

MINNESOTA WOODTURNER'S NEWS

May 1992.

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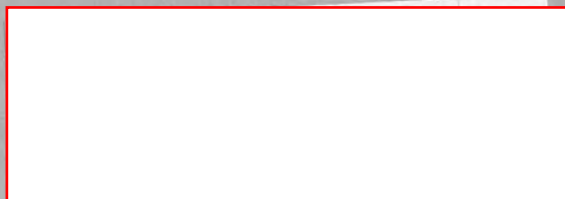
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Upcoming Meetings:

Rus Hurt has offered that he would be happy to have a turning/camping/sightseeing/socializing weekend at his place (225 miles away) this summer. Rus lives about a couple of miles from the south shore of Lake Superior near Port Wing Wisconsin. It could be a real chance to get to know each other better, to spend some concentrated time sharing woodturning knowledge, and to enjoy the beauty of the "north woods". People could either camp at his place, or stay in nearby (\$20), motels.

We asked at the past meetings, to see how many people might be interested in this. About 1/2 dozen people seemed interested. Chuck Pitschka volunteered to coordinate setting something up. All that is needed is for anyone who is interested in going, to call Chuck 935-0660. The gathering is tentatively scheduled for the weekend of July 25 - 26. Please call Chuck within a week or two to let him know if you may be interested in going.

Other than the meeting at Rus Hurt's, there will not be any meetings (or newsletters) until September.

At this time, we do not have any specific subjects in mind for any of the future meetings. We ask that you please think about the possibility of YOU giving a demonstration, or talk, or something, at a meeting. You do not have to be any sort of expert on a subject, or a great speaker, to give a demonstration. The only thing to think about is if you have some knowledge that others could benefit from. If you think that you may be able to do this, please call William Allshouse, or John Berglund, to talk about it.

AAW Symposium:

William Allshouse and Chuck Pitschka have indicated that they may be going to the Symposium in June in Provo Utah. They have indicated that they may be interested in traveling with anyone else who may be going. If you are interested in going, you might want to give them a call.

Past meeting minutes:

April 4, Saturday

Professional Woodturning Demonstration by Rus Hurt:

Approximately two dozen of us met at William Allshouse's house to take part in a very informative, all day demonstration, by Rus Hurt. Thank You Rus and thank you William!

Rus's talks, slide shows, and demonstrations touched on many aspects of woodturning, and on his life's experiences.

Some of what was covered:

Rus's background:

Rus is a professional woodturner with over a dozen years of turning experience. He maintains a private studio near Lake Superior's south shore near Port Wing, Wisconsin.

Rus talked of his experiences of trying to make a living at woodturning, and of some of the harsh realities that went with that. For awhile, he worked full time as a woodturner. He found that that involved many long hours of turning, much time away from his family, sore muscles, aching back, much repetition work, a big exposure to the hassles of marketing his work, and often, not much money.

In recent years, he has scaled back his woodturning, and now makes only about 1/3 of his living at it.

He also works on building timber frame houses, and as a caretaker for a number of cabins near his home,

The woodturning that he does, is divided about in thirds into the following areas:

1. Commercial and production turning of such things as stair railings, and other "architectural" turnings.
2. Teaching, writing, and talking about woodturning. He recently taught at Ernie Conover's woodturning school, and will have an article on sharpening turning tools in the June issue of "Wood" magazine. He has learned to never turn down an offer to do something of this sort.
3. Artistic woodturning. Here he has found that he has to turn what people will buy. Consequently, he has turned thousands of weed pots and vases, hundreds of bowls, and numerous other "functional" items. Though he said that he would like to, he has not turned many expensive "artistic" items, because He has found that he cannot sell enough of them to make it worth his while.

Harvesting and using green wood:

Most of the wood Rus uses is wood that he has harvested himself. Often this is wood that someone else has cut down, but he gets it while it is still "green". He told of traveling over 300 miles to get some nice black walnut.

Some things that Rus does to "process" green wood:

1. Have logs sawn into boards or thick slabs. He coats the ends of the boards and slabs with a sealer such as "sealtite" or "Mobilcer M". He has found that the boards crack less if they are "stickered" at their very end. Stickers are thin strips of wood that allow sawn boards to be stacked up with space in between to allow them to dry.

2. Logs and branches greater than 6 inches in diameter should be split, or sawn, lengthwise down their middle to relieve stresses, and reduce cracking. The ends of them should also be coated with sealer. Rus also puts sealer down the sides, from the end, for one or two inches.

3. Turn the wood while it is still green in such a way that it will not crack when it dries. For bowl turning there are two ways this is typically done:

A. Turn the bowl to a uniform thickness of approximately 1 inch (for a 10 inch diameter bowl). Coat the bowl, or at least its exposed end grain, with paste wax, sealtite, or something semi permeable. Then allow the bowl to dry. Drying may take anywhere from a couple of months, to a year, depending on the type of wood, the type of coating, and the temperature and humidity in the area where the wood is stored.

After the bowl has dried it will have warped, and gone "out of round". It can be remounted on the lathe and turned round again. After this "final turning" it should then remain round.

Rus has gotten good enough at rough turning bowls from green wood, so that he can turn four or five, 10 inch birch bowls an hour.

B. A bowl (or vase) can also be turned uniformly thin (1/8 to 3/8 inch). It will dry quickly, and is done in a day or so. A potential drawback of this method, is that warping can be very noticeable, and the object is too thin to remount on the lathe to make it round. With turnings such as natural edge bowls or vases, this warping may not be noticeable, or undesirable.

4. Rus advises that green wood be kept out of direct sunlight, to reduce cracking.

Rus has found that big pieces of wood can take many years to dry. He told of obtaining a huge, 4 foot in diameter Elm burl, that had been stored in a dry garage for 15 years. When he cut into it, it still was semi wet inside.

In the case of the elm burl, he cut it up into pieces, the size of the objects he wanted to turn, and coated the pieces with Sealtite, to keep them from drying too fast, and cracking.

