#### THE MOSTLY MONTHLY NEWSLETTER OF THE



🞾 Eugene 5160 Club ~ December 2013 🐔



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#### DECEMBER MEETING

The 5160 Club will meet at Woodcraft of Eugene (Delta Oaks – Beltline & Delta Hwy) December 5<sup>th</sup> at 6:00 pm. There'll be show & tell & pass-arounds. It's the last meeting of 2013 already?

2014 will mark the 5<sup>th</sup> year of the club!



## **OKCA Shows**

THE OKCA DECEMBER MINI-SHOW is Saturday, December 7<sup>th</sup>. I believe that tables are still available if you want to display your wares. Lane Events Center – Wheeler Pavilion. Open for setup 7:00am. Open to the public 8:00am-4:00pm. Contact Dennis at OKCA for info: ibdennis@oregonknifeclub.org

The deadline for reserving your same spot at **THE BIG OKCA APRIL SHOW** is December 15<sup>th</sup>. See the latest OKCA newsletter for details: http://www.oregonknifeclub.com/knewsletters.html

NOVEMBER MEETING

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As we were waiting for folks to filter in, **WAYNE GODDARD** passed around a pinky-sized piece of mystery steel for us to guess where it came from. First hint: Into The North. As Walter & I were talking about my forge construction and how the size of the final blower pipe dictates the range of temperatures that you can get (both high and low in the forge)...

(http://elementalforge.com/images/ForMiscPostings/BlowerConfiguration.jpg) Wayne said "Pipe!" that was the second clue. The mystery steel was an oil pipeline sample that they take for QC purposes. *Correction on my conversation with Walter – I wound up with 1" for the final pipe size.* 

Then **MICHAEL KEMP** (that would be me) gave a slide show-talk about my trip down to the 2013 Oakland Axe-N-Sax-In. There were presenters from as far away as Nova Scotia, the U.K., and the Czech Republic. It was an awesome weekend and an enviable shop.

Not only the presenters, but the attendees also brought incredible work to share with the group. Attendees

came from as far away as Wisconsin and Tennessee. Here's a few photos from the workshop:

Jim Austin (our host) demonstrated a process for making an authentic Danish axe:



Every evening Jeff Pringle would do a steel smelt:



Jeff also shared some of his collection of artifacts:

Owen Bush (from the U.K.) demonstrated the construction of a multiple-bar broken-back saex. This was based on an archeological find constructed of eight separate bars of steel welded together, four of them twisted pattern-weld. Plus the wolf-tooth pattern inserts.



Jake Powning did

the finishing on another broken-back saex and demonstrated making a traditional sheath for it during the workshop:





There was a workshop on a decorative technique called koftgari for mechanically attaching silver or gold wire to the surface of steel. Lynn asked me the diameter of the wire – I didn't find it at the meeting – but my note is that Jim drew the wire down to 4 or 5 thousandths of an inch.



Petr Florianek (Czech Republic) demonstrated carving traditional patterns in bone with modern tools (primarily a Foredom flex-shaft). Here's how he later used the handle that he created at the workshop:



The pieces that other attendees brought were also stunning. Here's a closeup of a sword Neils Provos has been working on:



There are a series of YouTube videos in which Neils documents his historical inspiration and how he built this sword. You won't be disappointed: <u>http://www.youtube.com/watch?v=vyUkYJeZtW4</u>

For your further browsing pleasure – here are the websites of the workshop presenters:

Jake Powning <u>http://powning.com/jake/</u> Petr Florianek <u>http://gullinbursti.cz/</u> Owen Bush <u>http://owenbush.co.uk/</u> Jim Austin <u>http://forgedaxes.com/</u> Jeff Pringle <u>http://jeffpringle.com/</u>

If you like this sort of thing, check out the "Bladesmiths Forum" listed under **FORUMS** in the **WEBSITE LINKS** section of the newsletter.



Next up was **MARTIN BRANDT**. He brought in the blade he's been working on from a Nicholson file. He made the bronze bolster from a bearing cage. He was just getting the last little scratches out when he noted a last little scratch that was going the wrong way – and would not come out. Also known as: a crack.

So he may decide to dismantle the knife and start over (or keep it for himself). He never saw the crack until the finish sanding. The bearing cage had shown signs of having been beaten up – probably from a failed bearing. Lesson learned.



He showed photos of a couple of knives from Jon Christensen. Martin liked the "3 finger" fixed blade – which is called that because the handle is only long enough for 3 fingers. This makes the overall knife short enough to carry on horseback without hitting the saddle – and safer in a fall. Martin shared his wood mockup of a blade inspired by this style:



"Besides" he said "it's a great way to use those little Blacktail crowns that are too small and have too much bend to use in a regular knife..."

