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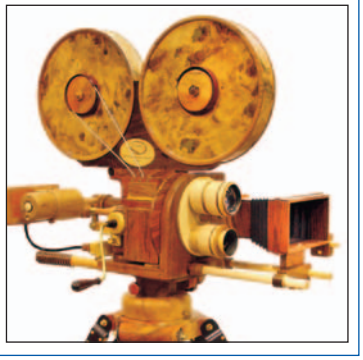
The Journal of the American Association of Woodturners
Fall 2003 Vol. 18, No. 3 www.woodturner.org

American Woodturner®

Dedicated to Providing Education, Information, and Organization to Those Interested in Woodturning



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Symposium Highlights

Symposium attendees like Joe Feinblatt, *above*, had plenty of light-hearted moments to share among three days of turning demonstrations in Pasadena. See page 32.

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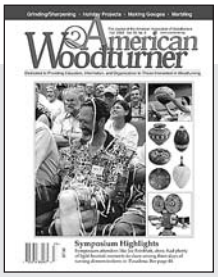
On this issue's Cover
A collage of images shows a sprinkling of the activities at the AAW's National Symposium in Pasadena.
Cover photos: Larry Mart



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www.woodturner.org

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What's going on at your lathe?

Anything interesting in your chapter of AAW?

Have you visited any turners, shops, or museums of interest?

Do you have a tip or technique **you'd like to share**?

Please send article ideas to:
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For tips on article submission and photography requirements, visit:
www.woodturner.org/articles.html

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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.

SUBSCRIBERS

If your issue arrives damaged through the mail, please contact the Administrator.

American Woodturner

President's Letter

As I start writing this president's page, I have hopes to prove our new editor wrong, since he told me "most people don't bother reading this type of page." I've tried to imagine why people see one of these pages from a president or editor, and keep turning pages. My guess: Often these pages just don't seem too interesting or relevant. So my challenge here is to actually get you to stop and read this page or at least come back to it after you've read the rest of the journal articles.

A change to the page

In this column you'll tune in to find out about new ideas, new problems, new programs, exhibitions, and other things the board is working on. This is where you'll turn to be up on things that just might actually affect you:

Here's one immediate request: We have an on-line *American Woodturner* survey at www.woodturner.org that we'd like you to complete. Your input will help us plan future journal content.

We now have over 10,000 members and 200 chapters worldwide. See page 7 for more details about these two eagerly anticipated growth achievements for AAW.

It's time to review board member candidates. I won't harp on the low voter turnout. You need to read the candidate profiles on page 4 and mail your ballots by Oct. 21. In the words of AAW treasurer Linda Everett, "Do it!"

The journal will now move up eight pages in size. Thank you for helping supply more information We're pleased to have more worthy content.

Things to watch for in this column

The board will be discussing the addition of an Executive Director. This person will coordinate exhibitions and traveling shows, work to strengthen the AAW membership, and help chapters learn to promote their events within the media and the community.

Five new videos including masters, profiles, and a new basics series.

Pasadena Symposium on DVD as well as traditional video. Look for more AAW offerings in both formats.

New education program comprised of professional educators and demonstrators working together to enhance turning education with our school systems.

Our new exhibition space at the Landmark Center in Minneapolis.

Maybe even a new home office.

See! Now you know some of the things cooking in your organization.

Goals and objectives

Since the AAW serves such a large membership with varied skill levels, one of our biggest challenges remains keeping a good balance within our symposiums and journal. Articles and symposium rotations that not only challenge the beginner, but peak the interest of our studio turners is a must. We welcome your input on how to address these issues.

Keeping the AAW a dynamic organization of resources and opportunities for beginner through pro is our goal.

Enjoy the journal,

Phil Brennion
philb@northlink.com

Board Candidates 2004

Steve Ainsworth

I started turning in junior high shop class and continued through college. The rigors of medical school, residency, and private practice kept me from continuing this pursuit, but the passion never ebbed. When I retired, I had the opportunity to return to turning. From the internet I discovered the AAW. It provided the "education, information, and organization" and I provided the interest. It has led me to local chapters, resources, symposiums, and a broad variety of topics in *American Woodturner*.

I now turn full time and feel I owe much to the AAW for its inspiration and guidance and to its members as leaders, mentors, and friends. I wish to serve on the board of directors in part to repay a debt of gratitude. But I also want to ensure that the AAW continues to meet the needs of its members, lead us through an ever changing world, and to promote public awareness of our passion. There are few shop classes anymore. Our children and grandchildren are missing out. The AAW and local chapters are doing an admirable job of reaching the community at large and in particular the next generation of turners.

My practice of orthopedic surgery has prepared me well as a potential board member. I was the managing partner in a practice constantly confronted with change. I served on both the hospital board of trustees and the foundation board. My dream of a wellness center for our community came true with the construction of a 2.5 million dollar complex. I have led multiple medical missionary trips throughout the world. From these experiences I have honed leadership skills, learned to make well founded, educated decisions and shown a commitment that is unwavering.

I believe these traits make me well suited for this position. I'm young, healthy, energetic, and excited. I promise to maintain the high standards and aspirations that have been the cornerstone of this organization and to be open to your ideas and ideals.

Steve Ainsworth
Washington, NC

Ron Alexander

As a woodturner of ten years, I progressed from a fumbling amateur to a confident professional; the status of master always eluding me. During this journey, the AAW was my guidance, my teacher, my source of inspiration. I have attended six of the last seven AAW symposia and taken classes at Arrowmont and Campbell Folk School. My most inspiring teacher was the late Knud Oland in Brasstown, NC. It is now time I repaid those debts with personal service.

I was a university professor, a pathologist, for 20 years, dealing with the problems of curriculum, budget, personnel, administration, and academic politics. Recently retired, I now have the time to lend those skills to the AAW.

I was an active woodworker for 30 years before the wood lathe seduced me. I founded a local woodworking guild in my prior city, Ocala, Florida, which we called *Cracker Workshop*. I was its first president and published the newsletter for 10 years. Now in the New Orleans area, I am a member of a local art cooperative where I display my work in its gallery, as well as other local galleries. I sell my work in art festivals throughout the South. I recently completed an article for the *American Woodturner,* titled "Water-Base Finishes for the Woodturner," which was published in the Summer 2002 issue.

I believe the most important function of the AAW is education, in all its formats: publishing, symposia, and inspiration. If we do not teach, we are merely ornaments to the craft.

I also favor brevity in communication.

Ron Alexander
Mandeville, LA

2004–2006

Soon you will receive a ballot, along with your membership renewal, to vote for three AAW board members to serve from 2004 through 2006. Ballots should be returned by Oct. 21, 2003. Each of the six candidates wrote a statement which follows.

John Hill

Eleven years ago, I was introduced to woodturning. I have developed a great relationship with Arrowmont and have taught and assisted numerous other instructors there, at the John C. Campbell Folk School, the Appalachian Center for Crafts, and numerous clubs. At the Charlotte AAW symposium and at several regional symposia, I was a demonstrator.

I have a good feel for what the AAW can do for both professionals and hobbyists. I have served as a director of North Carolina Woodturners. Three years ago, I was the founding president of the Carolina Mountain Woodturners in Asheville, NC. Under my leadership up to the present, CMW has grown to over 300 members and has had a professional demonstrator every month and has never had to charge a fee for anyone to attend. I saw the importance of having a chapter qualify as an IRS 501 (c)3 educational, charitable, non profit organization so that donations would be tax deductible. If elected to the board, I would try to help other chapters qualify for this designation.

This year I was the auctioneer for the Pasadena symposium. I have attended numerous symposia and have always been a volunteer. I have served on many boards or been the president of numerous, civic, environmental, government, and craft organizations. As a young man I became an Eagle Scout and knew that I could get things done. I work well with others and learn from other people's ideas. If elected, I would rely on my business experience, respect all that has gone before, and work with the rest of the board to protect our future and help expand our membership and help the AAW serve the membership.

John Hill
Weaverville, NC

Angelo J. Iafrate

I am honored to run for a seat on the Board of Directors of the American Association of Woodturners.

Starting woodturning in 1991, I was fortunate enough to "fall" into a week-long class taught by Alan Lacer. Alan's enthusiasm, knowledge, technical skill and easy way of teaching made it a simple matter to become hooked on woodturning.

Then, when I had more enthusiasm than skill, I attended many symposia, demonstrations and club meetings. Through these things I have been able to add different turning skills as well as have the opportunity to share these skills with others. Now, when I stand at the lathe I am comfortable. Teaching or demonstrating I strive to inspire that same feeling of satisfaction when the student first gets a taste of the skew chisel cutting just right.

In this time I have demonstrated at local crafts schools and at the 2002 Symposium in Providence, RI. For the Nutmeg Woodturners, I served separate terms as president and vice president. I enjoyed the duties and challenges associated with those offices. With these life experiences behind me I believe that I am ready to share what has been learned with other AAW members.

As a member of the board it is my hope to be able to continue to work with the local chapters, rank and file members. Having a penchant for hard work, I give every project due diligence to provide the very best effort I can muster. Thirty years in the construction industry has taught me to be tenacious, meticulous, and well organized. This method ensures the success of any project we undertake as a group.

Should I be elected to the AAW board, I will strive to make these characteristics the hallmark of my tenure.

Angelo J. Iafrate
Cumberland, RI

Continued

Board Candidates 2004-2006

Gary Lansinger

I have been fortunate in many ways to be involved in the movement to spread awareness of woodturning. My introduction to woodturning came from a variety of sources. I worked with Dave Hout, who sparked my first interest in the craft in 1982. Later that same year,

I attended my first seminar at Berea College taught by Rude Osolnik and Dale Nish. Their expertise and good humor convinced me that I was about to embark on a journey that would introduce me to many legendary characters. I have not been disappointed. I was also lucky enough to be present at the AAW's inception at Arrowmont School of the Arts and Crafts. I became one of its charter members, and soon helped start two local chapters, Northcoast Woodturners and Buckeye Woodworkers. I have served both groups as a demonstrator, president, and vice president, and have helped to organize several symposia.

Currently, I'm employed by the Hartville Tool Company, in Hartville, Ohio, as a sales representative and technical advisor. We are in the process of creating a school of woodworking, and woodturning will certainly occupy a large part of the curriculum.

I am a retired social studies teacher with over 30 years of experience. I have demonstrated at local meetings, woodworking shows, high schools, and symposia.

The expansion of the woodturning movement has been a focal point of my experience during the last several decades. I have had the opportunity to learn from, and to meet thousands of new friends who, like myself, enjoy working with wood. Given the opportunity to serve on the AAW Board, I will continue in that involvement, and dedicate my energy to the service, growth, and education of the community that appreciates woodturning throughout the world.

Gary Lansinger
Barberton, OH

Ashton Waters

In the mid 1990s, after moving to northern Virginia, I was able to explore a longtime interest in woodworking. It soon became my passion. I joined the Capital Area Woodturners (CAW) and the Washington Woodworkers Guild. I was proud to serve as the vice president of the Guild for a year. Both clubs and their diverse membership inspired me. These individuals took the time to teach, share their love of working with wood, and fuel the drive of newcomers. It wasn't until moving to the Shenandoah Valley that I was driven to reach out to others that also wanted to grow as woodturners.

A few special individuals and myself founded the Woodturners of the Virginias. I served as president for the first two years. The club used the CAW as a model.

I have spent most of my life working in various occupations. While working in building and home construction, I earned a BS in biology and served as chapter president of the National Honor Society. I worked as a chemist and high school teacher but developing as an artisan has been the most rewarding. I presently serve on the Art Advisory Board for WVPT public television for their annual art auction.

I want to pass on the love of woodworking to others. Applying for the AAW Board of Directors will allow me to give back. It would be wrong not to continue the legacy so freely given me. The woodturning craft would soon become a skill of the past if not for the many talented members along with the leadership and direction of the AAW. I can only hope to be part of its mission.

Ashton Waters
Fulks Run, VA

Watch Us Grow

10,000 members and 200 chapters

Naoto Suzuki, president of the Far East Woodturning Society, demonstrates laser hollowing techniques at a chapter meeting in Tokyo.

June was a big month when the AAW reached two milestones. **Jim Bohn of Scranton, PA, became the AAW's 10,000 member**. Jim, who has been turning for about 25 years, is largely self-taught. "I am by no means talented," Jim confesses, "but I do enjoy turning as well as making other things of wood. My turning products have been of the nature of small cups and bowls, spindles for chairs, and several lamps and bases."

Jim is an executive for United Gilsonite Laboratories, manufacturer of ZAR wood stains and polyurethane. He first became acquainted with the AAW when a Texas chapter invited his company to help sponsor "Texas Turn or Two."

Naoto Suzuki, (woodturning @hkg.odn.ne.jp), *above,* is president of the **AAW's 200th chapter, the Far East Woodturning Society**. And we mean really Far East: the mailing address is Tokyo. The chapter meets quarterly and counts a Korean woodturner among 100 members. This is the AAW's first chapter outside of North America.

If you're looking for an exotic destination for a turning seminar, the chapter's first symposium with American woodturners will be October 1-3, 2004. John Jordan and Alan Lacer are among invited demonstrators.

Do it now! On-line AAW survey

Could we have five minutes of your time? Through October 15th, we welcome you to log onto the AAW web site–woodturner.org–and complete an on-line survey about the *American Woodturner.* Your valued opinions will help us plan editorial content for future issues. Please be candid about what you think about of the journal and how we can best serve your turning interests.

Your input will help us find the right mix of articles and inspiration for the AAW membership.

New stuff

Check out AAW's new merchandise

Don't forget to look at the AAW order form on pages 71 and 72. There, you'll find information about new products, including:

- 2003 AAW Symposium. This year, video and DVD versions are available.
- Two CDs of *American Woodturner* back issues, going back to 1986.
- The popular "Fundamentals of Sharpening" is now available in DVD format, too.
- A Turning Tradition," a new 55-minute video featuring Ray Huskey of Tennessee.
- "Put a Lid On It" exhibition catalog (48 pages).
- An updated AAW smock with back pockets, full-length zipper, and vented underarms.

Conover Scholarships and Apprenticeships available

Ernie Conover, a well-known teacher and author in the turning arena, offers scholarships and apprenticeships to attend Conover Workshops, a crafts school founded in 1980 in Parkman, OH.

The scholarships for week-long classes are funded by alumnae of the school. Apprentices spend three months or more at Conover Workshops auditing all classes. When classes are not in session, apprentices have full access to the shop.

For more information about scholarship and apprentice programs (including a list of previous apprentices), call 440-548-2721 or follow the links at www.conoverworkshops.com.

When did you start turning? Can you beat 67 years?

Wally Dickerman (jawal7@msn.com) thinks he may be right up there with the long-time turners. Wally was just a 15-year-old when he bought his first lathe and turning tools in 1936 by saving what he earned by working all summer at lumber camp for two dollars a day. Those hard-earned dollars were enough to get an entry-level Sears lathe delivered to his door in Kirkland, WA.

Wally, who turned 82 this summer, now lives in Green Valley, AZ, where he works at his eighth lathe, an 800-pound Nichols lathe. He also teaches woodturning and exhibits at several galleries. For those who keep track, he's AAW member #164.

Let us know if you've been at the lathe longer.

Woodturners and the Freedom Schooner Amistad

What's the connection?

Top photo: CCW members receive instructions for working the Amistad sails. **Center photo**: CCW members turned 56 parrel beads from lignum vitae. The beads act like roller bearings to make raising and lowering the spars easier. **Lower photo**: Members produced 95 belaying pins from angelique. The pins are movable cleats used to tie off the lines that adjust rigging and sails.

Yes, there is a fascinating connection between the Central Connecticut Woodturners (CCW) and the freedom schooner *Amistad*.

Perhaps you remember the Stephen Spielberg movie *Amistad*, which portrayed an 1839 historical event of renowned heroism and courage. The uprising of the West African captives aboard the *Amistad* to vanquish their European slavemaster kidnappers offers hope for oppressed people the world over.

However, the event represents much more than an exciting hero story. The value of the history lesson is in the dedication of all the people of diverse racial and ethnic backgrounds who came together in defense of the would-be slaves, then used America's young judicial system to prevail over the inhumanity of racism.

In 1999, the CCW chapter was asked to participate in the reconstruction of the *Amistad* at Mystic Seaport Museum. Our group turned belaying pins, parrel beads, and other reproduc-

tion shipboard items that are used on the schooner today.

Since her launch in March of 2000, CCW has raised more than $18,000 to promote the goals of the ship through the sale of turned items made from the *Amistad* construction wood scraps and cutoffs.

In addition, CCW members have visited the West African nation of Sierra Leone to dedicate the *Amistad* Freedom Grove tree planting to commemorate the return of those early freedom fighters to their homeland.

Recently, members were invited to sail aboard the *Amistad* on Long Island sound. The importance of that solemn event of 1839 really hit home as we hoisted sails, sang African songs and listened to a retelling of the amazing story of the struggle for freedom against a background of creaking and groaning rope, canvas, and wood.

The mission of the *Amistad* is to promote reconciliation and harmony among races through operation of the freedom schooner. Over the summer, the *Amistad* completed a Great Lakes tour visiting ports in Cleveland, Toledo, Muskegon, Chicago, Detroit, Buffalo, and other cities. For more information, check out the *Amistad* schedule at www.amistadamerica.org.

The *Amistad* carries our aspirations for justice and equality for all humankind and the Central Connecticut Woodturners are very proud to be part of that important charge. We encourage AAW members to come aboard and hear her story when she visits a port near you.

—John Lorch

The Quizzical Woodturner

By Ernie Newman

Think you know something about woodturning? Test your woodturning IQ, then check answers below.

1 Why do turners often cut logs lengthwise before seasoning?

2 What is the reason that some turners file a notch into one of the prongs of the driving center?

3 What is the problem with turning a piece after it has been sanded?

Ernie Newman (ernienewman@hotmail.com; ernienewman.cjb.net) lives in the Blue Mountains west of Sydney, Australia. He previously taught a 700-hour course for apprentice woodturners.

4 If the following operations are performed for one minute with a spindle gouge, which operation will blunt the tool most quickly?
A. Hollowing out a goblet.
B. Turning the off-center part of a cabriole leg.
C. Turning the rim of a small bowl (grain at 90° to the lathe bed).

5 The following trades are all mentioned in an old nursery rhyme: woodturning, baking and butchering. Can you remember the rhyme?

ANSWERS:

There is more than one way to turn and there isn't just one right answer to the questions in this quiz. Your comments and corrections are welcome.

1 Cutting a log lengthwise reduces a lot of the tension in the wood so that it is less likely to split or check as it dries. It also reduces drying time.

2 Even if a prong center is machined symmetrically by the manufacturer (and some aren't) the prongs become uneven when re-ground. This means that when a turning is removed from the lathe then replaced, it may be slightly off-center. A notch filed in one prong automatically marks the wood so that it can be quickly replaced in its original position.

3 When a turning is sanded, tiny abrasive particles from the sandpaper become embedded in the wood and if the piece is then turned, these particles will blunt the tool.

4 Turning the end grain on faceplate work, in this case the rim of a bowl, is particularly hard on tools and necessitates more frequent sharpening than the other examples listed.

5 The nursery rhyme which refers to woodturning, baking and butchering is:
Rub a dub, dub, three men in a tub,
Who do you think they be?
The butcher, the baker, the candlestick maker,
We'll turn them out all three.

Turners go High Tech for Fundraising

By Dick Stucki

AAW chapters across the country have all experienced the rising costs of operating their clubs. Most have found that membership dues alone will not cover all the costs of operating a club. Of course you can increase dues and hope to increase membership, but there are other solutions.

Today's world is abounding with the advancements in the high-tech sector, which has changed the way we work and live. If your chapter hasn't already embraced these changes, it's time you do—and possibly generate a little positive cash flow.

Many turners attend the Utah Woodturning Symposium at Brigham Young University every year to recharge their batteries. The Utah Association of Woodturners is a co-sponsor of the event, which draws turners from all over the world.

Turners attending the Utah symposium have the opportunity to order a $35 CD with photos of every item in the instant gallery along with photos of every demonstration. Those who have purchased the CDs say that the pictures of the instant gallery alone are worth their weight in gold for their idea file. Many turners load the CDs on home computers, view all the pictures, and then print favorites for reference in their own shops.

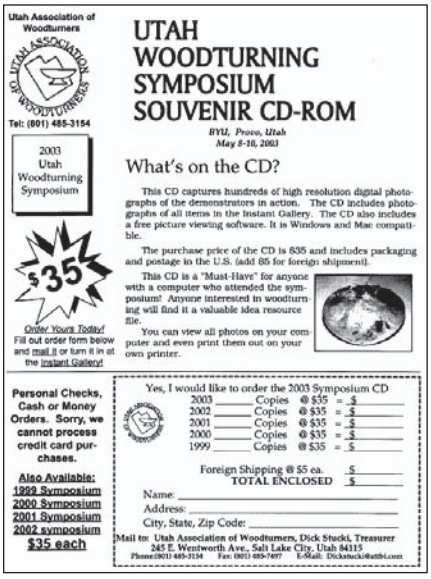
Our chapter is fortunate to have such a high-quality annual event in our backyard. However, don't undervalue your own members and chapter events.

If your chapter hasn't scheduled a major event, consider putting together a CD of images from chapter meetings, newsletters, or representative photographs from your most experienced members.

With the many advancements in computer software and digital photography, club members can now produce a valued CD on home computers. The steps to produce them are not that difficult to get your arms around. When finished, our chapter will have about 1,600 hours in producing the newest CD, but believe me it's worth every minute.

Go digital, shoot photos

There are many quality ranges of digital cameras. Be sure the camera records at least 2 mega pixels resolution. Photographers should select to save pictures in the J-PEG format and the highest quality available.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$35

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UTAH WOODTURNING SYMPOSIUM SOUVENIR CD-ROM

BYU, Provo, Utah
May 8-10, 2003

What's on the CD?

This CD captures hundreds of high resolution digital photographs of the demonstrators in action. The CD includes photographs of all items in the Instant Gallery. The CD also includes a free picture viewing software. It is Windows and Mac compatible.

The purchase price of the CD is $35 and includes packaging and postage in the U.S. (add $5 for foreign shipment).

