# Tuckessee Turners

### Woodturners from North Central TN and South Central Kentucky

We provide an environment to help beginning woodturners get started with minimal start up costs

### December 1013 Newsletter

### Presidents Message....

Hi y'all,

I trust you all had a merry Christmas. Well, another year almost over and it's time to start looking forward to the new and better new year. Hope you got lots of woodturning tools for Christmas to enhance your turning skills and pleasure.

We have an article coming out in the Clarksville Family Magazine about the club in January - please pick up a copy. I'll try to get us in their monthly calendar of events with the dates and times of the meetings.

Our first chance for exposure will be the Irish festival in Erin the 15th of March. Then, the 1st and 3rd Saturdays of the month at the marketplace downtown Clarksville - starting TBA.

If there are any web gurus out there who want to take over the clubs' website, please raise your hand!

Looking forward to the January meeting on the 6th. See you all there. Have a safe New Years Eve. Bring a friend and something to show to the Jan 6<sup>th</sup>, Monday night meeting.

Jon Haigh President Contact at 931 647 3328 or jonbh@charter.net

P.S. Mike Patrick will demonstrate at the Monday meeting. Mike always gives an interesting and educational presentation. Don't miss it.

#### December Meeting....

The December meeting kicked off with a huge crowd and a new President...Jon Haigh. Jon took over as if he had been doing this forever, and with the help of our former President Bob Forsythe, presided over a great meeting.

Refreshments were provided and members brought wood to swap. Many members participated and those who brought wood left with a different wood. It is always exciting, anticipating what you will receive in return for the wood you brought. All the pieces I observed was quality wood that members would be lucky to have.

The Saturday Turn-in was cancelled, so the meeting was our last gathering for the year.

The year 2013 is history now and what a history it was. Our club continues to improve and we look forward, with the leadership of Jon, to a continuation of this rapid growth with the use of the Franklin Street Follies, Market Place, November Crafts Fair at Liberty Park, Erin Festival, etc

### Preventing stress cracks in your work...

We all are occasionally upset by a crack that develops, either while we turn, or after it's turned. Or we watch as the bowl warps and distorts. How to prevent this will always be a problem to some extent. However, we can reduce this frustration with the procedures described in at article on pages 8 through 12.

#### First time visitor...



Tim Terry 1555 Southside Road Southside, TN 37171 timmyjayterry1@yahoo.com

#### Annual Dues...

Membership runs from January through December each year, so now is the time to renew your membership if you have not done so.

Charles Wall will be accepting membership dues at the meeting Monday night. Dues are \$15 individual and \$20 dollars family.

Charles is planning to print an updated membership list. Those not paid by February 15<sup>th</sup> will not be included in the updated list.

## Take Advantage of... The Library.....

Billy Dickens, our Librarian, invites you to check out one of the many learning tools...books, videos, etc.

If you have checked anything out lately, be sure to check the return date. If more time is needed, give Billy a call at 931 645 9210 or email him at billy.dickens@lildickens.com

### Activity for 2014

January 6 <sup>th</sup>	Monthly Meeting
January 25 <sup>th</sup>	Turn-in
February 3 <sup>rd</sup>	Monthly Meeting
February 22 <sup>nd</sup>	Turn-in
March 3 <sup>rd</sup>	Monthly Meeting
March 22 <sup>nd</sup>	Turn-in
April 7 <sup>th</sup>	Monthly Meeting

April 26<sup>th</sup> Turn-in

May 5<sup>th</sup> Monthly Meeting

May 24<sup>th</sup> Turn-in

June 2<sup>nd</sup> Monthly Meeting

June 28<sup>th</sup> Turn-in

#### **Looking for Tips**

If you have a **tip** you would share with members, about something that works for you that saves you time, money, energy, or makes turning safer and more enjoyable please share it with us.

email to jmason@newwavecomm.net

Hope all of you are big **tippers**, but we don't **tip** for **Tips**.

