning stock.

Press the clock body onto the wasteblock tenon. The clock body should fit snugly and run true. Smooth the back (**Photo 5**). Texture or sand the back to match the front.

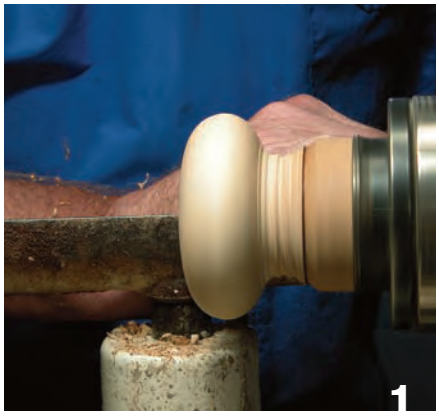
To make the clock body stand up, cut an angled flat spot at the edge. To accomplish this, make a simple tablesaw jig (**Photo 6**). Position the jam-chuck tenon so the edge of the clock body protrudes about ½" beyond the edge of the ¾" plywood.

Safety note: Do not attempt the tablesaw cut without the tenon.

Press the clock body onto the tenon, tilt your tablesaw blade 6 to 8 degrees, and make the cut (**Photo 7**). I make two or three light cuts rather than one heavy cut. Sand the bottom and apply a finish.

If I'm in a hurry, I spray my clocks with Deft satin lacquer and then buff them. If I have a bit more time, I oil the clocks with Waterlox and buff the clocks on a 4"-diameter wheel. Finally, insert the clock movement.

Bob Rosand (RRosand.com) is an *American Woodturner* contributing editor. He lives in Bloomsburg, PA.



Leave a sturdy wasteblock on the back of the clock (1½" diameter shown above).

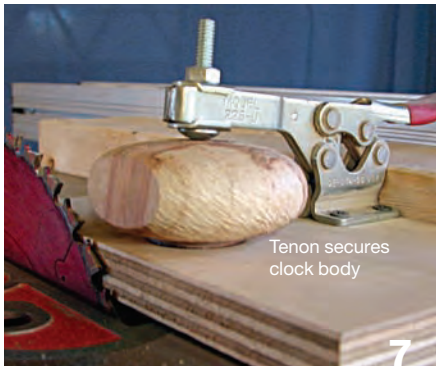
Advance the quill to bore a 9/16"-deep hole to accept the clock insert.

Engage the tool at the edge of the hole and move it toward the edge of the body.

Use calipers to mark the clock diameter on the wasteblock that will become the tenon.

Use your spindle gouge to smooth the back of the clock body.

Part off a short length of the jam-chuck tenon and fasten it to a piece of plywood.



With the tablesaw blade tilted about 6 to 8 degrees, cut a flat spot on the clock body.

Right: Desk model; cherry and maple; 12×6x12". ***Below***: Handheld model; cherry and maple; 3×13". Both designs (plans are available from Jim) have three interior lights to illuminate the objects.

Jim Duxbury
Graham, North Carolina
cyberdux@bellsouth.net

Kaleidoscopes

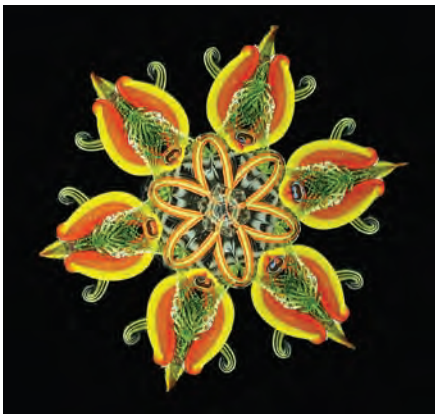
An eye-popping experience

By R. E. Coleberd

One of the popular rotations at the AAW symposium in Richmond featured North Carolina woodturner Jim Duxbury turning wooden kaleidoscopes. His eye-opening presentation sparked interest and conversation throughout the convention. Those who saw him work found a tasteful project to add to the turner's customary menu of bowls, trays, bottle stoppers, platters, and boxes.

Kaleidoscopes are an excellent conversation piece that never fail to evoke favorable comments when seen on a coffee table.

This gallery highlights the work of three AAW members who are well-known contemporary kaleidoscope artists. Their work illustrates some of the many turning options in the crafting of a scope.



Shelly Knapp creates the lampwork (glass patterns) for kaleidscopes designed by her husband, Randy.

Brewster Society

The kaleidoscope was invented in 1816 by Sir David Brewster, a Scottish clergyman turned scientist. Scope-making began in this country in 1863, soon after Charles Bush emigrated from Prussia. Woodturning was obvious in Bush's work.

For many years kaleidoscopes were limited to novelties and children's toys. Making kaleidoscopes as a work of art, and often a collector's item, began three decades ago under the leadership of Cozy Baker of Bethesda, Maryland, long recognized as "the first lady of the kaleidoscope." She founded and was for many years president of The Brewster Kaleidoscope Society (brewstersociety.com), named in honor of Sir David Brewster.

Types of scopes

For turning purposes, we begin by identifying two types of kaleidoscopes: handheld and parlor. Both types comprise the three essential components of a kaleidoscope: the barrel or tube that contains the mirror system, the object cell that

Far left: "Kaleidodeer"; ash and walnut; 16×12×12". ***Left***: "Journey"; cherry and padauk; 10×6x10". Collection of the Japan Kaleidoscope Museum. David was the first foreigner to win the Japan Kaleidoscope Grand Prix.

David Collier
Vancouver, Washington
kaleidofun@aol.com

Left: "AGM Parlor Kaleidoscope"; madrone and African blackwood; 7×10×10". ***Below***: "Symbioptic"; African blackwood, box elder burl, and walnut; 3×3×7½".

Randy Knapp
Brookings, Oregon
randy@knappstudios.com

contains the small pieces forming the image from the mirror reflection, and the eyepiece end.

Handheld scopes, such as Jim turned in Richmond, are usually limited in size, often no more than 2½" in diameter up to 12" in length. This is a popular style because the scope can be passed around and cradled on a stand.

Tabletop models are a favorite among turners because of the many turning options: the base, the stem for the base, the barrel, the turning pilot's wheel for the object cell, and the eyepiece end. Clarity Glass (clarityglass.com) is a recommended source for parts.

California woodturner Bob Coleberd (recoleberd@aol.com) is a member of the Glendale Woodturners Guild and The Brewster Kaleidoscope Society. He lives in Granada Hills.

OT

Ornamental Snowflakes

With the help of a jig, you can create a blizzard of creative ornaments.

By Jon Magill

Ornamental turning, or OT, rarely appears in the same sentence with "production work." Yet here is a production technique that will allow you to create multiple ornaments relatively quickly and easily.

The foundation of this particular technique rests with the jig (really just a socket) into which you place a blank for cutting on one side. It's easy to reverse the blank and then cut a pattern on the other side. The result is a simple-to-make, two-sided ornament. Or in this case, you can turn a collection of thin snowflakes.

Make a socket

Begin by making the socket itself out of a piece of ¼"-thick hardwood. Rough-cut the wood into a disc appropriate to grip in your chuck. Drill a hole in the center of your disc to allow mounting onto a wasteblock with a central screw and a fender washer (or use your tailstock). Once mounted, true the outer edge to a diameter that will work with your chuck jaws. Cut a tenon about half the thickness of the disc to grip with the jaws. Leave a shoulder to register against the face of the jaws.

Transfer the disc to your chuck with tower jaws and cut or drill through the center to open up the middle of the disc.

Move the chuck and jig to the rose-engine lathe (see Spring 2007 *American Woodturner*). Before you start cutting, a few simple steps will help avoid some of the obscure pitfalls that could prevent your jig and blanks from mating.

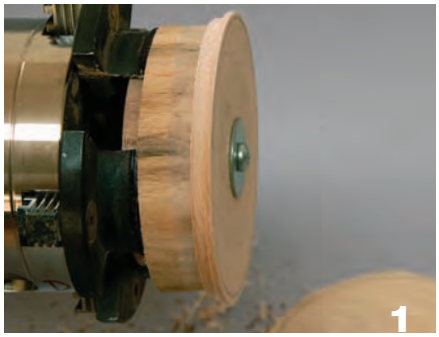
First, ensure that your headstock is oscillating about a vertically centered position (swinging the same distance toward you and away from you as it rotates). Second, check that your cutting frame is set exactly at the correct center height. If either of these is not done, there will be distortions in your pattern—both the hole in the socket and the outside of the blanks. These distortions may prevent your jig from holding the blanks.

Finally, make sure that your slide rest is perfectly parallel with your lathe's headstock. You can do this by holding a straightedge against the headstock and along the edge of the long portion of your slide rest. This adjustment will keep your jig and blanks from being cut at a tapered angle.

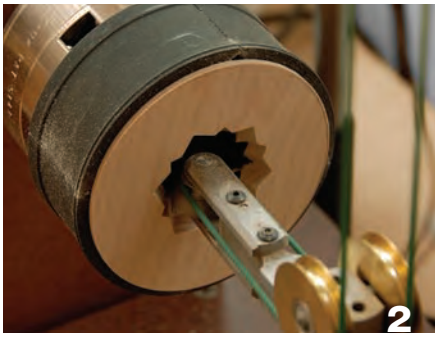
Using a horizontal cutting frame, or HCF (see "Cutting Frames," Spring 2008 *American Woodturner*), open up the socket in the disc to a size appropriate for your final ornaments. The tower jaws allow the head of the cutting frame to pass completely through the disc, creating parallel sides without hitting the inside of the chuck. If you do not have tower jaws, you will need to devise an alternate technique.

The final size of the cut-through opening should be slightly smaller than the stock size you plan to use for your ornaments. Stock in the 2"- to 3"-diameter range seems to work well for this project.

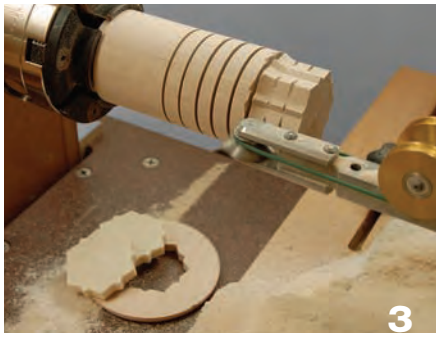
Mark your disc at each edge of the #1 jaw on your chuck. Remove the jig and sand if necessary to clean up the front and back faces of the disc. Then make two small blocks to span the opening, leaving a space through the center, and glue these to the inside of the disc. (Hotmelt adhesive is perfect for this application.) Make sure the blocks are small enough to clear the inside edges of your chuck jaws. These blocks provide backing for the blanks when they are placed into the socket of the jig.



Using wasteblock and 4-jaw chuck secured to a wood lathe, cut a tenon and leave a shoulder on the ¼" disc for the jig.



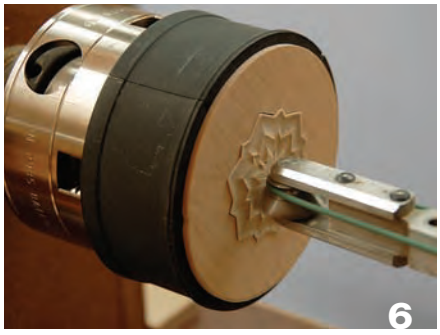
Using a horizontal cutting frame and holding the disc in tower jaws, cut the socket all the way through the disc to make the jig.



Cut along the outside of the cylinder to create the end-grain blanks that will be sliced off. Check the fit by sliding the jig onto the cylinder.

Two jig discs and several blanks are ready for rose-engine detailing. Blocks glued to the back of the lower jig provide backing and allow reversing the blanks.

