June 1995

LOCAL CHAPTER OF THE AMERICAN ASSOCIATION OF WOOD TURNERS

Member Spotlight

John Magnussen

Taken from an article in the April 6, 1995 edition of the Wright County Journal - Press

Wood has been such a common material for many of us through our lives, we may not tend to think about the beauty it contains. However, those who work with wood carpenters, lumber workers, cabinetmakers, etc become well acquainted with the patterns and shapes that are formed by grain and growth rings in wood.

For John Magnussen of Hanover an appreciation for the beauty of wood developed during, about 27 years of operating his own cabinetmaking business. He is retired now, but he remains involved with woodworking as a member of the Minnesota Woodturners Association.

Woodturning involves the use of a lathe, a heavy machine that turns a block of wood while the operator scrapes away pieces with chisel-like cutting tools. Magnussen had tried woodturning for the first time when he was a high school student at International Falls. He had gotten away from the craft since high school, but over the past ten years he has become quite skilled and now has many examples of artfully crafted wooden objects.

Shiny and smooth wooden bowls, candle-holders, tall vessels and other distinctively shaped pieces, which woodturners simply refer to as "an object," are part of the collection. Each has walls cut to about one-eighth to one-fourth of an inch th'.k. They feel as light as paper. Their beauty is in the grain, which is enhanced by a finely sanded and lacquered polish. The finish is so shiny it looks like marble. But when you pick up a piece it feels as light and delicate as a finely crafted violin.

The lacquer gives some pieces a luminescent appearance. When the light hits it the right way, the reflection is similar to the light coming off a holographic image.

Magnussen has used oil on some pieces, but he prefers lacquer,

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which is more subtle and even.

The wood he prefers to use the most comes from burls in tree trunks. A burl is a large lump or knot. This is where the most interesting wood grain patterns and shapes can be found, Magnussen says.

"Burls are usually what people discard or chop up when cutting wood. The very idea of that happening makes woodturners cringe in regret," Magnussen said. "If anyone has any burls, I would love to have them. Just give me a call, I'll come and get them."

The types of wood he uses are mostly locally grown. Maple, box elder, oak, cherry, and cedar are some of the wood he has used.

"I don't like to use what you might call exotic wood, such as those from the rain forests. Those trees should be preserved," he mentioned. "I like the local wood."

His concern for the environment motivated him to help replace the wood he has used. His wife Mary Ann said John has

planted about 65 walnut trees and roughly 65 trees of other types (ash, maple, pine, tamarack, butternut) on their land along the Crow River. He started the walnut and butternut trees from the seed.

His shop building, a pole barn structure, is situated on a hillside overlooking the river. Inside John has an Oliver Lathe that was made in 1922. Manufactured with heavy steel it serves as an extremely stable platform for his work. As the powerful electric motor of the lathe turns the wood, John scrapes with his tools, shaping the outer surface and, on some pieces, gouging out the inside.

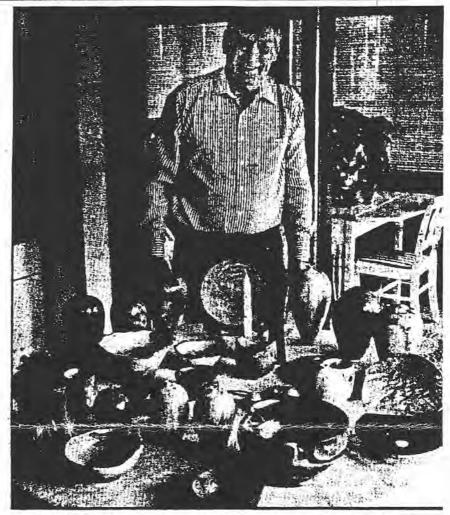
. On pieces he cuts thin, he checks the thickness of the wooden walls with a special caliper. "You can get some pieces so thin that if you hold them up to a light you can see through them," Magnussen said.

