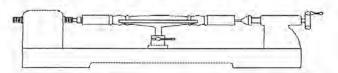
## Minnesota Woodturners Association



Local Chapter of the American Association of Woodturners

January 1996

Volume 10 Issue 1

# Happy New Year

### Editor's Corner

Happy New Year! I hope everybody had a safe and satisfying period over the holidays. With the new year upon us, we can reflect back on our past and look forward to the future.

What is our future? Since being organized in 1987 with 25 charter members, we have grown into the range of 80 members. Although some of our members are from out of town, the majority are within driving distance of meetings. On the average we have 20-35 members per meeting. We have been trying to follow an agenda more closely to fit within the time frame of each meeting. We have instituted a wood raffle that has proven to be popular and has demonstrated the generosity of our members by donating the wood for the raffle.

As with boards in the past, this board is trying to supply the membership with a diverse amount of information, that will increase the knowledge and skills of our membership. Some board activities are getting a meeting place, setting up for the demo and transporting equipment, books, magazines, wood, etc plus all of the little things that pull a meeting together. We have tried to have the meetings in varying locations to serve the total membership so as not to put a hardship on any one group for travel. These meeting

### Membership Renewal

#### -Reminder-

If your mailing label says "Expired on it regretfully this will be the your last news letter if your 1996 does are not paid. Also, a new membership list will be published in the middle of January and if dues are not paid by this time your name will not be included in the list. Membership lists are available to all active members at meetings or from Ron Meilahn @ (612) 633-8902. Call Ron to check on the status of your membership or if you have any questions.

See page # 8 of this newsletter for the Renewal form

Thanks to members who have renewed and we hope you like your new membership card included with this issue

places are becoming harder to come by because of the liability issue with turning equipment and also because we have a pretty decent turnout at these meetings and we cannot fit fit into most of the original places we have met. We are presently looking for more meeting areas and request help from any member that has or knows of places we can meet.

As you know, the board is here to serve the membership, but we cannot succeed without the help and input of the membership.

We are looking into new activities such as turning challenges, (The Egg demo and meeting will be a first for us on this), wood gathering, school demonstrations, and possibly putting on a mini-symposium with thoughts of eventually hosting the National symposium here.

All of these activities require an investment in time/talent and we would like to have as many members involved as possible. Please give some thought as to how you can help the association. There are many ways from doing some phone work to putting yiur name in for election to the Board of the Minnesota Woodturners Association. You will always get more back when you are willing to give a little.

Our board has the rest of this year (1996) to serve but it is not to early to start thinking about nominations for a (Continued on page 9)

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Jan 1995 Beginning Bank Bance	\$1,342
1995 Activity thru 12/31/95 Income	
Membership (82 Paid)	\$1,185
G Sales(Net)	\$332
Meeting od Raffles	\$118
Total Income	\$1,635
Expenses	
Net Demo Costs	(\$68)
Library Tapes, VCR Rental, etc	(\$567)
Newsletter Printing, Postage, Supplies	(\$748)
Tools	(\$244)
Annual Liability Insurance	(\$75)
Donations - Arrowmount School	(\$200)
Prizes, Board Migs, Misc	(\$257)
"Woodturning" magazine renewal-2 yr	(\$240)
Total Expenses	(S2399)
Membership Deposits-Library Tapes	\$20
1996 Dues received to date	\$920
Checkbook Balance as of 12/31/95	\$1,518

#### Member Helpline

Do you have a question or need help with a project or turning? The following members have volunteered to try and answer your questions, or get you pointed in the right direction for the answer.

John Engstrom	(612) 475-0307
Jim Jacobs	(612)437-2302
Ed Johnson	(612) 224-4194
John Magnussen	(612) 477-6294
Hal Malmlov	(612) 789-9616
Dave Schneider	(612) 934-4667
Don Wattenhofer	(612) 572-1045

If you would like to help out and have your name on this list, please call Dave Schneider @ (612) 934-4667

### Know Your Minnesota

### Trees

ation from Minnesota Cavision of For

AMERICAN ELM [Ulmus americanal

FORM Large tree; height 80' to 90'; diameter 2' to 4'; wide spreading branches with more or less drooping branchlets.

BARK Dark green; divided into irregular, flat-topped, thick ridges; generally firm, although on older trees it tends to come off in flakes.

LEAF Alternate; length 4" to 6"; rather thick, somewhat onesided; doubly toothed on margin, generally rough above, smooth below; veins very pronounced and run in parallel lines from midrib to edge of leaf.

FRUIT Winged, light green, oval, and wafer-like in appearance; seed portion in center surrounded entirely by wings; outer end of each wing deeply notched; seeds hang in clusters; ripen in spring; widely scattered by wind.

RANGE Fairly common throughout state; more abundant on rich bottom lands in southern half of Minnesota.

WOOD Light brown, heavy, hard, strong, tough, and difficult to split; used for saddle trees, boats and ships, furniture, barrel staves and hoops, and veneer for caskets and crates. Very susceptible to Dutch Elm disease.

BOX ELDER [Acer negundo]

FORM Height 30' to 60' on favorable soils, diameter may reach 18"-24"; rather bushy on unfavorable soils; limbs and branches fragile; tree somewhat subject to fungus disease and attack by insects.

BARK Smooth and green on young branches; thin grayish to light brown and deeply divided on old trees.

