

The CNEW Skew

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President's Message

Hope everyone is doing well and getting out to turn now that the warm weather is here. I have been going thru all my wood and roughing out a bunch of blanks before the wood goes bad. This will allow me to have a bunch of projects to do as well when I am bored, all I have to do is throw a roughed out bowl on the lathe and finish it. To keep the blanks from splitting I store them in the shavings that came off of them. This will allow them to dry slowly and not split, I hope. I am not sure if I will let them dry fully, but it is nice for them to sit around and get rid of the majority of the moisture.

Right after the May meeting I turned my attention to hats. Literally, the next day I drove up to Vermont to visit Johannes Michelson's shop and take a three day course in turning a hat. I won't go into a lot of details here, I was going to write up an article about the experience and still will when I find the time. I will be showing off my hat at the June meeting, and talking a little about the trip. All I can say is that it was well worth it, I learned a lot and had a blast. I also found out that Johannes is thinking about moving to Orange, MA and buying a building to rent out studio space and to teach. He could use a lot of help from people that are experienced with renovating buildings, laws and more.

I hope you can venture out and make it to the June meeting. The demo will be Mishaps into Art, people will be bringing in items that they turned into treasures that happened by a mishap. Please contact Bobbi Tornheim if you are interested in showing off your art. I also got the new lathe we ordered and will bring it to the meeting to show everyone. Let the wood turn.

Editorial

I hope some of us have been having some success turning mishaps into art for next month's meeting. Recently most of mine have been turning into shavings and shards. One piece went through becoming three different things before it ended in pieces on the floor. The original plan was for a natural-edge goblet. After a while I decided I didn't like the shape of the rim so I changed it – and went so thin as to lose all the bark. Oh well, it can still be a regular goblet. This time I had the bowl nearly finished before I made the inside bigger than the outside. Oops. At this point, I had not begun turning down the stem so I still had a fairly wide cylinder, big enough for a hollow form. Shaping the outside went well, as did hollowing the inside. As the entrance hole was large enough to get a finger into, I decided to clean up the inside with a shear scraper on my Sorby hooker tool. Almost immediately, **CRACK!** I have never had much success with that hooker tool. The moral: if you need to practise with a tool, do so when the walls are 2" thick.

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Club Officers and Contact Info for 2005

President, Ray Boutotte
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 VP, External, Reid Gilmore
 Secretary, Tim Elliott
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Minutes of May Meeting

Tim Elliott

There were no new members/visitors.

Ray is still looking for a lockable cabinet that we can use to keep library materials at the Center between meetings. He still plans to purchase one if nobody volunteers a cabinet they already have.

Jack Grube will attend our June meeting to discuss the teachers workshop he is helping to plan in Worcester October 14. He is still seeking help from CNEW.

Reid Gilmore reminded us that CNEW has purchased a 10x10 booth at a craft fair in Lowell Aug 26-28. The location is the plaza at Saugus Arena. It will be covered - inside a large tent, with overnight security. Members are invited to show/sell work on the usual terms - a flat entry fee of \$10 to participate with the balance of the booth cost assessed as a percentage of total sales. Reid is negotiating possible demonstration space at no additional cost to the club. Richard DiPerna is still investigating how the club might be able to accept credit card sales.

Reid also notes that the Worcester Center for Crafts will hold their usual Fall fair and CNEW will be invited to sign up for a booth within the next month.

Richard DiPerna gave a treasurer's report. Our current balance is \$3190 (less some expenses payable for newsletter costs). We have 84 paid members so far this year. Please remember to pay your dues if you have not already done so. Checks may be sent to Richard DiPerna, or use our new PayPal account (see our Website for details).