He has also found that Kiln dried wood can still be somewhat wet, if it has absorbed moisture from the air, after it was dried.

He talked about the EMC, Equalized Moisture Content. This is the moisture level that "dry" wood will have, based on the temperature and moisture level of the air around it. He said that this constantly changes in wood. He gave the example of furniture, such as a rocking chair, that is creaky in the winter, but not in the summer. That is because the wood dried, and shrank some, with the dryness of winter, but swelled when it absorbed moisture, during the humidity of summer.

Rus said that he turns wet wood, dry wood, and in between wood. He must use different turning methods with each type, to accommodate the characteristics of them.

Tools:

Rus uses 7 tools to do most of his turning:

1. A 3/8 inch high speed steel (HSS) "spindle" gouge. He uses this for much of his bowl work, which doesn't involve reaching very far over the tool rest. He finds that high speed steel tools hold their edge much longer than "tool steel" tools, and do not "blue" as easily, (lose their hardness) when sharpening.

2. and 3. 1/2 inch and 5/8 inch HSS bowl gouges. He uses these for roughing out work, and for cases where he has to reach far out over the tool rest. The thickness and mass of these tools allows them to absorb a lot of force, while still maintaining control, and not chattering.

4. A Sears HSS parting tool. He finds that they are of good quality, and are relatively cheap.

5. A 1 1/4 inch Sorby HSS roughing gouge. He has found that he uses this more for finish cuts than for roughing.

6. A 1/4 inch wide parting tool, for fast "wasting" of wood.

7. A 1 inch wide HSS skew.

Sharpening:

Rus stressed that to have sharp tools is a top priority to doing skillful woodturning.

Grinders: Rus talked a bit about "cheap" grinders. He has found that many grinders in the under \$50.00 range have a lot of vibration to them. The vibration makes it much harder to get a good grind on the tool. A source of bad vibration is often a flimsy tool rest. Rus brought a "Millwakee" grinder which was big and heavy, and ran very smooth. Though he didn't say, my guess is that it cost in the \$200.00 range.

Rus sharpens his tools by first using a rough grinding wheel, then a finer grinding wheel and then to a drum sander for "Honing".

When tools lose their sharpness he just resharpens them on the drum sander. After three or four resharpenings on the drum sander, he needs to go back to the fine grinding wheel for regrinding. Likewise, for every three or four times he regrinds the tool on the fine grinding wheel, he has to go back and regrind it on the rough grinding wheel. Thus, for every one time he uses the rough wheel, he uses the sanding drum about 10 times.

The sanding drum is the type used by people who do lapidary work (make jewelry using rocks). Rus mentioned that it can take a lot of work to get these sanding drums perfectly centered.

When using grinding wheels, Rus likes to move the tool fairly fast, and dunk it in water often, to keep it from overheating.

Rus does use a stone to take off the wire edge produced on the inside of a gouge, after rough grinding. To do this he just takes two quick swipes at it with a thin, rounded stone.

When Rus gets a tool, he likes to tune it up and make it "user friendly". This often involves grinding off sharp edges on the steel where his hands may be holding it. He often will make his own handles to better suit his hands. Most of his handles seemed to be about 1 1/2 inches in diameter. He has also been experimenting with putting foam from bicycle handgrips around the handles to serve as shock absorbers.

At past demonstrations, we have heard many people talk about the height they like to have their lathe at. Rus likes to have his lathe about one inch above his elbows. He also likes to have his grinder at the same height, so he doesn't have to bend over when using that.

The #1 hint for sharpening, is to start sharpening on the bevel of the tool. Move the tool so that when sparks just begin to fly over the top of the tool edge, you know then that the edge has just been sharpened.

For people who use devices to sharpen their tools that they also use for sanding wood, such as belt sanders, Rus has a word of caution: Make sure that the device can not catch, and accumulate pockets of sawdust inside it. The sawdust can start on fire if a steel tool is sharpened, and sparks fly into the sawdust.

Turning a bowl:

Rus demonstrated turning a bowl out of green birch.

He started by gluing the wood to a waste block which was screwed to a faceplate. He used thick bodied super glue. He put the

superglue on the waste block, and sprayed super glue "accelerator" on the block of wood. He stuck the two pieces together, and held them for about 30 seconds. He said that for added strength, you can put some glue around the outside joint where the waste block and block of wood meet.

Rus mounted the faceplate, with the wood on it, on the lathe. He brought the tailstock up, and positioned it into the wood. He said that he always uses the tailstock for support when using superglue. He keeps the tailstock in place for as long as he can, and only removes it when he has to work in the area held by it.

Rus tries to start cutting at the part of the wood that will be the bottom of the bowl. He tries to get that area rounded out. Once that area is rounded, he cuts outward toward the outside, top of the bowl. He finds it is much easier for the tool to cut in this manner, because the bevel is able to ride against rounded wood.

Rus said that he likes to have all of his turned pieces look like they came from a tree. By that, he meant that he likes to have some bark, or a knot, or a pocket, a natural edge, or something show, that looks rustic, and unique. Such uniqueness also helps to make the piece look hand made, instead of factory produced.

It is when the outside of the bowl is being turned, that its shape can be altered to include something to give it uniqueness.

When Rus starts to turn the inside of the bowl he leaves the tailstock in place for as long as he can, until it gets in the way.

Rus makes all of his final cuts on the inside rim of the bowl after only removing an inch or two of depth from the inside of the bowl. This is especially important for natural edge bowls, and bowls turned from green wood. There are two reasons for doing this: 1: By leaving a greater mass of wood inside the bowl, when cutting the rim, the wood at the rim has more "support" and will not change shape as much while it is being cut. 2: When the full depth of the inside of the bowl is cut, stresses within the wood will have been altered, and the rim will very likely warp some. At that stage it would be difficult, or impossible to go back and recut the rim.

Rus has found that bowls that are wide and open are easier to turn than ones that are deep and narrow. The reason is that gouges cut better when going at the wood at a gradual angle. For cutting the bottom of bowls Rus often switches to a gouge with a blunt bevel on its cutting edge.

