Central New England Woodturners

The CNEW Skew

Volume 19 Issue 11 November 2006

President's Message

Thanksgiving will soon be here and I am reminded to extend a warm "Thank You" to all CNEW members who have reached out to make someone's world a better place through either Project Goodwill or the Freedom Pen Project. My thanks also to those persons that have helped me as President or have made a contribution in some manner to our health. We all need to participate in some way to be sure our club can continue to be the great organization we have created. If you're overdue at giving something back, think about what contribution you could make now that it's Thanksgiving. Even coming to open turnings or bringing in a show and tell item helps us by giving us reasons to continue these programs. Your active participation in club activities helps keep it all going. Maybe consider paying your dues early so the Treasurer can sleep at night.

With the giving of Thanks and volunteering on your mind… Please consider taking an Office this next season. We have some nominations for the elected positions but are still lacking a new President nominee.

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Editorial

Next meeting will be our annual party, with food (bring some!) and the Holiday Gift Swap. For those who are not familiar with this, you bring something you've made turned or something related to turning. To make it impossible for anyone to tell who brought what, put it in a brown paper bag and tie it with string. A long string. All the gifts go in a big box with the strings hanging out and we take turns to pick a string, and whatever is on the end of it. Unwrap it and then everyone tries to guess who made the item. There is one special gift – the Bob Howland kaleidoscope. I don't know how many years the kaleidoscope has been going around for but whoever gets it takes it home for a year and brings it back next year to put back in the gift swap. And, of course, whoever is the Keeper of the Kaleidoscope does not have to make a gift for the swap next year.

On a completely different subject, we still need someone to take the position of President for next year. Dave has been doing a stellar job as both President and Webmaster: we cannot ask him to do double duty again next year. Of the eleven officer positions, eight are occupied by people who held officer positions in 2006 – and of those eight, six were *also* officers in 2005. We have two new volunteers so far and need a third to take the position of President. The membership should not keep relying on the same handful of people to keep the club going year after year. Surely three new officers out of a membership of 90+ is not too much to ask? Those who have stepped up to the plate so far are

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Club Officers and Contact Info for 2006

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Secretary, Tim Elliott	secretary@cnew.org
Charlie Croteau	
Treasurer, Mickey Goodman	treasurer@cnew.org
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Book Librarian, Charlie Croteau	librarian@cnew.org
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President's Message

We urgently need to fill the President position and as sorry as I am to say, I will not be looking for another year in office just now. Will you help?

I hope to see everyone at our December meeting and Pot Luck party. Bring your friends or family and a food item to share. We will have a brief business meeting but no other regular activities like show and tell, demo or wood swap. Come early and turn in the Open Shops at 5:30pm as usual then enjoy the party. Make sure to bring in a turning for the gift swap too. Place it in a small brown bag, like a lunch bag, and tie on a couple feet of string. This is always a good time. We'll put the items into a box with the strings hanging out. If you brought a swap then you get a swap. You pull on a string to get the item, open it and we all guess who made it. There's also the Coveted Kaleidoscope prize too.

See you soon and Happy Thanksgiving.

