

EUGENE 5160 CLUB ~ NOVEMBER 2015

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

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



NOVEMBER MEETING

November 5th – 6:00pm at David Thompson's shop. If you didn't get the directions in the meeting notice, email me for them: michael@elementalforge.com.

Bring your share-and-tell! I'll be bringing results from my stab at stock-removal stainless knives & sub-zero quench and I'll also bring the very first knife I made (call it “the good, the bad, and the ugly”).

Note from the Thompsons:

“Please **drive very slowly** down our lane. The maintenance is all ours. Thanks.”

A note about Wayne Goddard:

As many of you know, Wayne has been dealing with Parkinson's disease for quite a few years. With the help of his son Steve he was able to stay in his home until recently. He is now at “Quail Park” memory care residences – which is tucked behind the Santa Clara Square shopping center in Eugene. Wayne has been in good spirits when I've dropped in to visit. Your thoughts and prayers on his behalf are most welcome.



NOTES AND REMINDERS

The **OKCA** is taking table applications for the December show – and membership renewals & April show reservations. Details in the September newsletter: <http://www.oregonknifecub.org/Newsletter%201509a.pdf>

Mini Show: December 5th

The Big Show: April 8th (members) 9th-10th (public)

Northwest Blacksmith Association – the following are at the Cowlitz Expo Center – Longview, WA:
November 21st – Mentoring/Demo/Open Forge
December 12th – Power Hammer Certification
May 13th to 15th – NWBA Blacksmith Conference see <http://blacksmith.org/> for details.
Then at Government Camp (Mt. Hood):
November 14th and 15th – Forging Animal Heads
August 18th to 21st – Blacksmith Week see <http://www.cascadiaart.org/> for Government Camp activities.

The **North West Knife Collectors** and Washington Arms Collectors will have a joint **show in Puyallup, WA** March 19-20 2016. They estimate attendance at over 8,000 according to this table application: http://elementalforge.com/5160Club/Misc/NWKC_WAC_Puyallup2016.pdf Mike Johnston forwarded the application but I could not find a copy on-line – so I've posted the copy (above) to my website.

Axe forging in February in Oakland, CA – among other classes: James Austin was the host of an outstanding gathering I attended a couple of years back. I'll add his offerings to the “Classes for Knife Making, Etc.” links at the end of the newsletter. http://forgedaxes.com/?page_id=148

Mike Johnston recommended **North Woods** as a source of **figured wood**. I'm adding them to the new “Wood Suppliers” section of the links at the end of the newsletter: <http://www.nwfiguredwoods.com/>



OCTOBER MEETING NOTES



I gavelled the meeting to order with this tiny hammer provided by **JIM JORDAN**. Given my recent brush past the grim reaper, we've set up that I'll keep Jim and Mike Johnston

updated on the current 5160 Club email list. Since we aren't an official entity (no officers, no money, no bylaws, etc.) - the email list is about as much organization as we've got!



MARTIN BRANDT was up first up. He shared a puukko (aka scandi aka Sami knife) knife with a birch bark handle. "It's an oldie" but Martin has not been able to find any references to the maker's name that is etched in the blade.

Martin noted that birch bark "lasts forever" and was used between rock foundation and cabin logs the way tar-paper is used. The cross section of this particular knife is rhombic – tapered toward the spine – which was one of the traditional grinds.



As with most scandi knives, the primary bevel of the knife goes all the way to the edge. The knife is sharpened by laying the entire face of the blade on the sharpening stone, so that the main bevel continues to the edge with no secondary grind.

MIKE JOHNSTON

was up next. He'd been to the North West Knife Collectors' show in Kelso. They'd had an "issue" where someone in the club disappeared along with their advertising materials "we had 74 people on Saturday and about 45 on Sunday." Mike sold 4 knives. "I was very happy... everybody going in wanted to buy knives."