LEAF Length 5" to 8"; compound. usually with three leaflets (rarely 5 to 7) which are opposite on stem, smooth, lustrous green; length of leaflets 2" to 4", width 1" to

FRUIT Cluster, winged and similar to that of sugar maple, but smaller; ripens in late summer or early fall; often stays on trees all winter.

RANGE Common throughout the state; less abundant in northeastern part; grows naturally along streams and in cool ravines; a fairly rapid growing tree, prolific in reproduction; however, many young trees are destroyed by grazing and cultivation; hardy tree for severe locations.

WOOD Creamy white, soft, light and close-grained; decays rapidly in contact with heat and moisture; used occasionally for fuel; has no general commercial value.

### Learning About Turning.....

Dave Schneider

earning Processes.

Some of the learning resources available to us are; Magazines, Books, Video Tapes, Demonstrations, Chapter and Guild Meetings, Symposiums, Individual and /or small group instruction and just standing at the lathe.

Whether a beginner or professional turner, we always have something to learn or a need to improve. How we do that depends on several circumstances; interest, time, money, and the amount of each of these that we have to spend.

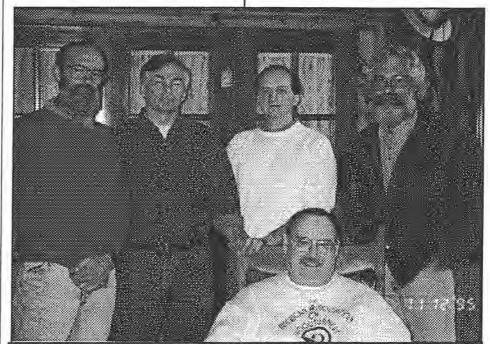
There are times when we each reach a plateau and we have a hard time climbing off. Such as advancing our skills, trying something new or maybe not being able to master a certain technique or techniques.

I had found that reading, videos and standing at the lathe would not get me past certain areas of using bowl gouges, specifically in sheer scraping and body movements (tool control). This left human intervention (instruction ) as the next step to move from the plateau I was on, hopefully upward. After seeing David Ellsworth demonstrate at the 1995 Symposium in Davis, California, wondering how he creates his famous (fantastic) hollow forms and reading his ad for the "Ellsworth School of Woodturning" in the AAW magazine, I called for information on his school. It was exactly what I was looking for and so I registered for a class on Nov 10, 11, 12-1995. Each class is limited to 4 people or less and we were asked to be there on the Thursday night before, for a get acquainted meeting and see the shop/studio where we would be working and learning.

Arriving in the dark at 8:00PM on Thursday night was an experience in itself as David's house and studio are located about 1/2 mile off the surfaced

road and you wind through a fairly thick forest to get back to a "T" that to the left is Davids home and to the right is the studio. Taking the left to the house proved to be the correct choice and David was at the door to personally greet each one of us. David and his wife Wendy designed their home which is not only a very comfortable abode but a show place for David's work, and Wendy's, who does elegant bead work. It also houses their collection of art ranging from other Master Turners, Master Woodworkers, (one of Sam Maloofs famous rockers sits in an area off of the living room), to 2 pieces of Anasazi pottery circa 950AD and 1400AD on their fireplace mantel.

the ways are wide enough that a person can stand in the center when working straight on in a piece. There is also an A frame that looks like a car engine hoist that David uses to mount the large pieces of wood onto this lathe. We were told that we could use any of the equipment there and encouraged to try all of the lathes if possible. David also has a very unique dust control system that is very effective as well as being very simple. He has two 20" window fans, one of these is placed in the corner of the shop where the stove is, the other fan diagonally opposite in the shop, drawing the air around and into a stack of standard furnace filters that David periodically takes outside and blows out with his air compressor. In all of the time we were there, dust



Attendees from left to right: Abe Harper, Berea, KY; Robert Bradshaw, Clinton Twp, MI; Tom Vencziak, Lansdale, PA; David Ellsworth, Quakertown, PA with Dave Schneider, Eden Prairie, MN seated.

After an introduction to the other attendees, we walked to the studio to get acquainted with where we would spend our next 3 days. Lathes in the shop include a Woodfast shortbed, 16" swing, Woodfast longbed, 20" swing, 2 General 260 lathes, 20" swing and a Thompson lathe that swings 30", has a 5 HP motor, and

was at a minimum.

On Friday morning we were there bright and bushy tailed and ready to go. After having breakfast with David and Wendy, we headed for the shop to begin our learning.

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David showed us the tools that we would be mainly using. They consisted of four main tools. The first two were 5/8"diameter deep fluted bowl gouges, one with a standard grind on it and the other with an Ellsworth grind. The "Ellsworth Grind" has a 20°-25° angle on its nose and the sides are ground back 3/4" or more. The area to either side of center is used to hog out wood. The center is used to cut bowl bottoms and endgrain and the sides are used to cut the inside and outside of bowls. If the tool is turned 90° to its side, it can be used to produce a finish cut, (with lots of practice). The tools that are custom made by David. His hollowing tools are made from 9/16" drill rod with a 1/4" 10 % cobalt bit superglued in to the end. These have a hole drilled into the end of them, off center so that when the toolbit is mounted in its cutting edge will be at approximate center of the shaft. One is a straight on design and the other has the cutting bit put in at a 45° angle for getting to the inside immediately after the opening and on down. The handles are a substantial 1 3/4" to 2 1/4 " in diameter and about 27" long to give good and stable control when hollowing deeply and through a small opening.

