November Meeting

The 5160 Club will meet at Woodcraft of Eugene in the Delta Oaks shopping center – Beltline & Delta Hwy. Thursday November 6th 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

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).

This Issue Has Notes From The October Meeting

Followed By Photos From The 5160 Club Hammer-In & Tribute To Wayne Goddard!
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.”

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.”

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 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 19th 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.”


**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.
**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:

![Birch Bark](image)

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!”

![Forge Burner](image)

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.

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

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


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


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

Verhoeven's updated book:

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

**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

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

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

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

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

**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.highemptools.com/supplies-mainpage.html

**Logos/Etching**

Ernie Grospitch – Blue Lightening 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

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/