Mark the jig on the inside, indicating the left and right edges of the #1 jaw of the chuck. The shoulder and tenon on the disc work as normal.



Make a series of cuts, adding phasing for interest, across the first face. Reverse the blank and cut the other face to finish the ornamental snowflake.

Prepare your blanks

Prepare some blanks using spindle-oriented stock. The goal is to end up with slices of end-grain material for your blanks. True up cylinders to slightly larger than the outside diameter (OD) required, with a tenon on one end. Good choices if you are making snowflake designs include white woods like holly and hornbeam, or alternative materials like faux ivory. Any wood that can be painted is fine too. Acrylic interference medium paints in reds and greens, over a coat of white, add a nice holiday sparkle.

With a cylinder mounted in your chuck (**Photo 1**), mark off thicknesses (¼", or the same thickness as your disc) and use a thin parting tool to cut grooves slightly deeper than the "peaks" will be (otherwise the peaks may be damaged when separating each blank off the main cylinder). Move the cylinder to the rose-engine lathe and cut the outside profile by slowly feeding into, and then along the length of, the cylinder (**Photo 2**). Keep your jig handy to check for fit as you work down to the final diameter. Remove the stock and slice off the individual blanks using a bandsaw, handsaw, or parting tool (**Photo 3**).

Turn a snowflake

Using a couple dabs of hotmelt adhesive, mount a blank into the socket (**Photo 4**). Mount the chuck that holds the jig onto the rose-engine lathe. Place the disc into the chuck and align your #1 jaw marks (**Photo 5**). Make a light cut around the periphery of the blank, then stop the lathe and cutting frame, and check that the "points" of the snowflake are aligned with the jig's points (**Photo 6**). If adjustment is necessary, open the chuck slightly to rotate the disc as needed, then retighten.

Proceed through a sequence of cuts on one face, remove the jig, and use your thumbs through the back of the disc to pop out the blank. Reverse the blank into the jig with another couple drops of hotmelt glue and cut the second face.

For the truly adventurous, piercing all the way through the center portion of your ornaments creates an even more delicate version of these snowflakes.

Drill carefully to add hangers or thread to display your new batch of snowflakes on the tree.

Send feedback, questions, and suggestions to jon@magill.com.

Journey to Abbeyfeale

Photo: Brendan Landy

By Denise DeRose

It was February, and the train window felt cold against my cheek as I rode deep into the Irish countryside. I was on my way to meet woodturner Liam Flynn.

Knowing that my February business trip to Ireland could leave me an extra day, I had contacted Liam Flynn on a whim. He had politely responded to my e-mails, but he must have been wondering the same thing that I was: What would he and some strange lady woodturner from California have to talk about?

An internationally renowned woodturner from County Limerick (three hours from Dublin), Liam is known for his award-winning hollow-form vessels, many boasting his signature double rim. His work, unmistakable for its graceful organic shapes and strong sculptural presence, is found in prominent private collections and is shown in many galleries in the USA, Great Britain, and France.

When like interests meet

At the station in Charleville, I caught sight of Liam slouched against a wall. He wore a shy smile and dirty jeans, but his piercing eyes hinted at what was to come.

We hesitated for only a moment before hopping into his truck and striking up easy conversation. "I'm not very good with trees," Liam shrugged in response to my endless questions about the leafless silhouettes we sped past on our way to his village.

Liam keeps his shop, a low concrete building, at his parents' house in Abbeyfeale, a small town cupped amid rolling hills where Limerick borders County Kerry. The ground outside was thick with wood chips. On his woodpile, thin holly logs crisscrossed stout sections of Irish oak. "I am looking for almost veneer-quality wood," Liam explained. "I don't want burr [burl]. I want straight-grained wood."

He grinned as we pushed open the creaking wooden door and edged into his workspace, dodging boxes packed for a London gallery. "I cleaned it up a bit for you," he said. Liam's three lathes—caked with sawdust—clustered in a triangle. There was a short bed Graduate, a long bed Graduate, and a new Powermatic, marketed in Ireland as a Jet. "A real working shop," I thought. Shrink-wrapped bowl blanks crowded the floor. A table down the center of the room

Opposite: Liam works on one piece at a time, turning, hollowing, and carving while the wood is still wet. He uses hand tools, often starting with a V-gouge to define the outline of his design.

Liam's surface carving is restrained and precise. Vessels are ebonized, fumed, or whitewashed to emphasize form over color. Subtle grain patterns enhance the overall design. Rims are carved to emphasize their gently irregular line.

was loaded with large bowl gouges, carving tools, and a couple of hollowing scrapers. Wires snaked like tangled vines along the cobwebbed wooden rafters.

Drying and finished work was everywhere—on tabletops, open shelves, boards suspended in the rafters, and in cabinets. Piles of Liam's signature double-rimmed vessels, large-bottomed juglike forms, graceful fluted bowls. All were in Liam's elemental palette: natural wood, ammonia-fumed caramel-colored oak, and ebony black.

Revealing recipes for wood

Liam and I talked of Merryll Saylan, a San Rafael woodturner and friend we had in common. "I have some of Merryll's recipes," Liam said. "She had this beautiful black finish that I loved, and she gave me the recipe, you know. She told me that it would look green until the final stage, when a chemical reaction with the finishing oil would turn it the lovely black. I sourced all the ingredients and followed all her steps." Throwing up his hands, he exclaimed, "I put on the last solution and waited. Nothing happened, still green. So I sent it out to a painting shop, and the pieces came back looking like this." He tapped a black enamel light base with his finger. "Always test

your finish *before* you put it on your work," he advised with a rueful look.

Liam ebonizes much of his work by applying a solution of vinegar and iron trimmings to the still-green wood. The oxidation process involves a chemical reaction with the wood's tannin, turning it black. He then finishes with Danish oil and fine sandpaper. "I don't mind the little sanding scratches going around," he commented, although I could find none on the satiny wood. On light wood, he uses a Danish white flooring oil that does not yellow. Liam also produces a subtle brown color on oak by fuming. "Turn it upside down under a box in the yard suspended over 880 industrial ammonia. You want the kind that'll kill you," he said.

Ammonia-fumed oak vessel (about 13¾" wide) with Liam's signature double rim. Liam's hollow forms, turned mostly of oak, have a strong profile but are deceptively delicate.

Some talk about technique

"I prefer to hollow the green, wet wood with a gouge," he noted. Liam's special grind flattened the left edge of a bowl gouge 3" down the shaft, leaving the left side of the flute in a modified Irish grind. The right side of the shaft was ground in a blunt traditional bowl grind. This allows Liam to reach deeply inside a hollow form without catching while maintaining a supported edge throughout a cut across the bottom.

Liam held up a drying oak vessel and traced a growth ring around the piece, showing how the ring was equidistant from the bottom around the entire circumference. "Placement is very important, especially with wet turning. You can lose a beautiful piece if it lists to one side. I want the pieces to look organic, but not off balance. You can control that warpage by placement and turning to a uniform thickness."

Liam developed his signature style gradually. "I live in Ireland," he said. "So I had plenty of oak to work with. Rather than use exotics, I decided to stay with the oak. At first I had trouble with discoloration of the sapwood. And I hated stain, so I started experimenting with oxidation and fuming to get a more uniform color."

The carved double rim came as a result of experimentation as well. "I was turning a rim on the bottom of my vessels, and carving feet. I thought one day that I would try carving the rim as well. Then it all went very quickly until I found my double-rim form." Liam explained that he creates the double-rim form by turning an interior and an exterior rim, and then carving away part of the exterior rim to achieve the organic off-center look that he is known for.

I asked Liam whether he found the isolation in Abbeyfeale disturbing. Although Ireland has a well-organized woodturning guild and encourages artists by exempting them from income taxes, none were close to Liam's hamlet. "Community can be overrated," he said. "It's distracting. Sometimes when you see something that someone else does, you just have to go try it yourself. There was even a time when I stopped reading woodturning journals or visiting other woodturners. I just wanted to find my own work."

"It is hard to figure out your influences," Liam continued. "Many are unconscious." He remembered seeing Dutch turner Maria Van Kesteren's vessels in the early 1980s. "When Maria was first doing her work, everything was grain and exotics and spalting, recalling Moulthrop, Stocksdale, and Lindquist," Liam recalled. "Her work was often painted black and all form, and it sparked my interest. But I think woodturners look too much at other woodturners. They should look more at the other arts—ceramics and glass."

As we talked, I began to see the evolving style of Liam's pieces, the newer ones more ceramic in look, almost Danish in feeling; some with a whitewash, others leaner and smoother, with only an incised or raised line. "I think I have taken carving about as far as I can. Now I want a smoother look. A bit of color."

The light in Liam's shop was fading. It was time to go, so I chose a piece in the Liam Flynn style I already knew and Liam wrapped it for me. I could not urge Liam to give me a lesson or to come demonstrate for our club in California. To Liam, woodturning is a private business between himself, the wood, and the gouge. We ended our day in the fashion that all good days in Ireland end—in the pub. We talked about U.S. politics and our common love for fly-fishing until it was time to catch the train back to Dublin.

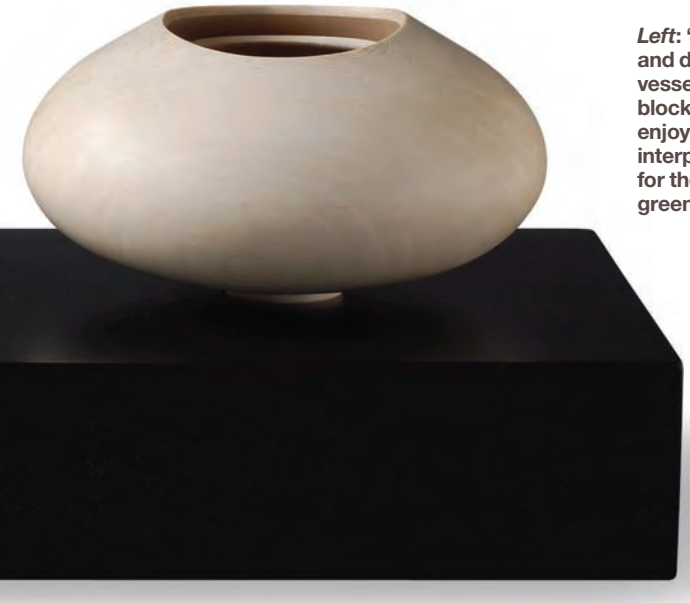
A day later I sat on a flight home, my Liam Flynn treasure carefully tucked in the overhead bin. I looked down and saw that my scarf was still full of wood chips from Liam's shop. I didn't remove them.

Oak vessel with carved spine. Liam's most recent work moves even closer to pure form. Surface decoration is eliminated or reduced to its most austere form.

Change the market, not the work

Liam began turning as a teenager in his father's cabinetmaking shop. After a number of years learning his craft, he began selling his work through craft fairs. This brought his work to the attention of some gallery owners. At the time, small business development agencies were encouraging artisans like Liam to follow the path down the production salad bowl route, supplying the craft-shop market. True to form, Liam did the opposite and concentrated on developing his art. His philosophy was, "If the work doesn't sell, change the market, not the work!"

Sometimes, though, he supplemented his income by turning balusters and spindles, work that Liam believes helped in developing his present technique.



***Left*: "Still Life in Holly" bowl and double-rimmed vessel on mahogany block. About 13¾" wide. Liam enjoys the challenge of interpreting and planning for the movement of the green wood he turns.**

Denise DeRose, a recent vice president of the Bay Area Woodturners Association, lives in Oakland, CA. Denise (denisederose@turn-two.net) hopes to visit Liam again, and maybe squeeze in some fly-fishing as well.