AAW chapters have an opportunity to buy Jet and/or Powermatic lathes at a substantial discount. There is a condition: they must be used exclusively for demonstration and teaching. We voted to order a variable-speed Jet mini lathe and stand to be used for meeting demos. There was also some discussion about whether to get a larger Powermatic lathe - either to enable the club to hold more ambitious demonstrations or somehow connect it to a donation to the Center in exchange for our meeting space. (Since the Center would use it for classes, this would seem to be in keeping with the "teaching" part of the purchase condition). The pricing terms are attractive, but nobody really knew where the Center stood on the plans they announced last year to obtain a large lathe. Charlie Croteau and Richard Vose agreed to speak with someone at the center to understand their needs. (Continued on p. 8)

June Program

The next meeting will be on Thursday June 2nd beginning at 6:30pm, at the usual place. For the June meeting the regular business meeting will be followed by Show & Tell so bring some of your recent work. There will be no demo as such but we are hoping that some members will participate in an extended Show & Tell entitled "Mishaps into Art". Bobbi Tornheim is organising this so if you have a piece that turned into something other than was originally intended, please bring it along. If you can bring something, please contact Bobbi by e-mail or phone (even if you spoke to her at the last meeting) so she knows how many people will be taking part. This being prime tree-cutting season, the meeting will finish up with a Wood Swap.

Hollow Turning the Old-fashioned Way

Frank White

I am something of a traditionalist, generally a “low techie”, in my approach to woodturning. I don’t use a vacuum chuck for reverse chucking, and I have stubbornly resisted the trend to newer techniques of hollowing that rely on a laser to monitor wall thickness. I guess I enjoy the freedom of working freehand and the challenge of gauging wall thickness with my fingers or a pair of calipers.

Tools

I have three different sets of tools for making hollow forms ranging in size from about 1” to a maximum of about 9” high. These are augmented by a few simple tools I have made for certain situations.

- Sorby Mini Hollowing Tools. Consists of a straight tool, a straight hooked tool and a curved hook tool. I use this set for hollowing the balls in Christmas ornaments and for miniature forms. Good for up to about 2” depth.
- Sorby Micro Hollowing Tools. Includes straight and curved hooked tools, a heavier curved hooked tool with an articulated scraper/cutter and thickness gauge, and a 5/8” dia. boring tool with adjustable depth stop. Said to be good for hollowing up to 5” but you will experience a lot of chatter and vibration with the tool that far over the rest. I mostly use the straight and curved hook tools and have adapted a screwdriver as a straight tool to open up the access hole. I have also mounted an Allen wrench in a handle and use this to make cuts just inside the entry hole on especially flat-shouldered pieces. I don’t find the other two tools particularly useful.
- Dennis Stewart Hollowing System. Includes the arm brace handle, the Omni tool (a 3/4” x 16” bar with a 1/4” cutter), the Hooker tool (curved bar with swiveling 3/16” cutter), the Slicer (a carbide-tipped bar for coring out blanks), and a Tantung steel scraper which fits the Hooker or Omni for final scraping and cleaning inside the hollow turning. The effective limit for this set is about 9” and for me this is really tempting fate.

There are lots of other hollowing sets on the market now and probably some of them are better and easier to use, but these are what I invested in and am accustomed to using.

Wood

Almost any scrap of wood of sufficient mass is suitable for hollow turning. You can choose between dry and green wood, long grain or side grain, burl, figured or straight grain, a solid piece or one with voids and bark inclusions or even knots. Blanks coned out from larger bowls are fair game. Of course, the standard warning to watch out for flying bark or loose pieces of wood applies, especially if turning an unstable piece of wood. For your first hollow turning projects I would recommend using straight-grained green wood, turned in spindle orientation. It turns more easily and doesn’t include the nasty surprises that knots or bark inclusions may present. I would also center the pith as closely as possible to reduce the risk of distortion or splitting as the piece dries.