This CD is a "Must-Have" for anyone with a computer who attended the symposium! Anyone interested in woodturning will find it a valuable idea resource file.

You can view all photos on your computer and even print them out on your own printer.

Personal Checks, Cash or Money Orders. Sorry, we cannot process credit card purchases.

Also Available:
1999 Symposium
2000 Symposium
2001 Symposium
2002 symposium
$35 each

Yes, I would like to order the 2003 Symposium CD
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To market advance orders, The Utah Association of Woodturners create a flyer and order form to distribute to all symposium attendees.

At club meetings and events, be sure to assign someone to shoot the key events. For best results, provide a neutral, uncluttered background so the turned piece gets the attention it deserves.

Be sure to capture a variety of angles. Turners appreciate someone taking the time to kneel and shoot a picture from low angle to capture the profile. If there are special features not shown from that angle, always change angles so those features can be seen.

Convert photos to computer files

First, you'll need to remove the camera's reusable memory card; this is the equivalent to the roll of film in a 35mm camera. Then

copy the photos onto your computer's hard drive, where you will be able to access them.

If you do not have a digital camera, not all is lost. When you have the film developed, just ask for a computer disc of the photos. All modern labs now offer this service right along with the developing of the film. Then just copy the photo files from the CD to your computer.

Adjust the photographs

Most digital images need a bit of tweaking just like the portrait studio where you had your family pictures taken. The best part is that you can learn to do this yourself.

If you have a digital camera, it most likely was packaged with a good program to enhance the images (see the list *above right*). One of the best computer programs to do this with is Adobe Photoshop Elements.

The important thing is to open each photo and adjust the cropping, in case you were too far back, and adjust levels of contrast and saturation. (All of the photo retouching programs will do this.) Then save the new image to a file and rename it other than just a number your camera assigned.

Make CD copies of your turnings

It is time now to burn the CD. This is the term used to copy the photographs onto the disc called a CD. You will need a drive in your computer to write and burn a CD; for the past two or three years, most new computers include a CD/RW CD in the standard setup. It is really a simple few steps to burn a CD, usually only taking a few minutes. You can burn additional CDs as orders come in.

The same program that helps you burn the CD will also have a sub program that will guide you through the process of designing a label and paper inserts for the jewel case. (A jewel case is the plastic box that holds the CD.) Your finished project will end up looking a lot like the music CDs you see in most stores.

Now, market your CDs

When you host an event, have a flyer ready to pass out to all in attendance at the event; this will help you pre-sell the CDs.

Don't be intimidated by your computer. Most chapters will have someone who is computer literate. Enlist his or her help. Doing so will help generate some needed cash to help your club operate.

The CD sales mean a lot to our chapter. In addition to underwriting the cost of bringing in two or three international demonstrators, we use the CD revenue to help cover the costs of producing and mailing a newsletter. CD sales also help cover the cost of our December meeting and demonstration. Because of this revenue, everyone who attends our December meeting receives a gift--from lathe kits, tools, books, turning blanks or gift certificates.

The UAW has for many years given scholarships to the Utah Woodturning Symposium to young turners with an interest in becoming better turners. Two or three times a year we have internationally known turners come to the club to do demonstrations. CD sales also cover these expenses.

Software programs to get you started

Here are some of the popular, easy-to-navigate software programs to help you create your chapter's CDs.

Retouch, improve and enhance photos
- Adobe Photoshop Elements
- or Adobe Photoshop
- or Jasc Paintshop Pro

Burn CDs
- Roxio's CD Creator
- or Ahead's Nero

Assemble photographs
- Ulead Picture Show
- or Film Factory

Print CD labels
- Avery (comes with the labels)
- or Ahead's Nero
- or Roxio's CD Creator
- or CD Stomper

The 2003 Utah Symposium CD.

To order a copy of the CD including US postage and handling, send $35 to:

The Utah Association
of Woodturners
245 E. Wentworth Ave.
Salt Lake City, Utah 84115.

Foreign orders are $40.

Dick Stucki (dickstucki@comcast.net) is a long-time member of the Utah Association of Woodturners.

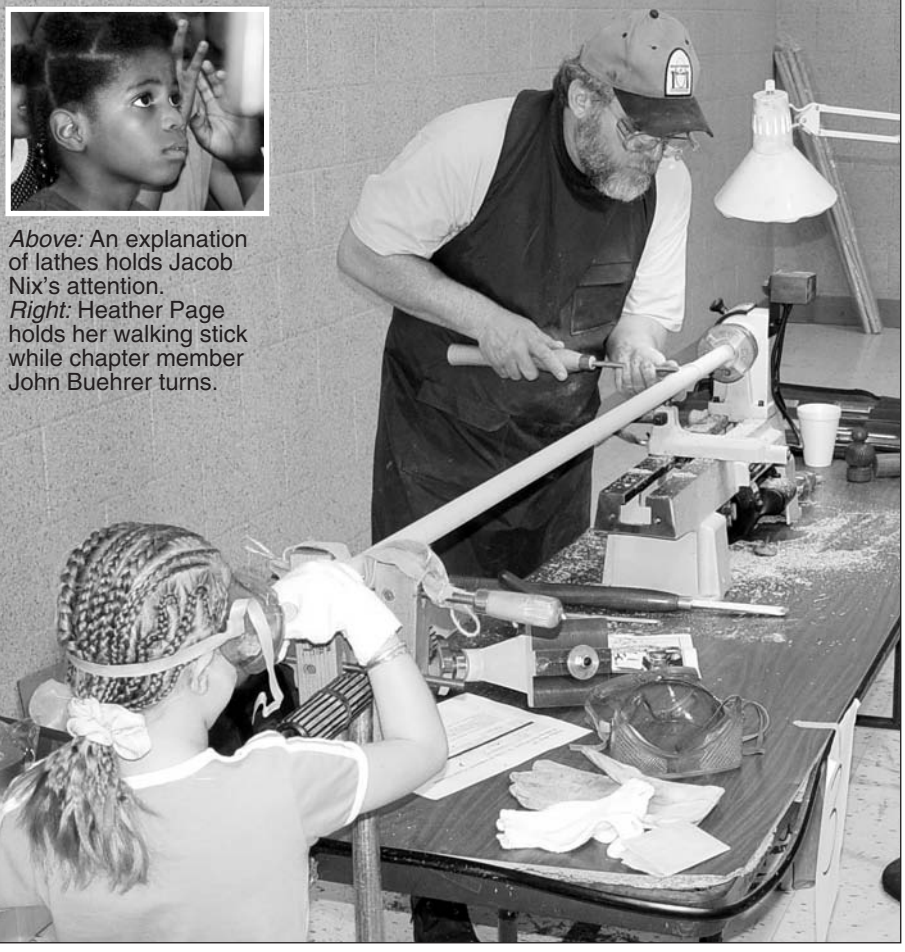
Seven woodturners in St. Louis with 165 Kindergarten to 5th graders going through 190 broomsticks in five hours.

We were never so exhausted or happier in a demo.

By Elaine Navarro

Learn what happened after an inner-city school contacted the Woodturners of St. Louis for help with a study on the totem and walking sticks. It's all about leadership and care for the community.

Garfield Elementary second graders had a busy day helping turn walking sticks.



Above: An explanation of lathes holds Jacob Nix's attention.
Right: Heather Page holds her walking stick while chapter member John Buehrer turns.

David Tabscott, a counselor and teacher at a St. Louis inner-city school, challenged our turners to help him with a project this year. He proposed the Garfield Elementary students learn about totem and walking sticks as symbols of leadership and care for the community. Mr. Tabscott had ordered broomsticks for every child and teacher and wondered if we could personalize each one with "a few notches." Of course we could!

Between local woodworking stores and chapter members' shops, we collected seven mini-lathes, seven chucks with spigot jaws and seven roller stands to help the kids be human steady rests. They were in awe of us, and we were in awe of them—especially their interest, curiosity and amazement.

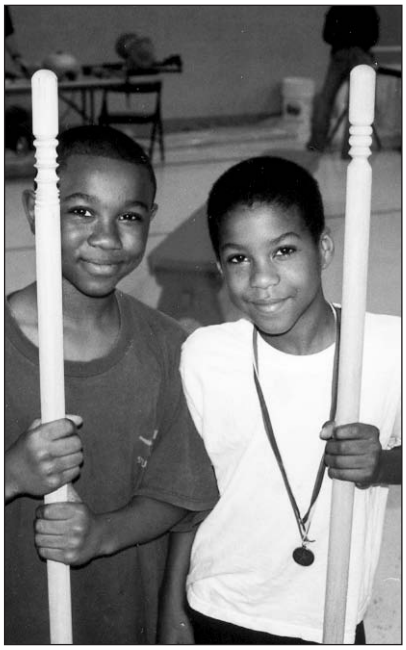
The kids could feel the lathe through the extension of the

broomstick resting on the roller in the U of a clamp. And they had an important job. If they didn't hold the wild tail end–gently, on center–their stick would whip around too much to get any decent bead or cove. The vibration alone imprinted woodturning through their whole body. Bonnie Klein would have been astonished to see us turning the five-foot poles on her lathe! We were astounded ourselves. It was a real challenge. We had to deal with bowed sticks, shaking tables, excited kids, and optimistic requests: Could we turn a tiger or a dragon or Minnie Mouse?

In preparation for the project members turned eight toppers–detailed turnings with a mortise in the bottom that would attach to the top of a stick. The toppers were to be awarded to eight students who earned them by exhibiting superior conduct.

Later, the children painted and decorated their sticks, then waited for parade day to arrive. On the last day of school, a St. Louis neighborhood had 165 young leaders proudly carrying walking sticks as a symbol of respect and responsibility for the safety and well-being of their community.

Elaine Navarro
(enavarro@sbcglobal.net)
is newsletter editor for the
Woodturners of St. Louis.



Clinton Mayfield and Lamont Johnson hold their sticks.

Stan King helps Tyrone Paine finish her walking stick.

While Michelle Like, left, controls vibrations, Ray Koeneman finishes beads on top of Michelle's stick.

Baxter Honored at Southern States III

Some 300 attendees paid tribute to retiring AAW board member Willard Baxter for his service and dedication to woodturning at the Third Annual Southern States Woodturning Symposium in Gainesville, Georgia in April. The Southern States Board voted to honor Baxter by presenting a scholarship in his name for woodturning study at the John C. Campbell Folk School in Brasstown, NC. The Baxter scholarship was one of four presented during the banquet auction which raised more than $5,000 for woodturning education.

Baxter, who has served as a national board member since 2000, is well known for his role as auctioneer for the AAW National Symposium auction for many years. He founded the Southern States Symposium in 2001 by bringing together representatives of six AAW chapters (now seven chapters) to plan a regional symposium. "We have a growing reputation as a family friendly event in a scenic environment that is perfect for a spring break," Bobby Clemons said. "Our symposium is a part of the growing trend of regional woodturning events that fill the needs of woodturners in a given region when the national AAW symposium is out of reach either geographically or financially," he added.

Southern States IV will be held April 23 - 25, 2004. Featured demonstrators for next year's event include Trent Bosch, Binh Pho, Al Stirt, and Gary Sanders.

Tips

Got a Great Idea?

Share your turning ideas! If your tip wins our Best Tip Award, you also receive a free AAW ball cap and turned ornament contributed by Bob Rosand. Send your tips with relevant photos or illustrations along with your name, city, and state to:

John Lucas
PO Box 1292,
Cookeville, TN 38503
jlucas@tntech.edu

Put golf balls to good use

Mounting wood in the old rod-operated Novas requires at least three hands, so I drilled and tapered in a golf ball to fit the nose of the tailstock live center. Use the tailstock quill to apply pressure. Hold the work piece against the chuck jaws, then tightening jaws only requires two hands. This also acts as a U-joint, allowing some movement to force the workpiece tightly against all 4-jaw shoulders. The tailstock can now be left in position as a safety feature, and the golf ball will not leave deep marks as the tailstock center would.

Jamie Donaldson
Georgetown, KY

Clean clogged sanding discs

When power-sanding green wood, my sanding disks fill up quickly and stop working. I have tried the rubber cleaning sticks, but found that they do not work on all woods nor do they completely clean the disk. My solution is a small steel barbecue brush, which has an 8" handle and a bristle area 1/2" x 1 1/2". I just brush the sanding disk, being careful to spin the disk under power for fear of a bristle hitting my eye. The barbecue brushes are inexpensive to replace.

Richard Preston
Richmond, VA

Freeing frozen drive spurs

Here are simple solutions to free a drive center from the headstock:

1. A good way to protect the spindle threads is to put a nut in the spindle before inserting the drive center. If the center gets stuck, you have a nut already in place.

2. Make a split nut by sawing in half a nut with the appropriate thread. Use an open-end wrench on the split nut to hold it together and back out the drive center. An adjustable wrench has too much play to hold the nut well but may work in a pinch.

3. If the drive center doesn't come loose from the pressure of the nut, try using the knock out bar again with the pressure still on.

4. Be careful when removing a stuck drive center, as the drive center can come out with considerable force. Under pressure, observe proper safety precautions. Simply place a towel over the drive center to keep it from flying across the room.

Scott Hogsten
West Jefferson, OH

Prevent Oneway chuck key handle dropout

The O-rings or plastic caps on the ends of my Oneway chuck keys come off, resulting in the handle dropping out. After replacing the O-rings several times and not being able to find end cap replacements, I decided to do something more permanent. First I dipped the ends of the handle in some fast-set epoxy to form a ball. When the epoxy is cured, the ball prevents the handle from sliding out. For handles without grooves at the ends, use a file to cut them, giving the epoxy a better grip.

Carl M. Schneider
Boca Raton, FL

Share a Show

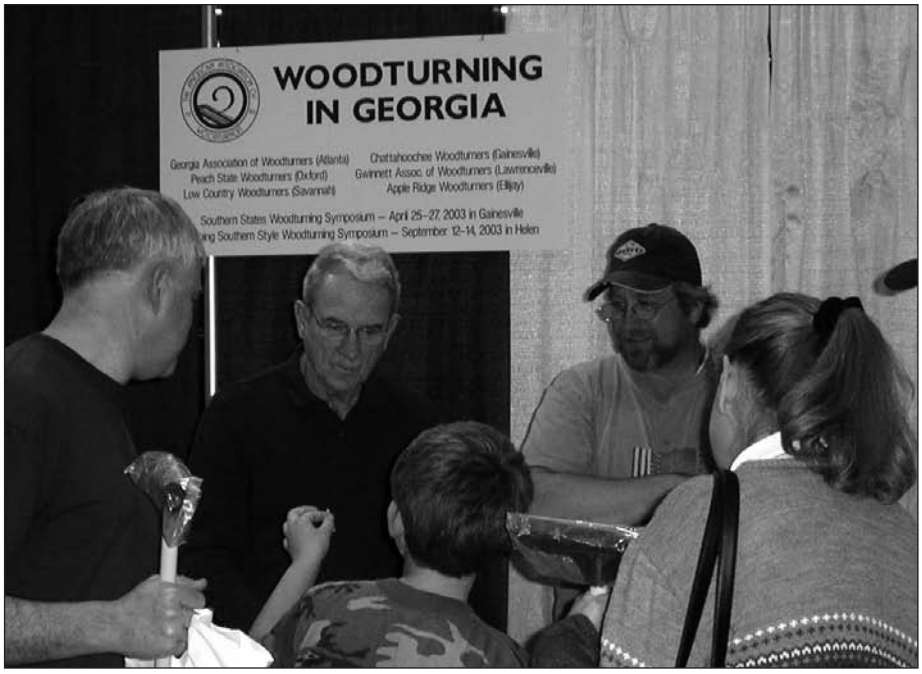
A tale of woodturning cooperation, Georgia style

by Wes Jones

Several months ago, the operators of the big woodworking show that comes to Atlanta every year contacted several of the area woodturning clubs. They offered each club a free booth at this year's show to be used for educational purposes. There are now six AAW chapter clubs in Georgia, and we decided it didn't make sense to have a whole bunch of different woodturning booths. So, since I am a member of the four woodturning clubs in the Atlanta area, I got the job of coordinating one common booth for all six clubs in the state.

With an expense to each club of only $10, we were able to have a nice sign made for the booth and 500 handouts printed up. The handouts included contact information for the AAW and each of the Georgia chapters, as well as the two annual woodturning symposiums we hold in Georgia. The meeting schedule and location of each club and the symposium dates also were included.

The booth was staffed by 23 woodturners in two-hour shifts over the three days of the woodworking show. Each woodturner brought several of his turned pieces for display while he was working. These pieces generated a lot of interest and were great conversation starters.



Don Butler, center, and Bob Keller, wearing hat, talk to perspective AAW members at the Woodworking Show in Atlanta. Both men are members of the Chattahoochee Woodturners in Gainesville, GA.

There was a tremendous amount of interest in woodturning. Many people said they had a lathe at home, but didn't know how to use it very well. We encouraged them to come to a woodturning meeting or attend a symposium. If they indicated they would not be interested in joining a club, we encouraged them to at least join the AAW and read the *American Woodturner*. We also directed interested people to the available woodturning classes taught in the Southeast.

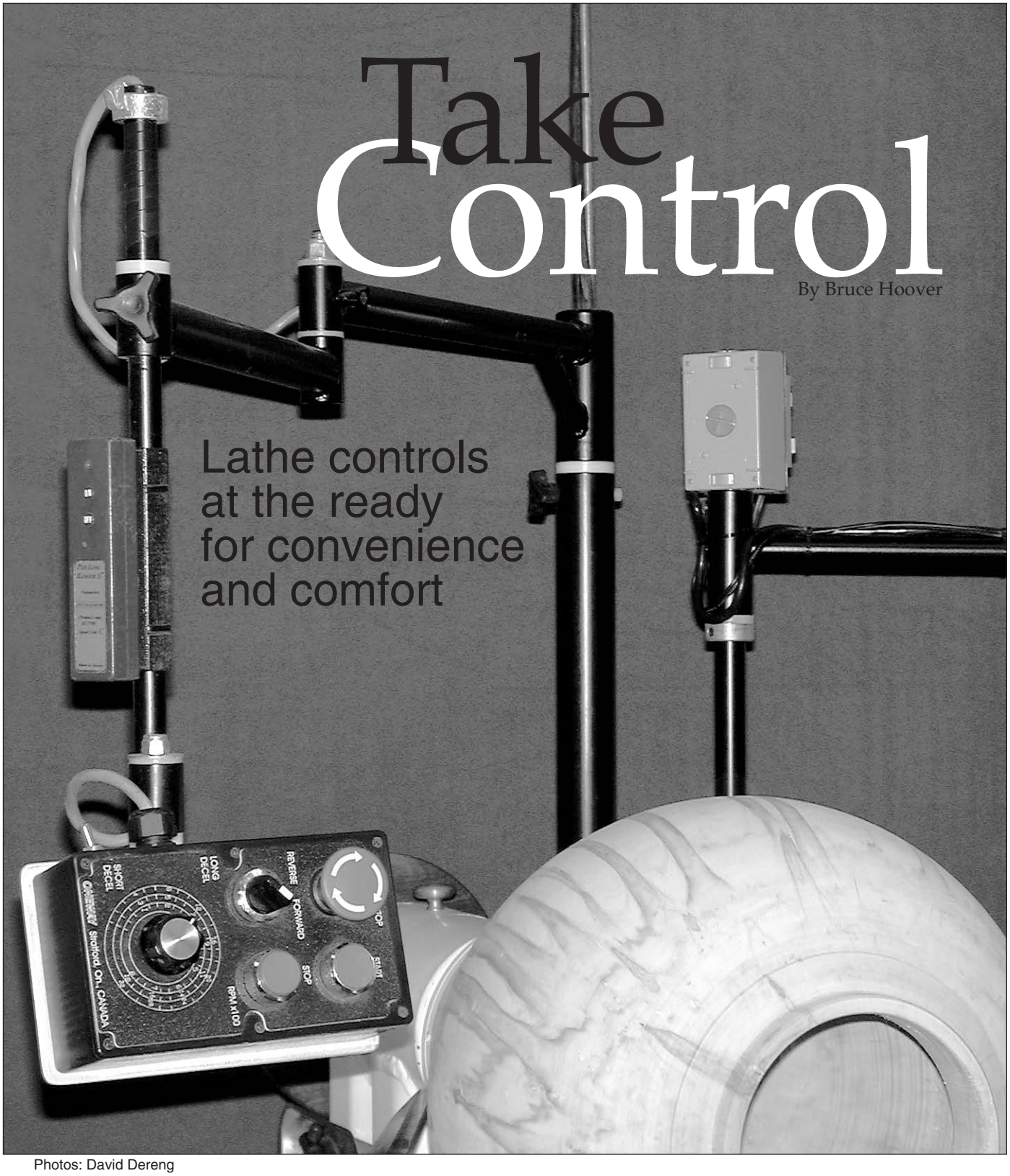
Everyone that worked the show agreed that this was a very worthwhile activity and should be continued next year. In the last 12 months, we have chartered two new woodturning chapters in Georgia, but judging by the response we got at the woodworking show, we may have to add a couple more clubs in the near future.

—Wes Jones
Lawrenceville, GA

Take Control

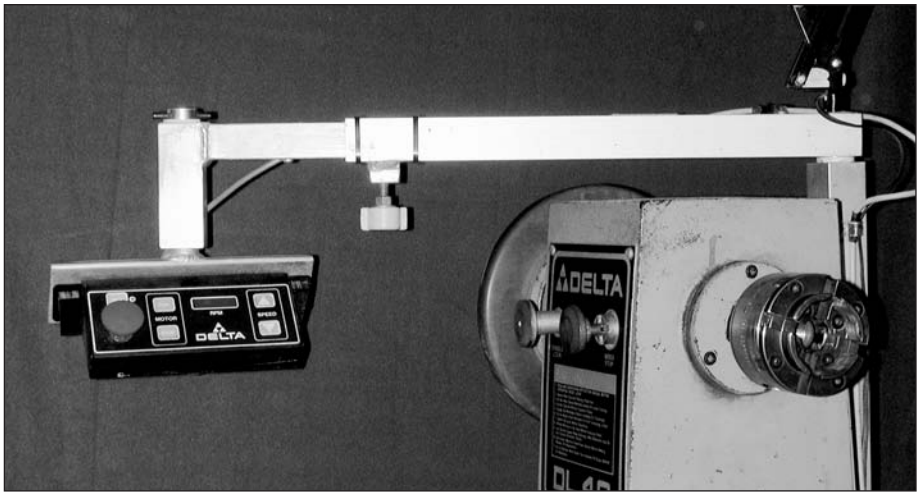
By Bruce Hoover

Lathe controls at the ready for convenience and comfort



Photos: David Dereng

A significant number of lathes today are available with electronic variable speed control. Anyone who owns one or has done any turning on one knows the value of this feature. It's easy to understand why they have become so popular. I have four in use in the shop now and would not trade even one of them for a fixed speed model that requires belt changes.