David then gave us a demonstration "On going from the log to a bowl" in the morning and then we spent the afternoon doing just that ourselves, with David continuously moving between the 4 of us to offer advice and point out what we were doing wrong and how to change it and also reinforcing what we were doing right. David is a master in the art of constructive criticism and has a most elegant way of telling you that you really aren't doing something correctly. Following is an explanation of the demonstration and what we then also did with wood that had been freshly cut out of David's woods.

The log should be a couple of inches longer than it is round in diameter. Center the log horizontally on the lathe and tighten the Tailstock, always remembering to tighten it up every few minutes because you are working with green wood that can be compressed easily between centers.

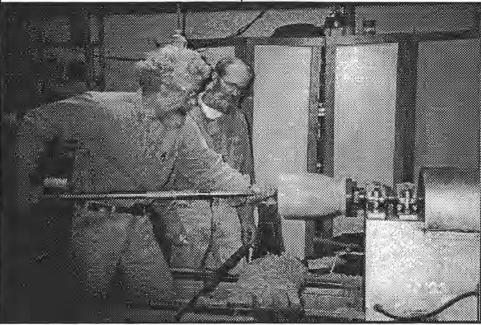
Round each end of the log with a stub on each end, always keeping your head above the cut and your eye following the bevel and

swinging your whole body, switching ends as necessary if the tool rest will not fit under the piece.

Once both ends are rounded and with the piece turning on the lathe, eyeball where you think the center is and mark with a pencil. As David had predicted, it was right on center. David had one of us on each side of the lathe spotting, while the turner marked the piece, and the line fell in exactly where both people thought it would. Amazing! Just remember that the lathe has to be running with the piece spinning.

other two tools were Ellsworth hollowing After marking the center in the above action,

marked are now the starting point for remounting. Once mounted, hold your pencil at the pith on one end of the log and then turn the log 180 degrees without moving the pencil. If you are extremely lucky the pencil will center with the pith on this side and you now have the pith perfectly centered. If it did not line up, take 1/2 the durance that it was off and move this distance on the Headstock and then the same distance but in the opposite direction on the Tailstock. Measure again and if not centered use the new measurement and repeat the process. Keep doing this until the piece is centered. You can now flatten the Tailstock end for mounting the face-



David Ellsworth demonstrating a cut on his Thompson Lathe for Abe Harper (Notice David standing in between the ways of the lathe)

it is time to remount the piece 90 degrees and center the pith of the log .(If the piece is going to be a hollow turning, try to end up with the bottom of the piece facing the Tailstock so that you can flatten it for the faceplate.) The first thing you want to do is to measure from the marking made on one end by the head or Tailstock through the center of the pith and follow through to the line on one side of the piece marking this with your pencil, turn 180 degrees and do the same on the other side. Now turn the piece over and do exactly the same here. Now you can bisect each of the pair of lines marking as the point to put the head and Tailstock. The two points you just

plate. (Keep your head directly above the cut and close one eye to check for flatness.)

If this is going to be a hollow object, turn off the stubs and then mount on the face-

If there are to be two bowls, mark on either side of the pith by 1/2" to 3/4" and cut the piece between these lines in order to get the two bowls out of the log . (Only cut down to 1" to 1 1/2", stop the lathe and then place your gouge in between the two pieces and snap off.) Mount the one side on a 6" faceplate and put the other aside for the next bowl or object. In either of the above cases, bring the

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Tailstock into place for outside finishing and the start of the inside of a bowl.

When the piece is mounted, envision where you want to end up with the bottom of the piece. You will have to know where the screw ends are and plan to miss them. Then using your gouge, cut in a sharp profile that your eyes will follow. If you just cut in a cove the roundness will throw you off and not give you a good idea of the shape of the form. Now shear cut the outside to a final finish before proceeding.

#### Hollowing the inside of a bowl:

Start from the center with the ground back gouge and go at a fairly steep angle to take out the nub on each pass, do not go in at to shallow of an angle, the entry cut is done with the gouge 90 degrees to the edge and turned horizontal (flute up) and follow the curve all the way through the center. (Finish cutting on the inside is done with the gouge in the horizontal position and the bevel riding). Once the bowl is hollowed you will then get a chuck with foam over it and then put the Tailstock up, lightly run a pencil on the edge to find the high spot, put spot at top and lightly tap down and try again until perfect, then turn away waste until you get to the point of shear scraping to finish. Now use a 1/4" gouge ground convex to finish the bottom and reduce the nubbin in diameter so you can then use a #2 spoon gouge to cut the nubbin off while the piece is turning but the power has just been shut off.

We finished the day with supper and then went to a local pub that was built in 1705 (I might be off a couple of years) to discuss the day and watch David play pool with the Friday night regulars. Incidentally, David brought in his own custom made pool cue. If you get a chance, read the article on making pool cues in the magazine Fine Woodworking, Issue # 59, July/August 1986 with the author using the pseudonym "Colorado Slim". (By the way, the authors initials are D.E.)

On Saturday we repeated the above process but instead of making bowls we used the whole piece and made it into a hollow form. The piece I did was made from black birch, has a fairly consistent wall thickness of 5/16th" and is 8"wide and 7"high.

On Sunday two of us chose to do a birds mouth type bowl with natural edge. The bowl I turned is made out of Ash, 6" high and 8" wide. Sunday afternoon we talked about photography, proper lighting, materials used, such as sailcloth, looked at the 2nd floor of the studio where David has an office and display areas (large and small).

