

EUGENE 5160 CLUB ~ JUNE 2016

<https://www.facebook.com/5160Club>

newsletter archive: <http://www.elementalforge.com/5160Club/>



For a debt that can never be repaid. For all those who gave the last measure for the sake of the nation and for liberty and justice for all.



JUNE MEETING

June 2nd – 6:00pm at David Thompson's shop. If you didn't get the directions in the meeting notice, email me for them: michael@elementalforge.com.

Bring your share-and-tell!

Note from the Thompsons:
“Please **drive very slowly** down our lane. The maintenance is all ours. Thanks.”



NOTES AND REMINDERS

Northwest Blacksmith Association events:
Beginning Blacksmithing June 4th/5th/6th White Salmon, WA – see <http://blacksmith.org/events/> for all events. **Mentoring** at the Cowlitz Expo Center – Longview, WA: generally on the 4th Sunday of the month. **The Blacksmith Week** will be August 18th to 21st at Government Camp (Mt. Hood) see <http://www.cascadiaart.org/> for Government Camp activities.

North West Knife Collectors and Washington Arms Collectors will have a joint **show in Puyallup, WA** August 6th/7th <http://www.nwkc.org/show-information.html>



MAY MEETING NOTES

CRAIG MORGAN put a box of wood handle blocks on the table – free for the taking – and also a jeweler's arbor for \$10 – which sold immediately.

MICHAEL KEMP (that would be me, again) started out with a couple of share-and-tells. I passed around my latest kitchen utility knife. 1095 and 15N20 – hundreds of layers – brass bolster (with vulcanized

spacers) – bubinga handle with a Sally Martin pin.



I like the sharp point for tight work; the high handle so I don't rap my knuckles on the cutting board; the smooth transition from handle to blade for a comfortable pinch grip; and I'm having fun with the overall style.

I also brought in my portable Rockwell hardness tester. It is accurate according to the test blocks that it came with – and matches testing that Wayne Goddard did for me on some blades years ago. It's great for me because I can store it under the workbench until needed. I demonstrated on one of my early 5160 blades. I managed to mess up the heat treat on this one – it has a softer edge on the blade near the ricasso, but better toward the tip where I broke it in doing a bend test. I demonstrated the use of the tester and got 60Rc where it broke (at the edge) and 50Rc where it broke (near the spine) – but a soft 40Rc at the edge near the handle. I've still got room for improvement in my heat treat – but at least I'm not this random any more!!!



Here's a shot of Wendell's knife:



And Wayne's folder – I apologize for the reflection of the shop roof, but the mirror finish was just too good. And the photo doesn't do justice to the abalone.



LYNN MOORE passed out fliers for a garage sale at Wayne's house. Lynn passed around a Wendell Fox cable Damascus blacksmith's knife he acquired recently... and also a Wayne Goddard folder in stainless with abalone scales and filework that he picked up on eBay.

JIM JORDAN was at a flea market a couple of weeks earlier and picked up some solid brass cabinet handles. Combined with a stainless cabinet handle and Jim's ingenuity they became a tooling hammer! “That'd be really cool for silver smithing or something” he thought. “I did a little engraving on it – I need to make a better handle for it...” The knobs



are screwed into a central engraved T. Gotta love it!



Jim's also been working on his engraving. "I ordered one of Steve Lindsay's sharpening guides... it looks like a little bit of nothing for \$89 but I got it and I love it... he's got 25 or 30 different templates you can put on the thing and they're \$23 apiece for a little piece of plastic... but after using it – I really like it." <http://www.airgraver.com/sharpening.htm>



So Jim's been playing with (among other things) silver plated steel counterfeit Chinese coins. He also engraved on a \$5 Kershaw knife [a couple of folks picked these up at the OKCA show – to give away as gifts etc.]... I didn't get a photo of the knife.



CRAIG MORGAN came to the front. "I did pick up a new knife at the OKCA show in April, made by my friend Dan Stucky... a small tactical folder – titanium and S35VN – it's a really cool knife!"