Last month Mike had brought in a full tang knife and asked for feedback on putting the guard on it. "The consensus was that after you drilled the holes in the tang, it's hard to match up the holes in the guard." *This is a combination guard/bolster.*

Mike described aligning the knife and guard in the drill press for the holes. He cut a slot vertically in the brass to form a U shape to slide up onto the tang. He put in two pins and silver soldered the guard. The top of the guard sat 1/8" proud of the spine so that he could work it down flush. The wood is Maple burl – non-stabilized.



Mike shared “my concept of a seax – except it's not really a seax because it has a ricasso... a saex doesn't have any sort of ricasso or any choil.” *Beautiful work – I love the details!*



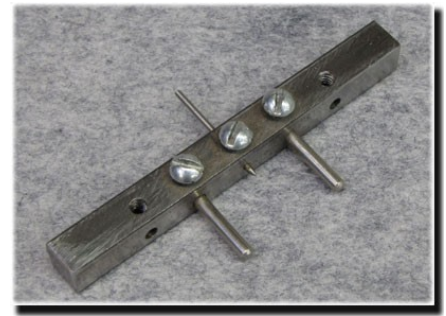
The seax was the utility and fighting knife of early Northern Europe – “seax” or “sax” comes from the Proto-Indo-European word “sek” – to cut – also the root of the word “Saxon”. I met a couple of folks who make seaxes at a workshop in Oakland, CA a few years back: Petr Floriánek of the Czech Republic: <http://www.gullinbursti.cz/index.php?lang=en&page=swords> and Owen Bush of the U.K.: <http://owenbush.co.uk/seaxes/>

Mike passed out copies of the CAD drawings that Jess Horn had provided the group with back in October 2011. These were his “class notes” on his method of folder design. Jess Horn shared these so that anyone who wanted to could make knives from his design. Some of this is also available at: <http://www.elementalforge.com/5160Club/20111028JessHornHandout.pdf>

Mike also shared one of his favorite sanding blocks. It's a piece of mild steel with a piece of leather on one side. One end is radiused, the other is beveled for getting into corners. The plain steel side is good for things like hitting the high tops of etched Damascus – the leather is good for a softer surface.



Here's Mike's center-scribe. The scribe itself is carbide rod sharpened to a point. You can move the indexing rods to the outer holes for wider pieces. Just angle the bar until the rods touch both sides of the piece and the carbide scribe will be centered. *This is similar to a center-scribe that Cliff Christian shared at an earlier meeting – it must be a useful design!*



And here's Mike's edge scribe.

In response to a question Mike said that he usually does not use a scribe to guide the grinding of the main blade bevel – but had one project where he wanted a center-scribe – so he built one.



Martin Brandt and Mike both talked about grinding a point on the end of a file to use that as a scribe. Lay the file on a flat surface – as well as the blade to be scribed – and move the blade against the file to scribe a line down the blade. Using layout fluid or sharpie on the metal to be scribed helps! Also, Mike noted a trick Wayne Goddard taught – make a scribe out of a triangular file, grinding 3 separate angles (or 3 amounts) from the 3 sides so that you can choose 3 different heights by laying the file on one of the 3 sides when scribing.

Next Mike shared a knife shipping tip: Get some leftover carpet tubing from Lowe's or Home Depot. A circle cutter set to the size of the tubing will leave a plug that has a bevel to it. Make two plugs. Staple a plug into one end of the tube. Put your knife in the tube – packed in bubble wrap or whatever – put the other plug in the other end and use a couple of drywall screws to secure the 2nd plug. Wrap the tube in brown paper and ship it off! “Dirt cheap because they throw carpet tubing away ... I





shipped a 16” long tube for the same rate as a flat rate priority box - \$5.95 ... the circle cutter costs \$4.95 at Harbor Freight and adjusts from 5” down to 1” - the problem is, if you don't tighten the cutter blades down real tight they'll go ZING – off across the shop.”

“Last but not least – this one's done!” Mike said as he unpacked his beautiful “Big Sister.” The sheath has a copper throat and end cap – and is wood core with black calf skin. It has a removable “frog”. The blade is a 15” clay hardened blade from harrow tooth.

