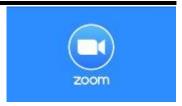
A CALIFORNIA NONPROFIT CORPORATION
LOCAL CHAPTER AAW

February 2022 Volume 26 Issue 2



Glenn Lucas 'Dublin Viking Bowl' February 12th 8:30-12:00



Glenn Lucas has an international reputation for his proficiency at the lathe and his ability to pass on to students the skills and knowledge he has gained. He balances his production of classic bowls turned from native Irish wood (set up in 1995), and some exhibitions with galleries and design-led outlets, and with an extensive teaching program run from his 'Woodturning Study Centre' in rural south-east Ireland.

Glen will be demonstrating the Dublin Viking Bowl.

Glen will make an elegant bowl based on one made in the eleventh century by the Vikings which was recently discovered under the streets of Dublin in Ireland. The intricate closed form of this piece can help to perfect the techniques which are useful in all aspects of turning. In this demo we will take a look at selecting the right tools for the job and then mastering the cuts. From quickly rough shaping a piece to achieving a smooth surface and fluid curves straight from the bowl gouge. Negative Rake scrapers and their benefits will be discussed.



A Viking Age wooden bowl from Fishamble Street, Dublin, it's over 1000 years old. Photo from Irish Archaeology @irarchaeology



Glenn Lucas Creation

A CALIFORNIA NONPROFIT CORPORATION LOCAL CHAPTER AAW

#### **Club Meetings**

#### Club Meetings-

Meetings are held on the 2nd Saturday on each month. Until further notice meeting will be via Zoom (except for July and August). Invitations are posted to all members: guests are welcome by request to: <a href="mailto:membership@bayareawoodturners.org">membership@bayareawoodturners.org</a> who will forward an invitation to the next meeting.

Zoom sessions open at 8:30am. The meeting start time is 9:00am.

See bayareawoodturners.org/ for club information.

#### BAWA Officers Meeting -

The Association's officer meetings are held each month. Contact Steve Griswold at: <a href="mailto:president@bayareawoodturners.org">president@bayareawoodturners.org</a> for more information.

2022 Event Schedule	
Feb 12th	Glenn Lucas
	Dublin Viking Bowl
	8:30am-12:00
March 12th	Jim Echter
	The Sensational Skew!
	8:30-12:00
April 9th	Stuart Batty
May 14th	Phillip Greenwood
June 11th	Michael Mahoney
July 9th	Turn for the Troops
August 13th	Annual Picnic
September 10th	Alan Lacer
October 8th	Alan Straton

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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Secretary Richard Dietrich

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Pro Demonstrator Liaison John Cobb Cobbemail@gmail.com

Staff Photographer

Rick Dietrich

Photographer@bayareawoodturners.org



#### Jim Rodgers January 2022 Demo

Jim Rodgers was our January demonstrator. As is always the case with Jim, he came well prepared with three projects: a rocking bowl, scoop, and small spoon. In each case Jim demonstrated the different skills we can use to improve our woodturning.

In the rocking bowl Jim mounted a square block using only the lathe spindle and tailstock. Jim discussed the challenges when turning a lot of 'air' and showed how to take the light cuts necessary to create a clean cut when turning a bowl on a winged piece. Jim also discussed the advantages of using a vacuum chuck to reversing the bowl and finishing the bottom.

The scoop was another interesting subject. Jim showed the method for setting the depth of the scoop by pre-drilling the hole on the lathe. He walked us through determining the shape of the scoop, and cutting the basic shape on the bandsaw while the wood was still square, allowing for a much safer means of using the bandsaw. The shaping of the outside of the scoop, and the hollowing of the inside using the spindle gouge showed its versatility. Jim also discussed and demonstrated the use of the scraper for cleaning up the inside bottom the scoop.

The final project was a small scoop. Jim walked us through making a perfect sphere using the octagonal method for calculating where to make the cuts and do the rounding in order to create a nice round sphere. Jim discussed the jig he uses to mount the scoop for hollowing. Again, Jim discussed the importance of staying safe, by staying behind the tool rest when the item being turned has parts that are spinning in air. In this particular project the handle of the spoon could cause a serious injury.