Martin sat down and **WAYNE GODDARD** took the front again to explain and pass around some tools he made for himself at a time when he was having "massive problems" with his wrists and hands. Here's Wayne's tool that let him apply grinding pressure while protecting his hands and wrists:



I learned from Wayne to have at least one vice-grip

in the shop with copper sheet wrapped around and glued to the jaws (to hold steel without marking it).

Here he's taken some old screwdrivers and re-shaped the ends to repurpose them as grinder aids.



I think I'll be making myself a few push-tools like this to keep my hands further away from the belt.

Wayne made this tool for controlling a handle while carving spirals into it – but never actually used it!



Wayne noted that he would be doing a shop equipment sale. He still has some tools and items left – see the De-Classifieds, below.

There was discussion about how to cure wood without checking. My take-away: seal the end-grain and let 'em dry slowly – but on the other hand, any super dense wood in big chunks may not be dry on the inside: cut it up and dry it slowly.

Martin told a cautionary tale about an old piece of ironwood that must have been sitting in an arroyo for time out of mind getting soaked in the Spring and heat-blasted in the Summer, such that out of a 6' chunk – after getting the dirt out and cutting out all the fractured wood – Martin got two handle sized pieces!

Wayne told a story of a little Mountain Mahogany snag that he brought home from a hunting trip on Winter Rim and had an experience similar to Martin's in getting very little usable wood out of it by the time the cracked & checked wood was removed.

Wayne talked about visiting Ruana Knives back in '68 or '69 (<u>http://www.ruanaknives.com/</u>). His cousins supplied them with truck springs – and everybody supplied him with elk antlers – in trade for knives. Ruana's trust in the toughness of his blades inspired Wayne to demand the same performance of his own knives.

Ruana said "don't ever use moose antler!" So of course Wayne had to give it a try. Guess what – moose antler grows and shrinks along with temperature (or moisture?) on a day/night cycle – so you can tell what time of day it was fitted to a ferrule by whether it's shrunk down or overhung!

*FWIW: Petr Florianek (at the workshop I went to) also warned against moose antler – his gripe was that it is too porous to cleanly cut designs into it.* 

Wayne also passed around a miniature saw that was pretty darn cute!



Mike Johnston noted that at the Tacoma show there's been someone displaying maybe 500 different Ruana knives – it takes up the whole perimeter of one of the rooms. Mike was fascinated by all the models – even though he said that the grinds were crude but their reputation is "darned near indestructible." **RAYMOND JEWELL** brought in a set of blades that he and his partner have been working on. They're coming along:



Raymond relayed a close call with red-hot scale hitting his eye – and the importance of shop safety.

At the grinder where I need protection for my eyes and lungs, I've settled into a forced-air full face mask (available at Woodcraft). The forced-air keeps the mask from fogging up and doesn't require a positive seal around my beard. It's spendy – but not as much as what I spent on the eye-doctor when some grinder grit bounced inside my safety glasses & into my eye: <u>http://www.woodcraft.com/Product/2004923/7972/T</u> <u>REND-Airshield.aspx</u>

**LYNN MOORE** shared a beautiful hobo knife Wayne made out of Cable Damascus. I didn't manage to get a photo of it.

**MIKE JOHNSTON** talked about the Kelso show – where he had a great show and sold 4 knives (on top of finalizing the sale of the Black Wave).

# He stopped by at Gilmer Wood <u>https://www.gilmerwood.com/</u>

and picked up some Bocote that he used for the

handle on this knife – forged out of that spring-tooth harrow:



"One thing I found out about using that Rutland 2700°F furnace cement – I thin it down – but when you normalize your blades – if you leave that black stuff on there – you don't grind it off – the Rutland doesn't stick worth beans – it'll fly right off when you quench..." he said. So take it off with a 120 grit belt or a wire wheel. (Mike grinds to 120 grit, leaves a dime thickness at the edge for heat treat – then grinds it down to finish grit – going to 2000 grit hand sand.)

Here's some more of Mike's blades – waiting their turn to be hafted:



Mike also shared this chopper – made from saw steel with a Purpleheart handle:



When asked if this would cleave zombie bones Mike replied that the last one he made from this saw (for his sister in Alaska) had been used to process 54 salmon and a moose... and still shaved hair!

