The November Meeting will be Thursday the 1st at 6pm at the Woodcraft store in Delta Oaks Shopping Center just off Delta Hwy and Beltline Hwy in North Eugene.

**November Meeting**

**Wayne Goddard** is going to share experience gained over the years for how to get the most out of your grinder. Attachments, tips, and tricks. Also: Abrasive belt secrets revealed!

Wayne has built many grinders from scratch, such as “Old #1” pictured here. And according to Wayne there must be 20 ways to set your grinder. I can't resist a line like that - so sing it to that old Paul Simon tune:

♪ There must be 20 ways to set your grinder... just tighten the slack, Jack – attach a new plate, Kate – don't need no 3 horse, Morris – just listen to Wayne! ♪

Heh heh. And as always - bring in any recent work or pieces of interest to share with the group.

**October Meeting**

**Eric Ochs** came up the valley from Sherwood (S.W. of Portland) to spend the day with Wayne and share his work, tips, and favorite materials with the 5160 Club – thank you Eric!


Eric made it to a lot of the early 5160 Club meetings and it was great to see him again. But more on Eric in a minute...

The meeting opened with a very respectable set of elk antlers on the desk, courtesy of Bruce Fried. Bruce bagged this beauty recently and brought it in to get opinions on how many knife handles you could make out of it – and from which parts.
Lots of opinions were batted around, and then Bruce got Wayne to take a close look and give his thoughts on how and where it could be turned into handle material.

**Wayne** started by warning that only licensed dealers (such as himself) can legally purchase a full set of antlers in Oregon. I gathered this was to put a damper on selling full sets for trophy display.

He noted that the left side still had remnants of velvet on it, indicating that antlers get stronger as they get more mature.

“This looks like a lot of handle material, but it’s not” Wayne said – because you have to translate the geometry from antler to knife. He’d use brow tines to make folders, and the buttons (crowns) as belt buckles. On this particular antler he said there were no particular areas that would make slabs. He did like the piece his hand is on in this photo as a dagger handle, and the forward tine for a right-handed knife handle.

The upper tines on the left side – being just out of velvet – would be harder do to anything with. You could get small knife handles out of the lower tines, though. Cutting for the straight sections, he'd get 10 knife handles.

And he noted again that it looks like a lot of handle material until you start cutting it up – then it’s not. “Same with ivory” Wayne said and then launched into some experiences he's had with ivory!

Wayne advised that you can judge the thickness of the bone by the weight of the antler (the inner core is porous). The heavier (thicker) the better as far a giving you usable material.

Someone asked about attaching a button to a belt buckle. Wayne has had good experience using a combination of glue and sheet metal screws.

**Eric** came back to the front (after we carted off the antlers) and gave us a rundown on his development as a knife maker. He started on the forums and coming down to 5160 Club meetings. His first show was the OKCA April 2010 show. That September he got a table at the Usual Suspects Network “The Gathering” show in Las Vegas. He only sold 3 knives but made some good connections. So he went home – kept posting on the forums – and the next month he sold another 3 knives on the forums & got his own forum inside USN. There were some dry months. Eric started making stock for the OKCA 2011 show, but they kept getting sold on the forums!

About this time Eric changed focus to making folders and that really took off with the forum's collectors. However that **first** full custom folder took several weeks to work through. 2011 Eric sold all but one knife at the OKCA show and sold out at The Gathering. His order file grew out to a year's wait and he “closed his books” with two years work to fill.

Eric brought a number of his excellent folders. As well as the type of work that first got him noticed on the forums – a big chopper in process:

Eric makes tactical knives and recommends Bob Terzuola's book “The Tactical Folding Knife” ([http://www.amazon.com/Tactical-Folding-Knife-Bob-Terzuola/dp/0873418581](http://www.amazon.com/Tactical-Folding-Knife-Bob-Terzuola/dp/0873418581)) which was maybe $19 when Eric bought it - but it is out of print and goes for a lot more these days!

Eric started passing around examples of his folders. Photos don't capture how they feel in the hand!