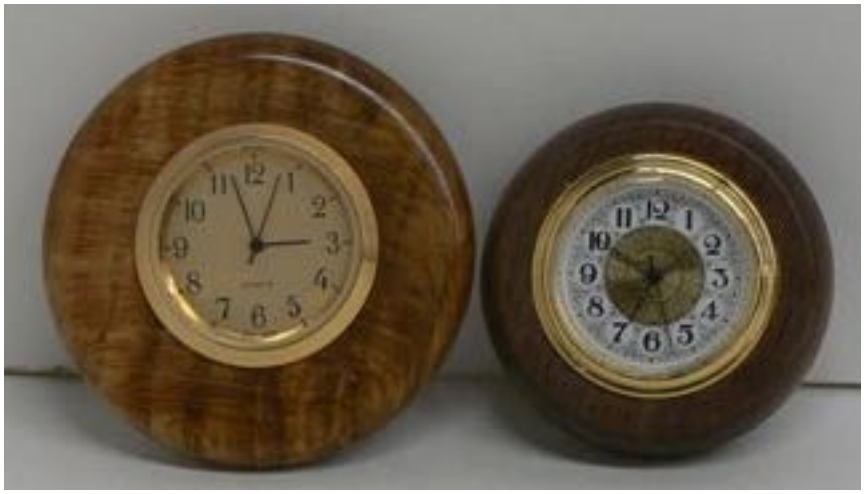
Dave Eaton

Editorial

President:	**N. O. Body!**
External VP:	Mary Maguire
Internal VP:	Reid Gilmore
Treasurer:	Norma Hogan
Secretary:	Tim Elliott
Newsletter:	Graeme Young
Photography:	Henry Fairlie
Webmaster:	Dave Eaton
Book Library:	Ray Boutotte
Video Library:	Al Faul
Supply Sales:	Ray Boutotte

Supporting Positions

Wood Swap Coordinator:	Gene Spadi
Contributing Editors:	Bobbi Tornheim
	Jim Metcalf
	Steve Rezneck
Project Goodwill Coordinator:	Charlie Croteau
Freedom Pen Coordinator:	Gene Spadi



Points in Segmented Rings

Will Hunt

1. Plane both strips of the 2 selected species to the same thickness.. Thickness depends on design involved — the main ring (the one with the points) in the illustration was planed to ¾″. For the main ring, the planned circumference will be adequate for needed strip length but allow 15-20 more for spares. For the point species, strip length will be much less and can be judged during assembly (see #4 below). For OD up to 8″, strips 1½″ wide work well. Above 8″, 2″ widths should be considered.

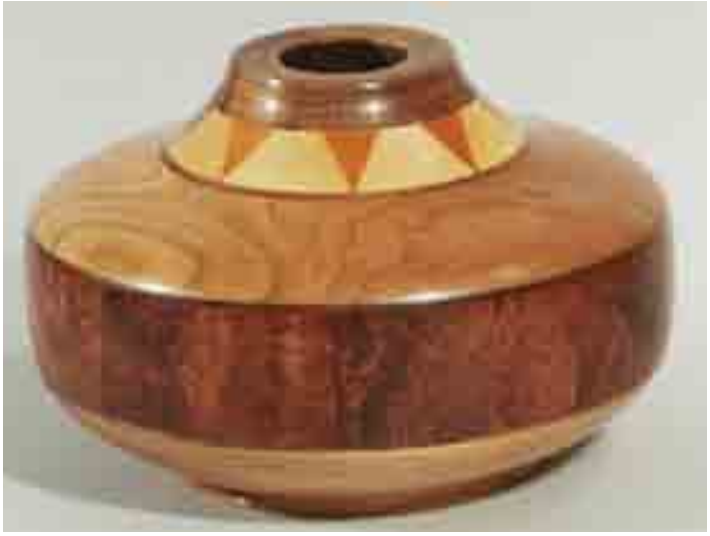
2. Set blade-to-fence angle appropriate for segment count (e.g. 12 segments = 15°). Calculate cut lengths for desired OD (see below *). Make test cuts for correct length and angle accuracy as there will be little room for adjustment later.

3. Tilt blade for desired point peak angle. The tilt angle setting will result in a final peak angle of twice the tilt angle. 30° is a good starting point (see illustration).

4. Cut main ring segments, flipping stock for alternate cuts. Assemble dry to check joint accuracy, circumference, and to calculate the needed point strip length (width across the openings X number of segments). Tip: if using a miter saw, let the saw come up to top speed before cutting. This will minimize blade deflection errors.

5. Leave blade tilt angle as is but reset blade-to-fence to 90 deg.

6. Cut point stock, flipping as above. Check each piece to see that a sharp peak point is there. Adjust as needed. Check each cut piece again for breaks in the peak point just prior to glue up. Make 2-3 spares.



7. Assemble all main segments snugly into a ring with joint edges up using tape to hold and confirm circle. Turn taped circle over. Check point pieces for good fit. Insert point pieces with glue on both sides. Clamp completed ring lightly between wax paper covered flats.

* Segment cut lengths = circumference/number of segments. Circumference = Outside diameter x 3.2

Minutes of November Meeting

Charlie Croteau

The meeting began at 6:30 and the minutes from the October meeting were approved and accepted.