As with all of Jim's demonstrations for the club, the demonstration was entertaining and informative. The club is fortunate to have talented members who are willing to share their knowledge to help us to better our turning experience.



Chucking up



Turning a tenon



Turning tenon on bowl



Showing stance



Turning interior of bowl



Setting up vacuum chuck



Tops of rocking bowls



Scoops



Cutting scoop mouth



Hollowing scoop



Two sizes of coffee scoop jig



Turning sphere



Coffee scoop jig



Coffee scoops



Sanding sphere



Secure grip of jig



Drilling coffee scoop



Hollowing coffee scoop

#### The AAW Recognizes BAWA's Beads of Courage efforts!

The American Association of Woodturners, AAW, printed an article in their bimonthly magazine recognizing your contribution to the Beads of Courage program! Here's the text of the article:

"At the beginning of 2021, the Bay Area Woodturner's Association, (BAWA) of Pleasant Hill, California, under the guidance of President Jim Rodgers, initiated a Beads of Courage box-making program. Our club, along with other arts and crafts organizations, operates out of the Pleasant Hill Adult Education Center. Members of another group that meets there, the Diablo Woodworkers, chose to participate, too. All the boxes we make find their way to children undergoing medical treatments, in an effort to provide support for them and their families.

By the end of 2021, about one year into our program, BAWA and Diablo Woodworkers had donated more than fifty boxes to five different hospitals in the Bay Area. Beads of Courage, through a mail-in program, also provides support to children and their families who do not have the opportunity to receive boxes at their current healthcare facility. BAWA members have hand-delivered boxes to children in this program, and, when requested, even created custom boxes with specially requested themes, (such as Spider Man).

BAWA members who have been involved have found great satisfaction in being part of a community of support to families. For the makers, it has added meaning to a craft they already love and now are able to use to make a difference in a child's life. If your club would like to start a program, you can learn more about doing so at the Beads of Courage website, https://beadsofcourage.org/, or by contacting the BAWA Beads of Courage program manager."

Thanks to all of you who have supported the program, and a hearty congratulations, not only for the recognition, but for making a difference! If you'd like to participate by making a box, you can find a link to a PDF explaining how to do so, or you can contact Larry Batti at: <a href="mailto:larrybattiwoodturning@gmail.com">larrybattiwoodturning@gmail.com</a>, (925) 997-9548. It's really very simple and can have a great impact on a child and a family!

Thank you again!



#### 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!!



## Jim Echter "The Incredible Skew" March 12th



Jim is a production turner, instructor, and writer. Jim's woodturning started as a hobby over 45 years ago and evolved into a career seventeen years ago. Jim conducts private instruction at his studio and has taught and demonstrated for over 70 woodturning groups. In 2019, Jim demonstrated at the AAW Symposium in Raleigh and was a featured live demonstrator for the 2020 Woodturners Worldwide Online Symposium where his *Sensational Skew* program received great reviews by the attendees.

Jim's demonstration is The Sensational Skew!

Jim will take the mystery out of how to use the skew so it becomes the sensational tool in your arsenal. Utilizing a combination of images, large scale models and actual demonstrations, the use of the skew will be broken down into very understandable chunks of information. The program will overview skew profiles, edge profiles, sharpening procedures, basic cuts, advanced cuts, and learning exercises. Project ideas will be demonstrated that will help you build confidence with using this sensational tool.













Crew acting as audience!



Camera/Mixer setup



Camera Manager Dave Bentley



VP Jim Campbell assisting



So many cameras



#### **President's Letter**



#### February 2022

Community Outreach . . . It may be an overused phrase, but these days it sure feels more important than ever. And I think outreach can be both internal to a community, and external - reaching out to bring others in. I'd like to mention several outreach initiatives we are currently undertaking, and ask for your input and support on each:

**BAWA flyer** – We are just completing an updated tri-fold flyer that can be handed to folks who may be interested in finding out what woodturning or BAWA is all about. As soon as it is printed we'd like to distribute it as widely as possible - to all woodturning students who attend classes in the studio, at Rockler stores, at BAWA events and demos, etc. If you have any ideas, or contacts where it would make sense to provide BAWA flyers, please contact me or any member of the Board.