DONKEY was up next. He passed around a kukri that a buddy gave him. There's a lion head on the butt cap. He'd like info on the background and value of this knife – if you have an idea, give him an email at donkeystyle01@gmail.com!



Donkey mentioned how impressed he was by Frank Bobbio's cable Damascus at the last meeting "so I did try #3 for it... from choker cable." He passed around a cable Damascus blank – and a necklace piece made from the same material.



JAKE TURLEY stood up next – saying that his step-mom really liked the single bevel kitchen knife he'd made a couple of months ago “so this is what I'm working on for mothers' day for her... the same layout but everything's a little better...” 1095 blade, textured brass bolster, Burmese Rosewood.



put together with this stuff...” Martin got recipes of Bernard Levine's website and other sources – it's basically pitch, a little beeswax, and a filler like brick dust – rendered thick.

First you need to melt the pitch and filter out sticks and bark and such. Martin uses a tin can with holes punched in it – set in a toaster oven on low (200°f).

Martin grinds up soft brick for the filler – and cautions that you want it all ground fine so that you don't wind fighting little chunks of brick when you're putting a knife handle together.

“The beeswax adds plasticity to it... I've taken apart some old knives where it [the cement] was dry and hard and it was just like powder, and you know it just crumbles. The beeswax doesn't seem to deteriorate and provides plasticity.” So if you are chopping with the knife it won't break the cement apart “and have the knife fling out into the tall grass!”

Note: BladeForums.com and BladesmithsForum.com have a lot of recipes. Variations include other waxes or tallow, fillers like sawdust or charcoal or metal dust or dung from an herbivore (from rabbits to elk), and generally using equal volumes of pitch and filler plus a much smaller amount of wax or tallow.

There was some general discussion of sharpening methods, from grinder and medium-to-fine sandpaper on a flat surface, to water stones, to India and Arkansas stones. To each their own!

Martin talked about putting a slight curve into the profile of a chef knife so that there is cutting action the full length of the blade even on a worn cutting board.

I gave my thoughts on the trade-off between hardness and toughness for a general use kitchen knife. If you are doing fine work with veggies or raw fish then a Rockwell in the 60's is great, but for general use something in the high 50's won't chip out the edge as quickly. I've seen a fair amount of chipped out edges at my farmers' market knife sharpening table – and a lot of just abused kitchen knives! Someone mentioned that a knife in the upper 50's will be easier to sharpen and clean up with a steel. True enough.

“I went to the [OKCA April] knife show. You guys should have told me that I need to be there for two days... because me and my buddy wandered around there on total sensory overload.” So by the time they stumbled out the doors 4 hours later they couldn't remember what they'd intended to go back to look at again and maybe purchase.

Several folks recommended getting OKCA membership for next year so you can go in Friday when it's quieter and get first dibs.

Jake had a question about wood cutting bandsaws – looking for recommendations. Grizzly and Jet are liked – but “as long as it runs and it turns smoothly” you're good to go. And looking on Craig's List for deals on used saws would save money. A couple of folks mentioned fixing up old saws with whatever parts they could scrounge or fabricate. 14” was recommended for a garage sized shop, unless you have the room &/or need to cut larger pieces.

MARTIN BRANDT came to the front with a big bag of pitch! “I've been playing around with primitive knives and at one point I wanted to put 'em together with old cutlery cement... knives all over the world were





Our host, **DAVID THOMPSON** passed around a curious double-bladed tool. “I still haven't figured out if [the two arms] were welded together or split.”

“Looks like an ulu.” “Yah but it has two blades.” “Then it's an ululu!”

Speculation on what this was intended for ranged from herb or cabbage chopper to pie dough cutter to slicing tobacco leaves for wrapping cigars.

At this point we broke up into little knots of discussion. Feedback on our current or planned projects. Knives, forks, cable Damascus, knife photography, forge design, and whatnot.