Project Goodwill continues. Your donated finished turnings could help provide a wheelchair for someone in need. We are currently collecting for the Big E Woodworks show which will be held in January. Please bring your donated items to the January meeting if you wish to participate.

Dave Eaton also collected fourteen pens for the Freedom Pen Project which he will be sending out this month. If you were going to make a pen for this project, please get it over to Dave and he will send a second batch.

Our open turning studio continues to go well. Interested people can show up at 5:30 before the meeting and turn in the woodshop.

The December meeting will be our traditional Pot Luck party. Please bring something to eat and a gift in a brown paper bag with a long string attached for the gift swap if you want to participate in it.

Reid Gilmore gave an update on upcoming events. There was much discussion about the annual Crafts Fair to be held at the Craft Center on Thanksgiving weekend. A motion was made and passed to put the club rules in abeyance for this event, as the spreadsheet used to illustrate the rules when they were approved contained an error. For this event, the old rules will be in effect.

Thank you again to Hal, Reid, Joan and John for the fine job of organizing and supplying the Malcolm Tibbetts demo.

The club has purchased nine new DVDs this month.

Metal Cutting on the Wood Lathe

Hal Mahon

In "Getting the Most Out of Your Lathe" Delta Manufacturing Co. announces in the manual accompanying their early model lathes that "Without any special equipment metal turning can be done free hand on the wood lathe using handled lathe tools of hardened steel in much the same manner as in wood turning." Lathe tools we use today are typically of M2 high speed steel, hardened to between 62 and 64 Rockwell. This is equivalent in durability to the bits we regularly use to drill through steel. Cryogenically hardened and powdered metal tools available for wood turning are even more durable at 67-69 RC.

The wood lathe, more than any other tool in our shop, is in its self a unit capable of producing a wide variety of finished work. The purpose of this note is to encourage broadening our scope of work we might consider when need or desire arises. I will show three examples of free hand turning of brass, aluminum and steel. For work of higher precision the Delta manual suggests mounting a Compound Slide Rest on the bed of the wood lathe. In my first note of this series I described a compound X-Y vise to help me turn the bottoms of deep vases flat and to face sector rings flat to the tolerance I wanted when I glued them together for bowls.

To start, our wood lathe makes an excellent drilling machine. It has important features superior to a drill press or hand held electric drill. A feature we can apply to our advantage is that the center of headstock rotation and the center of the tailstock are in perfect alignment. Pressure applied by advancing the tailstock quill is in direct line with the center of rotation.

There are two drilling modes with the three jaw chuck on a Morse Taper in 1) the headstock, or 2) the tailstock.

Mode 1): Assume the bit is rotating in the headstock and the hole to be drilled is centered with the aid of the tailstock point. The metal object is supported from the lathe bed in a manner (and this is important) that will keep it from rotating should the bit grab as it breaks through. Using a cushioning block of scrap wood pressure may be applied from behind by advancing the quill until the bit advances through the metal piece into the scrap wood.

Mode 2): Work is held in the four jaw chuck with the axis of the hole to be drilled in line with the axis of rotation. The bit is advanced into the work by rotating the tailstock hand wheel. In this mode, since both the work and the bit are securely held, there is no need for specially ground bits to avoid grabbing while drilling holes in brass, copper or aluminum.

With the lathe stopped threads may be put in the freshly drilled hole by holding the tap in the three jaw chuck and rotating the headstock by hand. Alternatively and my preference, the tap may be held in a tap handle using the tailstock point to accurately center and advance the tap as the tap handle is rotated. Those who have broken a tap because it was not perpendicular to the work can appreciate the alignment advantage the lathe offers for this task.


Figure 1

The ½″ capacity chuck fitted to a Morse Taper works well for holding small objects such as shown in Figure 1. Here I wanted to make a fitting for a vacuum attachment to my lathe. The nib of this ⅜″ pipe fitting can be held nicely by my three jaw chuck. In this figure I am turning the ⅜″ pipe thread down on my lathe until it just fits the bearing that can be seen resting on the lathe bed at the bottom left hand corner of Figure 1. This bearing will be epoxied into a cone shaped piece that is part of a vacuum adapter for the headstock of my lathe. (I intend to give details for making a vacuum pump and how I outfitted my lathe for vacuum chucking in a future note.)

