

EUGENE 5160 CLUB ~ JUNE 2019

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

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



JUNE MEETING

Thursday June 6th – 6:00pm at David Thompson's shop. Please do not arrive before 5:45pm. If you didn't get the directions in the meeting notice, email me for them: michael@elementalforge.com

Bring your show-n-tell!

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



NOTES AND REMINDERS

5160 Club Hammer-In Mark your calendars for **July 20th**! David Thompson's place. More details in the next newsletter.

No “regular” meeting for July – it would have fallen on July 4th.

Check out the “Classes for Knifemaking, etc.” section at the end of the newsletter for offerings around the region. Let me know if there's more that I should add to this list.

I've gone through the links at the end of the newsletter and corrected or deleted out-of-date ones. If you see errors or have additions – let me know!

David Thompson – has coke and coal for sale (near Jerry's in Eugene, OR) – Talk to him at one of our meetings or call 541 688-2348.



MAY MEETING



BLAIR GOODMAN was first up with a couple of good finds. A post vice and an anvil – a Peter Wright weighing in at 122#. The guy he bought the anvil from also had a Hay Budden and other items but swore Blair to secrecy.

That gives you a fair idea of just how tight the anvil market is!



MIKE JOHNSTON came to the front noting “They just had the Pacific Overland Horsedrawn Equipment Auction up in McMinnville last weekend and

they had a Peter Wright 120-some pounder and a Vulcan that was 110#. The Peter Wright went for \$550 and the Vulcan went for \$950.” The Vulcan was a horseshoeing anvil.

Mike said he’s been busy and hasn’t made any knives recently – but **has** gotten his 150# guided helve hammer fully functional. “It’s fully adjustable – I’m pretty happy with the way it turned out. It took me almost 2 years to build it!”

Here's a photo of his home-built helve hammer, and the first test: a 3/4” Dodge coil spring – 1 pass with forming dies and 1 pass with flat dies and it's now 1-7/8” x 3/16”!



“By the way, if somebody comes up to you and says ‘I need you to make a Scottish basket-hilt backword with a blade 42” long’ and you need to temper that, I found an interesting way of doing that...” To temper that long of a blade, Mike said to put fire bricks around a hot plate – set 4’ of double-walled stove pipe on the bricks (over the hot plate) – wrap it in insulation and with a chunk of Kaowool on top – and “diddle with the heat until you get the right tempering temperature.”

STEVE GODDARD was up next. He dumped out a box of “free stuff – from dad’s house”. Then noted that he’d been to the gun show in Klamath Falls and sold a couple of knives. “It’s interesting that I have some stuff that’s been on



the table for 4 or 5 years and I look at the pattern and say ‘that’s what I don’t like about it’ - change the pattern – and that’s what sells.”

“It’s amazing: I never seem to have anything completely done to bring to club meetings... It’s amazing that I fix one problem but then I create something else...” [general murmur of agreement from the group].

Steve passed around a couple of hunters – with handles made from beech that he stabilized. Also a neck knife – noting that he puts an inner liner in the sheath to avoid having the snap scratch the blade. The blades are made from 8670.



EDWARD DAVIS got up next, noting that the batch of neck knives he'd been working on for the April show will be ready... for next year's show.

"My idea was that if I made 10 of the same thing I would learn something – and I certainly am... here are the 5 I gave up on getting finished in time... ground to 50 grit..."



and he commented that having done so many of the same design he has a better feel for grinding technique – and can understand advice from other makers better.



Then Edward added another 5 pass-arounds that have their handles started. For the one with African blackwood "I want it to look really smooth and shiny when I'm done – [should I] keep going with higher and higher grit? Should I use poly on it?"



The general response was to finish with Tripoli (brown buffing compound). "You don't want to use white buffing compound on a dark wood" noted Martin Brandt "it'll get stuck in the grain and you'll never get it out."