David loves what he is doing. After 3 days of teaching, he picked up a piece of wood to demonstrate the Vacuum Chuck setup he uses and made the statement, "Now I can have a little fun" and proceeded to make a 6" bowl with a very small foot in less than 10 minutes, all the while explaining what he was doing and why.

We wound up on Sunday at 5:30 PM, pleasantly tired and filled with new knowledge that we were anxious to get home and put to use.

I can say that all of the goals that I had set for the course were met and now all I have to do is to follow through and practice. An unseen bonus was that I came home with 4 pieces I had turned.

David Ellsworth is one of the most competent teachers I have had the privilege of learning from. He is open, warm, communicative, has a great sense of humor and is non-threatening. David is also very open with opinions but does not push his view and leaves decisions up to students. He is also an excellent demonstrator.

If you are thinking of taking a woodturning course, I would highly recommend David and his school.

The school is located on 20 wooded acres about 8 miles outside of Quakertown, Pennsylvania. Quakertown is about 1/2 hours drive south of Allentown/Bethlehem, PA or 1 1/4 hours drive north of Philadelphia, PA. The school runs for 3 days, (Friday, Saturday and Sunday) for approximately 10 hours a day, starting with breakfast at 8:00 AM, lunch and supper with David and his family.

For further information write or call:

David Ellsworth
The Ellsworth School of Woodturning
Fox Creek - 1378 Cobbler Rd
Quakertown, PA 18951
215-536-5298

#### PESTICIDES APPLIED LOCALLY HAVE SPREAD GLOBALLY, STUDY FINDS

A report on the study of pesticides and fungicides by Ronald Hites, a chemist and professor at Indiana University and a colleague, Staci L. Simonich, published in Science, the journal of the American association for the Advancement of Science has stated some of the following information.

An analysis of tree bark suggests that insecticides and fungicides have spread over the globe, often thousands of miles from where they are used, and that some chemicals sprayed decades ago are still affecting the environment.

Tree bark gathered from 90 sites, from the tropics to the chilled latitudes, bears traces of chemicals related to DDT, lindane, chlordane, aldrin and to 18 other pesticides or fungicides, said Hites.

The worldwide survey of tree bark, Hites said, showed that some of the chemicals became airborne in hotter climates and are carried to cooler areas, where they condense out of the atmosphere and concentrate far from where they were used.

Traces of the insecticides were found in even very remote regions, such as rain forests in South America, Hites said.

Hites said even though DDT has been banned for decades in most industrial countries, decayed products of the insectiside such as DDE and DDD, are still around and easily detected in the tree bark.

The study found DDE most highly concentrated in the tree bark in the Midwest and Southwest, agricultural areas where DDT was most widely used.

Even though DDT and its related chemicals are still in the environment, Hites said, they have become locked in deposits, such as sediments at the bottom of lakes, where they have less effect on the environment.

#### THE RIGHT FINISH OIL, VARNISH, LACQUER, OR WAX

By Don Westerman

You have just turned a beautiful piece on your lathe, and now you have to decide what finish to use. For openers, your finish can be no better than your surface, and it could be worse! This is because the finish may show defects you had not noticed before. To check for defects, put on a quick coat of lacquer or sealer, then take the piece into sunlight, or use a bright light at the lathe, and rotate it slowly to see if all marks from torn grain have been removed. Basic finishing materials can be loosely divided into four groups: oil, varnish, lacquer, and wax.

OIL: This category is dominated by modified linseed oil. All the oils are formulated with dryers, without which oils can take months to dry. This includes tung oil, which takes nine months to a year to dry if a dryer is not added. You need to know that dryers used in finishing oils contain heavy metals and are very toxic. Rubber gloves and good ventilation are essential. Oils have very little wear resistance and even less water resistance. Varnish is often combined with oil to alleviate some of these deficiencies. Mineral oil never dries, and it may cause bonding problems for other finishes.

Oils for salad bowls, cutting boards, and other food containers must be safe for human consumption. Walnut oil (available at health food stores) is probably the best choice. It is the only edible oil that will dry and is thus the only one that will not turn rancid. Salad oil is notorious for turning rancid.

NOTE: When using Behlen's salad bowl finish, read the small print; be sure to observe the drying time to allow the dryers to evaporate. This finish is not FDA approved; the ingredients meet FDA standards. FDA does not approve finishes.

VARNISH: The most durable varnish is a high-solids spar varnish. Polyurethane would be next. Urethanes are available in blends with oils added, but the most interesting is urethane modified with acrylic. This is very durable and is widely used in the automotive industry. These products are best applied with a spray gun, which may be a disadvantage for woodturners. Because urethanes are extremely toxic, a gas-vapor rebreather approved by OSHA should be used.

Because varnishes are slow drying, you may have to put up with dust settling on your new finish. A bright spot in the varnish category is Bartley Gel Varnish. It can be applied with a cloth pad while the lathe is rotating. It gives a nice finish and seems to pick up a minimum of dust. The down side is that you must wait six hours before recoating.

NOTE: After many years using polyurethane in the boat-building industry, I feel obligated to warn again of its extreme toxicity. The side effects, and some deadly results, demand that I say use every known protection or, better yet, DON'T USE IT!

LACQUER: This is definitely a woodturner's friend. It dries very quickly and can be applied with a cloth to spinning work. This is called "padding on a finish," thus the term, padding lacquer. Almost all lacquers can be recoated in 20 minutes and sanded in 30 minutes.Lacquer makes a great sealer. Just thin it with 70% thinner.

NOTE: You can apply almost any finish over lacquer but not lacquer over other finishes.