The telescoping arm on Bruce Hoover's Delta DL-40 has a work lamp mounted on top. The vertical post provides a pivot point for the horizontal arm and the work light. The control unit also rotates independently.

One of my early lathes is a Delta DL-40 that has electronic controls. What I found over time was that the factory-installed location for the control was often inconvenient to reach for adjustment. It was stationary and as such, offered no flexibility. Most speed-control lathes on the market have similar drawbacks.

The problem became even more exaggerated when using a boring bar for turning large hollow vessels. I found myself at one end of the lathe using the bar and the controls at the other. It didn't seem to make sense to go the distance each time it was necessary to change the speed or stop the lathe. And if something flew apart and some piece of it was left flailing about, it was dangerous to dash past it to turn off the power.

Having decided that there must be a more efficient approach to this, the search for a solution began. The photo *above right* shows my first generation of controls that can "travel" with you. It consists of square aluminum tubing that rotates from a single post and telescopes to vary the length. A threaded lock button (on the bottom) secures the adjustment. The vertical post is mounted to the lathe housing. This configuration proved to be very useful and made things much easier.

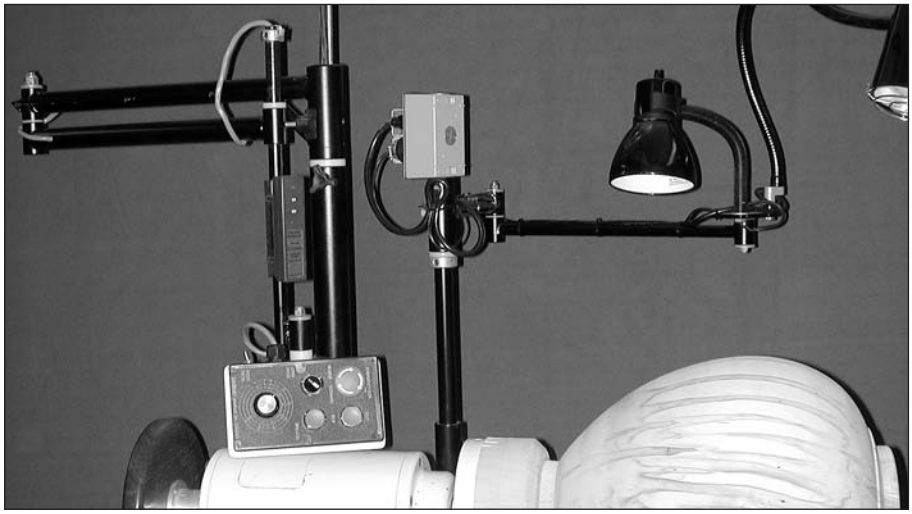
Before purchasing my Oneway 2436, I had already turned on a few and found that the pendulum provided with the unit has to swing out toward me in an arc in order to reposition it. It seemed to always be in the way and more cumbersome than my telescoping model. The time seemed right to try a new design. I reasoned that a system utilizing an articulated arm instead of the telescoping design would provide even more flexibility and ease of use. After designing the features and dimensions for the unit, I asked Gary Sanders of Greenville, Texas, who makes the lathe light stands, to custom-build the unit for me. This articulated arm is constructed of thick-walled steel tubing with nylon bushings and a powder coat finish.

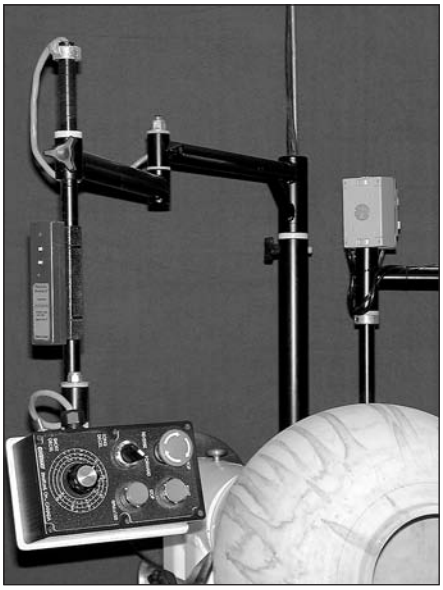
Having used the articulated arm now for two years, I am confident that it was an excellent choice. It has infinite possibilities for positioning in a horizontal plane. In addition, the height is adjustable on the vertical shaft holding the control unit. Settings can be placed at optimum height for the individual user and easily re-adjusted at any time. The joint tension is adjustable with set-screws to allow for setting the resistance with which the arm will move.

For inboard turning, the control unit can be positioned anywhere from directly over the headstock *opposite* for small turnings, and up to four feet down the bed for large vessels or spindles *(page 20)*. It can even be placed on the on the "back side" of the lathe bed for right-handed access if desired.

Continued

Swing it where you need it most





The articulated arms on this unit can be collapsed, stretched, or rotated to any desired position for easy access. Both the control and the lights can be raised or lowered to suit an individual user or task.

For outboard projects, the arm swings around the end of the lathe and I can place the controls in a safe and comfortable location.

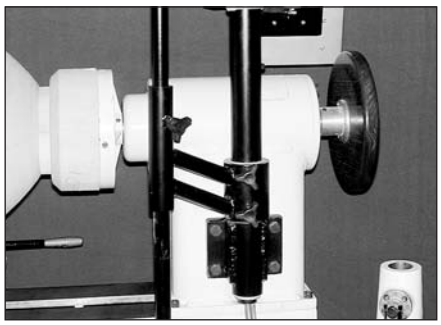
The unit is always up out of the way and just where I want it for any task. Another convenient feature you can add is an arm for work lights. Again, mine is designed with an articulated arm and double lights for maximum mobility and enough reach to use them on the outboard side as well as further down the inboard bed. The main support is a large 2" tube that provides good rigidity to suppress vibration, and through which electric and air lines were run from overhead. This avoids clutter on the floor.

Also you can see *above* that the Oneway control unit is mounted sideways. I have found this to be much more user friendly. This configuration places the ON and OFF buttons at the bottom where they are more easily pressed and makes it equally comfortable for right or left hand use. The *photo at right* shows the main support and mounting bracket used.

It should be noted that this article is not intended to be a step-by-step guide about how to build a specific design. Its purpose is to simply describe by way of photos and descriptions two variations that have worked successfully for me. Armed with this information and a bit of ingenuity, you can design and build a system suited to you and your lathe. Depending on how much of the work you want to do yourself, the cost could range from $50 to $500.

If you decide to make a unit–whether an articulated style or telescoping type–here are a few additional suggestions that will help you in the design phase.

- Plan the total distance you want the arms to reach.
- Allow for adequate clearance over the headstock, and positioning for outboard turning.
- Once you have a plan, build a makeshift test model from wood to see that everything will fit and move properly before you go to the welding shop.
- Be sure to purchase additional wiring for the control and allow enough extra to place loops at the pivoting joints to eliminate any stress on the wires.



Close-up of the mounting bracket for the articulated unit shows the mount for the light arm that can be raised or rotated on the main post or the secondary support.

Bruce Hoover (woodturner@esva.net) is a professional woodturner living on Virginia's Eastern Shore. Bruce, who shared his Square-Aim Laser design in the Spring 2003 issue, frequently demonstrates for local chapters.

The Cat box

It's Not What You're Thinking

By Stephen Hatcher

I enjoy combining wood turning and carving, often trying to achieve a whimsical result. I look for inspiration in pottery, craft figurines—anywhere I find it. This cat-box project is a fairly simple box that allows you to form paws and ears by removing material with a rasp. I suggest adding details with a small burr on a power-carving tool, though hand-carving tools also work well.

Continued

Tiger-stripe maple fits the personality of this tiger kitty.

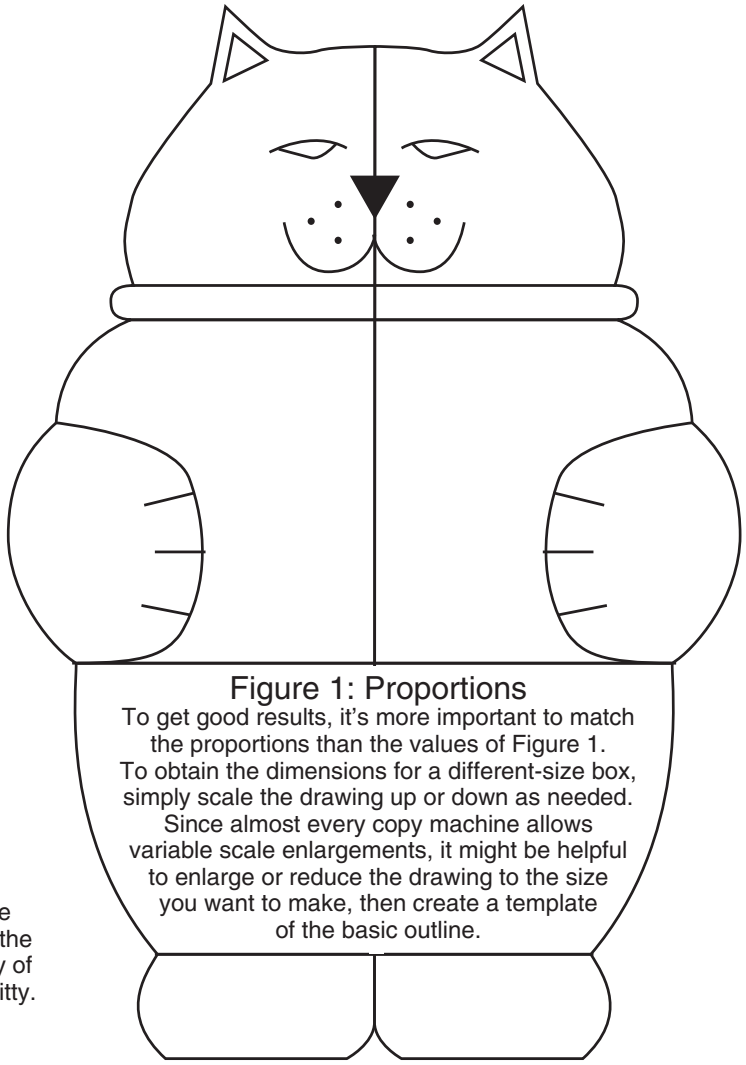
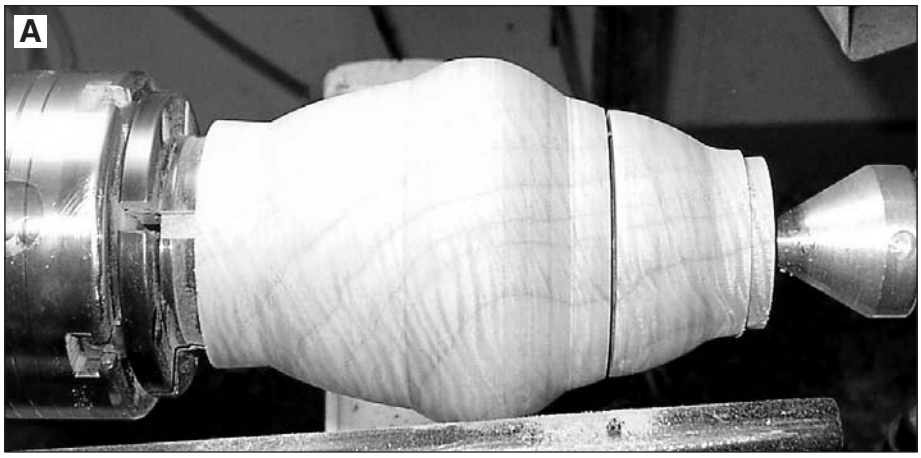
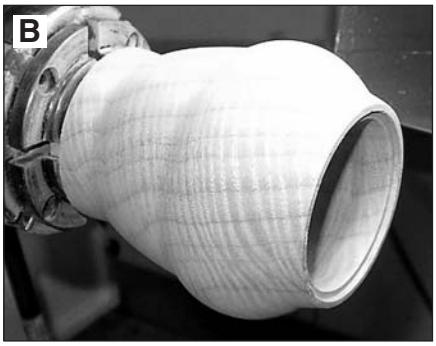


Figure 1: Proportions

To get good results, it's more important to match the proportions than the values of Figure 1. To obtain the dimensions for a different-size box, simply scale the drawing up or down as needed. Since almost every copy machine allows variable scale enlargements, it might be helpful to enlarge or reduce the drawing to the size you want to make, then create a template of the basic outline.

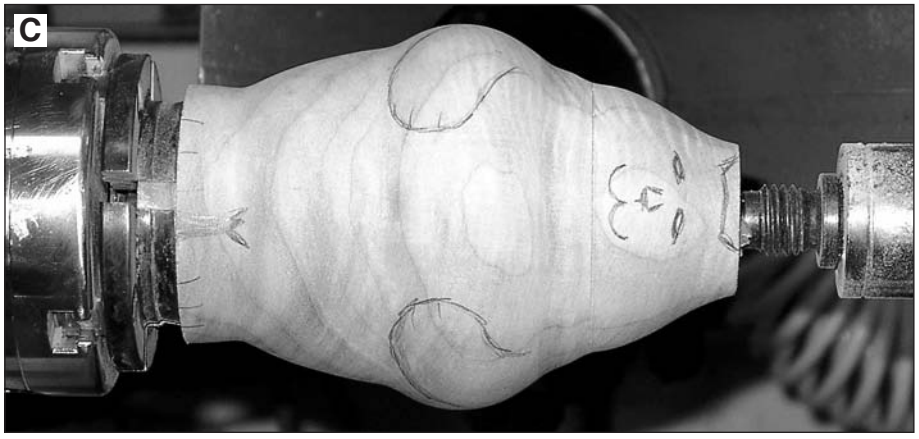
Step 1 Turn the cat shape as shown in Figure 1. The block should be about 1/2" longer than the finished length to allow for adequate end wood clamped in a chuck during hollowing. Don't bother sanding now; you will carve about half of the surface and sand again when adding paws, ears, tail, and feet. When you complete the basic shape (Photo A), separate the head (lid) with a thin cutoff tool.


A


B

Step 2 Hollow the inside of the head and body. I pre-drill with a 2 1/2" Forstner bit, then shape the interior with a small hollowing tool for a uniform wall thickness. Create a tenon on the lid and a mortise on the body for a fitted lid as shown in Photo B. I use only about 1/10" depth because I want the grain to align well when the lid is on the finished piece. Sand the interior to a 400-grit smoothness.

Step 3 Put the head back on the body with the grain aligned. Then draw on the finishing details with a pencil. Note that in Photo C, the head has been further turned to remove the tenon used for hollowing. That curvature will later provide the outside profile of the cat's ears.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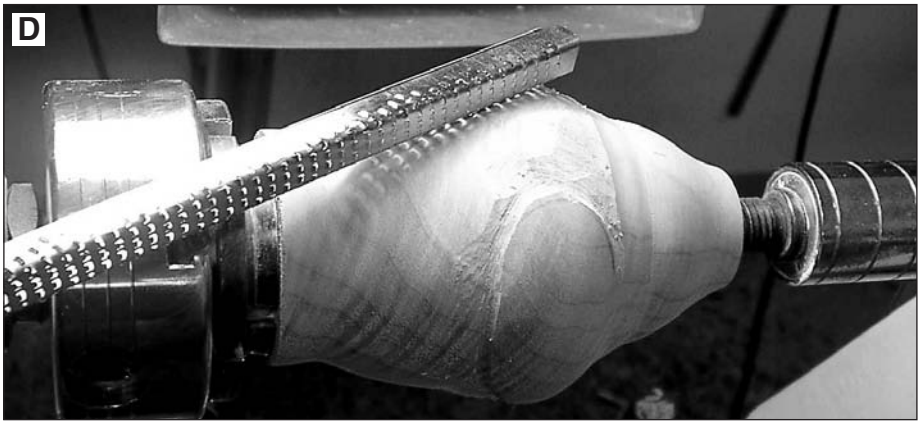
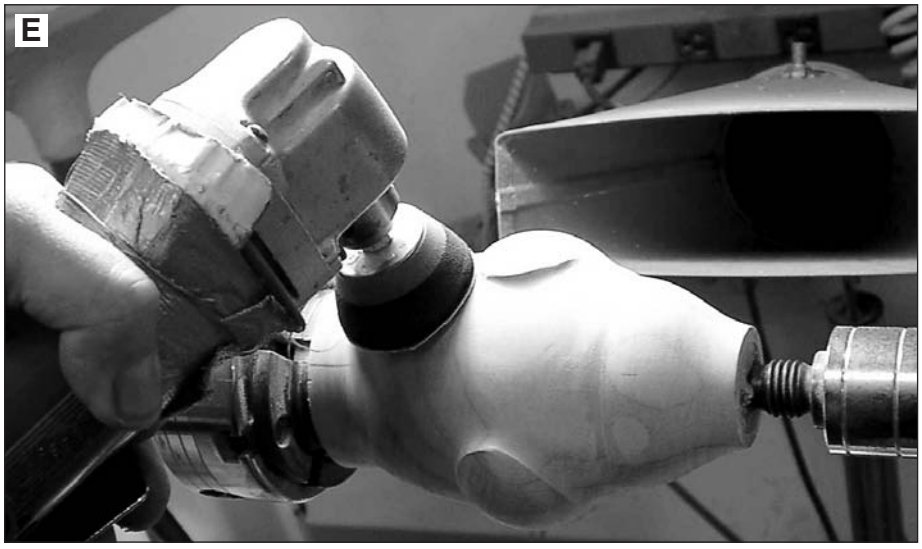

D

Step 4 Remove stock between the hands using a rasp as shown in Photo D or spoon gouge (I prefer a Microplane rasp). Now add a curved tail using a handheld spoon gouge. Remember this is a "for-fun" project so keep the carved details and sanding simple.

FRONT VIEW LID OFF SIDE VIEW BACK VIEW

Step 5 Use a 2" power-sanding disk with a soft sponge rubber backing to sand the entire piece from 80- to 400-grit smoothness as shown in Photo E. Shape this area as a smooth stomach "bulge" between the front paws. Adding a tail will require hand-sanding. Remove the box from the lathe and remove the wood between the cat ears. Then create a notch between the back (lower) legs.



Step 6 I find detail work is easiest if I place the box on the lathe again between centers while heavily padded with rags or foam. Use a 1/8" burr with a Dremel tool or pneumatic carver (Photo F) to add cat-like features including eyes (slits), nose, whisker spots, claws, and hollows in the ears. Lightly rub the carved areas with 0000 steel wool until smooth. Finish as desired (I prefer tung oil), then buff to a soft luster.

Stephen Hatcher (summit@nwlink.com) lives in Renton, WA. He is a frequent contributor to *American Woodturner.*

Ellsworth goes back to High School

By Ken Keoughan

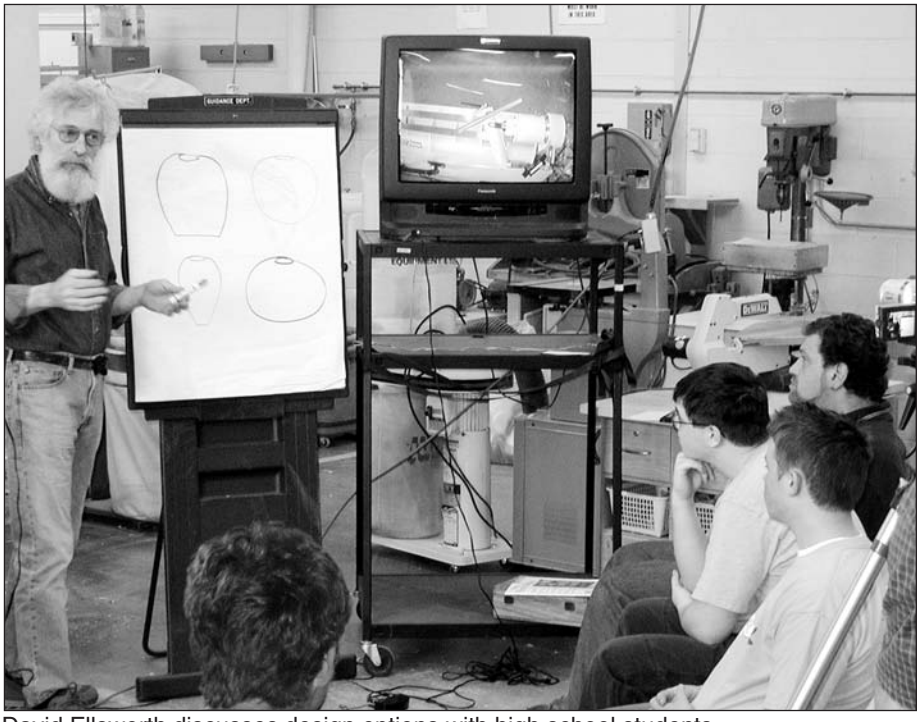
It was nearly show time. After two years of planning, the stage was set for David Ellsworth to present a major program… to high school students.

Yes, perhaps one of David Ellsworth's youngest audiences was lined up to hear "The Magic of Miniature Hollow Forms" at Pinkerton Academy in Derry, NH. Organizers were pleased with a crowd of 50 students giving up Mother's Day as part of the three-day New England Woodturning Symposium.

"I wanted Ellsworth because he's great with people," Jack Grube, Pinkerton's shop teacher, explained. "He's an internationally renowned turner. But as important or more important, is his Spirit Series in miniatures.