Edward talked to folks at the April show about how to secure a neck knife "and one of the ideas that I liked was Erik's idea of having rare earth magnets inside the sheath..." positioned to hold the blade. He's thinking of embedding 1 or 2 in the sheath and adding a thin inner liner to avoid scratching the blade.

For the neck knife in the photo that has tubes rather than pins in the handle Edward will position a Sam Browne stud in a flap in the sheath so that it fits into one of the tubes and secures the knife that way.

FRANK BOBBIO was up next. "I made seven new stainless steel san mai blades and three different cores. Six of them worked – one the stainless hot-shorted and started crumbling. I finished three of them out of the six. Two sold yesterday." The one he brought to the meeting was 416 stainless with a 1084 core.



Frank's online research found that folks are using "just about any stainless"... but there can be issues getting the weld to take – and the difference in expansion and contraction during heat treat can be extreme enough to cause the core steel to "tear apart right down the center... so what most guys have settled on is using 410 stainless as the outside cladding and whatever high carbon core you want..."

The problem being that 410 stainless goes for \$30-\$50/foot – which is why Frank used 416 stainless –

and AEB-L. Frank's issue with the AEB-L is that when you etch the finished blade the AEB-L does not stay bright – it gets frosted in uneven patterns.

Frank noted that you can see carbon migration into the stainless on the blade – going from the black etched core – to a bright line of stainless – back to a dark “ghost” area of carbon migrated into the stainless – then to the bright pure stainless.

He said that if you see a stainless san mai with a fairly straight transition line and little or no ghost edge it was probably made from thin layers of stock with little or no forging after forge welding the layers together – just stock removal. A wavy transition line and thick ghost edge indicates a thick initial billet and forging in a power hammer after the weld – the wavy pattern being the individual strikes of the power hammer having a ladder-pattern-like effect. The wide ghost edge is due to extended time at high temperature.

In response to a question Frank explained that for forge welding the stainless san mai he cleans up the three layers on the grinder. He squeezes the layers in a vice and runs a welding bead all the way around the edges. Either TIG or MIG seem to work fine. “Once you weld it up then no oxygen can get into the weld and that's the most important thing with stainless.” For the six experimental blades he heated them in his induction welder just because it is so fast (he made a custom set of coils to match the size of his san mai billet). He did three rounds of heating to ensure that the center got up to temperature without burning the outer layers. Then he hit it with his press to weld it – he repeated the heat-and-press a second time... and then forged it out at forging temperature.

Frank also brought an example of the style of knife stand he makes (this one was some oak flooring remainders that he got from Wayne Goddard). He gave it to Steve Goddard.

Next he showed a diamond sharpener that he bought off eBay for \$3. He's contemplating getting a bunch of them and including them with knife sales.



Frank then gave away a knife blank he'd cut out of 8670 circular saw steel – the stipulation being that whoever got it would bring in the finished knife in 2 months (*since we are skipping the July regular meeting I guess that would be at the July hammer-in – or the August meeting*).

Then Frank fired things up. Literally. He demoed a very simple atmospheric burner design from David Lisch that only uses hardware store parts. Lisch built these burners for the NWBA mentoring center forges. After talking to David Lisch about using this burner for forge welding Damascus Frank decided to try out the design for himself.

Frank had not gotten permission to share the design details – so you'll just have to look at the ones at the mentoring center or talk to Lisch yourself.



The flared tube at the business end of his burner is just friction fitted – and Frank demonstrated how sensitive the flame is to the positioning of the bell.

Here's the video Frank posted on YouTube on how both the T-Rex and his Lisch style burner react to adjusting the bell:

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



LYNN MOORE also did a demo for us on logo etching! “I do two forms of etching: the original one Wayne Goddard taught me to do using a power supply from a computer...” which involves masking the area to be etched with

nail polish, using a sharp instrument to draw your design through the nail polish, and using a wet Q-tip as an electrode to perform the etch.

For drawing through the nail polish Lynn took a dental tool and rounded the end of the pick so that it makes a good line. He also uses a short piece of brass rod that he ground a rounded end on.



