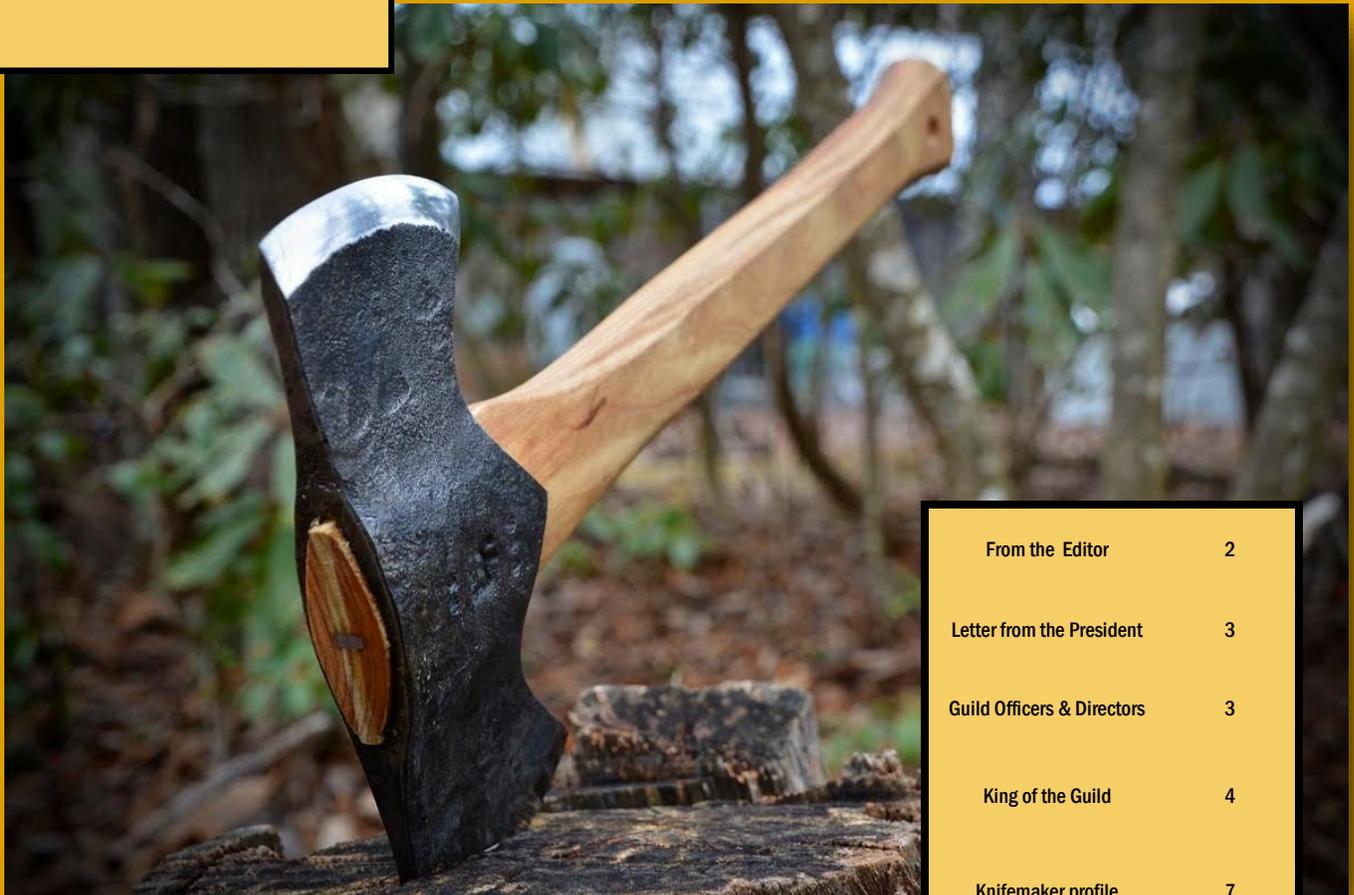


Billets & Blades

THE OFFICIAL PUBLICATION OF
THE NORTH CAROLINA CUSTOM KNIFEMAKERS GUILD

**SPECIAL POINTS
OF INTEREST:**

- The next **North Carolina**
- **Custom Knifemakers Guild**
meeting date: July 16, 2016



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ABOUT THIS PUBLICATION AND OUR GUILD

Billets and Blades is the official publication of the North Carolina Custom Knifemakers Guild. It is compiled and published in four annual issues, with two additional special publication dates possible each year.

