Hammer-in Saturday
July 20th
(No Regular July Meeting)

If you have a portable forge and anvil – bring em – if not, come anyway and share in the fun!

Newbies welcome – if you ask nice and behave yourself you can get some hands-on time and tutoring from accomplished bladesmiths. Seriously.

We will start setting up forges around 9:00am (please do not arrive before then) – and go until we get too hot or David kicks us out!

We're meeting at David Thompson's shop: 4440 Theona Drive, Eugene, OR. This is behind the Jerry's store on Hwy 99.

Take the road on the North side of Jerry's parking lot (Theona Drive) go West a couple of blocks worth – continue straight onto the gravel road when the pavement turns left – but veer left at the T in the gravel road – continue past the orchard and farmhouse to park at David's shop.

Bring your own lunch and refreshments.

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

Have a great & Safe 4th of July!!

It never hurts to revisit our Constitution. Here it is – with amendments, the first 10 of which we fondly call the Bill of Rights: http://constitutionus.com/
**Notes and Reminders**

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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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**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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**June Meeting**

**Mike Johnston** started the meeting, saying that he's “finally gotten back out in the shop – haven't got anything finished lately...” and passing around a blade-in-process that will be a Scagel style knife. This is the blade he made in his “90 minute knife” video – re-ground and re-profiled. “Once you get it to the color you want, quench it in oil and that sets the color.”

Responding to questions on the bolster, Mike noted that it is mild steel – and that there was nothing applied to it other than heat. “I did find out that you've got to heat up mild steel a lot hotter than high carbon steel to get the same coloring.” Quenched in canola oil. This treatment might not stand up to hard use, but it's the color that he and the customer wanted.

The other blade-in-process that he passed around was Damascus from a log yarding high lead cable a little over an inch in diameter. “Because it's such larger wires it gives you a bolder pattern.” One of the folks present offered that high lead cable is about 1095 as far as carbon content. “This is hopefully the last piece I make by hand!”

See last month's newsletter for notes on Mike's home-built helve hammer.

**Steve Goddard** got up next and passed around a bolo based on an old pattern from a company called Northwest Safari. 5160 steel blade that quenched to 65 HRc – tempered back for 2 hours around 400°f to around 60 HRc. Then Steve passed around a series of EDC knives. If I understood right these are all 8670. For the first one he based the blade on a pattern he liked from on-line. The handle is beech that he stabilized and finished with extra thin super glue.

*That's rafters and yours truly reflected in the blade.*

Mike's been playing with heat-bluing. He's come to using a toaster oven to get the steel up to “a nice brown” then worked on the thick portions with a low torch flame, working the heat out to get a beautiful dark blue.
Steve finds the finish sanding of a super glue (CA glue) coating to be a bit touchy – sometimes requiring a repeat application.

“These are some patterns that are different than my father's...” he said – noting that when he sees a pattern that he likes on-line he will tweak it to fit his own preferences.

... and he finished up with a couple of neck knives with purple heart handles. Steve likes the color of purple heart – and with the super glue finish it shows off the wood well.

Steve confided in us that he'd purchased a couple of the Oregon Blademaker grinders – plus the surface grinder attachment (see the Knifemaker Equipment section in the links at the end of the newsletter).

THELMA came to the front. “I've never been to anything like this...” noting that she's really into knives – doesn't know how to forge (yet) – but has been making knives from blade blanks and building handles and sheaths from scratch.

She passed around a neck knife made from a Jack White blade with zebrawood handle.
Then Thelma shared her “big knife... I've never had a knife this big so I had fun figuring out what I could do with it!” The blade and stabilized burl wood scales were bought on-line. The scales were a little thinner than she wanted so she added Micarta liners.

She re-profiled the handle to fit her smaller hands. Thelma also tooled and died the sheath.

Thelma was encouraged to come to the hammer-in – and sounded like she would if commitments allowed.

After Thelma sat down someone off-camera was talking about a friend named Adam who had forged a billet at Bear Iron in Cottage Grove and was entering a contest for making a narrow saex. For the billet he used chain mail that he had previously made and did a canister with the chain mail... which he's calling Adamascus!

Next up, the first pass-around was a san mai blade with desert ironwood handle.

I gathered that the steel for the three blades was AEB-L and automotive coil springs.

Our next presenter was back “after taking a couple of months off after discovering carpal tunnel from hand sanding.” He passed around this work-in-process... as well as a sanding tool he came up with that works better for the carpal tunnel issue *(I didn't get a photo of that).*

Good sturdy camp knives one and all.
“I've got a 'project knife' that I got at the knife show about 15 years ago... it was really rough – just like a block when I got it – and I've used a file, and a lot of patience...” He noted that it was “a piece of Arkansas Damascus” - and that he didn't have a tool to put a good bevel on it (that would be a grinder or a lot of draw-filing) or a way to heat treat it.

He was encouraged to come to the hammer-in and get it hardened (but he'd better get any holes and bevels that he wants done before that!).

Mike Johnston threw out a question about how to set up a hands-free control for an air-over hydraulic press that he'll be building. The winning thought was to set up the switch on the side of the press base, and put a hinged flap of wood over the switch so you can operate it with your knee. That way your hands are free and there's no foot switch to trip over.