#### Anonymous Tip...

If you cut a limb or log the length you plan to use, it will be unusable later due to checks. Wood, as it dries, loses moisture. A limb or log will dry from the ends. Consequently it shrinks as it dries and checks...cracks that go as deep as 2 to 3 inches.

So, to get the amount needed free of cracks/checks, cut the log 4 to 6 inches longer that you think you will need.

I measure the diameter of the long and add 4 to 6 inches, and cut it that length. Hope this is helpful

Anonymous

### **Instant Gallery**

#### (Show 'n Tell)

**Charles Maddux** 

#### **Charles Maddux**



15 inch Ash Salad Bowl

11 inch Ash Salad Bowl

#### **Charles Maddux**



6 inch cherry bowl

Jon Haigh



Cherry Pedestal Cake Stand

#### **Charles Maddux**



11 inch Ash Salad Bowl

### Jon Haigh



Cherry Burl Bowl

### **Bob Forsythe**



Hickory Salad Bowl

### **Steve Sabanash**



10 inch Red Oak Salad Bowl

#### **Steve Sabanash**



11 inch Cherry Salad Bowl

#### **Steve Sabanash**



10 inch Cherry Ornamental Bowl

### Steve Sabanash



12 inch Nutcracker Bowl Set

### **Max Harris**



9 X 6 Cherry Salad Bowl

### **Mike Patrick**



Wood from Brazil

### Mike Patrick



Wood from Brazil

### **Mike Patrick**



Wood from Brazil

### Mike Patrick



Wood from Brazil

### Jim Mason



Natural Edge Ash Bowl

### Jim Mason



Magnolia Natural Edge Vase

#### **Norbert Comtois**



Red oak Crotch

#### **Norbert Comtois**



Red oak Burl

We have included the following information on the Nashville Club's annual symposium for your consideration. The prices listed include a discount that is good until 12/31.

# Tennessee Association of Woodturners 26th ANNUAL SYMPOSIUM

Friday, January 31 & Saturday, February 1, 2014

The Tennessee Association of Woodturners (TAW) will be presenting their 26<sup>th</sup> Annual Symposium on Friday, January 31st and Saturday, February 1st, 2014. The Symposium will be held at the Franklin Marriott Cool Springs, 700 Cool Springs Boulevard in Franklin, TN. The 2014 Symposium features some of the worlds' leading woodturners including: Trent Bosch, Barbara Dill, Doug Fisher and Kurt Hertzog.

#### 2014 Symposium Detail

<u>Symposium Schedule</u> - a demonstration schedule for the two days of the Symposium will be added here in the near future.

<u>Demonstration Descriptions</u> - a detailed description of each of the demonstrations will be added here in the near future.

<u>Instant Gallery</u> - We invite every Symposium participant to display up to four pieces of their work for all others to enjoy during the Symposium.

<u>Peoples Choice Award</u> - Each year every participant can enter up to one piece, which Page 6

is entirely their own work, into the Peoples Choice Award. Vendors and demonstrators are not eligible for the People's Choice Award. No collaborative efforts please. All participants at the Symposium will be asked to vote and select the best piece for an award.

#### **Banquet and Auction**

**Banquet** - Prior to our auction on Saturday evening there will be a banquet at the Marriott Hotel, which is included in the price of the registration. Door prizes will be given away.

Auction - All proceeds from the auction will support continuing education and

training in woodturning through our demonstrator and scholarship programs. Highlights of the auction include wood turnings, wood and tools donated by our demonstrators and vendors. We encourage all Symposium participants to donate a piece to the auction to benefit the education funds and our community outreach programs.