He likes to work with "green wood" (freshly cut), as opposed to wood that is so dry it has cracks in it. Sometimes when he works with green wood he can feel the moisture coming off the surface as he is cutting.

Now and then he is pleasantly surprised by what he finds inside a piece of wood. An unusual twist in the grain pattern may have an appearance like an animal or a human form. The pattern on one of his pieces looks like an ear. Another is shaped like a prowling, four legged creature.

One of his most treasured pieces was made from a wormeaten old willow stump near his home. Magnussen created a vessel with the wood, and the worm holes give the piece much character. He marvels at the beauty that can be found even in a rotten old piece of wood that worms had at one time called home.

His pieces' made with box elder are also interesting. They



Several of John Magnussen's woodturning creations are set up on this table in h kitchen. Now retired, he developed an appreciation for the beauty in wood when owned and operated a cabinetmaking business.

have red streaks, and the growth rings are wider than in other wood.

"The rings are farther apart because box elder trees grow so fast. "I used to call them weeds," Magnussen commented.

A set of White oak candle stick holders in his collection were used in his son's wedding about two years ago. They were used in the unity candle lighting ceremony, Mary Ann said. John estimates the wood he used to make pieces is about 200 years old (from the time the tree was a sapling until now).

Woodturning goes back much further than that. Magnussen

estimates the art goes back as far as the Middle Age Europe. Today the art is practiced all over world. Sometimes professional wood turners from various countries have spoken at Minnesota Woodturning Association gatherings. Magnussen has picked up many useful tips at meetings, as well as from magazine articles about woodturning.

The beautiful pieces he now produces are all for sale, but he says 90 percent of the works are given away, mostly to relatives. He does not take his works to shows.

He is a woodturner simply because he enjoys it so much, he said.

"You never know what is going come out of a piece of wood," the former cabinetmaker said.

Like others who have become well aquainted with wood through their work he knows about the beauty hidden side each piece.

Past Meetings

3/14/95 James Tracy

James talked about and demonstrated his techniques for photographing his turnings. Following are thoughts and observations from James.

Photographing Your Work - James Tracy

The main question to ask yourself is "Why do you want to photograph your work?"

- To record your work for your personal use and to show your friends.
- To remember a piece (sold or given away).
- For publication in a magazine, sales catalog or public relations work.
- For entering shows or competitions.
- For entering registrys.

After you figure out why you want to photograph your work you will then have to decide whether you are going to do the photography or somebody else is.

Some advantages of you doing your own work are:

- You own the images and negatives.
- It may cost less.
- You may enjoy it.
- You have more options on how to photograph the object.

Some advantages of having the work done are:

- They are professionally done. (hopefully!)
- You are forced to pick your best pieces because of cost.
- You get another persons perspective.

Some disadvantages of you doing your own work are:

- There is a learning curve on getting good photos.
- There may be some up front cost for equipment.

Some disadvantages of having the work done are:

- You would not own the image and would have to get the photographers permission to use the picture.
- It can be costly \$40 to \$200 per print to be photographed.

At this point in time James has chosen to do his own photography. Each piece that is photographed will fall into one or more of the following categories:

- Black & White (ASA 100 or less) - For publications.
- Color Prints (ASA 100 or less) - For publications, Public Relations use and personal documentation.
- Color Slides (ASA 160 or less) - For entry into shows, publications, slide registrys.

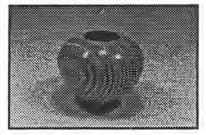
The reason for the low ASA numbers is that the lower the number the less grainy or the sharper the picture will be.

Some publications want 8"x10" Black and Whites (American Craft, Art Calendar). Some want color slides (all shows and woodwork magazines) and color prints for Public Relation releases and personal copies of your work. Some equipment James has bought over the years:

- A good quality 35mm camera
- A cable release for the camera shutter so the camera will stay stable
- Flood or Photo lights (color balanced)
- Tripod to hold the camera (As heavy duty as possible for stability)
- A good light non-textured background (not a sheet)
- PATIENCE! (acquired trait)

The lighting with Black & White photography is not as critical as in color, where lighting will make or break the photo. When using photo lights, you need color balanced film or a filter on your lens, otherwise there will be a blue or yellow/brown coloring to the photos.

