

∞ **EUGENE 5160 CLUB ~ NOVEMBER 2014** ∞



**NOVEMBER MEETING**

The 5160 Club will meet at Woodcraft of Eugene in the Delta Oaks shopping center – Beltline & Delta Hwy. Thursday November 6<sup>th</sup> at 6:00 pm. Bring your show-n-tell!

**NOTE:** I occasionally get calls or emails about an event or item that can't wait until the next meeting. If appropriate I've been sending an extra email out to the group.

Since the public can post on the 5160 Club Facebook page I may start directing folks to post such “alerts” there. If you know of a better forum where folks can post such things – let us know!

Or just “like us on Facebook!”  
<https://www.facebook.com/5160Club>



**THIS ISSUE HAS NOTES FROM THE**

**OCTOBER MEETING**

**FOLLOWED BY PHOTOS FROM THE**

**5160 CLUB HAMMER-IN & TRIBUTE TO WAYNE GODDARD!**



**OCTOBER MEETING**



**MIKE JOHNSTON** passed around a knife forged from coil spring. The spring spark tests and acts like 5160. The handle is a piece of elk tine with bronze guard and butt cap. The spacer is Bocote and black spacer material (two layers of spacer to make up for a slight miscalculation in the pin hole).



... and a knife made from one of the HC railroad spikes he bought in The Dalles recently. The blunt end is due to breaking off two pieces after two different quenchings (One in super quench and the other in canola oil).



Mike said that “After the Rockwell tests, I have been told the time between forge and quench is 1/2 second, so I was a little slow. Also the way I quenched, with a lot of thick heated mass behind the quenched end probably didn't help the lower hardness. More tests to come.”

The third piece is a forged coil spring in the shape of a dagger blade. Mike noted “The only thing interesting about it is that Wayne's "Weenie Roast" method was used to get a differential heat treat on the blade. The blade is ground to 220 grit and etched in ferric chloride for 3, 30-35 second etches buffing off the oxide with 0000 steel wool between each. I was a little surprised at the pronounced temper line.”



And Mike passed around a big box of chocolate chip cookies. Everybody was happy!

**JIM JORDAN** shared a couple of cable Damascus knives – in his words “The two cable Damascus blades are from both ends of the spectrum of skill and design.”

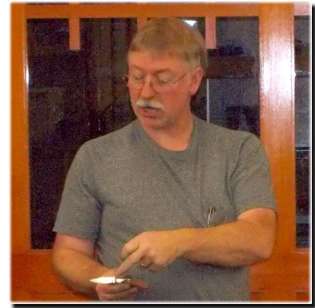


solder and file marks on the guard. It hasn't been particularly well cared for, has serious rust and got tumbled in the past. But a one of a kind piece.”

Jim noted that “The second piece is a Roebling Wire rope letter opener, made possibly mid 19<sup>th</sup> century by Roebling wire rope Co. the company that made the cables for the Brooklyn Bridge. It's well made, etched and probably made in the thousands for souvenirs and desk sets.”

<http://www.worthpoint.com/worthopedia/john-a-roebling-letter-opener-forged-roebling-wire>

**ERIK LAND** brought in a couple of tools he'd fabricated and two newly finished folders to share. My bad: the video camera was off and I didn't get back to Erik for his comments – so you'll have to be satisfied with a couple of photos. I will toss in that his folders are high quality fit, finish, and action.



The upper blade this photo “is an obvious labor of love by a semi skilled craftsman. It has a forge welded cable blade, a bronze guard and pommel, with some





**MARTIN BRANDT** was next up to tell how he and Dave Rider had picked up some grader blades. Martin used some to make a couple of hot cut tools for his anvil, quenched in oil. “They work really well!”

Then he passed around a couple of Puukko blades that he is working on – also from the grader blade material. Looking through my photos it seems that those never made it through my hands?!

What I did get ahold of was this piece of birch bark Martin brought in:



This was from some paper birch trees that “they were taking down over near the golf course.” Martin noted that in the Winter the bark sticks to the wood but in Spring and Summer it peels easily.

One of the traditional styles of Puukko uses stacked disks of birch bark for the handle. You have to scrape off the outer bark to get down to the pinkish layer. This leaves a layer about the thickness of cereal box liner board. It takes about 150 disks to make a handle, but birch bark will last forever.

Martin explained that you leave the tang a little wide so that the disks won't turn. Put on the bolster first. Punch the tang hole out of the disks with something like a leather punch. Stack them on the tang dry. Every two disks you change the grain direction. Stack them up a little long. Put a butt cap on. Use

some clamping method to keep the disks tight against the bolster and stick the knife in the oven at 175°f for about an hour – which softens up the tar in the birch bark. Take it out and press the handle disks down with a butt cap and clamp them. Trim and peen the tang to hold it all. The tar seeps out and basically glues it all together.

Birch bark has been used like tar paper (between a building's foundation and wood), or for household items like trash cans, pencil holders, etc. It's also used for tinder and to make a waterproof matchbox.

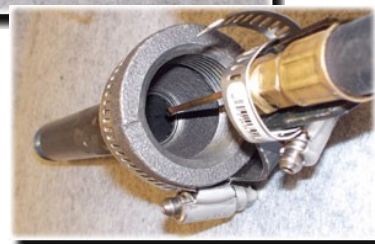
**JOVE LACHMAN-CURL** then came to the front and showed us his take on a forge burner. This is as straight-forward as I can imagine!



