

∞ EUGENE 5160 CLUB ~ MARCH 2014 ∞



### MARCH MEETING

The 5160 Club will meet at Woodcraft of Eugene (Delta Oaks – Beltline & Delta Hwy) March 6<sup>th</sup> at 6:00 pm. There'll be show & tell & pass-arounds. I'll bring my 1<sup>st</sup> random pattern (small) knife. Maybe Mike Johnston will show up with the blades that he clayed at the January meeting so we could see the resulting hamons. Bring *your* show-and-tell too!



Here are some updates and catch-up items:

Mike Johnston highlighted the health concerns about acetone (see the last newsletter <http://www.elementalforge.com/5160Club/201402Newsletter.pdf>). Mike recommended denatured alcohol as an alternative.

Since (for me) acetone cleans better than denatured alcohol, everclear, or isopropyl alcohol, I'm curious to hear other options that are less toxic than acetone but just as aggressive. Keith Johnson is looking at a citrus oil alternative. Maybe we'll hear about it at the meeting?

John Emmerling sent a couple of photos of a grinding jig he uses:



### FEBRUARY MEETING

Um. We had this little “weather issue” that kept me from making the February meeting. In fact I don't know if anybody got there... so this will be a catch-up newsletter. And yah. Danita's car was totaled.



### APRIL OKCA SHOW

Table change: Wayne called me a few weeks ago to let me know that OKCA has shuffled some tables around – so this year we'll be at table **M-10** on the same row as Dragonfly Forge and straight across the isle from the traditional Goddard table.



John also sent some samples of wood he's home-stabilizes in this solution:

<http://www.conservationssupportsystems.com/product/show/acryloid-paraloid-b-72/acryloid>

using a paint pressure pot from Harbor Freight and an auto vacuum pump. He cycles the vacuum several times a day over 3 days – then lets it air dry for several days. Definitely less “plastic” than most stabilized wood.



## EMMERLING'S DAMASCUS ETCH

Here are John's notes on getting the most from etching pattern-welded blades. Thanks John, for sharing your hard-won experience:

First, and foremost, sand and polish all visible scratches out - going to a near mirror finish. Never mind that the big boys say to not polish the blade before etching. Get the scratches out as they will deepen with the etch, after which you'll have to start over if you don't like the looks of a 'muddy' blade.

Second, go to the auto parts store and buy battery acid. Mix it with distilled water 1:1 in a plastic container that can be sealed after use.

Third, go on line and buy good etchant, not the Radio Shack stuff. <http://www.micromark.com/FERRIC-CHLORIDE-ETCHANT-16-OZ.8350.html> - 1/2 price of RS and better stuff. Mix this 8oz/gal of distilled water, again, in a resealable container.

After sanding/polishing/cleaning the gunk off from polishing (I use lacquer thinner), scrub the blade with scouring powder and rinse well. Place in the acid for approx 20-30 mins and clean occasionally with a 3M pad. You won't see too much change, but the acid cleans and seems to provide a 'toothy' base for the ferric chloride.

The last step is to clean and immerse in the ferric solution for whatever time you deem it etched. Sometime during the etch, I like to lightly sand with a piece of 600-1200 grit sandpaper to bring up fresh steel, but not enough grit to scratch the blade.

Both the acid and the ferric solutions are fairly dilute, so the immersion times can be long and you will have a good amount of control.

In the end, rinse and scrub/neutralize the blade with lemon scented ammonia and/or baking soda on a sponge. You should get a clean and highlighted finished blade with good contrast depending on what blade materials are used. I normally use 1095/L6/5160 as I like seeing 3 distinct colors in the blade.

After drying, I like to lightly rub the high spots with some crocus paper or 3000 grit sandpaper, then buff on the clean buffer. A coating of Renaissance wax is the finish.

I've struggled with etching for a long time and this is the best formula I've come up with to date.

John



## 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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**For Sale:** I have a TW90 grinder with all the goodies: surface grinder, 8" and 10", 70 Duro wheels, small wheel attachment with most sizes, 3 work platforms, and 10" platen. It's wired for 110 but can be 220. According to Travis Wuertz I should be asking \$5,000.00 given that there is right at \$6,000.00 invested - and it would take 90 days lead time from the time you pay for a new one plus \$300.00 for shipping. So \$5,000.00 seems fair to me. It's almost new. I have only made a few knives with it! contact Ben Davis 1-541-423-5216 – located in Central Point, OR.

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**Knife Maker Wanted:** Mike Lummio of Bushcraft Northwest is looking for a new knife maker that is familiar with scandi grinds and bushcraft knives. If you are interested, contact Mike at [www.bushcraftnorthwest.com](http://www.bushcraftnorthwest.com) (360) 606-1036.



## 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)

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.  
<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 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

[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>

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>

## **LOGO/ETCHING**

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

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

## **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>



Keep well – wear your safety gear – and have fun!

Your Scribe

~ ~ ~ Michael Kemp

p.s. Now I'm gonna grab some scrap steel and get some practice using my new toy!

And yah – everything around here does have kind of a green tint to it. If moss don't grow on it, algae will – including those posts and beams.

Even my hat.

M.