For a general shape for bowls, Rus likes to make the base approximately $\frac{1}{3}$ the diameter of the rim.

Sanding bowls:

Rus uses sanding discs on a drill to do much of his sanding. However, he does not do much sanding with the lathe running. He sands with the object still mounted on the lathe, but with the lathe switched off.

His sanding discs are about 5 1/2 inches in diameter, glued to foam discs which are about 5 inches in diameter. The foam discs are glued to the "Merit" snap on sanding discs which are about 3 inches in diameter.

The foam he uses is very dense, and about 1/4 inch thick. It is from computer "mouse pads". It does not have any fabric on either of its sides.

He glues the pads to the sanding discs, and the sandpaper to the pads with 3M 77 spray adhesive. He sprays the adhesive on both surfaces to be joined, dries them in front of a fan, and then presses them together.

He generally uses 120, 220, and 400 grit silicon carbide sandpaper.

He finds that when sanding with a variable speed drill, if you use slower speeds the paper does not load up, and get clogged, as much as at higher speeds.

With the bowl mounted on the lathe, he generally sands about 1/6 of it at a time. He rotates it about 1/6 of a turn, and then sands another 1/6, and so on.

He is very careful when sanding near the rim, that he is gentle, and does not round over the rim. To do so would change the appearance of the uniform thickness of the rim. He noted that when bowls are sanded with the lathe running, their rims are often very rounded over, and of uneven thickness.

When sanding the outside, He may run the lathe for a short while. To do so, can help to highlight irregularities, that need additional sanding.

Parting off the bowl, Turning the bottom:

After the sanding is finished, he uses the parting tool to cut slightly into the waste block, at the point where it is glued to the bowl. With only a small portion of the waste block cut away he switches the lathe off. With the heel of his hand, he hits the bowl, near its base, and it usually pops off of the waste block.

Seeing how little force was required to knock the bowl off, made me think that it wouldn't take much of a dig in, when cutting, to also make a bowl come unglued.

He then "reverse chucks" the bowl. The tail center contacts the bottom of the bowl at its center. The inside of the bowl is held, and will be driven with, a device held by a Jacobs chuck (the type of a chuck that a power drill has). The device is a 1/2 inch rod, deep enough to reach the bottom of the bowl, with a rounded disc of wood on its end. Between the bottom of the bowl and the disc of wood, Rus likes to place a rubber jar opener. The rod is held in a Jacobs chuck, mounted on the lathe.

This setup allows the bowl to spin on the lathe, while the bottom is undercut. Rus likes to make the width of the "rim" on the bottom of the bowl, as thick as the rim on the top of the bowl. This setup will not allow the entire bottom of the bowl to be finished, as a small nub must remain at the point of the tailstock. Rus will cut this nub off with a chisel, and hand sand the area.

The device can be made in a number of ways, one being: Attach a small pulley with a 1/2 inch hole, to the end of a 1/2 inch diameter rod. Leave about 1/2 inch of the rod extending beyond the pulley. Drill a 1/2 inch hole in a disc of 3/4 inch thick wood, 3 or 4 inches in diameter. Glue the wood to the pulley with superglue or epoxy. The wood could also be screwed to the pulley, if holes were drilled in the pulley. Chuck the rod into the Jacobs chuck, mount on the lathe, and turn the wood to a rounded shape. Different sized rounded shapes may be needed for different sized bowls.

Finishes:

Rus said that he is very happy with the finish from "Urethane Oil". It is made by "McFadden Lawrence" in Philadelphia. Rus applies 3 coats to bowls. It is supposed to be nontoxic after it has fully cured.

It was stated that one problem with Urethane oil, is that unused portions of it, left in the container, will gel over time, and become useless.

Hal Malmlov has found that the life of unused Urathane oil can be extended if it is vigorously shaken each time it is used. It also helps to transfer it to smaller containers, once some of it has been used. Hal thought that the "Woodcraft" store, on south Lyndale, may now stock Urathane oil.

Rus said that he had had some bad luck with Behlens salad bowl finish, That in some cases it chipped, peeled, or turned white.

Burls:

Rus likes to turn burls if he can get them. Burls are knob like growths, that grow on the outside of trees. The burls usually have grain patterns that are very figured, and unique. Though most burls

are usually fairly small, some can be huge, and weigh thousands of pounds.

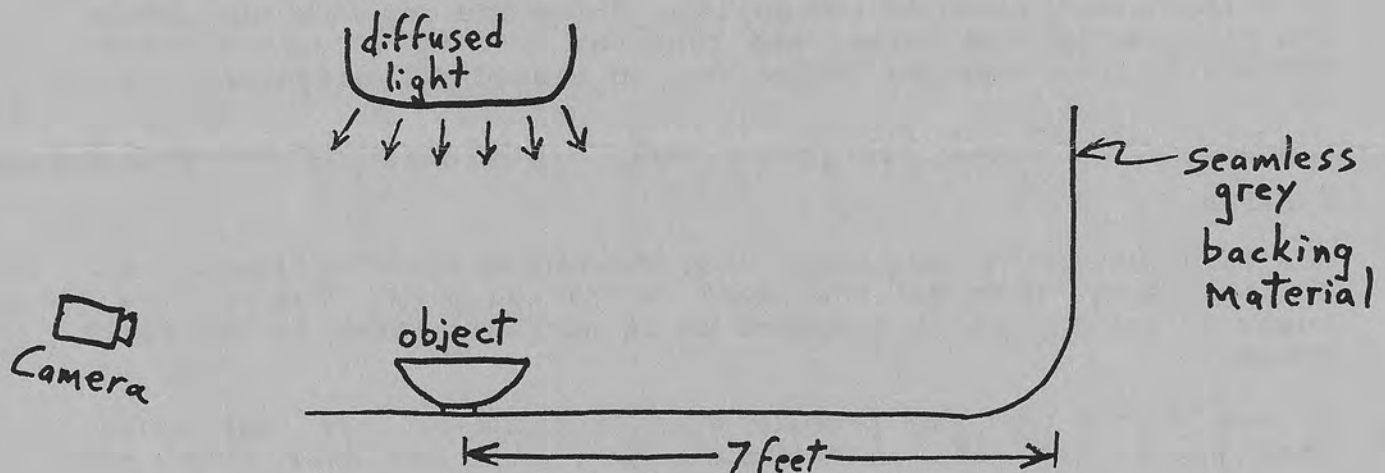
It has been Rus's experience that if a burl is growing on the outside of a tree, that the figured grain generally does not extend into the main body of the tree.

