



Early Settlers Made Iron Here

New Jersey Pinelands Commission
P.O. Box 359, New Lisbon, NJ 08064
Nancy Wittenberg, Executive Director

phone: 609-894-7300
fax: 609-894-7330
www.nj.gov/pinelands

by Dr. Barry Brady

A full quarter century before the Industrial Revolution began in this country, a thriving iron industry had been established in remote sections of what is today the million acre New Jersey Pinelands, our country's first National Reserve. Thousands of colonial Americans worked day and night at some 30-odd forge and furnace sites spread out along the major rivers of South Jersey.

Natural Resources Handy

Iron production flourished in so unlikely an area as the Pine Barrens because iron-rich water from streams and bogs provided the raw material, vast forests for charcoal-making offered the fuel, and piles of clam and oyster shells from nearby shore areas contained the lime necessary in the traditional iron-making process. The occurrence of these unique natural resources proved crucial for the colonists who needed iron for ammunition and armaments in the Revolutionary War.

But how did they get iron from water? Bog iron derives from ferric oxides that occur in the iron-rich clays underlying much of New Jersey's Outer Coastal Plan. Waters laden with organic acids from decaying vegetation percolate down to these layers, leaching out the soluble iron and carrying it to the surface. Deposited along river banks and in swamps, this iron ore was mined and smelted for a full century from the 1760's to the 1860's.

The fuel used to stoke the brick and stone furnaces at places like Martha, Weymouth, and Atsion was charcoal, which burned slowly with just the right intensity. Colliers made the charcoal in smoky mounds of sand and turf using large amounts of the native pine from vast Pinelands forests. Some remains of charcoaling can still be found near these sites.

The seashell lime used as flux to carry off impurities during the smelting process was available locally and was even conveniently gathered together in heaps. Archaeologists speculate that some of the great shell piles left behind by the native Lenape Indians were carried off to serve the furnaces.

Batsto

Entire towns sprang up around the old iron furnaces during their heyday. The most famous of them, Batsto, which today is maintained as a visitors center by the State, had perhaps as many as 500 residents at its height.

During the Revolutionary War, the British were concerned enough about the bog iron industry that they attempted to mount a raid on Batsto in October 1778. This precipitated the tragic Chestnut Neck Massacre in which a detachment of over forty Americans was wiped out by the advancing British who quickly withdrew when they learned of a stronger American force in the area.

In the 1840's, the discovery of anthracite coal near the magnetite iron ore beds of Pennsylvania foreshadowed the doom of iron production in southern New Jersey. The last of the great furnaces blew out its fire forever in the 1860's. By this time though, the iron of the Pines had already made its mark on the region and on the country as a whole, a colorful reminder of the rural industries that flourished in America a century or more ago.

Today visitors to Batsto can tour the ironmaster's mansion, a museum, and the homes and outbuildings of this 18th century community.