"Miniatures have a great appeal to kids and their parents. You can make a presentable miniature in 45 minutes--start to finish. That is the kind of instant gratification that teenagers love. You can make your own tools out of screwdrivers and allen wrenches. The kids love doing that and their dads love the low economic impact.

"Also you don't need a big expensive lathe. You can get a pretty good lathe for doing miniatures for $300 to $400. And that lathe is not going to throw a 40-pound block of wood through the garage door or take up a lot of space. All of this can make a big difference in encouraging the young person to develop and maintain an interest in turning."



David Ellsworth discusses design options with high school students.

First, design discussion

Ellsworth started off with a brief but pertinent and clear discussion of shapes and forms for hollow vessels. He explained how a fat base can make a hollow vessel

With wire calipers, David Ellsworth checks wall thickness of a miniature hollow form. Moments later–and to the shock of students–he cut the vessel in two with a bandsaw.

> "I just really like turning wood. It's a little like pottery, but I love wood. I'm hoping my parents will give me a small lathe soon."
>
> *–Casey Mullen high school junior*

look so heavy as to appear welded to the table. A tiny base can be very tippy and as such can be a little disappointing. There is a "just right" that can be found. He pointed out that the compressed sphere could be a wonderfully acceptable form for a vessel.

From forms, Ellsworth told the students about the design, geometry, and manufacture of hollowing tools for miniatures. Screwdrivers can be converted into straight hollowing tools; they can be heated, bent and shaped to get to the inside wall of a vessel.

Allen wrenches can be useful in getting under the shoulder and adjacent to the opening. The commutations and permutations are "limited only by your own imagination and need," Ellsworth pointed out.

From there Ellsworth set out to turn a miniature hollow vessel. Two cameras projecting onto TV monitors improved the visibility of the demo. He turned and shaped the outside, the inside, and the foot, taking plenty of time to be sure that he was being clear and that the audience was with him. He carefully measured the wall thickness with a loop of spring wire—just to be sure it was about 1/16 of an inch.

Satisfied, Ellsworth said, "Now for the test." With that he went straight to the bandsaw and cut the piece in half on its vertical axis. "There," he said with a smile, "it's just about right. Not too thick, not too thin and the walls are uniform thickness top to bottom."

Student observations

At the Sunday lunch break, two of Jack Grube's high school students shared their observations. Casey Mullen, a junior said, "What makes this demo most enjoyable is not only getting to see him work, but also to listen to how he incorporates his philosophy of life into his work."

"I just really like turning wood. It's a little like pottery. but I love wood. I'm hoping my parents will give me a small lathe soon."

Gareth Wilton, a senior, explained why he loves turning. "I come down here to the shop in all my free periods. Last year I took all heavy academic courses. This year I'm taking Mr. Grube's turning course in addition to the academics so I can come here between classes and relax.

"You know, I can't draw at all. Maybe stick figures. But I can come to the lathe and make a vessel that I really like, that I can appreciate."

Referring to the Ellsworth demo, Gareth added, "I can tell that he has mastered his craft and has taken it to a spiritual level. This symposium and the day with David Ellsworth were priceless." When asked if they had thought

Continued

of a career in wood-turning both Gareth and Casey seemed to think it unlikely. But both agreed that right now it was a valuable part of their lives; something that they hope to pursue in some way, at some time… at some level.

Another fellow walked up and said, "I'd like you to meet my son, Chris Belair. He's a turner. After a year or so learning he began to sell his work. He made more money that year than I did my first year of practicing law."

Obstacles for school shop programs

What about AAW chapters partnering with schools? This is of critical importance. According to Grube, here are some of the problems when attempting to work within school systems. First, the positive reason to eliminate woodshops in schools is the need to move into the future. Computers—not woodworking shops—are and will be the future.

Second, the negative: "why we can't maintain the woodworking program" is the "insurance problem." Whether or not it is a real problem could be the subject of some serious debate—but it is not usually debated. Most people just accept this as the gospel; furthermore, this is an issue that can be made murky and impenetrable quite easily.

A third obstacle is teacher certification. Fewer and fewer qualified teachers to instruct woodworking are graduated from 4-year schools or certified by their states each year.

Finally, use of classroom space is a serious issue. Efficient use of course sounds virtuous and can be made statistically compelling.

> "It is by partnering with organizations and people outside of the school systems that the AAW can promote exposing young people to turning."
>
> *–Lee Carter*

David Ellsworth talks to a Londonderry, NH, student about Ellsworth's homemade lathe tools.

The woodshop Grube uses processes 160 students per day. The same space cut into two classrooms would sustain 480 students per day. This poses a dilemma for administrators.

AAW and schools

David Ellsworth recognizes the problem. "We need to press from the outside to regain entry into the school systems. It really can't be done from inside of the school systems. It must come from the community."

AAW board member Lee Carter suggests that AAW chapters can partner with the schools and foster woodturning education. "That is one of our primary missions. Jack Grube is an outstanding educator. More important, he is one of the first educators to fully grasp and implement the idea of partnering with AAW.

"It is by partnering with organizations and people outside of the school systems that the AAW can promote exposing young people to turning and to turning education."

The programs that Jack Grube has developed at Pinkerton Academy are exceptional. There are 18 lathes in his woodworking shop—not one of which was paid for by the school system.

The Ellsworth workshop—sponsored in part by a $485 Educational Opportunity Grant from the AAW—was perfectly focused on young people, their teachers, and their parents. The synergy and productivity was easily perceived.

An interesting anecdote came out during the Ellsworth lunch break. A group of progressive parents in Cambridge, MA, approached a highly regarded professor at MIT and asked if he could please address a gathering of concerned citizens. They wanted him to advocate a computer program at the expense of the woodshop in the local school.

"I can't," he replied. "The first thing we do with civil engineering students at MIT is to make them climb a tree. They not only learn something about structures... they capitalize on the basic way that primates—all primates—learn. That is through their tactile senses."

Ken Keoughan (kkeoughan@yahoo.com) is a contributing editor to *American Woodturner*. He lives in Friendship, ME.

Great Gouges from Surplus Steel

By Ed French and John Shrader

It's a common belief that if you want high-speed steel turning gouges, you must buy them from manufacturers because the heat-treating is too difficult to make them in the wood turning shop.

We'd like to dispel that myth and show you a way to make your own high-speed steel gouges using worn out or surplus machine tools such as reamers and drills. The equipment required for the fabrication is common to most wood turning shops, or can be obtained easily and inexpensively. The photo *above* shows typical gouges we've made by this technique.

The basic technique is to shape a grinding wheel to rough-grind the groove in a round piece of hardened high-speed steel, then to polish the groove with a wheel of MDF that has the groove shape impregnated with abrasive.

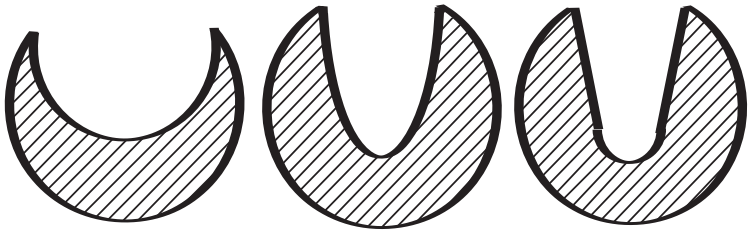
Find a source for scrap

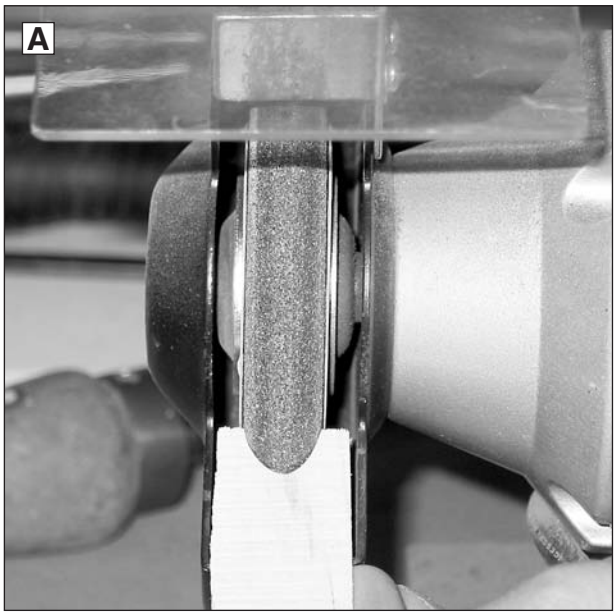
The first step is to find a source of high-speed tool-steel. Machine shops, sharpening services, surplus stores, and mail-order houses for machine-shop supplies are all potential sources. The photo *above* shows some typical surplus items that can be made into gouges. For this article, we purchased the raw material from Boeing Surplus in Seattle, WA. Our raw materials were mostly surplus reamers (at $1.00 to $3.00 each), but included drills with long shafts and hole saws. J&L Industrial Supply (800-771-8158, jlindustrial.com) is one mail-order house that sells hardened drill blanks. As an example, J&L lists a 5/8" diameter hardened high-speed steel drill blank at $11.52.

Choose your shape

The next step is to decide on the flute shape for the gouge. A few typical shapes are shown *below*. Once the flute shape is decided,

Continued





Use a template to verify the profile of the gouge.

With a wheel dresser, shape the grinding wheel to the gouge profile.

you must shape the grinding wheel to match the flute shape. It's helpful to make a female template for the grinding wheel out of thin material such as heavy cardboard or thin plywood as shown in Photo A.

Shape a grinding wheel

The grinding wheel should be considered dedicated gouge-making, since converting it back to a standard sharpening shape will involve removing a lot of material. The grinding wheel is then shaped using either a diamond wheel dresser or a star dresser as shown in Photo B.

WARNING! It's very important to wear breathing, hearing, and eye protec-tion during this process, as it produces a lot of grit and noise. The gray grinding wheels are cheaper and will hold their shape longer, but they also cut much slower than the white or pink wheels.

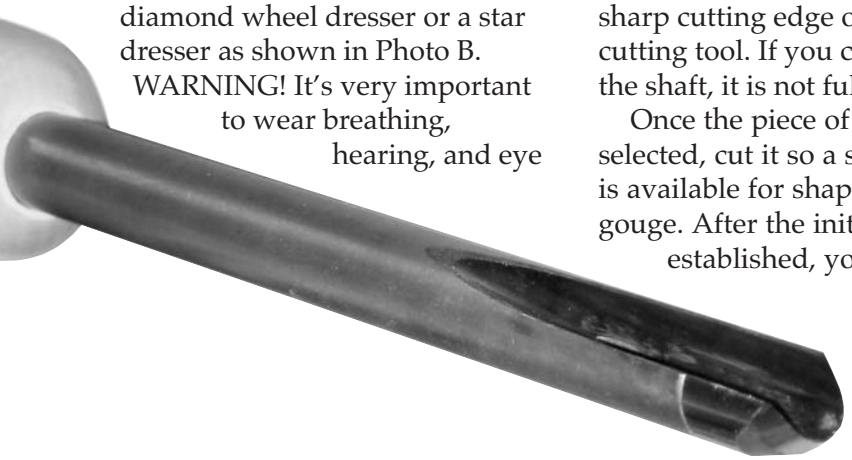
Grind the groove

The next step is to grind the groove in the piece of high-speed steel. Not all surplus tools are hardened for the full length of the shaft. A quick way to determine if the shaft is hardened or not is to see if you can scratch it with a sharp cutting edge of another cutting tool. If you can scratch the shaft, it is not fully hardened.

Once the piece of steel has been selected, cut it so a smooth shaft is available for shaping into a gouge. After the initial groove is established, you can proceed with the grinding by just staying with the initial groove and gradually deepening it, as shown in Photo C. It is very much like riding the bevel when cutting wood on the lathe. The gouge *below left* took about two hours to grind. Periodically, stop the grinding process and check the wheel profile using the template made earlier. If necessary, reshape the grinding wheel.

Polish the groove

When the rough shaping is completed, polish the groove using a wheel of MDF. This wheel is shaped the same as or a bit skinnier than the grinding wheel using the template for the grinding wheel to define the shape, as shown in Photo D. After shaping the wheel, impregnate it with 120-grit silicon carbide.



Gradually deepen and lengthen the groove to at least 1½" long.

The MDF wheel, left, is slightly narrower for polishing, right.

The silicon carbide grit is available at lapidary shops and auto supply stores; the local price was under $6.00 per pound. At machinist suppliers, you'll find this product as a lapping compound mixed in grease.

This step requires only a small amount of grit. The first layer of grit was applied by painting yellow glue on the outer edge of the MDF wheel, then sprinkling on a heavy layer of the grit before the glue dries. Repeat after the first layer of grit and glue dries. Subsequent layers were applied by mixing the grit in paste wax. You need to coat only the area of the wheel that matches the flute.

If the MDF wheel profile is the same as the grinding wheel profile, this step should go relatively quickly. You also can change the shape of the flute slightly at this stage, but this will take a long time, since very little metal is being removed at a time. This step also works for polishing commercial gouges, which do not always have smoothly polished grooves. Mount the MDF wheel on a bench grinder or your lathe. The wheel for this article was made 8" in diameter to match the regular sharpening wheels. Photo E shows the polishing step.

Give your gouge a grip

The gouge is now ready for a handle. Your handle could be a traditional straight wooden handle with the gouge either epoxied or driven in. Or try a handle made of aluminum or steel tubing with a set screw to hold different gouges. Some turners find a pistol-grip handle works best for some applications.

Shape and sharpen

Finally, you'll shape and sharpen the cutting edge as with any lathe tool at a regular grinding wheel.

Time for a few more?

Once you've made one gouge, you can create additional gouges using the same process for little more than the cost of the tool steel. By making your own gouges, you can try a variety of gouge shapes to closer match tasks and wood species.

To save fabrication time, you can grind a relatively short section of the groove to see if that shape is desirable. Works great? If so, lengthen the groove. If it is not, there is only a small time investment.

Ed French (efrench@winisp.net) and John Shrader (jaj.shrader@verizon.net) are members of the Seattle Chapter of the AAW.

Bottle Stoppers

Take your holiday gifts to a new level with these stoppers and stands

By Charles Turnage

Turning has been a joy for me for the last four or five years. As a matter of fact, it's not just a joy, it's a habit. Well, maybe it's something I like doing that I can stop anytime I want. Because I awake at 4:30 in the morning and turn a pen or stay in my basement at my lathe, making candle stands until 10 o'clock at night doesn't mean I have a problem? That's normal right? Okay, so maybe I'm obsessed with woodturning, but with a name like Charles Turnage, what do you expect?

Some of my favorite items to turn are bottle stoppers with turned stands. I supply galleries throughout the New England area, and these are the most requested items.

These bottle stoppers and stands require just a few turning tools, a bottle stopper lathe chuck, a chrome-plated bottle stopper cork, a 23/64" drill bit, a 1/2" paddle drill bit and two or more contrasting woods. I prefer a chrome-plated stopper cork because of its beauty and inability to absorb fluid. It also outlasts traditional cork stoppers.

The bottle stopper lathe chuck

One option is to make your own turning insert. With a hacksaw, cut off the head of a 3/8" x 2 1/2" bolt, then just chuck it into a 1/2" keyed chuck. If you don't want to make your own chuck, Penn State Industries (800-377-7297) sells a similar chuck. It simplifies the turning process because it has a shaft that matches the diameter of the bottle stopper and a 3/8" screw that self-threads the wooden body of the stopper blank.

The bits

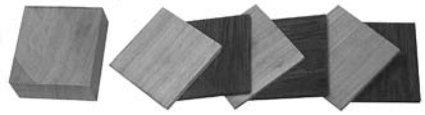
I use a 23/64" bit, which is a fraction smaller than the 3/8" screw in the chuck. This makes it easier to thread the bottle stopper and the stand blanks into the chuck. The 1/2" paddle bit is ground, using a 8" grinding wheel to about a 22-degree angle to match the plated bottle stopper's angle. Make sure you take off equal amounts on both sides of the bit in order to keep it centered.

The wood

I love to mix and match my favorite woods to get different looks and contrast. This project incorporates cherry and wenge and an optional 38mm natural stone cabachon (The Woodturners Catalog; 800-551-8876).

Cut the stock into 2 1/8" square pieces that are 3/4" inch thick (cherry) and 1/8" thick (wenge and cherry) for the inlay.

For the blanks, I epoxy in this order: 3/4" cherry, 1/8" wenge, 1/8" cherry, 1/8" wenge, 1/8" cherry, 1/8" wenge, and then 1/8" cherry.



Drill the 23/64" hole 7/8" deep for the stopper blank, drilling the end with 1/8" stripes. For the stand, it doesn't matter which end you drill. For this project, I drilled the opposite end.

You'll find other design options photographed in this article.

The plated stopper cork

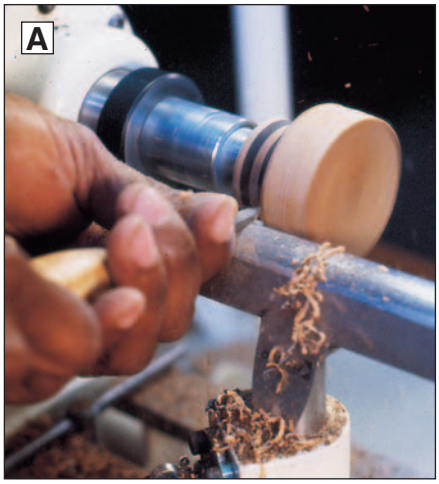
The plated stopper corks, available through many mail-order catalogs, have a 3/8" insert in order to easily accept the turned blanks.

Continued

Above: Some stopper designs unscrew to reveal a cork screw. This turned example is resin and fossilized whale teeth. **Right**: Close-up of segmented top.

Below: Finished pieces show a range of designs and materials. From left: stone, ebony, and sycamore; whale tooth; stone, padauk, and zebrawood; shark teeth in resin; fossilized walrus ivory,ebony, and deer antler; fossilized walrus teeth in resin.

Turning the Bottle Stopper



Screw the stopper blank into the chuck until it seats. If you have any problems with the blank seating, use 3/8" ID washers. Then turn the stopper profile (Photo A). If I plan to use a stone, I make sure not to turn the upper section down below 17/8" diameter.

To accent this bottle stopper with a 38mm cabachon stone, use a small square-end scraper to turn a shallow depression about 1/16" deep (Photos B and C). Use a caliper to get the correct dimension of the hole.

After drilling the hole, dry-fit the stone to make sure there is just a little play between the hole and the stone (Photo D) in case the wood shrinks. Then sand and finish. Secure the cabachon with epoxy or flexible adhesive.

After finishing the bottle stopper blank, unscrew the stopper from the chuck, and screw directly on to the plated stopper cork (Photos E and F). I don't use glue unless absolutely necessary; that way you can remove the plated stopper cork for cleaning.

Turn a base to display the perfect gift

When turning the base (use the same chuck as for the top), keep in mind that the base diameter must be as large as possible for balance. After you complete the turning process–but before finishing–drill the hole for the stopper to set in the base. Use the taper-ground paddle bit and drill about 1/2" to 3/4" deep (Photos G and H). Then sand and finish; fill the chuck hole in the bottom of the base with a 3/8" dowel.

Charles Turnage (cat41259@aol.com) is a full-time woodturner who lives in Worcester, MA.

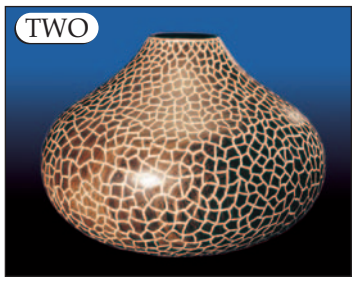
Ed Zbik

Ed Zbik's woodturnings show a variety of interests. From the simple hollow vessels like his "Cherry Egg" to the intricacy of his segmented bowls, this San Diego turner expresses himself in a variety of ways at the lathe.

Zbik, who has been turning for about 10 years, is an electrical engineer by trade.

ONE

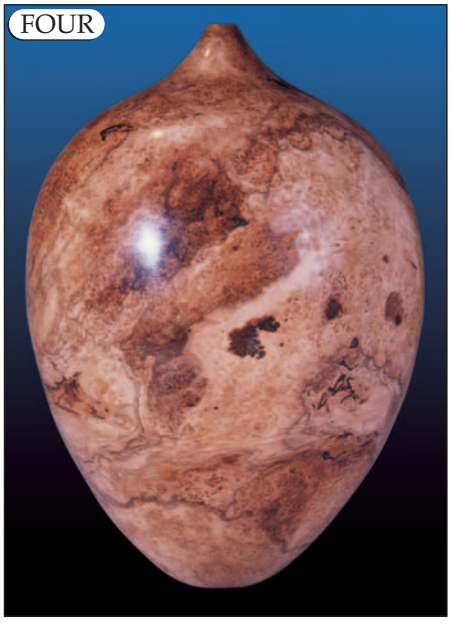
TWO



THREE

FIVE

FOUR



ONE: "Dragon Bowl," 12" x 6", fiddleback maple with inlay of redwood lace burl, tulipwood, and mother-of-pearl. The base and rim are zircote with a pewter rim inlay.

TWO: "Lizard Bowl," 10" x 7". Carved walnut and inlaid with acrylic.

THREE: "Indian Feathers," 13½" x 7". The top is curly maple inlaid with tulipwood, satinwood, and bird's eye maple. The bottom and rim are walnut.

FOUR: "Cherry Egg." 11" x 7", cherry burl.

FIVE: "Hopi Bowl #2," 14" x 8". The bottom half is segmented redwood burl. The top is from iddleback maple inlaid with zircote, holly, tulipwood, satinwood, black dyed-veneer, lacewood, rosewood, and mother-of-pearl.

Instant

Two perspectives on this year's

A Turner's View

By Cindy Drozda

For me, the Instant Gallery is always one of the high points of the annual AAW Symposium. Each year I see the work exhibited by AAW members getting better. Presenters Stephen Hogbin and Owen Edwards must have been in agreement.

Hogbin opened this year's Instant Gallery critique by expressing how impressed he was with the quality of the work on display. Educated at the Royal College of Art in England, and curator of several major exhibitions, Stephen brings an educated and analytical approach to design and critique. Joining Stephen to critique our work was Owen Edwards of Mendocino, CA. Edwards, a furniture curator and graduate of the Fine Woodworking Program at the College of the Redwoods, expresses the emotional impact that individual pieces have on him.