My "super-secret" formula is clear acrylic automotive lacquer and medium retardant thinner, which is available at automotive paint stores. Mix these one-to-one with the variable being more thinner. This is an easy finish to handle and can be padded and recoated in 7 to 8 minutes. It is very durable and has a UV protector in its formulation. It normally lasts 10 years on automobiles. It will not dull the grain as oil does and is as clear as any other finish.

WAX: Waxing is a good way to finish up. It will help to prevent fingerprints from showing on work that is handled a lot. But there are some commonly misunderstood qualities of wax. You cannot build up a "thick coat" of wax. When you apply extra coats of wax, you simply dissolve and buff off the excess. Extra coats simply assure that you have not missed a spot.

The quality of wax is determined mostly by the amount of carnuba it contains. The best waxes are those used in mold release films in fiberglass and plastic molds. These are formulated to provide a barrier that will tolerate 200 degrees Fahrenheit exotherm and insure a release of the part from the mold. The key here is the carnuba content. You should judge all waxes by their carnuba content. Johnson's Paste Floor Wax, for example, because of its high carnuba content, will preform as well as any of the fancy 12 a can waxes. Special waxes for use on dark wood are nothing more than shoe polish, smell them! Beeswax is good for helping to drive screws into hardwood.

This article was excerpted from the newsletter of THE NORTH CAROLINA WOODTURNERS Association

#### Tip:

When turning wet/green woods such as Oak, Maple, Birch, etc, if you touch the wood, stain marks appear which really detract from it's appearance. This is a chemical reaction between the turning tool steel and the acid in the wood.

There are two ways of removing the blemish: 1) Brush on a solution of 50% Chlorox or similar bleach and 50% water. 2) Brush on lemon juice (natural or from a concentrate)

# Notes & Tips from Paul Kachelmyer:

#### Chatter tool:

A few months ago I demonstrated using a "chatter tool", to put decorative designs on spinning tops. The chatter tool is essentially a small piece of spring steel which bounces slightly, when pressed against hard spinning wood. The spring steel is mounted in a steel tool handle. At my demonstration, I told of how easy the tool was to learn how to use.

Within a couple of months, several people told me that they had tried the tool, and could not get it to work. I then tried to use their chatter tool, and could also not get it to work.

It took some experimenting, and I found out what the problem was. The tool handle has to be held very firmly, so that only the spring steel tip flexes. If the tool is not held firmly enough, the tip will not flex properly.

I never had this problem, because I had just bought the tip, and mounted it into a heavy steel shaft. The shaft was about 5/8 inch in diameter, and 2 1/2 feet long. The heavy shaft has been easy to hold steady so just the tip of the chatter tool flexes.

The tool as it is sold in the stores, has a short handle, only a foot or so long. In order to get it to work, I had to hold the handle end of it very firmly against my body. I found this to be quite awkward.

#### Velcro:

If you want to make your own velcro sanding disc holders, or sanding discs, I have found a local source of materials. United Textile Outlet, 578-0111, in the Oakdale Mall. This is located at the northwest quadrant of the intersection of I-694, and 10th street, in Oak-

dale. This is one mile north of I-94. The mall is mostly full of empty stores, but this is one of the few that are there.

They have the hook-loop material in widths up to 4 inches. Most fabric and craft stores only have it up to an inch wide.

They have lots of material that the hooks stick to, priced very cheaply, at just a dollar or so a yard. They also have some with a firm plastic backing to it.

#### Past meetings:

On November 18, 1995 we met at Don Wattenhofer's garage for a very interesting demonstration by Don, on how he turns his deep, lidded, hollow vessels.

We had a good turnout, and the garage was packed.

Don has been making these vessels for several years, and has learned many things about how to make them.

The vessels are turned in "end grain". End grain turning is how most "spindle" turning is done. The grain of the wood follows the length of the piece. This is like table legs or baseball bats.

By turning in endgrain, the wood is very strong and stable, and is not likely to excessively warp.

To reduce the potential for cracking, Don uses pieces of wood that do not contain the center (pith) of the log. Thus, the size of the log has to be at least twice the diameter of the desired vessel.

Don starts with a piece of "green" wood, mounted "between centers". The wood was driven with a spur center, with a live center in the tailstock.

The piece of wood Don started with,

weighed approximately 20 pounds, and was only very roughly rounded with a chain saw.

Don started the lathe at a very slow speed, to start turning the piece to get it round. Vibration would have been excessive at faster speeds. Don's lathe is equipped with a variable speed DC motor, that can slow down to zero revolutions per minute.

Because of the slow lathe speed, it took quite a while to get the piece round. After the piece was round, Don was able to increase the speed of the lathe quite a bit.

Don Turned the shape of the piece to the approximate shape that he wanted for the outside of the vessel. At the top of the vessel, he also shaped the piece for what would become a removable top. At each end of the piece he cut a notch to the size of the jaws of his NOVA chuck.

Don was now done with turning the wood between centers. He removed the piece from the lathe, and used a bandsaw to cut the top from the bottom.

There were some big cracks in the piece. He filled them with a lot of super glue.

Don turns his vessels in two stages. He rough turns them out of green wood first, and sets them aside for a few months to dry. During this stage they will warp some. After they are dry, he finish turns them.

This process reduces the potential for the top and bottom of his finished vessels to warp, and thus not fit later on.

Many people in our association have made lidded boxes that fit perfectly, on the day they were made. Later, however, there was warpage and they would not fit.