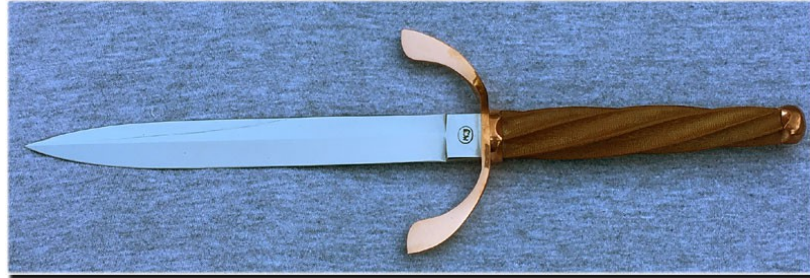
I took a tip from someone on the forums and made the bottom of my current forge out of 1" Insboard with 2" sides – like a shallow cup – filled with 2" of kitty litter. The kitty litter is the trick! If you use flux when forge welding it drips into the kitty litter and clumps up. When the forge cools you pick out the flux clumps and toss them. Add more kitty litter and the Insboard at the bottom of the forge is protected. Much better than replacing bricks or kiln shelving in the bottom of the forge. I plan to do the same on my next forge.

Craig threatened to let David burn the freebie wood blocks to heat the shop – so I think they all got picked through and wandered off into the night with the rest of us.

MIKE JOHNSTON wasn't able to make the meeting but sent in a few photos:

“This was my Micarta challenge knife at the Oregon show in April. Though it did not win I received may nice comments.

9" forged coil spring blade, copper guard, spacer and pommel with a fluted Micarta handle. The spacer and pommel are sculpted to match the flutes in the Micarta. I will have to present a WIP on how to set up and execute the twisted flutes by hand.”



“Just finished this Nakiri for a friend's wedding gift Saturday. 8" blade forged from Dodge coil spring. Copper "guard", quilted maple spacer, Bacote handle and one mosaic Sally pin. Handle is octagonal in cross section.”





Have fun all – and work safe!

~ ~ ~ Michael Kemp



FREE DE-CLASSIFIEDS

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. No charge – just email me at Michael@ElementalForge.com

25# L6 Power Hammer
Complete Rebuild
2 hrs use
\$3,000
Eric Sprado
541-964-3224
spradoeric@gmail.com

Starting Position – Foundry/Casting at Oregon
Pattern & Foundry.

Sand casting etc. Hard work. Rewarding.
Must be 18+. Hours: Monday-Thursday 6:00am-
4:30pm Friday being overtime day. Very real
opportunity to grow and learn all foundry skills.
Starting wage \$10-12 depending on experience.

Contact: terry@oregonpattern.com

If you know anyone who would be serious about
learning the foundry business - pass this on!



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>

OREGON KNIFE COLLECTORS ASSOCIATION (OKCA)

The OKCA hosts monthly dinner meetings where
you are guaranteed to see treasures from the wide
world of “things that go cut!” OKCA also puts on the
big knife show in April – if you haven't seen it you've
been missing something special!

<http://www.oregonknifeclub.org/index.html>

Go to the “Knewsletter” link and scan a recent
newsletter for a membership form and contact info.

FORUMS

Bladesmith's Forum aka Don Fogg Forum

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

Knifedogs Forum (USA Knifemaker)

<http://knifedogs.com/forum.php>

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>

Julious Griffith groups on Facebook:

- Custom Knives For Sale by Maker - Available now
- Knifemaking - Works in Progress (w.i.p.'s)
- Knifemaking Equipment Buy, Sell, or Trade (used only)
- Knifemaking - Masters to paying Students connection
- Knife shop photos
- Knife Calendar - Events, shows, hammer-ins, schools, misc.

These are all closed groups – to keep them focused – so if you want to join one of the groups, click the “+ Join Group” button and also message Julious and give him some info on yourself so he knows you have real interest in the group.