When shooting your work, how you place the work in relation to the light, can change the perception of the piece in size, shape, texture, etc.





Some Pictures taken at the meeting

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Hints:

- Shoot from below the piece looking up to make it look larger.
- Shoot from above the piece looking down to make it look smaller.
- How you fill the frame of the picture can make the piece look smaller or larger.
- It is best to shoot several different shots and angles and then chose the best from that selection.

James picks out his best slides and then has 4 to 10 copies made of each slide. If he really feels that he has the right angle and position for the picture, he will shoot several identical shots of the piece which is cheaper than getting copies made. He states "sometimes it works and sometimes not." Copies run from \$.40 to \$1.00 so you have to look at the cost of processing. James uses a specialty color lab and he also uses Target depending on what he is going to do with the prints/slides.

James stated "Photographing your work is just like learning to turn wood, it takes time and practice to get a good product."

Michael Mode Demo

Meeting & Demo of 4/15/95

Special thanks to Woodcraft again for letting us use their space for the demonstration and their drawing/giveaway of:

- \$50.00 gift certificate
- Large turning set
- Miniature turning set
- Woodturners tool roll

There was an excellent attendance of 37 people for this demo,

Michael uses a bench grinder for roughing out his chisels and then fine finishes them on a Makita wetstone horizontal grinder. After finishing a piece to as fine as he can get it (he said he achieves a surface sufficient to start with 220 grit sandpaper) he starts with 200 and goes to 400 for a final finish. He does not believe that going to any higher grit really does much. When he is hand sanding he uses scotchbrite for backing on the sandpaper to prevent burning his fingers. (Michael says he does not like using scotchbrite as an abrasive)

Michael says he uses an Airstream Helmet when he is at home for all dust producing projects and especially when he is working with superglue as a finish.

On Michaels finishes, his first coat is thin super glue applied with a homemade brush of polyester quilting and masking tape. Take a piece of quilting approx quarter size and then wrap a small portion of it into the masking tape, making sure that the masking tape is sealed at the bottom of the cone so that it can not run out and on to your fingers. Apply the super glue in very smooth motions back and forth making sure not to stop on the piece. (This is done stationary with the Lathe not running). After applying he waits approx 5 minutes and then very lightly sands with 400 grit paper again. he uses a squeeze bottle for his shellac (avail Woodcraft, \$1.75) and an old superglue bottle for his Boiled Linseed Oil. Michael uses white shellac flakes and mixes in approx 50/50 proportion with alcohol. You can vary this for personal preferences but be careful not to go out of range when applying to a piece in combination with the oil. Michael uses towels with the

velour side to hold the shellac and oil.

Michael uses dry wood now, but did use wet wood when he first started turning.

Michael normally uses a strobe light when turning irregular pieces so that he can see what the piece is doing in motion. His particular strobe can be adjusted in 15 degree increments so that various areas of the turning can be observed. He said the manufacturer of the light was "Ametek" and it cost about \$600.

When you are creating a turning out of one piece of wood that will have a separate top and a bottom make sure to cut at a point that will give a good distinction of seperation but matches (defined figure match)as close as possible when the 2 pieces are put together.

Michael has a homemade kiln made out of plywood lined with carpet and a 300 watt bulb on a dimmer switch. It is vented both top and bottom for moisture release. Use the dimmer to cut the wattage output down so the 300 watt bulb does not burn out prematurely by being in the heated environment. Temperature should be in the range of 150 degrees farenheidt. He used to use a moisture meter but feels he now has enough experience to judge proper moisture content.

Michael uses push blocks to hold pieces in place after they have been reversed.

In finishing the top of an irregular vessal, a jig is made out of a block of wood that is at least 1" deeper and 1"wider in diameter than the top. A hole is drilled in toward the Headstock side so you can fit a

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finger through. This will serve 2 purposes; 1) To reach in and check the thickness of the top and 2) to help push out the top if it gets jammed in to tight. Turn the block cylindical and then insert the top for finishing, tapping and aligning gently.

