



The rule of thumb was that the hotter the metal, the easier it would be to shape. However, if it got too hot, the metal could get brittle. If the metal got brittle, it would either have to be cooled down or heated up. Each time the metal was heated to the state it needed to be in order for it to be of use, (the colour of red) this is called a 'heat' - that is the temperature it needed to be in order to be of use, before it cooled down. It is called a 'heat' because it would have been heated to a specific temperature, and it would have needed to retain that temperature in order for the blacksmith to carry out their work. The blacksmith would have tried and finished their work in as few a 'heats' as possible, as the constant reheating of the metal would damage it by making it brittle and would have possibly resulted in impurities in it.

The Fultz House Museum Blacksmith Shop

The planning for and construction of the Fultz House Museum's blacksmith shop came to light in 1990, with a gift from the local county councillors. In the summer of 1991 the Fultz House was given the wood (mostly hemlock) from an old barn measuring 75 feet by 35 feet located in Beaver Bank (erected in the 1800's), donated by Ken Barrett.

With museum members Ken Grace, Jim MacLeod and Glen Slavenwhite, and supported by inmates from the Halifax County Correctional Centre, the

barn was taken down board-by-board and beam-by-beam. Throughout the years 1992 and 1993, over 20 tons of rock and gravel was hauled to the site to build the foundation for the shop. Boards, beams, doors and windows were transported to the Fultz House grounds, where they were stored until 1994.

The construction work began in earnest in 1994. When building the rafters, they were built in the style of the 1800's, and when they were put in place, they needed no bracing. The pieces of wood were cut to interlock and their snug fit makes the frame more secure.

The building was finished in September 1994, except for the firebox. This was started, but not finished until May 1995. The bricks for the firebox came from the Anglican Church in Stewiacke. Three truckloads of brick over 100-years old were obtained.

The year 1995 will be forever known as the year of the blacksmith shop at the Fultz House Museum. The blacksmith shop was opened on July 1st by Walter Smeltzer, the son of A.J. Smeltzer, who operated the last blacksmith shop in Sackville. At the ribbon cutting, there were four generations of the Smeltzer family on hand.

It took time, a great deal of patience and hard work from a reliable group of volunteers to ensure that the idea of the dream of having a blacksmith shop at Fultz House became a reality.

The **FULTZ HOUSE BLACKSMITH SHOP** is a tribute to old-fashioned building methods and the fulfillment of a dream. Touring the blacksmith shop helps visitors to look back into our past, and see how our forebears lived and carried on their lives.



The Old Blacksmith Shop



The blacksmith shop at Fultz House

The Modern Blacksmith

It is the common opinion that the art of blacksmithing is dead, proved obsolete by modern day machinery and electronics. Blacksmithing is very popular in museums and community heritage sites to show children and adults the labourious job that was undertaken by the village blacksmith.



**FULTZ
HOUSE
MUSEUM**



An Introduction...

The term "blacksmith" comes from the colour of the metal they used. The blacksmith had a very important role in the 1800/1900s. They used iron and steel, forging horseshoes, gates, fences, utensils and parts of machinery. They were also able to forge strong and sturdy tools.

A popular blacksmith in the early 1900s was A.J. (Bert) Smeltzer. He most likely learned his trade from John Robert Ellis (1843-1916), a local blacksmith. A.J.'s blacksmith shop was centrally located in Sackville (located where Disco Deli is today), and was a popular place for young and old alike as they watched Mr. Smeltzer work the forge and strike the red hot metal with his hammer, creating many useful items for the home, field and forest.

Pictured below is A.J. Smeltzer (on left) outside his shop.



Pictured above is the Fultz House Museum blacksmith shop anvil

The Tools & Costs of the Blacksmith Shop

The blacksmith would have made many of his own tools, but his most important tool would have been his forge. The forge would have been made from brick or stone, and was usually approximately 30 inches tall and 20-40 inches across. The forge was often square, but could also be rectangular and rarely circular. The forge would usually have been as deep as it was wide, as the oxygen would have stayed away from the metal, making it smoother.

The blacksmith had many tools, all surrounding his forge, anvil and slack tub. For instance, the blacksmith must have tools for his forge, including shovels and pokers. On his anvil (much like a workbench), the blacksmith would have a set of "anvil tools" used for shaping, cutting and molding the iron. The most important tool among the anvil tools is the "cutter" much like a chisel, which allowed the blacksmith to cut without any help.

On average, the price for giving a horse new shoes and putting them on, would have cost 80 cents. If the owner wanted to take the old shoes off, caulk the hooves, and put the old shoes back on, it would cost approximately 40 cents. If you wanted to get your pot repaired, it would cost you 20 cents, and it would have cost around 65 cents to fix your buggy.



General Blacksmithing Techniques

Blacksmithing is an art that has been lost with time. It is an art that was carried out with great care and precision. Blacksmithing relied heavily on visuals. Blacksmiths needed to be able to see what they were doing, besides seeing what colour the metal was and determining if it would be too hot, or hot enough to mold into something that was needed (i.e. horseshoe, tools, nails, etc.).

The shaping of the iron was basically a molding process. It required strength, control, and technique. Before anything could be done with the iron, the iron had to enter a 'plastic state'. It was called the *plastic state*, because the metal became like plastic, in that plastic is bendable, but hard to break. This was done by heating the metal up in the forge by lighting a fire and inserting the metal to heat. As stated before, the blacksmith's job was very visual; they had to watch the metal as it changed colours. The metal started at its original color and then went through several shades of yellow, purple, blue, gray, and finally a dull red, which is the considered the *plastic state*. If it continued to heat, the metal would have gone through more shades of reds, growing in intensity throughout, before changing to an orange, and then a white, and it then became semi molten when it turned yellow again. If it continued to heat by leaving it too long in the forge, it would erupt into sparks.