Across the Pond

A new wave of UK & Irish turners

Turning is developing at quite a pace around the world: More and more people are exploring the lathe as a medium to work with, and this trend will continue to develop.

Some turners work exclusively on the lathe, others work with their pieces both on and off the lathe. There is some debate as to how much enhancement can be done before a piece can no longer be considered turnd. But because turning is only a powered form of carving, it is one that will be debated for many years to come. And there is introduction of color, one of the most polarizing topics in turning to date.

The UK and Ireland have at times been overlooked as far as trend-setting or development of turned work is concerned. I have often heard people say that the demonstrators from over on this side of the pond are masters of technique, but when it comes to development of ideas, we lag behind some other parts of the world.

The artists featured in this gallery are some of the turners pushing the boundaries and causing quite a stir as to what they are creating and how. They are, between them, developing styles and bodies of work that cater to all aspects of taste.

—Mark Baker, editor of the UK's Woodturning *magazine*

Nick Agar

East Cornworthy, Co. Devon, UK

"**Standing Double-Sided Sculpture**"; 29×20×2½". "The British Museum is one of my favorite places to indulge my imagination. The inspiration for this work comes from my love of ancient artifacts and the lost and found treasures of different and distant cultures. I like to invite the mind seeing this work to a distant past, leaving the question 'was there more, or was this part of something much bigger?' "

Left: Jarrah on base; 24×24×7". "My love of fossils has been with me since childhood and this piece of jarrah burl was just perfect for this piece of work. It was turned from both sides and hollowed in the center. Viewing it face on, it has the appearance of the type of giant drill that is used to tunnel deep into rock beneath the earth." Nick demonstrated at the AAW symposium in Richmond.

Glenn Lucas

Bagenalstown, Co. Carlow, Ireland

"**Yew Gull Wing**"; Irish yew; 2×2x12". "Yew is a brittle wood to work with, so I laminated two sides with inexpensive softwood to enable the piece to be turned safely and accurately. After turning, I removed the waste wood and f nished the edges. Accuracy of turning is essential as the f nished piece exposes a cross section of the wall thickness."

Nick Arnull Norwich, Co. Norfolk, UK

Left: "**Geometric**"; English sycamore; 12" diameter. "I cushioned the platter and then accurately marked and hand-carved the rim. The petals were ebonized after carving but before turning the bowl."

Below: "**Coral Series**"; English sycamore; 2½" to 4½" diameter. "Each vessel is turned and allowed to dry before decoration can commence. First, I eroded the surface using a ball cutter, then a secondary texture is applied with a high-speed air turbine. They were then ebonized and overbrushed with color. The f nal stage is the f tting of a collar to the top."

Tracy Owen

Northwich, Co. Cheshire, UK

"**Untitled Vessel**"; English yew; 9×6". "The challenge with this one is carving the natural or broken edge using an angle grinder with a Lancelot cutter. I burnt the edge using a hot wire pyrography machine."

"**Green Bowl**"; English maple; 3×12". "This had an interesting challenge of turning off center while using a vacuum chuck. I colored the rim with an acrylic lacquer."

Seamus Cassidy

Gilltown, Co. Meath, Ireland

Far right and *detail*: **Raised bowl form** (front and top view); burr oak, bog oak, and gold leaf; 12×6½". "My challenge was to create an elegant fusion between contrasting woods."

Right: **Burr elm bowl form** on bleached and textured sycamore legs; burr elm, sycamore, and ebony; 11½×4½". "My goal was to accurately link the legs to the bowl form and to fuse the contrasting woods and shapes with angled pins."

Mark Hancock

Pershore, Co. Worcestershire, UK

"**Spiral**"; cherry; 9½×7½×7½". "The major technical challenge is hollowing out through a 1"-diameter entry hole and at a distance from the tool rest with the exaggerated rim limiting access and movement of the hollowing tool. The rim is shaped after the piece is off the lathe."

"**Leaf**"; English sycamore; 12×7×7". "These pieces come from my *Drop Series*. I developed this series in response to an exhibition curated by the Makers Guild in Wales, of which I was a member at the time."

Carlyn Lindsay Stisted, Co. Essex, UK

Above: "**R&B Whirly Bottom**"; English sycamore and colored veneers; 3×5". "I like the idea of a bottomless bowl. This one is great to spin and watch the colors animate."

Left: "**Red 'n' Green**"; English sycamore and colored veneers; 3½×5". "I have always liked the early work of Jim Partridge. He was my inspiration for this piece."

Matthew Calder

Ottery St. Mary, Co. Devon, UK

"**Ammonite 3**"; English burr oak, iron, hemp rope; 50×35×2". "The *Ammonite Wall Sculptures* are a direct response to the fossils found on the Jurassic Coast close to my home. To break open a stone and discover the fossilized remains of a creature millions of years old is a continual source of inspiration. These pieces have a tendency to dictate themselves; there is an almost meditative point during the making when I instinctively know it's time to stop, and the balance is right. The rope and iron help to complete the circle and add a sense of human intervention and interest to a natural form."

"**Nurture 1**"; English sycamore and spalted beech; 25×13". "This piece is a step on from my *Egg Series*, and it seemed a natural progression to have a 'baby' inside the egg. For me, the unseen void and interior of pieces is what holds much of the fascination of hollow forms, and the *Nurture Forms* give the interior life. I hope the layered interior gives a sense of family and unity. As a composite piece, these forms are fairly time-consuming."

Emmet Kane

Castledermot, Co. Kildare, Ireland

"**Sphere of Gold**"; ebonized oak with gold leaf and peaks; 4½×3¾". "I was inspired by the galaxy and all of its stars to turn this piece." Emmet is one of the featured demonstrators at the AAW symposium in Albuquerque. See *page 12* for more details.

"**Crock of Gold**"; ebonized burl oak with gold leaf; 11×6½". "The inspiration for this piece is from Irish folklore, which tells us there is a crock of gold at the end of each rainbow."

Left Brain Right Brain

To stimulate and simulate the design process for woodturners, Cindy Drozda (aka Left Brain) and David Nittmann (aka Right Brain) presented this demonstration at the Front Range Woodturners in Denver. This summer, they took the demonstration on the road and presented at the Utah Woodturning Symposium and the AAW Symposium in Richmond.

By Cindy Drozda
and David Nittmann

Are you an *artist*? What we make as woodturners, whether it's a candlestick, a bowl, or an abstract object, is *art*. It's a means of self-expression.

How does this expression evolve? It comes as a delicate balance between the conflicts of the two hemispheres of the brain. The right side is artistic, the left side is calculating. The right, innovative; the left, technical. Right, instinct; left, knowledge. Right, talent; left, skill.

What is essential for the design process is a balance between unworkable fantasy and endless to-dos. So how do we get started on the path to signature work? The answer is to copy, modify, and iterate, the same method we used to develop our own written signature.

Use your right brain to find a piece that you like. The piece we chose for this presentation is a vase by Steve Sinner at *right*. His distinctive style has well-defined features in the lip, neck, and body. Smooth transitions between refined details exemplify his signature work. Steve's surface treatment is exceptional artistry displayed on superb form.

Sources for your choice could be friends, contemporaries, museums, galleries, books, and magazines. Most studio artists, provided that you don't sell the copy, have no objection to you using their work for learning purposes.

Exercise left brain

Closely observe the piece that you have chosen. With your left brain, measure all the major diameters and associated heights. Also examine the transitions between the major points. Now make a drawing or template of the piece. At the lathe, lay out and reproduce the object. Set the completed piece next to your choice and compare. Repeat this process until you have a reasonably exact copy of the piece.

Engage right brain

Now put a blank on the lathe, engage the right brain, and make your object from memory. Compare this effort to the original and observe similarities and differences. What aspects of the differences interest you? Be very left-brain specific in your analysis. Explore these variations with more iteration. Quantity equates to quality.

Put it all together

The next step is to put the same details on a completely different-size blank. Let the left brain begin the process, but you will soon find the right brain exerting its influence on the final shape to accommodate the different size, especially in the transition areas. Add or subtract details, color, and/or texture to come up with something that pleases the right side while holding on to the original idea with the left side.

Please have fun and play. There are NO failures, only new information. Begin with your dominant side and allow the recessive side to influence the finished piece. What you need to know about the next piece is contained in your last piece. Quantity is the road to quality.

Colorado woodturners David Nittmann (david@davidnittmann.com) and Cindy Drozda (cindy@cindydrozda.com) live in Boulder. David is a featured demonstrator at the Albuquerque symposium.

Recommended reading

Here are three books to help you exercise both sides of your brain.

Art & Fear by David Bayles and Ted Orland, Capra Press (ISBN 0-88496-379-9)

The Alphabet Versus the Goddess
by Leonard Shlain, Penguin Books (ISBN 0-670-87883-9)

Designing Furniture
by Fine Woodworking editors, Taunton Press (ISBN 0-942391-02-0)

Hone Your Definition of Sharp

Scraper Sharpness

By Alan Lacer and Jerry Wright

A woodturner's scraper can remove wood with the brute force of a bulldozer or the finesse of a barber's razor. This flexibility parallels that of the furniture- or cabinetmaker's scraper.

Such craftspeople know that their scrapers can remove planer marks and dried glue or leave a finish on wood superior to sandpaper. In skilled hands, a scraper can even level a cured finish. These broad abilities are all the result of the way in which the scraper is sharpened and presented.

The woodturner's scraper is a relative newcomer in our field. Turning scrapers made their widespread appearance in general woodturning after the introduction of electric motors to power the lathe. Unless a turner worked on a small scale and/or in dense hardwoods or ivory, it was difficult to remove wood with a scraping action on human-powered lathes.

Scrapers have been popular in the patternmaking trade and with students in shop classes. In patternmaking, they were often a favorite for creating specific shapes with close tolerances, where clean cuts were not always the object (torn grain could be filled and sanded).

In some school settings, scrapers were the only tools, as gouges and skew chisels demanded more skill. The shop teacher required a higher level of woodturning skill to teach such tools, and scrapers were often thought to be a safer alternative.

Scraping vs. cutting

What makes a tool a scraper? It is not really the name of the tool, as one can "cut" with a scraper and "scrape" with a cutting tool such as a skew chisel.

The answer lies in presentation angle. Like the cabinetmaker's scraper, the tool is presented to the wood with no bevel supporting the edge, only the wood passing over the edge.

In a cutting action, the edge has some support of the bevel area to essentially lever away the wood, rather than scrape it off. Think of the difference between scraping off the skin of an orange with just the edge of a knife versus coming in at a low angle to peel away the skin. Or, closer to woodturning: Try grabbing a carving tool or bench chisel and presenting it in such a way as to scrape off the wood with just the edge, versus attacking it at a lower angle, using the bevel as a fulcrum to start cutting away the wood. Finally, most turners' scrapers are made from flat stock with only one side ground (unlike a parting tool or skew chisel).

Specific applications often dictate how scrapers are used. Early English turning books taught the mantra that "wood prefers to be cut rather than scraped." Although generally true, here are situations where a scraper is extremely useful:

- when the surface finish does not matter (facing off the outside bottom of a bowl for a faceplate or chuck or roughing the inside of a lidded box);
- when sacrificing a burr rather than a sharp edge is preferable (working bark, glue, or dirt when rough-shaping a piece);
- when a safer approach than a cutting tool is required (in aggressive areas on bowls, hollow turning);
- when leveling or blending a surface (inside bottom of a bowl or the large face of a plate or platter); or
- when a fine-finishing tool is required (leveling a finish).

Preparing new scrapers

A new scraper needs a considerable bit of tuning. First, the sharp corners behind the cutting edge require

softening. Some tools come sharp enough on these edges to cut flesh—and tear up tool rests or drag on the rest. A belt sander is the easiest tool with which to soften these edges.