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This can happen even with completely dry wood. One of the reasons for this, is that removal of the wood from the inside of a container, removes stresses from within the wood itself. These stresses exist in the growing tree, to give the wood strength. These stresses are like compressed springs. When the compressing forces are removed, the springs

hollowing out bowls.

To start the process, Don used a forstener drill bit mounted in the tailstock. He drilled a hole to what would be the bottom, of the inside, of the vessel. He then used a larger forstener drill bit to make the hole bigger.

While using the tailstock to drill large



Don Wattenhoffer roughing out a piece of walnut for a hollow vessal

expand.

Thus, even with dry wood, it may be a good idea to rough turn the two parts of a lidded container, and set them aside for awhile, before finish turning them.

Don remounted the base of the vessel on the lathe, with it being held by the jaws of the NOVA chuck. The other end of the vessel was supported by a three sided steady rest. The steady rest did not have any rollers. It just had flat metal ends. With the lather running, Don lubricated the wood surface that contacted the steady rest ends, with paraffin wax. The steady rest was absolutely necessary to support the wood during the hollowing out process. It was surprising to see how well the steady rest worked, even though it did not have any rollers.

Hollowing out the inside of end grain vessels, tends to be much harder than holes, the potential exists that the #2 Morse taper mount, for the drill chuck, may spin. This can cause a lot of damage to the tailstock. To prevent this, Don places a tightening key in the drill chuck, and places the lathe's tool rest, below it. If the drill chuck should start to turn, its movement would then be stopped.

He then used a "Stewart" tool to begin the slow process of cutting away the wood from the inside of the vessel. The process produces very small chips and sawdust. Don had to stop the lathe every few minutes to clear out the chips. Mostly he used a shop vacuum to suck out the chips,

When he had removed enough wood, so that the thickness of the walls of the vessel were nearly as thin as he wanted, he attached a special caliper to his cutting tool. The caliper would show him when he had reached a certain wall thickness.

The caliper fit around the outside of the vessel, while the tool cut on the inside. A small piece of plastic was held in the caliper, and was bent downward while the wall thickness was greater than its setting. The plastic would spring free when the wall thickness remarked its setting.

A method of measuring we vessel's wall thickness is real important. Walls to thick, produce a heavy vessel, that may crack. Walls to thin, mean cutting through, which means firewood.

Don also used a ring tool to remove some of the wood from the inside of the vessel.

Don shapes his vessels so that they have a very small base. Part of the reason for this is to limit the potential for cracking. In endgrain turning, the larger the base, the greater the potential for cracking.

Thanks Don!

Our December meeting was a general organizational meeting that covered aspects of the Association, the Duluth Art Show, a very interseting Show and Tell, our Wood Raffle and a Christmas drawing. Following are the Christmas Meeting Drawing Winners and their prizes:

Chuck Pitschka - Gold gilt paint - donor unknown

John Ratliff - Pocket Hone donated by Woodcraft

Bruce Arones - Complete set of Cyanocrylic Glue from MWA

Al Gaskell - Walnut hollow form made by John Magnussen

Jonathon Sybrant - Goblet from Don Wattenhofer

Dave Schneider - Small Medical Kit donor unknown

John Magnussen - AAW Calendar donated by AAW

Duane Gemelke - Pocket hone from MWA.

Thank you to everybody that donated something! We will definitely have a Christmas exchange for all attending members at our December meeting next year. Please forward your suggestions for what you would like to see at that meeting to any board member.

(Continued from page 1)

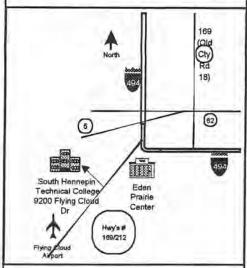
new board and possibly changing the makeup of the board to get more people involved. All positions on the board will be open for nomination and we would like to have several members interested in each position. We will expand on this in future newsletters and are encouraging each and every member to give some thought as to how they can each help improve our association.

Dave Schneider

### Opcoming Meetings

January 9th, 1996, Tuesday 7:00 to 9:00 PM -Understanding & Turning Green Wood - The Good, the Bad and the Ugly Don Wattenhoffer and Dave Schneider This will be a discussion with samples of successful and not so successful green turnings. Some do's and don'ts in working with green/wet wood.

The meeting will be held at South Hennepin Technical College. 9200 Flying Cloud Drive, Eden Prairie, MN Tel # 944-2222, Room



H117. The Campus is located approximately 2 miles south of the Eden Prairie Shopping Center on Hwy's #169/212

February 10th, Saturday, 1:00 to 4:00PM - Turning Eggs

As many of us know, eggs are one of the simplest of natures forms, but fairly difficult to duplicate. This meeting will give us some ideas on creating this illusive form.

The meeting will be held in Tim Mannings heated garage.

Tim's address is 1100 44 1/2 Avenue Northeast, Columbia Heights.

This is located about one mile south of I-694, and about 2 blocks east of Central Avenue (highway 65). If you are going south on Central, turn left (east) at 45th and go one block, then turn right (south) and go one short block to 44 1/2 Avenue. turn left and go to Tim's house, 1100 44 1/2 Avenue Northeast.

Please dress warm, and bring a chair.

Chapter wood raffle (Please bring a piece of wood for the raffle.)