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On Michael Mode castle top pieces, they are hollowed all the way in. He builds his laminates very simply by gluing up, planing, gluing up, planing, etc.....

[The following article was Copied From AW #44, March/April 1995 and follows very closely the actual demonstration Michael gave..]

French Polishing on the Lathe A Fast Finish With No Fuss

by Michael Mode

I've always liked the sense of immediate gratification possible with lathe work. In just an hour or two, you can turn a rough block of wood into a lovely object. Here's a decorative finish that gives me the same sort of satisfaction. All coats are done in less than half an hour, right there on your lathe in the midst of the shavings, the dust and, probably, the clutter.

Is this a new high-tech, synthetic wonder? Hardly-or only partly. It's traditional French polishing, with just a few new tricks to make the process easier.

French polishing scares some people because they've heard it's an arcane art based on secret recipes, a mysterious applicator pad and hard work requiring supernormal skill. A blend of shellac, alcohol and boiled linseed oil, laboriously hand-rubbed by a master finisher, seems like too much work, with too much chance for something to go wrong. Well, there's some truth in that. The recipes aren't really secret, but the materials do matter. And experience does show the way. But with my method, the lathe does most of the brute work, and disposable strips of towel replace the mysterious applicator pad.

Still, the final truth of the legend is in the finish itself. When you get it right the effect is like magic. I really enjoy teaching this in workshops because there is always that moment of "Wow, look at that!"

Materials and Supplies

The main ingredients are shellac and boiled linseed oil, but you'll also need a small bottle of cyanoacrylate glue, some denatured alcohol, a selection of sandpaper up to 400 grit, some strips of towel, a handful of polyester batting and some bathroom tissue.

I've tried ready-mixed shellacs and seen the results of padding lacquers, but in my experience, nothing beats fresh shellac. Purchase it in dry flakes, in the highly refined grade known as super blonde. I get mine from Woodworker's Supply (1125 Jay Lane, Graham, NC 27253, 800-645-9292), but many catalogs carry a similar grade. Also, use only denatured alcohol as a solvent. I recommend Behkol.

Dissolved shellac has a shelf life of only a few months, so mix small batches as you need them. Choose a clean glass jar with a lid, and fill it one-third full with shellac flakes. Then add alcohol to about twice the depth of the flakes, so that the jar is two-thirds full of the mixture. With occasional stirring, the flakes should dissolve completely by the next day. This is a ballpark mixture that you can vary according to the size and speed of the work, as I'll explain later. To apply the shellac, I make disposable pads that I use only once, to finish one particular area of a turning. In 15 years of trial and error, the best pad material I've found is brand-new, unwashed cotton velour.

Purchase a 100-percent-cotton bath towel with a "velour" or "polished cotton" side, and cut out pieces about 1 in. wide by 6 in. long. Fold these to a 1-in. by 3-in. double-layered pad, velour side out. I economize in other ways: For wiping away excess sealer or oil from a turning, I use bathroom tissue.

Preparing the Surface For practice, turn a cylinder about 2 in. in dia. out of a close-grained wood such as maple. Sand it to at least 320 grit, beginning with the grit required to remove all turning marks. Sand carefully through the grits, because any scratches will show up as if magnified.

Then apply a sanding sealer. I recommend cyanoacrylate glue as a sealer. It hardens very quickly, both sealing and toughening the wood. I apply it with tiny disposable brushes, which I make by wrapping a small wad of polyester quilt batting (available at any sewing store) with masking tape to provide a handle. (See photo, right.) I leave the head about the size of a Q-tip. (Real Qtips won't work well because the glue hardens very quickly on cotton.)

