As we come to the last newsletter of the year I will be saying goodbye as your Editor. As I had stated at last year's elections, I would carry on for one more year and then turn over the reins. The past year has gone quickly, as have the last three years that I have spent as Editor, Membership chair and list coordinator, sometimes meeting and agenda scheduler, etc. A lot of things have happened since that November meeting in 1994 when I questionably raised my hand to volunteer to maintain the membership list. We have had many things change in the last three years.

Some of the Achievements I am proud to have been a part of are as follows:

Wood Raffles: At almost every meeting that we have not had a professional demonstrator, our membership has been generous in bringing in wood pieces that they donate for the wood raffle. Almost everybody that buys a ticket goes home with at least one piece of wood they did not have before.

Challenges: We have had an Easter Egg challenge, Christmas ornament challenges and a Croquet mallet and Ball challenge with more to come in the future.

This gives any member willing to participate a chance to pit their skills against other members and have a good time doing it with the chance that they will win a certificate of recognition. It promotes interaction among members as one of its many positive aspects.

Increased membership: Our membership has hit 100 or over the last 2 years, up from the 56 members we had in 1994. This is almost a doubling in size.

Newsletters: Newsletters have come out on a regular schedule with special editions as necessary, and

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**Inside...**

1. Editors Note
2. Minnesota Trees
3. A Skewed Story
4. Drying Wood
5. Vacuum Chucking
6. How the AAW came to be
7. Water Based finishes & ++
**Know Your Minnesota Trees**

**NORWAY PINE (RED PINE)**
*(Minnesota's State Tree)*

**(Pinus resinosa)**

**FORM** Height sometimes 100', diameter 30" to 40"; straight trunk; branches on mature trees form an open rounded picturesque head.

**BARK** Becomes divided into large reddish brown plates as it matures, which gives tree its characteristic appearance and one of its common names, red pine.

**LEAF** Occurs in clusters of two each; dark green; 4" to 6".

**FRUIT** A cone length about 2"; light brown fading to gray. The thin, slightly concave cone-scales are without spines or prickles and are free from resin. Like all pines, it requires two years for cones to ripen; ripen about the middle of September but stay on branchlets until following spring or summer; cones drop during winter after opening and shedding seeds.

**RANGE** Native of state; found in pure stands in many parts of northern and northeastern Minnesota; increasing in popularity for forest planting; because of its general freedom from disease and insect attack, recommended in many instances to take place of white pine. Rate of growth—about the same as white pine; thrives on sandy loam or dry, rocky ridges.

**WOOD** Pale red with thin, nearly white sapwood; medium heavy, hard, coarser grained and harder than white pine; used in construction of bridges and buildings and for pilings.

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**WHITE SPRUCE**

*(Picea glauca)*

**FORM** Height attained, occasionally 100' with a diameter of 2'; straight trunk; long, stout branches form broad conical head.

**BARK** Dark gray or gray-brown and scaly

**LEAF** Four-sided and crowded along branchlets; length 1/2" to 3/4"; pale bluish when young; dark bluish green when mature; sharply pointed, having a slightly disagreeable odor when crushed.

**FRUIT** Slender cone; length about 2"; cone scales round and soft at ends; thin and flexible when mature; narrow-winged seeds mature in one season; cones drop during winter after opening and shedding seeds.

**RANGE** Extensively found in forests of northern Minnesota, reaching outward to the St. Croix Valley; thrives on dry soils associated with pine, and on moist soils and in swamps with balsam and tamarack; also found associated with mixed hardwoods.

**WOOD** Light, strong, soft, straight grained yellow-white; used in the manufacture of various products, most important of which is paper. Largest trees are sawed into lumber and used for general construction—airplanes, furniture parts, canoe paddles and sounding boards for musical instruments; planted quite extensively for ornamental purposes, windbreaks, and shelter belts; ranks high as a Christmas tree.
throughout the length and breadth of all the lands of the earth a large number of freshly turned graves began to appear. In a world subject to wars, plagues and pestilence, this in itself was no great cause for comment. There was however cause for speculation as it became apparent that a large proportion of headstones were designed in an unusual manner. Instead of the popular Norman or Gothic arch atop the stone, or fluted column dripping vines and angels, these headstones were almost austere in their simplicity. They were some three or four feet in height on one side and the top sloped down eight or ten inches to the other. This gave them the appearance of a parallelogram with one end buried in the ground. The only inscription upon the face was the dear departed’s name and age at the time of death. There was one minor difference to be seen, some sloped to the left and some to the right. At first this was thought to have political significance and, in some cases, widows and children were subjected to the usual discrimination from an ignorant minority. Nothing was further from the truth as the variation only indicated the direction that the skew was being traversed along the tool rest at the time of death.

