**November Meeting**

Thursday November 7th – 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**

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**OKCA December Mini-Show** – December 7th at the Lane Events Center in Eugene (in the Wheeler pavilion). Tables go for $40. Table-holder setup 7-8am, free to the public 8am-4pm!

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**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.

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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.  

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With notes from September and October meetings:

**September Meeting**

Danita & I were off gallivanting around in September (here's us at Glacier NP) so:
Many thanks to **Mike Johnston** for taking photos and making notes at the September meeting! Here's his write-up of that get-together:

It was an overcast stormy afternoon...

Anyway, I started the circus both by introducing myself and asking that persons making “Show and Tell” presentations first introduce themselves and show their item of discussion so that everyone could see it while they spoke.

I started the show and tell by talking about my recent adventures. My wife, Jill and I took a road trip to the east coast just to drop off the earth for awhile. Our first stop of note was Smokey Mountain Knife Works at 2320 Winfield Dunn Parkway, Sevierville Tennessee. I left my pocket knife at home and it felt wrong not to have one. I bought their Rough Rider house brand pocket knife that seemed to be good quality. They had knives of nearly any brand, size and price, including some from historical makers (but no Wayne Goddard).

I had met a new knife maker friend a few months back who lives in North Carolina. We were able to spend some time together with one of his sons so I could teach them a little about my forging/knife making techniques. Both my sisters live east of Atlanta, Georgia, which I found was just over an hour from
Pop’s Knife Supply at 5450 Technology Pkwy, Suite 700 Braselton, Georgia 30517 678-889-5160 (interesting choice of phone numbers). James Poplin sold Pop’s to 4 knife makes in 2019. It worked out well for them as they have all their knife shops in the rear of the building. I spoke with each of them and they are dedicated to working with other knife makers to provide knife making supplies.

While in Atlanta, I stopped in at Atlanta Cutlery where they have both reproductions and original knives, swords and some antique firearms. I found a case of Kukri blades as well as some complete knives that had been purchased from Nepal where they had been manufactured for the military. I bought a Bhojpure kukri blade still in cosmolene. All the kukri blades had a VERY short tang. The thought was that a tang extension was welded or riveted on to make a through tang.

Brock was next to present some of his work. His recent kitchen knives are from 15N20 that is not from bandsaw blades. He said he has been having fun making handles, combining G10, Westinghouse Micarta and some “micarta” made by Greg Hansen who recently moved to Idaho. Brock said the large pieces in Hansen’s “micarta” is rope.

Brock has been experimenting with the mustard finish concept. He has combined Red Rooster Sriracha hot sauce with 40% yellow mustard. The result is almost no color to the etch but only an outline of the design applied.

The ring pattern was made with a clear plastic hair dye bottle from Sally’s Hair Supply filled with the mixture to give consistent drop size. 15 to 35 minutes etch time seems to work well. He has played with applying other designs and you just have to be careful to get a clean finished design. A blade finish of 600 grit in one direction seems to work well but leaves a dull finish. 400 grit finish and a Scotch-Brite swirl also works well. A 1500 grit finish retains almost all its shine after the design is etched. Brock has also tried etching the blade in ferric chloride, which left a dull gray finish. After rubbing the blade down with a cloth or 3/0 to 4/0 steel wool with WD40 the design came back. Brock said he was having fun with beads on some of his knives and people have been giving him good comments on them.
Marty Brant presented a barrel knife made in Sweden that he found at a garage sale. He said they are a folding puukko and are quite common. The blades are often 62-64 HRc and have no secondary sharpening bevel. This is why many of the older puukkos have chips in the blades. Marty believed this knife was from the late 1800’s to early 1900’s. The mechanism that locked the closed blade into the handle was both simple and effective.

Erik Land brought in some curved, interlocking Warehouser silica carbide fire bricks that he had salvaged. He wanted his pickup empty before he left so he would not have to throw them away. He had no idea what the heat rating was on them. Dave figured out that 9 bricks made a full cylinder. Erick did not have to take any home at the end of the night. Erick brought in two early Ted Dowell knives to show. Dowell was friends with Erik’s father and the larger of the two was Erick’s first knife from his dad. Erick said these two knives were some of Dowell’s first knives.

His next presentation was a “Father/Son” set made of CPM154 and Vegas Damascus with orange handles. Since the knives were for hunting, they wanted Kydex sheaths. Erick decided he didn’t like the way the commercial tube rivet setter finished the rivets, and since he has the machines, he made his own. The statement was something like, why buy the expensive commercial one when I can spend twice as much making one.

Brome wondered if anyone in the group sharpened clipper blades, which no one present did. In looking at the commercial sharpening, Brome said the job was pretty course. He worked the blade down finer and finer till they were sharp. The comments for sharpening were to use a glass plate or flat cast iron with loose powder abrasive or carbide.
paper to work the clipper surface. Brome showed a tandem Kydex sheath that he made for someone to carry the knives in their back pocket (Brome did not make the knives).