March 19th, 1996, Tuesday 7:00 to 9:00PM - Making your living in the Crafts, The Up and Down Sides - Glen Elvig

Glenn Elvig was born in 1953 In Houston Texas. After short stays in Chicago and Detroit, he has lived most of the last 25 years in Minnesota. He graduated from the University of Minnesota (B.S. Education/Ceram-

(Continued on page 10)

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#### Minnesota Woodturners Association

#### LIABILITY RELEASE

The process of woodturning presents an ever-present risk of injury to a person operating a lathe, and to any individual observing its operation.

We want to make sure that all individuals operating or observing a lathe are aware that many hazards do exist.

Lathes spin woods at high speeds, presenting the potential for injury if the wood, or portions of it, somehow breaks, shatters or comes away from the lathe while it is spinning. Potential weaknesses exist in all wood, and in all methods of holding wood, therefore the potential for wood breakage and personal injury exists any time a lathe is used.

Sharp tools, brittle tools, hazardous glues and finishes may also present a potential for injury for lathe operatores and observers.

Wood chips, shavings, splinters, bark, chunks of weak wood and dust fly off the wood being worked on the lathe. Eye and face protection is absolutely necessary to protect operators and observers from potential injury from this flying debris. Wood debris on the floor also presents a hazard for slipping/falling. Dust in the air may present respiratory hazards.

Many woodworking shops are not set up to allow observers. Therefore hazards may exist to individuals being in the shop due to areas being ramped, or to tools/supplies being touched, bumped, accidentally started or otherwise affected by themselves or others in the shop.

By signing, I acknowledge that I have read the above information, that I understand that there is a risk of injury to individuals operating or observing lathe operation, and that I accept full responsibility for any injury which may happen to me while attending or participating in any way, any event, gathering, demonstration or seminar, in any way associated with the "MINNESOTA WOODTURNERS ASSOCIATION". I further release from liability, any individual, business, school or meeting place and the the "MINNESOTA WOODTURNERS ASSOCIA-

#### January 1996

(Continued from page 9)

ics), and spent three years working as a potter and teaching high school, While teaching, Glenn attended a conference in Cody, Wyoming, and had the good fortune of meeting Stan Lynde - keynote speaker and the artist and creator of the well known comic-strip "Rik O'Shay'. Lynde's inspiring talk gave Glenn new focus and direction for a new studio and career back in Minneapolis. 1995 marks the 15th anniversary of the opening of that studio. In the last fifteen years, Glenn has drawn inspiration from the works of noted artists Claes Oldenburg, Ellsworth Kelly, and most recently - Gary Larson. He sees Carolyn Vosburg Hall (neighbor, friend, mentor, and star since childhood in Detroit) as his most Important artistic influence. Glenn has been active in the art community, serving terms as president of the innesota Woodworkers Guild In 1981 and the Minnesota Crafts Council in 1986. Presently, he is National Show Committee Chair for the American Craft Council. His work Is sold in galleries throughout the United States.

Fridley Library - Mississippi Branch - 410
Mississippi St. N.E. (612)571-1934
Located 1 block East of University Ave on
the corner of 6th St & Mississippi. This
is north of Interstate # 694 approx 2-3

miles.

 Chapter wood raffle (Please bring a piece of wood for the raffle.)

April 20th, Saturday, 9:00AM to 5:00PM -Professional Demonstration by Christian Burchard -Turning Spheres PLUS

There will be a \$15-\$25 Fee for this event. More info in March newsletter. Christian Burchard tries to create images which stimulate and surprise. Rarely is a piece totally conceived before he starts work on it. He gets a glimpse of something and flows - or battles - with it along the way.

It's a process which he says pushes at his boundaries, overcomes his timidity and expands his vision.

Born in Hamburg, Germany, Christian moved to the United States In 1979 after extended travels through Europe and a two-year apprenticeship with a furniture maker. He now lives in the mountains of southern Oregon, where he turns vessels and sculptural forms along with designing and making furniture.

Christian Is self- taught on the lathe. Using the lathe as a rotating carving machine he explores the properties of different timbers, retaining some of their characteristics in the finished pieces, leaning on nature a little, but not too much - finding the balance, like a conversation."

Where appropriate, he leaves the marks of his tools - the lines from the counsaw, grooves from the turning tools, partirus from the sand-blaster.

Although Christian has created both furniture and vessels, his current work harks back to his training as a sculptor. He spent two years studying sculpture at the prestigious Boston School of the Museum of Fine Art and at the Emily Carr College of Art and Design.

This background, combined with his innovative use of natural wood characteristics and exaggerated machine-tooling, has created a strong sculptural statement in Christian's work.

May 11th, 1996 Saturday, 1:00 to 4:00PM -Turning Large Burl Platters This will be at Steve Browns - Directions to follow in March newsletter

If you have never seen a Conover lathe or any of Steves large turnings, this is the meeting you won't want to miss. More info in March newsletter

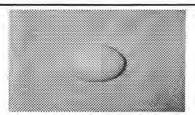
ues are due now for 1996. For simplification of processing enewals in November, rather than waiting until January. Pleateck to our treasurer, or bring it to one of the two remaining medicase take a moment to list below, what you would like to see as	ase clip out and mail this filled out form with setings this year
Name:	Telephone 1 :
Address:	Telephone 2:
City, St, Zip:	
Dues are \$20.00 yearly (Starting In January) but \$10.00 after July 1st of that year  Amount Enclosed: \$  Please Check: Renewing Member   New Member	Mail To:  MN WOODTURNERS ASSOCIATION c/o Ron Meilahn 1638 23rd Ave N.W. New Brighton, MN 55112

Are you a member of the AAW?