Second, the top surface is often an abysmal surface either because of pitted steel or deep milling marks. In the worst cases, use a belt sander/grinder with a flat platen to remove the marks. To remedy less-severe factory marks, polish the top surface (polish only the first 1" to 2" with a 600-grit or finer diamond hone, WD-40, and a little elbow grease).

As for shape, the beauty of a scraper is that the shape is whatever you need or desire. For most applications, a French curve or side radius (only the left side) performs well. For the bevel angle (actually a relief angle on scrapers), 20 to 40 degrees off 90 degrees (most turners would call this a 50- to 70-degree angle) works well.

When you buy scrapers, the factory grind often has a minimal relief angle. We do not want this bevel to contact the wood—it can inadvertently produce a horrendous dig-in.

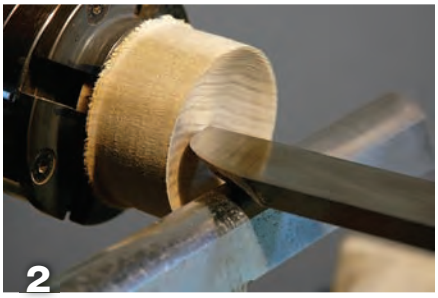
Rather than grinding scrapers to a negative-rake angle, grind a greater relief angle. Most negative-rake scrapers also arrive with a grinder-produced top surface—not well polished.

Develop the edge

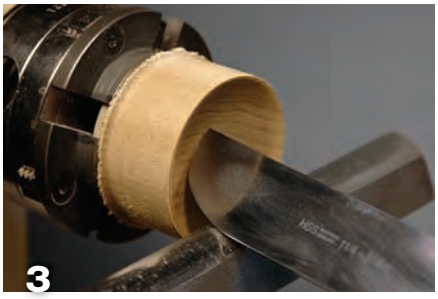
The key to preparing the scraper is developing a feel for burrs. Every skilled cabinet- or furnituremaker knows that a scraper takes a different burr for removing planer marks than for finishing off figured maple.

The majority of turners use the burr off the grinder. However, a cabinet- or furnituremaker's burnisher (**Photo 1**) can pull up a burr. A diamond hone (flat, round, or a slip) will perform the same task.

To pull a burr with a burnisher or a diamond hone, steady the tool and present the burnisher (triangular, oval, or round) at a 3- to 5-degree tilt toward the top of the tool. Make one steady pass. The amount of pressure you apply changes the burr from light to heavy.



In "normal" scraping, the tool is held flat on the tool rest (positioned close to the work) with the handle raised slightly in back and with only the edge contacting the wood.



A finishing technique to remove small amounts of wood is often called "shear scraping." The tool is no longer flat on the rest but canted in the direction of the cut at around a 45- to 70-degree angle.

Many years ago, some turners raised burrs on scrapers with an India slipstone, and it worked. When diamond hones evolved, we found out they raised burrs even easier.

All of these burr types have different applications. The burr off the grinder does not seem to differ radically with the grit of the wheel, but you can vary the amount of pressure applied with the burnisher and hone when raising a burr.

How to raise a burr

When using the burnisher or a diamond hone, begin at the grinder to raise a burr. Remove the grinder burr by honing the top of the scraper, and then pull a fresh burr with either a burnisher or hone. As the burr wears, hone the top again to remove any evidence of the burr, then pull up a fresh burr. You can usually perform this raising, removing, and raising again three to five times before you must return to the grinder to create a new burr and repeat the sequence.

Two approaches to wood

Turners use one of two approaches to contact the scraper and wood. The first is what can be called "normal" scraping mode: The blade is flat on the rest, handle in back is slightly elevated, rest at a level to allow only the edge of the tool with *no* bevel to contact the wood (**Photo 2**). The turning stock is usually contacted at the centerline or slightly above.

In what turners have dubbed "shear scraping," tilt the scraper in the direction of the cut to around 45 to 70 degrees, usually cutting higher (above centerline) on the workpiece and again with no bevel contacting the wood (**Photo 3**).

The test

With tools tuned, with different burrs (or even without a burr) and used as described above, the authors wished to determine the nature of the burrs and the wood finishes produced.

For turning stock, we selected kiln-dried yellow poplar (not an easy choice for scraping methods). The poplar was approached in a challenging way: hollowing end grain. Turning trials used poplar from the same long section of 3×3" stock, the same lathe speed (around 1,000 rpm), and the same size and shape of high-speed steel (HSS) radius scraper (1¼"

wide and ⅜" thick). After Alan completed the turning trials, he shipped the five scrapers and turned samples to Jerry. Labels did not hint which wood was prepared with which scraper.

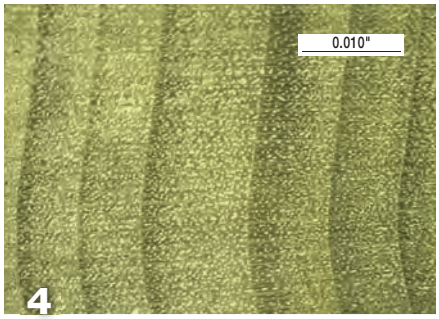
The wood

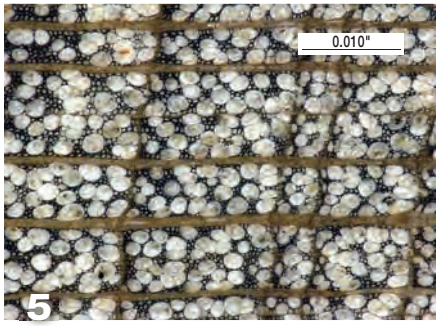
Although it is known that various sharpening methods produce different edges, does sharpening really affect the way in which the tool cuts?

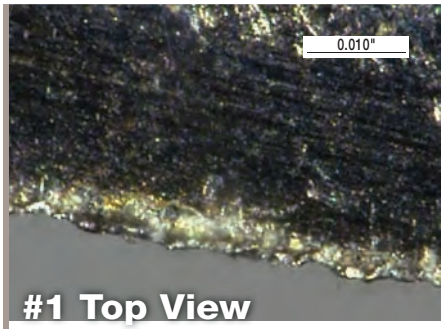
The poplar end-grain samples were examined at up to 100× under the same imaging microscope (see *page 50 sidebar*). A low-magnification image of the poplar is shown (**Photo 4**). All magnified images were made with the same grain orientation. In each sample, an area of cross-grain turning was selected because it has the highest probability of tearing.

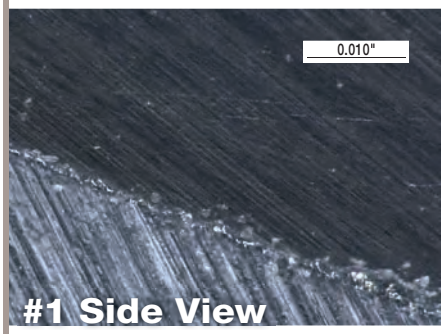
To illustrate the true underlying grain structure of the poplar, an end-grain face was sanded through a series of papers to 1,000 grit (**Photo 5**). Note that this image clearly illustrates the beautiful nature of the

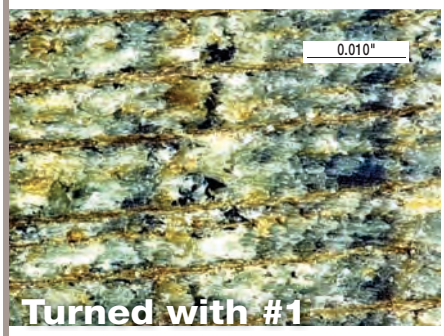
Continued on page 50





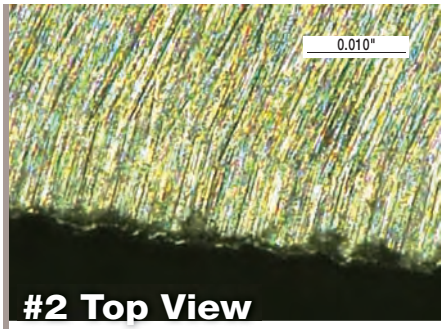


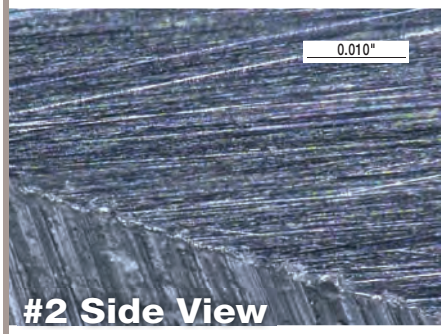


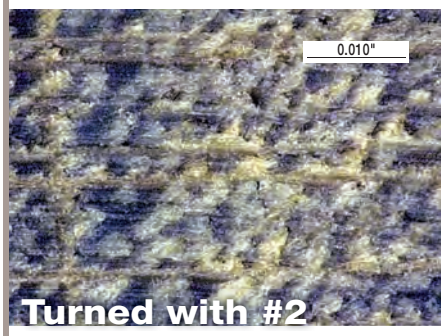


Scraper #1 was prepared by grinding the bevel on a 60-grit wheel. The top of the tool was the ground finish as received from the manufacturer. The burr was produced by the deformation of the tool edge by the force of the wheel surface. The top surface finish appears to have increased the coarseness of the edge. The burr has a stippled appearance. Note that at this magnification, the burr still does not appear sharp.

Poplar sample #1 shows a torn surface. It was turned with the scraper as received from the factory (not polished on top, tool sharpened on a 60-grit wheel). The white pores are nearly obscured and the reddish fibers are barely visible. Fracturing and tearing of the wood matrix is apparent.

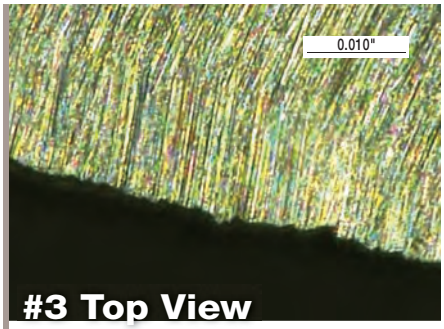


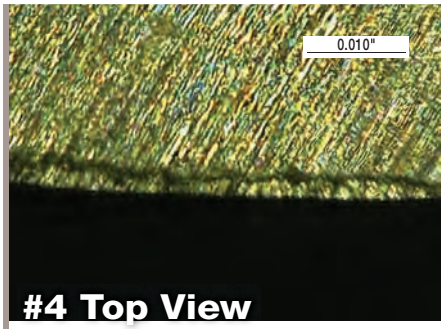


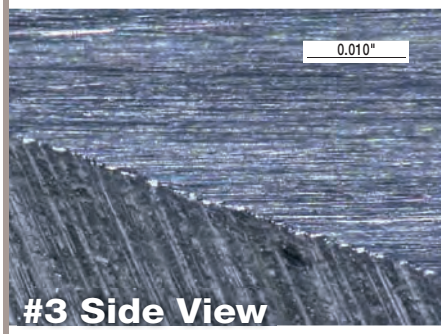


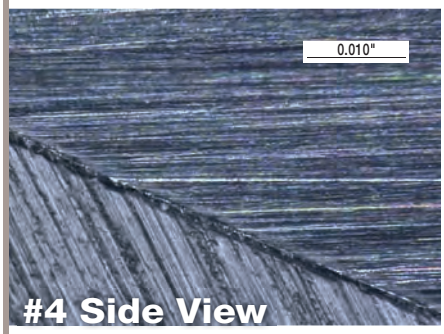
Scraper #2 was prepared in the same manner as #1, except that prior to raising the burr, the top of the tool was polished. Note that this polishing appears to have helped create a finer burr with shorter and more frequent stipples.