The North Carolina Custom Knifemakers Guild was formed to meet the needs of the growing body of custom knife makers in the southeastern United States. The purpose of this newsletter is to serve as a medium of exchange for the members of the NCKKG.

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Knife making and related endeavors are inherently dangerous crafts or occupations. The material contained in this newsletter is for information only and is not intended for private instruction. Therefore, the North Carolina Custom Knifemakers Guild and its Officers and Editor specifically disclaim any and all responsibility for damage or injury that may occur as a result of the use of any information that is contained in this newsletter.

Advertising Policy:

The NCKKG accepts no paid advertising as a matter of policy. From time to time, advertisements may appear that are deemed by the officers to be in the best interest of the Guild. Space for advertisements is offered free to Guild members who wish to promote a service or offer specific items for sale. The officers and editor reserve the right to edit advertisements for brevity.

Members, please submit ads to the either the president or the editor at one of the addresses shown to the right.

FROM THE EDITOR

If you are a new member, please make sure that I have your correct email and physical mailing addresses. You may send this information to me via email or the address listed on the right.

If you are currently receiving *Billets and Blades* but are no longer interested in receiving it please let us know. You may contact Barry or Darrin (see contact list on page 3) to have your name removed from the mailing list. Thank you.

If you know of someone who may be interested in becoming a member, please let Chris or Barry know and we'll be happy to mail a copy of the current newsletter to that person.

Existing members, please check the website to verify that we have your correct information. Especially your correct email address so you may be contacted should the need arise. I am also always in need of pictures, articles and ideas on how to make the website and newsletter better. Please contact me with any suggestions.

www.ncknifeguild.com

STEP UP. BE SEEN.

Featured Knifemakers are needed.

Don't be a wallflower!

Please let us get to know you and your work.

Contact Barry at longbowbarry@gmail.com

**LETTER FROM THE
PRESIDENT**

By the time you read this my fifth Blade show in Atlanta in June has come and gone. The weather was not too hot and all said and told I had a enjoyable show. I again did not really get a chance to see the show. I keep saying this is the year I will see the show. Just not in the cards this year I guess. I plan to start to focus alittle more on Hidden tangs this winter, My stock removal learning curve has started to flatten out a bit in the past several years so I need to change it up so to speak. My three year term is rapidly approaching, I want you Guild members to start to think about who might be fit to lead the guild after I pass the sceptor so to speak. I will see you all on July 16th.

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Editor & Webmaster

Chris Williams & Barry Clodfelter

Everything you ever wanted to know about Grinding belts but were afraid to ask.

I feel fortunate that I grind in a production manner so have a unique setting in order to evaluate belts. First lets start off talking about what belts most knifemakers use, Ceramic are the most prevalent belt most knifemakers use. They are consequently also the most expensive, Ceramic belts are best used to grind against steel, They do not do as well against G10 or wood as say Zirconium belts. Run the coarse grits fast and slow down as you move to the finer grits. Most ceramic belts stop after 120 grit.

Next belt is the zirconium belt, Its usually blue in color from what I have seen. It was the ceramic belt of 10 years ago, it's a great belt and lasts substantially longer than Aluminum oxide belts IMO in most instances. I personally use Zirconium for wood and G10 sanding and find G10 wears a ceramic belt faster than a Zirconium belt. Run these belts at medium speed.