“People keep asking me 'so what is that for?' and I say 'for killing people' and they just go absolutely berserk. I tell them it goes back to the early 1800's when you had a single shot pistol and a big knife.”



EVAN BOWEN got up next “I'm a total rookie” he said. “Last Summer my best buddy called me up and said there's some crazy dude down in Coos Bay making katanas out of logging cable.” *I think we knew where this was going ... check out the link for Dragonfly Forge in the “Classes for Knife Making, Etc.” at the end of the newsletter.*

“I took his week long basic forging class. This is a collaborative work.” Evan said as he unwrapped his blade. “They've got a great system where they tell you what they're going to do, they show you what they're going to do, they do it with you, then they fix your screw-ups! This is just from the first course – there's another one week course to finish it off and make the handle.”



Mike got an ovation from everyone for this one!

Evan and his buddies loved the course. “I caught the bug. So I got a piece of O1...” With a hacksaw, a file, and an old drill – Evan has very nice O1 (tool steel) hunter in progress.



Evan heat treated the hunter “and now the file won't work on it!” So he's looking at hand work to finish the geometry. Jove Lachman-Curl suggested using a 2x72 belt wrapped around a piece of 1x2 – as a better “paper” than generally available – until you can buy or make a belt grinder. Jove noted that



he built a variable speed grinder based on a treadmill motor/controller.

Martin Brandt noted that before putting on handle material it's a good idea to test the edge to make sure it is not too brittle (or too soft). This can be done using a piece of 1/4" brass rod (like brazing rod) set into a wooden block or held in a vice. Martin recommended setting a lamp to have good lighting on the secondary (edge) bevel. Run the edge over the brass rod "using 20 or 30 pounds of pressure, on a knife with a thin edge – not a big chopper – you'll see a little hump [where the edge deforms over the brass rod] and if the edge micro-chips then it's too hard. Try going 25° hotter [on the next tempering round] and try it again... so you've got flexible strength there where you can cut into a bone or a knot and it's not going to chip out on you. If the edge bends then you're too soft." Martin mentioned that this is a technique taught by Wayne Goddard – you can find it in his books.

*I can't resist noting that **JIM JORDAN** was referred to in our local paper as the "design genius" at Eugene start-up Arcimoto (<https://www.arcimoto.com/>) ... but moving right along...*



Jim started with a refresher on using images printed with old laser toner printers as transfer patterns onto other surfaces. Tape the pattern face down on metal, wood, etc. Then use a cloth with a small amount of acetone (or other

solvent) to moisten the paper – not a whole lot – "almost dry". Let it dry, then peel the paper off ... the toner should be transferred to the other surface.



Jim is using this in learning to do inlay on blades and hatchet heads – and carving on knife handles.

Here are examples of Jim's tests. The bottom block is brass – the other two are wood:



Jim shared some of the tools he has made for this work. The hammer has a lilac handle and scrap metal head that he turned up on his lathe. He made one chisel from a broken thread tap. Jim collected worn out impact bits from his former job at Country Coach – shaped them into chisels – re-hardened them – and added handles of brass or wood:



Jim likes picking up techniques from other arts and crafts and putting them to use in new ways.

Jim mentioned other “papers” that can be run through a laser printer that have a transfer layer that can be ironed onto the blade surface for an etch mask. These are photo-sensitive in that you expose the transferred layer to light, then rinse it – which removes the areas to be etched. Mike Johnston added that there is transfer paper that can be used in ink jet printers that is ironed on to transfer the ink.

Jove relayed how getting that last scratch out leads to thin blades – and several of us compared notes on how thick we like to leave blades going into heat treat. A thinner blade is more likely to warp in the quench. A thicker blade edge leaves more work in grinding hardened steel down to the final edge. Some folks grind to 0.030” at 1/4” from the edge. That is the thickness of a credit card. Other folks use 1/16” (0.0625”) at the edge. The consensus of those present was to leave the edge from the thickness of a dime to the thickness of a quarter going into heat treat.