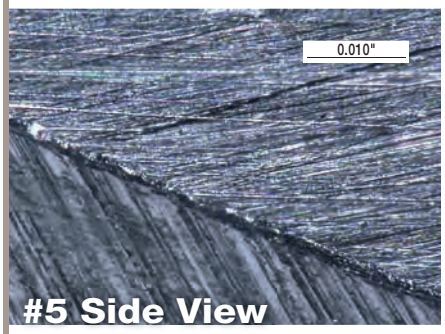
Poplar sample #2 was turned with a tool prepared as #1, except that the top was polished prior to grinding. Again, the pores are nearly obscured and there is some evidence of wood tearing.

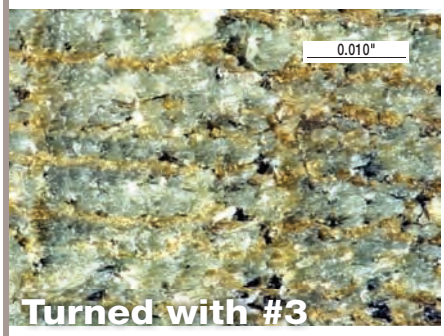


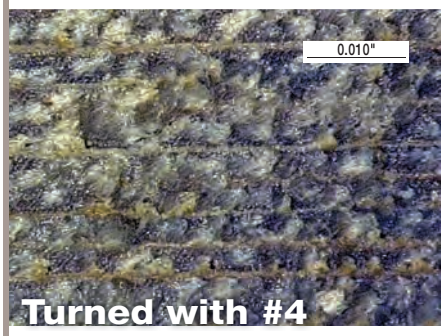


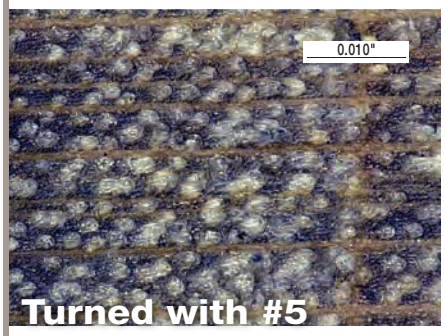












Scraper #3 was prepared as scraper #2, except that the burr was removed by polishing. There is no evidence of a burr and the top view shows the jagged nature of the 60-grit bevel grind. The sharpness of the cutting edge is limited by the intersection of the two surfaces.

Poplar sample #3 was turned with a tool with the burr removed by polishing. The poplar sample illustrates a smeared structure with multiple tears.

Scraper #4 was prepared in the same manner as #3, and then a burr was raised using a burnisher. The burnisher deforms the edge. The top view of the tool edge indicates that the burnisher raised a continuous burr, which is different in character from the grinding wheel-induced burrs. (The pressure applied during burnishing can control these burrs.) The edge view shows a varying degree of stippling which suggests that this edge is controlled by the top polished surface.

Poplar sample #4, turned with a scraper with a burr that was raised by burnishing, contains white pores that are beginning to be resolved and clear evidence of the reddish fibers.

Scraper #5 was prepared in the same manner as #3, and the burr was then formed using a diamond hone. The burr raised is similar to burr #2 and reinforces the concept that the top finish is important in burr formation.

Poplar sample #5 was turned with a tool whose burr was raised with a diamond hone. It shows reasonably resolved white pores, clear structure definition, and no evidence of tearing.

Under the microscope

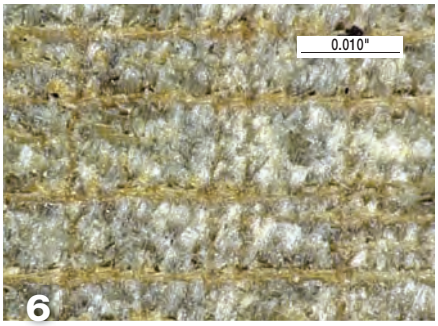
Woodturners know that their fingers are precise measuring devices. They use them to size vessels and wall thicknesses, and measure the progress made toward a smooth turned or sanded finish. They also use them to determine the sharpness or presence of an edge on turning tools. Our fingers are excellent for feeling the presence or absence of a burr on a scraper. Turners can't see such burrs, but they know they're there!

Much has been written about the many ways to develop the perfect cutting edge, but little has been published to demonstrate what these edges truly look like. One of the reasons for this lack of photographic evidence is the difficulty in producing images with a combination of high magnification and extensive depth of field. Traditionally, this has been accomplished through the use of scanning electron microscopy (SEM). The downside of this approach is that color images cannot be produced and only small samples can be examined.

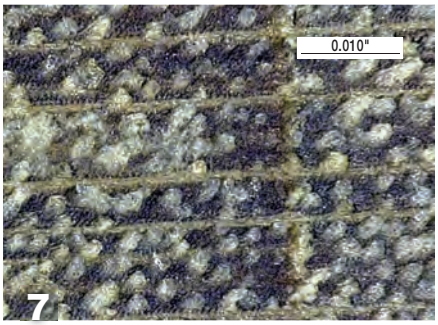
In the past few years, digital imaging optical microscopes have become available, which not only allow high depth of field color photography, but also allow the computer assimilation of multiple photo "slices" into images with extraordinary depth of field.

The tool edges and corresponding wood surfaces in this study were examined with a 54 megapixel optical imaging microscope. Each edge was photographed at a magnification of 200×. The field of view at this magnification is approximately 3/64" wide. Photos of top views as well as angled views depict the nature of the cutting edge as well as the roles played by the bevel ground surface and the finish of the tool tops.

All scrapers were determined to be type M2 high-speed steel (HSS) and confirmed the manufacturer's labeling as HSS. Scraping was accomplished using two turning methods—flat scraping and shear scraping.



This poplar sample was turned by shear scraping using a tool prepared as Scraper #4 (burr raised by burnishing). White pores are beginning to be resolved. However, the wood fibers are more clearly defined than by scraping alone.



This poplar sample was turned by shear scraping using a tool prepared as Scraper #5 (burr raised with a diamond hone). It contains reasonably resolved white pores and clear structure definition. The wood fibers are somewhat better defined.

Continued from page 48

wood with the reddish intersecting fiber elements and the large population of sectioned white resin-filled vessels or pores. The degree to which this underlying structure is revealed by the tool cutting action is assumed to be a measure of relative edge sharpness.

Based upon the appearance of the cut poplar faces, the sharpest cutting edge was Scraper #5, closely followed by Scraper #4. Each of these tools was polished on the top face prior to raising the burrs. There is a clear improvement between #1 and #2, indicating that polishing of the top of the tool improves the quality of the raised burr.

Observations

Burrs are tiny! The largest burrs observed were on the order of 0.001" to 0.002" in height. It is amazing how effectively these small edges can cut.

Shear scraping (**Photos 6** and **7**) provides a somewhat better surface than flat scraping, but the effect is small when compared to the effects of edge and top-surface preparation.

The shapes of the burrs are a function of how they are raised and the finish of the top surface on which they are raised.

Simply polishing the top of the tools prior to raising a burr by grinding improves the resulting cut surface dramatically. This also may suggest that a finer grind might also improve burr quality.

Our next attempt in evaluating sharpness of turning tools will be even more challenging: What is "sharp" when dealing with the cutting-type tools such as gouges and skew chisels? We will also explore if different turning tool steels produce a sharper edge than others. Stay tuned.

Alan Lacer (AlanLacer.com) is a woodturner, teacher, and writer living near River Falls, WI. Dr. Jerry Wright (jeryl.wright@crucible.com) is a woodturner and vice president of technology for Crucible Specialty Metals in Syracuse, NY. He earned an Sc.D. in metallurgy from Massachusetts Institute of Technology.

Go beyond round

Circles to Ovals

By Alan Lacer

In a previous issue of *American Woodturner* I wrote about a historic turning shop, the Old Schwamb Mill near Boston, renowned for more than 150 years for its oval picture and mirror frames.

An oval-turning device made the process possible. I also mentioned that a modern version was being developed. A sophisticated oval chuck is now available, and it offers a different geometric dimension to woodturning.

German professor Johannes Volmer (volmer---ovaldrehen.de) and the Vicmarc Company of Australia developed the chuck based on oval devices used in Europe for at least 300 years. The modern version, the Vicmarc OD (oval device), offers some significant improvements. One key advancement is an internal balancing system to oppose the out-of-balance forces encountered in oval turning. There are also adjustments for easily varying the width and length of the oval.

Turning an oval is a change in thinking and execution from traditional lathe work. First, there is no identifiable center of the piece. The "center" is spread out across a horizontal plane. For turners, this change involves getting accustomed to cutting along this plane, and not going above or below it. If you turn outside of the horizontal plane that serves as the center, you will be working on a different elliptical shape.

Some turners find a trapped tool (as used in hollow turning) works well to stay in this plane. A few turners have used lasers that shoot a horizontal beam to guide them along the correct path. I have excellent luck just staying in that plane freehand; I can feel the difference when I get above or below the line.

***Above*: The inside of the Vicmarc VO1343 includes belts, adjustable counterweights, and adjustments for the proportions of the oval. *Right*: Turning stock attaches to the device with a standard 4-jaw chuck or faceplate.**

What are the design possibilities? Platters, plates, and bowls are well-suited for this type of turning. A natural-edge oval bowl is next on my list to explore.

For me, boxes have proved to be a little more challenging.

In the hands of contemporary turners, I expect to see some amazing applications. Chapters may want to consider purchasing an oval chuck and making it available through their tool library.

The VO1343 chuck retails for around $2,000 and is available in four thread sizes (1" × 8 tpi, 1¼" × 8 tpi, M33 × 3.5, and M40 × 2) at Craft Supplies USA (craftusa.com) and Woodworkers Emporium (woodworkersemporium.com).

Alan Lacer (alan@alanlacer.com), an *American Woodturner* contributing editor, lives near River Falls, WI.

Shopping for Your

Buying a lathe—especially if it's your first—can be a confusing and difficult task. However, if you take the time to answer a few questions, you'll have a much better understanding of your needs. And when you have a good focus on the type and scale of projects you want to turn, your research will narrow down the field of lathes to a manageable number of choices.

Five questions, many possible answers

Before rushing to the lathe manufacturers' websites, begin your search by answering five questions:

1. What types of things do I enjoy turning? For example, you may enjoy making bowls, hollow forms, spindles, gift items, or other projects.

2. What is the size of the pieces I'll be turning? Be specific in both diameter and length.

3. How much space will I dedicate to this machine? Don't forget to also allocate space for storage of tools and lathe accessories.

4. Will I need to move the lathe often?

5. What is my budget?

The first two questions are usually the hardest to answer, especially if you're a novice turner. If you've just caught the turning bug (or plan to become infected), it can be difficult to know what type and size pieces you will be turning now and in the future. However, the answers to these two questions will heavily influence your decision-making on the next three questions.

I encourage prospective lathe buyers to reflect on these first questions and not answer hastily. Start by considering why you became interested in turning. For example, did you admire some bowls or hollow forms at the art gallery, or do you want to make components for a rocking chair? Are you thinking of making Christmas gifts for friends and family this year? Begin a project wish list, and also note the size of finished items.

Expand your search for prospective turning ideas by going to the library, surfing the Internet, and studying the instant gallery of the works of fellow members at the next meeting of your woodturning chapter. Again, take notes about items you might like to make one day, but also identify projects that don't spark your interest. By writing down likes and dislikes (pluses and minuses), you'll establish the boundaries of your personal woodturning interests.

One size doesn't fit all

Most experienced turners agree that there is no perfect lathe. Every machine is designed to perform specific tasks, and that gives it a range of both strengths and weaknesses. In some ways, choosing a lathe is similar to shopping for a vehicle: A compact car may offer good mileage, but it won't tow a boat.