Photographing your work:

Rus showed many slides of his work. As he was showing them, he talked about the various photography methods he used, and how he has improved them over the years.

Two main points came out for improving the quality of photographs of woodturnings:

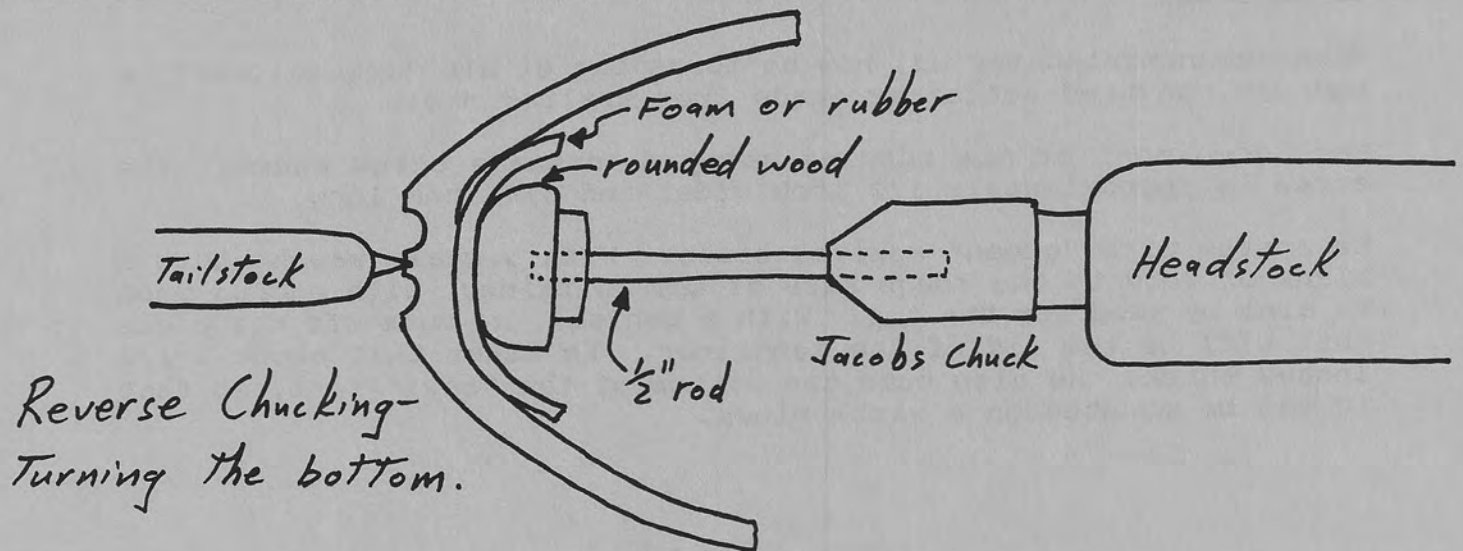
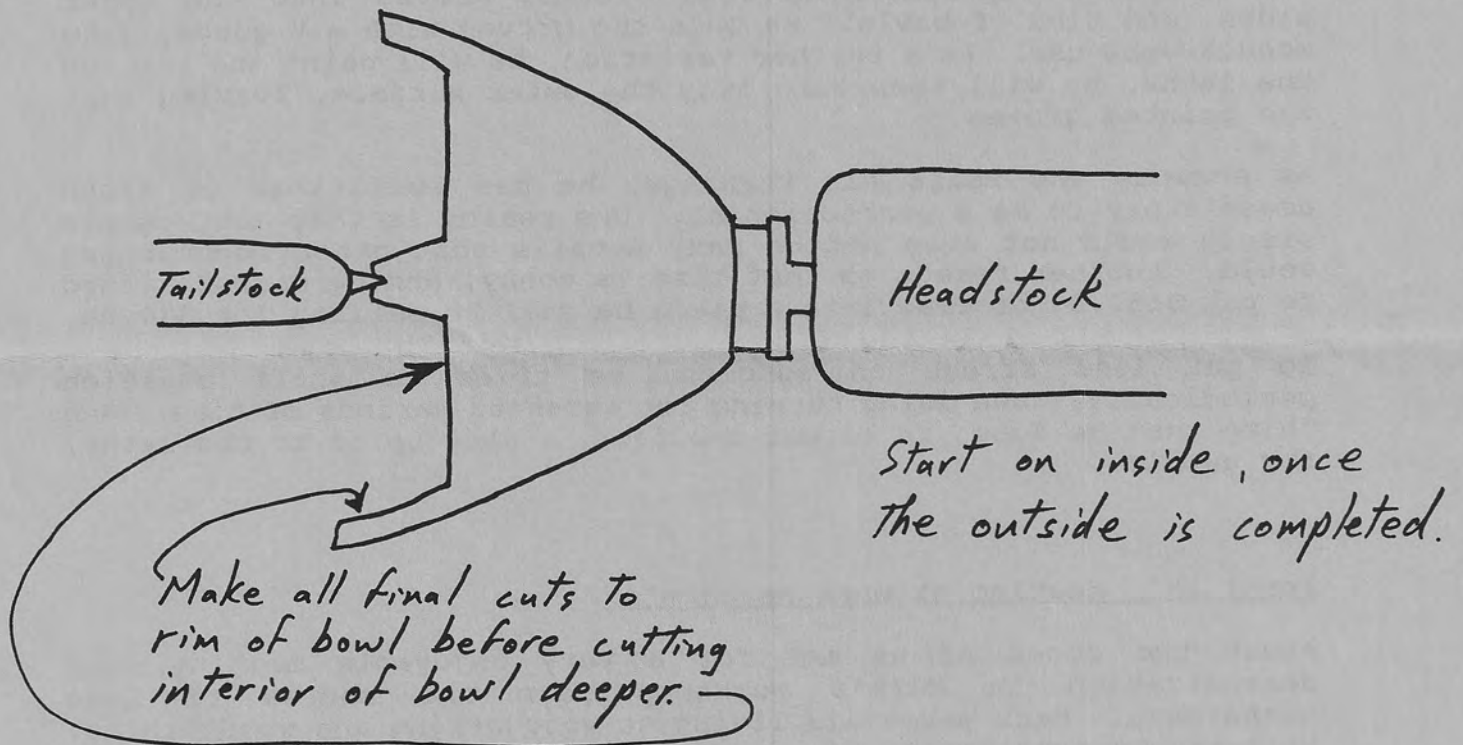
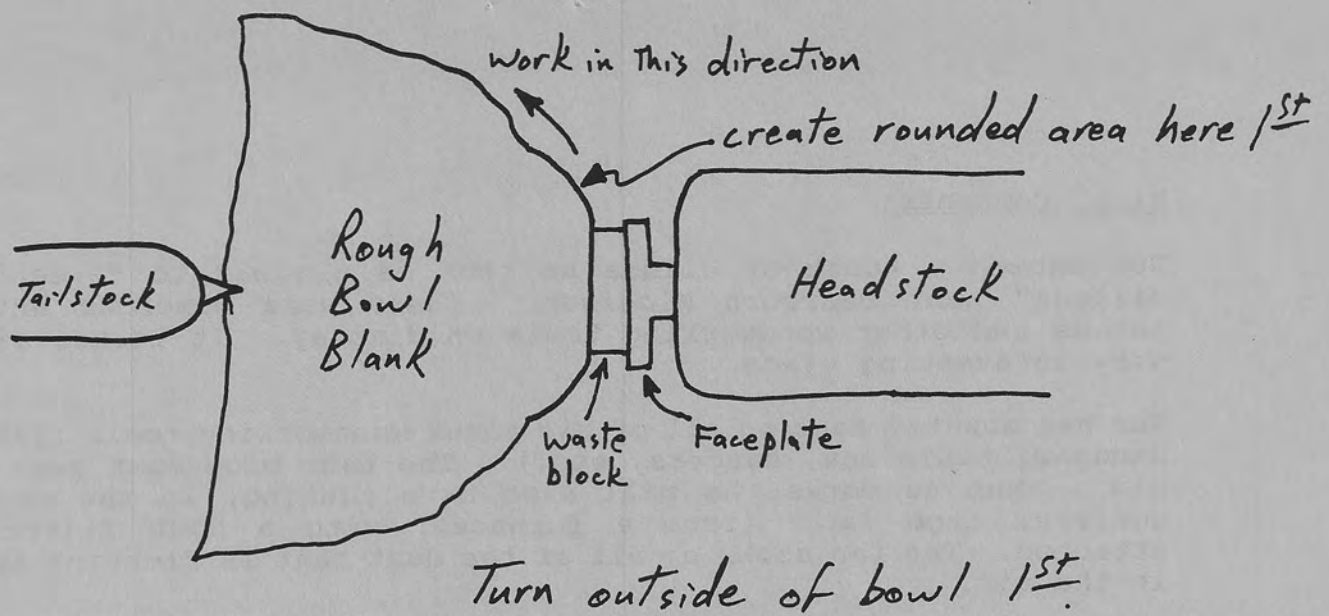
1. Try to have a background that does not detract from the appearance of the turning. What Rus now uses is a piece of seamless grey backing, which extends approximately 7 feet in back of the object, before turning upwards.