Hammered copper bolster on this one.
This one has a resin/burlap that Eric got once from “Shade Tree” but has not been able to get any more of. The honeycomb bolster material is an aluminum hex grid filled with a resin (your color choice) from Composite Craft's C-Tek line - & they have other interesting knife handle materials: http://www.compositecraftinc.com/KnifeHandle/CustumKnifeHandle.html

Again, hammered copper bolster. This one has alluminite resin filled spruce cone handle with green highlights that you just have to see in person. Ankrom Exotics (http://www.ankromexotics.com/) is where Eric got the spruce cone.

Eric will start working on a pattern with paper (like this pattern cut out of a file folder):

This lets you test the placement of pins and stops and how the blade and handle work together. From there Eric will xerox the pattern and cut it up, glue it to some Kydex to make a permanent pattern from that – here's one in Kydex for a different folder pattern:

The question was asked about how building folders compares to fixed blades. Eric emphasized how much cleaner you have to keep your shop in order to find that tiny screw that just jumped out of your fingers! Also other shop equipment is involved such as a milling machine. Though it can be done without – as Wayne Goddard has amply demonstrated … and Eric gets along without a surface grinder by purchasing surface ground steel. Parallelism in the steel parts is (obviously) critical in folders.

Someone asked about butterfly knives and (admitting that he has one on the shop bench) Eric emphasized how a balisong blade magnifies the need for everything to be absolutely flat, square, and parallel, with the right balance in the right place.

For pivots machined for folding and balisong knives Eric mentioned Knife Kits http://www.knifekits.com USA Knifemakers http://usaknifemaker.com/ and that he gets his GTC stainless thrust bearings from Jantz Supply http://www.knifemaking.com/

Eric feels he spends about the same amount of time on a folder as on a really nice fixed blade with a guard and a sheath, but the time is spread out differently. In folders, Eric works in batches – so that he can do one step on several knives before progressing to the next step.

Officially, Paul Bos retired as Buck's heat treat man, and Paul Farner has taken over under his direction. I believe that Paul Bos still does the knife-maker special order heat treating.

In response to a question, Eric said that almost all of his folder orders are for flippers. This is a variation of folder design where the protrusion that serves as the finger guard when open, sticks up when closed and is your lever for opening the knife.

There was a discussion of “what is a tactical folder” that reminded me a lot of the “what is a Bowie” discussions I’ve seen. What I came away with is: Open with one hand; Locking blade; Sturdy enough to stand some abuse. Beyond that it is in the eye of the beholder.

When Eric was asked about his technique for hammered bolsters he relayed that he uses a set of rounded-end punches that he uses on a partially shaped bolsters. You might drill one hole in a two pin bolster before patterning, then drill a second pin hole after patterning, because the metal is going to move during the patterning process.

Eric gets most of his patina and anodizing chemicals from Reactive Metals Studio: [http://www.reactivemetals.com](http://www.reactivemetals.com)

The discussion broadened out – about regional knife laws, shipping knives around the world, how a folder performs in harsh/dirty environments, and further.

The top knife's black handle is curly maple with black leather dye (a trick Mike learned from Ray Richards) – Mike says the leather dye penetrates extremely well. Mike has gravitated to Feibing's leather dyes. He applies the die after the wood is epoxied & pinned & sanded to 220, then he works it down to 600.

Mike makes small sheaths out of 4-5 # leather. For large sheaths more like 8-9#. Mike also recommends Ray Richards method of using alcohol and shellac to stiffen leather sheaths. Mike uses 1/3 alcohol (91% denatured alcohol) to 2/3 shellac and paints it onto a sewn-up sheath on the inside where you want to form it around the handle. It sets up in a matter of three minutes. Full cure in a couple of hours.

Craig Morgan brought in Firemountain Gems' catalog [http://www.firemountaingems.com/](http://www.firemountaingems.com/) and recommends them for fittings, jeweler's torches and tools. He also brought in his Knife-makers' Contour Vice (available from Jantz Supply) that he scored second hand. The continuous contour allows you to grip a knife handle in profile – among other tasks.

As for other show-your-work pass-around knives, Mike Johnson's has been busy – here are a couple:
I have to admit I’m at a loss as to who brought in this work in process – is that bog oak?

… or this set:

I do remember that it was Marty Brandt who brought in this handsome piece...

… and this remembrance from Vietnam.

And that wraps it up for this newsletter...

So come on by Woodcraft Thursday and get Wayne’s tips on grinders, belts, and much more!

Your Scribe ~ ~ ~ Michael Kemp