

the newsletter of hurstwic

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Hurstwic Moves to Our New Training Space

by William R. Short, Hurstwic instructor

The [Saga of Hurstwic](#) continues...

For more than a decade, Hurstwic has conducted its research and training at Higgins Armory Museum, in Worcester, MA, USA. Sadly, the Higgins will be closing its doors at the end of the year 2013, and so we were forced to find a new place to train.



We are pleased to announce our move to our own training space at 45 River Street in Millbury, MA. We have leased a portion of a mill built at the end of the 19th

century to make equipment for the many textile mills in Millbury. The space has been renovated to meet our needs. The earlier renovations have been removed, leaving us with the rugged wood floors and high ceilings of the original mill building and a wide open practice area without any of the internal columns or obstacles that bedeviled us at Higgins. High windows along one wall make the space bright and sunny during the day and allow for passers-by to see the cool activities happening inside at night. The mill's parking lot is literally steps away from the front door of our space.

But most importantly, because it is ours and ours alone, we can do with it what we wish. If we want to leave training gear in place, or hang heavy bags from the beams, or acquire and install mats for serious grappling, or set-up a sparring scenario to use for several sessions, we can. It's our research lab and training room whose uses are limited only by what we can imagine.

Our short-term plan is to continue the [research and training](#) that we did at Higgins. But our long-term plans are more expansive. We expect to expand the training. Since the space is ours and we no longer have to share it with other groups, we plan to add more training sessions and more hours, giving prospective students more options for fitting Hurstwic training in to their schedules.

We would like to expand the kinds of Viking activities we offer. In addition to combat training, we plan to offer instruction in other Viking-age skills, including wood work, iron work, leather work, textile work, and other hand-crafts.



At Higgins, we offered special Viking-themed days from time to time to our guests, and we hope to offer similar events at our new space, in order to continue educating and informing the general public about Viking topics.

We want to make this space the center for Viking-related research and teaching in New

England. We at Hurstwic are very excited about the possibilities now open to us. Please come join us at our new space. What Viking-age activity would you like to do?



Did the Vikings Throw Their Spears?

by Kevin Scott, Hurstwic student

For many people, the popular image of a Viking in combat is of a warrior armed with a fine sword or a huge axe, but for most Vikings, the [spear](#) was the weapon of choice. Its simple construction and low cost made it the most widely used weapon of the Viking Age.

When most people think of a spear, they think of a missile: a weapon thrown at an opponent. Yet it seems likely that the spear was more often used as a thrusting and parrying weapon. If it was your main weapon, would you really want to throw it away?



Maybe you would! The Norse myths relate how, at the [first battle](#) of the world, Óðinn himself cast a spear over the heads of the enemy host, dooming them to defeat and death. Steinþór used this same move in the battle at Geirvör, as told in *Eyrbyggja saga* to bring good luck according to ancient customs.

The *Sagas of Icelanders* tell us that Viking-age warriors threw their spears when attacking from a distance, or to distract an opponent before rushing in with another weapon. In *Egils saga*, for example, Egill and Berg-Önundur cast their *kesjur* at one another. The *kesja* is described as a spear-like weapon, but how it differed from other spears is unknown. Berg-Önundur's spear was deflected by Egill's shield, but Egill's spear became imbedded in Berg-Önundur's shield, making it too heavy to hold. Egill took advantage of the situation by closing the distance to his opponent. Using a sword hung by a loop from his wrist, he dispatched Berg-Önundur with two strokes. Thus, Egill's use of the spear allowed him to make his opponent's shield useless, giving him the advantage in the fight.



A danger in using your spear as a missile is that if you miss your target, your opponent might pick up your spear and use it against you. Even worse, your opponent might catch your spear in flight and hurl it back at you, a grave dishonor. This move was used in *Gísli saga*. Gísli traded places and clothing with his slave in an effort to elude his pursuers, led by Börkur. Thinking Gísli to be the slave, only two men pursued him, while the rest chased the disguised slave. When the two caught up with Gísli at the edge of some woods, one threw a spear at Gísli. Gísli caught the spear in flight and threw it back at the man, running him through. When the rest of the men caught up to Gísli at the edge of the woods, another man threw a spear at some movement in the woods. This time, the spear struck Gísli in his leg, but he nonetheless threw it back at spearman and pierced him through.

In an episode told in *Brennu-Njáls saga*, the Sigfússons were set upon by Kári Solmundarson and Björn hvíti (the white). Grani Gunnarsson of the Sigfússons hurled his spear at Kári. Kári planted his shield into the ground, caught Grani's spear in his left hand, cast it back at Grani, and picked up his shield again with the same hand. The spear passed through Grani's shield and through Grani's thigh and stuck in the ground. Grani could not free himself from the spear until his companions aided him, carrying him away and fencing him in with their shields to protect him from further injury during the battle.