The guild members agreed that the results of their plan exceeded all their wildest expectations. They closed their ranks and went about their business certain in their own minds that a return to the prosperous days of old was just around the corner. The one thing that they had not allowed for was human nature.

History has shown us that the human race, when faced with great adversity rises to ever greater heights and the amateurs responded to the occasion. They took up the challenge of the dreaded skew, and slowly learning from the mistakes of others finally mastered the skills required to survive.

Whilst doing this they discovered that the skew really was a wonder tool. It produced a finish far superior to that achieved by any other tool and it soon became apparent that any turner who could not master the art was at a great disadvantage when it came to reducing costs.

The Guild members suddenly found that they were trapped in a snare of their own making. This trap was twofold, as, whilst the amateurs were mastering the skew, the professionals had discovered another interesting fact about woodturning. Put simply it was that far more money could be made from teaching others the art and craft than by continued hard work in the trade.

In a manual craft or skill one needs to be able to demonstrate the use of all tools pertaining to the said craft. This meant that the Guild members now had to master the art of using the very weapon with which they had tried to decimate the ranks of the amateurs.

During the period that it took for the Guild members to master this dread tool their numbers fell at an alarming rate. To avoid the very real possibility of the Guild being wiped from the face of the earth the members opened their doors to all comers.

So it was that the situation where both amateur and professional can share in an ancient craft first began, and as we all know, still exists to the present day. This happy state of affairs was brought about by the introduction into the craft of the not so humble skew chisel.

Murray White of The Peninsula Woodturner's Guild

The Peninsula Woodturner's Guild was formed in 1983 to provide a forum for the exchange of ideas and techniques in relation to woodturning. The original group of about 12 met in member's workshops and now we have about 180 members and our own very well equipped meeting place and workshop at Studio Park in the grounds of the McClelland Gallery, Langwarrin, about 40 km. south of Melbourne, Victoria, Australia

November 1997
Is this how the Skew started?

To arrive at the sequence of events that led to the development and use of the skew chisel, one must go back in time to the days when men were first learning primitive woodcraft skills, mainly by trial and error methods. Having learned these, they soon found that a round pillar was far better to bump into than a rough hewn square one, so they applied their minds to this problem. The obvious solution was to use much smaller younger round trees but the conservationists quickly put a stop to that, so back to the drawing board.

The more skilled artisans began to experiment with short sections of timber and found that by shaping a square, then cutting the corners off, then cutting the corners off the corners etc. etc. they could arrive at a point where they had created a fairly well rounded short pillar. A spinoff from this of course was the invention of the wheel and, because the processes involved in making wheels and pillars were at best labour intensive, minds were applied to the problem and mouths to bottles. The end result of course was a crop of first class headaches and, as you have probably guessed, the lathe was born.

The woodturners very quickly realized that they were on to a good thing, so, closing their ranks, they formed a Guild and for many years they prospered sharing their skills only with other members. Secrets, even the best kept ones, will out and, as a result of industrial espionage or just plain snooping, trade secrets were laid bare to all comers. Amateur turners grew in numbers and developed skills in the craft that were equal to if not exceeding those of the professionals. This was bad enough, but imagine the impact on the industry when amateur turners began to give away work instead of selling it!

The Guild members got together to discuss ways and means of overcoming the problems being caused by the amateur, and after much discussion it was decided that the best way to combat the threat to their livelihood was to invent a new tool which would be so hard to use that the amateurs would become discouraged and things would return to normal in the trade. After much consideration they took a flat bar of steel, fashioned a tang on one end and then, because it was too long, cut a few inches off the other end. Owing to the fact that they were not very proficient in working steel the end they cut off was far from square, but they ground a cutting edge on it anyway and fitted a long handle. The next problem was a name. One said it was a chisel, but another objected on the grounds that the cutting edge was not square and, furthermore it was positively askew, which everyone knew was also askance, awry, askant and definitely oblique. Much argument ensued and things became rather heated until the President remarked that, even if it was askew, it was still a chisel and maybe they could call it just that. This suggestion became a motion, was put to the vote and passed. So it was that the tool became known as a skew chisel.

Volunteers were called for to test the new tool and two doughty members stepped forward. In very short order one slashed his wrists and the other disembowelled himself, dying for the cause a few minutes later. The tool was, it seemed, a far greater success than had been hoped for. A delegation took the prototype, wiped the blade clean, and carried it off to the toolmakers. They requested that several thousand copies be made and released worldwide after suitable media coverage had whetted the appetites of all the amateurs.

The toolmakers accepted the order with grateful smiles, and emptying out their scrap barrels, went to work producing large numbers of the new tool from all the offcuts they had been hoarding for years. This set a precedent which is still followed today. It is a well established practice in the trade to use up any large stock of otherwise useless offcuts simply by putting a cutting edge on one end and a handle on the other. The resulting object is then promoted as the latest wonder tool and sold to unwary wood turners worldwide.