#### Registration

Full Two Day Symposium	\$145*
One Day Only	90*
Spouse	75*
Youth Under 18	35*
Banquet/Auction Only	35

### **Lodging and Reservations**

### Franklin Marriott Cool Springs 700 Cool Springs Boulevard, Franklin, TN 37607

To reserve a room either call 888-403-6772 and ask for the special accommodation rate of \$109 per night (use discount code TAWTAWA) for the Symposium, or use the Marriott website by clicking <a href="https://hee.neen.night

<u>Directions</u> - - click <u>here</u> for a map that details where the Franklin Marriott Cool Springs is located. We recommend that you reserve your room early as there are a limited number of rooms at this rate. The hotel will sell out this weekend.

#### **Questions?**

If you have any questions about the Symposium, either send an email to tawsymposium@aol.com or call Jeff Brockett at 615-973-3336.

#### Wood Central

#### **ARTICLES & REVIEWS**

Alcohol soaking method for drying bowls

#### by Dave Smith

#### **Background:**

Drying roughed turned bowls has always been a challenge for wood turners. You need to balance the desire to finish a piece as soon as possible with the inherent tendency of wood to warp and split when dried too quickly. Wood turners have employed various methods to maximize the drying speed while minimizing the degradation of the wooden shape being created. Over time each method has collected its own supporters and detractors with respect to the relative effectiveness of the process.

Criteria for a good drying process include ease of use, cost, and consistency of results. A process that is difficult to use, even though it produces good results, will garner few adherents. Likewise, an expensive protocol may appeal to a commercial turner who can expect to recoup the investment but it may be cost prohibitive for the average wood turner. Consistent results without labor intensive monitoring or manipulations are a major benefit of any method.

The most common method of drying wood bowls is placing them in a paper grocery bag. The theory is that the permeable paper produces a micro climate around the bowl. The bowl dries slowly with a small differential moisture gradient across the bowl sides. This method works well but it is slow.

Boiling can improve the stability of the wood by rupturing the cells, allowing moisture to more readily migrate to the surface and evaporate. Boiling is time and labor intensive, consuming requiring considerable space for a large pot and heat source. Since most people don't want to boil bowls in the kitchen, it is necessary to set up some way to boil outdoors which can be a big drawback in cooler climates during the winter months. Boiling can also be dangerous. A good friend of mine was severely burned when a plate blank wedged in a boiling pot of water, sealed the pot and led to a steam explosion.

Soap soaking has gained popularity in recent years. A bowl soaked in a soap solution is supposed to be easier to turn because of the lubricating action of the soap. Bowls are said to dry faster and crack less after soaking but some people report that there is still a fair amount of distortion of the finished piece.

It was my experience with soap soaking that led me to the alcohol soaking procedure I use today. When I researched soap soaking and read the discussions on wood working forums, the consensus was that it was the surfactant in soap that allowed the wood to dry faster.

Researching the MSDS (material safety data sheets) for several commonly used soaps revealed that the surfactants were listed as being alcohols. I reasoned that using alcohol for a soaking solution might be a simpler method. The most readily available alcohol is denatured alcohol found in the paint section of any hardware store. A gallon of denatured alcohol costs from 10 to 12 dollars.

A search on the internet noted several instances of alcohol soaking of archeological artifacts to displace water in a complicated protocol for stabilizing and preserving historical wood pieces. Alcohol soaking is used as the

first step in of a process to replace water in the wood with a stable inert binder that will maintain the shape of the artifact and prevent further degradation. The fact that alcohol is used to displace water in archeological artifacts suggests that it might also work to displace water in green wood thus speeding up the drying process.

My testing involved a large variety of wood species. In each case, the results have been consistently good. Types of wood included some traditionally hard to dry woods such as apple, plum, cherry and mulberry.

The test consisted of turning two similarly sized bows from the same type wood. One bowl from each sample was soaked in alcohol then both were dried in the same manner. Several methods of drying were used from the most conservative, a paper bag, to the most radical of placing the bowls uncovered on a wire rack in my heated, dehumidified shop. I recorded the weight, date and time when the bowl was set aside for drying and then recorded the weight daily when possible. After the bowl stopped losing weight it was considered dry or at equilibrium with the surroundings. The data showed that small thin (1/2 inch thick walls) bowls would reach equilibrium in 4 to 5 days. Using this data, I developed a process that was quick and consistently yielded usable bowls.



