Henry Clay Furnace

From "National Register of Historic Places Inventory Nomination Form: Henry Clay Furnace" Clifford M. Lewis (August 1970)

Physical Appearance

Henry Clay Furnace is about one-half mile from the parking place for Cooper's Rock and is reached by a gently descending trail culminating in a small level spot confronting Clay Run, a stream about fifteen to twenty feet wide.

The external appearance of the furnace is little changed from the time of its building. It sets on a base about 30 feet square. The present height of the furnace is approximately 30 feet, but originally, with three or four more courses of stone at the top, it would have been about 34 feet.

It was a cold-blast furnace run by steam and had a capacity of about four tons of pig iron each 24 hours. The iron produced was located down the river until 1839, when ownership of the furnace was conveyed to the Ellicotts, who built wooden-railed tramways connecting the ore pits to the furnace. Remnants of the tramway may still be traced.

The ore, limestone, and charcoal were charged into the top of the furnace by a tramway which ran along the top of the stone wall on the side of the furnace. From that bank on the top of the wall to the top of the furnace was a bridge across which the charge was hauled in wheelbarrows and dumped into the top of the stack. Below and by the side of that wall was a waterpit into which the melt was drawn to cool.

The exterior of the furnace is in the shape of a truncated pyramid, the width of whose top we can no longer determine, but the interior is still lined with smaller stones creating a barrel shape. Triangular discharge openings were structured into the front and right side of the furnace.

In the woods across Clay Run there is a mound, now covered with vegetation, formed by the waste discharge from the furnaces.

Significance

Around the commencement of the 19th Century, before the Mesabi Range and other extensive deposits of high-grade iron ore had begun to be exploited, the Cheat River area of northern Nest Virginia (Virginia) witnessed a 70-year development of an iron smelting industry utilizing low-grade native ores.

The iron taken from this area was utilized chiefly for the cut nail industry of southern Pennsylvania and northern West Virginia.

Pre-eminent among the ten or more abandoned iron furnaces still existing in northern West Virginia is the Henry Clay Furnace, standing south of State Route 73 in beautiful Cooper's Rock State Forest.

It was selected by the Department of Natural Resources for preservation because it was one of the earliest and most important furnaces, was in good initial condition, owned by the State, located near well-attended recreation areas, and was cited by The West Virginia Antiquities Commission as deserving of restoration. It was dedicated as an historical place by the Commission on September 26, 1968.

The earliest furnace in Monongalia County was very near the Henry Clay location, being operated by John Davis by at least 1798.

The Henry Clay Furnace was built between 1834 and 1836 by Leonard Lamb for Tassie & Bissell. The ore for the furnace came from bands of shale underlying a vein of Pittsburgh coal or associated with limestone formations. The furnace may have continued to operate until 1868 when all the Cheat River iron works ceased production. The opening of the Sault Saint Marie canal in 1855 signaled the beginning of the end for low-grade ore operations. By 1882 no native ore industry was left anywhere in West Virginia.

A life-time resident of Cheat Mountain recalled that in 1840 the furnace employed about two hundred men digging ore, making charcoal and smelting iron. They generated a community of five hundred persons living in approximately one hundred houses, all of which have disappeared save for a few foundation stones. This recalls that West Virginia, a state of extractive industries, has many ghost towns resulting not only from utilization of iron ore, but coal and lumber as well. Henry Clay furnace remains as a witness to the close relation of human population to an economic base.

From West Virginia Geological and Economic Survey

Most of the iron furnaces were built in the Cheat River Valley near Ices Ferry and along Decker’s Creek in the Monongahela River Valley. The Decker's Creek Iron Works, also called Rock Forge, produced bar iron as early as 1798, although the most extensive iron works were on the Cheat River. At Pleasant Furnace, built on Quarry Run about 1798, Samuel Jackson produced large quantities of bar iron and sold it in exchange for cash, grain, and country products. Since the Pleasant (Davis) Furnace was small, it did not supply enough iron for Jackson's use. So new furnaces were built, such as Woodgrove, Henry Clay, and Anna, all near Ices Ferry on the Cheat River. Since iron manufacturers preferred charcoal over coal for the furnaces, the lumber industry in the area was encouraged and thrived. During its peak years, in the 1840s, the Jackson Iron Works was a well-known establishment, employing as many as 1,200 workers. A thriving community developed with over 100 homes, four times the size of nearby Morgantown.