The new folks were introduced. Stories were swapped about getting started in knife making.

There was a box of handle material for give-away.

Jigs, tricks, and techniques were shared for grinding curved profiles and bevels.

Martin explained that the splice on the belt can cause “belt bump” every time it comes around – and can leave a deeper set of scratches in the blade. Martin uses a piece of broken grinding wheel against the running belt to take the top off the splice bump.

Another tip was to use an angle grinder (with a sanding disk or a twisted-wire cup) to take off forge scale between forging and grinding.

There was discussion about setting up grinder and lighting so that you have better visual feedback while grinding. LED lighting was highly touted.

Mike talked about an LED work light with fold-out wings that was a huge help while he was stitching the sheath for Big Sister – black thread on black leather.

We discussed the relationship between hardness, edge geometry, slicing versus chopping, and how to ruin a great knife by using it for the wrong job.

In response to a question from Jove, Mike said that his hamon etching process is to:

- take the finish down to 2000 grit
- use 3:1 water to ferric chloride
- 1st etch for 45 seconds then rub off with steel wool
- neutralize and repeat the etch three times
- then heat vinegar in the microwave:
- wet a towel with vinegar and wipe the blade
- this brings out a different portion of the hamon
- use Flitz polishing paste above the hamon

Jove noted that there is a salvage lot North of Eugene that has cheap firebrick up to 12”x24” (not high enough temp for forge liner but good for fireproofing a bench or floor) plus industrial equipment, motors, bearings, spring steel, foundry pants, blocks of carbon. *I believe this is “Industrial Scarp Co.” just South of where Beacon Drive dead ends into Prairie Road – (541) 501-5969 – but don't hold me to it.*



Update to my personal note in the last newsletter: My ticker is back to “fully normal heart function”. The “non-kinetic” areas of heart wall and mitral valve were stunned – not permanently damaged. I’m on a fistful of drugs – but hey! I’m walkin’ and talkin’!

Keep Well! (the alternative sucks)

~ ~ ~ Michael Kemp



FREE DE-CLASSIFIEDS (IN NO PARTICULAR ORDER)

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. It's free – email me at Michael@ElementalForge.com

Lynn Moore - 39326 Little Fall Creek Rd, Fall Creek, 97438 - 541-554-5294

Lynn is offering a Bridgeport mill – asking \$2,500.00

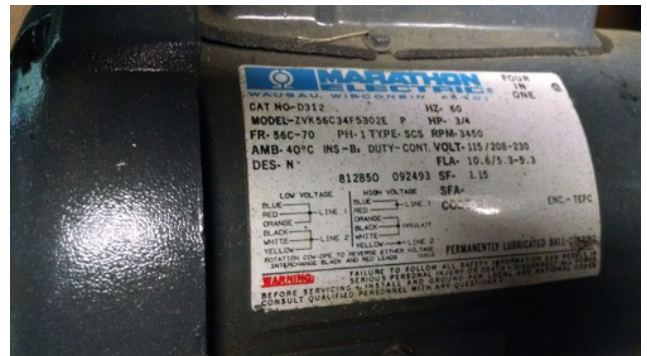


and a metal lathe, it was made by South Bend, but has a Power Kraft, Montgomery Wards label on it – asking \$1,000.00



Mike Todd - Cell: 541-968-1971 - In Eugene:

I am selling my home made forge, knife grinder and chop saw - all work very well it's just time to upgrade. I am asking \$ 400.00 for all three items . It would be a great deal for someone just starting out in the knife making world. The forge has a blower motor and a foot switch for forced air from the bottom. See photos...



Eric Bergland is selling:

- 6X36 belt/disc grinder \$40
- 10' DRILLPRESS (never used, just assembled) \$70
- Antique coal forge \$50
- Antique pedal grinder \$30.

Blue River – 541 912-4906



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

<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 – one of our regulars – has a number of Facebook groups designed to help knifemakers and collectors – search Facebook for:

- 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

Many of the sites linked under “Knife Maker General” have book & video sections as well.