The dreaded skew was duly released onto the market. The amateurs snapped them up, and shortly thereafter...
Drying Roughed Out Bowls and Wood

by Roger Austin, President, Triangle Woodturners of North Carolina

I have been getting a lot of questions from beginning turners on drying bowl blanks and rough turning stock. Most of the questioners seem to be having trouble with their bowls or other vessels developing cracks and checks.

With this article, I will try to give you some of the techniques that I and other TWNC members and acquaintances have been using successfully to minimize cracking and checking in our pieces. (Note: I said minimize, not eliminate!)

Why Does It Crack? The first thing to think about in minimizing cracking is to minimize the stress of the wood. Cracks develop in areas that have weaknesses or because the wood is abused and needs to move to relieve internal stress. Naturally, to minimize cracking, you want to minimize the stress. One caveat: some of your pieces are going to crack no matter what you do (so deal with it!)

When you begin the turning process, you need to select logs that are fresh or have been stored so that drying is controlled. Cut off the ends of the log and see if checks are deep. If they are their in the starting material, they will be in the final product. Some woods are more forgiving than others. Our North Carolina soft Maple is very forgiving, but Apple or Cherry seems to delight in torturing the poor turner. Other woods like Red Oak is very crackable, whereas White Oak is a little less fragile. Magnolia, Elm, Osage Orange, and some others don’t seem to crack as bad.

Log Storage I normally split the log through the pith into two pieces after I get a log. Once the checking starts on the ends, it will progress rapidly through the rest of the log. You can seal the ends, but this only prolongs to process, it doesn’t stop it. Once you have the log split, the wood can dry slowly and the stresses are relieved.

Roughing the Blanks If you are roughing bowls or hollow vessels, you should get started right away. Turn the bowls thick using the methods in the bowl roughing article. For hollow vessels, I sometimes will rough out the vessels between centers and bury them in shavings for temporary storage.

Drying the Blanks There are a number of methods of drying rough blanks, but all of them do a similar task of slowly allowing the moisture to escape from the wood so the internal stresses of the wood don’t cause cracks to start.

1. Very Wet to Moderately Wet
   There are a number of good methods for the initial drying period. During this period, I would take a look at the blanks every few days to see if the drying process is working. In wet climates, they may not faster than drying. In dry climates, I imagine they may dry too fast.
   Check for checking and cracking and stop it with thin superglue if the cracks start. (If the wood is worth it.)
   • Store them in a pile of shavings in the shop for a month.
   • Store them in a paper grocery bag with wet shavings until dry to the touch.
   • Store them in a plastic bag and rotate the bag every few days (from Ron Fleming).
   • Store them in a climate-controlled cabinet specifically built for this (from Rodger Jacobs).
   • Cover them with SealTite (end-grain sealer) and stack them in the shop.

2. Moderate Wet to Ambient
   This is normally my last step since the bowls will end up in this type of environment after final turning. If the wood gets to ambient moisture content, then it will probably not move much more. For lidded boxes or other vessels in which parts must fit together, I would go to the Bone Dry methods.
   • Put the blanks in an air-conditioned room where it is much drier than outdoors.
   • Bring the blanks into your heated shop and store on a high shelf for several months.
   • Use a microwave (very carefully) to drive off the moisture. I wouldn’t recommend microwave drying since it is too fast for my tastes.

3. Bone Dry
   • Use a kiln. This can be an insulated box with a heat source. We have had members who have built drying boxes from foam insulation as well as others who built them from used dishwashers and refrigerators. They installed a light bulb with a dimmer and controlled the temperature to about 120°F. After several days at higher settings, the moisture is released and the dimmer can be turned down. From what people tell me, they have great success with this method.
   This is a very worthwhile addition to your turning shop.

In Conclusion: These are some ideas that I have gleaned from the TWNC membership over the past few years. Many of the ideas are not novel, but are common sense. The basic idea is to have a controlled release of moisture so that the stresses that cause cracking are minimized. Please let us know if you have additional ideas on this subject. Thanks, Roger

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Continued from page 1

members have been able to count on getting their newsletter in a timely manner. Articles have been included to cover the whole spectrum of woodworking from beginners to advanced turners to the professional side of woodworking. We have always asked for input and hopefully have provided an informative and entertaining newsletter.

Small Group Sessions: We have tried small groups meeting in members' homes where there is a chance for more questions and the intimacy of a small group that is not available at our general meetings. These have proved to be popular and it seems like an afternoon flies by for both the host and cooperation to Don Robinson as he takes over the duties of editor.

Only with your help and cooperation will we have a successful organization that everybody can be proud of and have ownership in.