2. Avoid shadows. To accomplish this there must usually be several sources of light, and the light coming from them must be diffused. Some sort of thin white cloth, or "foggy" plastic or glass, in between the light and the object, is usually needed to accomplish this.

Some photos of turnings can look very nice if there is only one source of light. This may be from overhead, or the side, but it also should be diffused, so there are not sharp shadows.

If the light source is primarily from overhead, the underside of a bowl will be "lost in shadow". To avoid that shadow, Rus will use a solid white board, placed to the side, to "bounce" light to the underside.



Misc. Comments:

Rus showed a bunch of slides he took on a visit to "Greenfield Village" near Dearborn Michigan. There were numerous antique lathes and other woodworking tools on display. It looked like a very interesting place.

Rus has mounted fans on all of his power woodworking tools (lathes, bandsaw, table saw, sanders, etc.). The fans blow dust away from him. When he works, he will also have running, in the room, a squirrel cage fan (from a furnace), with a dust filter bag attached. The fan sucks up all of the dust that is floating around in the air.

Rus has been experimenting with cutting grooves into the upper sides, and rims of bowls. He cuts the grooves with a V gouge, like woodcarvers use. As a further variation, he will paint the rim. On the lathe, he will then turn away the outer surface, leaving just the painted grooves.

As someone who sells his turnings, he has found that it often doesn't pay to be a perfectionist. One reason is that most people simply would not even notice many details that other woodturners would. Another reason is that time is money, and he cannot afford to put \$150.00 of time into a piece he will be selling for \$30.00.

To put less stress on muscles, he tries to shift position periodically, when doing turning for extended periods of time. One thing that he does, is to put one foot, a step up on to the lathe, for awhile.

April 25, Meeting at Mark Reschke's:

About two dozen of us met for a very enjoyable meeting, and demonstration in Mark's workshop near the shores of Lake Minnetonka. Mark makes his living at woodworking and woodturning. He seems to concentrate his woodturning on only a handful of types of objects.

Mark demonstrated for us, how he turns one of his "specialties", a rounded, covered container, made from spalted maple.

Mark does most of his turning using a homemade screw chuck. The screw is approximately 1/2 inch wide, and 3/4 inch long.

