

# Pennsylvania Trails of History

**In Pennsylvania, all roads lead to history.**

To help find your path, the Pennsylvania Historical and Museum Commission (PHMC) has blazed several special-interest trails leading to some of Pennsylvania's most historic sites. We invite you to explore one site at a time, travel an entire trail or create your own road trip to Pennsylvania's past. No matter whether you choose one of our classic trails, a trail based on PHMC's annual themes or blaze your own, we're sure it will lead you to experience and embrace the people, places and events that make Pennsylvania so special.

**Begin your journey online at**

**[www.PATrailsofHistory.com](http://www.PATrailsofHistory.com)**

## Hours of Operation

**OPEN June-August:** Wednesday through Saturday, 9 a.m. to 5 p.m.; Sunday, noon to 5 p.m.  
Last tour leaves the Visitor's Center at 3:15 p.m. each day  
**September-May:** Thursday through Saturday, 9 a.m. to 5 p.m.; Sunday noon to 5 p.m.  
Last tour leaves the Visitor's Center at 3:15 p.m. each day  
**CLOSED** Mondays, Tuesdays, and all holidays

*Individuals with disabilities who need special assistance or accommodation should call in advance to discuss their needs. Persons who are deaf, hard of hearing, or speech impaired who wish to contact a hearing person via Text Telephone may use the PA Relay Center at (800) 654-5984.*

*Hours and rates are subject to change. Please contact us for additional event information.*



## CORNWALL IRON FURNACE

94 Rexmont Road (corner of Boyd Street)  
P.O. Box 251  
Cornwall, PA 17016  
[www.cornwallironfurnace.org](http://www.cornwallironfurnace.org)

Cornwall Iron Furnace is administered by the Pennsylvania Historical and Museum Commission in partnership with the Friends of Cornwall Iron Furnace.

**Pennsylvania**  
pursue your happiness™

# Cornwall Iron Furnace

**Cornwall, Lebanon County**



Pennsylvania  
Historical & Museum  
Commission

## Visitor Guide



### The only Surviving Intact Charcoal Cold Blast Furnace in the Western Hemisphere

Cornwall Iron Furnace (1742-1883) is the heart of a vast industrial plantation for nearly a century and a half. It is typical of the furnaces, which dotted the Pennsylvania countryside in the eighteenth and nineteenth centuries. Around it developed villages, artisans' shops, stores, schools, churches, and the home of a wealthy ironmaster. Iron ore, limestone, and wood for charcoal were found in this self-contained iron plantation, totaling about 10,000 acres at its peak; all of these raw materials necessary for the smelting process. Cornwall Iron Furnace, the only surviving intact charcoal cold blast furnace in the Western Hemisphere, attests to the once great iron industry that flourished in south-central Pennsylvania.

In the 1730s, Peter Grubb, a stone mason, began mining nearby. In 1742, Peter established the furnace, naming it Cornwall after his father's birthplace in England. This furnace remained in operation until 1883.

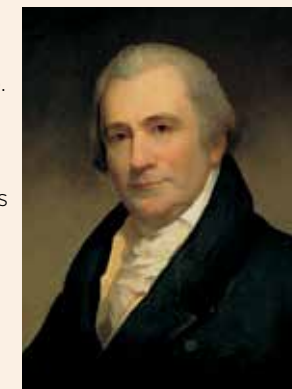
Although the British Parliament attempted in 1750 to restrict production of iron in the colonies, the output continued to rise.

*Front: This massive wheel was run by a steam engine and provided the power to blast air to melt iron ore, charcoal and limestone.*



The American colonies, with Pennsylvania being the top producer, smelted one-seventh of the world's iron.

In the mid-nineteenth century, Cornwall's iron plantation contained industrial, residential, and agricultural activities. Small villages were created for furnace workers and miners. These stone and brick structures were simple in style, but sturdy in construction. Many other structures built during this time period use a Gothic Revival architectural style.



*Robert Coleman*

When Peter died in 1754, the property passed to his sons, Curtiss

and Peter. By 1798, the Grubb family sold out to Robert Coleman. Coleman was so successful in the business that he became one of Pennsylvania's first millionaires. The Cornwall furnace remained in operation until 1883, when newer furnace operations fueled by anthracite coal made it obsolete. The furnace was abandoned leaving the building virtually untouched until it was donated to the state in 1932 by Margaret Coleman Freeman Buckingham, the great-granddaughter of Robert Coleman.

The Cornwall Ore Banks, which Peter Grubb started in the 1730s, continued to operate until 1973, and is located just south of the furnace property. Bethlehem Steel acquired ownership of the mine between 1916 and 1922.

