

# Rocky Forge News

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## Next Meeting: 9/9/2017

Rocky Forge metal-smiths will get together this coming Saturday in Ted's shop at 8:30. We have some good news that will be announced at the meeting and should make us happy. (suspense). If you want to finish your knives, this session it would be a good time to do so. For the rest of you it will be an open forge time to make whatever is on your mind. There are a lot of examples of early American items around the shop you may try making. Campfire items are always a good thing to test your skill. Try your luck at making something creative, artistic, contemporary, period piece or a tool. Using these key words, there should be many items come to mind. For example, a tool could be made for any number of trades, including woodworking, blacksmithing, gardening, etc. Let your imagination ignite some thought over the next few days and come armed with several ideas. Then see how well you can execute an idea. It should be fun and hopefully productive. As always there will be mentors available to advise you on ways to make whatever you choose.

**On Friday, September 22nd, the Illiana Antique Power Association will be sponsoring "History Day"** for up to 400 fourth graders from the surrounding county Public Schools. This is an annual event that Rocky Forge always participates. We need volunteers to demonstrate our trade during this event. So far we have Peter Cooper doing cooperage and Rob Durrett doing Lewis and Clark. We need volunteers doing blacksmithing or related demonstrations. This is a very visible time for all those groups involved and the blacksmith shop with all things going on is very popular with the kids. Letters sent in by the kids to their teachers and shared with the Illiana group are a real testament to the popularity of our shop.

Normally, Illiana will supply lunch to the volunteers, but this year Illiana is in the process of building a new clubhouse so we all need to bring our own lunch for this event. Over the past several weeks 4-5 volunteers worked diligently in the summer heat to insulate and add a plywood interior

to the mini-barn at the Illiana blacksmith shop. Now the interior needs a couple coats of paint. The paint has been donated and two letters to the membership were sent out asking for volunteers to paint the interior of the building. Guess what! Not one single call came. Summer and fall are busy times of the year, but it sure seems with the large number of newsletters we send out that we should not have any trouble finding help. So often we have a core work group of a few members and it's usually the same ones. Remember, it's not what Rocky Forge can do for you, but what you can do for Rocky Forge. An organization like ours is only as good as the dedication of the members.

We will have an Iron-in-the-Hat drawing at the Saturday meeting, so be sure to bring items for that drawing. Lunch will be gourmet cardiologist approved hot dogs prepared a special way. Please bring a covered dish that will compliment these tasty treats.

Hope to have a good turnout and see you at 8:30 for healthy doughnut treats and coffee.

Ted and Carol

## Dates to Remember

**September 22:** Illiana History Day, Showground.  
**September 22-24:** SOFA Quad-State, Troy Ohio.  
**Sept. 24, 2017:** Art on the Wabash, 10AM-4PM, Tapawingo Park, West Lafayette.  
**Sept. 30-Oct. 1, 2017:** Feast of the Hunters' Moon.  
**October 9, 10, or 11:** Pre-Conference Classes with Mark Asbury, "Making Your Own Tools", \$150/pay, each day is separate and different.  
**October 13-14:** Upper Midwest Regional (Pontiac) Blacksmith Conf. Pontiac, Illinois.  
**June 27-30, 2018:** ABANA 2018 Conference will held in Richmond, Virginia at the Meadow Event Park.

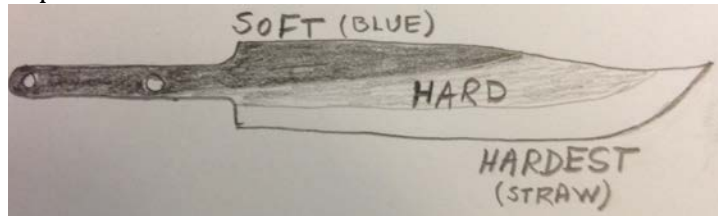
## Contacts

Forgemaster: Ted Stout (stout8525@tds.net, 765-572-2467 home).

Newsletter Editor: Dominick Andrisani (andrisan@purdue.edu, 765-463-4975)

### Heat Treatment of Knives, By Dominick Andrisani

1. Forge and finish knife to the 90% done state.
2. Normalize to relieve stresses in the blade. Heat the blade to a medium orange color (1500 degree F). This should be a little above the non-magnetic temperature. Place the blade on the raw coal on the edge of the fire and let it air cool until you can handle it by hand.
3. Heat the blade to a medium orange color. Quench the blade (except the tang) in pre-warmed oil (90-140 degree F.). Now the knife is maximally hard (except the tang).
4. Clean and rough polish the sharp edge and the spine (the fat side).
5. Alternative 1: Temper (soften) the cutting edge and spine with a torch.
  - a. Hold the blade by the tang in a vice.
  - b. Use a torch to slowly and evenly warm the entire spine of the blade.
  - c. Watch the temper colors develop on the spine of the blade and watch the colors move downward towards the cutting edge and tip.
  - d. Ideally you want to temper color of the cutting edge to be something like straw or bronze and the temper color on the spine to be blue color. The desired colors depend on the metal and use of the knife.



6. Alternative 2: Temper (soften) the cutting edge with an oven.
  - a. Immediately after quenching in pre-warmed oil, place the blade in a preheated oven set at about 380 degrees F (e.g. straw temper color). Keep in the oven for over an hour. This tempers (softens) the entire knife to the desired temper color (but only desired for the cutting edge).
  - b. Clean and rough polish the spine (the fat side).
  - c. Draw the temper of the spine to a softer state (e.g. blue temper color). Place a brick in a pan of water about a quarter of an inch below the surface of the water. Place the knife with the sharp edge resting on the brick in the water. Run a torch along the spine and draw a blue (630 F) temper color for all but the ½ inch of the cutting edge. Work up and down the spine continuously bringing the whole spine up to heat gradually. When working near the tip it may be necessary to rotate the blade to keep the tip under water so that the temper color of the tip does not change from straw. This step will soften the spine while not softening the edge or tip.
7. Finish polishing the heat-treated knife.

#### References:

1. Mark Aspery, **The Skills of a Blacksmith, Volume I**, pp. 290-294, published by the author.
2. Heat Treating Knives by makingcustomknives, <http://www.instructables.com/id/Heat-Treating-Knives/>
3. **Wayne Goddard's \$50 Knife Shop**, Revised, book sold at Amazon.com.