REFERENCES

Our own Wayne Goddard's books are available at Amazon:

<http://www.amazon.com/Wayne-Goddard/e/B001JS9M10>

And you can email the Goddards 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:

<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

From the Heat Treating Society of the ASM – the Heat Treater's Guide Companion for Android devices. Look up heat treating details on hundreds of

steels in the palm of your hand.

<https://play.google.com/store/apps/details?id=com.pfiks.mobile.heattreaters&hl=en>

My “Knife Info” has some knife musings and cheat sheet charts – plus Oregon and Eugene knife laws:

http://elementalforge.com/tips_notes/

CLASSES FOR KNIFE MAKING, ETC.

Gene Martin offers personal instruction at his shop south of Grants Pass for a daily rate.

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

Michael and Gabriel Bell of Dragonfly Forge offer an ongoing 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, Oregon.

<http://www.cartercutlery.com/bladesmithing-courses/>

David Lisch is an ABS Master Smith who teaches classes in Seattle. I've heard rave reviews from his students. Lisch is very skilled at blacksmithing in general and bladesmithing in particular.

<http://www.davidlisch.com/Learn.html>

Jim Hrisoulas now offers both formal classes and mentoring sessions in 2 hour blocks at his shop in Henderson, Nevada:

<http://www.atar.com/joomla/> and click the “Bladesmithing Classes” link.

The ABS (American Bladesmith Society) offers classes in Washington, Arkansas and elsewhere – if you are up for traveling across the country to take classes, check out their “Schools” link:

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

James Austin offers forging classes in Oakland, CA – axes, tongs, viking anvil, etc.:

http://forgedaxes.com/?page_id=148

Blacksmithing and some bladesmithing workshops are hosted regularly by the Northwest Blacksmith Association: <http://blacksmith.org/>

USA Knifemaker has a lot of fun & informative videos on their YouTube channel:
<https://www.youtube.com/user/USAKnifemaker/videos>
... and hey - “free” is a hard price to beat!

Nick Wheeler also has a good YouTube channel with a lot of how-to videos:
<https://www.youtube.com/user/NickWheeler33/videos>

GENERAL TOOLS & SUPPLIES

Woodcraft of Eugene – thanks to Joe & the crew for six years of hosting 5160 Club meetings – we've had to move on, but the hospitality was appreciated.
<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/>

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/>

True Grit
<http://www.trugrit.com>

KNIFE STEEL SOURCES

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

Kelly Cupples (High Temp Tools) – Alabama
<http://www.hightemptools.com/steel.html>

Niagara Specialty Metals – New York
<http://www.nsm-ny.com> (click Products/Knife Steels)

SB Specialty Metals – New York & Texas
<http://shop.sbsm.com/>

Bohler Uddeholm – numerous U.S. locations
<http://www.bucorp.com/knives.htm>

Sandvic – stainless steels – Texas & Pennsylvania
<http://www.smt.sandvik.com/en/products/strip-steel/strip-products/knife-steel/sandvik-knife-steels/>

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

EQUIPMENT

Beaumont (KMG) [Ohio] – the industry's benchmark 2x72 belt grinder
<http://www.beaumontmetalworks.com/shop/>

Travis Wuertz [Arizona] – premium versatile grinder
http://www.twuertz.com/Home_Page.php

FORGE & REFRACTORY

Pheer [Gresham, Oregon] – affordable grinder made in Oregon

<http://www.2x72beltgrinder.com>

AMK [Ohio] – affordable grinder, quick-change between platen & contact wheel

<http://amktactical.com/>

Coote [Port Ludlow, Washington] – affordable, simple grinder – you supply the motor

<http://www.cootebeltgrinder.com>

Marinus Kuyl [Hillsboro, Oregon] – another affordable grinder made in Oregon – and parts – you provide the motor.

<http://oregonblademaker.com>

Grinder-In-A-Box – grinder kit, assembly required

http://www.polarbearforge.com/grinder_kit.html

Wayne Coe [Tennessee] – grinders, motors, VFDs...

