

EUGENE 5160 CLUB ~ MAY 2019

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

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



We had a **great** time at the OKCA April Show! A lot of folks were interested in the 5160 Club – and we even sold a couple of knives. I hope you got there for all the annual awesomeness – plus the rare opportunity to see historic Bowie knives in the flesh.



MAY MEETING

Special note: **LYNN MOORE** will be doing a logo etching demo at the meeting!



Thursday May 2nd – 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

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.

NWBA 40th Anniversary Conference – May 24-26 at the Cowlitz Expo Center, Longview WA. They'll have demonstrations, hands-on workshops, food, contests, auction, displays... Onsite camping available. Here's the website: <https://blacksmith.org/events/nwba-40th-anniversary-conference>

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.

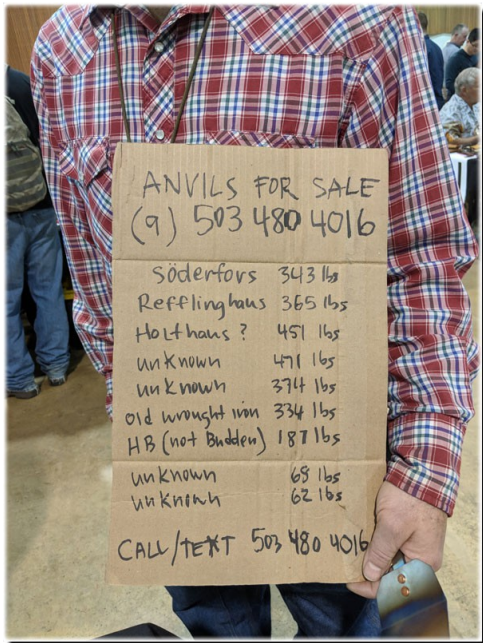


APRIL MEETING



MICHAEL KEMP (*your scribe*) called the group to disorder, laying out some more industrial circular saw blades from Ben Tendick, and there were also some some steel bars from another guy at the meeting “I was told it's 4140... it's real tough to forge...”. There were also energy bars and boxes of Yogi tea – all up for grabs. **DAVE THOMPSON** (*our host above*) snagged one of the 4140 bars. The rest of the steel disappeared by the end of the evening.

I don't know if Jim Allen (Three Sisters Forge) still has a Peter Wright 139# anvil for sale – reasonable price to a good home. jimallen.2131@gmail.com



Also, this fellow at the show came into a treasure trove of anvils and is selling assorted anvils for assorted prices.

AARON was first up with a batch of miniature hatchets. He's making the handles from pieces of hardwood passed down in his family – rosewood, cocobolo, wenge, etc.

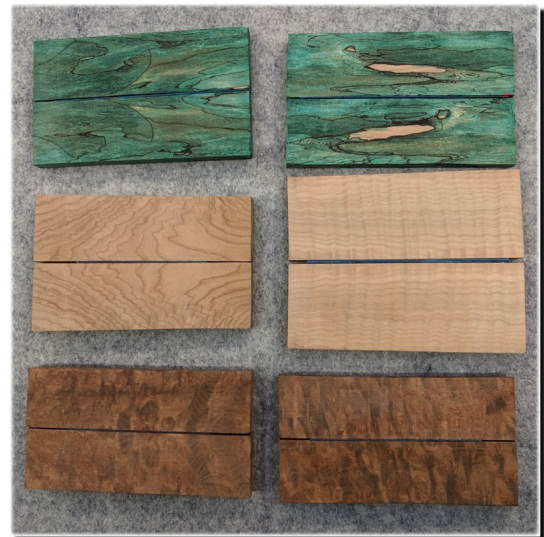


He is obviously enjoying making variations on this theme! *There's a quarter in the photo for scale:*



STEVE GODDARD came to the front next. “I traded for a heat treat oven and a wood stabilizing setup...” and he's been working up stabilized wood scales – some of which he passed around. Spalted alder, beech, redwood burl.

Steve noted that if he dried extra wood before he could get it into the vacuum chamber he not only sealed it up, but also put it in the oven to re-dry when he was ready to process it.



