

EUGENE 5160 CLUB ~ MARCH 2013

The March Meeting will be Thursday ~ the 7th ~ at 6pm at the Woodcraft store in Delta Oaks Shopping Center just off Delta Hwy and Beltline Hwy in North Eugene.



curved platens to give him the radiused grinding surface he wants for certain profile lines.

Wayne is working on a slightly smaller version of his “Spacer-Man Bowie” and cautioned that in scaling down a curved line you can't just blindly scale your formula down – it won't look right. You may have to adjust the formula and radius as you scale up or down.

Moving on to **THE STAG DOCTOR:**

Wayne is working on a folding knife making use of the saw blade steel that Woodcraft owner Joe Essin gave

out to the Club some time ago.

On this knife Wayne is setting up a stag crown handle. This is the example he is using for the current set of articles he is writing for Blade Magazine.

The spring has to have an anchor to create tension against – so Wayne uses a very long drill to insert long-wise through the slot in the antler made for the blade – and drill a socket into the inside of the crown button (without going through) for the spring to socket into. That and the pivot pin give the spring it's working tension. He noted that this does not wind up being in the exact middle of the crown due to the natural irregularity of the antler.

Here's a shot of the spring – which shows the profile but does not do justice to the filing:



MARCH MEETING

I ponied up for a 5160 Club table at the OKCA show in April – we can do informative displays, promote the Club, etc. If you want to help me sit the table you could even put your knives on the table for sale. Let's toss ideas around at the meeting tomorrow!

If you've been working on something – bring *your* show and tell.

We had a great hammer-in at Lynn Moore's place – see photos at the end of this newsletter!



FEBRUARY MEETING

WAYNE GODDARD started us up by talking about his quest to get the curves “just right” - especially on larger knives. He relayed how he's made custom

The piece of antler he is using for the Blade articles is a problematic shape – but solid enough that “I could take 25% off of it in places.” Then he textured those areas by jiggling them and stained them with potassium permanganate.

For this and other texturing, Wayne uses a Dremel or similar tool and makes his own bits from things like Allen wrenches or a screw head that he's cut notches into with a fine saw blade.

Since he does not want to damage the crown button when making the cuts for the folding knife blade and spring, Wayne uses some specialized jigs that he brought in to show us.

“You have to have sense enough to tell if the piece you've got is too curved to make a folding knife handle.” Then you eyeball it and select your line for the blade slot. Mark the blade slot with a pencil on the end of the piece.



You cut in the line you just made about an inch with the bandsaw. Everything else you do to create the slot will be based on this cut.



Here Wayne is showing how the positioning metal plate would be set into that first 1” slot & into the slotting jig. You feed the bandsaw blade into the end of the 1” slot in the antler. Then put the plate through the slotted antler and slotted wooden base. Then you

clamp everything up (there's a photo in the May 2013 Blade Magazine) and the antler will be kept in place for the rest of the bandsaw cut. At least that's how *your scribe* understood it.

(Question: If Blade Magazine thinks March is May what else are they mixing up?)

Here's a fancier slotting (and drilling) jig that Wayne made:

Wayne calls the jig shown below the “drill press saddle.” You feed your slotted handle into the steel plate (he's demonstrating with a scale – but this is also for a slotted handle) – clamp it tight, and that keeps the handle stable, in line, and at 90° to drill your pin holes through both sides of the slotted antler.



There are some pre-drilled holes and slots in the metal plate that don't show up in this photo.

Getting back to texturing and coloring the handle – Wayne noted that you will need to shape, texture, and stain just about any piece of antler you use for a knife handle.

He demonstrated staining with potassium permanganate. Wayne warned that this is an oxidizer – so you want to be careful with it. Mix in some glycerin and it would probably start a fire. The initial purple color of potassium permanganate changes to a nice brown as it oxidizes in open air. You can use make it real dark or real light.

In response to a question Wayne said that he either dips a whole piece into the solution – or applies it to the piece with a Q-tip.

There were warnings about potassium permanganate igniting when it comes in contact with any product containing glycerin.

Bob Lovelace told Wayne you could also use Rit Dye for coloring antler. Wayne tried a combination of a couple of shades of brown. He used vinegar as a mordant and liked the results.

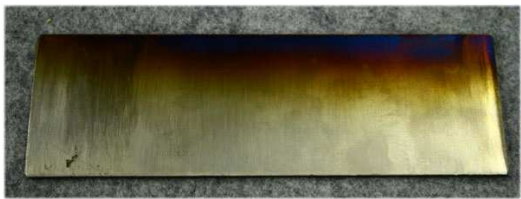


Wayne then talked about stress risers being caused by anything from hammered-in scale to dead square corners at the hidden tang to left-over file marks. He recounted having a hammer-in participant's knife break on him when he went to straighten the blade. The stress riser in that case was a piece of scale left in intentionally in the “brute-de-forge” style which is fairly popular these days.