In a similar way, some lathes offer an incredibly low price while others offer top-of-the-line quality. (Bear in mind that precision machining and quality control significantly influence price.) You can easily move many small lathes, but these tools typically lack the ability to handle large or heavy pieces. Some lathes are purpose-designed for efficient bowl turning while others are intended for furniture parts.

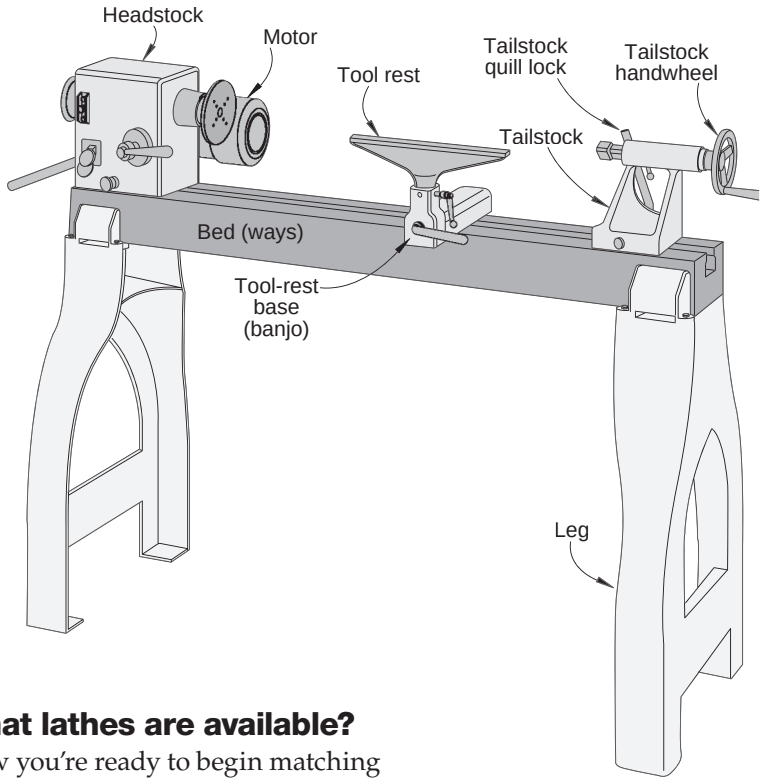
Lathe Decision-Making Chart

As you evaluate each lathe, assign it a number from 1 to 5 in each category, with a larger number reflecting a closer match with your needs.

Lathe Make/Model	Will handle projects that interest me	Has swing and length to meet my needs	Fits into available shop space	Ease of moving (if required)	Price	**Total score**

First Lathe

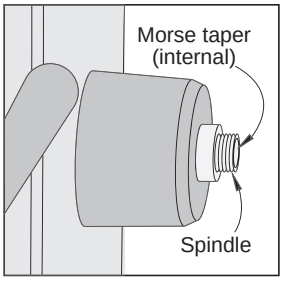
By Brian Simmons



What lathes are available?

Now you're ready to begin matching your needs to the lathes available in the marketplace. As you research various lathes, ask yourself how each tool's specifications meet your needs. You could even give each prospective lathe a score from 1 to 5 in each category to create an objective framework for evaluating potential lathes. See the Lathe Decision-Making Chart *opposite*.

Although the manufacturers' specifications are valuable information, you should be aware that the numbers sometimes require a reality check. For example, a lathe may physically have the capacity to hold a 20"-diameter bowl blank but lack sufficient power to move it or the mass to dampen vibrations from a large unbalanced piece of wood. If possible, check out the lathe in person at a local dealer, or discuss its capabilities with fellow chapter members.



Don't be overly influenced by which lathe got the top review in the latest publication or has a celebrity endorsement. After all, the celebrity or magazine writer won't be coming to your shop to do the turning for you. Instead, look for an opportunity to turn at the models that you're considering. Turning at a machine, even for just a few minutes, may reveal valuable information that's impossible to get by reading or conversation. Think of it as test-driving a car: You want to make sure you and the lathe are a good fit for each other.

Learn lathe jargon

The equipment specific to each art or trade has its own specialized vocabulary, so be sure that you understand the terminology. In some cases, a single term can include several technologies, and you'll need to get further details to truly understand what the manufacturer means. Variable speed is a case in point.

Many wood lathes are listed with a variable-speed feature, yet there are several methods that manufacturers use. The least expensive and easiest method is via a **Reeve's drive**. This system uses two V-shaped pulleys and a single belt to transfer power from the motor to the spindle. A lever adjusts the width of the pulley on the spindle. (The width of the pulley on the motor is then adjusted with a spring.) When you move a lever on the headstock, the spindle pulley is either spread apart or pushed together. The belt, which travels up and down on this pulley, then interacts with the motor pulley and causes it to move inversely (widening a spindle pulley causes the motor pulley to contract).

Although this method does produce numerous speeds without the need to stop the lathe, it does have drawbacks.

Illustrations: Roxanne LeMoine

More sage advice

Michael Mocho: Become familiar with rpm

Proper rpm is a major factor in getting a good quality surface directly from the tool. The smaller the diameter, the faster it should spin. Although variable speed isn't essential, it sure makes turning more efficient. (See comments *page 53* and *opposite*.)

A good range of speed should be between 500 (or slower) and 2,500 rpm, though smaller work sometimes requires up to 3,200 rpm.

Avoid the older gap-bed models. Although this design appears to offer more capacity, it really doesn't once you figure on using a faceplate or chuck. It makes it tough to get the tool rest into solid position when you are working up close to the spindle in some situations.

I also believe that an outboard handwheel is essential, and headstock spindles should also have a through-hole for the option of using vacuum chucks.

A faceplate or chuck screwed on should tighten against the spindle shoulder, with provision of tightening the grub screws onto the spindle notch (rather than the spindle threads).

The ability to reverse the rotation of the lathe is useful for some sanding operations, especially when turning bowls and when turning softer woods.

If you are turning a lot of wet wood, there are a few lathes now available with stainless-steel ways (the bed), though keeping the ways free of rust and grit is always important on any lathe.

Before you buy, make sure the tailstock doesn't slip when a workpiece is pressed between centers.

Bonnie Klein: You really need two lathes

You wouldn't buy a car without taking it on a test-drive, right? Before you buy a lathe, find someone who owns the lathe you're interested in and ask if you can turn on it. Most turners would be more than happy to invite you over to their shop.

I tell turners they need two lathes—a mini lathe and a full-size lathe. I just wish there was a really good full-size lathe on the market for about $2,000!

Mobility makes the mini lathe ideal to take to demonstrations, to take on vacation, and for small projects (up to 10" diameter) in your shop. If you are shopping for a mini lathe, put your money into a variable-speed model.

Without variable speed, you put too much load on the bearings and they get too hot, which reduces the lifetime of this important part.

There are upgrades you can make to a mini lathe. For example, Steve Sinner (ssinner@mchsi.com) makes a nice 6" machined tool rest (right; about $45). You will notice the difference!

Attach a mount on the top of the headstock for a Stay-Put Work Lamp (Craft Supplies USA; woodturnerscatalog.com). Jet makes a mini lathe stand with an accessory kit of locking casters.

Alan Lacer: Think used

1. Don't be afraid of an older lathe. Two of my favorite lathes in the shop were made pre-1940, with one of these made between 1910 and 1920. Other than bearings and inside tapers, not much can wear out if the lathe was not abused. Many items for the lathe can be found premade or custom made, such as faceplates, chuck inserts, belts, tool rests, tool-rest bases, drive centers, live centers, and the like. In addition to AAW chapter and newspaper classified ads, don't forget to search Internet sites including exfactorymachinery.com, redmond-machinery.com, Craigslist.com, and ebay.com.

In major cities, make inquiries at used machinery dealers as well as new dealers that take trade-ins or buy used machinery at auctions (especially from school settings).

2. Avoid lathes that have been abused and show any cracked castings for the bed or tailstock, severely damaged spindle threads, or a bent headstock spindle. The headstock spindle generally has the most machining of any lathe part, so replacing it can be expensive (this is not to be avoided, but be aware of the potential high costs).

3. The electrics can often be replaced, repaired, or upgraded. In the past, many who were searching for a lathe would avoid three-phase machines. This is no longer the case, as these can often be upgraded to function like most of the top-end machines today with a variable-speed controller/inverter. Another option is to use a phase converter (dynamic versus static), available from Enco (use-enco.com). Dealers Industrial Equipment (dealerselectric.com) is a source for parts to upgrade to a variable-speed system with motor and controller or to purchase a controller/inverter. Most motors and switches can be repaired or replaced, sometimes with a little more horsepower if you intend to do bowl and vessel work. Be sure to replace the motor with a totally enclosed model.

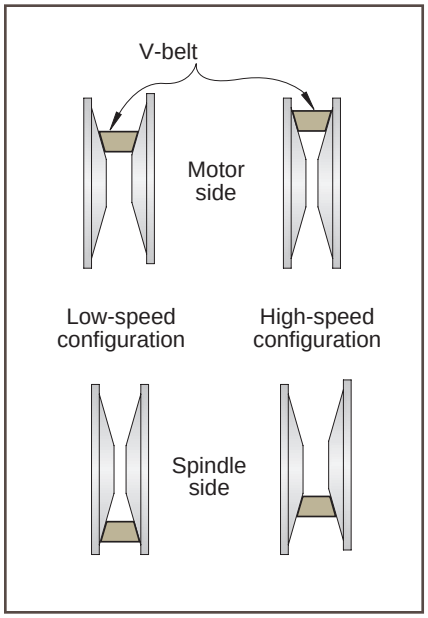
4. Look for a machine that uses Morse tapers rather than some other system. I have had a machinist convert a Roberts taper to a Morse taper on one older machine, but most turners will want to stay with Morse tapers. Size is not so critical as adapters are inexpensive and readily available through companies like MSC (mscdirect.com). I suggest taking one of your Morse taper centers with you to make sure it seats firmly into both the headstock and tailstock sides.

5. As many of the older standard lathes had only a 12"-diameter capacity, some turners have found it easy to block up the headstock and tailstock with metal or even wood blocks to achieve more capacity. My advice is to befriend a machinist to accurately mill some aluminum blocks to achieve this increase in capacity. Depending on the lathe, you will probably need to extend the belt length and replace the tool-rest base to come out farther and go higher. Oneway (oneway.ca) and others sell replacement tool-rest bases.

6. Bearings do wear out and, depending on the quality and how well shielded from dust, may need replacing. On most lathes these are not that difficult to remove. A simple test is to turn a short cup shape from a piece of hard material like maple, mounted on a faceplate or quality scroll chuck. First turn a cylinder, then hollow to about 1", thinning the walls to around ⅛" or less thick: Is there a noticeable "thick-and-thin" appearance, or even breaking through in spots? This can be a sign of worn bearings or, the worst case, a bent spindle. Also feel the bearing smoothness when turning the spindle by hand as well as note any sound coming from the headstock.

7. If indexing is one of your intended uses, inspect the indexing wheel if possible. On some lathes, the indexing wheel is notoriously stripped of a number of holes (probably by starting the lathe with the pin locked or using it as a spindle lock to remove chucks). Sometimes these are replaceable, but you might have to resort to a homemade version that usually mounts on the outboard side of the lathe.

REEVE'S DRIVE



First, this type of drive, shown *above*, typically won't produce speeds below 400 rpm. Second, the lathe must be rotating to adjust the speed, and that creates a possible safety issue. Third, the system's reliance on a loose belt and a number of moving parts leads to a loss in torque as well as potential maintenance situations.