The jet is a 1/8” brass tube soldered into a hole in the cap in the end of the hose. Jove put a wire (0.025”) in the end of the brass tube and peened it down to make the nozzle. If I heard right, he's been running it at 35psi with a two brick forge. “It works great!”



Jove brought in this knife he's finished. The handle is purple heart, rubbed with boiled linseed oil.



He also passed around a freshly hardened blade:



Jove brought in a couple of large bags full of bearings that his company was getting rid of (they were shipped the wrong part). A number of us grabbed handfuls – you never know when the right project might come along!



There was general discussion and follow-up questions including a few points that bear repeating:

- You can render birch bark for the tar – which itself has many uses (see the October 2014 newsletter)
- When cobbling together your own forge burner, don't use galvanized pipe. When the galvanizing (zinc) gets hot it vaporizes and breathing that can make you very ill.



## **5160 CLUB HAMMER-IN & TRIBUTE TO WAYNE GODDARD**

**MARTIN BRANDT** worked with **DAVID THOMPSON** to put on this event. **Many** thanks to the Thompsons for hosting this event!

The day started with a gathering in the shop to honor Wayne's work and his teachings. A good assortment of his knives were on display.

A few others of us spread out some of our knives on the tables too – so a good variety of skill levels and styles were on display.

Wayne told a few stories and many of us told stories on Wayne! He has certainly inspired a great number of us to get into this craft (including me) – and has been incredibly generous with his time and experience. Not to mention his books and magazine articles. Old and new friends were there to let Wayne know how much he is appreciated.

There was plenty of food and beverage to keep us all happy – if we took the time away from the forges!

Martin Brandt did a demonstration of forging a Puukko. Chuck Richards and others set up forges, did demos, and mentored folks who had never had a chance to forge before.

So we had masters and novices all at work. Mike Johnston forged his first layered Damascus billet in my forge with advice from Wayne and Chuck. It came out looking great!

The following photos are a mish-mash from myself and several other folks who sent me their pictures to include in the newsletter.

There are WAY too many to show them all – so here's the photo-essay version of the day. Mike Johnston, Dean Walton, Frank Bobbio and others all contributed photos.























A great salute to Wayne and one heck of a day!





Wear your safety gear – no loose hair or clothing in the shop – and have fun!

Keep Well ~ ~ ~

Your Scribe

~ ~ ~ Michael Kemp



## 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.

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**Help Wanted:** I am looking for help here at the coast (Gearhart, OR). The job will most likely work into a full time position depending upon the individual. The state has a job training program which I hope to take advantage of as they will pay 50% of the base salary for several months. Applicants need to know how to MIG, and hopefully TIG weld. Blacksmithing knowledge would be a plus. Contact John Emmerling [ironwerks@iinet.com](mailto:ironwerks@iinet.com)



## WEBSITE LINKS

### 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  
<http://www.bladesmithsforum.com/>

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>

### 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](mailto:wgoddard44@comcast.net)



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.  
<http://zknives.com/knives/steels>

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

Tempil Basic Guide to Ferrous Metallurgy  
[http://www.tempil.com/wp-content/plugins/download-monitor/download.php?id=Basic\\_Guide\\_to\\_Ferrous\\_2010.pdf](http://www.tempil.com/wp-content/plugins/download-monitor/download.php?id=Basic_Guide_to_Ferrous_2010.pdf)

## **GENERAL TOOLS & SUPPLIES**

Woodcraft of 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/>

McMaster-Carr  
<http://www.mcmaster.com>

Grainger  
<http://www.grainger.com>

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

Victor Machinery Exchange  
<http://www.victornet.com/>

## **OREGON KNIFE MAKING CLASSES**

Gene Martin offers personal instruction at his shop south of Grants Pass for a daily rate.  
<http://www.customknife.com/>

Michael and Gabriel Bell offer a constant series of small group classes in Japanese style sword forging and fittings. Located on the southern Oregon Coast.  
<http://dragonflyforge.com/>

Murray Carter offers small group classes in a variety of subjects, primarily focused on traditional Japanese cutlery. Located in Hillsboro.  
<http://www.cartercutlery.com/bladesmithing-courses/>

## **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  
<http://sb-specialty-metals.com/products/knifesteels>

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

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



## **2x72 BELT GRINDERS**

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

Travis Wuertz – premium brand, versatile machine  
[http://www.twuertz.com/Home\\_Page.php](http://www.twuertz.com/Home_Page.php)

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

AMK – affordable, quick-change between platen & contact wheel  
<http://amktactical.com/>

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

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

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

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  
<http://www.trugrit.com>

## **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/supplies-mainpage.html>

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

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

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

Pine Ridge Burners – for ribbon burners and all associated fittings, blowers, valves, etc.  
<http://www.pineridgeburner.com>

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

## **BLACKSMITH**

Blacksmith Depot  
<http://www.blacksmithsdepot.com>

Pieh Tool  
<http://www.piehtoolco.com>

Centaur Forge  
<http://www.centaurforge.com>

Quick and Dirty Tool Co.  
<http://quickanddirtytools.myshopify.com/>  
<https://www.facebook.com/QDTool>

## **LOGO/ETCHING**

Ernie Gropitch – Blue Lightning Stencil  
<http://www.erniesknives.com/>

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

Electro-Chem Etch  
<http://www.ecemmi.com/products.html>



## **OTHER GOODIES**

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

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

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  
<http://www.cherrycitymetals.com/>

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

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

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

M3 Composite – space age mokume & other  
<http://www.m3composite.com/>