Continued on page 60

Photos: Larry Mart

Pasadena attendees move in close to watch the Instant Gallery critique.

Gallery
spectacular display

Owen Edwards holds a segmented bowl turned by Dave Vannier of Saratoga, CA. Stephen Hogbin is at left.

A Critic's View

By Stephen Hogbin

The exhibition at the AAW conference in Pasadena was huge in many ways. Hundreds of pieces showed the development of lathe work and woodturning, now occasionally called lathe art. Many objects were things designed for the lathe pushing forward distinctive ways and parallel paths about the role of woodturning. There were possibilities for quite different perceptions on the way forward.

Entering the convention room space to find approximately half given over to the trade show and the other to the Instant Gallery felt like a good balance. Row after row of tables with evenly spaced work; there must have been over 500 pieces. The magnitude of tables left me wondering where were the wall-hung works being presented and what about works that stand on the floor. There is something

Continued on page 60

Where the Shavings Flew

Mahoney and Batty duo a hit at Pasadena

By Keith Gotschall

Although not part of the published Pasadena symposium program, the double "bonus" demo of Mike Mahoney and Stuart Batty was a crowd favorite. Mahoney and Batty had done this type of tag-team demo before, but the Friday afternoon rotation was a culmination of the earlier trials.

The idea—to do a bowl-turning demonstration as instruction and entertainment and do it together—highlighted the differences in their techniques.

Billed as "Two Ways to Turn a Bowl," it was just that: Stuart preferring the push cut and Mike pulling with a shear-scrape when turning the exterior. By itself, this information was good enough to satisfy most audiences.

But what this duo did was delve deeper into that difference and share more collective knowledge than any demos I have ever seen. Mike and Stuart did this by explaining why they each prefer their respective styles. Although they both agreed on many points—sharpening, how best to chuck, tool steels, tool rest height, speed—they also differed on many techniques.

There was a real buzz in the room—the biggest the conference center furnished—and there

Stuart Batty, left, and Mike Mahoney offered two views of turning.

wasn't an elbow's width of standing room available. The excitement and energy seemed to come from the expected hilarity these two offered. It is obvious that Mike and Stuart are great friends and have deep respect for each other's skills. However, that didn't stop them from giving each other quite a hard time.

During the sharpening section, Batty grabbed one of Mahoney's gouges to illustrate the desired 40-degree angle, and found it closer to 34 degrees. Batty quipped, "I'll show you how to fix that in a minute, Mike." Later, when talking about appropriate base diameter, Mike alluded to Stuart making bases less than stable, "... but if you have ever tasted English cooking you might understand why he might want it to spill!" There were many laughs and the audience enjoyed the banter between them.

One feature of the demo was the acrylic plastic chip shields passed out to the first couple of rows. The audience smirked at first, but when the chips really started to fly—back to the fourth and fifth rows—those who had shields beamed with approval, giddy, as if getting away with something.

Mike Mahoney is known for his impeccable urns, hollow vessels, and masterful nested bowl sets made of burl wood. He also is a production turner, personally making hundreds of salad bowls a year. His ease and speed around the lathe was evidence of a unusually adept craftsman. His use of the shear scraper shows that his technique is absolutely viable. The finish cut on the outside of his bowl was enviable.

Stuart Batty comes from an English family of woodturners with an early tutelage setting up a lasting traditional outlook. In the world of turning there are many bowl turners, but his thin-walled exotics, square-edge bowls

Joe Feinblatt of Pasadena gets a laugh as curls fly from Mike Mahoney's lathe.

and goblets are signature pieces. Stuart's push cut around the bowl exterior was fluid and flawless.

I really liked the shared narration; sometimes one would be talking while the other worked. While one turned, the other pointed out what to notice of the other's technique and dished out some good-natured ribbing at the same time.

They both used the push cut for the interior of their bowls, but structured it in different ways. Mike took the center mass out first, then went back for final cuts. Stuart terraced his way in from the rim to the bottom. They showed the different tools they used for getting to the absolute bottom of the bowls and showed

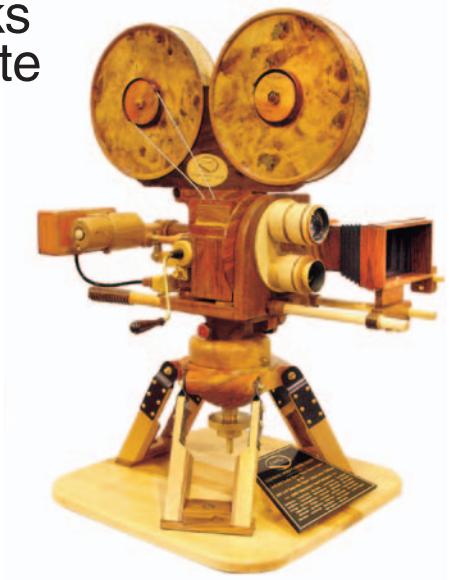
Continued on page 62

Collaborative works a Pasadena favorite

Three diverse entries grabbed top prizes in the Chapter Collaborative Challenge in Pasadena.

The Glendale Woodturners Guild won Best of Show and Technical Award with "1929 RKO Camera." This replica represented 23 months of work and more than 2,000 hours from 32 members. Members created 147 drawings, made 200-plus parts, and included 29 wood species. At the benefit auction, the piece sold for $3,300.

For the 2004 Chapter Collaborative rules, see the AAW web site.



Top: "1929 RKO Camera" by the Glendale Woodturners Guild won Best in Show and Technical awards.

Above: "WWW (Woodturners Wide Web)" by the Woodturners of St. Louis won the Artistic Award. The entire piece included a spider's web.

Left: "I Scream for Ice Cream" by the Greater Vancouver Woodturners Guild won the Fantasy Award.

Put a Lid On It

AAW's juried exhibit puts lidded objects on pedestal

For three brief weeks, lidded objects in an AAW exhibit had center stage at a Los Angeles-area gallery. "The challenge of this show," said critic Kevin Wallace, "is to create work that functions, reflects our time, or offers an exploration of an artist's vision."

The exhibit from June 14-July 5 at the Brand Galleries in nearby Glendale coincided with the AAW National Symposium in Pasadena. David Sengel and Bonnie Klein juried the show representing work from 34 juried artists and 11 invited artists.

See the AAW order form on page 71 for information on ordering a $20 copy of the 48-page exhibit catalog.

ONE

TWO

THREE

FOUR

Photos: Bob Hawks

ONE: “Pierced Sanctuary” by Dixie Biggs of Gainesville, FL. Maple with cocobolo insert and lid; 12"h x 9"d.

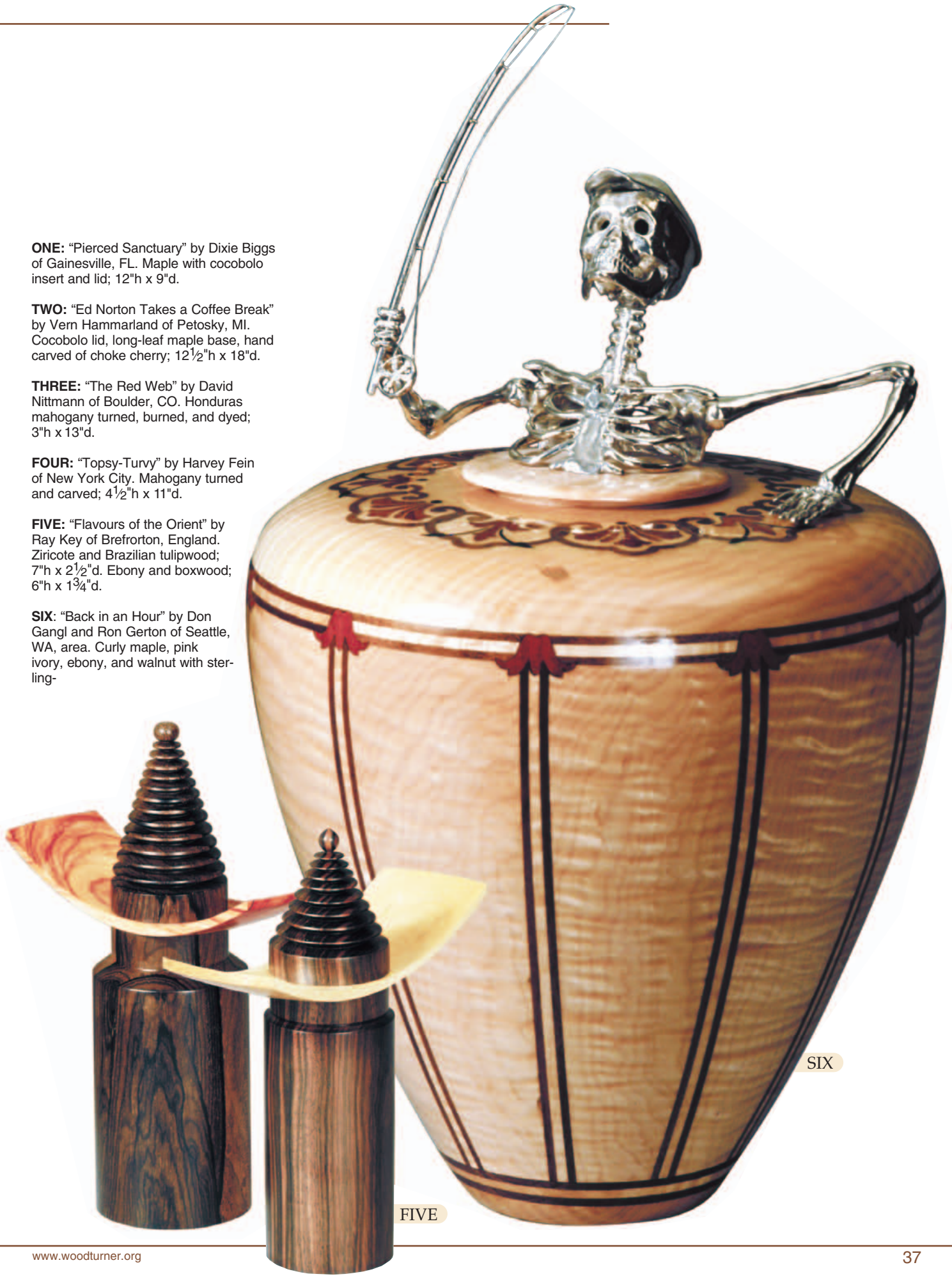
TWO: “Ed Norton Takes a Coffee Break” by Vern Hammarland of Petosky, MI. Cocobolo lid, long-leaf maple base, hand carved of choke cherry; 12½"h x 18"d.

THREE: “The Red Web” by David Nittmann of Boulder, CO. Honduras mahogany turned, burned, and dyed; 3"h x 13"d.

FOUR: “Topsy-Turvy” by Harvey Fein of New York City. Mahogany turned and carved; 4½"h x 11"d.

FIVE: “Flavours of the Orient” by Ray Key of Brefrorton, England. Ziricote and Brazilian tulipwood; 7"h x 2½"d. Ebony and boxwood; 6"h x 1¾"d.

SIX: “Back in an Hour” by Don Gangl and Ron Gerton of Seattle, WA, area. Curly maple, pink ivory, ebony, and walnut with ster-ling-



SIX

FIVE

New Mexico Woodturners

This issue, we put the spotlight on the New Mexico Woodturners in Albuquerque. See the AAW web site for more information about the Chapter Spotlight feature.

The New Mexico Woodturners–out there on the high desert where the pinons and junipers grow–recently put more than 100 of its turnings on display in Albuquerque. Although segmented turning remains popular in the Southwest, the exhibit shows a range of interest from the chapter's 70 members in the Rio Grande Valley.

The chapter recently celebrated its 10th anniversary by forming a mentoring program.

Red Hollenbach

Approximately 1½" x 1¼", lilac, firethorn, ebony, pink ivory, box elder, and apricot.

Ring box, 5" x 2½", dogwood, buckeye, and holly.

Ed Hume

6¾" x 9", cherry and turquoise.

Jim McLain

9½", honey locust.

Dan Shipman

5" x 11½", padauk, maple, and bocote.

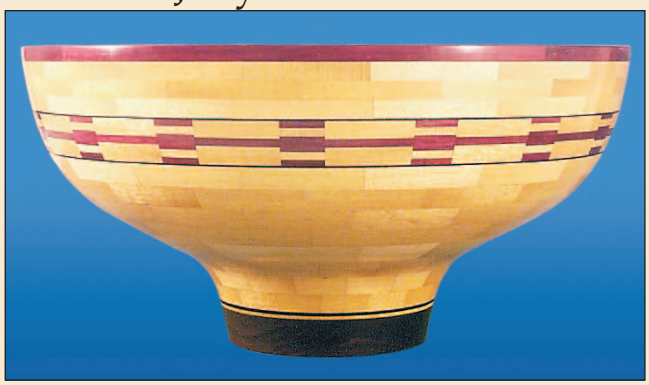
Gil Alford

6" x 9½", mesquite and turquoise.

Ken Pilkington

4" x 3½", desert ironwood.

Deborah Jolly



5½" x 11½", yellowheart, purpleheart, and bocote.

Hillard Gerhardt

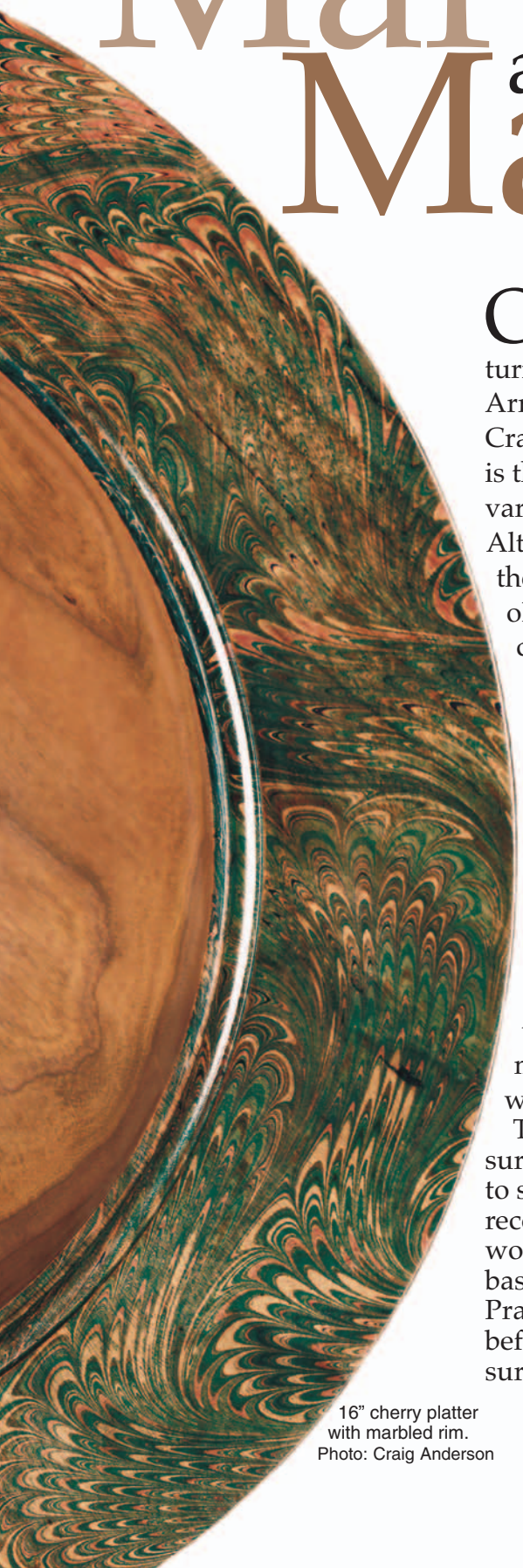
13" x 9½", wenge, padauk, cedar, maple, and osage orange.

8¾" x 9¾", wenge and holly.

27½" x 24½",walnut, ash, holly, padauk, wenge, basswood, and rosewood.

Marvel at Marble

By Jacques Blumer



16" cherry platter with marbled rim. Photo: Craig Anderson

One of the benefits of attending a week-long turning program at the Arrowmont School of Arts and Crafts in Gatlinburg, Tennessee, is the synergy between the various crafts programs. Although I was familiar with the use of marbling in binding older books, I had never considered its application to wood. One afternoon when the marbling class invited the woodturners to visit and marble a turned piece, I somewhat reluctantly brought a practice piece. The experience opened my eyes to an entirely new dimension of art. I was absolutely captured by the technique and committed to mastering the process and working it into my turnings.

This article only scratches the surface of the art form in order to stimulate interest. I recommend taking a one-day workshop, which will teach the basics and save time and money. Practice the techniques on paper before attempting wood surfaces.

TOOLS

The tools required for marbling are low tech and simple: marbling tray, color applicators, and pattern making tools. Most of the supplies are available at art-supply stores or Internet suppliers.

Build a tray

The tray is easy to build from plywood, wood strips, and silicon aquarium sealer. The tray should be about 2" wider and 3" longer than the pieces you plan to marble. The depth should be 1 1/2" to 3" deep or more, depending on the contours on your piece. Use the sealer to assure the tray will be watertight and paint it with white latex paint to allow better visualization of the colors.

Whisks

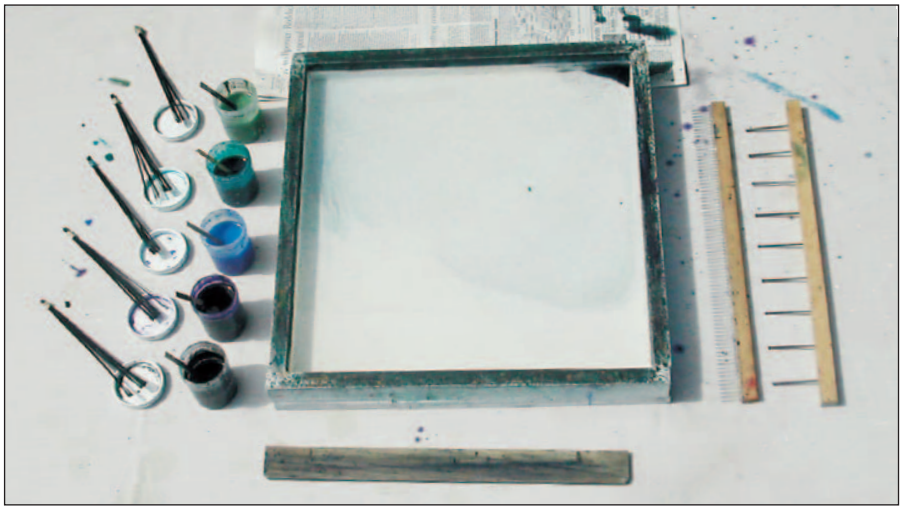
The colors are applied by whisks made of about 15 straws plucked from a natural or plastic broom. Cut the straws about 8" long and bind them together with rubber bands. You'll need one whisk for each color. Some artists also apply colors with eye droppers or brushes.

Pattern-making tools

Basic pattern-making tools include a skimmer stick, stylus, combs, and rakes sized to the dimensions of your tray. The **skimmer** stick is a 2" wide strip

of wood about 1/16" shorter than the width of the tray. The **stylus** is a 4" or 5" length of 1/4" dowel or a wood coffee stirrer available from your local coffee shop. The **comb** is a strip of wood about 1/8" shorter than the width of the tray with straight pins spaced 3/16" apart. The pins must be evenly spaced and it is far simpler to buy rather than make a comb. The **rake** is made of a strip of wood 2" shorter than the width of the tray with galvanized finishing nails hammered about 2" apart.

The materials include a liquid gelatinous medium or size, acrylic paint, gall, alum and paper. Traditional marbling was done with oils and gouache, but today's modern materials using water-based size and acrylic paints are safe and produce intricate patterns far more easily. The most commonly used **size** is carrageenan, which is produced from seaweed and commercially used as a food stabilizer. Mix two level tablespoons of powdered **carrageenan** with three cups of water in a high-speed blender for one minute. Pour the blended mixture into a one-gallon container and top off with additional water. Allow the mixture to stand overnight so the bubbles dissolve. The carrageenan mixture has a shelf life of a few days if left at room



temperature or up to a week if refrigerated. Methylcellulose is also used as size, but seems to be less popular.

Acrylic paints, which produce rich, intricate and stable patterns, are available in a variety of brands and colors at crafts stores. The colors and properties of each product line seem to be unique, so choose one supplier or brand and then perfect your technique. Marbling **gall** is a type of soap that acts as a wetting agent and is added to the paint to break the surface tension of the size in order to control the spread of the paint. Be careful since a drop or two has a big impact.

Alum (aluminum sulfate) acts as a mordant to adhere the paint to the material you are marbling. Dissolve one tablespoon of alum into a cup of warm water and allow to cool. You can marble on **inexpensive paper** for your initial practice sessions, but it will have a tendency to curl, tear and wrinkle. As your technique improves, you will want to marble on a good quality paper that will be strong enough to handle easily when wet and dry smoothly. Coat the paper with the alum solution using a small sponge and hang to dry. Mark which side is coated since the alum dries clear. You can prepare the paper the day before and press with weights after drying, assuring a flat surface.

It is important that the type and brand of materials you choose work together effectively. Some research at your local art supplier or the Internet and experimenting with materials is necessary.

Continued

The process

Carefully pour the size into the tray through a fine strainer to remove any solids that did not dissolved in the blending process. Using the skimmer stick, break the surface tension and remove air bubbles or dust from the surface. Place the bottom edge of the skimmer stick a little below the surface of the size at the top of the tray, then draw it slowly toward you across the surface. Hold your middle fingers at the ends of the stick against the sides of the tray so that surface material does not float behind the stick. At the end of the draw, scoop a small amount of size over the lower edge to remove any surface material from the tray. This is a messy process, so have lots of newspaper underneath the tray and plenty of paper towels available for clean up.

