

The South Central Penn Turner

Newsletter of the South Central Pennsylvania Woodturners, July-August 2002



Reverse turned ornaments by Dick Diehl (Elm and Ash)

Future Meetings:

July 2, 2002

Time: 6:00 p.m.

Place: Emigsville Recreation Building

Directions: From York, go north on N. George St. until you go thru the flashing yellow light. Soon after that turn right at the next signal light and turn right again between the tennis courts and ball field prior to the railroad bridge.

Program: Harry Memelink, a renowned wood turner from New Zealand, will demonstrate Exocet hollowing tools. Also, don't forget to bring your recent projects for "show and tell".

August 6, 2002

Time: 6:00 p.m.

Place: Valen Frye's workshop
535 Conewago Creek Road, Manchester, PA. (717) 266-6062

Directions: From York, take exit 28 (old exit 12) off I-83. Go east on Susquehanna Trail (about ¼ mile) to a right onto Conewago Creek Rd. Go approximately 0.8 mile to 535 Conewago Creek Rd. on your right (Look for Valen's red barn)

Program: More tool making and blacksmithing instruction. Bring along any materials, such as old screwdrivers, you want to forge into tools.

President's Column

Valen Frye

I have gotten several comments regarding the omission of "show and tell" at our last meeting. This was an unintentional omission of this very important part of our meeting. Maybe we had too many irons in the fire. Next time lets target "show and tell" for 6:30.

Guest turner-Thanks to a tip from Dave Barkby we have been able to get Harry Memelink, a New Zealand turner, to provide hands-on instruction plus a demonstration of Exocet hollowing tools for our July meeting. The hands-on instruction will be in my shop on July 1st and 2nd for a fee of \$50 per person. If you are intersted in signing up for either day please call me at 717/266-6062. The demonstration will be held at our regular meeting the evening of July 2nd. The demonstration will be in lieu of the "blacksmithing" session originally planned for July, but now scheduled for August.

Program ideas-We are always looking for feedback from members of what they want/need for future programs. We had toyed with the idea of a questionnaire, but this may be too cumbersome—would appreciate your thoughts.

A Reminder- *Wood Turning Since 1930*, which opened to the public March 15th at the Renwick Gallery of the Smithsonian American Art Museum, 17th & Pennsylvania Ave NW in Washington DC continues through July 21. (See the May-June Newsletter for details)

SCPA Woodturner Information

President: Valen Frye	717/266-6062
Vice-Pres.: Dave Barkby	717/292-0173
Secretary: Glenn Zepp	717/337-9571
Treasurer: Jerry Kopenhaver	717/432-2753
Librarian: Dick Becker	717/755-0794

The SCPA Woodturners is a Chapter of the American Association of Woodturners (AAW). SCPA Woodturner membership dues are \$20/year. For membership, send a check, payable to "SCPA Woodturners", to the treasurer, Jerry Kopenhaver at 50 Warrington Way, Wellsboro, PA. 17365. AAW membership information can be found at www.woodturner.org.

Treasurers Report (June 14, 2002)

Jerry Kopenhaver

\$1642.88 in bank
\$ 89.00 to deposit
Total \$1731.88

Notes from May Meeting:

Safety in the Workshop

Jerry Kopenhaver discussed some of the health hazards associated with woodturning and working in the wood shop. These include injury from improper use of machinery as well as wood dust hazards. All of us have read and/or heard that woodworking can be a health risk and that it is strongly advisable to protect yourself from possible reactions to wood and wood dust. Jerry gave a few basic precautions that can help minimize health risks from working with wood--work in a well ventilated area, wear safety goggles and/or a face shield, use dust extraction, wear a dust mask, use a powered

respirator. Jerry demonstrated a battery-powered respirator he uses in his shop.

Additional measures that help minimize risks for those sensitive to wood toxins include: avoiding unseasoned wood, avoiding plywood and MDF dust, avoiding treated lumber, changing clothes and washing and showering after working in the shop, and wearing gloves if necessary. The chart on page 5 summarizes some reactions reported from working with certain woods.

Reverse (Inside-Out) Turning

The second part of our May program was a lesson on reverse or inside-out turning by Dick Diehl. Dick uses this technique to make attractive Christmas ornaments and decorative weed pots (see the front page picture). He has found them to be quite popular items at craft fairs.

Reverse turning is a two-stage spindle turning technique. In the first stage, waste wood representing the inside portion of your creation (bell, tree, geometric shape, etc) is turned away. Then the turning block is quartered lengthwise, each quarter rotated 180°, and the pieces glued together again. You are now ready for the second-stage turning. This stage involves creating the desired shape by turning away the exterior waste wood. Most turners find the first stage turning tricky because of the difficulty of visualizing the inside of the object when it is still on the outside of the turning block.

Dick provided handouts detailing the reverse turning technique. If you didn't get one and want to try your hand at

reverse turning, give Dick a call and see if you can beg a copy.

Thanks, Dick and Jerry, for the informative program.

Notes from the June meeting

Forging Lathe Tools

Todd White and David Reed Smith led a hands-on session on the use of the forge for working tool steel while Valen Frye guided us through the art of tool sharpening. Following are some tips for working tool steel:

Obtaining tool steel - Steel for making wood turning tools can be ordered through a hardware store or it may be secured from used items such as old screwdrivers, automobile parts etc.

Heating tool steel - Heat the steel slowly in a clean, deep coke fire. Uneven heating, is usually caused by heating in a poor, shallow fire or by too rapid heating. Never heat tool steel above a bright-red or low-orange color.

Forging tool steel – Observe the following points when working hot steel:

- 1—Don't hammer below a red heat, as this may cause cracking and splitting.
- 2--Be sure the steel is uniformly heated before hammering. Otherwise, the outside parts, which are hotter, may stretch away from the inside parts, which are colder, and thus cause internal flaws.
- 3--Avoid very light hammering, because this may draw the outer surface without affecting the inner portions.