He found a pair of old hand forged hoof nippers that were in nice condition and showed a small hatchet cover.

Brome also showed his idea for a handle sleeve for axes to keep the handle from getting damaged. He wondered if anyone had other ideas to protect the ax handle. The most common answer was to be more accurate using your ax. Someone wondered about using carbon fiber on the handle, but most thought it would probably shatter. (I still miss occasionally with my forging hammer, so missing with an ax is not that uncommon for me).

Brome asked if anyone had any information on 1935 John Deere tractors. He has his father’s tractor and has it running, but still has to use starter fluid to get it to start. Mike’s brother-in-law has old tractors and loves to work on them. In a later conversation, Mike learned some of the 1935 tractors used kerosene and not gas. Second, compression is often the issue while starting. Put a little oil in the cylinders, replace the plugs and try starting. If not, it could be the valve guides leaking....

Dave brought up a draw knife that Issah (a student?) had forged in a coal forged just before the meeting. The question was posed as to what was the next step and how to do it. Marty said he would normalize the whole draw knife three times to reduce the grain size in the steel. He would then use a torch to heat the edge to just past non-magnetic and quench in oil. This way only the edge would be hardened and not effect that handles. Also with a torch, slowly heat the spine. Watch the color oxide move from toward the edge. Quench the blade when the color on the edge changes from tan to purple (55-58 HRc). One comment was made about the cold shuts at the junction between the handles and the blade. Rather than only forge the handles (tangs) longer, they need to be forged thinner at the same time. (I use my cross peen to both draw and thin with alternate blows during each heat. After the tang(s) are to shape I clean them up with a light flat hammer. I have never made a draw knife, but the technique is the same as a straight razor with in extra tang.)

Dave showed a Fiskars hatchet he had recently acquired. He liked it because it is a handy size and is light because of the hollow plastic handle. Some of this style hatchets came with a knife that fit into the
handle. I have a Gerber/Fiskars that I carry hunting for its light weight.

Tyler said he had contacted Coyote Steel about stocking 15N20 for thin knives. Marty said he had a good supply and no one else seemed interested. I told Tyler that Oregon Auto Spring had a pallet of thinner 1095 at their location that had been stocked for shaker blades, but the job ended. I bought some from them to try it, but hadn’t got to it yet. As of April 2019, Oregon Auto Spring Services has moved to 18650 SW Pacific Hwy. Tualatin Oregon 97062 503 234-9611.

Doug Asay said he had two post vices for sale. From looking at Dave’s, Doug was sure that they are 4” and 5” vices. He did say the large vice needs a spring (I just replaced one on a 4” vice, forging a small trailer leaf spring both thinner and tapered in about 2 hours and it worked fine). Doug said he wanted $100 for the pair.

After the meeting “officially” broke up, most members went outside to help Erik get rid of his fire bricks. Jim gave a demonstration of his engraving to Doug and another member using his new compressor. He gave Doug the chance to try his hand at what Jim makes look easy. Yeh, not so much. Practice makes perfect and perfect practice makes...

*Your regular scribe: And somewhere along Mike’s meeting notes and photos I wound up with the following photos that I could not place:*

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**October Meeting**

Roger started out the meeting with a small stainless steel knife “like a neck knife” that he made with a layered Micarta handle. “It's surprisingly handy... I'd thought it'd be kind of useless, but it's sharp and it fits in your pocket!”

The home-made “micarta” handle is 12 layers of a denim material all aligned to give a solid block effect to the fabric pattern.

His second pass-around had a Damascus blade he bought on-line – but he decided “I didn't like anything about the blade” so he re-profiled it to reduce the belly, “moved the choil back” to add 1/4” to 3/8” to the
blade, and changed the back to make a thumb rest. “I took a blade I didn't like and turned into something I wear every day now.”

Mike Johnston came forward next, noting that he'd finished the Scagel-esque knife that he'd shown in a past meeting – with heat-blued guard. The blade is from a trailer leaf spring. The handle is dyed Micarta and left hand deer crown with steel spacers.

Next he noted that he had an order for three boning knives. They are made from bandsaw blade heat treated to about 55 HRc which is a little less hard than he usually does. They are convex ground.

The Micarta handles are drilled out to match the holes in the tangs. Mike noted that he'd numbered the blades and marked the scales accordingly to make sure the right scales went with the right tangs! The steel and Micarta are from material that Dennis Ellingsen donated to the club.

The commission is a family affair: Mike had made one of these for the father. One of that customer's sons is a guide in Alaska – and got to use his dad's knife – loved it and wanted one like it – so dad said “I'll do three!”