Here is a set of roughed out apple bowls that were cored from the same block. After more than a year they are still in good condition and ready to turn when I get a chance.

#### The Process:

Bowls are roughed out to 1/2 inch wall thickness for pieces less than 8" in diameter. Over 8" in diameter, I leave a wall thickness of 5/8 to 3/4 inches. Since my lathe is limited to 12 inches, I have not tested bowls larger than that for optimum wall thickness. I often turn utility pieces with a finished wall thickness of a quarter to half an inch. In these cases the roughed out

wall thickness needs to be thick enough to allow for distortion. No drying method will completely prevent movement of the wood.

Once the bowl is roughed out it is submerged in denatured alcohol for at least 2 hours. Larger, thicker bowls need to soak longer to ensure good penetration of the alcohol. Longer soaking time does not appear to damage the wood.





Remove the blank from the alcohol and let it air dry for about an hour to dry the surface.



Now wrap the outside of the bowl in heavy paper such as a grocery bag. Secure the paper with a couple of wraps of masking tape around the rim. Fold the paper over the rim, trim off the excess, and place the bowl upside down on a rack to dry. If the bowl set on the foot it may not rest evenly due to the paper and the air may not circulate as well. The inside of the bowl needs to be exposed to air.

The reason for wrapping the outside only is the theory that it will create a compressive stress on the bowl by drying the inside quicker than the outside. As the inside dries it shrinks which pulls on the outside causing it to compress. This compressive force minimizes cracking during the drying process. Thinner walls yields less distortion and fewer cracks by decreasing the maximum stress developed between the inside and the outside.

The alcohol I use for soaking bowls is denatured ethanol alcohol, straight from the can. I do not recommend methanol due to health and safety concerns. Although I did successfully test some bowls in isopropyl alcohol I did not like the smell. Isopropyl is not readily available in concentrations greater than 70% while denatured ethanol normally is 95%. Alcohol is added to a container as needed to cover pieces. During soaking, some alcohol will be absorbed, so a small amount will be lost when each bowl is removed and must be replaced with fresh alcohol. Because of this I have not worried about the dilution of the solution over time. The results have been consistent for bowls soaked in fresh alcohol and those soaked in solution used many times.

One concern was the possibility that alcohol used to soak dark wood would become a dye and discolor lighter colored wood subsequently soaked in the solution. There has been no indication of this happening.



The solution does collect wood dust and other debris over a period of time, so I strain the solution when transferring between containers. A kitchen strainer place across a container with a paper towel filter is sufficient to remover the big hunks.

Containers used for storing soaking alcohol should be non metallic. Alcohol is about 95% alcohol and 5% water when purchased. As bowls are soaked in it, the moisture content of the solution will increase, which, along with other impurities leached from the wood will attack metal containers.

I use plastic ice cream containers for soaking bowls and storing used alcohol. A one gallon container will accommodate a bowl 8" in diameter by 5" tall. A two gallon ice cream container will hold a turning 8 1/4" in diameter and nearly 10 inches tall.

For larger bowls, a 13qt stainless steel bowl will accommodate 13" diameter bowls that are less than 6" from the rim to the bottom of the foot.





To cover a large bowl, place a sheet of heavy plastic film over the steel bowl and secure it by wrapping the rim with clear packing tape. If you stretch the tape, the cover can be removed and replaced as needed while providing a reasonably good seal.

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Still larger bowls can be placed in a heavy plastic bag and then nested into a pile of shaving to conform to the bottom of the bowl and limit the amount of alcohol needed to cover the bottom. The inside of the bowl can also be filled to reduce the volume of alcohol needed to completely cover the bowl. With a little bit of ingenuity the amount of alcohol required to process large bowls can be held to a reasonable quantity.

