



WOODTURNERS OF ST. LOUIS

A Chapter of the American Association of Woodturners

September 2005

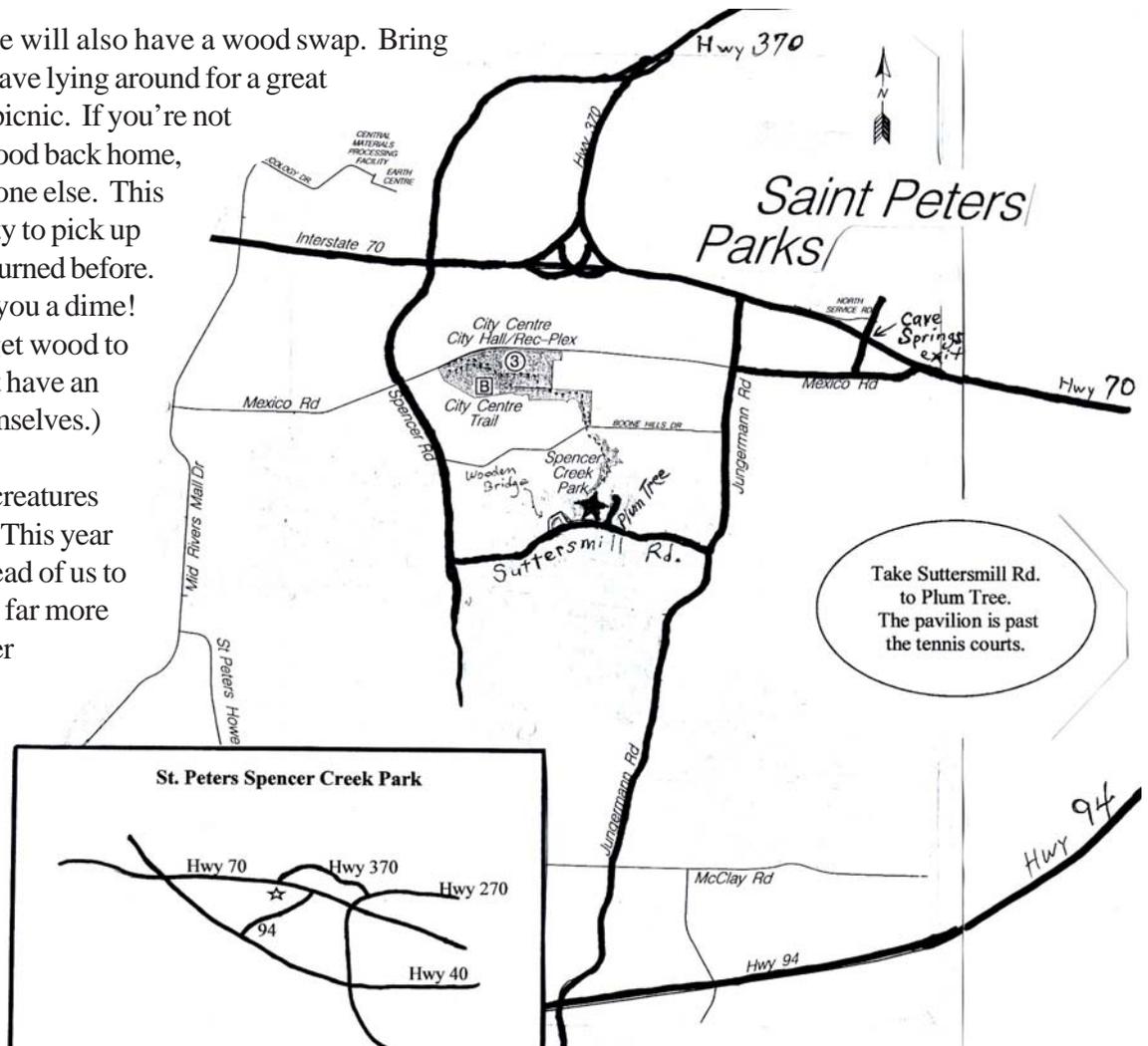
JOIN US FOR THE ANNUAL CLUB PICNIC

Our annual club picnic will be held on **Sunday, September 25** at Spencer Creek Park in St. Peters. The picnic will be held rain or shine and is open to our members, family and friends. The club will be providing the meat and dinnerware for the picnic and each family is asked to bring a side dish, salad or dessert and your drink of choice. The picnic will begin at 1pm and continue until the last turner leaves.

The club picnic offers a fun time for all and will feature contests and many other fun activities. The bocce ball contest awards will be given for the best turned. (you can bring two, one for the contest and one for tossing) Finish your ball any way you want, whether it is painted, marbled, textured, lacquered, etc. Make it your own.

At the picnic we will also have a wood swap. Bring some of the wood you have lying around for a great exchange at this year's picnic. If you're not interested in bringing wood back home, drop some off for someone else. This will be a rare opportunity to pick up something you haven't turned before. Best of all it won't cost you a dime! (This is a great way to get wood to our members who don't have an opportunity to get it themselves.)