I can say that it has been a pleasure to work with all of you and I would like to specifically thank Ron Meilahn for his astute work as Treasurer and Volunteer Grandeur, who has actively recruited new members, to Duane Gemelke for his work as Librarian and helping with anything that was asked of him, always doing a superb job, and also to Paul Keller and Anderson Windows. Paul went out of his way to help in cutting costs of the newsletter and takes his personal time to get the newsletters copied at Anderson Windows, who graciously let Paul use their equipment for copying.

Many Happy Days of Turning to all of you.

Dave Schneider

Chainsaw safety

Protect eyes, ears and nose and throat- pretend to be a Doctor.
Don't saw into the dirt. Cut part way through and roll the log to finish.
Don't force the saw - it fights back and has more teeth.
Make sure you have saw chain oil - and it is working.
Automatic oiler types work now.
Hand pump is just fine or better - but put oil on the chain it keeps it clean, and running smoothly.
Be cautious of kickback - don't get the nose (tip of the bar) into something, or else it might whip up and throw you around (into the saw).
Those large "T" or "U" handles in front of the metal ones are not handles but motor kill brakes for kickback.
Kickback is rare and only when one isn't doing things correctly.
Don't tackle something too big. Know your limits. Start small and learn/teach yourself.

Did You Know?
by Mel Turcanik

When a rain forest has trees cut, creating a clear area, regeneration is impossible without the work of BATS! Before a tree will take root, there must be a certain amount of undergrowth. Bats plant this favorable environment for regeneration. They eat fruit and then disburse the seeds from the air. The seeds aren't damaged going through the digestive tract because they go through in approximately 20 minutes. Bats also pollinate many plants, which would not be able to reproduce otherwise. It has been estimated that a particular type of bat can disburse 60,000 seeds of a rain forest fruit in one night.

(From The Animal Planet)

Past Meetings

Notes for the September and October meetings were unavailable at the time the newsletter went to print.

Point of Interest

Jim Frey, Manager of the Woodcraft Store in Bloomington has ordered a ONEWAY lathe fully loaded and expects to receive it sometime in December. Woodcraft will be selling the lathes and MWA members are invited to stop in and try the new lathe out. (How about one of our members trying it out and writing an article and review on it?)  Editor
VACUUM CHUCKING  By John Mackinven

Vacuum chucking is one of those technical aids which once in place quickly becomes indispensable. And it need not be difficult or expensive to set up.

If your budget allows you probably can’t do better than invest in the Berger-Vac system. But if cash flow is a problem or you enjoy tinkering why not build your own?

Given a spare vacuum cleaner (it doesn’t need super suction), a headstock spindle with a central bore and some PVC water pipe odds and ends your vacuum chuck won’t cost more than a morning’s work.

Mine has been in almost daily use for a year and never falters.

I don’t use the outboard turning facility on my lathe so I was able to dedicate a faceplate by drilling a central hole to line up with the spindle bore. A wastewood block (similarly bored) screwed to the faceplate doubles as a handwheel and can also be marked for indexing.

Turn a recess in the wooden wheel to accept a short length of plastic pipe which will be super glued in place. The diameter depends on your method of hitching up to the vacuum cleaner hose. I managed to find an elbow that would accept the tapered nozzle of the cleaner hose at one end and fit loosely over the spinning pipe protruding from the handwheel (see diagram).

There’s no need for bearings - in fact you must have some vacuum leakage to prevent the motor burning out. Some vacuum cleaner hoses have an inlet valve which is handy to regulate the air intake.

A liberal smear of grease to ease the friction between the revolving and stationary pipes is enough to put you in business.

I mounted my vacuum cleaner on a shelf above and behind the lathe - it could hang from the ceiling, sit on the floor or wherever. The hose is held loosely in place with a piece of elastic - the elbow assembly can be instills uncoupled from the handwheel pipe but in practice I leave it in place even when the vacuum is not in use.

A variety of holding systems can easily be made to provide for different jobs.

The simplest depends on an inboard faceplate - again with a central hole of course - with a 300mm plus custom wood or ply disk attached. Glue a rubber, cork or foam disk to this and drill to match the spindle bore. Mark a series of concentric circles for centring workpieces.

Beware of the pressure air exerts. The larger the surface area of the workpiece the firmer the grip. In fact a large bowl or platter may implode if the walls are too thin. If in doubt as to the holding ability of your chuck because of size, shape or balance of workpiece use the tailstock for security until the final delicate cuts.

To chuck natural edge bowls I have a set of sleeves in various sizes with padded rims. She sleeves locate in shallow grooves in the rubber pad and seal to the inside surface of the work. I use various diameters of plastic pipe but cardboard tube or even turned wood will suffice.