New member ambassadors — We would like to boost our welcome and orientation for new members. Hugh Bevan-Thomas sends out a very helpful letter describing our various activities, and wouldn't it be great if each new member were also welcomed by a current member? Just an informal chance to answer questions, provide some tips, make introductions, etc. If you would be willing to act as such an "ambassador" please let me or a Board member know.

*Updated Website* – We are starting work on updating our website, building on all the great content it has and making it even easier to find what you're looking for. If you have things you'd like to see on the BAWA website, please let me know.

On a separate note, I'm happy to say that our new demonstrator lathe, a Robust American Beauty, will be arriving next week. As I've mentioned before, this purchase was made possible in part through two very generous anonymous contributions from BAWA members. We've also got a great crew of volunteers standing by to help remove the OneWay and install the Robust when it arrives, no mean feat when you're dealing with 700 lb lathes . . . Talk about community!

Stay safe and keep on turning, Steve Griswold

#### **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.





Hand-made wood lathe

#### Membership News By Hugh Bevan-Thomas



As of the writing of this note, we have 109 paid up members for this year. This is way shorter than the 147 members that

we had last year. For those of you who have been somewhat tardy in renewing your membership, be warned that you will be taken off the active membership list and will not receive notifications of meetings and other club functions.

THIS HAPPENS THIS MONTH, SO DON'T SAY YOU HAVEN'T BEEN WARNED

In previous newsletters I have explained how to renew your membership:

- A. Renew online using the BAWA website with a credit card
- B. Use your own personal PayPal account to send a cheque to our treasurer
- C. Send a cheque directly to our treasurer and 1584 Webb Lane ,Walnut Creek ,California 94595

For \$30 it is a bargain!

### Tree Article #50 One Day in the Life of By Tony Wolcott

My fiftieth Tree Article allows me to muse about the world of trees and my wanderings through the labyrinth. Many things I find curious in life, and one phenomenon occurs daily. Some people find their lives boring; getting up in the morning is a chore. I am a morning person who likes the change from dark to light. For me getting out in the cool of the morning is just the natural thing to do. It's no wonder that trees and wood have great appeal. So, I thought I would share one day in the life of a consulting arborist.

Like many days, this day had a few set appointments, opportunities to look at trees and discuss what we know and don't know. The bright blue sky brought freezing temperatures on the northside roofs, but the day got warmer with each minute. I was off to

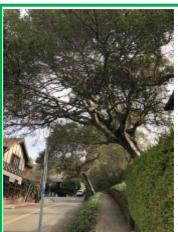


the Oakland Hills to meet with a recently retired couple. They have an orchard of mixed fruit trees. We discussed the annual pruning objectives, but not before we were interrupted by this massive black-winged bird atop their deodar cedar. I looked up simultaneously as the bird's red throat and head came out of its outstretched black wing. I always thought turkey vultures were one ugly bird, but one has to admit—their size is impressive. This turkey flew off to join his party of circling cohorts, perhaps an ominous sign.

My friends wanted to show me the tree we discussed six months ago. This Monterey pine was a big tree looming over their house and threatening their neighbor's house and garage. A recent installation of a circular driveway had cut through large roots all the way around the tree. My recommendation was to remove the tree and sleep a little easier. Other options did little to mitigate the risk. The tree is pictured on the right

The peace sign's birthplace comes from the British Empire and its anti-nuclear activists. The vertical line stands for the letter 'd' in flag semaphore signals. The two downward lines represent the letter 'n.' The peace sign is a nuclear disarmament sign – the CND symbol or Campaign for Nuclear Disarmament. The British activists in 1958 came up with the symbol, and I wholeheartedly agree with the sentiment. And I like the rendering of the peace symbol found on the inside of a Monterey pine.