Brush the glue on very quickly, with the lathe turned off to avoid flinging glue into your eyes, and to avoid lap marks which will look like sloppy sanding. Wipe off excess glue immediately to eliminate extra sanding. Allow a few minutes for hardening, then sand to 400 grit, beginning with 320 if that's where you stopped. Cyanoacrylate glue is the fastest-

drying sealer I know of. But a lacquer-based sanding sealer will work instead, or even shellac itself, provided you let the first coats dry thoroughly.

Applying the Base Coat:

Position a light so that you can see a reflection off the wood's surface.

Take one of the folded pads and drip on a scant 1/4 teaspoon of shellac near the folded end. With your lathe running at about 800 to 1,000 rpm (for your 2-in.-dia, practice cylinder, slower for larger work), hold the pad against the cylinder. Move from one end to the other slowly enough to completely wet the surface with shellac. Allow a few minutes for this base coat to dry.

Now you're ready to complete the finish, a process that takes just five minutes.

Applying the Polish:

Add a few more drops of shellac to the same spot on the pad and a few drops of boiled linseed oil near the opposite end. The pad should be wet but not sopping with oil. Again at slow speed hold the pad firmly with fingers supporting it to apply pressure, and make a first pass across the work. Hold the pad so that the end with shellac leads the way and the oil end follows. Angle the pad diagonally, as if it were following an imaginary screw thread on the wood, with the movement of the lathe gradually leading the pad toward the tailstock.

If your cylinder is 6 in. long, take five or six seconds to complete the pass, allowing the pad to run off the end of the work. Then reverse the angle of the pad and immediately make a second pass at the same speed back toward the headstock. One pass in each direction completes one coat of polish. Four to six such coats, applied consecutively, will complete the finish. As the finish builds, the pad will begin to drag and you'll have to apply pressure. The heat produced is what does the actual polishing.

As necessary, add more shellac and oil, drop by drop, to the pad. Learning the balance between the two-the "feel"-is a trial-and-error affair. Either too little or too much drag means you're running into problems.

If there is no drag, there is probably too much oil, or oil got on the work before the shellac. In this case, the finish will not build up to a gloss. Sand with 400-grit sandpaper, let the work cool down for five minutes and try again with a new pad.

If there is too much drag from lack of oil, or too heavy a shellac buildup at one time, the surface will develop streaks or lumps. This is caused by heat melting the shellac. Again, sand, let the work cool and start over. Try a fresh pad with less, or slightly thinner, shellac.

When the polishing is correct, the finish will appear very glossy as it builds, but this gloss may be an excess of oil on the surface. So after several passes, wipe the entire surface firmly with clean tissue paper. This will not stick or affect the finish, which dries almost instantly.

Only a certain amount of polish can be applied in one session. Attempting further buildup will only lead to streaking. Experience counts here: I always get a satisfactory finish in four or five passes of the pad. The photo at right above shows how things should look. If you want a heavier finish than you can get in one session, let the shellac harden overnight, sand it very lightly, and polish again.

Be careful when you remove the piece from the lathe. The shellac will be soft from heat, and it can easily take an all-too-permanent fingerprint.

Fine Points:

Adjust your shellac recipe according to your results. If the mixture is too thick, it will streak. If it's too thin, buildup will be slower and more affected by the oil. I have found that higher surface speeds and larger surfaces call for slightly thinner shellac. Keep in mind that the rim of a large bowl is turning much faster than its center. When polishing rims, you might try thinner shellac and a pad wetter with both shellac and oil.

When polishing complex shapes, vary the size of the pad to suit the area being polished. Whenever the shellac begins hardening on the pad, the pad loses effectiveness and I switch to a new one.

When you have the touch as well as the feel, you won't need to watch your hands. You can learn to hold the pad on the back or the underside of the work, so it's easier to see the finish build.

Another skill worth learning is hand-rubbing a French polish. Do the same preparation, including a base coat of shellac. Next, add the oil to the pad and hold it between your thumb and forefinger on the shellac end and between your ring finger and pinkie on the oil end, with the pad under your middle fingertips. Rub in a circular motion, leading with the shellac end of the pad. Use a fast motion and slide the pad on and off the work. Stopping the pad on the work will leave an imprint.

