

BAY AREA



WOODTURNERS
ASSOCIATION
A CALIFORNIA NONPROFIT CORPORATION
LOCAL CHAPTER AAW

May 2024

Volume 28 Issue 5

CARLOS ANGULO
NATURAL EDGE BOWL
Saturday May 11th
8:30 AM-12:00 PM

Carlos Angulo has been woodturning since 2012 and has been a woodturning instructor at the Curious Forge in Nevada City since 2013. He also teaches at Woodcraft in Rancho Cordova and in his professional shop. He is the President of Gold Country Woodturners in Nevada City. Carlos is passionate about the art of woodturning, educating the public about the craft of woodturning and teaching woodturning. This is an **in-person** demonstration by Carlos Angulo.

Carlos will discuss, in detail, how to harvest your own wood along with best practices in logging, storing, and understanding where the bowl and platter blanks are in a log. He will have a conversation about tool steel, sharpening and tool bevel degree. He will show how to keep the bark on the bowl blank using CA glue. He will discuss elements of design, form and function, and different bowl mounting techniques. He will show how to keep the bowl wings aligned with each other and reversing the bowl using a jam chuck. He will end the demo with a discussion on sanding and finishes.



Website: www.angulowoodturning.com

Facebook: www.facebook.com/people/Angulo-Custom-Woodturning/100064935870575/



BAY AREA WOODTURNERS ASSOCIATION

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Club Meetings

Club Meetings-

Meetings are generally held on the 2nd Saturday of each month. We meet in person. Meetings are held at the PHEC Woodturning Center at 1 Santa Barbara Road, Pleasant Hill, CA. The doors open at 8:30am. The meeting start time is 9:00am. See our website at bayareawoodturners.org for more information.

Guests are welcome to attend in person by request to: membership@bayareawoodturners.org.

See bayareawoodturners.org for club information.

BAWA Officers Meeting -

The Association's officer meetings are held each month. Contact Steve Griswold at: president@bayareawoodturners.org for more information.

2024 Event Schedule

May 11th	Carlos Angulo Natural Edged Bowl 8:30 AM-12:00 PM
May 23-26th	2024 AAW International Symposium Portland Oregon
June 8th	Sally Ault Ornament, Box 8:30 AM-4:00 PM

The Bay Area Woodturners Association is a local chapter of the American Association of Woodturners. Our purpose is to provide a meeting place for local turners to share ideas and techniques and to educate the general public regarding the art of turning. The Association usually meets the second Saturday of each month. The Association periodically sponsors exhibitions and demonstrations by local and internationally known turners.

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Kristen Levier Presentation Saturday April 13 th

Kristin opened her demo by discussing how she became interested in micromotor power wood carving. Originally, she was a hobbyist and built furniture. She took a class in micromotor power carving and decided that was the path she wanted to follow. Her career as a molecular biologist and research background made her aware of nature and its surroundings which she wanted to incorporate in her wood carvings. Kristen is an excellent presenter and her demo consisted of three main areas: a slide presentation on adding sculptural elements to wood carvings, bending wood without the use of steam and micromotor power carving.

She discussed three classes of connecting wood to objects in her work. They are the use of mortise and tenon joinery, dowels, and magnets. Mortise and tenons are temporarily glued, using hot melt glue to connect parts together. Twisting the objects breaks the hot- melt glue joint. She does not use glue to permanently connect objects relying mainly on a proper fit of the tenon. Touch up around the joints is done with 5-minute epoxy and saw dust. Any epoxy appearing around the joint is removed using a Qtip saturated with 91% alcohol. Dowels and the use of small magnets are employed in the same way. Occasionally, she uses a cutoff fixture hangar to connect objects.

Next, Kristen introduced and described the properties, shaping and bending of compressed hardwood. Compressed hardwood undergoes a thermo-mechanical process which allows it to be bent easily at room temperature. It is commonly made from North American hardwoods such as ash, red oak, white oak, cherry and maple. She soaks compressed hardwood overnight, in water, before shaping and bending. Clamps, jigs, fixtures, duct tape, foam, your hands, cans and pipes are used to help bend the wood.

