WOODTURNERS OF ST. LOUIS

A Chapter of the American Association of Woodturners

May 2006



WOODTURNERS

### **RAY KEY VISITS ST. LOUIS**

On March 18<sup>th</sup> Ray key was in town for a demonstration with our members and friends. The demonstration lasted 8 hours and covered many topics. Ray's ability to explain his process and approach helped us all walk away better turners.

Ray started the day by going through many rim designs for platters. He discussed proportion and form. By the time he turned through the blank Ray had shown us over 20 possibilities for rim design. After going through the design he turned a platter from start to finish, explaining the whole process.

Ray then moved onto boxes and turned 3 boxes to finish. These boxes can be seen at our meetings and are being raffled off to support the club. He turned a standard over fit lid box, an oyster box and his famous Pagoda box. It was truly a remarkable experience for everyone who attended.

The demonstration was held at Rick Thum Dulcimers. Rick was gracious enough to work with us in preparing for the event and gave us a nice demonstration of a hammered dulcimer at lunch.

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#### NEXT MEETING

May 28, 2006 ~ 1-4pm Woodcraft 2077 Congressional Drive Maryland Heights, MO 63146 Phone: 314-993-0413

On March 19<sup>th</sup> and 20<sup>th</sup> the Woodturner's of St. Louis had workshops with Ray Key. These workshops were all day long and gave us an opportunity to advance our skills under the eyes of Ray Key. The items turned at the workshop followed the demonstration's theme from Saturday. Each attendee had their own lathe and had the ability to spend eight hours turning, if he or she so desired.

The workshops were well received and completely full. Everyone who attended learned new techniques and also had the opportunity to try Ray's modified tools. Many of those who attended have probably ordered them by now since they performed their intended purpose wonderfully. By the end of the day, everyone had a completed project, while maybe not sanded, complete otherwise. Those who attended learned many new skills, techniques and ideas. Ray Key Visits St. Louis Continued

The workshops were held at Stubby Lathe USA in St. Charles. Bill Rubenstein provided 3 Stubby lathes and the space. Our membership came together and brought everything else needed. Dave Endres, Gary Heingardner, Matt Keim and Bernard Voss provided additional lathes. John Buehrer assisted Ray all day long and kept everyone moving. Dixie Smith assisted John. Jo Williams, who we can't thank enough, took care of all the paperwork, bookkeeping, food and drink for all three days and even found the demonstration location for us. We offer a special thank you to Dave and Nancy Endres for hosting Ray Key for this visit to St. Louis. So many other members helped out I can't mention them all, but thank you. This event was truly a team effort and our members showed how much they care about the group through all they did.



Sunday workshop attendees



Monday workshop attendees

#### WOODTURNERS OF ST. LOUIS

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Look for a complete roster in next month's newsletter!

#### **RAFFE TICKETS**

John Buehrer has donated a lidded box. Chances are \$3.00 each.

Sycamore hat turned and signed by Johanes Michelsen. Chances are \$20.00 each.

Ray Key boxes, turned during demonstration in March chances are \$5 and \$10 each.

# Bert Marsh

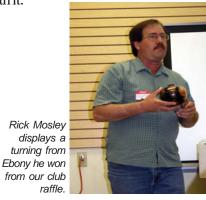
Bert Marsh will be coming to the U.S. in June. He will do demos at four locations, one of which will be in Davenport, Iowa on June 10, 2006 from 9:30am-4:30pm at the Figge Art Museum. This session will be open to the public. Registration is \$35 in advance, or \$40 at the door.

Bert's U.S. visits are extremely rare. The Quad Cities chapter of the AAW had decided to make this one available to those who wish to see Bert, but cannot catch one of the other sessions in Illinois, Wisconsin, or Utah.

For additional information, or to register, please email Steve Sinner at <u>ssinner@mchsi.com</u>.

# AUGUST CHALLENGE

We are going to have a new challenge for the August meeting. At the August meeting bring an item turned from wood, or other, acquired at a meeting or from a fellow member. Over the last year we have given away numerous door prizes, raffles and literally truckloads of wood from generous members and non-members alike. You can bring anything whether turned two years ago or today as long as it is from something you obtained at a meeting. During the show and tell let us know how you ended up with it.



## SHOW-N-TELL



# **GREEN TURNED BOWLS**

#### A PRESENTATION BY MATT KEIM

Many of us start out in wood turning using the green wood that is so readily available to us. It is most often free, if we're willing to put some work into preparing it, and it makes for good practice as we develop our skills.

When I first joined the club I only wanted to turn dry wood since I knew it would not warp and I could finish the bowl in one day. It didn't take long for our members to talk me into rough turning green wood bowls and storing them for a year. Now I have many dry roughed out bowls waiting to be finished.

There are many advantages to turning green wood, especially for new turners. Green wood is forgiving which allows you to practice various cuts while trying to find that elusive bevel we all hear about rubbing. You can spend hours on a few blanks getting the feel for how each of your gouges reacts at various angles and approaches. When a catch does occur you're not jolted nearly as hard as with dry wood. All new turners should spend time turning green wood for practice.