Polishing by hand takes more time, and you'll definitely know which muscles are in use, but it's the way to touch up damaged areas and bring them right back to life. Copyright (c) 1995 Rodale Press. [From AW #44, March/April 1995.]

John Berglund

Meeting & Demo of 5/13/95

On a cold and rainy Saturday, 14 of our members attended a talk, demonstration and tour of John Berglund's workshop and wood storage buildings. Even though the day was nasty, the workshop was toasty warm and John's wife supplied us with coffee, cookies and other refreshments for our creature comforts. Thank You Mrs Berglund.

John started off with a general discussion of his shop layout, stressing the importance of making sure your lathe is solidly mounted for turning so it will not move and vibrate on you.

Other highlights of his talk were:

- John uses two chucks 1) A goodsized 3 jaw chuck (it appeared to be about 6" in diameter mounted on a special faceplate to screw onto the lathe.) 2) A large, what appeared to be a pin chuck, with 6 slots in it and approximately 2 " deep. John said that the wood would tear apart before it would come loose out of that chuck.
- He generally turns his pieces green and down to a final finish right off of the tool. He lets the piece dry, generally in a box so that there is minimal air movement over the piece and then sands the piece after it is dry. He will mount the piece on the lathe but does not run the lathe in the sanding process. The lathe is used

strictly for holding the piece. John uses foam on the end of his sanding disks and then glues sandpaper to the foam. He uses a hand drill to hold and run the disks when sanding the piece. John does not like to sand green wood as it clogs the paper, so this is why he has chosen to do his pieces this way.

- John uses the SealaCell system for his finishes.
- John mentioned that if a person does any turning of bowls with natural edges, the wood should be cut when it is dormant and you will have a much better chance of having the bark stay on than if the wood was cut during the active growing season.
- He showed us several specialized attachments for his live center when he does production turnings that help him save time and make the job easier.

John's main shop is divided into 3 areas. 1) The main workshop with all of his tools and lathe. 2) A wood storage area almost the same size as his shop that he stores wood and turnings while they are drying. 3) A smaller storage area off to the side of the main workshop that John can climate control and where he stores a quantity of wood that most woodturners only dream about. He also has his air compressor in there to isolate the noise of the compressor when it is running. He has a dust collection system that runs to most of the machines in the shop. All in all it is a very spacious and comfortable work area that anybody would be very happy to work in. John also stores wood in several other buildings, one of them being a converted horse shed that he has added a solar kiln onto the end.

John gets his wood from a variety of places locally and nationally besides cutting his own and having contacts that either give or let him know where local wood can be salvaged. He showed us various woods and several of us purchased some Myrtlewood from him.

Minnesota Woodturners Association

John is a professional turner that sells his turnings to Galleries, Stores and he retails some of his turnings at various Art shows around the country.

We had our first trial with the tapes being turned in at the beginning of the meeting and then everybody was given a chance to check out tapes at the end of the meeting. It seemed to go smoothly.

The meeting ended with a drawing for a \$25 gift certificate and Duane Gemelke was the lucky winner .The drawing was followed by a wood and tool swap.

Colorado Woodswap

Chuck Pitscka has been contacted by the Colorado Association about trading wood from each of our respective areas. So far we have gotten donations from our members of Cherry, Birch, Basswood, Red Elm, Box Elder.....

If you would like to donate a piece or pieces please call Chuck at 935-0660. We will be having a raffle at a future meeting for the wood we receive from the Colorado Association

Look for your next newsletter toward the end of August. We will fill you in on the National Symposium, schedule meetings for the rest of the year and more. Have a great summer!!! Following is a complete list of Videos that the association owns and that are available available to all members for checkout. These Videos can be checked out at any meeting for a deposit fee of \$3.00, returned at the next meeting or mailed in if you are unable to attend the next meeting. There is a limit of 2 Videos that can be checked out at 1 time. Please check the videos in with our Librarian (Duane Gemelke) at the beginning of the meeting so that they will be available to other members that would like to check them out. We also have subscriptions to a variety of magazines and also have some books on turning which are also available for checkout with the same return time as the videos. Your consideration for fellow members in returning checkouts on time will be greatly appreciated by all.