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

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

And you can email Wayne directly for his DVD at wgoddard44@comcast.net

Verhoeven's Metallurgy For Bladesmiths PDF

<http://www.feine-klingen.de/PDFs/verhoeven.pdf>

Verhoeven's updated book:

<http://www.amazon.com/Steel-Metallurgy-Non-Metallurgist-J-Verhoeven/dp/0871708582>

ZKnives – Knife steel composition/comparison/etc.
<http://zknives.com/knives/steels>

Kevin Cashen's Bladesmithing Info
<http://www.cashenblades.com/info.html>

Tempil Basic Guide to Ferrous Metallurgy
http://www.tempil.com/wp-content/plugins/download-monitor/download.php?id=Basic_Guide_to_Ferrous_2010.pdf

My “Knife Info” has some knife musings and cheat sheet charts – plus Oregon and Eugene knife laws:
http://elementalforge.com/tips_notes/

CLASSES FOR KNIFE MAKING, ETC.

Gene Martin offers personal instruction at his shop south of Grants Pass for a daily rate.
<http://www.customknife.com/>

Michael and Gabriel Bell of Dragonfly Forge offer a constant 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.
<http://www.cartercutlery.com/bladesmithing-courses/>

David Lisch is a 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>

Speaking of the ABS (American Bladesmith Society) – if you are up for traveling across the country to take classes, check out their “Schools” link:
<http://www.americanbladesmith.com/>

James Austin offers forging classes in Oakland, CA – axes, tongs, viking anvil, etc.:
http://forgedaxes.com/?page_id=148

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

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.pmtsc.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

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

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

Coote [Port Ludlow, Washington] – affordable,
simple grinder – you supply the motor
<http://www.cootebeltgrinder.com>

Marinus Kuyl [Hillsboro, Oregon] – another
affordable grinder made in Oregon – and parts – you
provide the motor.
<http://oregonblademaker.com>

Grinder-In-A-Box – grinder kit, assembly required
http://www.polarbearforge.com/grinder_kit.html

Wayne Coe [Tennessee] – grinders, motors, VFDs...
<http://www.waynecoeartistblacksmith.com>

Contact Rubber Corp – wheels etc.
<http://contactrubber.com/contact-wheels.asp>

Sunray – drive wheels
<http://www.sunray-inc.com/drive-wheels/>

Quick and Dirty Tool Co. [Auburn, Washington] -
will build Spencer/Clontz style tire hammers
<https://www.facebook.com/QDTool>

Renaissance Metal Art [Mulino, Oregon] – 80# ram
air hammer
<http://www.rmetalart.com/tools.htm>

Anyang [Texas] – air hammers from 20# to 165#
<http://www.anyangusa.net/>

Meyer Machine Tool [Ohio] – treadle hammer
<http://www.meyermachinetool.com/Blacksmith-div-.html>

Spencer/Clontz tire hammer plans/workshops
http://www.alaforge.org/Trading_Post.html

Appalachian Power Hammer plans
<http://www.appaltnet.net/rusty/index.htm>

FORGE & REFRACTORY

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

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

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

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

Omega – thermocouples & measuring equipment
<http://www.omega.com/>

Auber – more thermocouples and controllers, etc.
<http://www.auberins.com>

Hybridburners – home of the venturi T-Rex
<http://www.hybridburners.com/>

Pine Ridge Burners – for ribbon burners and all associated fittings, blowers, valves, etc.
<http://www.pineridgeburner.com>

Zoeller Forge – low cost venturi & parts: Z Burners
<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.
<https://www.facebook.com/QDTool>

LOGO/ETCHING

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

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

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

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 – misc., 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/>

There's a new set of epoxies made specifically for bladesmiths, created by a man with a decade of experience in making fishing rod adhesives.

<http://www.bladebond.com/Products.html>

If you try some of this stuff, I'd love to know which product you tried and how you liked it!

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.