I have used a Oneway four jaw chuck to hold the objects shown in Figs. 2 and 3. The aluminum vase in Figure 2 is 18″ high and 4″ in diameter with a heavily weighted base. I turned a jam chuck to adapt its end so I could steady it using the tailstock. Stability and additional damping from the wooden jam chuck helped to reduce harmonic vibrations excited by the gouge. Vibration is more of a problem in this instance because aluminum, as opposed to wood, is so lossless that the resonances

build up. Adjusting speed also helped reduce vibration. A little more rounding is needed at the top, after which I intend to sand and polish through 0000 steel wool. I will


Figure 2

finish this aluminum vase with Butcher's wax. Tools I used on this vase showed wear little different from that experienced turning seasoned oak and cherry.

Sylvia, my painter wife, asked me to make a bracket for a large roll of paper she had purchased. The holder was sized to use ¾″ black iron pipe but the pipe would not fit into the mandrel-ends about which the paper was wound. The simplest solution was to turn the ends of the pipe to fit into the mandrels. Figure 3 shows part of the 40″ long pipe that is supported by a ball bearing center in the tail stock. The other end is held in my Oneway chuck. My intent is to turn down the diameter without regard to finish. The wire edge quickly disappeared from the powdered metal gouge I used. Honing was all that was needed to prepare this gouge for removing the center of a bowl I worked on after reducing the diameter of steel pipe as shown in Figure 3.


Figure 3

In this note I have discussed cutting metal with the wood lathe. It is a useful, sometimes advantageous alternative to the drill press. I have shown three examples of turning brass, aluminum and steel on my wood lathe. I would be very interested in learning how you have used your wood lathe for cutting metal.

Book Review

Fabulous Turned-Wood Projects by John Hiebert, Harm Hazeu, Tim Bergen and Henry Bergen

This book is not intended to be read by you as much as it is designed to be shown to others. Show it to the person whose approval you need to continue equipping your $10,000 dream shop. Show it to people who buy you gifts for Christmas. This book is very powerful in its ability to motivate people who view the fabulous projects to ask you if you could produce such items for them. Of course your answer is, "yes if I only had a new Oneway series 2000 long bed, or a few Ellsworth turning tools or whatever else is on your wish list".

Fabulous Turned-Wood Projects contains an assortment of some very appealing turning projects. It moves beyond woodturning's practical aspects and introduces techniques which will take you to your next level. To further enhance each project the photography is brilliant, with details that jump out of each page.

The book begins with a good discussion of safety, available woods for turning, seasoning and measuring which is a critical foundation for the projects which follow. However, this is not your typical discussion as the theme is photographic examples of what is possible. A knotted green Norfolk pine vase, a bloodwood segmented bowl and a spalted maple container finished in teak oil support each topic.

First up is Henry Bergen with bowl, vase and candle holder turning using maple, aspen and Russian olive supported by numerous photos and drawings. His instructions are detailed enough to provide the experienced turner with useful advice.

John Hebert follows with a more detailed presentation of segmented and layered work highlighted by his thunderbird designs made from mahogany, maple, walnut, wenge and pan amarillo. These alone will have friends and family praising your abilities.

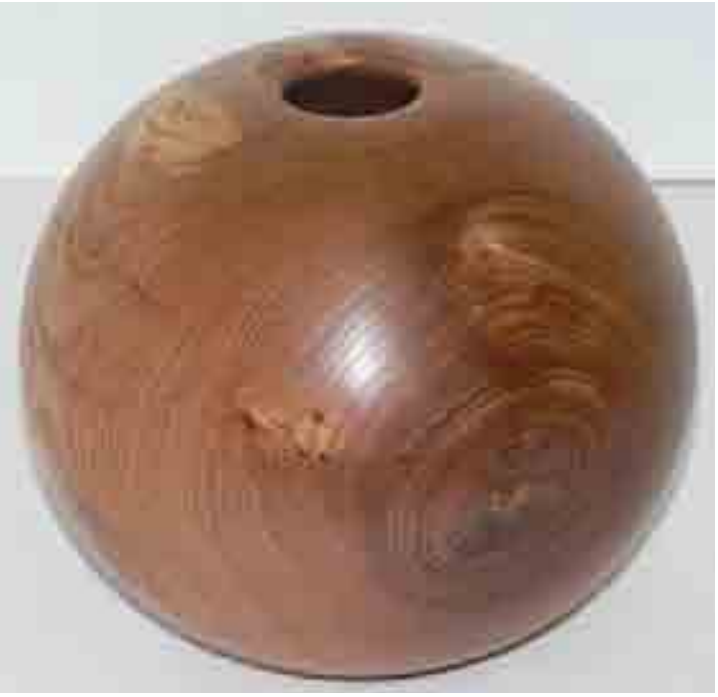
Harm Hazeu builds on his career as a professional turner to discuss and demonstrate a number of intricate segmented pieces highlighted by a beautiful Grecian handled vase and a patterned keepsake box both of multiple woods.