Remember the creatures from last year's picnic? This year we have a challenge ahead of us to create creatures that are far more advanced than their older siblings. After all, their creators have been developing their replacements for a year. Bring turnings that may be used in our new creatures, the rest will be made on the spot. Frankenstein won't stand a chance.



CHALLENGE

September's challenge is to turn a Bocce Ball. If you attended our August meeting then you saw a great presentation on turning a Bocce ball (or a sphere). It was presented by our very own Paco Navarro and John Buehrer. If you couldn't attend, follow the "how to" beginning on page 3 of this issue. We will play Bocce at the picnic so be sure to make one, or two. The standard size for a Bocce Ball is 113mm or 4.45in. Turn a solid sphere around 4.5 inches.

OHIO VALLEY SYMPOSIUM

Ohio Valley Woodturners guild symposium is October 21-23, 2005. Additional information can be found at www.ovwg.org OVWG have reached their limit and are no longer accepting registrations!

CLASSIFIEDS

- **Ryobi 10-inch Table Saw** (BT3100) with manual, moveable/locking stand, sliding miter table and fence, Ryobi 1.5hp **Router** attached to table, plus extra stuff... 2 years old, in great shape!
- **Tenoning Jig** for Table Saw
- **Woodworkers Choice** heavy duty bench top **drill press**
Call Al Schmiz (314) 721-4890

I am looking for a used **bandsaw**
Call or email Elaine Navarro at 636-532-3153,
enavarro@sbcglobal.net

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NEW OFFICERS

November will bring new officers to the St. Louis Woodturners. Start thinking about who will be the future leaders of the club, maybe you?

All ideas and nominations are welcome. Please bring them to the November meeting.



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Turning a Sphere

An instructional "how to" written by Matt Keim



To begin turning a sphere you must first turn a cylinder slightly larger than the diameter of your finished sphere. It is best to use dry wood to prevent cracking. Now get out a calculator and write these numbers down. Take the radius (half of the diameter) of your cylinder and multiple it by .586.

Write these numbers down.

D (diameter) = _____

R (radius) = _____

.586*R = _____

Now mark the length of the cylinder to equal the diameter and part it down leaving it connected with a tenon on each side.



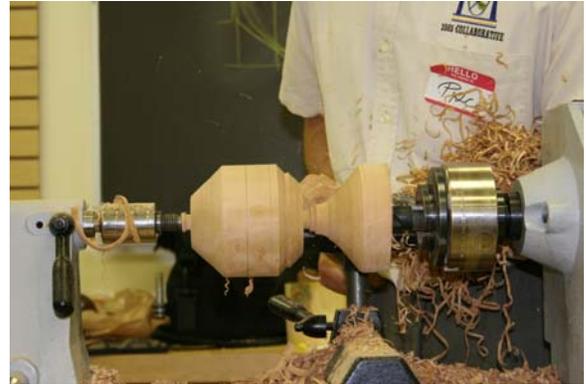
Use a ruler or set of calipers to measure and mark your center line.

Once your center line is marked draw two lines on the cylinder .586R in from each edge.

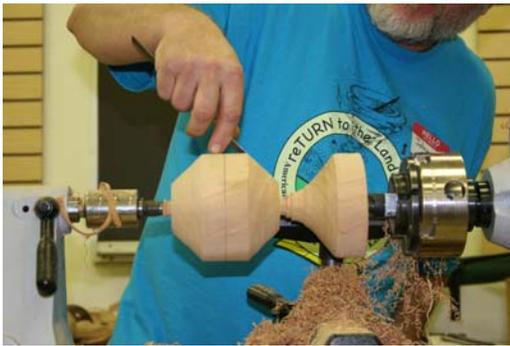
You now must mark a ring on each end of the cylinder .586R down from the edge. Another option is when parting down to your tenons leave them .414D in diameter. The edge of the tenon will act as your guide instead of the line.



Next use a gouge to connect the lines you just drew creating an octagon shape. You should try to make your cuts flat from one line to the other with no dip or ridge. Use a straight edge to check it.



Once you have created the octagon, measure and mark the centers of the two flat areas you just created. These lines are touching the surface of your sphere. The goal now is to round off the wood between these lines without removing the lines drawn.



As your sphere begins to take shape you can use a large washer, a router insert or other flat donut shaped item to check for high spots. If your shape is perfectly round the washer will touch all the way around the inside edge. Mark high spots and turn them down. It is not necessary to have a perfect sphere at this point. Small ridges will be cleaned up later. Get it close and move on to the next step.



Once you have it close enough, part it off and make a jam chuck to hold the sphere. It is important that less than half of the sphere is inside the chuck.

Install the sphere into the jam chuck perpendicular to the original center line. Draw another line perpendicular to that line creating two lines 90 degrees from one another.