Mike Johnston chipped in that if he lets the nail polish fully dry it gets brittle and leaves ragged edges on the lines – so he does his scribing while the polish is still slightly tacky.

Lynn noted that Wayne initially had him using a mix of beeswax and casting wax – but Lynn found that if you weren't careful in scribing it could pull up from the steel and ruin your etch pattern.

For the wetting solution he has a very small bottle that he puts a few ounces of water in and adds a tiny amount of table salt. “Just the amount of salt that you can get between your fingers.”

“It's always a good idea to play with it – practice on a scrap piece of metal...”

Beyond the area covered by the nail polish Lynn masks off more of the blade with electrical tape to protect from accidental markings.

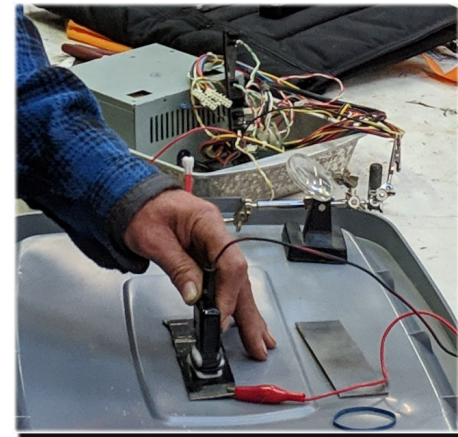
He uses the 12v leads from the power supply and clips the positive to the steel to be etched, and he uses a small vice-and-arm with alligator clip to hold the Q-tip (the clip should be into the wet cotton to conduct electricity). The negative lead goes to the clip with the Q-tip. Be sure not to short the Q-tip holder with the metal to be etched. The cotton tip is placed onto the area to be etched.

He's found that 7 minutes works pretty well with his setup. 10 minutes is too aggressive. Results vary depending on voltage and amperage. Mike said his setup does the etch in about 20 seconds, and he puts a puddle of the salt water over the etch area, hand-holds the Q-tip and just touches it to the puddle. You can also gang up multiple Q-tips to cover a larger area.

The other method of etching uses printed etch masks that you purchase through folks like those in the “Logo/Etching/Stamps” section of links at the end of the newsletter. You get multiple copies of the etch mask on a sheet. Each etch mask can be used many times.



The process is similar. You attach the etch mask to the steel (Lynn uses electrical tape). There is a replaceable fiber pad that goes on the etching tool – you wet the pad with a chemical from the etch kit company that is tailored for the type of steel (stainless, high carbon, etc.).



This method only takes seconds to get an etch – depending on how deep you want.

There is also a “cleaning” solution to remove residue from the steel.

These etching machines typically have a DC mode to etch and an AC mode to deposit a black mark through the etch mask.



Folks shared their experiences with home-built power supplies, whether to etch deep or not depending on the type of metal and surface preparation.

... and folks shared the experience of having the logo etch go bad (using any method) and having to spend hours removing the etch mark and re-finishing the blade for another try.

PAUL HAINES came forward - “In the early '70s I was working up in central B.C. and was out



moose hunting – and walked back to the Jeep. I looked down and found this knife laying in the middle of the road. It turned out it was a Russell knife and I thought 'boy that's a funny looking shape' but it worked well and I used it to skin out three moose while I was up there.”

So Paul is making one on the same pattern from cable Damascus. It's interesting to note that he has etched his logo in deep, before finishing and etching the blade.



In response to a question Paul said the cable he started with was 1-1/8”.

CHRIS was up next. “I've been making knives for a couple of years and heard about the club...”

He passed around a camp knife of W2 with ebony and curly maple handle. Unfortunately not only did I not get a picture of Chris (he stood out of view of the video camera), but I guess his knife never made it around to me because I don't have a photo of it either! My bad.



Our next presenter said “I finished a couple of knives – I'll just pass 'em around... made of 1075 – with brass rivets...”