This low tech, low cost vacuum chucking method was first seen in operation in Auckland woodturner Ian Fish’s workshop. Ian has been using his successfully for three years now.

I hope this encourages people to save time and money.

John Mackinven is a full time woodturner living and working out of Auckland, New Zealand. He specialises in colour and mixed media work.
HOW THE AAW CAME TO BE

Woodturning's growth as a popular hobby and professional art form began quietly in the years following World War II. There weren't many people like James Prestini or Bob Stockdale who were exploring the artistic potential of the turned wood bowl. But the lathe's economy, ease of use, and self-contained versatility attracted many. By the early 1980s, woodturning had begun to appear in galleries and craft shows, and woodworking magazines covered the techniques and exciting new work of this old craft now recharged with a sense of quality and innovation.

Woodturning was taking a uniquely contemporary shape, but there was yet no national coherence to the widespread activity. In 1985, the Arrowmont School of Arts and Crafts, in Gatlinburg, Tenn., was one of the few places in the country where it was possible to teach or study woodturning. Director Sandra Blain, along with woodturner David Ellsworth, a regular instructor at Arrowmont, recognized the need to highlight the state of current work in a national show. They engaged turner/sculptor Mark Lindquist and Reunion Gallery Director Michael Monroe to help judge what became the 1985 exhibition, Woodturning: Vision and Concept.

The show's opening coincided with a three-day symposium, drawing more than 200 woodturners, at which the concept of a national organization of woodturners was put forth. "With all the meeting and greeting of old friends and new," writes David Ellsworth in the premier issue of American Woodturner, "it soon became clear that what had brought us to Tennessee was more than just a lust for tools and techniques. It was a thirst for the process of learning. Several hundred turned objects were on view in both formal and informal [Instant Gallery] display—as if the energies of the past decade were brought before us in a moment. If there was a single thought on everyone's mind, it must have been, 'where do we go from here.'"

At this symposium Dick Gerard, who would later serve as the AAW's treasurer, submitted a survey calling for the formation of an association. The first brainstorming session took place after hours, among a group of the symposium participants. The next day an invitation to join the organization went out to the rest of the participants. A vote was taken, an ad hoc board of directors was formed, and the work began on framing a charter. By April of 1986 the American Association of Woodturners was formally named and incorporated as a non-profit organization. The journal began later that year, along with the first local chapters; our first "official" symposium was held in October of the following year. Ten years later, this web site helps answer the question, where did we go from there?

WHO WE ARE

International, non-profit, and now more than ten years old, the American Association of Woodturners is the largest organization in the world dedicated to the advancement of woodturning. We are more than 6,400 members, eighty-nine local chapters, a nine-member volunteer board of directors, a board of advisors, a full-time administrative staff, and a journal editor. Our mission is to provide education, information, and organization to those interested in woodturning—a branch of woodworking centered around using the lathe to shape wood. The results range from the familiar to the profound: everything from decorative and functional bowls, boxes, and vessels to furniture and architectural spindles, toys, tools, musical instruments, even sculptural art. Members of the AAW include professionals, amateurs, gallery owners, collectors, and wood and tool suppliers.

WHAT WE DO

Our journal, American Woodturner, is a high-quality, professionally produced magazine filled with articles contributed by our members on all aspects of woodturning. Recent issues have included feature stories on carved turnings, laminated and segmented bowls, woodturning in France, Early American lathes, and ornamental turning on a rose-engine lathe. Technical articles abound, from basic topics like chucking and drying wood to state-of-the-art approaches: multi-axis work, oval turning, sculptural bowls, and close-tolerance nesting. Each issue includes a Turners' Tips column; a gallery of Photos from the Mailbag; book, video, tool, and product reviews; a national Bulletin Board; and a Calendar of regional events. There are in-depth design discussions, profiles of noteworthy craftspeople and artists, and reports on recent and current workshops and shows.

Our annual Resource Directory includes the names and addresses of all our members (including "hosts," who welcome traveling members) as well as sources of supply, contact information for local chapters and workshops, and a book and video listing.

Our annual symposium is an intensively informative, fun-filled event held in a different region of the country each year. Three days are packed with demonstrations by internationally renowned and local turners, slide shows, and design workshops, as well as panel discussions on marketing, technical and aesthetic development, safety, and legal issues. A favorite part of each symposium is the Instant Gallery where members show off their latest and greatest accomplishments. The symposium also includes a trade show, local tours for spouses, and a catered banquet culminating in an auction of donated woodturnings, tools, and supplies. Special publications include a Project Book of articles from past issues of the journal, a periodic index to the journal, and a growing library of videocassettes, which capture the flavor and information of our annual symposiums.

The AAW fosters the creation of local chapters, where turners meet regularly and make friends, sharing their woodturning challenges, insights, and accomplishments. Local chapters develop their own unique features, from mentor programs and video libraries to raffles, contests, mini-symposiums, and monthly newsletters.