Aluminum oxide belts, usually brown in color and are also the cheapest belts of the three I am going to discuss in this article. This is what I use to sharpen knives (120 grit then move to 400 grit) and also on wood when going for a high grit finish. I also use a J flex Aluminum oxide belts to do my plunges (Norton RB406) as well, I usually use a 120 then a 220 J flex belt and lastly sand blast.

Now lets talk about belt speeds, I find most ceramic belts like to be spun really really fast and work best when pushing hard. At least the 50 grit belts I use prefer high speed and hard pressure, they tend to gloss over less and fracture often which is what keeps them sharp. I personally use a 50 grit then move to a 120 grit ceramic belt in every knife I make, next I move to a J flex aluminum oxide belt to work my plunge while the belt is hanging over the flat platen 3/16" of an inch.

One other thing that is obvious to most knifemakers but I will say it anyway, 50 grit or coarse belts prefer fast speed, but as you progress to finer grit belts you MUST slow the speed down. At 120 grit I am running my grinder at 40% speed and a 220 grit I run at 30% or slower speed.

Trizact belts, (3m Trizact CF Gator) A trizact belt is considered a structured abrasive belt and has diagonal stripes which consist of the abrasive. This is an incredible belt which I use often in my shop. Trizact belts do not use the conventional grading structure (Grit size) you are used to hearing. They use instead a micron grit size chart, Following below is a conversion from Micron to conventional grit size.

<u>Micron grit size</u>	<u>Conventional grit size.</u>
A300	80 Grit
A160	110 Grit
A130	140 Grit
A90	220 Grit
A65	240 Grit
A45	320 Grit
A30	400 Grit
A20	500 Grit

I love Trizact belts and use them often, They are also quite thick and last a long time if cared for. Significantly longer than if you got a conventional grit version. I only use Trizact belts when I go above 200 grit, but if you often go to high grit finishes this is the only belt to use for that job.

Now that we have talked about the basics of belts lets talk about belt backings. If a belt is said to have a x or Y weight backing then it will be stiff. The closer to z you get the stiffer the belt is, Consequently a J weight belt is usually fairly flimsy and what I personally use to wrap around the side of my flat platen to work plunges.

Now lets talk about what belts I prefer to use, I always use economy ceramics (Norton, Yellow ceramics from Phoenix abrasive etc) to grind high carbon steel like 1084 and 1095. I Tend to be able to get 15 knives ground from an economy belt grinding 1084 or 1095 steel. I consider any ceramic belt costing less than \$5.50 a economy belt. I have also found that the higher end Ceramic belts (3M 977 ceramics) do worse on High carbon steel than a belt half its cost. But don't think Im knocking 3M belts, I wont even think of using a economy ceramic belt

when I grind stainless steel. So I have adopted a philosophy high end belts for high end steel and economy belts for high carbon steel. I currently stock about 15-20 different belts in my shop at any one time for the different products I manufacture.

The last belt I want to discuss is the scotchbrite belt, this is the same material your Mom uses to wash here dishes. Its commonly sold in squares to clean pots and pans. Yes 3M makes a belt out of it and its an incredible finishing belt. I also use it to debur and soften edges of steel I am manufacturing or use it to soften my edges on Kydex. These belts are sold in the following grits

Grey= Super fine

Blue= Very fine

Maroon= med grit

I personally only use the Blue in my shop, these belts commonly last a year in my shop before the splice lets go. They almost seem to last forever if taken care of.

Now I would like to share some of my secrets I have learned, when grinding with a 50 grit belt if it feels dull reverse the belt. Sometimes the way the belt grit glazes it might be sharper running the other way. Another trick I use for 50 grit ceramic belts is I found a 1" wide diamond coated tool designed to dress grinding stones on ebay. I will lightly run this across my belt and it fractures the belt enough to make it start to cut again. I have found this new sharpened belt does not go very far after being sharpened but I usually can get one or two more knives after doing this.