Stir the paint to assure consistency, as the solids separate out quickly. Then dip the end of a straw bundle into the paint. Holding the straw over the tray, tap gently with your finger to spatter small drops onto the surface of the size. A dark color is best to use as a base color and then work toward the lighter colors. The paint should float and spread slowly over the surface of the size. Start with dark colors, which help define the final pattern. Then add the lighter colors. The objective is to have many small drops of paint spread evenly over the full surface of the size. At first the colors will appear pale, but as you add more color, the pattern will become more vibrant. The feel for colors, amount of paint, flow rate and even spread requires practice.

Lightly splatter colors over the surface.

Next, follow the pattern development guide *opposite*.

Now you are ready to "print" the pattern, which is the trickiest part of the process. Hold a piece of alum-treated paper by opposite corners so it loops down in a curve over the tray. Slowly lower the paper onto the surface of the size in a smooth motion. Shaking or uneven motions can cause the size to backwash, resulting in streaks or air bubble spots on the printed pattern.

Run your fingers around the four sides of the paper to make sure all the edges are in contact with the color. Then carefully lift the paper off the size by the top corners and place it pattern-side up on a cookie tray. The colors are well fixed at this point, but they are not permanent until completely dry. Gently bathe the paper in water to remove most of the carrageenan; otherwise a powdery film will form when dry.

The paper will feel a bit slimy, but that is all right. Hang the paper over a rack to dry. Clean the surface of the size with the skimmer stick or newspaper to remove the remaining color. You are ready to start another pattern.

When finished, clean the surface with a skimmer stick.

Are you ready to marble wood?

Marbling on turned wood presents a world of opportunity. The basic process is pretty straightforward.

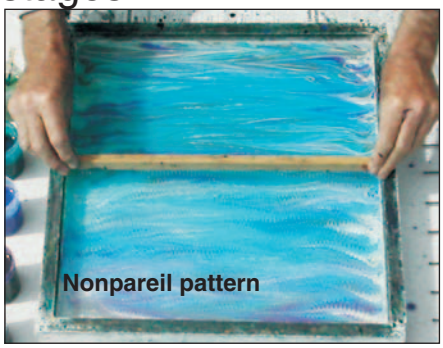
Before marbling a turning ask yourself: "Will marbling enhance this piece?" Burls, irregular patterns or complex grains may not show marbling well. Most fine-grained woods—including maple, birch, cherry, and walnut—look spectacular.

Rough out the piece on the lathe, then finish the area to be marbled. The marbled area should be as wide as possible, but at least 1" to show the pattern. Remove the turning and marble the piece. Return to the lathe and finish the unmarbled area.

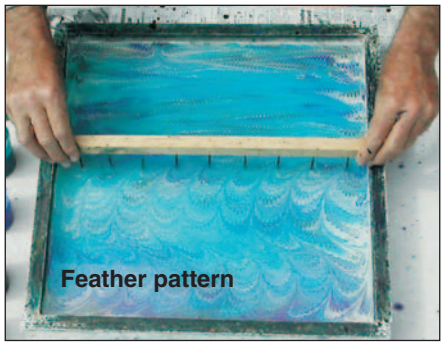
Since you will remove and return the piece to the lathe several times, mount it on a faceplate with a glue block. The glue block allows you to accurately return the piece to the lathe and provides a handle to hold on to during the printing process.

Pattern development: 3 stages

The development of the pattern begins by mixing the colors. Insert a stick or stylus in one corner of the tray and draw it slowly and carefully horizontally across the tray. Lift the stick and reinsert it about ½" down and drag it back across. Continue this process down the entire



length of the tray to form a herringbone type pattern. For the nonpareil pattern, hold the comb at the top of the tray with one hand on either end, with the tips of the pins about ½" below the surface. Slowly pull the comb toward you down the length of the tray. This creates the



nonpareil pattern, which appears like rows of small crowns. For the feather pattern, start the rake at the upper right corner of the tray and move it down and across the tray in three or four wavy S motions. It's that easy.

Unlike a flexible piece of paper, a rigid turned piece may have an open center that can trap air. Abrupt motion disturbs the size, causing streaks or waves in the pattern. Air bubbles (spaces between the wood surface and the paint) cause holes in the pattern.

A convex surface can be printed similar to paper since the piece will push the size away.

Rims of bowls or platters are a little more difficult. Practice a "360-degree swirl"as shown *at right*. Start by holding the piece firmly over the tray by the glue block with both hands. With a slow, smooth and controlled motion, dip the lower edge onto the size. Now rotate the piece 360 degrees without trapping air in the center. This motion requires control. Practice with a dinner plate over clean size or water until you feel comfortable with the movement.

The alum solution raises the grain on most woods. I recommend a three-step process. Raise the grain of the wood with

A glue block helps position the turning.

water and sand lightly with your final grit sandpaper. Apply a coat of alum, dry, and repeat the sanding process. Apply a second light coat of alum and allow to dry, but do not sand.

The water-based carrageenan and bathing process in water after printing also will raise the grain. After one or two coats of your favorite finish, a light sanding with 600-grit sandpaper or buffing with a Beal-type system resolves most of the fuzz. Start with the white diamond compound since rouge is too coarse. Be careful: You can sand or buff through the marbled surface.

After printing, bathe the marbled area in a sink or deep tray to remove the excess carrageenan. Be gentle so as not to disturb the pattern. The water-based materials may leave some light stains on the non-marbled surfaces even after the final sanding. A light coat of water-based sanding sealer (50/50 mix of sealer and water) seems to minimize staining on the non-marbled areas and does not appear to impede paint adhesion.

If you are not satisfied with your print, simply wash off the pattern with a fine abrasive pad before the paint has time to set. Or if dry, sand and repeat.

The amount of paint and choice of colors will create different effects. The result will range from a transparent look that allows the wood grain to show through to totally obscuring the surface.

Jacques Blumer is a former health care executive and is currently a studio turner, instructor, and demonstrator in the San Francisco Bay area. Contact him at jacquesblumer@hotmail.com.

Acorn Ornaments

Tiny gifts to treasure

By Bob Rosand

I've made a career out of turning Christmas tree ornaments. I've probably turned close to 6,000 ornaments—the ones with a hollow globe and the four-segmented icicle–over the last 10 to 15 years. I've also turned a couple thousand of my "regular" birdhouse ornaments—the ones with multiple parts. These are all good sellers, but if you do crafts shows, you need a good price range of items as customers will part with a $20 bill much faster than fifty or a Ben Franklin.

The birdhouse ornaments and my standard ornaments represent the higher end of my ornaments, so I realized I needed something to fill in that $20 to $25 gap. What I came up with is an acorn birdhouse ornament. It is far less complicated than my "regular" birdhouse ornament, has fewer parts, is easier to make, and sells well.

Getting started

Most turners have the required lathe tools for the acorn ornament. You'll need a small skew, a spindle gouge, a round-nosed scraper, a small square-nosed scraper, and a roughing-out gouge. The body of the acorn is made with square straight-grained stock about 4" long and 1¼" square. Walnut, oak, maple, and cherry are all good choices for the acorn body.

While the stock is square, I drill a ¼" hole about ½" deep for the entry to the birdhouse and a 1/16" or smaller hole below that for the birdhouse perch. I place the ¼" entry hole lower than I want it on the finished product. This allows me to reverse chuck, glue the piece in place, and part it off where I think the entry hole should be.

Although you can certainly use contrasting domestic woods, I turn the cap from scrap burl pieces about 2" square and 1½" high. I make the perch from odds and ends of ebony.

Turn the acorn body

The easiest method I have found for turning the body is to chuck it in a Talon chuck with spigot jaws. I like the Talon because of its small size and the spigot jaws hold extremely well. (If you don't have a Talon chuck, or don't want to spend the money on one, no problem. Fasten a waste block to a small faceplate, then true the waste block and drill a 1" hole about 1" deep. Turn a 1" tenon on the body of the acorn body stock and glue it into the waste block. It's a little more time-consuming, but just as effective.)

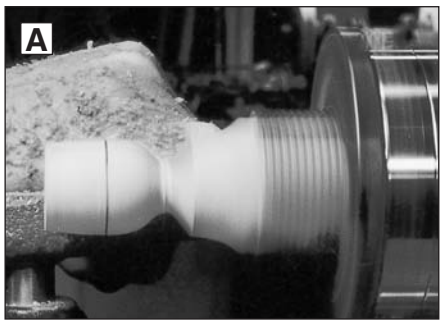
Place the stock for the body of the acorn in the chuck and use a roughing-out gouge to turn it to a cylinder. Then smooth that cylinder with a small skew (Photo A). Stop the lathe and make a pencil line at the hole where the perch will be. I don't turn away any more wood from this point. Here's why: When I turn the perch and glue it in place later, I want it to stick straight out and not angle up or down. This is not an issue with the ¼" entry hole since nothing is being glued into it. Although a small detail, this will either make or break the look of the ornament.

I begin shaping the acorn body with a ⅜" spindle gouge. From the perch pencil line, taper towards the top slightly. Then begin to turn what will be the bottom of the acorn body. Be careful not to remove too much material from this base, because you will need to hollow the interior. Once you have the shape where you want it, use a ⅜" or ½" drill to open the interior (Photo B) followed by a round-nosed scraper.

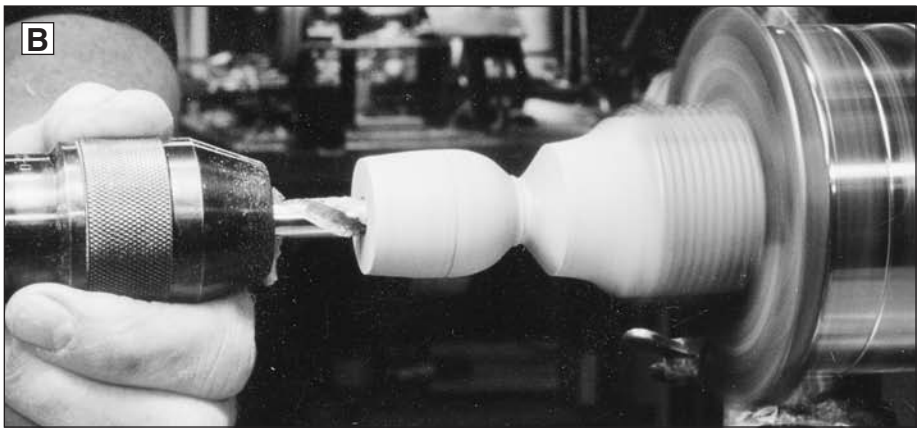
I don't worry about extreme thinness here; I just want to lessen the weight of the ornament so that it doesn't weigh down the branch of a tree.

Once the hollowing is complete, I return to the bottom of the acorn and continue refining that, before parting it from the lathe. You will probably notice

Continued



Turn the body of the acorn birdhouse, leaving sufficient material at the base for hollowing. Note the pencil line at the opening for the perch; it should be untouched.



Use a ⅜" drill bit to drill out the interior of the acorn birdhouse.

that no sanding has taken place prior to parting the acorn body from the lathe. That is because you'll reverse the turning and friction-fit it to the waste material already in the chuck (Photo C).

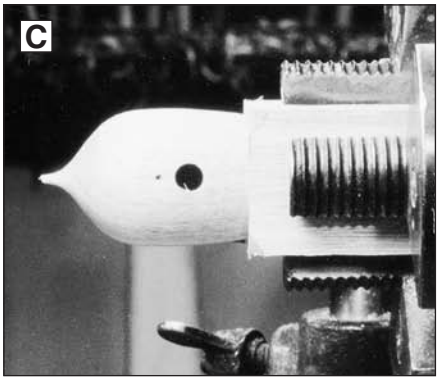
Using a small skew laid flat, peel down, making a tenon that the acorn body fits on to. The fit only needs to be snug, because you'll adhere it with super glue. Now, complete your final shaping, sanding, and parting from the lathe (Photo D).

Cap on the house

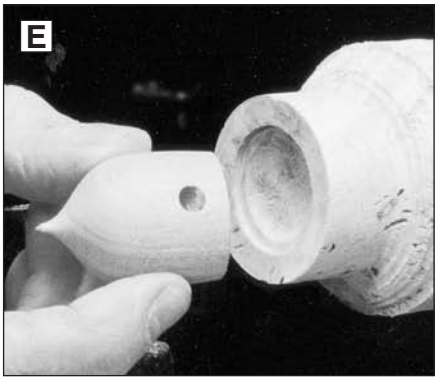
As mentioned earlier, I turn my acorn caps from scrap pieces of burl about 2" in diameter and about 1½" in length. I then glue the burl scrap to a waste block held in my chuck. The waste blocks are always pieces of oak, maple, or cherry. I never use plywood, even though it may be tempting, as the plys are notorious for separating while you are turning, resulting in a destroyed piece.

Next, fit the acorn body to the cap (Photo E). True up the sides and the face of the burl cap in the lathe. The stock closest to the tailstock will be the underside of the cap. Undercut this a bit—just for aesthetics—and then use a set of vernier calipers to mark the diameter of the top of the acorn body. Using a spindle gouge, remove some of the interior of the cap to reduce the weight. Then cut a rabbet for the body to fit into with a square-nosed scraper.

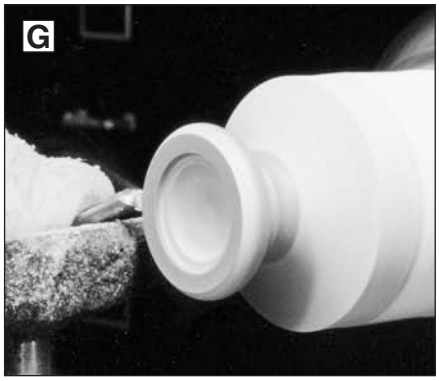
Once the pieces fit properly (Photo F), I refine the shape of the acorn cap (Photos G and H), part it from the lathe, reverse it, and friction-fit it to a waste block (Photo I). This friction-fitting allows you to refine the shape a bit more, sand it, and drill a hole for a screw-eye hole for hanging.



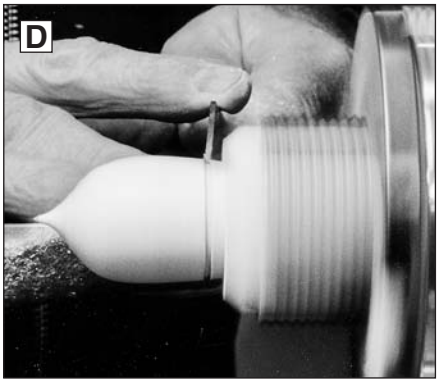
After the body is turned, hollowed and friction-fit on waste block, it's ready for final turning and sanding.



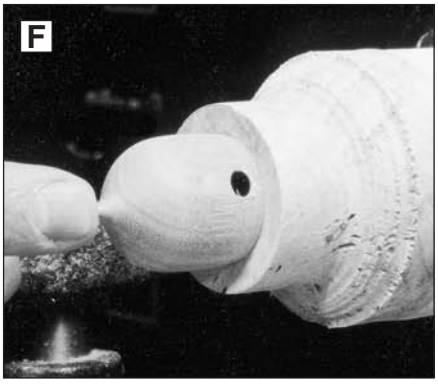
Prior to refining the rest of the birdhouse cap, check the fit of the cap to the body of the birdhouse ornament.



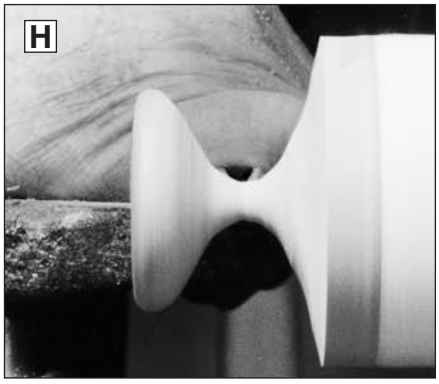
Once the fit to the cap is snug, use the spindle gouge to refine the shape of the acorn cap.



Using the parting tool, cut off the birdhouse body to the appropriate length.



Once the fit to the cap is snug, refine cap shape with the spindle gouge. Entry and perch holes are already drilled.



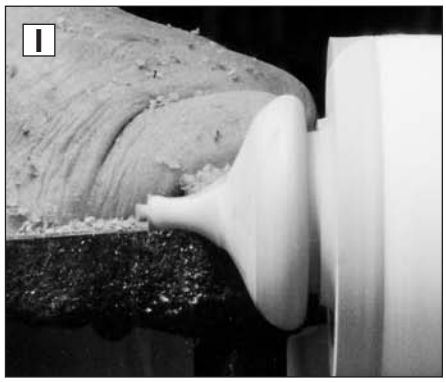
Prior to parting it from the lathe, refine the shape of the acorn cap with a 3/8" spindle gouge.

Once complete, you can glue the cap to the body of the acorn birdhouse. If you get a little tired of sanding, you might consider using a Sorby texturing tool to texture the roof of your birdhouse (Photo J). I have done this with great success. It is no replacement for clean cutting and a sharp tool, but if you do it properly, you don't have to pick up a piece of sandpaper.

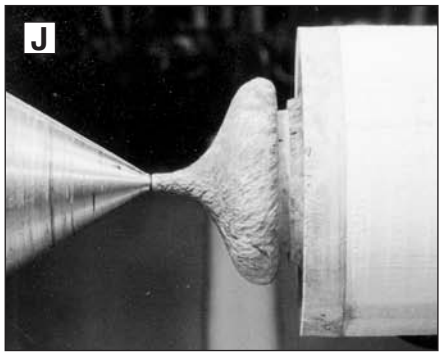
The perch

All that remains is to turn the perch. Ebony is a perfect species. With the perch held in the chuck, use a small round skew to "peel" down to about a 1/16" diameter (Photos K and L). I also turn a small spherical shape at the base of the perch. This is more for aesthetics than anything, but the little globe section also keeps the perch from going too far into the body of the acorn as well as giving me a bit more of a glue area. Using a small parting tool and a set of vernier calipers, turn a tenon to fit into the hole you drilled into the acorn body, and part off the perch. Cyanoacrylate glue holds the perch in place.

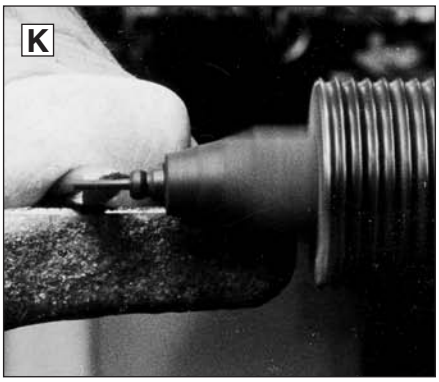
For finish, spray the acorn birdhouse with a satin or semi-gloss lacquer.



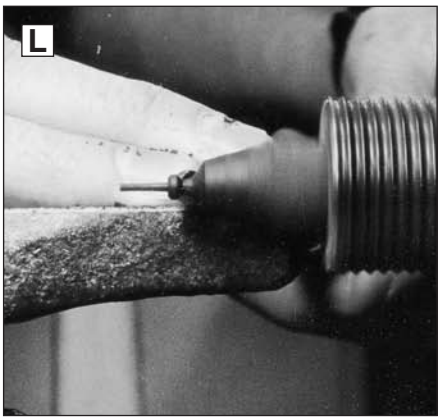
At this point, the cap has been parted from the lathe, reversed and friction-fit to the waste block, allowing final shaping and drilling of a screw eye hole for hanging.



Complete the cap held in place with the tail center.



Use a small round skew to refine the ebony perch.



Turn a globe at one end of the perch to help insert this small piece.

Now, try something smaller

Once you become accomplished at turning the bird houses, consider a variation or two. One variation that I have found to be a good seller is an acorn you can fashion into a necklace or earrings. Except for size, the process for turning these miniatures is exactly the same as for the larger acorn birdhouse. For the body stock, I start out with 1/2" stock about 1 1/2" long and cap stock about 1" square by 3/4" long that can be glued to a waste block for turning. This is a great way to use up those small precious pieces of wood that you can't bear to throw away, and if you do manage to blow it up, you have wasted very little.

The holes for the birdhouse entry and the perch should be appropriate to the size of the finished piece. The birdhouse entry hole should be something less than 1/8" and the perch hole about 1/32". My only caution here would be to pay attention to proportion. It's very easy to turn a perch that's simply too large for the finished piece or to drill an entry hole that is either too large or too small or to make a cap that just doesn't look like it belongs.

Bob Rosand (rrosand@pdprolog.net) is a frequent contributor to *American Woodturner*. Bob, who lives in Bloomsburg, PA, is completing his sixth year on the AAW board.

Now That's a Big Burl

By Cliff Guard

There are burls and then there are–well, photos hardly do justice to this monster.

Jerry Whitehurst, a member of the Tidewater Turners of Virginia, got a call last fall from a friend who invited him to view a burl on a piece of land he was clearing.

When Jerry arrived at the tree (within a mile of the Virginia Beach courthouse), his eyes feasted on an enormous burl about 25 feet in the air and wrapped all the way around a red oak tree. How big? After the tree was felled, it took two bulldozers to lift the burl onto the back of the flatbed truck that transported the burl to Jerry's studio. Jerry then found himself with one humongous burl sitting in his front yard.

At the next Tidewater Turners meeting, Jerry asked for volunteers to help him carve up his burl. Ten members showed up the following Saturday to begin slicing. It wasn't a task for the faint of heart.

How do you eat an elephant?

There is an old riddle that asks how do you eat an elephant. The answer is one bite at a time. That logic was applied to sawing up this 3-ton burl.

After removing all of the smaller superficial pieces, decisions were made after each cut to allow for whatever the previous cut revealed. Splits, voids, and damaged areas had to be evaluated continuously to try to get the best available stock.

Five hours and four chainsaws later, the members completed their task. Not counting the trunk, the largest single piece took six men just to roll it over. When the work was over for the day, one of the members observed that what was left of the trunk looked like a turkey carcass on Thanksgiving night.

Jerry shared pieces with the 10 members who helped dissect the burl. Since the chapter's "burlathon," finished pieces continue to appear at regular Tidewater meetings.

Although there are larger burls in other parts of the country, as far as can be determined this is the largest native burl anyone has ever seen in this area.

Photos: Bob Chiavarini

Jerry Whitehurst, top, and Art Roehling pose with 4-foot chainsaws before dropping the massive red oak.