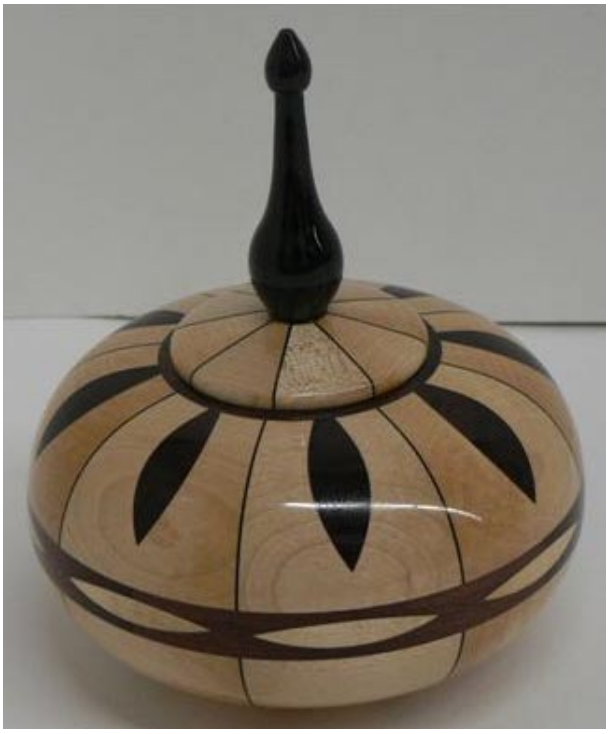
Tim Bergen closes the book with an assortment pens, bowls and goblets all made with multiple woods and extra fine finishing. His final piece is a kaleidoscope plate made with scores of scrap pieces of wood left over

Book Review (ctd.)
from previous projects. Save your scraps as these plates will be in high demand.

One pass through this wonderful assortment of projects will provide you with the motivation to move on to your next level of turning. However, the real power of this book is to assist others to recognize what you do and more importantly, what you can do for them if you only had the right equipment in your shop. Happy Holidays.