He starts with "green" spalted maple. With a chain saw he cuts a blank of wood to the rough size of the container, with enough wood to also be used for the top. With a bandsaw, he cuts off the piece that will be the lid of the container. He makes that about 1 1/2 inches thick. He also cuts the bottom of the "bowl" flat, so that it can be mounted on a waste block.

Using superglue, he mounts the part that will be the bowl of the container, on a waste block. Mark used to use five minute epoxy, but has found that super glue works just as well, and is faster, and less work.

The waste block is then screwed on to the screw chuck. Mark drills a hole in the waste block beforehand, so that it will fit squarely on the screw chuck.

Mark rough turns the bowl to a thickness of about an inch. He then removes the bowl from the lathe, writes the date on it, and coats it (or at least its end grain) with paraffin. He leaves it attached to the waste block. He also coats the piece he cut for the top with paraffin. He melts the wax in a double boiler.

After several months, the wood has dried. Mark remounts the bowl on the lathe using the same screw chuck. He turns it to final thickness, and partially parts it off. He then sands it. By partially parting it off first, he is able to sand the entire outside, right down to its base. After sanding, he parts the bowl completely off of the waste block. The waste block will be reused. There may be a nub of wood left on the bottom of the bowl, from being parted off. Mark will remove that with a small chisel. He will sand the bottom with sanding discs mounted on a drill.

Mark now starts on the top of the container. With a power planer, he smooths the bottom side, of the top piece, that had been coated with paraffin. The planer removes the paraffin, and leaves a flat surface. He then mounts the piece to a waste block, using super glue. The waste block must be smaller in diameter than the inside of the bowl. He puts a mark on the waste block, and the screw chuck, so that later, when the piece is removed, and then remounted, that it will be screwed on to the same point. Mark has found that sometimes, if the piece is screwed on more, or less, that it may not revolve on the lathe, perfectly true.

Mark turns the outside (top) to its rough shape first. He then cuts in on the lower side of the piece, with a parting tool, to just a hair less than the size of the opening in the bowl. To do that, he has to measure the opening with a caliper. He then uses the caliper to make sure he made the parting cut to the correct size.

With a scraping tool, specially ground to a pointed V shape, he undercuts the bottom of the lid so that it will fit the top of the bowl better.

Now begins the task of making the size, and curve of the lid, properly fit the bottom. Mark unscrews the lid from the screw chuck, and places it on the bowl. He visually notes where its curve may not match that of the bowl. He then remounts it on the lathe and recuts it. He may do this several times until he has a shape that he feels is correct.

Mark noted, that for such a simple shape, it is real easy to mess it up. That is, to get a curve on the top and bottom that just do not match well.

After he has cut the top to the shape he wants, he uses a shear scraping cut to smooth the surface. He then sands the top.

After sanding, he uses a parting tool to part the lid off of the waste block. He usually has a pile of wood chips on the floor, so he just lets the lid fall into them. Again, he cuts any nub left, off with a chisel, and then sands the bottom of the lid with sanding discs, mounted on a drill.

For a finish, he usually uses "Deftoil".

Some other things:

Mark has a foot switch that turns the lathe on and off. He has to be standing on it for the lathe to be on.

To sharpen his tools he uses a small grinding wheel (about 5 inches) that runs fairly slow (less than 1000 rpm). He finds that the slow speed greatly reduces the potential for overheating the tool's edge.

To save time when sanding, Mark made a small box that is divided into compartments. The box holds rough grit sandpaper at one end, and finer grits at the other. Thus, he can quickly grab the sandpaper that he needs, and put it back equally as easily.

To quickly screw his pieces (on their waste blocks) on to the screw chuck, he quickly switches the lathe on, and off, while pressing the piece against the screw. It screws itself right on.

The height of Mark's lathe, is lower than what many people have theirs. He finds that the lower height works well for when he is using large tools. However, he has to bend over a lot when using small tools.

To make his screw chuck he first mounted a several inch thick block of wood on a faceplate. He turned the block round, and flattened its face. With the block still on the lathe, he drilled a hole in its center, sized to fit a long lag bolt. He modified a standard lag bolt by cutting the grooves between the threads deeper, with a file. He marked the position of the block of wood on the faceplate, and then removed it from the faceplate. On the backside of the block he enlarged the drilled hole so that it was large enough to fit the head of the bolt. He screwed the bolt as far into the block as he could. The last 1/4 inch of the head of the bolt still stuck out, so he hit it a number of times with a hammer, to get it all the way in. He then put epoxy around the head of the bolt, and the wood.

The screw sticks out of the chuck by about an inch. If Mark does not want the screw to go that deep into the wood he puts a spacer washer over the screw. The washers are very simple, and are just made of thin wood or masonite. They have a hole drilled in them just big enough to slip over the screw.

Mark has made many of his tools. Most of his scrapers are square steel stock with pieces of power hacksaw blades brazed or glued on to their ends. The power hacksaw blades are quite thick, about 1/8 of an inch. They can usually be obtained from used tool and machinery outlets. Mark has found that superglue works very well for this. He has found that soldering does not seem to work well. It was said that the steel in the power hacksaw blades will not lose its hardness if it gets heated up.

For tools with square steel shafts, Mark makes handles by sawing a dado cut down two narrow boards, the width, and 1/2 the depth of the steel. He then glues them together. The shaft can be slid into the opening, and glued in place with epoxy. Since the steel only goes part way in to the handle, an opening is left in the rest of it. Mark fills the opening with lead shot, and plugs the end of it. The shot helps to balance the tool, and to absorb vibration when in use.

Mark's lathe is home made and very unique. His father made it, and was at our meeting, and described it a bit. It's main shaft came from a used machine, and has a "Timkin" bearing in it. The bearing is adjustable, so that it never has any slack in it. So, despite years of use, the shaft is rock solid, and doesn't have any slack or play in it. The lathe is quite simple in its design, but rather hard to describe. All I can say is that anyone wanting to build a lathe would benefit from seeing it.

Some of Mark's recent work can be seen at the gallery "Three Rooms Up" at the Galeria in Edina. Mark also will have booths at the Renaissance Fair, and the Uptown Art Fair.

