

THE MOSTLY MONTHLY NEWSLETTER OF THE

# ∞ EUGENE 5160 CLUB ~ DECEMBER 2012 ∞

The December Meeting will be Thursday ~ the 6<sup>th</sup> ~ at 6pm at the Woodcraft store in Delta Oaks Shopping Center just off Delta Hwy and Beltline Hwy in North Eugene.



## DECEMBER MEETING

We are not only smack in the middle of the Holiday Season with all the events, shopping, and other obligations that entails – but this month's meeting comes just two days before the OKCA December mini-show. So this will be one of our informal meetings with no set agenda. Just bring what you want to share!



## NOVEMBER MEETING

**WAYNE GODDARD** shared tips, jigs, and techniques gained from decades of building and using grinders.

But before he got started we had some “show your work” time.

Craig Morgan brought in a box he made several years ago to show another example of inlay. Brazilian Cherry with Ebony and Mother of Pearl inlay on the

lid. The box is beautifully shaped and lined. The inlay is crisp with a seamless fit. Beautiful:



Ray Richard (Hawk'n'Knives Off Beat Forge <http://www.hawknknives.com/>) made the trip up the valley from Gresham.

It's always a pleasure to be able to hold one of Ray's knives.

Lately he has been exploring the use of rototiller tines made of O1. He passed around a couple of knives made with the tines – with wrought iron fittings and Ray's personal style of sheaths – photos are on the next page...



show through the stone washed surface. Ray asked where Ben stops on grit before tumbling, and Ben feels that if you take it up to 220 you should be fine. Ben etches in Ferric Chloride first, then tumbles the blade. On the blue handled blade Ben wiped it down afterward with cold bluing.



Jim Jordan passed around a diamond bladed push dagger he'd made:



Mike Johnson passed around a knife made from coil spring and a piece of unknown wood (Padauk?) and a clip point "that's been fighting me for awhile":

Someone passed around this knife, but I missed where it came from:



Mike Johnson shared that he's been using Quik Cast casting resin from TAP Plastics ([http://www.tapplastics.com/product/mold\\_making\\_materials/casting\\_products/tap\\_quik\\_cast/74](http://www.tapplastics.com/product/mold_making_materials/casting_products/tap_quik_cast/74)) to fill in hidden tang holes. This stuff expands as it cures so you want to cut or wipe it off as it expands – it hardens up like a rock. Later – after the meeting broke up – Mike and I tried to smash a leftover "peanut" of this stuff and we could not put a dent in it. Since it expands

Ben Tendick's dad passed around a knife Ben made for him – and Ben added another to the mix. Dad's knife is the blue handled one. Steel is O1 – stone washed and cold blued. Ray asked about the "stone washing." Ben uses ceramic media and the 15# tumbler from Harbor Freight – with a little dish soap and water. Ben warned that you want the blade in a finished condition – any scratches or gouges will



into the contours, is fairly impervious to water etc., and is hard as a rock – it seems like a great product for this use. The working time is just a few minutes – gets hard in 10 to 30 minutes – and reaches full cure in 36 hours. It can be tinted somewhat – but Mike didn't get the deep black he was looking for.

Someone asked about making a mold with Quik Cast – but for that you'd use something like the “Mold Making System” from TAP Plastics. Mike sent me a link showing you can find the mold making material on eBay too: [http://www.ebay.com/itm/Silicone-RTV-Rubber-Mold-Making-Compound-1-Qt-Yellow-/180987677502?pt=LH\\_DefaultDomain\\_0&hash=item2a23b4cb3e](http://www.ebay.com/itm/Silicone-RTV-Rubber-Mold-Making-Compound-1-Qt-Yellow-/180987677502?pt=LH_DefaultDomain_0&hash=item2a23b4cb3e)

If you were looking to make a mold for hot metal that would be a whole different animal. For lost wax casting you create your master in carving wax – encase that in casting plaster, melt out the wax, and cast with molten metal. You can use a casting machine (centrifugal or vacuum), but you can also just use gravity and lots of sprues. Here's a link to a post by Jake Powning showing a bit of his casting process <http://forums.dfogknives.com/index.php?showtopic=15441>

I asked the group about any sheath-making tip to keep the knife from cutting through the side of the sheath if you aren't careful when inserting the knife (from an issue someone raised in an online forum). One suggestion was to line the sheath with wood. I also asked if anyone knew where I could get pine pitch for cutler's resin (without driving over the mountains to scrape it off the Lodgepole pines that are fighting bark beetles) – and Martin Brandt was generous enough to set me up.

Wayne Goddard shared his experience that in repairing old knives he has seen some cutler's resin that basically fell apart and other that was set like a good epoxy.



At this point we got Wayne Goddard up in front to show us “at least 20 different ways to set up” one of his homemade grinders that he brought in.