Mike hand-forged the next pass-around out of pickup coil spring. The handle is ziricote with brass guard and Sally Martin mosaic pin.

Then Mike pulled a tub of “Museum Gel” aka “Quake Gum” which is used in earthquake prone areas on the bottom of your shelf sitters to – well – keep them sitting on the shelf during minor shakes. Mike uses a ball of this stuff to prop a knife up at the angle he wants (to avoid reflections etc.) when he's taking photos.

It's a little sticky and does not leave any residue – and can be returned back to the tub after use. The only problem is that if it gets warm the ball of this goop will start to sag.

And after getting his commissions finished, Mike took some time to “play” with his home-built power hammer. From a 1”x16” piece of 1050 round stock he hammered out a gladius.
The hollow “grinds” are forged in using rounded forming dies in the power hammer. It took him only about 45 minutes from stock to forged. He cleaned it up a little with a 3” wheel but needs to make himself a bigger wheel to do the job right.

There was some discussion about the contact wheel material for a larger wheel. Mike is thinking of trying horse stall mat – cutting multiple disks and stacking them up into a wheel.

Mike took a family trip to the South and East a few weeks back. One of his stops was at Smoky Mountain Knife Works in Sevierville Tennessee (https://www.smkw.com/) where he picked up a Rough Rider pocket knife because he'd left his pocket knife at home and missed having one. For $12.95 Mike declares it a nice little knife that holds an edge.

In contrast, he picked up an Old Timer at Bi-Mart that he was very disappointed in – poor grinds on the blades, and it does not hold an edge.

As for Smoky Mountain Knife Works: “Boy if you ever get down there – think of a Cabela's but put three of’em on top of each other and it’s almost all knives... I got lost in it dramatically.”

**BROCK** was up next. He relayed that he'd had a commission that drove him batty: two sets of chef/paring knives. Apparently it was one of those “great ideas” about how to do the scales that had him pulling his hair out. “It looked cool – I want to make it simple – but it caused me nightmares.”

But it all got done and he brought in a chef knife he finished recently in 15N20 finished to 000 steel wool with G10 handle.

In answer to a question Brock said that he can get up to 62 HRc on the 15N20 that he purchases - “I took it up over 62 and it was all kinds of brittle.” He gets more in the 58-59 HRc when using bandsaw steel – at which point it's really tough and flexible “I dare you to break it.” And in the upper 50's HRc it may dull faster but it's very easy to sharpen back up.

Next he passed around a “shenanigans” knife in a style he calls Loki – as it's just good for opening a box or, well, shenanigans. The blade is AEB-L hardened/tempered to 60-61 HRc. “At 63 it gets problematic but at 60-61 it can take a pretty good pounding, and holds an edge better than I anticipated.” Satin finish on the bevels, stone wash on the ricasso & flat. Black “micarta” scales with G10 liners.

There was a spirited discussion about sharpening various steels, and stories about knives that have been brought to us to be sharpened.

**ISSAH** came to the front with a railroad spike knife he'd just made. I presume he was working with a coal forge as he admitted that he'd burned the tip a little. That's something I think everybody does when they are getting used to using a coal forge.
RR spike knives are a good fun way to get into forging knives. The steel is generally low carbon, making hardening difficult but not impossible. And they just ooze character!

Public Service Announcement: Mike told us that Ray Richard is throwing in the towel on forging after damaging his hand on a table saw – so he has a 170lb Trenton anvil up for sale. He'd like $500 for it. “It's got a nice clean face – he's used it for decades and decades – but you've got to load it because he can’t.”

He's selling pretty much his whole knife shop, including a long Evenheat oven.

There was some discussion about liquid nitrogen availability in the area.

Oregon Grinder changed their name to Origin Blade Maker due to somebody threatening to sue them over their name (go figure).

We broke up into individual discussions and drifted off into the night...

As of the writing of this newsletter the NWBA Swaptopferfest is done and Blade Show West is happening in Portland.

Have fun, keep well, and work safe -
Your Scribe ~ Michael Kemp

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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 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:

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


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

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

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

Travis Wuertz [Arizona] – premium versatile grinder  

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

https://originblademaker.com  

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  

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  

Mathewson Metals – forges, burners, anvils...  
Tacoma Washington  
https://mathewsonmetals.com  

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

Auber – more thermocouples and controllers, etc.
Alpharetta, Georgia
http://www.auerins.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:
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.petersheattreat.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**


Bamboo Oasis – wide variety of bamboo – Beaverton, OR phone 503-703-1345  https://bamboooasis.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://treeproducts hardwood.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**


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/
Swift & McCormick Metal Processors Inc.
3192 NE Sedgwick
Terrebonne, Oregon
541 548 4448
Everything from big chunks of steel to railroad spikes. Very good prices. They can torch-cut big pieces down for a small fee.

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.