Mike reassured me that he **is** working on a "big sister" blade to the Dark Wave -15-1/2" blade with the same basic profile with some improvements.

And with that the Woodcraft whistle blew - westood up - had our final discussions - and went into the night.

~~ your scribe – Michael Kemp



# **MISC. NOTES**

• FREE DE-CLASSIFIEDS are making a comeback. See below for details.

(1) I've added Menkel Forge to the WEBSITE LINKS under FORGE & REFRACTORY. I saw one of these at the NWBS Conference and was impressed with their versatility. I've also added Victor Machinery to GENERAL TOOLS & SUPPLIES.

JOHN EMMERLING has tried out flux-less forge welding and is having success with it. I started my first layered billet this way and it worked for me for that first weld – but I dropped back to borax on later welds. Master Smiths such as Bob Kramer and JD Smith have gone "bare back" (as Smith likes to call it). No borax. No kerosine. Dry & clean. John started quite a lively thread on this at the ABS forum!



#### **FREE DE-CLASSIFIEDS** (IN NO PARTICULAR ORDER)

Email me a brief description of what you are selling/buying/ looking for with your preferred contact (phone/email/...). Unless you let me know you want a shorter run, I'll run the note for 3 months and then send you an email to see if it's still valid.

For Sale: Vises, hammers, misc bench grinders. One lapidary-double ended polishing machine, it has a built-in filter type dust collector. Too much else to list.

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Call Wayne Goddard at 541-689-8098

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Wanted: Looking for a good buffer, forging tools, etc.

Contact Mike Todd at mtodd@toyotaliftnw.com

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Wanted: Rockwell tester (not the files).

Contact Michael Kemp michael@elementalforge.com

Looking for Training: I am a 66 yr old man with a strong interest in learning to craft fine cutlery. I have forged a half dozen knives over my lifetime, and I found the experiences very fulfilling. I spent 25 years working in building repair and construction and about 3 years working in a cabinet shop. I am somewhat familiar with hand tools and power tools in general. I often modify or make my own specialty tools as well as some parts for my mowers and truck. I have done some basic metal fabrication, but I have only spent a total of about two weeks working at a forge. I'm not very good at arc welding, but braising and soldering come almost second nature to me. I am currently putting a shop together which will include a small anvil and a coal forge which I inherited from my grandfather. They should prove adequate for working the small pieces of material I would expect to use in Knife Making.

My Bachelors degree is a 5 yr BFA in Visual Design from the U of O.

The V.A. has approved me for a training program. They are talking about an apprenticeship or part time minimum wage On-the-Job-Training position that they would subsidize, but the burden of finding such a position falls on me. I am seeking guidance. And a job helping out in someone's shop.

I am hoping that the 5160 Club might prove a resource in pursuing this goal as well as in gaining knowledge that can be used to refine my skill. I have been watching the ABS videos on YouTube and reading your newsletters. I am thirsty for more!

Contact: Allen Grush at a grush@msn.com



### WEBSITE LINKS

Send me a note if you have a favorite site to add or have comments about a site I've posted.

#### 5160 CLUB

5160 Club Newsletters are archived at: http://www.elementalforge.com/5160Club/

Hint: to Google the archive for a specific knife style or presenter name, use a search like this: sami site:http://www.elementalforge.com/5160Club or this:

ron lake site:http://www.elementalforge.com/5160Club

#### **FORUMS**

Knifedog Forum http://knifedogs.com/forum.php

Bladesmith's Forum aka Don Fogg Forum <a href="http://www.bladesmithsforum.com/">http://www.bladesmithsforum.com/</a>

American Bladesmith Society http://www.americanbladesmith.com/ipboard/

Usual Suspects Network http://www.usualsuspect.net/forums/forum.php

Blade Forums http://www.bladeforums.com/forums/forum.php

## **GENERAL TOOLS & SUPPLIES**

Woodcraft Eugene – special thanks to Joe & the crew! 1052 Green Acres Rd Eugene, OR 97408 (Delta Oaks Shopping Center) 541 685-0677 http://www.woodcraft.com/stores/store.aspx?id=515

MSC Direct http://www.mscdirect.com/

Grainger http://www.grainger.com

Surplus Center http://www.surpluscenter.com/

Victor Machinery Exchange <a href="http://www.victornet.com/">http://www.victornet.com/</a>

#### **REFERENCES**

Many of the sites linked under "Knife Maker General" have book & video sections. Our own Wayne Goddard's books are available at Amazon: http://www.amazon.com/Wayne-Goddard/e/B001JS9M10 And you can email Wayne directly for his DVD at wgoddard44@comcast.net