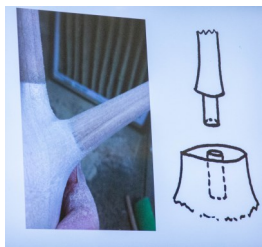
For more than ten years working with compressed hardwood, Kristen has learned that: old, compressed hardwood can be revived by soaking in water, lightly steaming or microwaving; dry wrapped wood can be sprayed with water and rewrapped; older wood sometimes bends unevenly; it can split due to age or overbending and the drying process can be sped up with a hair dryer, or heat gun. Any of the glues (CA, PVA, Titebond, epoxy) you normally would use with regular hardwoods are okay to use.

The next area discussed by Kristen was Micromotor power carving of wood. General woodworking safety including wearing lung and eye protection, dust control, proper lighting and not working tired were discussed. Several brands of carvers are available, some high end brushless costing as much as \$1,000.00, iCube and Marathon Champion power carvers are more affordable and can be purchased for \$150.00 They are a good choice.

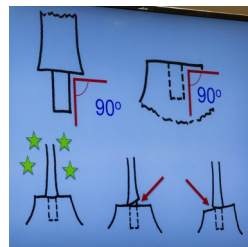
Kristen went over the basics of using power carvers, for example, always reducing the RPM before turning the carver off, collets, proper installation of the burrs, and snd speeds for various burrs. Kristen does not recommend buying burrs in sets as you do not need some of the burrs. She discussed her favorite woods to carve which include tupelo, holly and pear. Kristen spoke about the most common types of wood carving which are: texture carving, relief carving, sculptural and pierced carving and the burrs to use for each type of carving. Other subjects covered by Kristen were: finishes, shaping wood, carving on flat vs round objects, sanding, airbrushing, fixing issues in wood.



Kristin's micromotors



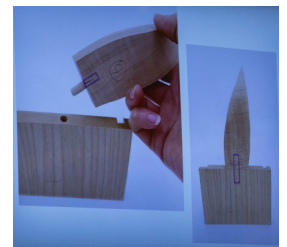
Mortise & tenon joinery



Proper design of mortise & tenon



Refining connection



Dowel joinery



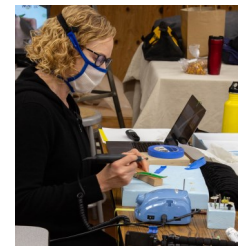
Mighty toothpick dowel



The group pays close attention



Explaining a fine point



Texturing a carved leaf

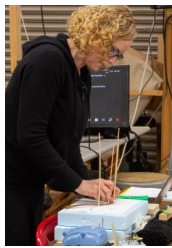
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Comparing different lids



Showing how compressed wood bends



Bending compressed wood



Bent compressed wood



Bent wood in form



Texture board



Texturing tools



Relief carving



Carving tools



Kristin's favorite burs



Textures w/ colors



Kristin demonstrating to group at Workshop



BAWA Classified Ads



We want members and others with items to sell or trade, services to render or if you're just looking to find a specific item from fellow BAWA members.

Please send ads to Louie Silva at: newslettereditor@bayareawoodturners.org

You can't beat the price...FREE!!

Rockler Helps BAWA Members

BAWA members receive a 10% discount when purchasing directly at the Concord Rockler Store at:

<http://www.rockler.com/retail/stores/ca/concord-store>.

Mention your BAWA membership when checking out, to receive your discount. Rockler also donates part of the proceeds back to the club which help support our Holiday Party raffle.



Sally Ault

Ornament, Box

June 8th
8:30 AM-4:00 PM



About Sally Ault:

Sally Ault was born and raised in San Diego, California and graduated with a degree in Art with an emphasis on 3-dimensional design from San Diego State. Her work there was focused on Weaving, Jewelry Design and Ceramics. During a furniture class, Sally discovered woodturning. After a break of a number of years, she resumed woodturning in 2001.

Sally enjoys all types of wood turning but currently her focus is on lidded containers (especially the sea Urchin series), open bowls, embellished pieces and jewelry.

Sally's work is shown at the gallery at Studio 38 in Spanish Village Art Center in San Diego, at the Mingei International Folk Art Museum in San Diego's Balboa Park and at the gift shops at Anderson Ranch Arts Center in Snowmass, Colorado and Arrowmont in Gatlinburg Tennessee. She has won a number of awards over the past years at the Design in Wood Show at the Del Mar Fair and at the annual Small Image Show at Spanish Village in San Diego.