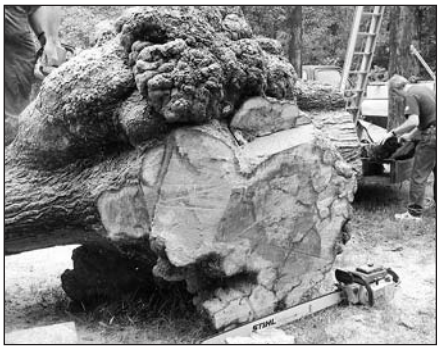
"Where do I start?" ponders Jerry Whitehurst before cutting up the burl estimated at 3 tons.

Before beginning their "burlathon," Tidewater Turners gather around the burl at Jerry Whitehurst's studio. It took four chains and 50 man hours to bite into the burl. From left: Mike Barker, Mike Dennis, Jerry Whitehurst, Kyle Vogel, Wolfgang Vogelbein, Ron Wood, Bob Chiavarini, Cliff Guard, and Jim Vogel.

"Heave ho!" The first slab required a half dozen Tidewater Turners to roll it out of the way. Jerry Whitehurst estimates this piece to be 6' x 5'x 2' . "It has burls on top of burls on top of burls," Jerry reported. "I'll turn a big 50" bowl from this."

How big is a big burl?	
Burl statistics	
Circumference	23½'
Diameter	7½'
Length	over 7'
Estimated weight	3 tons
Tree trunk statistics	
Circumference	
Above the burl	9½'
Below the burl	8'
Diameter	
Above the burl	3'
Below the burl	2½'
Age of tree	approx.100 years

"I've got my slab," exclaims Ron Wood as he carves out an early chunk.



After slicing off one slab, the crew prepares to hook up the burl to a truck to expose another section.

Finding your own Voice

By Gary A. Zeff

After mastering your turning techniques, what's next?

Many turners are looking for that "next step" in their woodturning journey. Maybe they have gone to one or more of the techniques classes that are so common today or have improved their dexterity from skills learned at club meetings or symposiums. They feel very competent in the technical aspects of turning and many now want to explore more creative paths. They ask "How is the field emerging and how do I grow with it?

A new direction

No doubt turning will not only continue to grow but will also have something to offer everyone. As now, many turners will continue as hobbyist while others will pioneer new directions. "One direction," says Kevin Wallace, a consultant and writer in the field of craft art and former del Mano Gallery manager, "will focus on more sculptural pieces where the wood is a means of self-expression and the lathe is simply the tool to produce the piece. Like

Gary Jacobson, left, of Navarre, FL, talks about his vessel shape with Trent Bosch.

a paintbrush, one still needs to be technically proficient with tools and materials, but the success of the finished piece is not based solely on technique and skill."

Todd Hoyer, a turner on the leading edge of the evolution of the medium, agrees. "The direction many turners are moving toward is a more sculptural use of the turned object. Pretty grain and vessel forms may be but a component in the finished piece, not the focus. Pieces that artists are now producing reflect the things which are important to them, whether it's environmental or emotional. Each artist is developing his/her own language of expression through form, texture, color, etc."

Mark Lindquist, another of today's prominent turners, expanded on the future of turning at the Woodturning in North America Symposium at the Minneapolis Institute of Arts in the Fall of 2001. In his speech he said that most of today's professional woodturners are under self-imposed pressure "…to advance the vistas of possibilities within the realm of the lathe. Simply put, the lathe now often serves as the equivalent of an artist's easel, as it is a most convenient device for holding the work strongly and precisely.

"Today, woodturners have solved most of the work-holding and technical work methodology problems, or are on the brink of solving them. And now the larger issue that looms is that which is… being made, not necessarily how it is being made: In essence the idea of what the object is and what message is being communicated through it."

The map to get to the next step The "how-to-do-it" instruction that is so common today will not be enough to help one be part of the evolving turning movement. One also needs to learn the use of

wood as an artistic medium, the ability to turn ideas, concepts, beliefs and feelings into a sculptural expression and the language of art. That language includes the "Principles of Design" such as balance, contrast, emphasis, proportion, and unity along with the "Elements of Design" like color, line, mass and texture.

One teacher who focuses on these areas in his workshops is Trent Bosch in Ft. Collins, Colorado. Why should novice as well as more advanced students be interested in this instruction? As Trent says, "With design and form, if you think about it as a beginner, it is easier to think about as you advance your skills."

A beginner can work next to someone who wants to tap Trent's artistic side and both will greatly benefit from each other's lessons. "I try to help students develop work that is more individual and relates to them on deeper levels than just good form," Trent explains.

"Kai"
by George Reynolds

"I turned this in Trent's class. I learned the tools to play with texture, form, contrast, and color."

George Reynolds, Omaha, NE

Don't fear 'design'

Trent emphasizes that workshops such as his are not the only avenues to investigate and that fields to delve into should not be limited only to woodturning. Galleries, shows, books and periodicals that showcase glass, clay, metal and fiber are all excellent resources for woodturning design inspiration.

All of the discussion of this movement is not to suggest that traditional turning will be left behind, but rather that new areas of exploration are opening. The acceptance of woodturning as an art form is simply following the road where ceramics and glass have been.

Photo: Gary Zeff

In workshop of three or four students, design assistance can be individualized.

Design Resources

You can learn a lot that applies to woodturning design by browsing leading publications of other crafts. Here are recommended magazines, web sites, and books:

American Craft
www.craftcouncil.org

Craft Arts International
www.craftarts.com.au

Ceramic Review
www.ceramicview.com

Metalsmith
www.snagmetalsmith.org

Object Magazine
www.object.com.au

Sculpture
www.sculpture.org

Glass Art
www.glassartmagazine.com

Shaping Space
by Paul Zelanski

Gary Zeff (mail@openstudios.org) is a studio turner living in Boulder, CO. He is a frequent contributor to *American Woodturner*.

Learn to Sharpen Progressively

By Alan Lacer

This is the first of a two-part article on grinding. The second part—sharpening gouges—will appear in the Winter 2003 issue.

Were these your first experiences in sharpening turning tools?

- You believed the tools came ready to use?
- You thought because the ad said you could turn 4,822 bowls without sharpening, they weren't kidding?
- When you did try grinding, the surfaces looked like a flint-chipped arrowhead?
- In frustration, you went out and spent several hundred dollars for every grinding jig on the market, only to discover they had not reached the level of a pencil sharpener?
- You sent your tools to a sharpening service only to have them sharpened like a saw blade?

Don't be too bashful in grinding tools. You really can't hurt them— you only shorten them.

Sharpening takes some knocks because some turners see it as a task or chore to be endured and not as a skill—just like turning—that will take time to learn. The good news is that sharpening is closely related to the skill of woodturning.

At one time every conceivable woodworker learned sharpening skills as part of their activity—whether it be sharpening saw blades, axes, spokeshaves, chisels, or plane irons. Today however, few cabinet or furnituremakers sharpen circular or bandsaw blades, planer and joiner knives, router bits or shaper cutters—either these are throwaways or cutting tools sent to specialty shops. Even the other domain where sharpening was essential to learn—that of carving—has often been replaced by spinning bits and cutters that require no sharpening, just replacement. Alas, the poor woodturner still must learn to sharpen. However, there are numerous benefits from learning this skill.

Here's how sharpening skills mimic woodturning: You take a turning tool and place it on a tool rest, it meets a round object approaching the edge, and you manipulate the cutting edge. Sounds like what we do as turners, right? Learn the skill to sharpen and you are learning turning—and vice versa.

If sharpening frustrates you, you may need to adopt a tried and true learning strategy: a progression from simple and relatively easy activities to something difficult and more complex. If you think about it, this is how most skills are acquired. If you take up playing the fiddle, you don't start with the Brahm's violin concerto as your first task. You probably start with playing notes, then scales, *Yankee Doodle*, and finally progress in difficulty at the rate of your learning. The same path that works for learning math, cooking, computers, golf, drawing, driving, and sailing holds true of sharpening turning tools.

The good news to all of this is that learning those simple tasks first has several benefits: Most of those tasks are also foundational—not just easy—and will be the basis for learning the more difficult maneuvers.

I wonder how many folks have quit woodturning over the years because they either could not sharpen the tools or found they spent more time sanding than turning? So, if you are early on in your career as a turner or you are still frustrated about this sharpening thing, join me and try this progressive order of learning to sharpening your tools.

To begin with, you can't shape and sharpen your tools by hand.

Working with dull tools is like trying to drive your car with flat tires— it just isn't very satisfying.

We can certainly hone the tools by hand—but honing only keeps a sharp tool sharp or regains a small loss of keenness on a cutting-type turning tool.

No, power equipment is the order of the day for a host of reasons, not the least of which is the type of tool steels used today. Most turning tools currently being sold are not just higher heat-working steels but also higher wear-resistant steels. Your grandpappy's Arkansas oil stone is going to have a tough go on a Glaser V-15 tool or on most of the English, Canadian, and Australian tools now on the market. And the fact that too many tools need major reshaping from their new condition, we will need some power assistance to do the job.

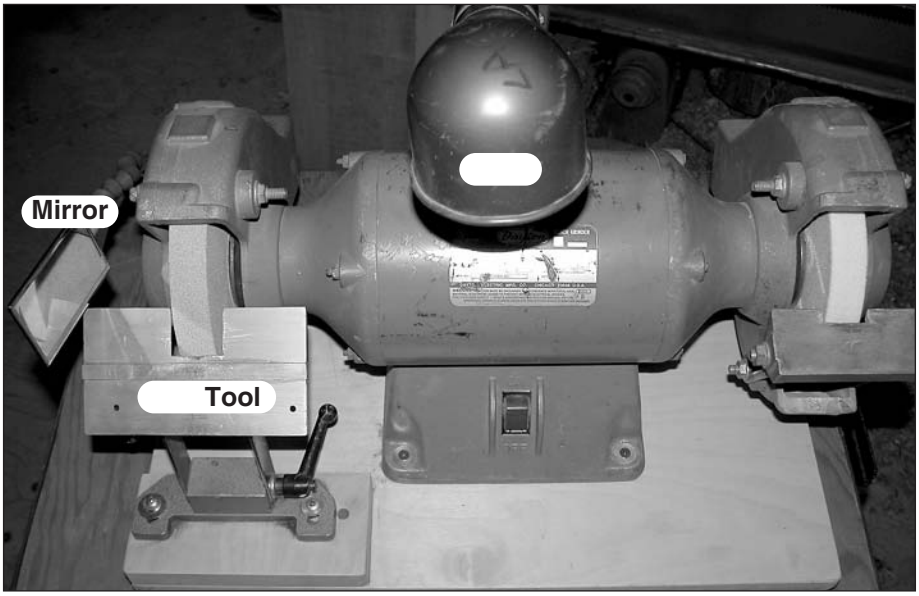
Continued

Buying your grinder and wheels

I find that it is not as simple as "anything will work" for a grinder. If you have a 3600 rpm grinder with a 120-grit gray wheel, 1/2" wide and worn down to 4" in diameter—it will be tough sledding. Nor do I find the slow speed water grinders to be my first choice for a grinder. Ditto for a belt or disc sander either. At least 90 percent of the turners I know worldwide use a wheel grinder—and for good reason.

Here's my grinder preference: an 8" dry wheel grinder, with either variable speed or a fixed rate of 1725 (or 1800), a rock-solid tool rest system, and at least one decent wheel. The 8" wheel offers a lot over smaller and larger wheels: the 8" has 25 percent more surface area than a 6" wheel per revolution. This translates to greater efficiency, cooler grinding, and a much longer wear period before replacement. The 10" and greater diameter wheels leave too little of a hollow-grind for me—and I use the concave surface as a two-point honing jig (see Spring 2002 article).

I prefer the dry wheel as the action is towards me—this allows me to determine a lot of things from the spark trail: where I am grinding, the degree of grinding, and when to stop grinding (sparks just trail over the top of the tool). With a water-type grinder, the action is away from me and there is no longer a spark trail. Those grinders are fantastic for carbon-steel tools like plane irons, cabinet makers chisels, scissors and the like—but not a first choice with most turners. I like the slower 1725 speed for a grinder. As I aim to remove minimal material, the 1725 speed grinder has a cooler action, and I just find it a more gentle action than a 3600 rpm screamer (those seem to double my mistakes!). We are now seeing two-speed grinders and infinitely adjustable grinders on the market, which will probably be common with most grinders at some point.



Strong and sturdy tools rests, good lighting, solid mounting and at least one good wheel are minimal requirements for a reliable grinder. The tool rest on the left is an after-market rest. A supporting strap was added to the right rest for increased rigidity.

If the tool rest assembly is flimsy, I cannot consistently grind my tools nor is it really safe to do so. Place your thumb in the center of the tool rest of your grinder and push down. You should feel virtually zero give—if it feels springy, improve or replace. You can add extra support strapping, build a wooden rest, or purchase one of several after-market accessory rests. Also, the rest should be adjustable both in angle and the ability to slide towards the stone to accommodate for wear as well as keeping the rest close to the stone for safety purposes. Finally, a light is a worthwhile accessory to the grinder if one did not come attached to it.

Thoughts on grinding wheels and dressers

First, work with the widest wheel you can fit to your grinder. In most cases this is 3/4" or 1"—but the wider the better. Next, throw away your gray wheels. Spend a lot or spend a little, but acquire at least one decent grinding wheel to sharpen with.

The wheels I would suggest are friable aluminum oxide—now in patriotic colors of red (okay, often pink), white, and blue. The word "friable" refers to the ability of the stone to fracture, exposing fresh grinding surfaces as you use it. Gray wheels usually are not very friable, the cutting particles

round over, thus reducing grinding ability and often glazing and generating considerable heat. The color code of these wheels makes them easy to spot. However, there really is a difference between a $10 wheel and $100 wheel.

My advice: If you have an 8" grinder look for wheels that sell for between $25 and $55 and you'll be fine. Two other critical aspects of the wheels: grit size and hardness. I like to work with two different grits on my grinder. For initial shaping of a tool or any other heavy grinding operation, I rely on a 36- or 46-grit wheel. For the actual process of sharpening an edge, I prefer either a 60- (the new 54-grits are close enough) or 80-grit. My ideal setup is a 60-grit on the left side of my grinder (I am right handed; reverse this if you are a lefty) and a 36-grit on the other side.

And finally, how hard should the stone be? Most stones—but not some of the real cheapies—indicate the hardness as shown in the photo *below*. This makes a difference in its friable quality and how well it performs on

Profile the tool first, then pull a bevel up to meet that profile

tougher steels. Stone hardness follows the alphabet scale from soft to hard as you go down the alphabet. Most of the stones commonly found range from H through K. My first choice is a J followed by the K.

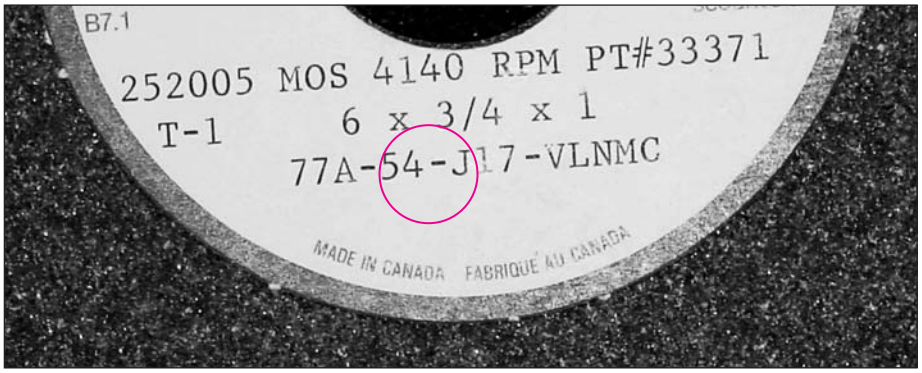
Almost as critical as a good stone is a dresser. These are tools that perform a number of functions: true the wheel to the axis of your grinder, flatten the face of the wheel, remove the buildup of metal particles, and expose or sharpen the abrasive particles. There are several choices: star-wheel, gray dressing stick, boron carbide stick, and diamond. I prefer the multiple diamond dresser (not a single point) in a round or tee shape. Keep it by the grinder, and use it lightly but frequently.

Finally, deal with the hazards associated with tool grinding. One of the greatest hazards is to protect yourself from flying particles, whether they are grit from the wheel or pieces of steel removed in the grinding process. The plastic shields on most grinders are worthless to see through after a short time—a full face shield is my first choice followed by goggles. Only use a grinder with metal shrouds to contain the wheel just in case it shatters into pieces.

Another serious hazard is the dust produced from grinding. I like to think of it as ground up glass. I know of no turners who use a wet dust collecting system to direct the grinding dust into—but this is more common with jewelers and other metal workers. And, of course, don't direct the dust into your normal wood dust collecting system—think of the drama of sparks and wood dust meeting!

What is most common is to wear a quality respirator, one rated for small particulate matter. And finally, keep the pinch and crush factor to a minimum by always working with the tool rest as close to the wheel as possible.

Wheel dresser examples left to right: gray dressing stick, tee diamond, round diamond, star-wheel. In the foreground is a boron carbide stick.



It is challenging to look at a wheel and guess its grit size and hardness. Most stones have a code—in this case, the bottom row of numbers.The most important codes to a turner are circled.The "54" designates grit size; "J" indicates the hardness designation.

Continued

Order of learning

From my own learning and watching hundreds of students try to learn the sharpening process, I recommend learning the turning tools in this order:

1. **SCRAPERS**
   (all shapes, but not including profile scrapers)
2. **PARTING TOOLS**
3. **SKEW CHISELS**

We'll cover the above tools in this issue.

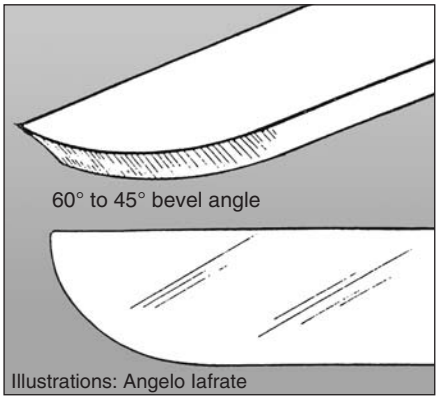
4. **ROUGHING GOUGES**
5. **DETAIL GOUGES**
6. **BOWL GOUGES**

We'll cover gouges in the Winter 2003 issue.

1. Sharpening scrapers

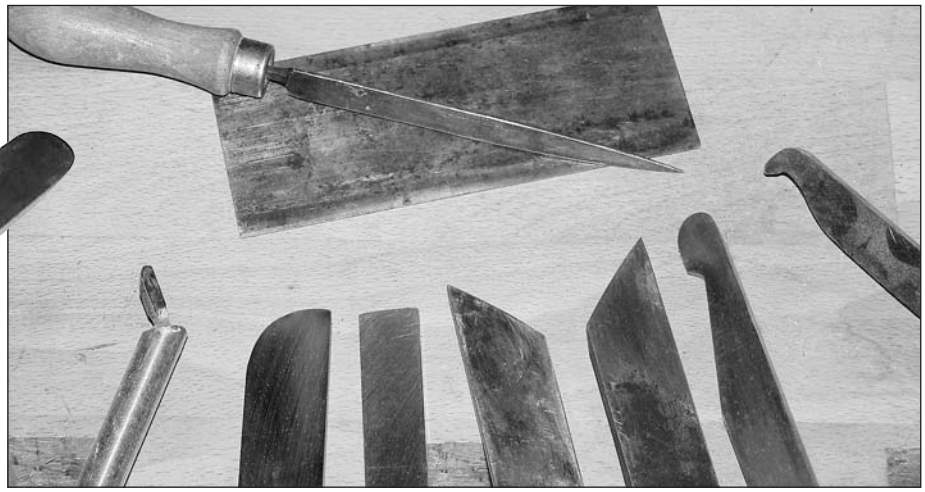
These are tools, of almost any shape, that are intended primarily to cut with a burr and not rub the bevel on the wood. Yes, I know we violate both of those guidelines from time to time, but that does not help someone who is starting out. Of all the turning tools, scrapers are some of the most straightforward to sharpen. Few turners struggle with these tools in getting the basic process, and we don't have to be too fussy about shapes, angles, and multi facets on the ground face.

The first rule of sharpen-ing turning tools: Profile the tool first, then pull a bevel up to meet that profile. For a scraper, personal preference determines the shape. You will probably discover that the slight dome on a new "round nose" scraper you just bought isn't very rounded. You may even find you don't use one side of the rounded end, so it may take on the shape of a side-ground scraper. Whatever the specific need or your style of turning, shape the tool first.



One version of a side-cutting scraper

Next, rough in the bevel angle. When most of these tools are new, I find the bevel to be 80 to even 90 degrees below the cutting edge. I believe manufacturers started with the notion that a scraper


Woodturning scraping tools are quite similar to the cabinetmaker's scrapers (background, shown with a burnisher). Both types of scrapers usually cut with a burr and both can make use of a burnisher to raise that burr. Turning scrapers are thicker and heavier in weight and come (or can be made into) in an array of shapes for specific purposes.

needs a lot of support under the edge since you don't have the secondary fulcrum of a bevel-rubbing tool to add extra support (your tool rest is the primary fulcrum). Unless your scrapers are 1/8" thick, this is a bad notion.

As a matter of fact, if I am using the tool at a scraping angle (with no bevel support) and the bevel inadvertently touches the wood, I can get a catch. I treat the bevels on scrapers as clearance angles, so mine are ground between 45 to 60 degrees. I also don't have to worry about single facets and a hollow grind on the ground bevel: I don't hone the bevel on these tools so it is not as critical as it is with other turning tools. However, grinding uniform bevels on these tools is great practice for all the tools to follow.

The process for sharpening is straightforward. After profiling, proceed to grind the bevel to match the profile. If you need some assistance early on in sharpening, set the tool rest angle to that 45- to 60-degree window. Start at the back of the bevel, keeping the tool flat on the rest, and progress along the cutting edge until sparks just come over the top. I don't look for a heavy stream of sparks, but consistent "tracer bullets" that tell me I have reached the cutting surface.