Jim Metcalf





Show and Tell

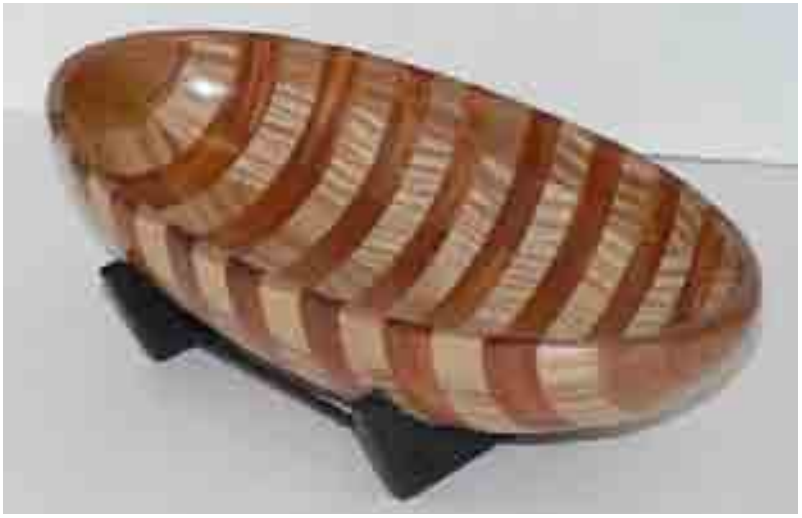
Photography by Henry Fairlie

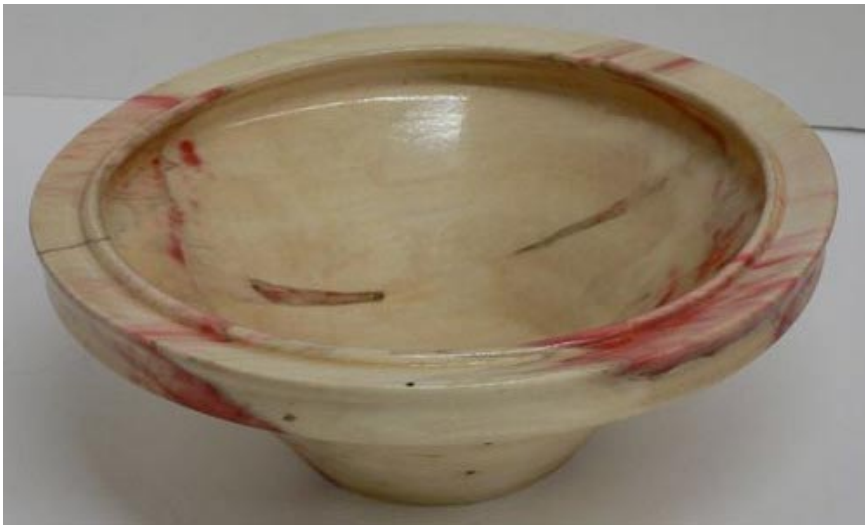
Clockwise from above:
Segmented maple, walnut and ebony by John McAtee