Sally has been a demonstrator at the Utah, Honolulu, North Dakota and Wisconsin Symposia, at a number of woodturning clubs and at John C. Campbell Folk School, Arrowmont School of Art and Craft and Marc Adams School. She was a featured demonstrator at the American Association of Woodturners symposium in 2016, on 2 panels at the 2017 AAW symposium and demonstrated at SWAT in Waco, TX in August of 2017, 2019 and 2022. Sally worked with the young woodturners at the 2022 and 2023 AAW symposia. In the fall of 2013, she was accepted for a 10-week artist in residency program at Anderson Ranch Arts Center.

She is a member of the San Diego Woodturners Association, American Association of Woodturners, Point Loma Artists Association and Spanish Village Art Center in San Diego.

Check out her work on the [My Gallery](#) page.





BAWA NEWS & NOTES



Photos from last meeting



Bob Ackley introduces Kristin LeVier



President Steve opens meeting



Plethora wood raffle



Shrinking stash of donuts



OLIVE HYDE *Art* GUILD
Celebrates the 40th!

Holiday for the Arts 2024

Call for Artists

Entry Deadline for New Artists:
July 15, 2024

Olive Hyde Art Guild is now accepting entries for the Holiday for the Arts Gala, Show & Sale, October 18-20, 2024

The show opens with a ticketed Gala on Friday night featuring hors d'oeuvres, sweets, and wine, with the first viewing and sale of art.

On Saturday and Sunday, the show is open to the public without charge. Each year we sell over \$25,000 of high-quality handcrafted objects and fine art.

All aspects of the show, including sales, are handled by Guild members. Artists do not need to be present at the event.

Media: Ceramics & glass, paintings, jewelry, fiber art, wood products, sculpture, and holiday goods.

Image samples of new artists' work will be screened online at the OHAG website. Artists submit 2-3 digital images using the online form at OliveHydeArtGuild.org.

For new artist information, visit OliveHydeArtGuild.org or email ArtistContact@OliveHydeArtGuild.org

Show & Tell April

Mike Vergino-lidded box & grinders



Joel Albert-cake stand & grinder



Hugh Buttram-carved urn



Continued on following page

Show & Tell April

David Fleisig-carved quadrangle



Charlie Saul-segmented urn & porridger



Ed Steffinger-lidded box



Continued on following page

Show & Tell April

Mark Benjamin-NE bowl



Mike Rizza-wormy NE bowl



Dave Bentley-bowl



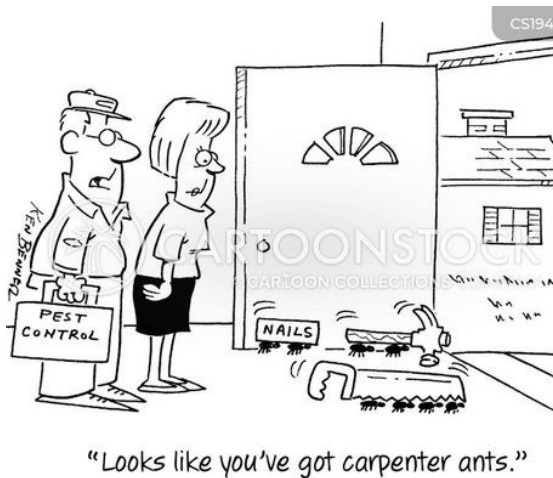
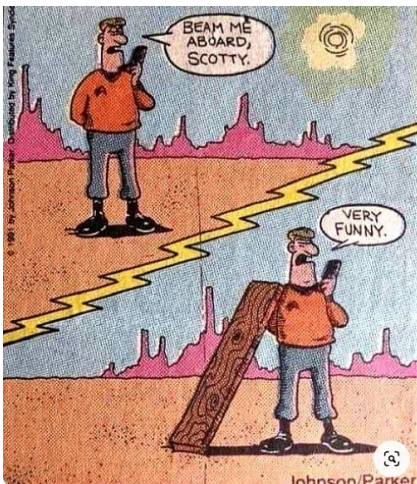
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Show & Tell April