#### **Other Trials:**

In order to verify the results I had obtained with alcohol soaking, I asked several other tuners to try it. I wanted to get a cross section of turners with different experiences and specialties. Some of those who provided data included Bill Grumbine, Dominic Greco, Mark Kauder, and Jennifer Shirley.

Mark Kauder has used the method for 3 bowls, two from box elder and one from sycamore. He bought a slab of freshly cut Ambrosia Sycamore, 4" thick and not sealed. He cut three 16" diameter blanks from it, roughed them out, then used the alcohol soaking method on one of them while completely covering the other two with Anchorseal. When he later pulled them out, the Alcohol Soaked on seemed dry, and had warped only about 1/2" across the grain. When he turned it, it was dry, and has not moved since. The two Anchorsealed ones had both warped/shrunk 1" across the grain and had "Potato chipped" or cupped about 1/2". After chucking them up and getting them round again, they still continued to move. Mark reports he will use the alcohol soaking method when he turns solid Wood.

Dominic Greco has completed more than a dozen pieces using the alcohol soaking process. He has used the process on many types of wood including; Box Elder, Norway Maple, Osage Orange, Cherry, Chinese Elm, and Apple. When asked what the worst problem was Dominic responded, "The piece of Osage Orange cracked during drying, but I believe this was a crack that was present in the blank, and not a direct result of drying". Dominic uses a moisture meter to determine when a bowl has completed drying. After 2 weeks he reports that his pieces are at a moisture content of 6%. None of his finished pieces have distorted as of the writing of this article, and Dominic reported that it is now the only method he uses for drying bowls.

Bill Grumbine used the alcohol soaking method in late 2003 to fill Christmas orders he received during a Thanksgiving artist show. Bill has been an enthusiastic supporter of the method.

Jennifer Shirley soaked one walnut bowl before reading the fine print as, she calls it, and left it in the alcohol for four days. When she removed it, she simply left it on a shelf exposed to air. Four months later the bowl exhibited no problems other than the normal out of round when she finished turning it.

#### **Conclusions:**

Although I collected data in a consistent manor and attempted to control variables, this is not a strict scientific study. The study did not verify my theory of why the process works. The study does show that soaking green roughed out bowls in alcohol does reduce the time necessary to bring them to equilibrium with their surroundings. Wrapping the outside of a bowl reduces distortion and checking. Testing by other wood tuners has verified that the protocol works consistently. The process is simple and relatively fast. The expense of denatured alcohol is minimal compared to the savings in reduced bowl losses, but the biggest saving is time. Using the alcohol soak method reduces the drying time for roughed out bowls from months to weeks.

... Dave Smith

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The world of woodturning!...should I enter?

Do I use a face plate or a drive center?

What have I turned, a hollow vessel, a bowl, or a vase?

Should I finish it with oil or water base.

When finish is applied, my talent has been expressed. But look at those sand marks...oh! I get so depressed. Had I not solved that problem with sandpaper? I thought sandpaper would even alter a taper.

I watched experienced turners, and gee! It's the tool I am using...that's plain to see. I bit the bullet and now I am so proud. I purchased a ½ inch bowl gouge.

I'll make a statement that is explicit With this gouge I will not have to sand it. The new gouge cut easily, but only for awhile. Perhaps I changed my cutting style.

I attended a turn-in and my hopes were darkened. They told me my gouge was not properly sharpened. One member sharpened it and for over an hour I pushed that sucker into wood with much less power.

I was advised to purchase a tool grinder. With a few dollars, I think I can find her. Slow or high speed, 6 or 8 inch, pink wheel, gray, or white? With \$200 for grinder, jigs, & fixtures, I solved that plight.

Seems everyone is suggesting another tool.

For knowledge on tools there should be a school.

Chucks!...four jaw, jacobs, jamb, vacuum...it's not funny.