Both strip mining and underground mining were used to extract ore from the ground. The mine began to flood during Hurricane Agnes in 1972, and today is filled with water.

*The charging floor was where buggy loads of charcoal and iron ore were dumped into the nineteen-inch mouth of the furnace.*



### 1. Visitor Center

Is housed in the nineteenth-century Charcoal Barn. Displays and exhibits on ore mining, charcoal making and iron making are shown. This allows the visitor to get a glimpse into an iron plantation operation. Visitor's services and the museum store are located in this facility.



### 2. Connecting Shed

This roof protected charcoal from inclement weather as it was transported in carts to the furnace building. Prior to the construction of the furnace building, raw materials were brought to the top of the stack on a bridge built from a hilltop to the charging hole of the furnace.

### 3. Furnace Building

This building was constructed in the mid-1800s when the furnace was remodeled and enlarged. Its elegant façade and Gothic Revival details are a testimony to the success of the furnace and the taste of its owners. Charcoal, iron ore and limestone were introduced into the furnace in the charging room on the upper level. The blast equipment, which supplied air to the furnace, is located on the next lower level. This is believed to be the sole surviving example of this type of machinery. The casting room is located on the lowest level and is where molten iron was released from the furnace to be cast into pig iron or other cast iron products.



### 4. Roasting Oven

Alternate layers of charcoal and iron ore, loosely placed to permit the upward passage of air, were put in the roasting oven to remove sulfur from the iron ore. Failure to eliminate sulfur caused difficulties in the smelting process and could force the operation to stop. This structure was probably erected in the early 1800s, when the mine was beginning to yield a lower grade of ore.



### 5. Coal Bins

Although charcoal was the only fuel used in the furnace operation, both company houses and the ironmaster's mansion were heated by anthracite coal in the 1800s. The coal bins also supported the track of the Cornwall Railroad's (1850-1968) spur to the furnace, which brought iron ore from the open pit mine to the furnace. A piece of rail from the railroad is still visible near Rexmont Road.



### 6. Blacksmith Shop

The fabrication and repair of tools for mining and iron making was an ongoing process. In this building a blacksmith could make tools and hardware for the community. *Not open to the public.*

### 7. Wagon Shop

Wagons for the mining and iron making operations were constructed and repaired in this building. *Not open to the public.*



### 8. Abattoir

This charming Gothic Revival building, featuring quatre-foil windows, served as a smokehouse and butcher shop for the Cornwall estate. *Not open to the public.*



### 9. Stable

The stable quartered the horses and mules used in everyday

functions of the furnace, such as hauling raw materials and finished products. Notice the keystone arches over the lower doors and the vent grills in the upper doors. Today the stable serves as the hobby shop for Cornwall Manor.

### 10. Manager's House/Office Building

Present knowledge indicates that this impressive stone building was erected in the 19th century as a residence for the Furnace Manager, who ranked only second to the owner. After 1916, Bethlehem Steel used the building as its Cornwall office.



### 11. Open Pit Mine

Cornwall Ore Banks was one of the world's greatest iron ore deposits. Approximately 106 million tons of iron ore and over 82 minerals were extracted from the mines between the 1730s and 1973. The depth of the Open pit reached approximately 500 feet below the surface.

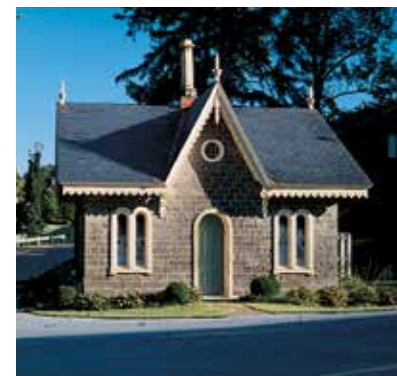


### 12. Minersvillage

Company housing was made available to miners and furnace workers. Minersvillage was constructed in the 1860s and has been continuously occupied. Today the houses are private residences lining Boyd Street. At present, many of these houses have two numbers, one for the current house number and the other, for the company number of yesteryear.

### 13. Paymaster's Office

By 1875, this structure was an office serving the Cornwall Estate. The Cornwall Iron Co., Ltd. (1886-1901), who had control over the defunct Cornwall Iron Furnace, used the building for their office as well. Today, Cornwall Manor uses this building as an art studio.



### 14. Ironmaster's Mansion

Curtis and Peter Grubb, sons of the builder of Cornwall Furnace, constructed this mansion circa 1773. The Coleman family, whose patriarch, Robert Coleman, had acquired the furnace and estate did extensive remodeling in 1865. Included in the renovation was the addition of Italianate architectural elements. Today a few residents of Cornwall Manor have apartments in the old mansion.