Turning

I always start by turning between centers because this gives me the option of changing the centers to take advantage of or avoid certain features in the piece of wood or to adjust it so that it is more balanced. I rough shape the piece and turn a tenon on the foot to fit into a scroll chuck. I customarily cut the tenon on the tailstock end however, if I am turning a relatively small piece with a natural edge opening that I don’t want marred with spur center scars, I may reverse the piece or replace the spur center with a cup or cone center. Not only is it important to make the tenon the right diameter and depth to fit the chuck, but you also need to make a flat ring adjacent to the tenon so that the chuck will seat tightly against the bottom of the workpiece. This will go a long way to reducing vibration. If you don’t have a scroll chuck, simply leave waste material at the bottom end and turn a flat for mounting a faceplate. I suggest leaving only a minimal amount of waste material on the bottom so that the piece does not project from the chuck or faceplate any farther than necessary. The longer the workpiece the more prone it will be to chatter and vibration while it is being worked.

Now reverse the piece and mount it securely in the chuck or on a faceplate. If you haven’t come to the project with a pre-conceived form in mind, now is the time to decide what the basic shape will be. For beginners I would recommend an open-mouthed jar shape so that you can see what you are doing with the hollowing tool. More about this later. When turning a vase shape, I like to make the profile slightly convex because I think

this gives the piece a softer line. One of the precepts I was taught in turning bowls is to “fair the curve”, that is to make a smoothly flowing, uninterrupted curve from rim to base. I think the same principle can apply to hollow turning. Whether it is a vase shape or a spherical form, if you are creating a curved profile it should flow smoothly from rim to foot.

Whatever shape you decide on, take pains to finalize it and produce as smooth a surface as possible with turning tools in order to reduce sanding time. If the piece is long grain, I use a 1" roughing gouge to do the basic shaping and a ½" spindle gouge for turning the shoulder. Often I use the roughing gouge for planing the sides, but scrapers can also be used effectively. For side grain pieces I use a ½" bowl gouge, with a ¼" bowl gouge for creating details. I do not finish turn the area adjacent to the access hole at this point in case I should screw up. I simply rough shape the neck or leave extra thickness so that I can add some detail later. However, if you are turning a thin-walled piece then you need to remember to add this detail and give the final shaping to the neck before the piece becomes too thin or possibly out of round to do so effectively. The same holds true for adding any rings or beads to the outside.

Hollowing

Now it is time to begin hollowing, and these are the basic steps that I follow.

a. Drill an access hole to provide room for the straight hollowing tool and to establish the depth that you want to work to. Try to make your drill hole bottom out where you really want the finished floor of the vessel to be as it can be difficult to deepen the vessel later without leaving a large nub at the center. Of course, it goes without saying that you don't want to drill through the bottom of the piece either. Using your gouge make a slight depression at the center of the top that will help to center the drill bit. Be careful cutting this depression especially if you are working end grain as the gouge will tend to grab and skate out in a spiral, scoring the area that you luckily have not yet finished.

b. The tool rest should be positioned as near to the work piece as possible. With the straight tool the rest can be snugged right up to the work piece. With the curved hooked tool the rest needs to be positioned farther back so that it supports the straight part of the bar. Otherwise the torque of the rotating work piece can twist the tool from your grasp. This will not make you happy!

c. Start by opening up the hole with a straight tool, cutting from the center toward the outside. You may find that you don't have room to maneuver this more than a third of the way into the vessel. Use the curved hooked tool to open up the part that you have already cut with the straight tool. This will give more room for the shavings or sawdust to accumulate and give you clearance to manipulate the straight tool so that you can expand



the initial drill hole all the way to the bottom of the vessel. I often alternate using the hooked tool and the straight tool until I have opened up a good sized hole to the bottom of the vessel.

d. Now that you have room enough to swing the hooked tool, use it to cut away the wood so that the interior profile begins to follow that of the exterior. Depending on the shape of the vessel, you will have to remove more

stock in some parts and less in others. It will probably be necessary to adjust the angle of the cutter, if you are using the Hooker tool or another tool with an articulated holder, in order to cut under the shoulder of a vessel and then to access the wider part of the sidewall. You can turn the cutter so that it is directly in line with the axis of the handle to make cuts at the bottom of the vessel, but I usually prefer to revert to the straight tool as I find it easier to control.