Steve also passed around some work-in-process knives made from 8670 (industrial circular saw steel – but these are made from fresh bar stock). The patterns are a combination of his dad's and his own designs. Steve noted that with a modification to eliminate belt drift on his grinder he is getting plunge cuts that he's happy with.



These are ready for normalizing and heat treating.

Steve's been busy!



And here's a larger blade in 5160:



JIM JORDAN was up next. At the OKCA April show, tables against the North and South walls (plus or minus) are museum quality displays. As a “thank you” each year 12 knife makers are given identical knife

blanks to finish in their own style, and the display table holders are judged – with the 1st place table holder getting 1st choice of these custom knives.

Jim passed around his work-in-process display award knife. Ebony handle with guitar wood inlay strip on the edges, brass pins, and silver diamond shield on the side (*not installed yet*). Silver gallery wire ferrule and copper bolster.



This year's display award style was San Francisco spear point Bowie. Here's a closeup of Jim's coffin handle – you can see where it's going.



JERRY MARTINDALE said “I've only been here before...” and brought a sword he's working on for show-n-tell. “This is the first thing I've made of this length – most things I've made are about the size of this handle.” This is his take on an executioner's blade – made for chopping rather than stabbing. He noted that this is a wedding gift for a friend ~ ~ ~ **that** got some chuckles from the crowd.



Chisel ground edge. 1084 steel.



In response to a question Jerry noted that he started grinding with a Harbor Freight 4x36 belt grinder “and burned that sucker out” and bought a WEN belt grinder that he is happy with. Jim Jordan noted that you can save time on a big piece like this (if you are careful) by roughing it out with an angle grinder before going to a belt grinder.



CHRIS – a 1st timer at our meetings – was up next with his first kitchen knife. “Most of mine have all been camp knives.” O1 tool steel blade. Brass/ebony/ purple heart/and a spalted wood that I did not catch the name of. He will be putting a slight hollow grind on the back of the blade. Very nice work!



Next were a couple of auction finds. Rustic, rusty, and handsome. You never know where you might find design inspiration.



ERIK LAND got up next – noting that he already had all his knives ready for the show (*bragger!*)... “and I thought, well I’ll just whip out one more...” using a really nice set of black walnut scales.



He held up the pair of liner/scales and said “this is representative of four hours of wasted time, all because I didn’t stop and think about what I was doing.” His usual practice is to solder the dovetail bolsters on to the liner, then epoxy in the scales. This time he decided to use quick-grip clamps to really get a firm bond on the scales. Weeeeeell – best laid plans – the clamp pressure caused the whole assembly to warp slightly. “At that point I should have just set ‘em down on the bench and gone in and had a Scotch.” But instead he tried to “save” them (with four hours of frustration)... and just wound up kinking the assemblies beyond repair.

“Find a routine, and stick to it!”



I believe the next person up said his name was **BEN BARRETT** who came forward with a couple of pieces – a scraper-edged tool (yet to be hafted) made from some of Ben Tendick’s circular saw steel, and a set of short tongs made from railroad spikes.





MARTIN BRANDT quipped “I figure it's about two weeks to the knife show so I'd better start working on a knife!”

He's working on a special order “which I never do” with a blade and handle made from found objects

that the client gleaned from the rural area where he grew up. The client makes turkey calls and likes to find old osage orange fence posts that have cured underwater in farm ponds. “It's very interesting to cut – it smells just like a farm pond – imagine a lot of cattle shit slurry goin' downhill into a farm pond!”

Martin started making the blade in his bush-craft pattern – but then the client requested more of a bird-n-trout style for processing turkeys. He also noted that there wasn't enough thickness in the found piece of steel for a ricasso.

Here's one of Martin's bush-craft knife blanks:



“Then I did something you should never do when you've only got one piece of steel to work with: I tried something new.”

If Martin needs to get thick scale off he usually uses a knotted-cup brush on an angle grinder – but **this** time he decided to try a vinegar soak that he keeps hearing folks talk about... but that caused pitting issues when he overlapped treatments (and let it sit in vinegar longer than intended). It was at this point that the client requested a bird-n-trout profile – which meant that Martin could grind away the pits!

