The Mostly Monthly Newsletter of the

Eugene 5160 Club ~ October 2012

The October Meeting will be Thursday the 4th at 6pm at the Woodcraft store in Delta Oaks Shopping Center just off Delta Hwy and Beltline Hwy in North Eugene.

October Meeting

Wayne Goddard & Eric Ochs will bring in some knife testing examples. They will discuss blade testing goals, their methods, and show the results.

Bring in any recent work or pieces of interest to share with the group!

Phyllis Goddard

After fourteen years of battling cancer, Phyllis went to join her maker September 13th. All of us who knew Phyllis (even briefly like myself) valued her positive attitude, her fortitude, and her enjoyment of life. Our condolences and positive wishes are with Wayne and the Goddard family.

September Meeting

Lynn Moore demoed the process of inlaying silver wire into maple for our September meeting.

This demo really brought home to me the need to utilize Woodcraft’s overhead screen. I am experimenting with my sweetie’s camcorder so that in the future we can get up-close views displayed on the monitor. With some advice from the wood turner club’s videographer (Jim Hurst) I think we’ll have this option at future meetings. A regular digital camera remains the best tool for still photos.

Along with his on-the-spot demonstration, Lynn gave us a lot of information on tools and techniques. I’ll try to do his presentation justice – if you notice that I get something wrong in this or any newsletter, email me and I’ll post corrections in the next newsletter.
Lynn draws out designs ideas until he gets a pattern he likes – then he will draw that on the wood. Include existing handle pins and such in your design.

Once the design is laid out you cut a single line into the wood where you want to inlay the silver wire. This line should be straight in at 90°.

In the photo below you see Lynn’s cutting tools on the left – created from X-ACTO knives. You want a tool that you can apply force through, and that you can work along the curves of your design.

On the right are Wayne Goddard's cutting tools made from feeler gauges. Wayne likes to shape a shoulder on his cutting tools so that he has a visual depth gauge while cutting the lines into the wood.

Lynn was using a vice bolted to 1/2 of a bowling ball, set in a circular metal collar so that the ball-and-vice can be turned as needed to follow a curved design with the cutting tool. Lynn noted that a carving chisel can also be used to cut the curves.

Someone noted that you can even mount a cutting tool in a drill press chuck (don’t turn it on!) and with the depth gauge stop on the press, use the up/down control of the press while moving your work piece to follow the lines of the design.

The idea is to cut the line such that the wire you are using will be set into that slot flush or with just a little above the surface – which will be sanded down when finishing the piece.

Lynn noted that you generally wind up with three thicknesses of silver wire to give your design a dynamic look. Heavier wire for areas like plant stems, medium for branches and leaf edges, and finer wire for grace lines etc.

Here's a shot of Lynn cutting into his sample block to add lines to some existing inlay.

If I caught it right, Lynn mentioned that a couple of the wire thicknesses he was using on this piece were 0.008” and 0.013”. Which the chart says is about 33 gauge and 29 gauge.

Square silver wire like you would probably want for inlay comes in dead soft, medium (or half hard), and hard. For this sort of work you want the medium (half hard) wire.

To set wire into the cut slot, bend the wire to the shape of the slot and cut to length. If this wire goes to the end of a line – or one end of it lays next to another wire – you might hammer or sand that end of the wire flat so that it blends smoothly rather than with a square shoulder.

The areas I’ve circled in green in this clip of knotwork and an acorn would be good to flatten before inlaying the wire:

Hold the wire at 90° with fine needle nose pliers or similar clamp – and pressing straight down – gently tap into place with a jeweler's hammer. The wire does not have to be flush, it can stick up a little. Try not to deform the wire or you may wind up with a fat spot in the lines.
You might notice in the above photo that the wood is held on top of the vice jaws by metal knobs that Wayne set into the top of the vice. Two on one jaw and one on the other. This configuration allows firm gripping of non-rectangular pieces.

When you are done, get the wood to pinch the wire by spraying the wood with alcohol. The wood will expand – then the alcohol will dry off.

At this point you can finish the piece. I would expect that you would need hard backing on sand paper to keep the metal and wood surfaces flush.

Here's the sample piece that Lynn demoed for us:

Lynn warned that you might want to clear off your work surface before starting on wire inlay, as a dropped piece of silver can be a <bleep> to find.

Craig Morgan mentioned Fire Mountain Gems (http://www.firemountaingems.com/) as a source for supplies (use the links along the left side of the web page) and also GRS Tools (http://www.grstools.com/) for engraving tools and supplies.

Lynn mentioned T.B. Hagstoz & Son (http://hagstoz.com/) as his source for silver – but they also supply other metals in wire, rod, and sheet as well as findings and tools.

Wayne Goddard talked a bit about inlaying ovals, rectangles and such, which use much the same technique.

You lay the inlay piece on top of the wood block, mark the edge with a very sharp knife, cut the edge in as with wire inlay, then clean out the material inside the outline with a Dremel or other tool. If you plan to do a lot of the same shape inlay it pays to make a die to cut the outline with.

In the discussion that followed it was mentioned that some woods are better suited for inlay than others. One aspect I had not realized was that you need a wood that will swell up (to pinch down on the wire) such as maple, alder, or even black walnut. Woods that are oily or heavy like ebony or rosewood will not swell properly and will not secure the wire in place. Synthetics like Micarta or stabilized woods are also unsuited for these techniques.
Lynn referred us to an on-line tutorial on wire inlay by gunsmith David Price:  
http://davidpriceflintlocks.com/id30.html

As for pass-around blades, Ben Tendick brought in this beautiful blade and sheath:

Lynn also noted the annual NW Blacksmith Association (http://blacksmith.org/) gathering. Master Smith Bob Kramer would demonstrate there. As I write this, the gathering was a week ago, and Dietrich has razzed me for not being there – Bob gave a great heat treating talk. Wayne mentioned that Bob Kramer did his JS performance test with Wayne and “his knife was sharper than any other JS performance knife I’ve seen by 5 times!”

If you haven't seen this YouTube on Bob Kramer, it's well worth the 5 minutes (sad to say you have to wade through an advertizement at the start):  
https://www.youtube.com/watch?v=-OCoS81G2CY
“Hi, my name is Bob and I'm addicted to knives...” Watch his blade literally bounce back from a 90° bend and then baton through threaded bolt stock. OK. So the threading would help keep the knife edge from rolling – but still...

Speaking of videos – several were made at the Arctic Fire 2012 invitational. Here's the one where Peter Johnsson reveals and demonstrates the balance, vibration nodes, and rotational nodes of the Medieval sword. Again, you have the occasional blip-advert – and the 1st 2 minutes are titles – but this is the good stuff:  
http://www.ustream.tv/recorded/23590865

In more general discussion it was noted that garage sale treadmills are a great source of electric motors for home-made belt grinders.

Mike Johnson brought in a box of usable production reject blades from Western – with the challenge for everybody to grab one and make a finished blade out of it for the January 3rd, 2013 meeting.

Keith Johnson passed around a piece of rock hard felt (good for strop or other use) that he got on closeout – and has some extra of. Keith also mentioned having some extra silver strips.

Craig Morgan shared around this handy necker.

And Mike Johnson passed around the knife he made for his recent trip to Alaska.

Mike also brought in this wee small sledge head (20 pounds?):

So come on by Woodcraft and see what shows up at the next 5160 Club meeting!

Your Scribe ~ ~ ~ Michael Kemp