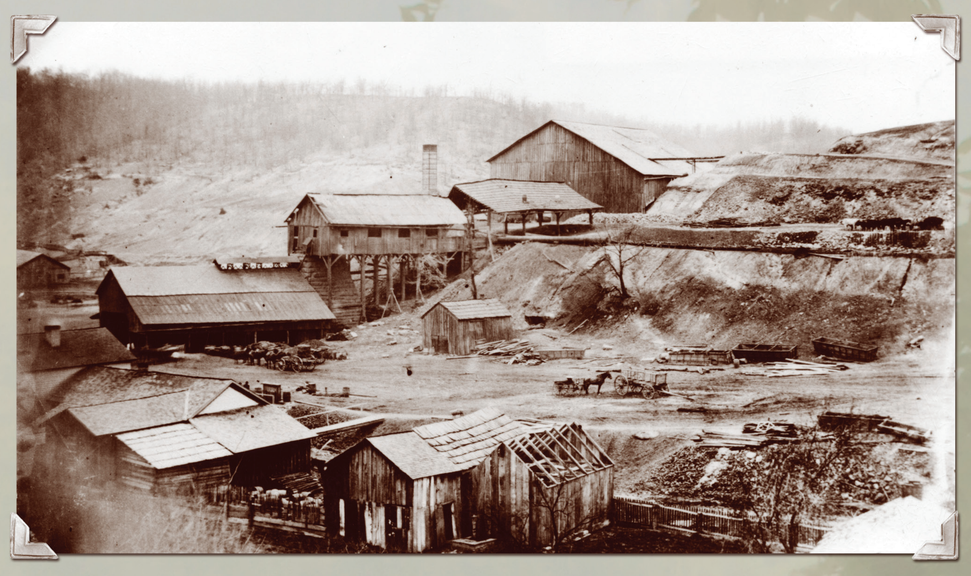
EXPLORE AREA ATTRACTIONS

Hope Iron Furnace

During the late 19th century, there were 69 iron furnaces in the Hanging Rock Iron Region of Ohio. Two of these furnaces were located within the boundaries of what are now Zaleski State Forest and Lake Hope State Park. They are the Hope Furnace and the Zaleski Company Furnace. The stack from the Hope Furnace, located in Lake Hope State Park near State Route 278, is still standing. An Ohio Historical Marker has been posted, and the site is a popular tourist attraction. The Zaleski Company Furnace was disassembled and removed by a buyer in 1875.



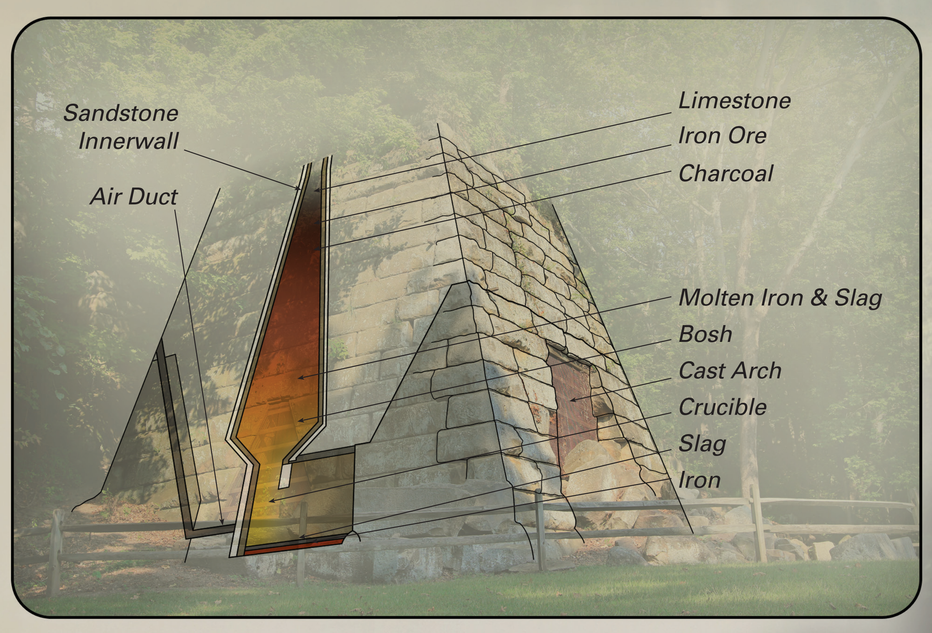
These iron furnaces were a type of blast furnace used to smelt iron ore into cast iron. During the 19th century, nearly everything was made of cast iron, wood or stone. Cast iron is a vital ingredient in the production of steel. The furnaces were built of stone in the shape of a truncated pyramid and were generally charcoal fired. Many of these furnaces were converted to use coal. The furnaces were constructed of local sandstone and lined with firebrick produced locally in kilns from clay mined in the area. The area had vast reserves of iron ore, coal, limestone and timber for charcoal essential in the production of cast iron.

The construction of railroads, canals and the production of iron was largely responsible for the settlement of this part of Ohio. Roads, canals and railroads were constructed to haul iron ore, charcoal and coal to the furnaces, and then to haul the cast iron to manufacturers during the Industrial Revolution. Ohio iron played a critical role in the production of munitions during the Civil War. Most of the industry in Ohio traces its origin to the iron industry, which was initially enabled by the construction of the canals and railroads during the 1800s.

The Hope Furnace operated from 1854 to 1874 and supported a community of about 300-400 people. The furnace was operated on a 24-hour schedule, and during its peak operation, it produced 15 tons of cast iron per day. Historical accounts vary as to whether the average daily production of the Hope Furnace was between 10 and 14 tons, which still makes it somewhat superior to the average furnace in the area. The average daily production of iron in the Hanging Rock Iron Region was about eight tons. In 1973, the Hope Furnace was listed on the National Register of Historic Places.

The workers at the Hope Furnace lived in log homes with dirt floors. They were paid in company script that was worthless anywhere other than the single company store where food, clothing and household products were grossly overpriced. Only three people lived well in the entire community: the iron furnace foreman, his secretary and the operator of the company store. When the furnace shut down in 1874, all the workers moved away, and the town disappeared shortly thereafter.

The age of the iron furnaces in southern Ohio had a very strong influence on the development of the area. Much of the formerly forested area was converted to community structures and agricultural fields. Homes, stores, churches, hotels, boarding houses, restaurants, taverns, jails and other community-based structures were erected to accommodate a growing community. Land clearing for iron ore mining, clay mining, coal mining and stone quarrying, in addition to logging for charcoal production, was extensive, significantly altering the landscape.



Hope Iron Furnace was a charcoal burning iron furnace in operation from 1854 to 1874. The remains of the furnace can be seen at Lake Hope State Park.

The diagram above shows basic elements of an iron furnace. Components are added to the top of the furnace and descend through the furnace to exit from the casting arch as iron and slag.

Ohio Department of Natural Resources
ZALESKI STATE FOREST