Annealing tool steel – It is best to anneal, or soften, tool steel after it has been forged and before it is hardened and tempered. This relieves strains that may develop during alternate heating and cooling and hammering. To anneal a tool, heat it to a uniform dark-red heat and let it cool slowly.

Hardening and tempering – After the tool is forged and annealed, it may be hardened and tempered as follows:

1--Heat the end to a cherry red, back about three inches or so from the cutting edge.

2--Cool about half of this heated part by dipping in clean water and moving it quickly up and down and sideways.

3--Quickly polish one side of the cooled end by rubbing with emery cloth, a piece of an old grinding wheel, a piece of brick, or an old file.

4--Carefully watch the colors pass toward the cutting end. The first color to pass down will be yellow, followed in turn by straw, brown, purple, dark blue, and light blue. The various colors indicate the temperature.

5--When the straw color reaches the cutting edge, dip it quickly into water or oil and move it about rapidly while letting the shank cool slowly.

6--When all redness has left the shank, drop the tool into the bucket or tub until it is entirely cool.

Dipping the hot cutting end at the beginning of the hardening and tempering process (step 2) makes the steel very hard. The heat remaining in the shank of the tool, however, gradually moves down to the cutting end and softens it (step 4); and when the cutting end is softened to the desired degree of hardness, as indicated by the straw color, it is then quickly quenched to prevent any further softening, while the shank is permitted to cool slowly to avoid brittleness.



The Village Blacksmiths-David Reed Smith (left) and Todd White demonstrate forging and heat-treating

The following chart appeared in *American Woodturner*, June 1990, Originally posted to Rec.Woodworking by Bruce Taylor

Wood	Reaction	Site	Potency	Source	Incidence
Bald Cypress	S	R	+	D	R
Balsam Fir	S	E, S	+	LB	C
Beech	S, C	E, S, R	++	LB, D	C
Birch	S	R	++	W, D	C
Black Locust	I, N	E, S	+++	LB	C
Blackwood	S	E, S	++	W, D	C
Boxwood	S	E, S	++	W, D	C
Cashew	S	E, S	+	W, D	R
Cocobolo	I, S	E, S, R	+++	W, D	C
Dahoma	I	E, S	++	W, D	C
Ebony	I, S	E, S	++	W, D	C
Elm	I	E, S	+	D	R
Goncalo Alves	S	E, S	++	W, D	R
Greenheart	S	E, S	+++	W, D	C
Hemlock	C	R	?	D	U
Iroko	I, S, P	E, S, R	+++	W, D	C
Mahogany	S, P	S, R	+	D	U
Mansonina	I, S	E, S	+++	W, D	C
	N		+	D	
Maple (Spalted)	S, P	R	+++	D	C
Mimosa	N		?	LB	U
Myrtle	S	R	++	LB, D	C
Oak	S	E, S	++	LB, D	R
	C		?	D	U
Obeche	I, S	E, S, R	+++	W, D	C
Oleander	DT	N, C	++++	D, W, LB	C
Olivewood	I, S	E, S, R	+++	W, D	C
Opepe	S	R	+	D	R
Padauk	S	E, S, R	+	W, D	R
Pau Ferro	S	E, S	+	W, D	R
Peroba Rosa	I	R, N	++	W, D	U
Purpleheart		N	++	W, D	C
Quebracho	I	R, N	++	LB, D	C
	C		?	D	U
Redwood	S, P	E, S, R	++	D	R
	C		?	D	U
Rosewoods	I, S	E, S, R	++++	W, D	U
Satinwood	I	E, S, R	+++	W, D	C
Sassafras	S	R	+	D	C
	DT	N	+	D, W, LB	R
	C		?	D	U
Sequoia	I	R	+	D	R
Snakewood	I	R	++	W, D	R
Spruce	S	R	+	W, D	R
Walnut, Black	S	E, S	++	W, D	C
Wenge	S	E, S, R	+	W, D	C
Willow	S	R, N	+	D, W, LB	U
West. Red Cedar	S	R	+++	D, LB	C
Teak	S, P	E, S, R	++	D	C
Yew	I	E, S	++	D	C
	DT	N, C	++++	W, D	C
Zebrawood	S	E, S	++	W, D	

REACTION: I - irritant
S - sensitizer
C - nasopharyngeal cancer
DT - direct toxin
N - nausea, malaise
P - pneumonitis, alveolitis (hypersensitivity pneumonia)

SITE: S - skin
E - eyes
R - respiratory
C - cardiac

SOURCE: D - dust
LB - leaves, bark
W - wood

INCIDENCE: R - rare
C - common
U - uncommon

Reference:

1. *Woods Toxic to Man*. author unknown. 2. Woods, B., Calnan, C.D., "Toxic Woods." *Br. Journal of Dermatology* 1976.
3. *ILO Encyclopedia of Occupational Health and Safety*. 1983. 4. Lame, K., McAnn, M., *AMA Handbook of Poisonous and Injurious Plants*. AMA 1985.
5. *Poisondex*. Micromedex Inc. 1990

Show and Tell Table—May & June, 2002



(Left) Box elder burl hollow form by Dave Barkby

(Right) Selection of reverse-turned holly, walnut, and cherry ornaments by Dick Diehl



(Right) Willow burl hollow form by Dave Barkby



(Left) Madrone vessel with carving; Indian rosewood bowl with rectangle border, by Dean Swagert



(Left) Box elder burl hollow form by Dave Barkby

(Right) Hollow forms by Dale McCoy---box elder, yew, and maple burl



(Right) Green ash bowl by Dale McCoy