He also had a bucket of Lenox power saw blades. He had to really pester the folks at Lenox to find out what kind of steel the blades are made from. They finally said “I can't tell you what it's made out of, but the closest is D6A.” He had 2# bundles for anyone wanting to make Damascus with them.

KAER came forward next. “I do a lot of sculpting and this is definitely archaic [*he made this some time ago*] but this is my sculpting knife...”



For his other pass-around he noted “This one I like – and I wanted to make it rustic – I had this piece of antler sitting around for awhile...” He noted that he's started smithing again at LCC and wants to learn as much as he can.



There was some discussion about on-line resources for saex style knives – historical and otherwise.

... as we broke up into informal discussions someone put out some plainer blades for anyone who wanted them. Martin Brandt did some spark testing on the freebie steels... and we drifted into the night.



Have fun and work safe -

Your Scribe ~ Michael Kemp



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 a small show in December and 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)

<https://knifedogs.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/>

Hype-Free Blades

<http://www.hypefreeblades.com/forum>

Peter Newman of Bent River Forge/Farrier Supplies has a closed Facebook group: Blacksmiths of Oregon
<https://www.facebook.com/groups/blacksmithsoforegon>

REFERENCES

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

Sg2goddard@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. I no longer see the original free PDF – but here's the updated book on Amazon:

<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>

Knife Steel Nerds – a metallurgist's blog on the technical details of steel

<https://knifesteelnerds.com>

Tempil Basic Guide to Ferrous Metallurgy

[http://es.tempil.com/assets/5/31/Basic_guide_to_ferrous_metallurgy_\(2\).pdf](http://es.tempil.com/assets/5/31/Basic_guide_to_ferrous_metallurgy_(2).pdf)

From the Heat Treating Society of the ASM – the Heat Treater's Guide Companion for Android devices.

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

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

http://elementalforge.com/tips_notes/

CLASSES FOR KNIFE MAKING, ETC.

Erik Olson is teaching intro to forged knives in Eugene. I don't have a business contact but his personal Facebook page is:

<https://www.facebook.com/erik.olson.77715>

Farrier Supplies aka Bent River Forge offers intro and advanced blacksmithing classes – and supplies. 26729 99W, Monroe, Oregon

Coal, coke, forges, parts, tools, classes...

<https://www.facebook.com/FarrierSuppliesOR>
(541) 847-5854

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

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

Bear Iron in Cottage Grove offers blacksmith classes through Lane Community College.

<https://www.beablacksmith.com/sign-up>

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/>

White Hart Forge offers intro to blacksmithing classes plus some advanced classes and some intro to knife making classes. Oak Grove, Oregon (just south of Portland). <https://whitehartforge.com/classes/>

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

David Lisch is an ABS Master Smith who teaches classes in Washington.

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

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

Keep an eye out on California Blacksmith Association for workshops and events:

<http://calsmith.org/CBA-Events>

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

Zoro

<https://www.zoro.com/>

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/>

Widget Supply - Dremel tools, needle files, craft knives, drill bits, etc – Albany, Oregon.

<https://widgetsupply.com>

And of course there are the local hardware stores like Jerry's, and chains like Harbor Freight and Woodcraft.

KNIFE MAKER GENERAL

Knife kits, steel, tools, machines, supplies such as handle material, fasteners, belts, glues, finishes, etc.

Jantz Supply – Davis, OK
<http://www.knifemaking.com>

Texas Knifemaker's Supply – Houston, TX
<http://www.texasknife.com>

USA Knife Maker's Supply – Mankato, MN
<http://www.usaknifemaker.com/>

Knife and Gun (K&G) – Lakeside, AZ
<http://www.knifeandgun.com/>

Alpha Knife Supply – Cedar City, UT
<http://www.alphaknifesupply.com/>

True Grit – Ontario, CA
<http://www.trugrit.com>

Especially Abrasives – lower cost 2x72 belts
<http://www.especiallyabrasives.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/>

Sandvic – stainless steels – Texas & Pennsylvania
<https://www.materials.sandvik/en-us/products/strip-steel/strip-products/knife-steel/sandvik-knife-steels/>