Here's a few other useful references:

Verhoeven's Metallurgy For Bladesmiths PDF http://www.feine-klingen.de/PDFs/verhoeven.pdf

Verhoeven's updated book: http://www.amazon.com/Steel-Metallurgy-Non-Metallurgist-J-Verhoeven/dp/0871708582

ZKnives – Knife steel composition/comparison/etc. <u>http://zknives.com/knives/steels</u>

Kevin Cashen's Bladesmithing Info http://www.cashenblades.com/info.html

Tempil Basic Guide to Ferrous Metallurgy http://www.tempil.com/wp-content/plugins/downloadmonitor/download.php?id=Basic\_Guide\_to\_Ferrous\_2010.pdf

## KNIFE MAKER GENERAL

Knife kits, steel, tools, machines, supplies such as handle material, fasteners, belts, glues, finishes, etc.

Jantz Supply http://www.knifemaking.com

Texas Knifemaker's Supply http://www.texasknife.com

USA Knife Maker's Supply http://www.usaknifemaker.com/

Knife and Gun (K&G) http://www.knifeandgun.com/

Alpha Knife Supply http://www.alphaknifesupply.com/

### KNIFE STEEL SOURCES

New Jersey Steel Baron http://newjerseysteelbaron.com/

Niagara Specialty Metals http://www.nsm-ny.com (click Products/Knife Steels)

SB Specialty Metals <a href="http://sb-specialty-metals.com/products/knifesteels">http://sb-specialty-metals.com/products/knifesteels</a>

Bohler Uddeholm http://www.bucorp.com/knives.htm

Pacific Machinery & Tool Steel – Portland, Oregon <u>http://www.pmtsco.com/tool-die-steel.php</u>

## 2x72 Belt Grinders

Beaumont (KMG) – the industry standard http://www.beaumontmetalworks.com/shop/

Travis Wuertz – premium brand http://www.twuertz.com/Home\_Page.php

Pheer – affordable, satisfied customers on the forums <u>http://www.2x72beltgrinder.com</u>

Coote – affordable, reliable – you supply the motor <u>http://www.cootebeltgrinder.com</u>

Grinder-In-A-Box – low cost – assembly required http://www.polarbearforge.com/grinder\_kit.html

Wayne Coe – grinders, motors, VFDs, etc. <u>http://www.waynecoeartistblacksmith.com</u>

Contact Rubber Corp – wheels etc. http://contactrubber.com/contact-wheels.asp

Sunray – drive wheels http://www.sunray-inc.com/drive-wheels/

True Grit – grinder belts <u>http://www.trugrit.com</u>

## FORGE & REFRACTORY

Chile Forge http://www.chileforge.com/

Mankel Forge http://mankelforge.com/forges.html

High Temp Tools (scroll down the page for the category buttons) http://www.hightemptools.com/suppliesmainpage.html

Omega – thermocouples & measuring equipment http://www.omega.com/

Auber – more thermocouples and controllers, etc. <u>http://www.auberins.com</u>

Hybridburners – home of the venturi T-Rex <u>http://www.hybridburners.com/</u>

Zoeller Forge – low cost venturi & parts: Z Burners <u>http://zoellerforge.com/</u>

#### **BLACKSMITH**

Blacksmith Depot http://www.blacksmithsdepot.com

Pieh Tool http://www.piehtoolco.com

Centaur Forge http://www.centaurforge.com

## LOGO/ETCHING

Ernie Grospitch – Blue Lightening Stencil http://www.erniesknives.com/

IMG International Marking Group <u>http://img-electromark.com/</u>

## **OTHER GOODIES**

Sally Martin Mosaic Pins – So. Oregon http://customknife.com/index.php?cPath=13

Burl Source – handle blocks/scales – So. Oregon <u>http://www.burlsales.com/</u>

Gilmer Wood – N.W. Portland https://www.gilmerwood.com/

Oregon Leather – 810 Conger Eugene and 110 N.W. 2ND Portland http://www.oregonleatherco.com/

Coyote Steel – misc., scrap, copper, brass, bronze – Garfield & Cross St. Eugene http://www.coyotesteel.com

Cherry City Metals – Salem, Oregon – metal recycling and useful objects <u>http://www.cherrycitymetals.com/</u>

Amtek – tool steel & cutting tools <u>http://websales.amtektool.com</u>

Rio Grande – jewelry tools/supplies <u>http://www.riogrande.com</u>

Otto Frei – jewelry tools/supplies <u>http://www.ottofrei.com</u>