#### Name Badges

We supply stick on name tags at our meetings but have had requests for permanent Name Badges. We have found a source of supply and will offer preprinted, plastic encased Name Badges to members for \$2 which is the cost of the tag and printing. To see what they look like, each of our board members will be wearing them at future meetings

To order, Call Ron Meilahn @ (612) 633-8902 or order one at any meeting.



How hard could it be to turn this shape?

#### Classified Ads

Turning Related, personal classified ads are free to members. Commercial ads are billed at \$4 per month per column inch. To place an ad, call Dave Schneider (612) 934-4667.

#### LATHE For Sale:

Delta Lathe 12" swing w/approx 16" over the Gap Bed on a Re-enforced enclosed metal base. Has an extended bed for longer spindle work. 1 1/2 HP DC variable speed with Reversing switch. Excellent condition. \$1200.00 Contact: Don Wattenhofer @ (612) 572-1045 5312 Horizon Dr Fridley,MN 55421

#### Premium Hardwood Lumber For Sale:

Cherry, Ash, Hard Maple, Soft Maple, Red Oak, White Oak, Butternut, Walnut, Birch, Mahogany, Cedar.etc., Contact Loel Brown, HARDWOOD LUMBER INC. 612-934-6412

#### **Duluth Woodturning Show - Duluth Art Institute**

Saint Louis County Heritage and Arts Center (The Depot) 506 West Michigan St Duluth, MN 55802 (218)-727-8013

February 12, 1996 through March 31, 1996 in the Balcony Gallery
Gallery hours are 10:AM - 5:00PM Monday - Saturday and 1:00PM - 5:00PM Sundays
The show will highlight work by members of the Minnesota Woodturners Association,
presenting the different techniques and approaches to turning; covering the spectrum from
functional bowls to sculptures.

The objectives of the show are to inform and educate the public about woodturning
and to show the high quality of work by local woodturners. We also want to promote
the Minnesota Woodturners Association as an excellent place to learn about and share
knowledge on woodturning. This show will also give the public an opportunity to
purchase quality handmade turnings from the exhibitors.

All exhibitors have to deliver their pieces by January 13th to either James Tracy @ (612) 571-3374 or Joe Nopola @ (218) 485-4254. You can also bring your pieces to the January 9th meeting. Please pack carefully and use anything for packing with the exception of "foam peanuts" as they will not be accepted.

For those members that would like to travel together for the reception on the 24th of February, we will be meeting in the parking lot of Perkins at the Forest Lake Exit on Interstate 35E and leaving at 8:30AM sharp. This is to Caravan to Duluth. If you plan to stay overnight, make sure to make your reservations quickly as there is/are convention(s) in Duluth that weekend!.

Following is a press release put out by the Duluth Art Institute:

#### Turned North: Minnesota Woodturner's Association

February 12 through March 31, 1996 Balcony Gallery

If you spend time in our local galleries you are sure to notice the bounty of beautifully designed and finely crafted wooden vessels. One could say that in this neck of the woods, appreciation for the art of wood turning is growing and taking root.

From Port Wing to Moose Lake, Virginia to Grand Marais and all across the state of Minnesota, talented woodturners are producing numerous and varied artistic forms of their craft. In fact, it appears that Minnesota is home to a virtual bevy of gifted artisans of the wood turning persuasion. They have even established their own organizations, the Minnesota Woodturners Association, which meets monthly at various locations in the Twin Cities area, and the Lake Superior Woodturners meet monthly in Duluth. From February 12 through March 31, 1996, the Duluth Art Institute will showcase sixty plus wood-turned objects created by approximately twenty Association artists. The artists are both professional and amateurs from various vocational backgrounds. Works for the exhibition will be selected by guest curators Joel Nopola of Moose Lake, Minnesota, and James Tracy of Minneapolis, both Minnesota woodturners.

The exhibition is the first of its kind to be featured at the Art Institute and will offer museum visitors the opportunity to experience a wide variety of turnings, from functional to sculptural and simple to complex.

Many artists participating in the exhibition adding to the exhibition event will be present at the reception to be held on Saturday, February 24, 1996. A wood turning demonstration will be presented in the Depot Great Hall during the opening reception.

Address



Newsletter Editor Minnesota Woodturners Association 16777 Thatcher Rd Eden Prairie, MN 55347-2261



U.S. Postage

## Minnesota Woodturners Association

Dedicated to providing education, information and an organization to those interested in woodturning.

The Minnesota Woodturners Association was formed in 1987 with approximately 25 charter members and now has about 80 members. The Association is non-profit and all work by members is done voluntarily.

The skill level of our members ranges from complete beginners to skilled professionals. Membership includes a few professionals but hobbyists make up the majority. The members live mostly in the Twin Cities metro area, however there are members in all areas of Minnesota stretching into western Wisconsin.

The Association normally schedules meetings once a month during fall, winter and spring of the year. The meetings are normally held an Tuesdays or Saturdays and the group meets in a different location each time. The meeting locations vary from members shops to the various woodworking stores located throughout the metro area.

The Newsletter is published bi-monthly, 5 times a year, excluding the months of July/August

The meetings usually consist of some sort of turning demonstration or related subject. The subjects of the demonstrations vary from basic techniques to advanced levels. The meetings are always open to questions from the members and we invite and encourage them to share their knowledge and skills freely. The Association tries to arrange at least one professional demonstration each year, with past professional demonstrators coming from all areas of the United States, England and as far away as Australia.