Tom Tovrea-ornaments



Larry Batti-pierced disc



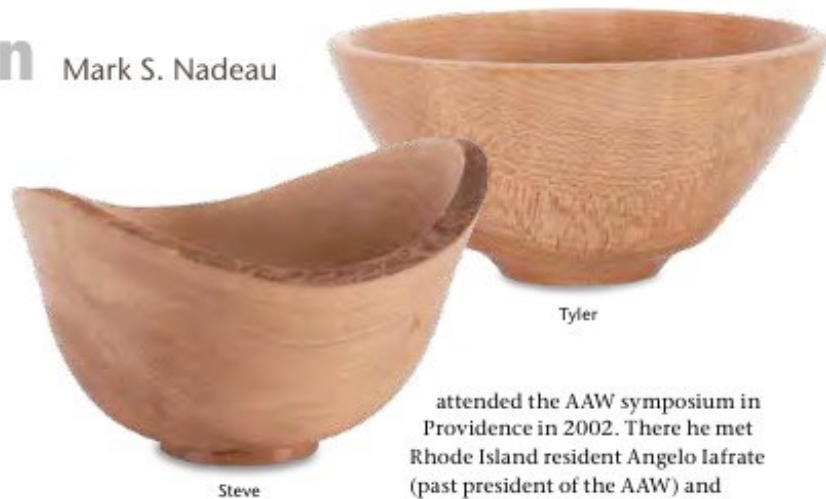
Students Turn Mark S. Nadeau

It is not uncommon to see shop classes disappearing from our nation's schools. Fewer high schools are offering industrial arts, and it is even less common to see these programs in middle schools. However, in the town of Tiverton, Rhode Island, the Tiverton Middle School (TMS) has not only managed to maintain its woodworking program, but it has a growing woodturning program as well. This is originally as a result of the hard work and dedication of technical education teacher Wayne Collins, as well as a handful of dedicated volunteers.

Wayne Collins began teaching fifth through eighth graders at TMS in 1989. For each year of Collins's curriculum, the students were introduced to a new topic. Fifth graders studied introduction to technical education; sixth graders studied mechanical drawing; aerospace (model rockets) was offered in seventh grade; and eighth graders studied woodworking. Initially, woodturning was not a

mandatory part of shop class. It was taught during regular class time only if students had an interest and was offered after school for students of all grade levels. However, more and more students became interested in learning to turn. As of January 2008, woodturning became a regular part of his eighth-grade curriculum.

The inspiration for the woodturning program came after Collins



attended the AAW symposium in Providence in 2002. There he met Rhode Island resident Angelo Iafate (past president of the AAW) and Larry Dunklee and Mike Murray, two members of Rhode Island's local AAW chapter, Ocean Woodturners. Collins became a member of each organization, held three terms as vice president of the Ocean Woodturners, and was elected president in 2009.

Collins went to the symposium looking for new ideas. The individuals he met as well as the youth turning sessions he saw opened his eyes to the possibility of starting his own woodturning program at TMS. With only a year of woodturning experience he was able to launch the woodturning curriculum in 2003. He started with six JET mini lathes, three of which were purchased with his class budget. The other three lathes were donated to his program: one from the Ocean Woodturners, one from George Snyder (owner of the Woodcraft store in East Greenwich), and one from the parent-teacher organization of TMS.

Since the inauguration of the program, Collins received two Educational Opportunity Grants from the AAW. The combination of those grants, generous donations, and fundraising in the form of a biannual craft fair, allowed the program to grow to eleven lathe stations. This is important, as the program now has an average



Owen Leary turns his first bowl with the help of Rick Sousa (left) and Wayne Collins (right).

of twenty students per class, and as many as fifteen students have recently signed up for after-school classes. Students have been successfully sharing their lathe time with each other.

During the 2006-2007 school year after-school woodturning classes went smoothly, even spawning an after-school woodturning class for the faculty. But, in September 2007, many after-school programs, including the woodturning class, were halted as a result of a teacher strike. Teachers returned to work under a contract compliance rule, but that meant teachers worked a full day of school, nothing more. All volunteer-based after-school activities were put on the back burner.

Many of Collins's advanced woodturning students voiced their disappointment, and as a result Collins and the Ocean Woodturners came up with a solution. There was an exception to the rule about holding after-school activities during the strike: If an outside organization sponsored an activity for the students, then it was permissible. The Ocean Woodturners started sponsoring Tuesday night woodturning classes, effectively reinstating the original schedule. They continue to sponsor the classes to this very day.

