

## **Charcoal Was An Early Product Produced In The Pine Barrens**

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Batsto Citizens Gazette, Sunner/Fall/Winter 1987

ANYONE WHO has ever traveled in the Barrens during or just after a light snowfall couldn't help but notice perfect circles 20 to 30 feet in diameter etched in the snow. There are mementoes of charcoal kilns of years ago. These kilns once abounded in the Batsto, Pleasant Mills, Weymouth area.

At one time it was possible to spot three of these circles on the road from Dutch-town, a local name for an old cranberry settlement in Hammonton near Atsion, and Batsto. There was once evidence of kilns near Constable Bridge, New Pond and this writer recalls as a youngster seeing a kiln in operation on the Quaker Bridge Road where the old "mail road" branched off to provide a short-cut to Batsto.

Three things were needed to produce iron in the old iron furnaces in the Pine Barrens: the ore, found in sheets in boggy areas, hence the term bog ore; flux, usually limestone or oyster shells needed to cause the iron to separate from the dross or position of the ore to be discarded; and charcoal, used for fuel.

The ore was gathered and brought to the furnace site in wagons or flat-bottomed boats; the flux was also brought in by wagon or boat. The shells from the shore, the limestone from North Jersey. But the charcoal had to be made near the furnace site by charcoal burners or colliers.

First, exactly what is charcoal? Charcoal is simply wood that has been charred or partly burned. The process drives out all moisture and wood fibers and the resulting product is a light, easily handled fuel, almost pure carbon, which burns with little flame but gives off intense heat.

The key man in making charcoal was the burner or collier. His was a lonely life since most of the pits were located outside and often some distance from the settlements. Mostly he worked alone living in a crude shelter hardby his kiln. Sometimes, especially where there was more than one kiln to be tended, there was an assistant.

In the beginning, setting up a pit was work for many hands. In the first place the term "pit" was a misnomer. The charcoal burning operation was done entirely above ground on a piece of cleared, packed level ground. It was essential that the kiln be set level for proper burning.

The actual burning was done in late spring, summer and early fall months. Wind, the bane of the collier, was always a lurking danger and the colder months is the time when strong winds will suddenly spring up. A kiln left untended for even a short while under those conditions was quickly turned into an all-consuming bonfire.

The operation began with the cutting of the wood. This was done by several men. Sometimes the collier would take part in the cutting if he was inclined to make a little more money. The wood was cut in four foot lengths and hauled to the kiln area by haulers using wagons or perhaps sledges. The collier took no part in the transport.

Once the wood was at the kiln site the collier would take over. He supervised the building of a square or triangular shaped chimney of logs. A heavy green pole called a "fagin" was driven into the ground in the center. The first series of kiln wood was canted against the chimney. This was called a crib and so constructed to slope to the outside. When complete the second crib was begun. Most kilns included three such piles, all sloping from the inside to the outside perimeter. When complete the pile about to be fired looked like a log igloo.

Openings were provided near the ground in the perimeter. The kiln was then covered with sod and sand. Where old kiln-dust was available in the vicinity this might be favored over sand.

Either before or after building and setting up the kiln the burner would build himself a shelter. This was usually a lean-to of logs covered with sod and sealed with leaves. Sometimes a more elaborate teepee like structure was erected.

This was to be the burners home for the next 10 days to two weeks while the burning process charred the logs. The piles usually contained 30 to 40 cords of wood.

When all was in readiness, chips, dry sticks and other flammables were dropped into the chimney and

fired and the long, slow process was underway.

As the charring progressed "soft spots" might develop in the pile. When this happened the burner, using a ladder fashioned on the scene would climb up on the pile and gingerly test the trouble spots with his foot. Often these had to be repaired with sod, sand or charcoal dust and tamped, sometimes by jumping on them. A dangerous task, to say the least.

As the charring went on, blue smoke was considered an indication that all was well in the kiln and good charcoal was being made. Some burners believed that breathing air heavily laded with this blue smoke enhanced their and was the reason why they developed such demanding appetites during the operation.

It took three and a half to four cords of wood to produce 100 bushels of charcoal. A bushel of charcoal was about one and one quarter cubic feet, which means it took 450 to 500 cubic feet of cordwood to produce 125 cubic feet of charcoal.

The charcoal burner was never able to relax during an operation. A rising wind or a shift in the wind called for quick adjustment of the draft to prevent disaster.

When the charring was finished the charcoal was removed with rakes, starting with a hole made in the pile near ground level. Sometimes when the charcoal hit the air it would start burning and the flames had to be smothered with sand. But eventually the pile was leveled, loaded into wagons, with a watchful eye open for sparks, and taken away.

For his labors in those days the charcoal burner earned as much as a dollar a day. It was not the road to riches. Not for the charcoal burner, anyway.