I didn't get a photo of the bird-n-trout knife blade or pond cured osage orange – but here's a scrap of found wrought iron (from an old wagon?) that will become the bolster:



Martin discussed various methods for fitting a bolster onto a hidden tang. Jeweler's saw, hot punching/hot fitting, grinding a divot in the back side so you have less to mess with to get a good fit on the front...

The same client gave Martin a mystery knife to see if anyone at the show can identify it. “My initial thought was it looks like Pakistani junk, but the more I looked at it ... everything's done solid and fits together fairly well...” It has san mai style blade.



Martin also passed around one of the first knives he made – which has become a beat-up shop knife painted red so it's easier to find!



He then commented on how they show borax flux being spilled all over the floor on Forged In Fire – with contestants running back and forth “and that stuff is like ball bearings.” Plus those of us tutored by Wayne Goddard try not to waste anything. So Martin shared that he uses a large-size plastic spice shaker (like for garlic granules or Parmesan cheese) for shaking on the borax (held back from to blade so it doesn't melt) and do that over a baking pan to catch the fall-down for re-use. “No big mess in the shop.”

LYNN MOORE came to the front next. His first pass-around was an artist-blacksmith trivet made by our host David Thompson that Lynn bought at an NWBA auction.



“So I'm making some kitchen knives for the knife show. This is a copy of the one kitchen knife in my house that I seem to grab 90% of the time...” (top in the photo).

The blade is from the industrial bandsaw steel that Dennis Ellingsen got for the group. It has an ironwood handle with copper pins. In response to a question he said that he will normalize the blade two or three times, then bring it up to non-magnetic and quench in transmission fluid – then temper. When asked if he has issues with the bandsaw steel warping Lynn said that he heat treats it before grinding and doesn't have any trouble with warpage that way. “It's so thin already that it doesn't take much grinding.” Although he did mention that he had another knife of the same steel warp on him and it snapped in half while he was trying to straighten it.

There was discussion of techniques in how to manipulate the blade when heating and quenching to minimize overheating of the thin edge and tip – and avoid warpage in the quench.

On the 3rd knife in the photo, Lynn said that the handle material was something he got from Wayne.

Lynn noted that when he is grinding bevels he usually grinds perpendicular to the blade – then at hand sanding he starts with 220 grit going down the length of the blade – so that he can be sure to sand out the courser scratches from the grinder. Then perpendicular again with 440 grit then fine & final sanding lengthwise down the blade.

The 2nd blade in the photo is a present for his wife. The handle is some stabilized wood that she picked up at one of the shows.

For wood handles, Lynn usually hand sands to 600 grit, then uses Tripoli compound on a buffing wheel, then a carnauba wax finish.



The bottom paring knife in the photo is stabilized maple burl.

All the blades are the bandsaw steel. Lynn tested the one that snapped (hardened but not tempered) and it came in at 64 HRC – and the others after tempering came in at 60 HRC.

Another bare blade that Lynn passed around is from the circular saw steel.



Then Lynn shared that after his dad passed away in Florida Lynn came home with an early folding knife that he'd made after working with Bob Lum. It's a liner lock. He cleaned it up – and his wife claimed it!



He also brought back a Goddard Spyderco baby clip-it and a full sized clip-it that Wayne had initialed.





The next guy up said “I've got a lot of landscape work to do – a lot of limbs came down in the storm a couple of weeks ago. So I made myself a machete – and decided to paint it with truck bed liner and it's working – it's pretty tough. I've got 60 feet of paracord on it.”



He noted that he works at Bartel's meat packing plant out west of town. “There's a lot of Hispanic guys working out there and they asked me to make them a cleaver...” they couldn't find one they liked in the stores. Those are short, light, Japanese style – more for chopping fish and veggies than pigs and cows. So he's making one out of the circular saw steel. “This is a '20s or '30s style cleaver.”



From there we went into informal conversations.

Chris offered the use of his electric heat treat oven and quenching – including liquid nitrogen – to folks in the group. Now that's generous!



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 “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)
<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.heatreaters&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/>

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 Lightning Stencil
<http://www.erniesknives.com/>

IMG International Marking Group
<http://img-electromark.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.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 & 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
I've purchased stabilized blocks from them at the April show. They tend to be heavier, presumably more durable/stable but less wood-feel than others.
<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 – your mileage may vary.
<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>

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

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

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

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