The Ocean Woodturners members who regularly help at these classes include Wayne Collins, Rick Sousa, Bill Mershon, Tom Marshall, and myself. Rick Sousa has been teaching all of the after-school woodturning classes since he came on as a mentor in 2003. Rick turns and builds custom furniture for Stephan Plaud Inc., an independent furniture maker located in Tiverton. Rick has generously donated his time and knowledge regularly over the past six and a half years. Other professional woodturners who volunteer include



The lathe stations at Tiverton Middle School.

Angelo Iafate, Beth Ireland, and Bill Grumbine.

In 2009, Collins retired from his career at TMS. However, his after-school woodturning program continues with the volunteer work of the Ocean Woodturners. The program is enriching the lives of many young people. You just never know what treasures you are going to find in a small town. ■

Mark S. Nadeau is a photographer and woodturner who lives Portsmouth, Rhode Island. Questions and comments can be sent to mark@markscottnadeau.com.



Zack



Owen



Victoria

I have been enjoying making spheres ever since reading Christian Burchard's 1995 article in *AW* (vol 10, no 2, pp. 26-28). Spheres are satisfying to look at and are pleasant to hold. They rest on a single point, seemingly floating above the surface of a table or pedestal. Spheres show off beautiful wood grain.

Spheres, of course, tend to roll away. To help keep them in place I display them perched on small O-rings. Having the spheres sitting atop an O-ring, however, detracted from the appeal of a form with almost no base. Additionally, when I sold one, I had to throw in an O-ring, almost as an "embarrassing extra" so that the customer would be able to safely display their sphere.

At a recent art event, a potential customer knocked one of my spheres off of its O-ring and the sphere went crashing to the ground, suffering major dents. I knew then that I had to do something to prevent the spheres from rolling away; this unfortunate event motivated my exploration for a solution.

I thought of drilling a shallow hole in the sphere, adding a lead weight, and then plugging the hole to make a weighted sphere. I even bought a plug-cutting tool for that purpose. Before I tried it, however, I thought of

removing weight from the sphere to achieve the same effect. With some design experimentation, the result is what I have titled *balanced bowls*.

Balanced bowls solve the problem of having them roll away because they

have a weighted spherical bottom. As a bonus, these bowls, turned off-center, achieve a slight rocking movement until they stabilize, infusing life into static bowl forms. My original balanced bowls were spherical; the current ones I make have straight sides above a curved bottom. I call them *hemispherical balanced bowls*.

Wood selection

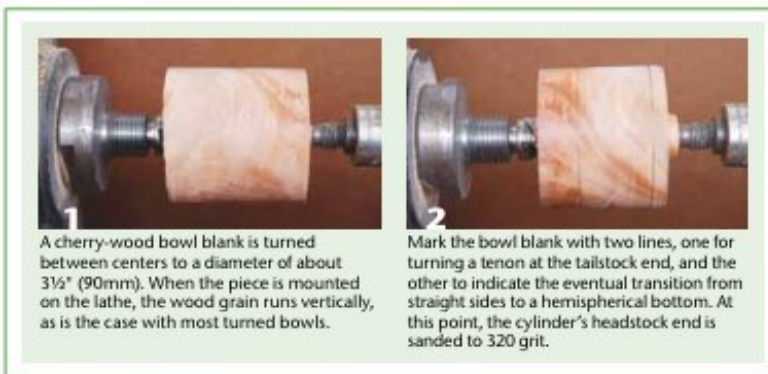
I like to use a wood that leaves a good finish from a scraper and also wood that is free. For me, that means orchard cherry or olive wood. I usually turn these cross-grain in the way that conventional bowls are turned. The blank used for this demonstration piece was approximately 4" (100mm) cube. To begin, I turn ▶