Next was a scheduled pruning of oak trees in the Berkeley Hills below Grizzley Peak. I was checking in on the tree service doing the work; the owner-operator was a good friend and ran an excellent, ecologically sound company. He phoned on my way to the job site; his truck with chipper was down, and he asked me to set up the crew with instructions, and he would get there in about an hour. The job was not straightforward as three coast live oaks hung over a busy street. Trucks were pruning the oaks in an unsatisfactory manner. We needed to raise the oaks by removing small branches hanging down or reducing the branch ends: this required traffic control, ground workers, and two climbers in the trees.

The above photo shows the three oaks before pruning. Safety is always the primary concern, and the street with two bends posed extra care. The area was hit hard by the recent heavy rains and winds. Three tree failures happened within this block. While we waited for the traffic control and the chipper to arrive, I had a chance to look at the tree failures—a decayed black acacia (*Acacia melanoxylon*), a pittosporum cheesewood (*Pittosporum undulatum*), and a spectacular coast live oak (*Quercus agrifolia*).

Although it is hard to pinpoint the significant causes of tree failures, there are several possible factors. The oak had its root system disturbed by terraced landscaping with retaining walls, concrete walkways, and newer plantings. (Photo below left) The root system shows signs of *Armillaria mellea* oak root rot, and the above photo reveals the extent of decay in the upper stem. As much as I like oak wood for its ray presentation, this particular tree has wandering decay in the main trunk. (Photo below right)





My last stop of the day was a familiar client with a bit of pruning to do in his yard. I have done this place for the last three years, and it is rewarding to see the pruning reaction and how the trees and plants are coming along. I often talk, measure, photograph, and write as a consultant. Sometimes you need a job that requires physical labor to sleep well at night. This client has several Japanese maples, and this year there was no evidence of verticillium wilt killing off branches. The client is in a wheelchair and has been for many years. He zips around in this souped-up machine, keeping ahead of me. He picks up the branches, cuts them up, and tosses them into the green can. I admire someone that resourceful. But today, he was not happy. He has a new neighbor to the west.

The neighbor's front yard has a majestic valley oak, a specimen for the area. However, the neighbor's first action was to cut off large limbs brutally to keep the branches from falling on his house and family. This neighbor had rented a scissor lift to lop off the large branches. The Best Management practices do not include this treatment on a tree. These significant cuts open up the wood to decay, and eventually, those limbs fail despite the intent of the pruning.

My client and I spoke in hushed tones, and I dared not take any photos, but I dug up another valley oak photo with similar heading cuts.

My day was done, and as I headed back home, I thought about the variety of trees and people, those whom I interacted with; it's good to love the work you do. I consider myself lucky to be in this moment.





AAW Annual International Woodturning Symposium Chattanooga, Tennessee June 23 - 26, 2022

#### Virtual Show & Tell January

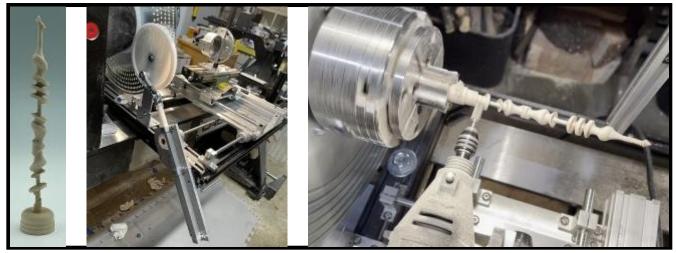
#### Michael Hackett



Carl Mercer



Jean-Louis Meynier



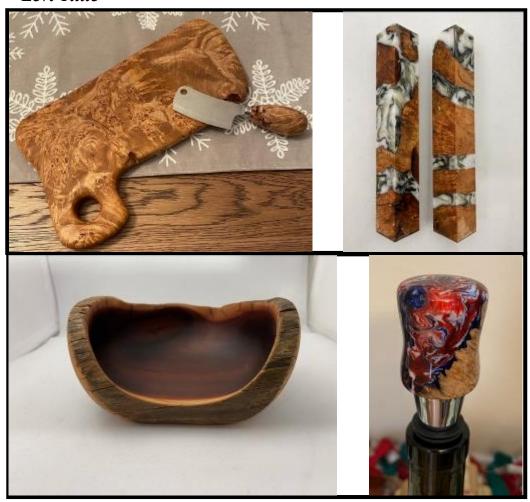
#### Virtual Show & Tell January

Gary Bingham Bob Bean





Levi Tillie



## How to **Nood:**A Beginner's Guide

By Dr. Seri Robinson

ood and water have a very complex relationship, and wood drying deals with every aspect of that relationship. Below is an introduction into how drying affects wood and tips for how to dry wood so it doesn't crack.