Ethics:

This is perhaps a good chance to talk about the works that our professional members have demonstrated for us, at our meetings. They make their living by making and selling these works. They have shown us how they make them, solely out of the goodness of their hearts, for our benefit. There should be an ethical understanding that this information, which allows us to make what they make, will not be used in competition against them. Specifically, we should all have the understanding that we will not make, and sell, woodturnings, that are similar to those we have been shown.

I find our association to very special, in that our professional members are so willing to share their knowledge with us. For a

number of years I belonged to a woodworking organization that had many professional woodworkers as members. The situation in that organization was that the professional woodworkers typically would NOT share their knowledge with others. I imagine that they felt that knowledge they "gave away" would be used in competition against them. It was an unfortunate situation, which our association does not have, and I hope we never have. The best way to avoid this, is for us to continue to abide by the ethical standards, of not making, and selling, woodturnings similar to those we have been shown.

Hazards of finishing rags:

Don Wattenhoffer was at the meeting, and told of an unfortunate accident that he had in his house last fall. He had a fire, which was started by spontaneous combustion of some rags that had been used to apply Watco oil stain. The fire didn't actually burn much of the house, but the smoke damage was very bad. There is a big lesson here for us in handling our used finishing rags !

Saturday, May 2 1992:

We met at John Ratliff's house for a meeting on harvesting and using green wood. John even provided coffee, punch and home made chocolate chip cookies ! Thanks John !

Craig Lossing and John Berglund did most of the talking, and demonstrating of how they use green wood. Their approaches to accumulating, and processing wood differ in many ways. John, with his house, garage, outbuilding, and a lot of land, is able to cut a lot of wood to dry for later use. Craig, finds that he moves about once a year, and doesn't like to have to move more than a pickup load of wood, when he moves. Consequently, Craig cuts very little wood that isn't used fairly soon.

When Craig gets logs, he tries to leave them in the longest pieces that he can handle, until he is ready to use them. He does not coat the end grain of the logs with a sealer, unless the wood is extra special. The logs do crack in from the ends a bit. Craig just cuts off the cracked portion and discards it.

When ready to use the wood, Craig usually cuts straight logs down the middle to avoid the pith (center). Wood, when it dries, shrinks, and usually produces cracks that are directed toward the pith. Both Craig and John try to produce turnings that do not contain the pith.

For cutting up the wood, Craig uses a bandsaw whenever he can. He uses a bandsaw instead of a chainsaw, partly out of consideration for his neighbors. The noise from chainsaws, in the city, can be

aggravating to people. Craig has a Delta bandsaw with an extension, that allows him to cut thicker pieces of wood. He uses a 3/8 inch blade with 4 teeth per inch. He finds that he can usually cut thick wood (10 inches) for about an hour with a new blade, before it starts to dull. After that he will use it to cut thinner pieces. He buys the 105 inch long blades at G.C. Peterson (on Lake Street, about 1/2 mile west of the Mississippi River). The blades cost about \$8.00 each. For cutting thick wood on the bandsaw, it is important to have blades with no more than 4 teeth per inch. Many "fast cutting" blades have only 3 teeth per inch.

One of the things that Craig cuts with the bandsaw, is small boards. He may cut figured wood so that the figure is best exposed on the board. He uses the boards for a number of different turnings.

Craig said that for logs with straight grain, he may turn a number of types of objects out of them. For bowls or vases, he will only roughly cut up as much as he can turn within a day or so. Craig also turns a lot of spinning tops. For the tops, he may rough turn a bunch of "dowels" out of straight grained green wood. He will let the dowels dry, before turning them in to tops.

John Berglund brought his chain saw and cut up a lot of different types of wood. He seems to cut wood with two goals in mind, maximize the beauty of the wood, and minimize it's potential for cracking.

To cut wood to minimize cracking, it seems that the main thing that John does, is to cut it so that it does not contain the pith. For straight logs, rather than cutting the log down its center, John will make two cuts, an inch or two apart, on either side of its center. He has found that the pith often wanders a bit, and one cut often doesn't completely remove it. The wood right near the pith is also more prone to cracking, so that is removed by making the two cuts.

Also to minimize cracking, John cuts slabs of wood relatively thin, typically less than four inches. He also coats the ends of the slabs with a sealer. He will also coat the ends of logs with sealer, right after they are cut from the tree.

The only wood that he will try to dry without some sort of cutting, is branches less than 5 inches in diameter. He coats the ends of the branches, and stores them indoors. He has found that it is real important that they be stored in a place where they can dry real slow, and not just under a tarp or a cover outside.

To maximize the beauty of wood, John and Craig have learned how to look at a tree and spot the areas that may contain very "figured" graining. The most predictable place for this is in "crotches". Crotches are the areas where two branches grow apart. Quite often, the graining in the wood in this area, is very twisted, and intertwined, and can be quite beautiful. Some trees, which have

very plain looking wood, can have very beautiful looking crotch wood. Cottonwood, for instance, is very, very plain looking, but has beautiful crotch wood.

The size of the area of the figured crotch wood can be relatively small, compared to the size of the tree. It is therefore a challenge to produce a woodturning that shows off the crotch wood, but does not contain the piths of the branches (to avoid cracking). A common way of doing this is to saw the V shaped log in half, through the piths of the two branches. The halves can then be turned in to bowls, with the figured crotch wood exposed on the inside bottom of the bowl.

Craig has found that the area in the crotch containing the figured wood, is approximately in the shape of a cone. The size of the top of the cone, is approximately the distance between the centers of the two branches, at the point where the outside of the two branches comes together.

Sometimes branches form a V, but bark gets stuck inside the crotch and figured wood may not be formed. Craig and John showed how to spot this without cutting into the wood. The big difference in appearance of this type of crotch is that the V of the crotch is very "pointed". Crotches with good figured wood often have a very rounded "point" to their V.