Balanced Bowls

Mark Knize

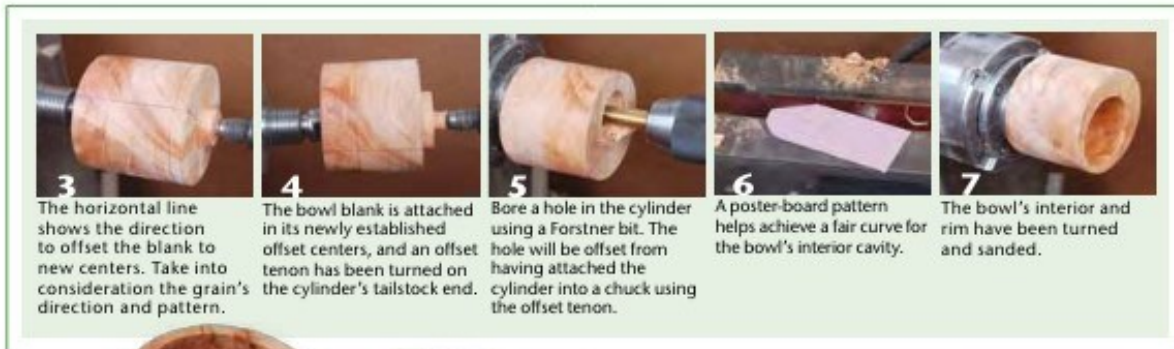


Group of seven hemispherical bowls in cherry wood.



1 A cherry-wood bowl blank is turned between centers to a diameter of about 3½" (90mm). When the piece is mounted on the lathe, the wood grain runs vertically, as is the case with most turned bowls.

2 Mark the bowl blank with two lines, one for turning a tenon at the tailstock end, and the other to indicate the eventual transition from straight sides to a hemispherical bottom. At this point, the cylinder's headstock end is sanded to 320 grit.



3 The horizontal line shows the direction to offset the blank to new centers. Take into consideration the grain's direction and pattern.

4 The bowl blank is attached in its newly established offset centers, and an offset tenon has been turned on the cylinder's tailstock end.

5 Bore a hole in the cylinder using a Forstner bit. The hole will be offset from having attached the cylinder into a chuck using the offset tenon.

6 A poster-board pattern helps achieve a fair curve for the bowl's interior cavity.

7 The bowl's interior and rim have been turned and sanded.



This set of balanced bowls (hemispherical) was made from an unidentified landscape tree.

the wood into a cylinder, mounted between centers of the lathe (Photo 1).

Mark the cylinder

The diameter of this cylinder is 3½" (90mm). The height of a hemispherical bowl looks best at about 80–85% of its diameter, so in the case of a cylinder 3½" (90mm) in diameter, the final bowl will be about 2¾" (70mm) tall. I allow ¼" (6mm) for

a tenon, which I turn on the tailstock end of the cylinder. Mark a line for the tenon ¼" (6mm) from the end of the cylinder, then mark a line 2¾" (70mm) up from that line.

The next step is to mark a line where the hemispherical part of the bowl ends and the straight part of the side begins. The location is 1¾" (45mm) (half the diameter of the bowl) up from the bottom of the bowl (2" [50mm] from the tailstock end). I carefully adjust the length of the blank, working on the headstock end to achieve the exact length (Photo 2).

Sand the outside of the bowl above the hemispherical line to 320 grit. This is the last chance to easily sand that area.

Offset the cylinder

The next step is to offset the cylinder. Draw a horizontal line through the center of the cylinder. The line should go through the points of the headstock and tailstock (use your toolrest and a pencil) and will be used to help align the new centers (Photo 3). I mark new center points about ⅜" (8mm) from the old centers and use a scribe to make a dimple to mark the points. The idea is to shift both centers the same amount in the same direction. I usually move the centers in line with the direction of the grain to keep the grain balanced when looking at the top of the finished bowl, so place your line on the cylinder accordingly.

The new centers will be used to locate a tenon that will fit into your chuck. Remove the cylinder from between centers and shift it to the new centers. It is a good idea to draw a circle on the face of the spinning cylinder to indicate



8 Mount a piece of scrap wood into the chuck, turn a jam-fit recess, and reverse the bowl blank. Use the tailstock for support. The bowl blank will now be mounted in line with its original centers.

9 This shopmade scraper is ideal for fine-shaping of spheres. It is made from a hole saw with the teeth ground off and is fitted with a wooden handle.

10 Before using the scraper, remove the tenon using a bowl gouge. The scraper is only for taking light, scraping cuts and refining the bowl's curve. Fine shavings will collect in the scraper.

11 The bowl's bottom is sanded.

Spherical-shaped balanced bowls

Balanced bowls can be made closer to a spherical shape with some slight modifications to the steps that produce the hemispherical version. A spherical shape was my original intention; however, I like the straight-sided hemispherical design better.

After turning a cylinder and marking the tenon length, the overall length, and hemispherical point at half the diameter, cut and scrape the blank to a spherical shape above the hemispherical line. Extra care needs to be taken not to change the diameter (try not to scrape off the pencil line) and to make the top the correct diameter. This is when the circular scraper comes in handy. By carefully scraping the top and not pushing as much on the hemispherical line, it is easy to arrive at something close to a chopped-off sphere. Close is all you need at this stage.

Make the offset centers as before, move the piece to the new centers, and cut the tenon at the bottom.

Chuck the sphere using the eccentric tenon. Hollow as before (Photo A) and follow the profile of the outside of the bowl. Leave the top with a wide, flat rim and make the bottom approximately 1/2" (13mm) thick. Smooth the top rim with abrasive paper wrapped around sanding block. Sand and finish the inside of the bowl.

For this spherical-style bowl, the jam chuck does not work, but I have had surprisingly good luck using hot-melt glue to attach these bowls by their top rim surface, which is flat. Buy high-strength glue sticks.

Mount a waste block into your chuck. Turn the top surface to the same diameter as the top of your bowl to help align the two. Apply the hot-melt glue using a heat gun. Heat the block and the glue stick with the heat gun and deposit a thin layer of glue around the diameter that will contact the bowl top (Photo B). Then,

Set of spherical bowls in cherry.



apply glue in the same manner to the top of the bowl. Finally, heat both surfaces and, using the tailstock, apply pressure to the bowl. Let the glue cool for ten minutes (Photo C). The only time I have had this glue fail is when I have not allowed enough cooling time. I usually have the opposite problem: How to get the bowl off?

Carefully remove the tenon with a sharp gouge, cut the bottom part of the bowl to a hemispherical shape and scrape the outside until you achieve a spherical shape. Sand and finish (Photo D).

To remove the bowl, heat the glue joint with the heat gun. I do this with the lathe running at very low speed. Eventually, the glue melts a little and the bowl can be removed by sustained pulling.

To remove the glue residue, I sand the top with abrasive paper resting on a flat surface, progressing through all the grits.



With the cylinder attached into a chuck, shape the upper part of the spherical bowl form, then drill the interior.



First apply a thin layer of hot melt adhesive to an auxiliary blank using a heat gun. Hot melt adhesive will also be applied to the rim of the bowl blank.



The bowl blank is attached with hot-melt adhesive. To achieve a strong bond, the tailstock was used for pressure during the curing process.



The bowl blank is shaped and the exterior is sanded.

the correct tenon size, since making the tenon too small would be a disaster. Because the cylinder is side grain like a regular bowl, I use a bowl gouge and finish the tenon with a scraper (Photo 4).

Hollowing the interior

Reverse the cylinder and mount it into a chuck using the new offset tenon. Now it is time to begin the hollowing process. Drill an initial hole with a 1 1/2" (40mm) Forstner bit. This diameter is smaller than the final inside diameter of about 2 1/4" (60mm). The inside bottom will be curved, so I only drill about halfway into

the bowl (Photo 5). Drilling too far into the bowl and/or using a large-diameter bit would result in cutting through the side walls of the curved bottom.

To finish hollowing the interior, I use a template to indicate the interior: a hemispherical bottom, straight sides above that, and a line for the depth that will leave a 1/2" (13mm) bottom thickness (Photo 6). I hollow with a bowl gouge as much as I can, and then use a large round-nose scraper.

This is where wood that leaves a good finish with a scraper is ideal. I spend some time with the scraping on the interior; woodturners aren't the only ones who love to feel the interior of these tactile pieces.

I use the same template for all bowls in this size range in order to get ▶



Roughing out green bowl blanks

An eccentric blank can be roughed-out from green wood and left for several months to dry. Turn a cylinder and shape a large-diameter ½" (13mm)-deep tenon on one end. Shift the centers and turn a smaller tenon, sized to fit your chuck, half the depth of the existing tenon. Reverse the cylinder and mount it into a chuck using the small tenon. Drill the opening and rough-turn the interior of the bowl to leave a wall thickness of about ½" (13mm) as a minimum sidewall thickness.