MIKE JOHNSTON reported back on the file-knife he'd brought in the previous month. He'd lightly clayed the spine, quenched, and then did a soft back draw to blue on the spine (light tan on the edge). Wayne did Rockwell testing on it and the edge is 60Rc and the back is 50Rc.



Wayne passed around a steel sample that he made to demonstrate temper colors. You go through straw color into blue to dark blue, then as you go higher it gets light blue again.



Someone

asked if these colors and the corresponding temperatures are consistent between different types of steel. Wayne responded that they are not. They are similar but they will show a little difference in color.

Wayne then talked about shear steel and passed around the remnants of an antique shear steel knife from the Civil War era. Wayne picked this one up at a garage sale – but due to damage and a clumsy repair job the knife is not as valuable as it could have been.

Wayne passed around a railroad spike blade he made at Ed Fowler's place with what he called “Pennzoil Damascus.”

Martin Brandt shared a quench fail – the dreaded TINK! Which in this case made kind of a happy-face-shark-knife:



Martin said this is 1050 that he'd torch-heated the edge and then quenched in water. He intended to interrupt the quench at the point the steel lost color – but the steel had other ideas. Martin said the back of the blade was perfectly straight before quenching.

There was much discussion about how club members have seen water quenching done... including a tamahagane wakizashi demo at the last NW Blacksmith Conference. Several folks do water quench by repeatedly stabbing the blade into water.

What I've seen in books of the traditional Japanese quench matches this video:

<https://www.youtube.com/watch?v=-4A2JJmWi6Y>

But here you are dealing with highly layered steel, clay backing, and years of apprenticeship.

My memory of the hamon workshop we did years ago was that we took the heated clayed blade and stabbed it into hot water – held it there several seconds (5?) or until a vibration was felt – the pulled it out into the air for a few seconds – and reinserted it in the water for final cooling.

Martin Brandt is looking for reindeer antler – so if you have a source – let him know.

One member asked Wayne for advice on refurbishing a wakizashi blade – Wayne gave him pointers and warned about getting the wow out of it early in the process. He also asked about pattern welding – Wayne noted that it is one aspect of bladesmithing where you can do something new with every knife.

Another member shared a sword that he's been commissioned to shorten to fit the new owner. The owner is into reenactments and needs the sword not to drag on the ground. Shortening the sheath will also be a challenge! Wayne noted that in reality a long sword fight would be over in 7 seconds.

I'm embarrassed to say I did not get the background on this pass-around:



CRAIG MORGAN noted that the OKCA has a few tables that were paid for by folks who for one reason or another can't make it to the show & don't want a refund. OKCA is making these tables available on a scholarship basis to knife folks who otherwise could not afford a table. Check with Craig or Dennis or Elayne with OKCA if you are interested. Membership in OKCA is required.

Dave Rider suggested having a 5160 Club table – and I've run with it... Dennis has OK'd our table to sell knives from our membership. Since I want help sitting the table I'm putting the constraint on it that if you want to put your blade(s) out for sale you have to help me sit the table!

There was general discussion in support of the OKCA show. You may or may not be enough of a salesman to sell blades at the show – and may or may

not have what folks are looking for – but beyond show sales there was a lot of support voiced for the networking and public education aspects of the show.



NW BLACKSMITH ASSN.

MIKE JOHNSTON reminded us that the North West Blacksmith Association has a permanent home at the Longview Washington Fairgrounds. There's a good sized building where NWBA has set up permanent forges with a demo area and bleachers etc. The 4th Saturday of each month they host a hammer-in. *I believe this is a "members" event and that dues are \$45/year.* Mike went to the last one and talked about the demo forging of acorns, leaves, horse heads, etc. followed by open forging.

Mike said he had a ball. Kids, little kids, were there swinging a hammer with dad. A lot of fun.

And don't forget their August 22-25 conference at Mt. Hood.



THE 5160 CLUB HAMMER-IN AT LYNN MOORE'S

was a great day! There were half a dozen forges going – including Lynn's good-sized coal forge. I think Mighty Mike was the most prolific blade-maker. Martin, Lynn, and Wayne worked up a billet of cable Damascus. Lynn demoed his dovetail scale construction method. Here's some scattered photos:



Lynn's propane forge – hot and ready!

Forges being fired up...



Some people got right to work – and of course a worker needs a couple of supervisors!





Mighty Mike got the best shot of Wayne at the power hammer turning wire rope into a billet:



Martin got the coal forge up to welding heat...



Mighty Mike earns his name...



Eventually the sun came out and Wayne got some shots of the group...



So – that's this month's better-late-than-never newsletter! See you at the meeting tomorrow ~ ~ ~

Your Scribe ~ ~ ~ Michael Kemp

... and this one of me catching up on some hand sanding. The impromptu weed-burner-and-pile-o-bricks forge did actually function – but took a long time to come up to heat.



So a good day was had.