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

Alpha Knife Supply – Cedar City, UT
<http://www.alphaknifesupply.com/>

KNIFEMAKER EQUIPMENT

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

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

Pheer [Gresham, Oregon] – affordable grinder made in Oregon
<http://www.2x72beltgrinder.com>

Oregon Blade Maker [Oregon] – affordable chassis and accessories, good reputation – you supply the motor
<http://stores.ebay.com/oregonblademaker>

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

Northridge Tool [Ohio] – precision manufactured belt grinders
<http://www.northridgetool.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.
<https://originblademaker.com/>

Grinder-In-A-Box – grinder kit, assembly required
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
<https://www.sunray-inc.com/products/wheels/>

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

Helve Hammer and Quick-Change Dies Video –
from a BladesmithsForum.com thread.
<https://www.youtube.com/watch?v=uzruqYkKGNM>

True Grit – under “All Products”/“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. for Kaowool, castable refractory, fire
brick up to 2,600°f, etc. Portland, Oregon
<http://hightempinc.net/>

Omega – thermocouples & measuring equipment
Stamford, Connecticut
<https://www.omega.com/en-us/>

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
<https://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

Farrier Supplies aka Bent River Forge
26729 99W, Monroe, Oregon
Coal, coke, forges, parts, tools, classes...
<https://www.facebook.com/FarrierSuppliesOR>
(541) 847-5854

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/STAMPS

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

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

Marking Methods, Inc.
<http://www.markingmethods.com>

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

Steel Stamp, Inc.
www.steelstampsinc.com

LectroEtch – Ohio
<https://lectroetch.com/>

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.petersheatreat.com/?s=cutlery>

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/>

WOOD & HANDLE MATERIAL

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/>

Bamboo Oasis – wide variety of bamboo – Beaverton, OR phone 503-703-1345
<https://bamboooasis.com/>

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

Atlas Billiard Supplies – Wheeling, IL – cue blanks of Micarta and exotic woods – with some sizes suitable for knife handles. <http://www.cuestik.com/>

For Eugene area boards, planks, etc. there's:

Crosscut Hardwoods at 2344 W 7th, Eugene
<http://www.crosscuteugene.com/>

Tree Products Hardwoods at 150 Seneca, Eugene
<http://treeproductshardwood.com/>

and it doesn't hurt to check Mike's Bargain Center on Hwy 99 just south of Beltline, Eugene
<https://www.facebook.com/MikesBargainCenter/>

WOOD STABILIZING

K&G (Knife and Gun) – Lakeside, AZ
Good reputation with everybody.
<http://www.kandgstabilizing.com>

Gallery Hardwoods – Eugene, OR
<http://www.galleryhardwoods.com/stabilized.htm>

WSSI (Wood Stabilizing Specialists International, Inc.) – Ionia, IA – some folks have had issues with them, some folks are totally happy.
<http://www.stabilizedwood.com/>

Alpha Knife Supply – Cedar City, UT
<http://www.alphaknifesupply.com/>

Turn Tex Woodworks – San Marcos, TX
“Cactus Juice” and pressure chambers etc. for the do-it-yourself folks.
<https://www.turntex.com>

OTHER GOODIES

Grey Leather Company – Eugene – Hannah Morgan does custom leatherwork, including sheaths.
<https://www.facebook.com/GreyLeatherCo/>
<https://www.etsy.com/shop/GreyLeatherCo>

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>

Burcham's Metals – Albany, Oregon – recycled metal of all sorts. Very good pricing.
<http://www.burchamsmetals.com>

Cherry City Metals – Salem, Oregon – metal recycling and useful objects
<http://www.cherrycitymetals.com/>

Amtek – tool steel & cutting tools
<http://www.amteksteel.com/index.html>

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/>

Voodoo Resins – striking resin handle material
<http://www.voodooresins.com/>

The Engineering Toolbox (formula & info reference)
<http://www.engineeringtoolbox.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.