e. Take fairly light cuts until you are comfortable with the tools and the process, somewhere from $\frac{1}{8}$ " to $\frac{1}{4}$ " with each cut should work. What I found daunting when I first began hollow turning was that I would have catches and not understand why. These catches usually occur as a result of one of the following mistakes: you address the tool to the wood above the center line of the piece, you run the tool too abruptly into the side of the piece, or you encounter a deep shoulder or ledge that you left from the previous cut. Any one of these actions can result in a catch and throw the tool so violently that it may crack or shatter the work piece. You may want to start by introducing the cutter to the wood below the center line and gradually raising it until you can feel it start to cut. If you start by making an open-mouthed vessel, you will be able to see what is happening and how the tool approaches and cuts the wood.

f. Enter and withdraw the tools carefully. In turning a vessel with a small access hole, this is one of the moments of greatest risk. It pays not to be distracted or unfocused at such a time.

g. Be aware that you will need to stop the lathe regularly and clear out the sawdust/shavings. If you allow them to build up they will interfere with the cutting tool, even grab it from your grasp and shatter the work piece. With green wood the shavings may even heat enough to cause the piece to check (my theory). Does this sound like experience speaking? If you have compressed air, use it to blow out the shavings. If not, you can make a simple scoop from a steel teaspoon mounted on a wooden handle to clear the shavings. You may have to grind the sides to make it narrow enough to fit through the opening.

h. Periodically stop the lathe and check the wall thickness as you proceed. Once you have reduced the thickness to $\frac{1}{2}$ " or so, stop the lathe more frequently. You can gauge the thickness adjacent to the opening with your fingers; below that you can use a pair of calipers

to fairly good effect by running the inside leg against the vessel wall and watching how the distance between the other leg and the outside of the vessel varies. You can also use David Ellsworth's old trick of creating a makeshift caliper out of wire.

i. Try to create a relatively uniform wall thickness as you proceed with the hollowing and before you make the final series of cuts. With your finish cuts aim for a relatively thin wall $\frac{3}{8}$ " to $\frac{1}{4}$ " or less, depending on your experience, your risk tolerance, and the size of vessel. Also try to achieve a uniform thickness throughout as this will significantly reduce the risk of distortion and checking of the vessel. I usually make a final pass with the scraper blade mounted on the Hooker tool to clean up the interior surface and remove the most flagrant irregularities. This is really only important in parts of the interior of the vessel that you can feel or see, but it depends on how anal a woodturner you are.

Finishing

There are a variety of options for finishing the top of the vessel. If it is a piece that became unstable during the hollowing process, you should have already taken care of this detail. Otherwise you can probably deal with it after the hollowing is completed. Here are some options.

- Clean unadorned hole – the simplest solution and lets the piece speak for itself, à la David Ellsworth
- Concentric lines or beads around the access hole
- Slightly raised neck
- Raised neck with moldings
- Raised natural edge neck on a burl or side grain piece
- Plug from contrasting wood: this allows you to work through a larger hole when hollowing and close it up. It is also a good way of correcting errors that may have marred the area around the entry hole.

For further guidance you may want to watch John Jordan's video on Hollow Turning which is in the club's video library. I think it is one of the best guides to low tech hollowing. Jordan is an accomplished turner and is a very good instructor.

Suppliers

Sorby mini-hollowing tools (Christmas ornament set) is carried by Woodcraft.

Sorby micro-hollowing tools and Dennis Stewart hollowing system available from Packard and Craft Supplies.



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Reid Gilmore: Hollow form in beech (from a "crotch with a fungal infection")
 Dave Hopkins: Beech burl with gold-leaf accent in voids
 Ken Lindgren: Cherry burl hollow form
 Graeme Young: Hollow form with 4 feet.
 Or is it 5 feet?

Photos by Emilio Iannuccillo

Paul Charbonneau: Cedar pepper mills made with lathe duplicator
 John McAtee: Carved desk clock
 Al Czellecz: Composite sculptural piece assembled out of small turnings with spikes made of Golden acrylic gel
 George Whippen: Pepper mill from mahogany railing scrap



GY



PC



JM



AC



GW



BT



MG



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Bobbi Tornheim: Cherry bowl with 3 feet, darkened with oven cleaner.