#### Types of Water in Wood

Water exists in two states in wood, bound and free. Bound water is water that is in the cell walls, bound to the -OH groups that dangle from the cellulose (cellulose is a polymer of glucose and glucose is a sugar... basically water binds to some of the sugars in wood). Water always binds first to the cell wall before filling up the inside of the cells. The water in the cells is called free water, and it is this type of water that is first lost from the cell upon drying.

So, there are two types of water, bound and free. Let's start with a completely dry cell. A cell with 0% moisture content (MC) has no water, bound or free. Now we move our wood cell out of the oven in which it was drying. BOOM, it hits the air. There is moisture in the air (called relative humidity, or RH). The wood INSTANTLY starts absorbing moisture from the air.

Water binds to the -OH groups. This fills the cell wall and the cell expands to accommodate the water. Somewhere right around 30% MC, the cell walls of most wood species become completely saturated with water and can't take any more. It is at this point that the cell lumen, the inside space of the cell (think the open, inside area of a straw), begins to fill with water.

But this water, the water that fills the cell lumens, doesn't come from the air. It takes liquid water to fill up a cell lumen, so this water would have to come from something like rain, water-saturated ground, etc. And the RH of the air has to be quite heavy, around 80%, to saturate a cell wall to 30% MC. With me so far? Yes? Good.

#### Wood Drying, Stage I

You have cut down a tree, or taken a fallen log from the forest floor. Said log contains both types of water, and is well above 30% MC (this is a magic number, this 30%. Remember that). You take the log home and stick it in your garage. Months pass. The wood doesn't crack, but it is still drying. You are a genius! You have magically managed to get your wood to stabilize without doing a thing. You are so proud of yourself.

But wait. Another month passes. Now your log has split down the middle and warped beyond recognition. What happened?



Wood Drying, Stage 1



That prized log is now yours.

What happened is this. Wood cells shrink and swell only within the cell wall, Once the cell wall is saturated (around 30% MC), the inside of the cell just fills with liquid water, but the cell can't get any bigger because the wall itself is already as big as it can get. Think of a balloon inflated to capacity. You could replace the air in the balloon with water but it would never get any bigger, because the rubber can only get so big. It is the same with wood.

When you brought your wood home, it had an MC higher than 30%. Maybe 50%, maybe 110% (MC is a funny thing; it can go above 100% because of how the math works). A change from 50% to 45% does not change the dimensions of the wood.

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Drying rack for bowls

So water is rapidly evaporating from the surface of the wood, but the cells are staying the same size.

#### Wood Drying, Stage II

The time of reckoning is at hand. The second your wood hits the fiber saturation point (our magical 30%), all the free water is gone. All that is left is the bound water that is stretching the cell walls. As the bound water evaporates, the wood cell walls start to shrink. This makes the wood shrink as a whole.

Unfortunately for everyone who works with wood, water is lost first from the outside of the wood. In order for the inside to dry, water must move from the inside to the outside to evaporate. Wood likes to have an even MC throughout the piece, so it will constantly move water to try to equilibrate both with itself and the surrounding air.

But what does that mean if you have cells shrinking on the outside, but cells still swollen on the inside? Wrap your hands around a hot dog and give it a good squeeze. Squeeze too hard and the hot dog smashes. The same thing can happen with wood.