In Viking times, the spear was a valuable weapon. For some warriors, it may have been their only weapon. To throw it at an opponent could have spelled your own doom, unless it was used as a means to distract or misdirect your opponent prior to another attack. To have your own spear caught and flung back at you earned dishonor, and to be struck by your own weapon brought the greatest of shame.

All of these moves are part of our projectile training at Hurstwic. Our research suggests that these fighting moves with a spear that are described in the sagas seem workable and effective.

Using the Sagas in the Classroom

by Michelle L. Mielnik

The *Sagas of Icelanders* are not only enjoyable stories set in Iceland and other northern lands in the Viking age, but they also can serve as a doorway through which teachers and educators can introduce and motivate their students over a wide range of topics.

To facilitate the use of the sagas in their classroom, I have created a [document](#) with over one hundred ideas and resources for educators. The document came out of *Haustþing Kennara á Austurlandi 2013*, the annual fall conference of teachers in East Iceland. At the conference, as foreman of *Félag áhugamanna um sögu slóðir Hrafnkels sögu og söguferðahjónustu á Héraði* (the [Hrafnkels Saga Organization](#)), I presented ideas of how to connect the sagas to the classroom.

The sagas are not just for history classes, since they provide information





about virtually every aspect of daily life during the Viking age. Therefore they inspire a certain curiosity and understanding in every subject. Although their credibility is sometimes controversial, many of the places, people, and events have been recorded or proven to be real by other means. And even though not every aspect of daily life is described in full, there are clues throughout the sagas, enough to interest students and to motivate further study. For example, a short passage about a wedding may be enough to arouse curiosity about food, sitting arrangements, poems, gifts, love vs. efficiency, loyalty and status, musical instruments, dancing, and many more. Creating a television news story about an event from the saga as if reporters were present at the time it took place can engage students on many levels.

Other examples include:

- Games and sports: play some of the games and sports described in the sagas, such as hnefatafl, knattleikur, hornskinna (left), tug-of-war, and others.
- Handcrafts: spin or weave using the materials and tools used in the Viking age
- Nature: recognize, pick, and use wild plants that were used in the Viking age for food, for medicine, or for dying yarn
- Science: make charcoal in a pit, as was done in the Viking age

- Literature: make and use a quill pen, ink, and animal skin to copy some text from the sagas
- Social studies: contact students and classrooms (via Skype, for example) in places where saga events took place

Teachers and educators attending the teachers' conference were encouraged to try some of these activities for themselves in the session. Additionally, Dr. William R. Short gave a short presentation on how the sagas were used to educate guests at Higgins Armory Museum and at Hurstwic.

The Hrafnkels Saga Organization has been working towards goals of drawing East Icelanders' attention to their roots, as well as widening people's perspective of the opportunities of historical-based tourism in the area.

This list is only a beginning. For further details, please see the [whole document here](#). And feel free to improvise and use more ideas. All teachers, in Iceland and every other country, are encouraged to connect their classrooms to the area's history, the children's history, and the country's history, because what happened – or didn't happen – in the past is what makes us what we are today!



A saga-age activity corner in an elementary school classroom.

Evolution of the Sword in the Viking Age, part 2

By [Jeff Pringle, Swordsmith](#)

At the start of the Viking age, iron smelting technology and steel making techniques were primarily small-scale endeavors. Even in areas where the process was semi-industrialized, the furnaces were small. This resulted in units of trade iron and steel that were not of sufficient size to create an entire sword blade, so blades were assembled from several pieces of iron and/or steel forge-welded together. If the metal was all the same alloy, the result is what the archaeologists call "piled" structure, but smiths in the Roman and Migration periods quickly realized that multiple alloys could be combined for decorative effect, in the process today known as *pattern welding*.



This method of making weapons results in blades with visible textures, seen in the replica pattern-welded blade above. Al Kindi's mid-ninth century report "On Swords and Their Kinds" includes a description of European swords and portrays them as patterned like Tabari brocade cloth or rings of mail, and in the poem Beowulf swords are described as "ring-patterned" and as having "serpentine colors." These patterns were made by combining either high- and low-phosphorus iron or iron and steel, and would have been visible either through the polishing methods employed at the time or by lightly etching the surface of the blade. The patterned areas of weapons were confined to the center, since the cutting edges need to be of uniform material to avoid areas of weakness or variations in sharpness.