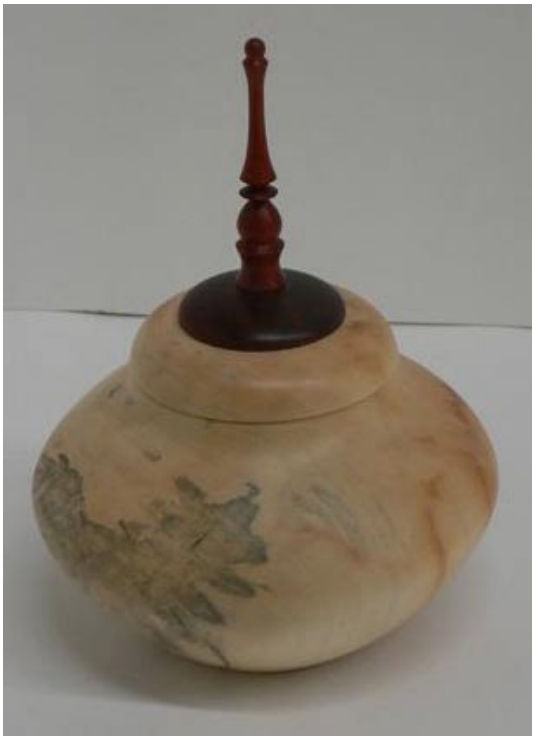
Oak "bowling ball" by Mike Peters

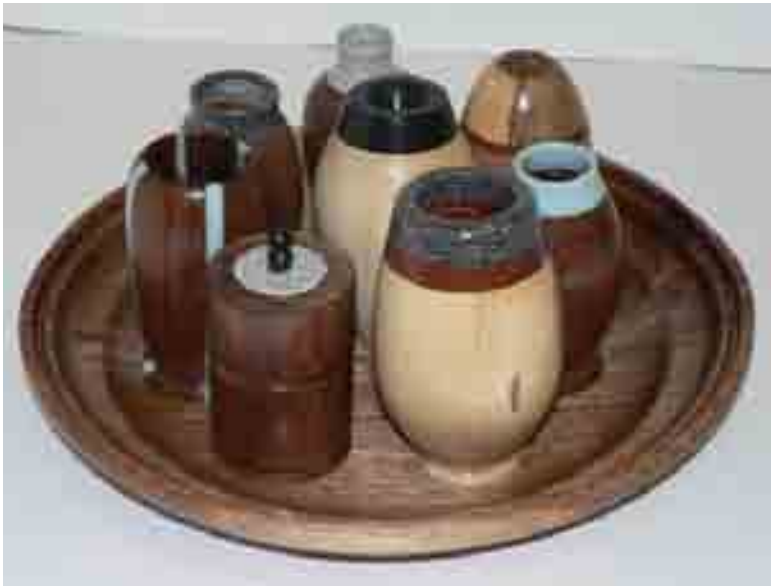
Spalted dogwood bowl by Bobbi Tornheim

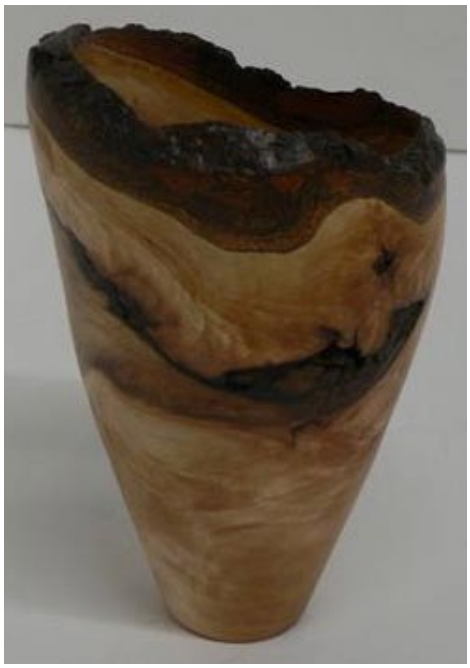
Segmented bowl by Will Hunt – turned, split and reassembled

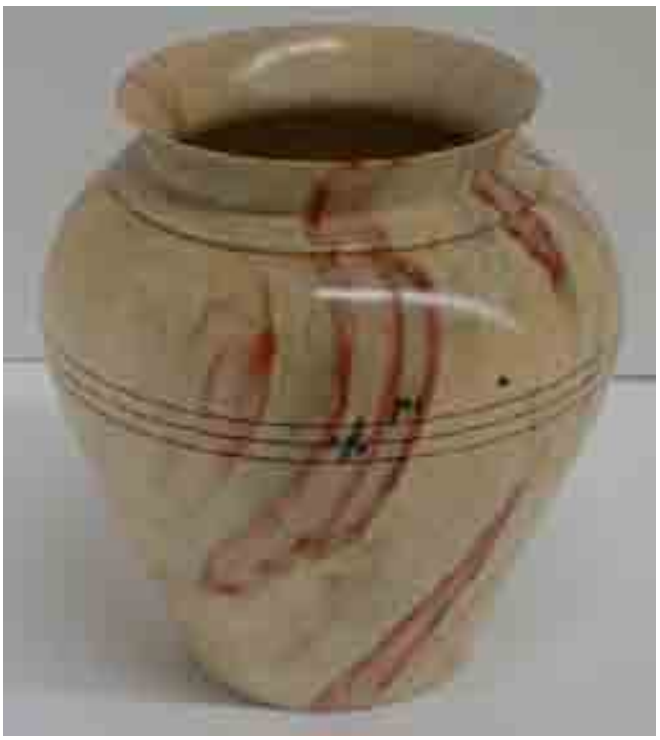












Clockwise from top left:

Box elder bowl by Mickey Goodman

Box elder and padauk box by Graeme Young

Cherry with a hole by Mike Peters

Box elder vase by Rick Gonzalez

Joe Harbey playing with Corian

The CNEW SKEW

CENTRAL NEW ENGLAND WOODTURNERS

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Central New England Woodturners
A Chapter of the American Association of Woodturners

On the web: www.cnew.org

To join or renew your membership, print this form and either bring it to the next meeting with cash or check for $20 made payable to CNEW, or mail the form along with a check to:

Treasurer
Central New England Woodturners
c/o Worcester Center For Crafts
25 Sagamore Road
Worcester, MA 01650

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Address _____
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If you wish, please let us know more about you and your interests.

Old member New member Turning how many years? _____
Selling your work? Yes No Where? _____
_____
What programs would you like to see at our meetings?
_____
Would you be interested in demonstrating at one of our meetings? Yes No