Each year the AAW makes available a number of Educational Opportunity Grants for members to attend woodturning workshops or to further proposed research and development projects. Local chapters may also receive grants to help finance visiting demonstrators or other educational events.

Membership in the AAW is open to anyone with an interest in woodturning. We encourage you to join us.
Clay is a professional woodturner from Krum, Texas. Known for the broad scope of his work, from finely crafted turned vessels to cutting edge sculptural work, his work has received recognition from a large audience. He has been exhibiting on a national level since 1987.

This broad experience as a turner has also earned him respect as a teacher, able to relate to students from all levels of experience. His desire to teach has taken him to Arrowmont School for Arts and Crafts, the Appalachian Center for Crafts, and many woodturning clubs and regional symposiums. He has been a demonstrator at several American Association of Woodturners National Symposia and now serves on its Board of Directors. He is a founding charter member of the AAW, member #50.

The Woodturning School is located in The Woodworking Club of North Texas. An intensive three-day school, attendance will be limited to three students per session. The result is an extremely beneficial student/teacher ratio. Open to turners of all skill levels, the curriculum will be custom tailored to the needs of each student. Topics can include bowls, hollow forms, multi-axis turnings, large and deep turnings, and adapting and making tools.

Clay Foster says about the school, "I want to help you learn whatever it is you want to know about woodturning." All wood and supplies are included, as is lunch for the three days of the session. A list of nearby motels and hotels will be provided upon registration. Transportation to and from the airport can be arranged. Tuition for the school is $500 per person.

Clay Foster's Woodturning School
3003 Shamrock
Fort Worth, TX 76107
Telephone (817) 882-9944

Highlights

- Taught by a professional, experienced turner/instructor.
- Located in Fort Worth, Texas. Central to most of the US and Minutes from Dallas/Fort Worth International Airport.
- Historic hotels and restaurants within driving distance.
- Close to the Historic stockyards of “Cowtown.”
- Large, modern workshop with a lathe for each student.
- Small class size, (3) allows for very close instruction.
- Turners of all ability levels are welcome.

Fort Worth Stockyards

The Fort Worth Stockyards National Historic District, continues the mystique of early Cattle Drives, Cowboys, and the livestock and meat packing industries.

In 1849 Fort Worth was established on the bluff overlooking the West and the Clear Forks of the Trinity River. The pony soldiers were to drive the Indians further West, away from the buffalo hunting grounds. Settlers began to arrive and by 1880 the settlement had earned the name “Cowtown”

Fort Worth was the last major stop before entering Indian Territory. Between 1866 and 1890 more than 4 Million cattle were driven through Fort Worth. The railroad arrived in 1876, and prompted the construction of the Union Stockyards. In 1896 the Fort Worth Stockyards Company held its first sale on the banks of Marine Creek.

In 1908 the Cowtown Coliseum was built and was home of the world’s first indoor rodeo. With the livestock processing, the railroad and the Coliseum the Stockyards processed over 100 million head of livestock during the seventy years of production.

Fort Worth is still known as the city “Where the West Begins.”
Myths about Water Based Finishes

Myth #1 - Lack Of Durability

Water-based finishes are significantly more durable than their solvent based counterparts in terms of mar, print and abrasion resistance. They are much more difficult to sand and remove from a wood surface than solvent based finishes. A typical finish remover will generally require more elbow grease to get them off. In fact, a water-based finish based on pure urethane cannot be removed with conventional removers. Only specially formulated, highly aggressive removers will take off such a finish.

Myth #2 - Lack Of Useful Life

Water-based finishes will outlast their solvent-based counterparts by as much as 300%, depending on type of product. For example, a water-based lacquer will outlast a conventional nitrocellulose lacquer by 5 to 10 years. A marine spar varnish will last only 4 to 5 months when subjected to Florida’s hot sun and humid conditions. A marine type water-based polyurethane has a useful life of at least 12 months under the same weather conditions.

Myth #3 - Excessive Grain Raising

It is a fact that water-based finishes raise the grain from very slight to excessive. The degree of grain raising is a function of type of finish, manufacturer, type of wood, application temperature, drying time and, above all, smoothness of the sanded surfaces. It is important to point out that, contrary to false belief, some grain raising on the initial coat is necessary to a smooth and good looking finish. On the other hand, excessive grain raising is not good productivity wise.

Years ago, prior to the development of lacquer sanding sealers, it was a common practice to wet the wood with water in order to raise the grain, then the wood was sanded down to remove the dead fibers. Lacquer based sanding sealers were developed to achieve the same thing but with increased productivity. They were not designed however, for film building due to being soft and having poor water resistance. Lacquer based sanding sealers were designed to raise the grain then be sanded down to bare wood upon application. Their fast drying time was the key utility over wetting the wood surface with water.

