

# EUGENE 5160 CLUB ~ OCTOBER 2016

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

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



## OCTOBER MEETING

October 6<sup>th</sup> – 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](mailto:michael@elementalforge.com).

## BRING YOUR WACKIEST &/OR FAVORITE FORGING TONGS OR TOOLS

At the September meeting **DAVID THOMPSON** shared some of his favorite (and oddball) tongs – and so the challenge is made: bring a favorite forging tool or two or three to share with the group – especially if it's off the beaten track!

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

Also, Lynn Moore has some items he will be bringing to the meeting for sale:

- 1 - propane forge \$50
- 1 - coal forge with hand crank blower \$50
- 1 - heavy duty vice \$25
- 1 - electric dust collection motor & bag \$50
- 1 - Champion forge blower \$40



## NOTES AND REMINDERS

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**Oregon Knife Collectors Association (OKCA) – December Mini-Show** – Saturday December 10<sup>th</sup> in the Wheeler Pavilion at the Lane Events Center.

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**OKCA Knife Show** – April 7<sup>th</sup> (OKCA members only) 8<sup>th</sup> & 9<sup>th</sup> (public) at the Lane Events Center. <http://www.oregonknifeclub.org/okcashow.html>

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**Northwest Blacksmith Association** – see <http://blacksmith.org/events/> for all events.  
**Mentoring** at the Cowlitz Expo Center – Longview, WA: generally on the 4<sup>th</sup> Sunday of the month.



## SEPTEMBER MEETING

This is a very brief newsletter by our group's standards. The September meeting was more informal than normal and I never fired up the video camera (which serves as my stenographer).

There were maybe ten of us – including several newbies – and just a handful of pass-arounds. That

was actually a good thing for the new-to-knife-making folks, as we broke up into discussion groups and they were able to get their questions asked and answered face to face.

**JIM JORDAN** shared several items. The first is a work-in-process knife:



Jim is making this as one of the 2017 OKCA award knives. Every year at the big April OKCA show there is an abundance of museum quality display tables on the North and South walls. The tables are judged and table owners are rewarded by getting to choose a custom made “award knife”. Knife makers volunteer to create these custom knives – and Jim is getting a head start on his piece!

He also brought in several engraving pieces - - - go ahead, drool away – here are a couple of buckles...



... and one of those little Kershaw knives:



It may have been **LYNN MOORE** who brought in this skinning knife by Wayne Goddard – made from a coil spring with bone handle.



**LYNN MOORE** also had with him some practice pieces and a couple of bracelets braided from brass welding rod and copper electrical wire. He picked up this process from someone at The Blacksmith Week held at Government Camp last August:

<http://www.cascadiaart.org/>



As I mentioned, there was a lot of question-and-answer from new-to-knife-making folks. I do wish I'd had the video running so I had more of the give-and-take to share.

Some of the discussion was about the basics of hardening and tempering. I've put together my understanding of it in this posting:

[http://elementalforge.com/tips\\_notes/?page\\_id=87](http://elementalforge.com/tips_notes/?page_id=87)

Some of the discussion was about smelting steel from black sand. Talk to Jim Jordan if you want to scheme about this.

**MARTIN BRANDT** gave some really good advice about creating knives from used files without any heat-treatment needed. The bare bones as I recall it are this:

- For any knife maker a grinder is your best friend. You can get along with hand filing but a grinder will turn hours into minutes. The 2"x72" belt grinder is the standard in knife making. You can get an amazing variety of sanding belts in this format.
- To turn a used file into a knife without heat treatment (if you have no forge) you have to start with a good hard file that is at least as wide as the knife you want to make.
- Grind the profile and bevels you want **without** heating the steel to where it changes color. Well OK – if it goes into “straw” color you're fine, but into the blue and you will start losing some hardness. See the color examples here: [https://en.wikipedia.org/wiki/Tempering\\_\(metallurgy\)#/media/File:Tempering\\_standards\\_used\\_in\\_blacksmithing.JPG](https://en.wikipedia.org/wiki/Tempering_(metallurgy)#/media/File:Tempering_standards_used_in_blacksmithing.JPG)
- You should temper the knife after you have finished grinding it. A temp under 400°F will give a hard but somewhat brittle blade. A temp like 450°F will give a tougher blade – for heavy use like a camp knife. Tempering is usually done in 3 rounds: bring the blade up to temp and soak for an hour, let cool to room temp and repeat.
- The stick tang of the file can become the stick tang of your knife handle.

Somewhere in there **DAVID THOMPSON** showed us some of his favorite tongs – which started quite a discussion – and a challenge to bring your favorite forging tools to the next meeting – especially if they are a little unusual.

The first set was some V jawed tongs – which are among my favorites too – especially like the offset jaws on the left:



And also some special pickup tongs!



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](mailto:Michael@ElementalForge.com)

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## 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 “Knewslettter” 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](mailto:wgoddard44@comcast.net)

Most of the companies in the “Knife Maker General” links (below) have a section for how-to books and DVDs.

Verhoeven's Metallurgy For Bladesmiths PDF – this is a very deep dive, not an introduction.  
<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)

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.heatreaters&hl=en>

My “Knife Info” has some knife musings and cheat sheet charts – plus Oregon and Eugene knife laws:  
[http://elementalforge.com/tips\\_notes/](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](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](http://www.twuertz.com/Home_Page.php)

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\\_order.html](http://www.polarbearforge.com/grinder_kit_order.html)

The “No Weld Grinder” plans can be purchased from  
<http://usaknifemaker.com>  
either as a booklet or as a download – just use the search  
box to enter “no weld grinder”

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](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>

True Grit – under “Machines & Accessories”  
<http://www.trugrit.com>

## **FORGE & REFRACTORY**

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 Lightning 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](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/heatreat/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.