When turning green wood for rough outs, meaning bowls that will be left to dry and warp then re-turned later, you should leave a wall thickness 10% of the bowl diameter. This means on a 10" bowl the roughed out wall thickness should be about 1". This is by no means a guaranteed success but has been proven to be effective on most woods. Before storing a rough out you must do something to retard the drying process. I personally wax the bowl completely with emulsion wax, available through the club, then set on a shelf in my basement for 12 months. Some will place the bowl in paper bags for 3 months. There are many other ways of doing this so do some research and chose what works for you. After the 12 months I take the bowl back to the lathe and finish it. Since I have only been turning a little over a year my experiences on finish turning these bowls is limited to about a dozen. I can say however that the only bowls that I can see will not make it back to the lathe were oak and they have developed ring shakes that were not detected the first time around. I have about 30 rough outs ready and over 100 somewhere in their 12 month wait.

Turning green wood to finish is another option that I have done little of due to the inevitable fact that my bowl will look like a football after 24 hours. Or will it? Well this depends a lot on the orientation you choose to mount the blank on the lathe and the type of wood. If you mount the blank to turn the bowl face grain style your bowl will certainly pull in on two sides as it dries. If you choose to turn your bowl end grain style your chances of having a fairly round finished bowl is good. Regardless of the style you choose there are important things to keep in mind when turning a bowl from green wood to finish.

First, your finished thickness needs to be consistent and under ¼" for most woods. An inconsistent wall thickness will cause uneven stress and increase the chances of cracking. Second, you should prepare with enough time to start and finish in the same session. This is not absolutely essential but will make things easier. Third, you need to follow a process that keeps the side wall supported as you work your way in. The steps that follow will explain this.

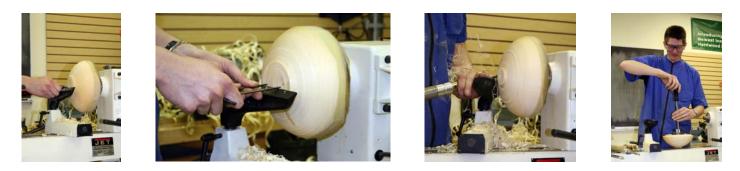
In the demonstration I chose to turn a bowl face grain style since most bowls are turned in this manner. This means that the bark side will either face the tailstock or the headstock. It is important to recognize this since the direction of cut is different for face grain bowls as opposed to end grain bowls.



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Select a piece of green wood and rough it out with a bandsaw or chainsaw. Mount it on the lathe using a faceplate or similar method with the bark side facing the tailstock. This side will become the outside bottom of the bowl. In the demonstration I had the bark mounted towards the headstock to start due to a poor chainsaw cut.

Start by facing off the blank so that you have a smooth surface facing the tailstock to create a tenon from. Create your tenon first so in the event of a mishap you have a good way to re-chuck the blank and correct things, a tip I learned from Dave Endres. Creating a proper tenon for your chuck jaws is very important. It is important that your jaws have two



good surfaces to meet the wood. The diameter of the tenon should be a little larger than your jaws when fully closed. This will provide the greatest surface contact. The tenon should also be at a right angle or dovetailed to match your jaws. Take time here as this will save frustration later.

Now that your tenon is complete begin shaping the outside of the bowl. Since we have the blank mounted face grain style we will cut from the minimum diameter to the maximum diameter on the outside of the bowl. This means our cuts when viewed from the tailstock will go from right to left or center out. This is very important to ensure the smoothest cut. In this direction we are cutting supported fibers, try the other way and you will see how the fibers tear. Slowly shape the outside of the bowl creating a minimum diameter and a maximum diameter with a pleasing curve in between, as spoken by David Lancaster himself. If you can stay on the bevel you can create a long smooth cut along the entire exterior of the bowl leaving a great finish. If not get out the sandpaper and pretend for a moment that someone else paid for it.

Once you have finished the outside of the bowl take it off and mount it in your chuck using the tenon. Turn on your lathe and verify that it spins true. If not, try removing it and re-chucking. Some soft woods compress and make it difficult to get it to spin true after re-chucking. If this is the case with your wood try coating the tenon with super glue before chucking for the first time. If all else fails use a gouge to true up after re-chucking.



Now begin removing the wood from the inside of the bowl. The direction of cut should be from the maximum diameter to the minimum diameter or outside to the inside. This will once again mean your cutting supported fibers. Turn the inside in stages. This will give you good support throughout the process.

Take the first inch or so to finished thickness and sand before moving on. Then turn another inch or so, sand and continue. Check your thickness often. If you try to go all the way to the finished thickness

before sanding the bowl may warp and you'll need a lot of TV time to get it sanded. This means you won't be sanding it on the lathe and that's no fun. Stop to check the thickness often and try to keep the wall thickness consistent.

Once you have completed the inside of the bowl you must finish off the bottom by removing the tenon. Do this by reverse chucking either with a vacuum chuck or a jam chuck. Once complete you can oil immediately or place it in a bag for a few days as an extra precaution. I will typically apply up to four coats of oil the first day then place in a paper bag for a week before applying the final coats of finish.