Mickey Goodman: Spalted Maple bowl & hollow form.

Charlie Croteau: Laminated box in maple & bloodwood.

Reid Gilmore: Segmented bowl using too many species to list.



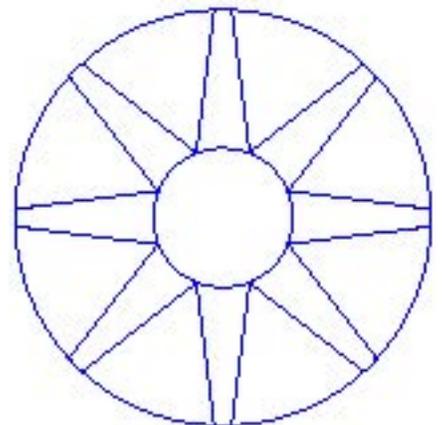
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John McAtee's segmented box, how the support is made:

Ignoring the box and base, the support was made from a wood cylinder and a pattern. The steps are as follows:

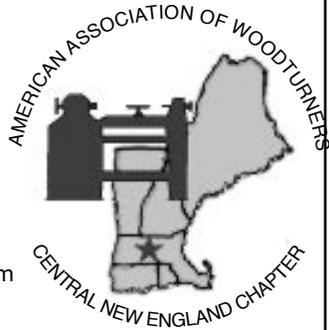
1. Turn a cylinder with a foot/tenon the same diameter as the pattern.
2. Affix the pattern to the tenon end of the cylinder with spray adhesive.
3. Using the pattern, cut out one of the eight grooves using the bandsaw.
4. Chuck the tenon end and hollow the box receptacle to fit the shape of the box. The one groove allows you to see and adjust for fit.
5. Once there is a good fit with the box, drill a hole all the way through so the box can be affixed to the support with a small tenon rather than trying to glue it to the rather delicate support tines.
6. Shape just as you would a small bowl, using the single groove to see how the tines will be shaped.
6. Take the piece back to the bandsaw and cut out the remaining seven grooves following the pattern.
7. Reverse compression chuck the piece with the tailstock center in the hole. You will likely have to turn a compression block to fit the hollow. The compression block should make contact at the center third of the hollow only, so as not to stress the delicate tines.
8. Turn down the remaining tenon.
9. Sand carefully and finish. Attach box and base when ready using tenon/dowel.



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On the web: www.cnew.org

AAW has a new insurance program to cover home-based turning business assets. Contact them directly if interested.

Richard DiPerna noticed that our own Al Faul has been published in the Irish Woodturner's Guild journal. His article describes a homemade press for assembling pens. Congratulations to Al, who was too modest to bring up this achievement on his own.

Al Czellecz reports that Ken Dubay is recovering from his table saw injury and was happy to receive the get-well basket that CNEW sent.

He also announced that the Central Connecticut club will host demonstrator Graeme Priddle of New Zealand at their picnic June 19th. The location will be Ken Dubay's shop in Columbia, Connecticut. CNEW members are invited. Contact the Central Connecticut club for more details.

Charter CNEW member and past treasurer Hank Cahill is recovering from a bad fall. We voted to send a basket with our wishes for a speedy recovery.

Wood For Sale

From e-mail to Ray Boutotte

I am a member of the Spacecoast Woodturners, a Florida chapter of the AAW. I started a small wood supply business approximately 1 year ago for woodturners. We currently can provide fresh cut Norfolk Island Pine in log form in many sizes. Also presently available is some Spalted Citrus, Bay Laurel, Red Cedar and Florida grown Mahogany. I will offer 10% discount to your club members. The wood can be shipped as individual pieces via UPS or USPS, or in larger amounts (such as a group purchase) via a commercial trucking company. Kindly forward this message to your club members. I can be contacted via e-mail to answer any questions. Thanks.

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