Another quick observation, time is money when making knives. When my belt is so dull it takes me twice as long to do the job a new belt can do its time to replace it. I usually don't throw away a used belt, I just save it for my horizontal grinder. I never use a new belt in my horizontal belt grinder, to do so will prevent you from using it in a vertical grinder. Even if you use it for only a few seconds.

I hope this helps

Chris W.

KNIFEMAKER SPOTLIGHT

Meet Liam Hoffman



How did you find out about our Guild AND when did you join? My mom found the guild online, and I joined sometime around 2011 at the age of 15.

Who or what was your major influence when you began knife-making or collecting AND why? I had no influences when I first began. Many ABS master smiths influence my work today.

Favorite Knife, Knife maker(s), etc AND why? One of my favorite style of knives is the recurve. Integral knives have taken up my fascination recently. The organic and flowing aesthetics of these knives appeal to me. Some of my favorite knife makers would include Nick Wheeler, and Sam Lurquin.

Preference? Forging or Stock Removal? AND why? I prefer to forge all of my “one-off” knives, as it makes each one unique in it’s own. We’re coming out with some stock removal lines for production.

Style/Patterns? I enjoy making large recurve knives with raised clips, as well as chefs knives.

Favorite Steel or Steels/AND why? Steels I use often are 1095, 1084, 15n20, W1, W2, 80crv2, and 4140. 10XX series and 15N20 make great damascus, and the W1/W2, and 80CRV2 make great choppers. 4140 I use for axes.

Area of Expertise? I am well known for forging axes, as they make up the largest part of my business. On the knife side I would like to think I’m known for organic hand forged

Favorite Step or Part in knife making process? In knife making my favorite steps are forging and handle work.

Is everything done in your shop? Sheaths/Heat Treating, etc? All of my forged creations are done in house, including leather work done by my mom.

Affiliations? NCKMG, ABS apprentice

Website? www.hoffmanblacksmithing.com Hoffman Blacksmithing on Facebook.
@hoffmanblacksmithing on instagram.

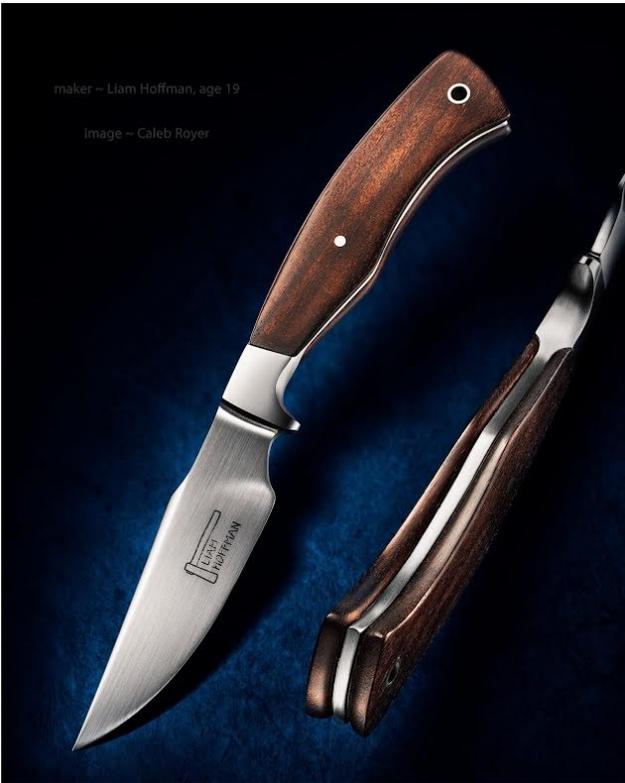
When did you start making knives? I started making knives in 2008.

How much time do you spend in your shop in a given week? Describe your shop set up, please. I work in my shop approximately 60 hours a week. My current shop set-up is 300 SQ feet.

Please tell about making your first knife. My first knife was the first thing I made in my blacksmithing career in 2008. It was made out of scrap metal, and I still have it today.