# HAND THREAD CHASING

A PRESENTATION BY JOHN BUEHRER

Hand thread chasing takes patience and lots of practice but once mastered gives great satisfaction. Thread chasing has been around for many years but a very small percentage of turners can say they do it today. I believe one major reason is the amount of time needed to learn this skill. Johns demonstration gave us all a good idea of the basics so we could go back and practice.

Wood selection is very important when learning hand thread chasing. The woods must be very hard and dense. Boxwood and African blackwood are ideal and should be used for your first few pieces. While many of us would prefer to practice on cheaper woods we should not when stating out. After you become proficient at threading the woods that take threads readily you can then try softer woods like cocobolo.

The tools needed for this project are:

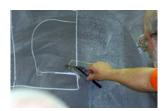
Set of thread chasers Three point tool Relief tool Spindle gouge Arm rest for threading Box scraper (optional)

Thread chasers often need to be modified since they are sometimes sold with a starting half tooth that will cause you trouble. This half tooth should be ground off so that there is a full tooth at the starting edge. This should be done to both inside and outside chasers. Another important thing to know about chasers is that you NEVER grind the teeth for sharpening, don't even touch them. To sharpen the chaser you will grind or hone the top only. Another helpful thing to do to the male thread chaser is to round over the two bottom edges. This will allow the chaser to slide on the tool rest easier.

To begin turn a cylinder and hollow the inside leaving the wall thickness about 3/8" for practice. Your walls should be parallel to one another as we do not want a tapered thread. At the front edge make a chamfer or round it over with a small radius. Then use your relief tool to cut a relief behind the portion you want to cut your thread on. Leave about 1/2" of depth before your relief to cut the threads on. Now your female blank is ready to have its threads cut.







Set your lathe to about 300 RPM (rule of thumb is 100-500). Use the arm tool rest to hold the chaser and moving into the cylinder at an angle strike your first thread on the rounded over front edge. Use an elliptical motion as you move into and out of the wood cutting the thread a little deeper and longer each time and straightening your angle to be parallel with the wall. The wood will begin to pull the chaser for you. Keep moving and

never stop as your cutting. It is also important to remove the chaser before it hits the bottom. Hitting the bottom will cause you to stop which will strip the threads. If you do strip the threads cut them off with a scraper and start over.

Once your make several successful passes you can stop the lathe and see the



threads taking shape. Spread some paste wax on the threads for lubrication and make several more passes. Do not cut the threads deeper than your chasers will allow. Once you're done you can clean the

dust off with a tooth brush and get ready to turn the mating male piece.



Now prepare a cylinder with a diameter at least 3/16" greater than the inside diameter of your female threads. On the end of your cylinder turn a short tenon that is just small enough to fit inside the female threads. This tenon will be used as a gauge and later turned away. Next turn down about the next 1/4" of your cylinder to a diameter a little larger than your gauge at

the front of the cylinder. The diameter of this is the maximum diameter of your threads and









will vary with the chasers you are using. A 10 tpi set of chasers will cut a much deeper thread than a set of 20 tpi chasers. You will learn what this should be with practice and can write it on the chasers for future reference. Then use the point tool to cut a relief at the end of your threads, or wood soon to be threads.

Using only the lathes tool rest now begin by striking the thread at an angle first and gradually begin to cut the threads. Keep cutting the threads in the same manner as the female threads. Cut them slowly and allow the wood to pull you. Remember to remove the chaser before hitting past the relief. Any time you stop movement while in contact with the wood the threads will be stripped and you have to start over. If you are successful and have a good thread when your chasers just scratch the tenon you made for a gauge you're done. The two pieces should now thread together. If you did this on your first try drop everything and go buy a lottery ticket.

The important thing to keep in mind is that the learning curve is long but worth the effort. If your pieces don't fit make new mating pairs for them instead of wasting a perfectly good threaded piece. A hand threaded turning is a wonderful thing to see and make.

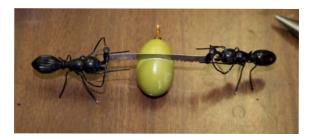




# AAW 2006 Symposium June 22-24, 2006 Louisville, KY

## **2006** Collaborative Project

Wow, so many decisions pop up as the project moves closer and closer to completion. The painting of the quilt happened on April 15<sup>th</sup> and it looks great. Binh Pho came to town to help us and 8 members participated in painting. It was a great opportunity to use high quality air brushes and get a little instruction from a real pro. We have grapes, a goblet, wine bottle and a platter that is almost done. We always have room for more helpers so contact Matt Keim if you need directions. There is less than two months left and there's a lot to do...Even the ants are hard at work!!!



#### WOODTURNERS OF ST. LOUIS

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## CALENDAR

May 27, 9am Collaborative Meeting

May 28, 1-4pm Regular Meeting at Woodcraft Challenge = Non wood or processed turning Demonstration = To Be Determined

June 3, 9am Collaborative Meeting

June 22-24 AAW Symposium - Louisville, KY

September 23-25 Alan Lacer in St. Louis for Demo and Workshops.