David Thompson had brochures from his friend in Montana, Glen Gilmore, for his hydraulic forging presses. He makes a 25 and a 50 ton press. Here's the website: http://gilmorepresses.com/

Have fun and work safe -

Your Scribe ~ Michael Kemp

There we had a lot of informal discussion. Steve Goddard talked about visiting Ed Fowler while he was in Wyoming. “That was a kick of a day!” Steve came back with some sheep horn. “He doesn't raise sheep any more [for meat, wool, sheepskin?] so the sheep that are left are there for their horns. So when the animal dies they push it over in a pile … it takes a year for the horns to fall off and then they let it dry for seven years...” [at this point I'm wondering where the jackalopes and porcupine eggs come in]... “The special thing was: he got in the safe and pulled out the biggest camp knife I've seen that my dad made – and a Bowie. That was probably 30 years ago – when my dad got Ed to change over to 52100 – and Ed's been pounding on 52100 ever since.”

Steve also noted that the Drapers (outstanding knife and jewelry makers in Wyoming) teach a class every month at $550 for a 4 or 5 day class if you stay in the bunkhouse or another $100 for a room in the house. “They feed you, and you come out with a Damascus knife. They take June off for Blade Show – and July and August are full...” Steve plans to take their October class, so contact him if you might want to join in. “After October the class is going to go up $200.” Either way that sounds like a good deal for a 4 day Damascus class in Wyoming with room and board! Scroll to the bottom of the page for class info: http://draperknives.info/

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

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

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

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**GENERAL TOOLS & SUPPLIES**

Zoro
https://www.zoro.com/

MSC Direct
http://www.mscdirect.com/

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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.

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**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 Knifemakers Supply – Houston, TX 
http://www.texasknife.com

USA Knife Maker's Supply – Mankato, MN 
http://www.usaknifemakers.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

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  

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

https://www.youtube.com/watch?v=uzruqYkKGNM

True Grit – under “All Products”/“Machines & Accessories”  
http://www.trugrit.com
# Forge & Refractory

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<th>Business</th>
<th>Location</th>
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<tr>
<td>Chile Forge</td>
<td>San Marcos, Texas</td>
<td><a href="http://www.chileforge.com/">http://www.chileforge.com/</a></td>
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<td>Western Industrial Ceramics Inc.</td>
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<td><a href="http://www.wicinc.com/">http://www.wicinc.com/</a></td>
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<tr>
<td>High Temp Tools (scroll down the page for</td>
<td>Tuscaloosa, Alabama</td>
<td><a href="http://www.hightemptools.com/supplies-">http://www.hightemptools.com/supplies-</a></td>
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<tr>
<td>High Temp Inc. for Kaowool, castable</td>
<td>Portland, Oregon</td>
<td><a href="http://hightempinc.net/">http://hightempinc.net/</a></td>
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<td>refractory, fire brick up to 2,600°F, etc.</td>
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<td>Auber – more thermocouples and controllers,</td>
<td>Alpharetta, Georgia</td>
<td><a href="http://www.auberins.com">http://www.auberins.com</a></td>
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<td>etc.</td>
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<td>Hybridburners – home of the venturi T-Rex</td>
<td>Smithville, Georgia</td>
<td><a href="http://www.hybridburners.com/">http://www.hybridburners.com/</a></td>
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<tr>
<td>Pine Ridge Burners – for ribbon burners and</td>
<td>Conway, Massachusetts</td>
<td><a href="https://www.pineridgeburner.com">https://www.pineridgeburner.com</a></td>
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<td>all associated fittings, blowers, valves, etc.</td>
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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/](http://blacksmith.org/2005-1-hot-iron-news/)

You can download the PDF from that site. John's article starts on page 11.

# Blacksmith

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<tr>
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<tr>
<td>Farrier Supplies aka Bent River Forge</td>
<td>26729 99W, Monroe, Oregon</td>
<td><a href="https://www.facebook.com/FarrierSuppliesOR">https://www.facebook.com/FarrierSuppliesOR</a></td>
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<td>Blacksmith Depot</td>
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<td><a href="http://www.blacksmithsdepot.com">http://www.blacksmithsdepot.com</a></td>
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<td>Pieh Tool</td>
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<td><a href="http://www.piehtoolco.com">http://www.piehtoolco.com</a></td>
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<td>Centaur Forge</td>
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<td><a href="http://www.centaurforge.com">http://www.centaurforge.com</a></td>
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<tr>
<td>Quick and Dirty Tool Co.</td>
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# Logo/Etching/Stamps

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<td>Ernie Grospitch – Blue Lightening Stencil</td>
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<td><a href="http://www.erniesknives.com/">http://www.erniesknives.com/</a></td>
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<tr>
<td>IMG International Marking Group</td>
<td></td>
<td><a href="http://img-electromark.com/">http://img-electromark.com/</a></td>
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<td>Marking Methods, Inc.</td>
<td></td>
<td><a href="http://www.markingmethods.com">http://www.markingmethods.com</a></td>
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<tr>
<td>Steel Stamp, Inc.</td>
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<td><a href="http://www.steelstampsinc.com">www.steelstampsinc.com</a></td>
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<tr>
<td>LectroEtch – Ohio</td>
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<td><a href="https://lectroetch.com/">https://lectroetch.com/</a></td>
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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!


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://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

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

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.