What knives sell best for you? Larger camping and bowie style knives as well as kitchen knives sell well for me.

What are your goals for the future? My goals include expanding my shop in 2017, growing my axe and knife lines and maintaining continuous growth.



MCC is pleased to announce our upcoming 2016-2017 Knife Making Schedule. Registration will open Monday, August 1st at 8:00AM!

Fixed Blade, Grinding

Ed & Tanya VanHoy

September 1 – 4 (Th-Sun)

Room: 172

Cost: \$375 (1 meal included)

The class will consist of a course that will take students into the first phase of knife construction. It will define the anatomy and construction of a fixed blade knife. The student will learn how to design, properly layout the grinding lines, lay out lines for drilling, and handle / scales . It will start from basic grind preparation and end in the student having a finished blade that will then be completed into a finished knife. The student will have the opportunity to do more than one blade if he chooses to do so. This may of course dictate if he will have a finished knife. A certificate of completion will be given to each student.

Folding Knives

Ed & Tanya VanHoy

October 6 – 9, 2016 (Th-Sun)

Room:172

Cost: \$375 (1 meal included)

The class will consist of a course designed to take a student through each phase of constructing a folding knife. It will define the anatomy and construction. The types for the knife will be a bolstered folder. It will be designed in a way that students will be able to make it at home with limited hand and machine tools. The course will have a well written manual that will include the design, materials list, and a suppliers list . The student will complete a finished folding knife in the class and will receive a certificate on completion.

Wilderness Survival Knife

Barry & Phillip Jones "The Jones Brothers"

October 13th – 16th, 2016 (Thurs-Sun)

Cost: \$375 (1 meal included)

Of all the survival equipment available, the most useful and most necessary is a good knife. Knives allow you to cut tree branches to make shelter, prepare firewood to keep you warm, hunt, prepare what you get from your hunt and a host of other necessary tasks. If you only have one tool with you at all times, it has to be a knife. This class will be a hands-on guide in making the perfect Wilderness Survival Knife!

Forged Tomahawks

Tim Scholl

October 27 – 29, 2016 (Th-Sat)

Room:172

Cost: \$375 (1meal included)

Learn to make adorned tomahawks using traditional forging, heat-treating, and handle finishing methods. Students will complete a tomahawk by the end of the course.

Damascus Patterns & Blades

Burt Foster

November 4 – 6 (Fri–Sun)

Room: 172

Cost: \$375 (1 meal included)

Description: A Damascus class for students with some forging and grinding experience who want to learn more about making high-performance, exhibition worth Damascus knife blades. We will discuss steel selection, basic and advanced pattern development, and Damascus blade forging and finishing. Basically everything from choosing the right steel to polishing your completed blade. This will be a hands-on class where each student will have the opportunity to make a couple different Damascus billets as well as heat treating and polishing samples from each billet.

Basic Blade Smithing

Bill Wiggins

January 12-15, 2017 (Th-Sun)

Cost: \$375 (1 meal included)

Class Limit: 8 Students

Hands-on course in the proper forging, heat treating, and finishing of a knife blade. Topics covered will be steel selection, forges and forging tools, heat treating, and finishing of the forged blade.



The **North Carolina Custom Knifemakers Guild** was founded in June of 1992. Our goals are to:

- Promote the craft of custom knife making
- Seek to constantly improve the craftsmanship of its members
- Provide an educational resource to anyone interested in the craft
- To encourage new makers and provide a forum for their training

Through public knife making and forging demonstrations by a group or individual members, we try to display the craft and to educate the public. It is our intent to raise the general awareness of custom made knives and the people who create them. That is why there is no cost to attend one of our meetings, and we welcome anyone with an interest in knife making.

Our quarterly meetings are organized around speakers and various demonstrations of activities important to our craft. These speakers and demonstrations are from our members or experts in the field who come as our guests. As a training resource, our Guild is prepared to present any aspect of our craft to organizations that feel it would be beneficial and informative.



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[Empty rectangular box for address information]