Another area where figured wood may occur is on the underside of a branch where it branches off from the tree, or at the base of a tree where it curves to go upward. The figuring in these locations may be a ripple like grain, sometimes called "fiddleback". This fiddleback can be quite beautiful. It also can be fairly small, often only going in to the wood an inch or two. Careful thought needs to be given to the shape of a turning that would show off this figure.

Craig got a bucket of water to splash on the logs when they were cut. The water helped to highlight figure in the wood.

The subject of how long wood stays "green" was highlighted by several logs that were cut up. I had brought a cottonwood crotch piece that was about 1 1/2 feet in diameter. It had been cut down several years ago and its ends were very cracked. The bark had just fallen off, and the sides were not cracked. It had been sitting outside the whole time. When it was cut up, everything but the outer 2 to 3 inches was as green as if it had just been cut down.

John Ratliff had some 15 inch diameter black walnut logs that looked like they were many many years old. They had been laying outside for many years before he got them, and they had been inside his garage for several years since then. The outer wood was also very weathered. They looked like they would be completely cracked up inside, because there were deep cracks every inch or so, all

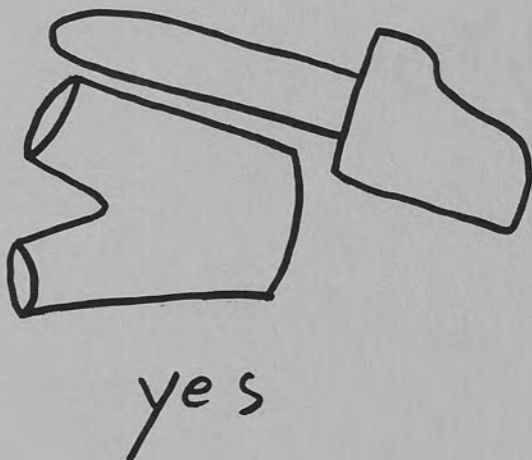
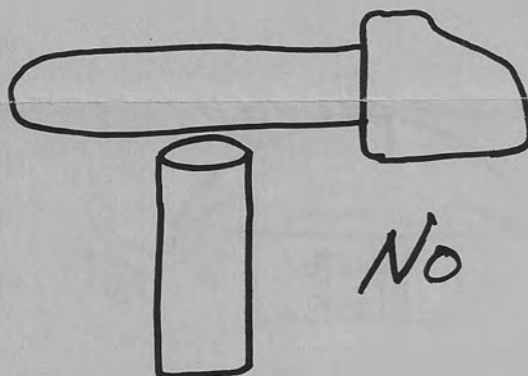
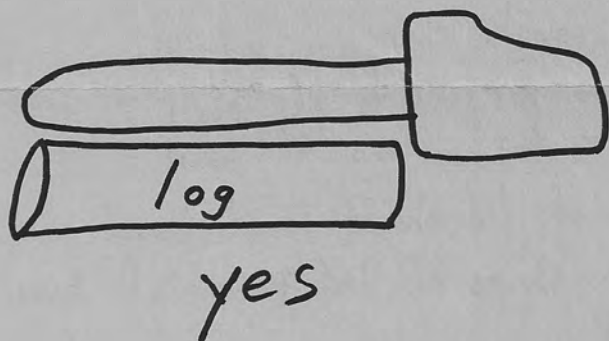
around them. When about 6 inches of the end of them was cut off, it was found that the cracks only penetrated into the wood by a couple of inches. It was also found that the inside wood was still "wet".

Don Wattenhoffer told of a large log that he had stored inside a garage for 20 years that was still wet inside.

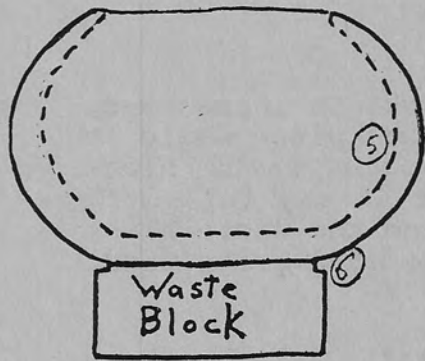
John said that he does not like to glue waste blocks to green wood, for turning, unless the block will be parted off the piece while it is still wet. He has found that if he leaves a waste block attached to a green turning while it dries, that it may fall off. The reason is that the wood shrinks, and moves, and the waste block doesn't. Consequently, he usually uses screws to hold green wood, and later "turns them out".

If the wood is dry, he will plane the bottom flat, and glue on a waste block.

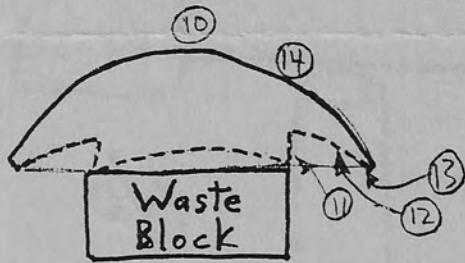
Chain saw positions for easiest cutting:



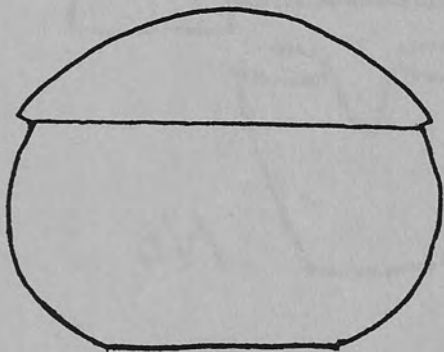
Mark Reschke's lidded containers



1. Glue Block of wood to waste block.
2. Rough Turn shape of bowl, inside & outside.
3. Coat with sealer.
4. let dry (several months)
5. After drying, turn outside, and inside round.
6. Cut in at bottom slightly with parting tool.
7. Sand.
8. Part off, from waste block.
9. Sand bottom.



10. turn rough shape of outside.
11. Cut to fit inside of "bowl".
12. Cut to fit on top of "bowl".
13. Edge of lid should touch bowl.
14. Refine shape of lid to match bowl.
15. Sand.
16. Part lid off of waste block.
17. Sand base of lid.
18. Apply finish.



Figured wood from trees:

