

## *Hopewell Furnace National Historic Site*



Although it looks more like a church camp tabernacle than an industrial structure, this is the cast house. The square stone structure protruding above the rear of the cast house is the blast furnace stack. The blast was powered by a water wheel fed from a stream which originally ran under the stone bridge in the foreground. The stream was diverted as the original stream bed was filled with furnace slag (waste material from the iron smelting process) over the furnace's years of operations.

In this view from the hillside overlooking the furnace, we see the charcoal storage shed and the charging ramp leading to the furnace top. Charcoal, made from thousands of trees on this iron plantation, fueled the furnace. Iron ore and limestone, the other ingredients in iron making, were also moved to the furnace over the ramp.





This is a charcoal pit, typical of sites once scattered over the Hopewell iron plantation. In this photo, it is in the early stages of preparation. If weather conditions allow, the National Park Service actually makes charcoal here during the summer months.



A stack of iron "pigs" outside the cast house. My hat provides some sense of scale. Each one is about 3 1/2 feet long, and weighs 90 lbs. On most charcoal iron plantations, iron pigs were reheated and pounded into wrought iron bars at a foundry.



Besides wrought iron, iron plantations produced commercial castings for local markets. Here, a skilled molder employed by the Park Service and his park ranger apprentice perform a living history demonstration at the furnace. Wearing clothing appropriate for the early 19th Century (except for safety goggles and gloves) they take visitors through the process of making a mold and casting a part for an iron stove.



<https://www.nps.gov/hofu/index.htm>



These iron stoves were made at Hopewell Furnace. They are displayed in the Visitors Center.