DC variable speed combines a DC motor with a controller. The system converts your household AC power into DC power, and then adjusts the speed by varying the voltage into the motor. The operator uses a dial to easily control the speed. This type of drive can be unreliable because it may not produce the necessary torque required for turning wood.

The third system, **AC variable speed**, uses an inverter and a 3-phase motor. The inverter converts your household AC single-phase power into 3-phase power, then adjusts the motor's speed by varying the frequency delivered to the motor. This system, also dial-controlled, adjusts easily. AC variable speed can cover a wide range: from 0 to more than 3,000 rpm. (See Michael Mocho's comments *opposite*.) When the drive involves only a few pulleys, this system delivers exceptional torque. Unfortunately, this convenience and capability come at a hefty price.

Additional buying points

Other considerations include what accessories are available for the lathe. Bed extensions easily increase the length capacity of small lathes and are relatively inexpensive compared to a lathe with a long one-piece bed.

The Morse taper size and spindle thread deserve consideration. The #2 Morse taper is the most common one used at woodturning lathes, and numerous accessories are available in this size. Additionally, check the headstock's threads. Common thread patterns are 1" × 8, 1¼" × 8, and M33 × 3.5. Manufacturers offer a wide variety of chucks, faceplates, and other gadgets for these spindles.

The bottom line

For most turners, price can often be the deciding factor in determining which lathe to purchase. But giving too much consideration to price can be a dicey proposition. An inexpensive lathe that meets your needs can be a wise choice. But sacrificing satisfaction to save a few dollars is no bargain. On the other hand, spending more money than necessary won't guarantee happiness. Consider the lathe as an investment toward achieving results, and you'll help maintain a good perspective.

If you are just beginning and aren't sure what your needs will be in the future, you may want to consider one of the numerous mini lathes on the market. Most of these lathes can handle pieces 10" to 12" in diameter and 12" to 48" between centers. Choosing a starter lathe like this may compromise the size of pieces you can turn, but with common spindle sizes and Morse tapers, you can purchase accessories that will fit an upgraded lathe purchased later. (See Bonnie Klein's comments *opposite*.)

If an occasional project requires the use of a larger lathe, your local turning chapter can be a valuable resource. Many chapters own lathes that are available to members at minimal or no cost. There also may be chapter members who are willing to offer the use of their larger lathe.

Don't rule out the used tool market. (See Alan Lacer's comments *opposite*.) You may find a high-quality lathe just waiting for a new home. Although some of these lathes may be in need of a major repair, others may require only minor maintenance before they're ready to produce fresh shavings.

So whether you decide to purchase a top-of-the-line, full-sized, fully accessorized lathe or a bargain-basement (or even garage sale) treasure, do your research and make sure it will meet your needs. Don't be concerned with the manufacturer's selling points. Instead, ask yourself whether you will need each of its features and if they are worth their cost to you.

Woodturner Brian Simmons (brianwoodturner@earthlink.net) lives in Des Moines, IA. He has demonstrated at three AAW national symposiums and formerly worked full time in a retail woodworker's store.

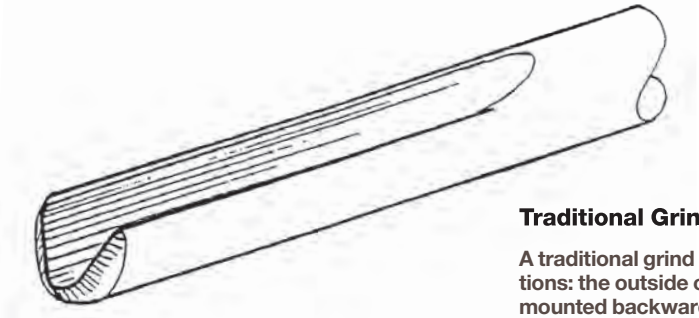
Buying Your First Bowl Gouge

By John Lucas

For a beginner, buying turning tools can be a daunting task. Do you choose high-carbon steel, high-speed steel (HSS), or powdered metallurgy? What about cryogenically treated tools? Out of the confusion of tools available, which one do you really need? Sometimes it depends on what you turn, but even then, every turner seems to have a different opinion.

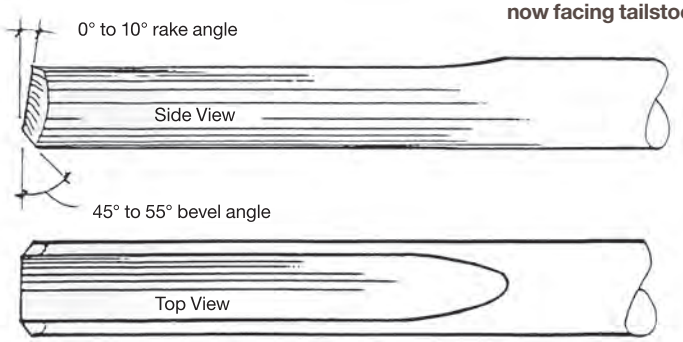
Before making a recommendation, I asked turners from beginner to professional what they own and what they would recommend for a beginner. Almost all recommended a ⅜" or ½" bowl gouge.

It's important to note that English gouges are designated by flute width while American gouges measure the diameter of the shaft. A ½" American gouge is about the same as a ⅜" English tool, so it's possible some turners were actually recommending the same tool.



Traditional Grind

A traditional grind has some sound applications: the outside of a face grain bowl when mounted backward (base is at tailstock side) or for opening the interior of a bowl (opening is now facing tailstock side).



This ⅜" bowl gouge has a fingernail grind.

What steel?

Because high-carbon steel doesn't hold an edge and carbide is too hard to sharpen, most professionals favor high-speed steel and powdered-metallurgy tools.

You won't find new gouges manufactured from high-carbon steel or carbide. You'll choose between standard HSS (most are M2) and high-wear steels (often in powdered metal) like 2030, 2060, A11, and V15. Although cryogenically treated tools offer an advantage in edge holding, they are expensive for a beginner.

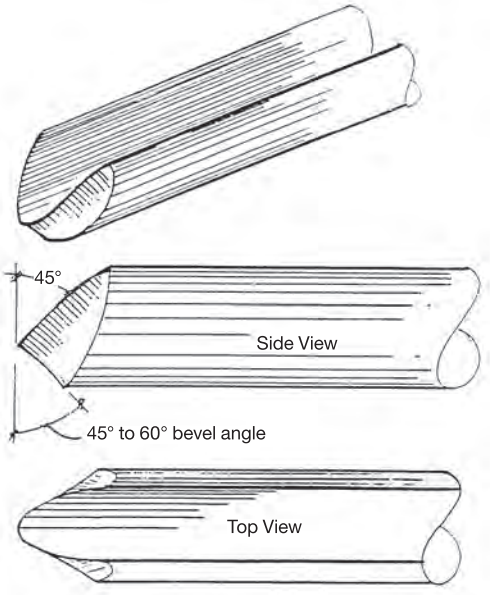
The bowl gouge will become the most versatile tool in your toolbox. With a properly ground bowl gouge you can rough-turn a bowl, form the outside and hollow the interior, and shear-scrape it to a smooth finish. The gouge is also fine for roughing end-grain boxes and hollowing vases. (It tends to scrape rather than cut end grain.)

Some turners prefer a V-shaped flute, some a U-shaped flute, while others prefer the superflute, a shape somewhere between a V and a U. I have all three types at my lathe and find only minor advantages of one over the others. For a beginner, proper sharpening is more important than flute shape.

What profile?

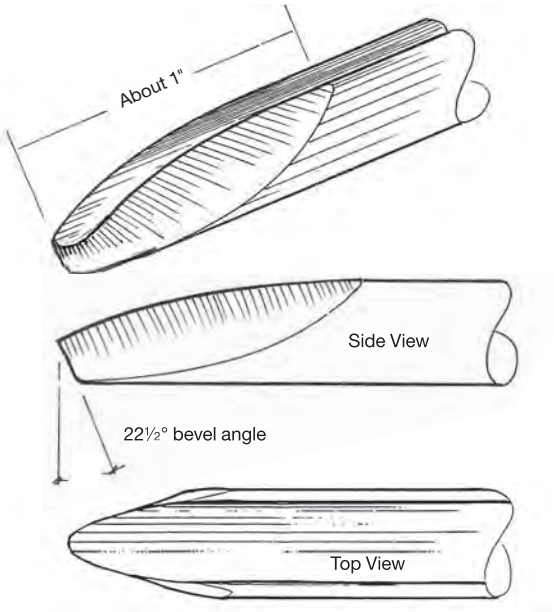
Bowl gouges are available with tips ground to the manufacturer's standard profile or to a special profile developed by any of several well-known professional turners. The

Illustrations: Angelo Iafrate and Roxanne LeMoine



Transition or Fingernail Grind

Many turning instructors recommend the transition (fingernail) grind to new turners. You work the outside of a face-grain bowl regardless of the orientation. The ground sides allow limited shear-scraping.



Irish Grind

Experienced turners may prefer the more complicated Irish grind. It's a good tool for roughing bowls, detailing (with the elliptical front), shear-scraping, and smoothing the transition from sides to bottom.

tip profile most often recommended for a beginner is the transition or fingernail grind. After experience (50-plus bowls), you may want to try the Irish (also known as the Celtic or Ellsworth) grind.

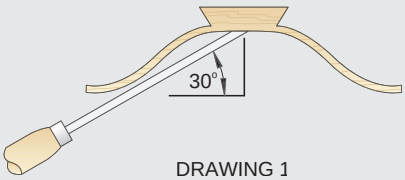
Using the Oneway Wolverine Sharpening System with the Vari-Grind Jig is an easy way to form a similar shape. *Fundamentals of Sharpening*, an AAW video, has excellent instructions on three techniques for sharpening a bowl gouge, making it easy to choose a method that works best for you. (For details, see woodturner.org/products.) The angles shown are typical ranges.

I'm confident that a ⅜" or ½" HSS or powdered-metal bowl gouge with a transition grind will get any beginning turner started on the road to enjoying bowl turning.

John Lucas (johnclucas@charter.net) is Shop Tips editor for American Woodturner and frequently demonstrates to chapters and at symposiums.

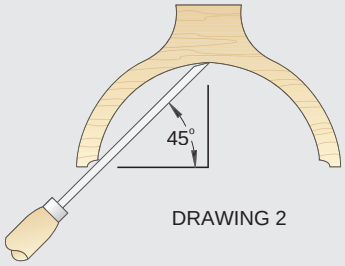
Allan Batty on Angles of Bowl Gouges

What determines the grinding angle for bowl gouges is the type of bowl you are going to be making," writes Allan Batty in *Woodturning Notes*, an information-packed booklet available from Crafts Supplies (woodturnerscatalog.com)



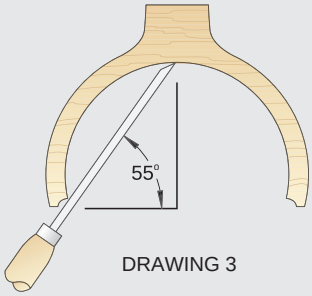
DRAWING 1

Drawing 1: "This is a shallow type of bowl. We have no restrictions placed on the gouge by the wall of the bowl. Therefore, none is placed on the angle of the tool."



DRAWING 2

Drawing 2: "With this bowl, the wall restricts the gouge movement. As the depth does not exceed the radius, an angle of 45 degrees would be ideal to maintain bevel contact throughout the cut."

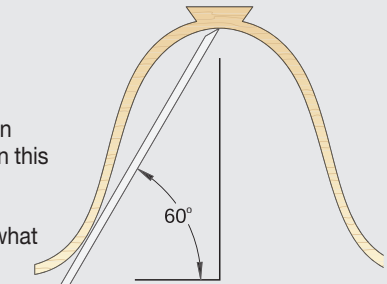


DRAWING 3

Drawing 3: "Here the restriction becomes greater as the depth has now exceeded the radius, which in turn, would require a shorter bevel angle of approximately 55 degrees. This would allow the bevel to contact right to the bottom of the bowl."