<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/>

Renaissance Metal Art [Mulino, Oregon] – 80# ram air hammer

<http://www.rmetalart.com/tools.htm>

Anyang [Texas] – air hammers from 20# to 165#

<http://www.anyangusa.net/>

Meyer Machine Tool [Ohio] – treadle hammer

<http://www.meyermachinetool.com/Blacksmith-div-.html>

Spencer/Clontz tire hammer plans/workshops

http://www.alaforge.org/Trading_Post.html

Appalachian Power Hammer plans

<http://www.appaltnet.net/rusty/index.htm>

Helve Hammer and Quick-Change Dies Video – from a BladesmithsForum.com thread.

<https://www.youtube.com/watch?v=uzruqYkKGNM>

Chile Forge

San Marcos, Texas

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

Mankel Forge – Muskegon, Michigan

<http://mankelforge.com/forges.html>

Western Industrial Ceramics Inc.

All things refractory – Tualatin, Oregon

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

High Temp Tools (scroll down the page for the category buttons) Tuscaloosa, Alabama

<http://www.hightemptools.com/supplies-mainpage.html>

High Temp Inc. has also been recommended for Kaowool etc. Portland, Oregon

<http://hightempinc.net/>

Omega – thermocouples & measuring equipment

Stamford, Connecticut

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

Auber – more thermocouples and controllers, etc.

Alpharetta, Georgia

<http://www.auberins.com>

Hybridburners – home of the venturi T-Rex

Smithville, Georgia

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

Pine Ridge Burners – for ribbon burners and all associated fittings, blowers, valves, etc.

Conway, Massachusetts

<http://www.pineridgeburner.com>

Zoeller Forge – low cost venturi & parts: Z Burners

Lanesville, Indiana

<http://zoellerforge.com/>

Here's the original article on making a ribbon burners that John Emmerling wrote back in 2005 for the NWBA Newsletter:

<http://blacksmith.org/2005-1-hot-iron-news/>

You can download the PDF from that site. John's article starts on page 11.

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.com/>

LOGO/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>

HEAT TREAT SERVICES

Here are some folks who provide heat treating services for blades. While all of these have been recommended by one reputable person or another I have not had experience with them. If you use one, let us know how it went!

Paul Bos Heat Treating at Buck Knives. Paul Bos has retired and handed the torch to Paul Farner. Highly reputable. Post Falls, Idaho:
<http://www.buckknives.com/about-knives/heat-treating/>

Peters Heat Treating is another highly reputable operation. Meadville, Pennsylvania:
<http://www.petersheattreat.com/cutlery.html>

Texas Knifemaker's Supply offers heat treat services. Houston, Texas:
<http://www.texasknife.com/vcom/privacy.php#services>

Tru-Grit provides heat treat services. Ontario, California: https://trugrit.com/index.php?main_page=index&cPath=34

K&G also provides heat treat services but I can't find a reference on their web site – you'll have to contact them for details. Lakeside, Arizona:
<http://www.knifeandgun.com/default.asp>

Byington Blades heat treat service is in Santa Clara, California: <http://www.byingtonblades.com/>

It's my understanding that Chris Reeve Knives uses ACE Co in Boise Idaho – which is enough for me to add them to the list:
<http://www.aceco.com/heattreat/index.html>

WOOD SUPPLIERS

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

Shelton Pacific – stabilized wood – Shelton, WA
<http://stores.sheltonpacific.com/>

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

North Woods Figured Wood – Gaston, OR
<http://www.nwfiguredwoods.com/>

OTHER GOODIES

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

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

Coyote Steel – wide variety of new steel, 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/>

Minarik automation & control
<http://www.minarik.com/>

Valley Stainless (that does water-jet cutting) is one of Craig Morgan's customers. They told Craig “bring in a pattern” and they'd work with you on small batch cutting. They don't have a website yet. 29884 E Enid Rd, Eugene, Oregon 97402 (541) 686-4600.