Not all water based finishes raise the grain equally. The specific manufacturer and the finishes’ drying time will dictate the degree of grain raising, all other factors being equal such as smoothness of the sanded surface. Smoothness of the sanded wood, which is a key factor, is discussed further.

The faster the drying time of a water-based finish the less grain raising will be experienced. A fast drying, spray type water-based lacquer will raise the grain minimally, similar to a nitrocellulose lacquer based sanding sealer. A slower drying, brushing type polyurethane will raise the grain more severely. Therefore, to minimize grain raising, a water based lacquer should be used and applied by spray. Applying a couple of light coats as initial coats, without sanding between the coats, will minimize grain raising as well. Applying a wet initial coat to raw or stained wood will raise the grain more severely. Degree of grain raising is inversely proportional to smoothness of the wood’s surface. The smoother the sanded surface the less grain raising will be realized. Sanding the wood to only 120 grit will generate severe grain raising - sanding to 280 grit will generate none to very slight. On oak, ash, mahogany, poplar and walnut, grain raising can be eliminated or prevented by sanding to 280 grit. On cherry, maple and pine, grain raising can be eliminated or prevented by sanding to 220 grit.

It is important to mention that some water-based manufacturers now offer a wood Pre-Sea/product that eliminates grain raising and wood swelling completely. Such a product, though still water-based, employs unique resins that block grain raising and wood swelling provided the wood is sanded to 220 grit prior to application. In addition, most Wood Pre-Seal products also bring out warmth and color of the wood grain just like a solvent based lacquer. That is, on oak wood for instance, they bring out the yellow and red hues that are associated with warmth.

Finally, applying a cold product to a cold surface will cause the water to dwell on the surface hence cause grain raising. A warm product and a warm environment will cause the finish to dry faster thus minimizing or preventing grain raising.

November 1997
Myth #4 - Difficult To Apply and/or Finicky To Use

With the advancing technology, water-based finishes are now as easy to apply as solvent based finishes provided proper spray equipment is utilized. Undersized spray equipment and/or applying a cold product to a cold surface will generate an orange peel. Following manufacturers label directions and published literature will yield excellent results.

Myth #5 - Clogging Of Spray Equipment

Some water-based finishes do clog spray equipment - most however, don't. In fact, some water-based lacquers on the market can now be left in the spray gun for days without the need to clean out - just like conventional nitrocellulose lacquer. Press the trigger and the product flows without spitting debris. This phenomenon is a result of a new chemistry developed over the last few years. Some of these newer water-based lacquers have a 100% burn-in, just like a nitrocellulose lacquer which prevents clogging and spitting.

Myth #6 - Sagging On Vertical Surfaces

Most water-based finishes can sag on vertical surfaces if applied too heavy - some however, don't. Sagging is a result of high specific gravity and gravitational pull. A water-based finish typically weighs 8.6 lbs/gal versus 7.6 for a solvent-based finish. The extra pound per gallon coupled with gravitational pull causes sagging to a very heavy coat applied. It should be mentioned that water-based finishes that have a 100% burn-in just like a nitrocellulose lacquer, should not sag on a vertical surface.

Myth #7. Extensive Drying Time

At 75 degrees F and 45 % relative humidity, water-based lacquers will dry to touch in 5 to 10 minutes. Only in a cool or cold environment and, high humidity will they dry significantly longer.

Myth #8 - Too Costly To Use

Gallon per gallon, water-based finishes are in fact more expensive than solvent based finishes. However, on a solids bases, water-based lacquers cost less than solvent-based lacquers. Solvent based lacquers on the average, cost 5.750 per square foot per mil versus 3.750 for water-based lacquers. This is due to at least 10% higher solids offered in a water-based lacquer versus nitrocellulose lacquer. Water-based polyurethanes are all around more expensive than solvent based counterparts. However, the added cost is well worth the price. Water-based polyurethanes dry 75% faster, last longer and most are UV stable which makes them very suitable for exterior application. That is, do not yellow over time.

Myth #9. Inflexible

Water-based finishes are very flexible yet very durable as well. Hit a solvent-based finish with a hammer on a wooden surface and it will crack or chip. Hit a water-based finish with a hammer and it will dent with the wood without cracking or chipping.

Myth #10 - Just As Bad For Your Health As A Solvent Based Finish

All water-based finishes do contain an organic solvent or a combination of solvents. However, the amounts are significantly less than in solvent based finishes, usually less than 10% by volume. Some water-based lacquers in fact contain less than 2% by volume. These solvents are an essential component for film formation known as coalescing solvents.