During the Viking age, smelting furnaces evolved and smelting efforts became increasingly organized as the church rose in power and feudal systems took root across Europe and Scandinavia. The furnaces became bigger and at the end of the Viking period were beginning to operate on power from water wheels. These larger, more efficient smelting operations improved the quality and quantity of raw material used in sword production, so that a blade could be made from a single unit of steel. This, of course, removed the laboriously achieved patterns which resulted from the previous construction method. An indication that these patterns were seen as a mark of quality can be noted in the fact that the first generation of these "mono-steel" blades were decorated with pattern-welded strips of metal welded onto the surface in the form of designs and signatures, as can be seen in the historical [Ulfberht](#) mono-steel sword shown to the left.

As power became more centralized and armies became larger, the ability to make swords more efficiently was necessary to arm them, so decorative pattern welding did not last long. By the crusader period, most swords were relatively plain, inexpensive equipment.

Rowing a Viking Ship

by William R. Short, Hurstwic instructor

Hurstwic recently traveled to Maryland to be the guest of the [Longship Company](#) on board their replica Viking ship, *Sae Hrafn*. During our visit, we sailed under wind power, and we rowed under our own power. I was later asked what it was like to row a Viking ship.

I was taken aback by the question. It's like *not* rowing a Viking ship, but a lot more work. But hidden in the question are a number of topics that are worth further discussion, since they help us understand the mindset of people in the Viking age, an understanding we feel is important in our combat training at Hurstwic.

The *Sae Hrafn* is a modern replica of a coastal raiding ship, similar to the *Skuldelev V* wreck found in Roskilde fjord in Denmark. *Sae Hrafn* is 12 m long (39 feet) compared to 17.3 m (57 feet) for the *Skuldelev V*. She is powered either by a single square sail, or by oars. There is space for 12 rowers, 6 on each side.





The first impression is one of limited space. The spacing of the thwarts fore and aft (front and back) determines the spacing of the rowers, and that space is limited. Since the spacing used in the construction of *Sae Hrafn* is not dissimilar to that of surviving Viking-age ships, it suggests that Viking-age rowers, similarly, had limited space since their stature was about the same as ours today.

The short spacing requires that strokes of the oar also be short so that the handle doesn't strike the rower's back sitting in front

of you. The crowded spacing also means that anyone not actively rowing who is sitting on the bench must make himself small, or he is likely to get hit with the handle during the stroke. The result is a light stroke, and the power comes from all the rowers working together.

For many reasons, rowers must row in unison. For one, failing to row in unison makes it far more likely that oars will collide outboard of the ship, and that oars and rowers will collide inboard. During our sail aboard *Sae Hrafn*, a coxswain provided the rhythm, sitting on the aftmost bench on the port side, and we were instructed to listen to his commands and look to his body motions (rather than to his oar) to guide our own rhythm.

How did Viking-age sailors row in unison? There is little that suggests anything like a coxswain, and to my mind, much that suggests that Viking-age people avoided this kind of authority figure. That does not mean they rowed chaotically, but it suggests that, while rowing, as in many of their other activities that required cooperation, they found ways to work together without the need for a central authority.

Our Viking combat research suggests that Viking society was in no way a military society with a command structure. Even in mass battles, the leader set only the general direction of the battle and led by example by fighting in the front. Individual warriors did what they felt best suited the overall goal, as well as their personal goals.



One wonders whether on-board a Viking-age ship, a similar situation occurred, with a steersman setting the course, and individual rowers finding their own way to support him in this goal.

I think all of us at Hurstwic who took a turn at the oars were surprised at how easy the work was. The skipper of the *Sae Hrafn* told us that he usually planned 40 minute shifts at the oars, and several of us ended up doing much longer shifts without any sense of exhaustion.

Eldar Heide's study (2005) of rower shifting in the Viking age suggests that shifts were 2 hours long. The term *vika sjóvar* is the distance a man should work the oars before he should be released. The distance was set to 1000 strokes, about two hours work. But that works out to a much more leisurely rowing pace than what we were doing aboard the *Sae Hrafn*, so many questions remain.

The sagas suggest that crews sometimes rowed day and night. *Egils saga* tells us that when King Haraldur hárfagri traveled to kill Þórólfur Kveld-Úlfsson, the

king's men rowed day and night against a headwind to reach Þórólfur at sunset to make their attack when Þórólfur and his men were unprepared. Warships carried two full sets of rowers so one set could rest while the other set rowed.

The other aspect of rowing that surprised us all was how maneuverable the ship was while being rowed. Very tight turns were possible with one side rowing forward and the other rowing backwards.

Taking a turn at the oars of a Viking ship was memorable for us all. We all learned more about Viking ships and seamanship from being on the water in a replica ship, but there was also a lot of satisfaction on working together as a team to move the ship forward to the goal.