Now score the sphere just enough to touch all the way around on the line you just drew. This scoring mark will be a guide for the finished size. After scoring remove the sphere and re-install it orientated with the original center line vertical. (same as when you turned the cylinder)



Now turn one half of the sphere down using the score mark as your guide. When you just make contact with the score mark you're done with that side. Flip the sphere around and do the same for the other half.

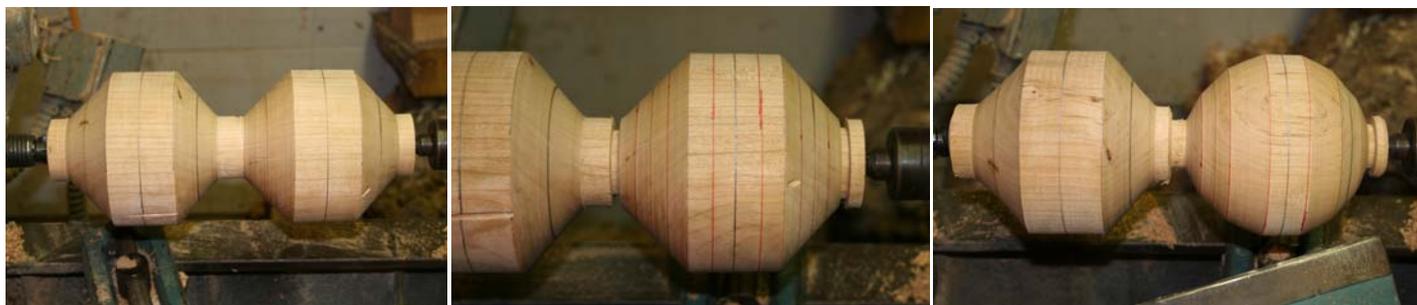
When using the jam chuck method sanding is easier since you have access to so much of the sphere at a time. Apply your finish of choice and congratulate yourself. You're done!



Alternate Methods and Ideas

There are a few other things you can do to help get to that difficult shape.

You can turn two spheres out of one cylinder for practice. When creating your tenons turn them to .414D so that they're edge is your guide rather than the lines marked previously.



You can take the measuring, calculating and marking one step further. This will get you to a 16 sided object rather than an 8 sided object. It is much easier to visualize the sphere this way. After turning your two flats and marking the centers, part in your tenons a bit. Now mark the centers between the three lines you have and the corners or edges (red lines). This gives you another set of lines to create flat areas between. You can see how much easier getting to your final shape will be.



Rather than a jam chuck you can make a cup chuck to hold your sphere between centers. Start with the tenons perpendicular to the bed ways. When you turn on the lathe you will see a shadow inside where you are cutting, that is the perfect sphere your looking for. turn to the shadow and rotate your ball in the cups. Continue doing this until satisfied with your sphere. Once you are close you may want to switch to scraping. Even if your sphere starts out oblong when you put it in the cup chuck you will eventually get to a sphere. It may, however, end up a little smaller than hoped for. The two spheres

below came from the same cylinder. The beginning diameter of the



cylinder was 4.60 inches and the goal was a sphere 4.5 inches in diameter. One of the spheres was turned oblong to illustrate the effectiveness of the cup chuck method. The first sphere ended up at 4.54 inches and the second, oblong one, ended up at 4.29 inches. Good Luck!!!

Other Resources:

Woodturning Methods by Mike Darlow
Chapter 4 - Turning Spheres



St. Louis Wood Turners

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SHOW AND TELL



AUGUST

- #1 Bernard - fir off center oval box • #2 Herbert - laminated pill box
- #3 Dave - wooden spoon and tapered wedge • #4 John - lylsaloma nested bowls
- #5 Jo - xmas tree ornament • #6 Hal - captive ring • #7 Gary - olivetranslucent goblet
- #8 Carl - Bowl with wood burning done by daughter • #9 Paco - Spheres
- #10 Matt - Revolution Evolution • #11 Brad - box elder lidded box

MEMBERSHIP APPLICATION --WOODTURNERS OF ST. LOUIS

NAME _____

STREET ADDRESS _____

CITY _____ STATE _____ ZIP _____

HOME PHONE _____ WORK PHONE _____

E-Mail _____

Mail this application along with your check for \$20 for one-year's dues to:

Woodturners of St. Louis
6548 Ike Drive
Barnhart, MO 63012

or, bring it to the next Meeting.

WOODTURNERS OF ST. LOUIS

Micki Keim, Editor
2649 Forest Glen Estates Drive
Pacific, MO 63069

CALENDAR

September 24, 9am-2pm
Collaborative Meeting

September 25, 1pm
Annual Club Picnic

October 15, 2-5pm
Michael Bauermeister Demo
(bring your money to the picnic if you
registered for this demo, a few spots remain)

October 23, 1-4pm
Meeting at Woodcraft