Now we are talking serious money

Face plate, drive center, tail center, or live center? What is this world of wood turning I just entered? Chisels...gouges, scrapers, Carbon or High Speed? Is this just a wish list, or is it an urgent need?

Sanders, carvers, forstner bits.

Decisions that are giving me fits.

Bigger lathe, band saw, and chain saw,

When I priced those tools I dropped a jaw.

Do I chuck with a Tennon or a mortice? You know these decisions affect all of us. Cracks, holes, voids...do we fill or accent? To solve this problem, is it worth the time spent?

Sanding sealer, wipe on poly, or friction polish? These are decisions I'd like to abolish. Do I dry it fast or slow? How am I supposed to know?

Spalting is not easy, I am here to say. Because spalting is the first stages of decay. Every time I tried, I seem to have forgotten, And by the time I check it, it's rotten.

I had cracks, warp, & oval shapes...what the heck? And when I dried the wood, the problem was check. It was CA, (super glue), saw dust, and accelerator That I soon learned would fill those craters.

I guess you might say that I am possessed With a hobby, to which I have become Obsessed. One of the reasons, I have observed Is my curiosity with that steep learning curve.

At first, I thought it was the lack of tools.

That prevented the perfection I pursued.

I soon learned that it was experience that I needed.

And when I obtained it, my expectations, I exceeded.

Sure it was difficult, but I faced my fears. I emphatically say it was worth the sweat and the tears. And I see the worth in its having taken years When I receive those occasional cheers.

By Jim Mason Hopkinsville, Kentucky July 28, 2011 American Association of Woodturners www.woodturner.org

**Tennessee Association of Woodturners**Nashville, TN <u>www.tnwoodturners.org</u>

Duck River Woodturners Club,
Columbia, TN www.duckriverwoodturners.com

Tri-State Woodturners Club
Chattanooga, TN www.tristatewoodturners.org

Blue Grass Area Woodturners
Lexington, KY bluegrassareawoodturners.org

Louisville Area Woodturners
Louisville, KY louisvilleareawoodturners.org

Cumberland Woodturners
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Smokey Mountain Woodturners Knoxville, TN smokeymountainwoodturners.org

West Tennessee Woodturners

Jackson, TN tristatewoodturners.com

**Tuckessee Woodturners Board Officers, Directors & Chairmen** 

**President** - Jon Haigh 931 647 3328 or jonbh@charter.net

Vice President – Steve Sabinash 931 221 0603 reupsgm@gmail.com

Secretary - Charles Wall 931 624 3716 wallc@apsu.edu

**Treasurer** - Bruce Hensley- 931 553 8198 hensley144@hotmail.com

Social and Publicity Secretary
Charles Putnam – 931 362 3669
<a href="mailto:charlesrjoan@bellsouth.net">charlesrjoan@bellsouth.net</a>

Editor - Jim Mason <u>imason@newwavecomm.net</u> 270 885 0069 (office) 270 484 0571 cell

#### **Our Club Website**

www.tuckessee.org

#### **Our Location**

2576 N. Ford Street (New Providence) Clarksville, TN 37040

#### **Contact the Editor**

Email – jmason@newwavecomm.net

#### **Directions to Club Meeting Place**

FROM THE SOUTH:: Take N. 2<sup>nd</sup> Street north onto Hwy 41A (Providence Blvd), Turn Right on Market St, Turn Right on Chapel St, Turn Left on North Ford St. About ½ mi. rd turns hard right, continue about ½ mile to the last building on the Left. (F.O.P. Lodge)

FROM THE NORTH: From Hwy 41A (Providence Blvd) turn left on Chapel St ¼ mi. turn left on North Ford St. About ½ mi. rd turns hard right, continue about ½ mile to the last building on the Left. (F.O.P. Lodge)

Regardless of which route you take you will think you are lost before you get to the F.O.P Lodge