Wayne built this grinder in 1983 for \$56 worth of parts – from flea markets and such. This was his 3<sup>rd</sup> or 4<sup>th</sup> generation of homemade grinder and it is still running strong.



He gave a lot of details on construction. One note was that if you have a work rest on your machine it has to be quick to move in and out of position.

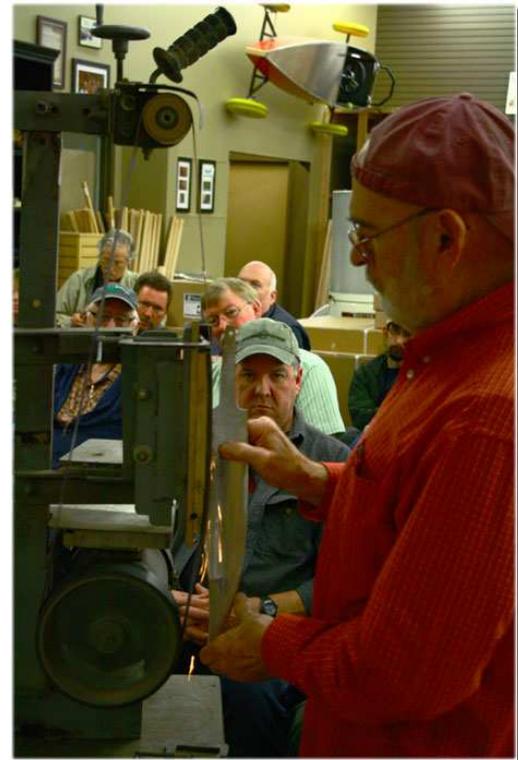
Wayne emphasizes that the knifemaker's skill level is the main issue – not how fancy his or

her grinder is. Practice, practice, practice.

Then Wayne started pulling out all the jigs... starting with a folding knife squaring jig. Then a simple door hinge type jig to set at any desired angle.

Some of the jigs fit over the entire platen to provide a soft surface or any number of specific radius for either hollow grind or a to ensure a particular spine profile:

Most of these were made from a radiused piece of wood covered with Hermes graphite cloth and clamped or hung over the platen.



A hard felt pad between the platen and the grinding belt can be used instead of slack belt for getting that “apple seed” edge set. Wayne also showed a concave jig he made to back up the slack belt area so that he would have a consistent radius no matter how hard he pushed.

This bevel-angle jig clamps to the table rest on the grinder and makes it easy to set and keep a specific bevel angle for a long blade or a keep the same angle for a group of matching blades:



Wayne is still really pleased with SG (seeded gel) belts for the way they maintain sharpness even as they wear down. Wayne will use a star grinder to revitalize a dull belt. And of course there's the old tried-and-true belt cleaning rubber bar.

Wayne brought back his “upside-down” platen that he's been perfecting for years. He says the variable speed grinder makes it work right – otherwise it's just a belt-eater. He runs the belt at about 1/10 speed (300'/minute). He's been working on this as a better way to control grinding a smooth radius for the plunge lines... I've got a better photo of one version of it in the February/March newsletter (on page 6):

[http://www.elementalforge.com/5160Club/201202\\_03Newsletter.pdf](http://www.elementalforge.com/5160Club/201202_03Newsletter.pdf)



Wayne and Craig Morgan swapped stories of building grinders out of junk and spare parts. Craig built his first grinder frame out of Eastern Hardrock Maple. Wayne gave him a gasoline pump motor for the drive. He used skateboard wheels and industrial cartwheel on pillow blocks for the drive wheel.

You'll find Wayne's grinder building details in his “\$50 Knife Shop” - Of course once you pay \$20 for the book then it's a \$70 knife shop!

[http://www.texasknife.com/vcom/product\\_info.php?cPath=51\\_859&products\\_id=457](http://www.texasknife.com/vcom/product_info.php?cPath=51_859&products_id=457)

Someone asked about 2 wheel versus 3 wheel grinder design. Wayne seemed to feel that you didn't gain enough from the 3<sup>rd</sup> wheel to compensate for the loss of horsepower. Although he did say that it's easier to keep the belt running true on a 3 wheel grinder.

One thing Wayne wants everyone to practice is using your fingers to pinch the blade and moving your finger-pinch along the blade, detect minute changes in thickness.

Another thing Wayne noted is that good lighting is so important for proper grinding that he is looking at making a mounting bracket on this grinder to hold two bulbs – one above the platen on each side.

As noted, Norton SG Blaze belts are currently Wayne's favorites. The only Seeded Gel belt that he really got dull was one he used to flatten an Arkansas stone!

Wayne uses 60 and 80 grit in Seeded Gel – higher than that in aluminum oxide.

Before the meeting broke up, Martin Brandt recommended using a piece of broken grinding wheel to take the top off the belt splice so you don't get the “splice bump” putting divots in your work.



And that wraps it up for another newsletter...

Your Scribe ~ ~ ~ Michael Kemp