Tape Number	Tape Name	Person(s) / Demonstrator(s) Raffan		
1	Turning Projects by Richard Raffan			
2	Turning Wood by Richard Raffan	Raffan		
3	Hollow Turning by John Jordan	Jordan		
4	Bowl Turning by John Jordan	Jordan		
5	Hollow Turning, Tape 3 by D.Ellsworth	Ellsworth		
6	AAW Turning Symposium 1994			
7	Rude Osolnik Demo 3-26-1988	Osolnik		
8	Fun at the Lathe, by Timby	Timby		
9	AAW Turning Symposium 1992			
10	Hollow Vessel, John Berglund Demo	Berglund		
11	Ben's Mill, Sound, Woodwrights			
12	Bonnie Klein Demo	Klein		
13	Melvin Firmager Demo 3-21-1994	Firmager		
14	Russ Hurt Demo, 1989, Bowl Turning	Hurt		
15	Rod Croncite Demo, Burl Vases	Croncite		
17	Hooked Tools, & Birdhouse	Allshouse		
18	Jordan Demo May 1990	Jordan		
19	Bowl Turning by Del Stubbs	Stubbs		
20	Michael Mode Demo, Stewart Tools	Mode		
21	Vic Wood Demo part A, 6-19-93	Wood		
22	Vic Wood Demo part B, 6-19-93	Wood		
23	Russ Hurt Demo, Harvesting Wood Berglund, Lossing,	Hurt, Berglund, Lossing, Magnussen		
	Hollow Vessels , Magnussen			
24	Finishing, Burl Bowl Demo, Resche	Resche		
25	Pens, Eggs, & Basic Turning	Kachelmyer		
26	Threads, Tops, Chatter Tool, & Shear Scraping	Don, Paul		
27	Alan Lacer Demo, Boxes	Lacer		
28	Wood Hat Demo, Don Wattenhofer	Don W.		
29	Vic Wood Demo 6-19-93	Wood		
30	Russ Hurt, 4-89, Ron Kent, 5-89 Demo	Hurt, Kent		
31	M Hosaluk Demo Part A, Bowls 3-94	Mike H.		
32	M Hosaluk Demo Part B, Bowls 3-94	Mike H.		
33	Michael Hosaluk Demo, Bowls 3-94	Mike H.		
34	Berglund 9-90, Hedlund 1-90, Demo	John & Dave		
35	Mike Darlow, No. 1, Theory, Spindles	Darlow		
36	Mike Darlow, No. 2, Spind. Cup Chuck	Darlow		
37	Mike Darlow, No. 3, Faceplate, Bowls	Darlow		
38	Mike Darlow, No. 4, Tools	Darlow		