#### Wood Drying, Stage III

Enormous pressure has built up on the inside of the wood as the shell has dried and is compressing the inside. Cells are being crushed. This stage is called 'case hardening', and is a classic error phase of the beginning woodworker. Those scanning moisture readers only read moisture at the surface, so many people purchase them, scan their wood, then mistakenly think it is dry. Remember, just because wood is dry to the touch doesn't mean it is actually dry! It may just be dry on the surface.

The good news is, water from the inside is moving slowly to the surface. This will re-swell some of the outside cells and relieve some of that pressure. If you followed a proper kiln schedule (these are available online), you dried your wood nice and slowly—slow enough to allow moisture to move out from the center before the cells on the outside completely dried. If so, you probably didn't honeycomb your wood, which is what those internal separations and cracks are called.

#### Wood Drying, Stage IV

An equilibrium is reached between the MC inside the wood and in the outer shell. Pressure begins to release from the inside. Some formed cracks may close at this point, and those that do close are not likely to reopen, but will be points of decreased strength in the finished piece.

#### Wood Drying, Stage V

The remaining extra moisture moves from the inside of the wood to the shell. The shell is swollen again but the inside is dry. In this stage, the pressure is reversed, with the inside of the wood trying to shrink but the outside being swollen and not allowing the shrinkage. This is the final (and most devastating) cracking stage. With the tension from the inside, the wood literally tears itself apart as it tries to shrink internally, and pulls against the bloated shell.

#### Wood Drying, Stage VI

At last, final equilibrium is reached. All of the wood is at the same MC, and is equilibrated with the RH of the surrounding air. As long as the RH of the air doesn't change, the wood will not change any more, either.

#### How to Avoid all the Cracking

Cracking happens while wood dries due to the forces that build up in wood as the drying stages progress. A kiln schedule is a drying schedule, specific for each wood species that gives heat and relative humidity conditions on an hour to hour basis over several weeks. Some hours the heat may be higher or lower, dehumidifiers may run or sprinklers may run (sprinkling the top of the wood can help prevent case hardening). The kiln schedule's entire purpose is to guide you through drying without getting cracks. The schedules have been well researched and, if followed properly for each wood species, completely prevent cracking. Some, like those for sugar maple, can also affect what color the wood changes to when drying. For sugar maple, a whiter color can be achieved with one method of drying, and a richer brown color with another.

Air drying is a terrible method to dry wood as it does nothing to help regulate evaporation of water from the wood. If you are serious about working with green wood on a semi-production scale, it is worth your time to set up a kiln with a space heater and some sprinklers. Kiln plans and schedules can be downloaded for free from the internet.

Dr. Seri Robinson holds the Gene D. Knudson Forestry Chair, and is an assistant professor of wood anatomy in the Department of Wood Science & Engineering at Oregon State University. Her primary research areas are in spalted wood and wood sculpture, and she is heavily invested in helping woodturners better understand the science of their material. She created and runs the woodturning program at Oregon State University, and has written the quintessential resource for spalted wood: Spalted Wood. The History, Science, and Art of a Unique Material, You can learn more about Dr. Robinson, her research, and her programs at http://www. northernspalting.com

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# Singing the Green Wood to a Piece of Firewood. Singing the Wood to a Piece of Firewood.

o a woodturner, there is nothing more exhilarating and satisfying than turning green wood. Those long, flowing ribbons of wood hurtling through the air are as exciting to watch as fireworks on the Fourth of July! But, depending on where you live in this great world of ours, those fireworks may soon turn to firewood. In no time at all, huge cracks and checks begin to appear, the wood begins to collect mold and mildew (and you wanted to save that nice unblemished piece for pyrography), and that big beautiful bowl you were envisioning has now turned into three tool handles, if you are

You're now singing the Green Wood Blues. And, depending upon which part of the world you call home, the blues can arrive really quickly. While some of you may have a week or two before you start singing, the dreaded day will come when "snap, crackle, ruined" visits your green wood.

FUNdamentals feels your pain. Expert turners from across the country have been asked what they do, based on their part of the world, to protect green logs from cracking and what they do to prevent turned green wood from checking. Following are some of their solutions.