However, there are two important facts that need to be recognized regarding these solvents. One, these solvents are propylene glycol ether based and are not classified as hazardous substances by the EPA. Second, if these solvents are not propylene glycol ether based (ethylene due to cost), as these solvents evaporate, they are encapsulated by water that evaporates with them causing minimal health hazard.
**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

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**For Sale**

1. **Wards 10” radial arm saw w/ hi-speed spindle, stand and accessories** - $290
2. **Sears 4” jointer/planer w/new blades** - $50
3. **Sears 3 in 1 rotating utility table w/casters (mounts 3 power tools)** - $90
4. **Ryobi 18” mini lathe** - $160

Contact Don Robinson @ (612)-441-8207

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**For Sale**

SEAR’s Floor Model Belt/Disk Sander - 6” x 48” belt with 9” Disk - Excellent condition
- 3/4 Hp - 120 VAC with dust collector hookup
- $125

Contact Dave Schneider @ (612) 934-4667
16777 Thatcher Rd
Eden Prairie, MN 55347

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**For Sale**

SEAR’s Wood Shaper, on stand. Set up for forward and reverse directions. Stand is on casters. Complete set of 15 cutting knives and collars in separate carrying case. Like new, barely used - $250

Contact Dave Schneider @
(612) 934-4667
16777 Thatcher Rd
Eden Prairie, MN 55347

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**Membership Application/Renewal**

**MINNESOTA WOODTURNERS ASSOCIATION**

Name (Please Print) ___________________________ Telephone # _______ Date ____________

Address ______________________________________ City ________________ State ______ ZipCode ______

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 ☐

Are you a member of the AAW? Yes ☐ No ☐

I would be willing to:

☐ Help out at meetings
☐ Be on a planning committee
☐ Help out at demonstrations and/or shows
☐ Serve on the Board of the Association
☐ Contribute to the Newsletter

Mail To:
MN WOODTURNERS ASSOCIATION
c/o Ron Melahn
1638 23rd Ave N W
New Brighton, MN 55112

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November 1997
Minnesota WoodTurners Association

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 add, call Dave Schneider. (612) 934-4667

Submission deadline of Ad. and Article, for the Newsletter Is tbe 1st of the month prior to publication. (Le. The 1st of Dec, Feb, Apr, Aug, Oct)

Saturday, November 8th, 1997 at John Berglunds’ from 1:00PM to 5:00 PM. Oval turning will be demonstrated by John. He will also show us his new lathe and a large bandsaw he has brought back from Oregon and refurbished so he can do his own resawing of large timber.

For those who may not know John, he is one of our most experienced members, and makes his living as a professional woodturner.

Also at this meeting we plan to have a wood raffle and Show and Tell so bring any extra wood you may have and bring your latest masterpieces for Show and Tell.

Johns house is about 10 miles south of St Cloud and is about a 1 1/2 hour drive from the center of the Twin Cities. Directions to Johns: Take 1-94 to the Clearwater exit # 24. Turn left (west) and take Cty # 24 about 1 1/2 miles to Cty Rd # 40. Turn right (northwest), and go about 1 1/2 miles to the stop sign at Cty Rd # 44. Turn left (southwest), and go about 1 1/2 miles to Johns house. 15695 County Rd # 44.

Retirement Sale

Large Lathe -
24" swing. 9' 6" bed capacity
$1200

Delta Unisaw -
10", 1 1/2 hp, 220v, 1ph $850

Delta Planer -
13" x 5 1/2", 2 hp, 220v, 1ph $900

Delta Floor Model Sander -
6"x48" belt with 12" Disk - Used less than 40 hour - Sold new for $1350 now for $925

There are also many tools, wood and accessories to numerous to mention but are available from Bill.

Contact Bill Thul @
(612) 489-4540 or 483-2815
165 E. Viking Drive
Little Canada, MN

Future Meetings

Christmas Ornament Challenge
At our December meeting, bring as many Christmas ornaments you have made and match them against what other members have done. They can be any style, size, material and color as long as you have turned them. Lets see how creative we can be. Members will vote on the different categories. (i.e. Best of Show, Most Unique, Most Colorful, etc.) This should be a fun event and lets see if we can get everybody to participate.

Christmas Gift Swap/ Drawing
Along with our Christmas Ornament Challenge, we will have our annual gift swap. Members that want to participate should bring in a turned piece to be put into the gift pool. They will then be given a number and their gift will be given another number (this is so you won't get your own gift.) There will then be a drawing of numbers and when your number is called, you get the gift that your number was assigned to. Remember, you have to bring a gift to receive a gift.

Minnesota WoodTurners Association

4541 E. Lake Harriet Pkwy
824-4541

November 1997
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. (September thru May) The meetings are normally held on Tuesdays or Saturdays and the group meets in a different location each time. The meeting locations vary from members shops, educational associations, 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.