Minnesota Woodturners Library of Video Tapes for Member Checkout

TOXIC WOODS CHART						
WOOD	REACTION	SITE	POTENCY	SOURCE	OCCUR	
Bald Cypress	sensitizer	respiratory	+	dust	rare	
Balsam Fir	sensitizer	eyes, respiratory	+	leaves, bark	common	
Beech	sensitizer, nasopharyngeal cancer	eyes, skin	++	dust, leaves, bark	common	
Birch	sensitizer	respiratory	++	dust, wood	common	
Black Locust	irritant	eyes, skin	+++	leaves, bark	common	
Blackwood	sensitizer	eyes, skin	++	dust, wood	common	
Boxwood	sensitizer	eyes, skin	++	dust, wood	common	
Cashew	sensitizer	eyes, skin	+	dust, wood	rare	
Cocobolo	sensitizer, irritant	eyes, skin, respiratory	+++	dust, wood	common	
Dahoma	irritant	eyes, skin	++	dust, wood	common	
Ebony	sensitizer, irritant	eyes, skin	++	dust, wood	common	
Elm	irritant	eyes, skin	+	dust,	rare	
Gonalco Aves	sensitizer	eyes, skin	++	dust, wood	rare	
Greenheart	sensitizer	eyes, skin	++	dust, wood	common	
Blackwood(Surinam)	sensitizer.	eyes, skin	+++	dust, wood	common	
Hemlock	nasopharyngeal cancer	respiratory	2	dust	unknown	
Iroko	sensitizer, irritant, pneumoitis alveolotis	eyes, skin, respiratory	+++	dust, wood	common	
Mahogany(Swietenia)	sensitizer, pneumoitis alveolotis	skin, respiratory	+	dust	unknown	
Mansonia	sensitizer, irritant nausea, malaise	eyes, skin	***	dust, wood dust	common	
Maple(C.Cortticale mold)	sensitizer, pneumoitis alveolotis	respiratory	+++	dust	common	
Mimosa	nausea, malaise	respiratory	2	leaves, bark	unknown	
Myrtle	sensitizer	respiratory	++	dust, leaves, bark	common	
Oak	sensitizer, nasopharyngeal cancer	eves, skin	++	dust, leaves, bark	rare	
Obeche	sensitizer, irritant	eves, skin, respiratory	2	dust, wood	common	
Oleander	direct toxin, nausea, malaise, cancer		++++	dust, wood, leaves, bark	common	
Olivewood	sensitizer, irritant	eves, skin, respiratory	+++	dust, wood	common	
Opepe	sensitizer	respiratory	+	dust	rare	
Padauk	sensitizer, nausea, malaise	eves, skin	+	dust, wood	rare	
Pau Ferro	sensitizer	eyes, skin	+	dust, wood	rare	
Peropa Rosa	irritant, nausea, malaise	respiratory	**	dust, wood	unknown	
Purpleheart	nausea, malaise	respiratory	++	dust, wood	common	
Quebracho	irritant, nausea, malaise nasopharyngeal cancer	respiratory	**	dust, leaves, bark dust	common	
Redwood	sensitizer, pneumoitis alveolotis nasopharyngeal cancer	eyes, skin, respiratory	++	dust	rare	
Rosewoods	sensitizer, irritant	eyes, skin, respiratory	++++	dust, wood	common	
Satinwood	irritant	eyes, skin, respiratory	+++	dust, wood	common	
Sassafras	sensitizer			dust		
	direct toxin nasopharyngeal cancer	respiratory nausea, malaise	+ ?	dust dust, wood, leaves, bark dust	rare rare rare	
Sequoia	irritant	respiratory	+	dust	rare	
Snakewood	irritant	respiratory	++	dust, wood	rare	
Spruce	sensitizer	respiratory	+	dust, wood	rare	
Walnut,Black	sensitizer	eyes, skin	++	dust, wood	common	
Wenge	sensitizer	eyes, skin, respiratory	++	dust, wood	common	
Willow	sensitizer, nausea, malaise	respiratory	+	dust, wood, leaves, bark	unknown	
Western Red Cedar	sensitizer	respiratory	++++	dust, leaves, bark		
Teak	sensitizer, pneumoitis alveolotis				common	
Yew		eyes, skin, respiratory	++	dust	common	
rew .	irritant direct toxin, nausea, malaise, nasopharyngeal cancer	eyes, skin	**	dust dust, wood	common common	
Zebrawood	sensitizer	eyes, skin	++	dust, wood	rare	
	our officul	ejeo, anii	1 74	dual, wood	Inde	

PROTECT YOURSELF!

•Wear Eye Protection At All Times (Preferably Full Face Shield) •Use a Power Air Mask When Working With hazardous Woods •Use Air Filter Mask While Turning And Sanding •Beware Of Fumes Generated From Finishing •Wear A Helmet When Turning Large Objects •No Loose Sleeves Or Hanging Clothing •Wear Ear Protection When Necessary •Remove All Jewelry And Watches •Think First, Then Turn!