#### **BARBARA DILL**

- Virginia
- Temperature: 80s in summer, a low of 30s in winter
- · Humidity: High year-round
- Rainfall: 43-44 inches

I have always preferred using green wood. I turn a bowl to the thickness that I want it to be and then either put it in a paper bag for a few months, or I put it in the microwave at the highest setting and slowly increase the time and frequency of heating it until it is dry.

I also use green wood for my multiaxis projects. They usually don't check if they are small projects.

The larger forms do check and that is fine with me. The joy of using green wood is worth it.

Barbara Dill is known for her multiaxis turning, and she regularly uses green wood for turning them.



woodtuner.org 3



#### **MOLLY WINTON**

- · Washington (Western)
- Temperature: Summer highs in the 70s, winter lows in the 30s
- Humidity: High, ranging from mid- 60% to mid-80%
- · Rainfall: 34 inches

Depending upon the general stability of local woods, sealing endgrain with Anchorseal or wax for blanks works well. Storing them where they get even ventilation and out of direct sunlight works effectively.

If bowls and vessels are rough turned, they can be stored in a similar environment without sealing them. Sealing rough turned pieces can lead to mildew and mold.

To prevent cracking in fairly unstable wood (madrone, fruit woods), it is recommended that you boil the rough turnings immediately.

Boiling the wood reduces the amount of moisture in the cell walls and works on most woods, particularly those with irregular grain patterns, knots, or wood close to the pith. The boiling process involves covering the rough turnings with water (such as in a

4

large stockpot) and bringing them to a rolling boil. Allow them to boil for a minimum of one hour and up to three hours. When the time is up, turn off the heat and allow the pieces to cool while still in the water, then store them as described previously for stable woods.

Wrapping the cooled pieces in paper bags is also a good option. You will find some color fading but it does not go much below 1/16 in.

Molly Winton turns bowls and platters that she uses for further enhancement

#### KEITH GOTSCHALL

- Colorado
- Temperature: Summer highs reach 90, winter lows down to -20
- Humidity: 10% to 15% in summer, may reach 80% in winter
- Rainfall: 9- 1/2 inches

It's so dry that a green turned bowl will crack by morning if not treated right away.

Rough turn the wall thickness to 10% of the diameter, and then apply green wood sealer to the whole blank. Stack the bowls in a pile and air dry them for six months or longer.

An option is to put sealed bowls in a de-humidification kiln and slowly extract the moisture over 6-7 weeks. Several designs for these kilns exist, including using an old refrigerator or freezer unit with holes drilled in the bottom and top. An incandescent light bulb is placed in the bottom. The holes will allow the air to draw up and through the bowls, spaced slightly apart.

Sometimes, I finish turn the green bowl and blowtorch it to remove surface water. Sand the bowl after torching but leave the foot with tenon intact. Turn the bowl upside down on a concrete floor to dry for



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a week or more then re-turn it to remove the foot.

Keith Gotschall is known for both his furniture and his woodturnings.

#### DAVID HOLLEY

- · Texas (Central)
- Temperature: 90s-100 in summer, lows of 20s-30s in winter
- Humidity: 40%-50%
- · Rainfall: 25-30 inches

To keep a green turned bowl or platter from warping, put it in a bucket with a solution of 50:50 water and dish washing liquid (don't use the blue or green soap as it will discolor the wood). The soap is a surfactant, and it works by dispersing and removing the moisture from the wood cells, thereby conditioning and stabilizing. Do not remove the tenon from the bottom. Leave the turning, which will need to be weighted down, for 2-4 days. Remove it from the liquid and let it dry thoroughly



for 3-4 days, longer if needed. Return the piece to the lathe and sand it, then remove the tenon and finish the bottom. The bowl or platter will not warp or check.

After twenty years, David's bowl (pictured to the lower left) has never warped or cracked after his 50:50 treatment.

For more information about the treatment of green wood, see "The Sawmill Project," by Joshua Friend, American Woodturner, April 2010. (You will need to login as a member to the AAW website to access this article.) You can find the average moisture content for your area on the Forest Products Laboratory website, at: https://www.fpl.fs.fed.us/

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