Drawing 4: "Now the depth has increased even further, which requires an even shorter angle (in this case approximately 60–65 degrees) to allow successful bevel contact."

"You can see that the determining factor is what type of bowl you want to make. An angle of between 45 and 55 degrees would be a good working compromise."



DRAWING 4

Tips

Got a Great Idea?

Share your turning ideas! If your tip is published, you'll earn $35. Send your tips along with relevant photos or illustrations and your name, city, and state to:

John Lucas
529 1st Ave. North
Baxter, TN 38544
jlucas@tntech.edu

Cardboard bandsaw milling guide

To accurately rip logs into sections, I pin a section of cardboard to the log as shown *top left*. The cardboard, which is pinned to high points of the log, serves as a guide for my bandsaw cuts. A steady board fastened to the side of the log (*bottom left*) keeps it from rolling. (I screw the steady board to the ends of the log, which will be waste material.)

The same cardboard guide is ideal to cut the quartered logs into 2"- and 3"-square turning blanks.

After completing the blanks, I dip the ends in wax emulsion and stick them between rafters to air-dry.

David Reed Smith
Hampstead, Maryland

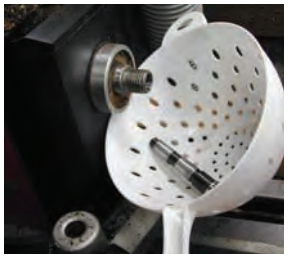
Two improvements for mixing and applying 2-part epoxy

Here are two suggestions to improve mixing and applying 2-part epoxies.

I use a small digital scale to measure 2-part epoxies. After placing a square of waxed paper on the scale, squirt on part A, read the weight, zero the scale, and then add part B.

After mixing the two parts, make a piping bag (similar to what cake decorators use for frosting) from the waxed paper. Fold the waxed paper in half and then quarters to form a piping bag. Fold in the sides, snip the end, and apply the epoxy with ease.

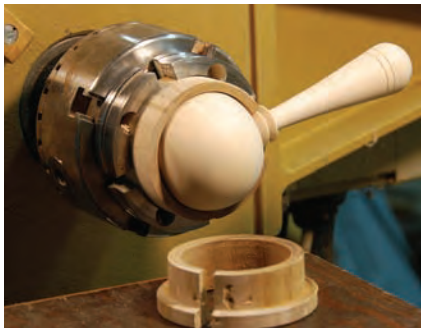
Clifton Chisum
Norfolk, Virginia



Catch drive centers at the lathe

I got tired of chasing my drive center across the shop after using the knock-out bar to free up the drive center. I found a plastic colander with a handle that makes a great catcher's mitt for the flying drive center.

Jim Fay
Norfolk, Massachusetts



Nonmarring chuck jaws

Sometimes you need jaws that don't leave a mark on the project. Sometimes you need jaws just a little bit smaller than your chuck's minimum. This tip serves both problems. Select a limb section that is a little larger than you need and with the grain running parallel to the bed. Then turn a hole about 1½" deep and slightly larger than the object you wish to hold. True up the outside and turn a lip to bottom out on the jaws. Part this off so the piece forms a hollow ring. Cut a slot in the side to allow for compression (or big enough for the handle if you turn a scoop, as shown *above).* Slip this in the chuck, insert the project, and tighten the chuck.

Mark St. Leger
Pearisburg, Virginia

Seeing a fair curve

To see if I have a fair curve on a bowl or vessel, I use a long glue stick. Because the stick is round, the light refracts around the curve revealing the flat spots. When you use a steel ruler, it casts a shadow so you cannot always see the fault. For larger items, I heat up the ends of two sticks and join them together. This works best when you are carving out feet. It's easy to end up with bumps and hollows, but by using the glue stick, an even curve is easy to spot.

Terry Scott
Auckland, New Zealand

Crisp detail sanding

To sand tight areas and retain crisp details, I adhere sandpaper to frozen dessert sticks. The stick keeps the sandpaper from rolling over the detail edge and softening it. I adhere the sandpaper with 3M Super 77 spray adhesive.

Ed McDonnell
Parkland, Florida

Enclosure makes best use of shop space

The dust collector in my shop takes up a big footprint on my shop floor. To gain storage space, I made a three-sided enclosure with a plywood base on 5"-diameter casters. I added panels of perforated hardboard (Peg-Board is one trademark name), which yielded a lot of new storage space. By removing the Y-intake from the collector, I can easily slide the dust collector out of the enclosure.

The enclosed unit rolls about the shop more easily than the collector did before this improvement.

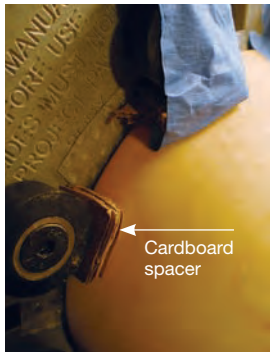
Larry Sefton
Bartlett, Tennessee

Improved planing cuts with a skew

I do architectural woodworking, which includes a lot of spindle turning. I recently reproduced several spindles that had a long, straight shaft on both halves of the spindle. Because I'm right-handed, I can execute a planing cut with the skew chisel going downhill from right to left very nicely. The results require very little sanding. Despite lots of practice, I am terrible at a planing cut going downhill from left to right. I beat the problem by simply turning half of the spindle and then flipping ends on the lathe. If I have a spindle with just one shaft, I set it up on the lathe making sure that I will be doing the planing cut going downhill from right to left.

Dan Miller
Elgin, Illinois

Reverse-turn warped bowls



I recently turned a green bowl and, of course, it warped. When I reverse-chucked the bowl to complete the bottom, I discovered that three of the eight buttons on my adjustable bowl jaws didn't contact the bowl, but they were not far enough out of line to move the button up a hole. To solve this, I widened the jaws far enough to accept the widest part of the bowl, put the tailstock live center into the center hole on the bottom of the bowl, and moved the bowl forward to the jaw plate.

I wound in the jaws and then wedged small pieces of cardboard into the space between the button and the bowl on the side where the three buttons didn't touch. After the bowl flew off the lathe a couple of times, I used my favorite painter's (blue) tape to hold the cardboard in place. I kept the tailstock in place until I was down to the last few cuts across the center of the foot.

Because I registered the bowl with the tailstock in the center hole, the foot area was true and I just had to blend the bottom of the bowl up into the warping sides.

Sally Ault
San Diego, California

Calendar of Events

Photo: Tib Shaw/AAW Gallery

Bob Rosand's urn is part of ***Restful Places: Artist-Created Cremation Urns and Objects*** at the AAW Gallery in St. Paul.

Spring Calendar deadline: January 1. Send information to editorscarpino@gmail.com.

Alaska

Fifth Annual Alaska Woodturners Association Woodturning Symposium, March 7 and 8 in Anchorage. Featured turners include Wayne Boden, Pat and Peggy Bookey, Bill Bowers, Arnie Geiger, and Jeff Trotter. Master classes will be held the week prior. Information: Bill Bowers at 907-346-2468, turningsbb@gmail.com, or akwoodturners.org.

Arizona

Third Annual Desert Woodturning Roundup, Feb. 7 and 8 in Mesa. Featured demonstrators include Jimmy Clewes, Nick Cook, Cindy Drozda, Hans Finsterwalder, Dwight Klaus, Bonnie Klein, Alan Lacer, Mark St. Leger, and Keith Tompkins. Information: Jason Clark, 480-380-1444 or desertwoodturningroundup.com.

California

Del Mano Gallery, Los Angeles, *Selected Works,* Jan. 17–Feb. 14; *Ron Layport and Ron Fleming: Narratives on Nature,* Feb. 21–March 21. Information: delmano.com or 800-del-Mano.

Florida

Florida Woodturning Symposium, Jan. 9–11 at Lake Yale Baptist Convention Center near Eustis. Featured demonstrators include David Barriger, Stuart Batty, Bobby Clemons, Jimmy Clewes, Raymond Ferguson, Barrie Harding, John Jordan, and Richard Morris. Information: floridawoodturningsymposium.com.

Georgia

Southern States Symposium IX, April 24–26 at the Georgia Mountains Center in Gainesville. Featured demonstrators include Soren Berger, John Jordan, Dennis Liggett, and Chris Ramsey. Information: southernstatessymposium.org.

Hawaii

Eleventh Annual Big Island Woodturners Woodturning show, March 6–27 at the Wailoa Center in Hilo. Special events include a March 6 artist reception and demonstrations every Saturday. Information: Mark Stebbins at 808-982-9974 or markstebbins@hawaiiantel.net or the Wailoa Center at 808-933-0416.

Photo: Tib Shaw/AAW Gallery

Dewey Garrett's "Red Palm Hollow Form" is part of the permanent collection on display at the AAW Gallery in St. Paul and the City Hall in St. Paul.

Minnesota

AAW Gallery, St. Paul, *Restful Places: Artist-Created Cremation Urns and Objects*, Jan. 16–March 29. Information: AAW Administrative Offices at 651-484-9094 or woodturner.org.

Nina Bliese Gallery, Minneapolis, *Solo Exhibit: Mark Gardner,* Jan. 5–March 13. Information: ninabliesegallery.com.

Pennsylvania

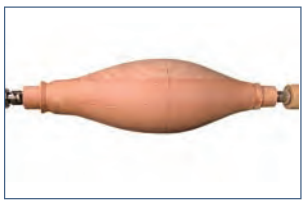
The Wood Turning Center, Philadelphia, *Challenge VII: dysFUNctional*, through Jan. 17. Information: 215-923-8000 or woodturningcenter.org.

Tennessee

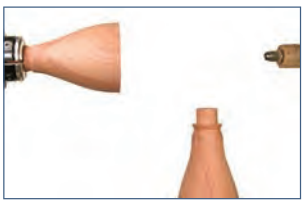
Tennessee Association of Woodturners 21st Annual Symposium, Jan. 23–24 in Nashville. Demonstrators include Jimmy Clewes, Cindy Drozda, Mike Mahoney, and Bob Rosand. Information: 615-300-0363 or info@tnwoodturners.org.

A highlight of the Instant Gallery at the Richmond symposium was Malcolm Zander's turned and pierced fish, employing the twistable compressed wood pioneered by Tania Radda. Malcolm was inspired by a cloisonné metal and enamel design by Russian artist Valeri Timofeev.

Riverglider

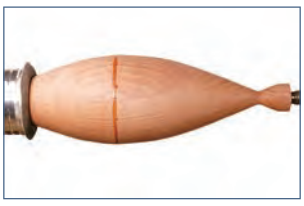


1. Laminated 18"-long compressed cherry block turned between centers.

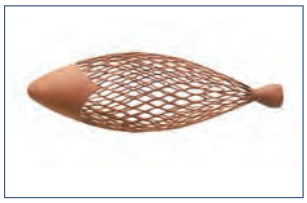


2. Body cut in half, yielding two conical forms (each with a tenon for chucking).

3. Each half was hollowed to a 1/16" wall thickness.



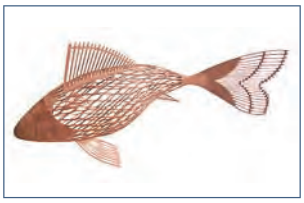
4. Hollowed halves glued together (butt joint).



5. Body pierced with NSK Presto tool and holes filed clean.

6. Form wetted and twisted. Fin from compressed cherry cut and fitted.

7. Tail fin pierced, twisted, and adhered to body.



8. Other fins cut, pierced, and adhered.