Being a scraper, the raised burr will be my cutting edge at least 90 percent of the time. I can use the burr right off of the grinder (useful if heavy stock removal is called for) or remove that burr with a flat stone and pull up a new burr with a cabinetmaker's burnisher or the honing stone.

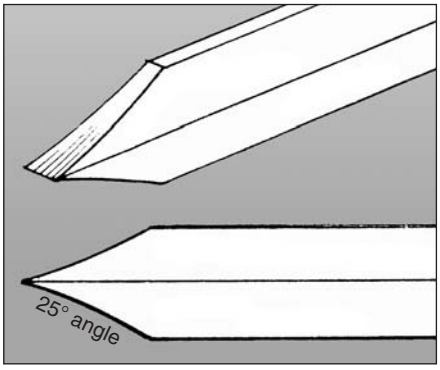
By using one of the other methods, I find it easier to produce different types of burrs—some for heavy work, some for fine finishing work. In those cases where the burr is too aggressive for a particular piece of wood (you may feel it "picking" at the wood rather than a smooth leveling action), try scraping with a sharp edge—produced by grinding--then removing the burr on top with a flat honing stone. This is similar to the action of scraping with the edge of a knife or the furnituremaker scraping the top of a table with a large piece of broken glass. When you work a sharp edge in a scraping action, it may quickly dull the edge. However for that window of doing fine scraping, it may be just the ticket.

Sharpening the cutting tools

Now we come to the tools that start to cause problems for beginners. These are tools that will cut with a keen edge and, in most cases, presented at a cutting angle with the bevel rubbing on the wood. Now we become fussy about angles, uniformly ground bevels, and of course, keen edges.

2. Parting tools

There are several variations of this tool, but the most common is a rectangular section of steel with the cutting edge in the middle that's ground on both sides. This is a great tool to learn cutting tool sharpening as it has a relatively small area to grind (the edge is usually no greater than 1/4") and the edge is in a flat plane.



Diamond-section parting tool (profile and angles same as rectangular tool)

For profiling, make sure the edge is ground straight across, and the included angles of the ground bevels are around 25 degrees. Fortunately, new parting tools most often arrive profiled in an acceptable manner—not sharp mind you, but routinely shaped fine. To sharpen, either set the tool rest at the approximate angle desired, use the edge of the rest as a steady, or use your fingers to adjust the angle.

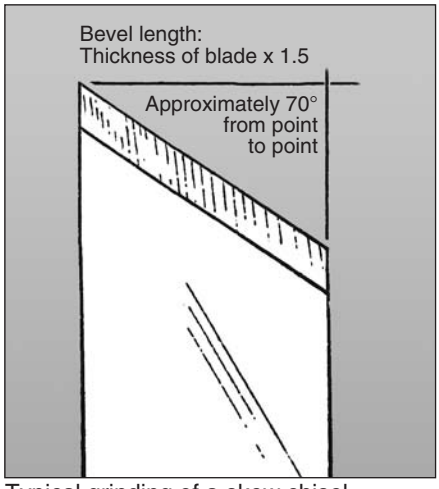
Start at the back of the bevel (called the "heel"), keep the edge horizontal, and lap from side to side on the wheel until you just see sparks trailing over the top of the cutting edge. Flip over the tool and repeat the same procedure on the other side. The objective is to produce a single facet with a slight hollow grind. If your movements are controlled and steady, this all happens. If jerky, uneven, inconsistent, too much pressure, "grind and look" and "grind and look," then things probably won't be so good.

Continued

Go slow, be deliberate, leave the tool on the wheel, and use only enough pressure as it takes to keep the tool from bouncing on the rest. I am always surprised how much of grinding and turning is really about feeling your way along rather than seeing.

In grinding, most of the action is on the other side of what you can see. We can help the looking part along—especially when learning the process—by placing our head to the side of the grinder or by the use of a mirror (attributed to a North Carolina turner). In time, most of your grinding will be by feel and watching the spark trail to give the additional feedback.

Until you have a sense of where you are grinding on the tool, it's helpful to either place your head to the side of the wheel or make use of a small mirror. The mirror, shown above, allows you to see your placement of the tool on the wheel.

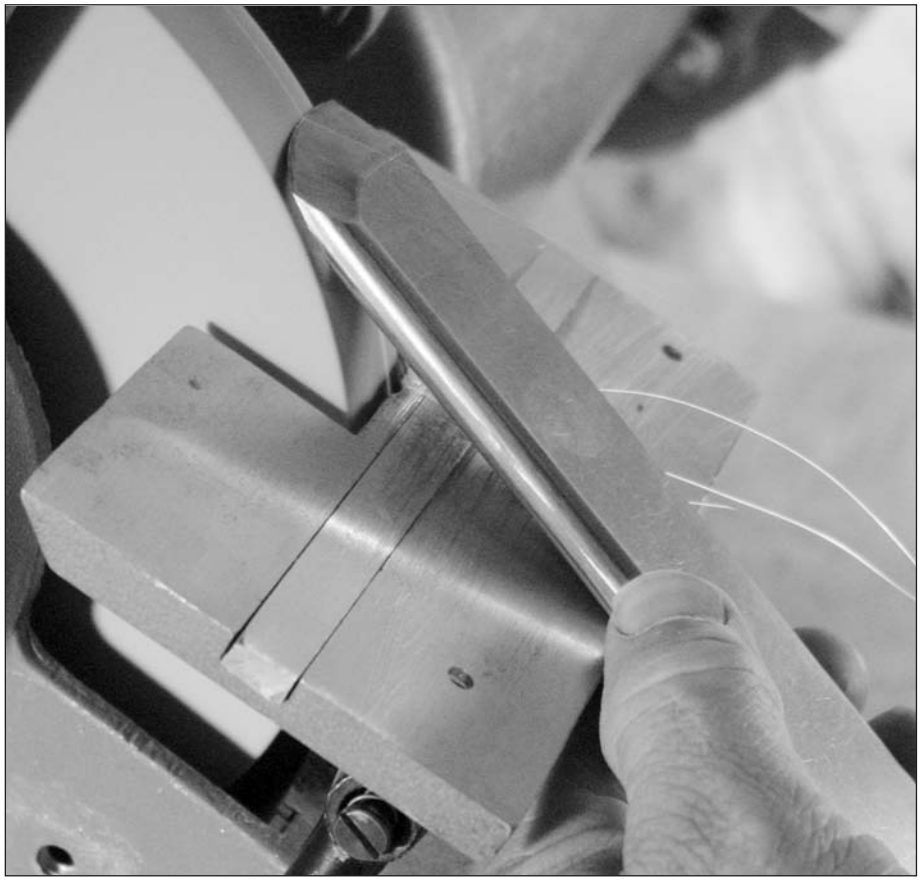


Typical grinding of a skew chisel

3. Skew chisels

Fortunately, the sharpening of a skew chisel is similar to the parting tool: two ground flat planes that meet to form a cutting edge. The only real difference is in the skewed angle of the cutting end—essentially a clearing and viewing advantage over a square-across chisel.

Again, profile the tool first. For a "traditional" straight-edged skew, I recommend 70 degrees from point to point. Rather than measuring included angles to measure the steepness of the two ground bevels, I use the thickness of the steel as the reference. Using this method, grind the bevels back to approximately 1.5 times the thickness of the blade.



Using the back edge of the tool rest, pivot the curved skew to grind the edge. Using a rotational movement, grind in the area that is roughly parallel to the face of the wheel.

If you can see the edge, there is no edge.

Grind the bevel and not the edge.

For the sharpening process, follow these steps: Keep the edge horizontal and parallel to the face of the wheel, start at the heel and lap back and forth. Continue this process until sparks just trail over the edge. Flip over the tool and repeat the same procedure.

If you have an "oval style" skew (my last choice for a skew) you will find it wants to wobble rather than remain in a flat plane. In that case, maintain pressure in the center of the tool with a thumb to essentially lock it into a fixed plane. As an alternative, investigate a grinding jig that locks the darn thing in place.

If you are grinding a curved-edged skew, simply grind the edge while it is generally parallel to the face of the wheel. This will require a rotational motion that follows the curve of the edge. If the skew plagues you with multiple facets, go ahead and set the tool rest to the suggested bevel angle. Keep the tool flat on the rest and follow the above strategies. I have had good success just using the front or back edge of the tool rest as a point to slide along for a straight skew or to pivot on while grinding a curved edge.

Tests for sharpness of cutting tools

If you can see the edge, there is no edge. Short of turning, this is the best test I know. Use an incandescent light to check for any reflection along the edge; a sharp edge disappears into a black line. Dull spots will reflect light.

What comes off the tool, dust or curls? Even in dry material, a sharp tool forms a longer chip or ribbon, dull tools produce dust or very short chips.

How much effort does it require to remove the material? Unless you are roughing out a large piece, a sharp tool presented at the right angle is almost effortless; a dull tool requires more force.

What does the cutting action sound like? A sharp tool makes a sound reminiscent of a sharp hand plane; the dull tool sounds flat or makes a scraping sound.

How clean is the surface when you stop the lathe for inspection? Sometimes it is a difficult piece of wood, but generally a sharp tool gives far superior results to the surface of the wood.

Alan Lacer (www.woodturninglearn.net) is a turner, writer and instructor living near River Falls, WI. An *American Woodturner* contributing editor, Alan wrote about honing in the Spring 2003 issue.

Notes on overheating the tool

By now you may have come up against the problem of bluing the grinding surface of the tool. If you have high-carbon steel tools, you have a problem: the steel has now been re-tempered to a hardness that is too soft to hold an edge for woodturning. If you have high-speed or high-heat-working tool steel—no problem. But how do you know what kind of steel?

Generally the high-carbon tool steels produce a complex, white, bursting spark when placed on the grinding wheel. The high-speed steels tend to have individual, orange sparks. Often the manufacturer stamps the handle or steel itself with "HSS" or "High Speed Steel." I have found some inexpensive imported tools stamped with those designations, but sparked like high carbon tools—so be careful.

Here are some suggestions regarding overheating. First, learn to grind with a lightness of hand and movement of tool that does not overwork an area, thereby reducing heat. Second, use friable wheels (see page 54) that grind cooler, and dress the wheel often. If you have carbon steel tools—and some of my old favorites are of that steel—quench in water frequently for heavy grinding or delicate points of skew chisels.

If you have high-speed tools, don't quench in water: the effect may be too shocking for the steel and possibly produce small fractures at the cutting edge. The high-speed steels easily handle temperatures of 700 to 1000 degrees F with no loss of hardness (bluing is around 580 degrees F). If the high-speed tools get too hot to handle (during heavy grinding), I just place them on a large metal heat sink like a lathe bed and take a short break. The best rule for all steels is learn to work without generating a lot of excessive heat and eliminate the need for quenching.

Instant Gallery

A Turner's View

Continued from page 32

Up close and personal

This year's critique was more spontaneous than in previous years. The presenters invited the attendees to ask for a critique of their work as the group went around the room. Hogbin and Edwards then critiqued that person's body of work, analyzing the designs and offering compliments as well as suggestions for improvement.

We learned about the idea behind an artist's work through their dialog with the presenters. And I was flattered when it was my turn and Owen said that his 3-year-old daughter liked my work!

Mark Knize
Tracy, CA

Strong designs keep us involved

Nelson Cassinger's small-segmented piece moved Edwards to comment, "Most of us love small objects that are beautifully done, and the small size invites holding and caressing."

Hogbin enjoyed J. Paul Fennell's *below right*, exploration of nature in the abstract. Fennell's delicate pierced pieces draw attention from far away, and up close they stay with you.

In conclusion, Owen Edwards offered us his personal favorite, an oak, apple, and ebony piece by Mark Knize, *left*. A successful and strong design, it kept drawing him back. "The person who made this really enjoyed making it, and I enjoyed looking at it." Well, I guess that's why we all turn wood after all!

Cindy Drozda (cdrozda@nyx.net)
is a studio turner from Boulder, CO.

Christian Burchard offered familiar and new shapes at the Instant Gallery.

A Critic's View

Continued from page 33

about the consistency that was alarming, while being intriguing. Logistically, it is understandable although limits the creative potential.

The lathe is a limitation just like the potters wheel, although the potter's wheel never developed the technical prowess of the numerous models shown in the trade show. This single technology has created a multiplicity of possibilities and some singular forms. The challenge of limitations stimulates the field while sometimes narrowing potential subjects for exploration.

Plenty of vessels

Vessels abounded in this particular display while bowls were under-nourished. It felt like a disjuncture between the everyday and artifice; perhaps the result of so much in one place. Restraint and rarity would heighten value to both vessels and bowls.

The nature of wood, grain, and color swelled into forms. This organic quality sensually contains space, with wood skin stretched over the promise of life. Other pieces were fragmented through cutting, reassembling, shaping

J. Paul Fennell
Scottsdale, AZ

and carving, into new, unfamiliar, and challenging forms.

Walking at a turtle's pace along rows of tables, there were pieces that demand the attention of a running hare. Playfully they leaped into the air, somersaulting about their own being. These individualistic pieces detached from the applications of reality gave some spirited attempts at content. But play does not always have content anymore than a walk in the woods has to have content. It may be about the pleasure or joy of a relaxed walk and no intention at investigation.

Decorative and applied arts

Side by side, the decorative arts and the applied arts are revealed in turnings. Utility and function occasionally displayed on a pedestal became a pediment to our perception of the work in play. Strict divisions of decorative and applied art will always be confounded by the introduction of both one into the other.

However both are to be celebrated and if it has an application, there is no harm in presenting the work with some fruit in the bowl. The applied arts did not show strongly and come to think of it there was not a single light fixture or chair although there were some small boxes. The lidded container exhibition ("Put a Lid On It" exhibit nearby at the Brand Library and Galleries) may have drawn the few boxmakers.

I was hard on some of the work in the critique as it was presented as sculpture. The exploration of form has always been an interest of mine. Seldom is it sculpture, as it does not carry content-only form relationships. However the logic of materials–physical shaping, spatial formation that leads to a decorative object or abstract form–has on occasion led me to find an application for living, a form for narrative or the challenge of an issue in a subject.

Metaphor or irony

Tucked into the exhibition were a few works that carried content through metaphor or irony. The mind becomes fully engaged along with the senses when beholding this work. The piece develops beyond a pleasing shape transformed by desire into an idea that challenges or evolves the way we think about a subject. Not that desire cannot be or is not part of issues and ideas. The difficulty of so much work in one place made it harder on the sensitive subtle works that were an exchange between material and form and the spiritual values placed on that presence.

With all the talk of art, craft, and design it was with interest that a number of people from the sciences were also present and presenting their work. Perhaps there were also authors who could have introduced text into their pieces. I have often wondered why people who have interesting lives in other disciplines do not bring that experience to woodturning. I appreciate it may be a break from or a form of therapy, but the

Two attendees take a close look at Instant Gallery pieces on display.

sauces of inspiration have the potential to be stronger. As one person in the exhibition explores the fourth dimension of movement, we can see the major issues of time and space emerge–a 20th century preoccupation. It is in the exploration or investigation that new possibilities occur. Sometimes it takes years to develop works that are fully resolved with clarity of insight, conviction and full resolution of all the parts.

Trying to make something look like something else is part of artifice and that has a long tradition. For some objects–perhaps even most–the design is best when it looks like it was meant to be what it is.

Design is about organizing the relationships within the whole. A confluence of many learned human experiences. A conceptual confluence of idea, material, form and object. The evaluation is ultimately to place our values in the work, which we must each do for ourselves, while living in our respective community.

Stephen Hogbin (s.hogbin@bmts.com) is a sculptor, writer, and teacher who lives in Owen Sound, Ontario.

Where the Shavings Flew

Continued from page 35

why that was necessary. They were clear on their own technique preferences and why this was so. This proved to be very informative for the audience.

How refreshing it was to see two professionals at the top of their game, each willing to say "this is how I do it, it works best for me," and in the same demo have someone with a very differing point of view say the same thing. Neither tore down the other's technique, but instead underscored the idea that there are lots of different ways to tackle the task at hand.

Toward the end of the demo, Stuart pointed out that though he had a clean cut finish on the exterior of his bowl, there was a small blip where he had moved the tool rest and hadn't quite matched it up, admitting that it was a very difficult technique. A fellow from the back of the room blurted out "Couldn't you use a shear-scrape to even that bump out?" The room roared with laughter, and even Stu had to smile. It pointed out nicely that every technique has limitations and the best turners know how to get around an obstacle.

From the saturation of information to the lively high jinks of the two humorous presenters, this was a not-to-be-missed demo. Though late in the day, you can be assured there was no napping in this program.

Keith Gotschall (k2turner@sallidaco.com) is a full-time turner living in Salina, CO.

New products at Pasadena

A walk around the Pasadena trade show revealed several new items of interest to turners.

• **Oneway** (www.oneway.ca) introduced the **1640 lathe**, its first lathe priced under $3,000. Features include a 16" swing over the bed and 40" between centers.

• **Drill Wizzard** is Oneway's cross-hole driller and tenon maker in one tool, useful for spindle work.

• Two companies showed software for segmented bowl builders. **"Segmented Project Planner,"** by **Good Turns** (www.verifiedsoftware.com/goodturns) and **"3D Design Pro"** from **Woodturner Pro** (www.woodturnerpro.com).

• **Alan Lacer** (www.woodturninglearn.net) showed a **diamond-impregnated honing stone**.

•Lacer also introduced "**Getting Started Right**," a 108-minute video or DVD to introduce new turners to the craft.

• **Trent Bosch** (www.TrentBosch.com) unveiled a **pneumatic carving stand** to hold pieces while completing surface treatments.

• **Stuart Batty** introduced a series of **deep-jawed chucks** in three overlapping sizes. Crafts Supplies (www.woodturnerscatalog.com) will initially market the Batty chucks that grip higher on a chucked piece.

Mini-cameras a hit with demonstrators

"Absolutely brilliant," is how Chris Stott described the mini-cameras set up in two of the 13 demonstration rooms at the Pasadena symposium.

Six Sony mini video cameras (about the size of two cigarette packs) were set up in the demonstration area as shown in the illustration *at right*. The cameras were wired to a switching device (about $35) with the image then fed to two standard monitors.

"It worked especially well with an unexperienced assistant," demonstrator Reuben Everett noted. "All he or she had to know is when to hit the switch for another camera. Plus, the camera person never obstructed the view. The cameras stayed in focus, too."

Everett and other demonstrators took advantage of a handheld camera which allowed them to show close-ups not normally seen by audiences.

Some members believed their chapter could purchase a similar system for fewer dollars by eliminating a camera at the chart board, grinder, or both. The mini cameras retail for about $80, making the total cost less than video cameras. The cameras can be hook up for video taping, too.

Stott, who has demonstrated worldwide, didn't hold back

More new information

"The Practice of Woodturning," by **Mike Darlow**, a 7-hour double DVD covers the lathe, theory, tool design, sharpening and safety in the first hour. The remaining six hours cover spindle, cup, chuck, faceplate, and bowl turning. It's available from Packard Woodworks (packardwoodworks.com) and other mail-order sources.

Darlow's new 280-page book, "**Woodturning Design**" covers the design process, spindles, boxes, and vessels. It is available from book retailers and specialist woodturning mail-order firms.

praise. "This is the best set up I've ever come across. I was absolutely blown away by it."

Pete Carta, president of the El Camino Woodturners Guild, oversaw the pilot program with cameras supplied by Woodchuckers Supplies (800-551-0192; www.woodchuckers.com).

Mounted mini cameras–trained on a demonstration area–keep camera person out of the way.

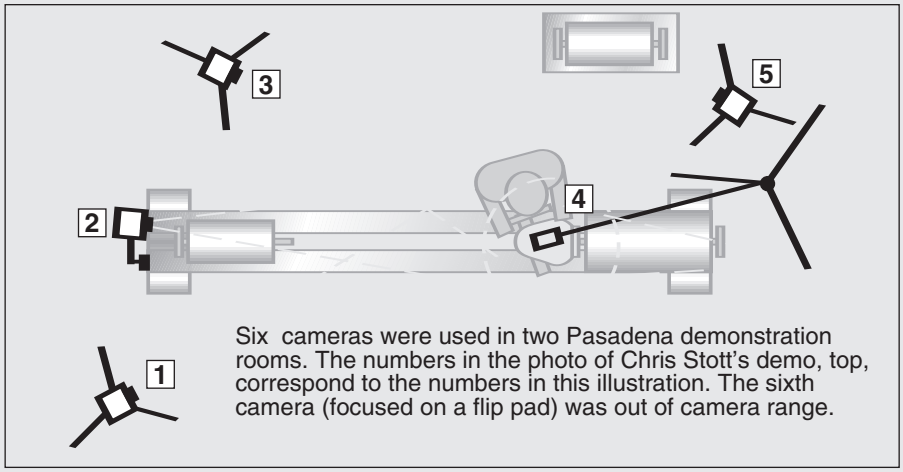
Orlando, Florida
Call for Demonstrators
July 23 to 25, 2004

If you're interested in demonstrating at the AAW's 18th Annual National Symposium, the application deadline is Oct. 31.

The symposium, to be held July 23-25 in Orlando, FL, is the AAW's biggest annual event and attracts 800 to 1,100 turners.

If you have a new idea, a great technique, or a different approach to design, Orlando might provide the ideal forum for you.

For more information and a demonstrator application, contact Mary Lacer in the AAW offices (651-484-9094 or woodturner@qwest.net).



Six cameras were used in two Pasadena demonstration rooms. The numbers in the photo of Chris Stott's demo, top, correspond to the numbers in this illustration. The sixth camera (focused on a flip pad) was out of camera range.

thin walls with a twist

Daniel Guilloux continues to receive rave notices in Europe for his delicately turned and sculpted pieces. Guilloux has designed a profiling tool to hollow and shape the inside of his thin-walled (1 mm) pieces without impacting the outside surface. He likes the transparency of unbleached maple and European fruit wood for most pieces.

Daniel Guilloux

Guilloux, who was trained as a photographer, was a presenter at the World Congress of Woodturning at Puy Saint Martin in May. He has studied with Canadian Michael Hosaluk and at the Wood Turning Center in Philadelphia.

"Vase DeCoupe"

"Parchment Series"

"Parchment Series"

"Arabesque"