After several months of drying, place the open end against a sandpaper-covered wooden disk attached to the headstock, using the point of the tailstock in the original center point. True the first tenon. Remove the cylinder

and reposition it using the offset point. True that tenon. Proceed to turn the bowl as described in the article.



This roughed-out blank shows the offset tenons. (The recess in the other end is not shown.) After several months of drying, the blank is remounted and each tenon is trued. The balanced bowl is then made following the steps in the article.

the inside shape to match the eventual outside shape, that is, straight sides and a curved interior bottom. The template is useful for the depth measurement in any size bowl, estimating a ½" (13mm)-thick bottom.

Sand the interior and the top face to at least 320 grit. I tear off small strips of abrasive paper for sanding the inside. For sanding the top, wrap abrasive paper around a sanding block and hold that flat surface onto the flat rim. Run your lathe at a fairly slow speed. This is the last chance to easily sand the inside and top (*Photo 7*).

Reverse and turn the bottom

Remove the bowl from the chuck and mount it into a jam chuck. I like to use wet wood for the jam chuck because I

believe it holds the work better. Make a recess about ½" (13mm) deep that is the same diameter as the outside of your bowl. Place the bowl into the jam chuck and use the tailstock for support (*Photo 8*). Turn the tenon off and start making a hemisphere. Make light cuts with a bowl gouge toward the headstock to create the best curve possible. I sometimes hold a circular template next to the piece to see how I am doing with the shape.

Now comes the key part of the hemisphere-forming process. To get a nearly perfect hemisphere for the bottom, I use a circular scraper made from a hole saw with the teeth ground off, an idea I got from *AW* (vol 15, no 1, p. 37). My version is shown in *Photo 9*. The tool works by contacting the sphere with its entire circular surface, with the inside of the

hole saw doing the scraping. As the work piece spins at a low speed, move the circular scraper back and forth on the toolrest. The high points are removed, resulting in a nearly perfect sphere. Sawdust accumulates on the inside of this scraper (*Photo 10*).

Do not allow any part of the scraper's surface to contact the wood near the headstock side of the line delineating the straight part of the bowl from the curved section. Doing so will quickly begin to reduce the diameter of the bowl above the hemisphere. In practice, I scrape a little, then see the high points as smooth or shiny surfaces, and then make a light cut shear scraping with a bowl gouge. Then I go back to the round scraper.

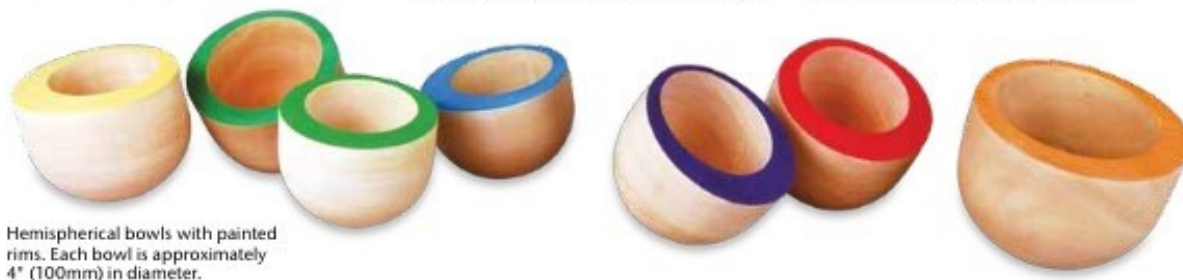
When the surface is satisfactorily hemispherical (*Photo 11*), I sand to 320 grit. I apply one coat of my favorite finish. These days, it is Minwax Wipe-On Poly. I let it soak in a few minutes and wipe off the excess.

To remove the bowl, I release the wooden jam chuck from the scroll chuck, grip the bowl, and whack the jam chuck with a mallet. This works every time.

I let the finish cure overnight and then sand with 800-grit paper and add one or two more coats of finish. After curing, I buff using the Beal buffing system.

I enjoy displaying balanced bowls in groups. Making one seems to lead to two or three more. ■

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Hemispherical bowls with painted rims. Each bowl is approximately 4" (100mm) in diameter.