

Sample Keys from Hetland, Rogaland  
Norway



## Norse Key

I keep the keys to our locked 6 board chest, where we keep the household valuables. I have had to lock up the spices that we use to mull wine and mead from my Husband, as he spends the whole winter complaining about how cold he is and mulled wine is the best and only way to warm him up. I am sure that if I left the spices out, nothing would get done around the farmstead.

I made the key with the lost wax method of casting and using a Viking pit furnace. This was a group project that the Barony of Tir-y-Don did a little over a year ago. I had a wonderful time learning how to do this technique. We started with a basic shape in beeswax. I chose a key and a medallion. Each of us personalized our project with carving. Then we made a mixture of 50% clay and 50% sand, plus 30% organic material (we used oak pollen and saw dust.) This concoction helps to absorb the extra water in the clay and lessen the thermal shock impact, when the mold is fired.

The mixture was used to create both the molds and the pit furnace. The molds and furnace were dried slowly over a week. On the weekend, the furnace was loaded with a mix of charcoal and hardwood, and a fire was lit. The furnace fired at the same time as the molds were baked. As time progressed and the molds heated up, the wax was burned off. We tried to recover the wax, but that is not possible when you are working with the lost wax method of casting. By now it was mid-afternoon and the weather was looking threatening. We decided to try and melt the bronze. We had a few problems. The period crucibles that were made had a 100% failure rate. We had a modern crucible for a backup method, which was put on

the fire, and the bellows were turned up. The fire got even hotter, but our crucible was too large for the amount of bronze needed to pour. Then disaster struck, it started to rain. (If bronze gets wet it will explode.) We quickly rushed the bronze under cover and buried the furnace and molds with sand. We hoped that the project would cool slowly enough not to crack. I rescued the molds in the fall, after a very wet summer. I have the ability to pour pewter. After cleaning up the molds, I poured all of them. It was fun to break them open and see if the projects were successful. We had two good Thor's hammers, one great strap end, one passable strap end, one medallion which got cooked a bit on the bottom, three keys, four molds with blown out bases and two molds with a cinder blocking the pour spout. I was surprised at how



brittle the molds were and that some of the molds were burnt. After a bit of trial and error I discovered that the easiest way to clean up the key was using a small file.

The class was taught by Mistress Lucrezia, who took a class at Pennsic. I found it equally interesting to see how the knowledge was passed from one individual to another. I

Burning off the wax



could probably create a furnace on my own and with a little trial and error I could probably cast more objects. The skill to create beautiful broaches should come with time.

Heating the Bronze

