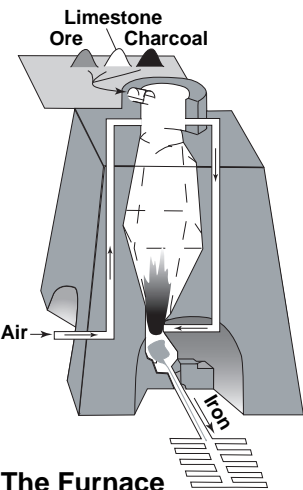


Mining Ore Mountain

Ore Mountain, a mile west of the furnace, was the source of the iron ore that was refined to pig iron. Mining was relatively easy because a four foot deep layer of raw ore lay just below the surface. Workers needed only to clear away trees and topsoil to reach the ore deposits. Once it was roasted to remove the sulfur, the ore was ready for the furnace.

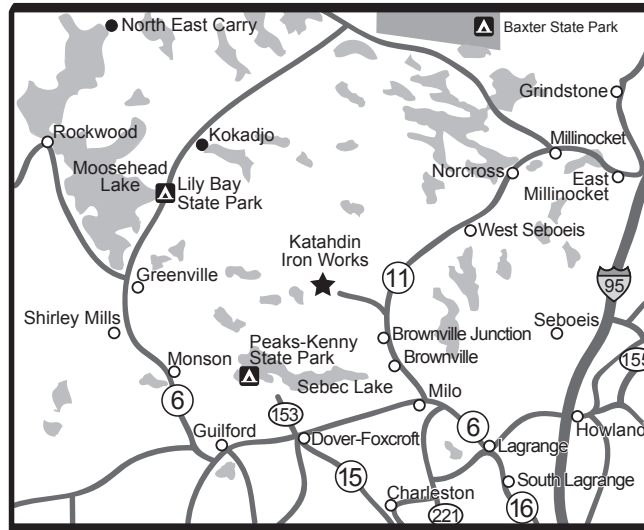


From a building on its top, workers dumped raw materials down into the furnace. These included iron ore prepared in an ore kiln behind the furnace, limestone from Rockland, and charcoal from the brick kilns. When these mixed together in a flame, superheated by air blown into the furnace, the iron melted. The impurities or "slag" were lighter, so they floated on top of the liquid iron and could be drained off. The molten iron ran to the bottom of the furnace and into the casting house. There, the iron flowed into troughs cut in the sand by workers with shovels. When the metal cooled the process had created rough iron bars known as pigs.

To reach Katahdin Iron Works, take Route 11 to Brownville Junction. Drive 5 miles north of Brownville Junction on Route 11 and turn left at the sign for Katahdin Iron Works State Historic Site. Katahdin Iron Works is located about 6 miles further on this gravel road.

Beautiful scenery and numerous recreational opportunities surround Katahdin Iron Works. Among the most well-known is **Gulf Hagas**, a four mile long gorge with 300-400 foot high slate walls and scenic waterfalls. Gulf Hagas is a National Natural Landmark and part of the Appalachian Trail. Information on camping and hiking the Gulf Hagas area is available through the North Maine Woods:

www.northmainewoods.org
Tel: 207-965-8135



While in this part of the state you can also visit Lily Bay State Park on Moosehead Lake, Peaks-Kenny State Park on Sebec Lake, and the Appalachian Trail which ends about 40 miles to the north. The Allagash Wilderness Waterway is about 60 miles to the north and the Penobscot River Corridor is about 40 miles northwest. For camping information at Maine State Parks including Lily Bay and Peaks-Kenny State Parks:

www.campwithme.com
In Maine: 1-800-332-1501
Outside of Maine: 207-624-9950

Katahdin Iron Works



Iron Furnace

Katahdin Iron Works State Historic Site
Katahdin Iron Works Township, Maine

Maine Department of Conservation
Bureau of Parks and Lands
106 Hogan Road
Bangor, Maine 04401

Tel: 207-941-4014
Fax: 207-941-4222



DEPARTMENT OF CONSERVATION
Bureau of Parks and Lands

KATAHDIN IRON WORKS

Industry in the heart of the Maine Woods

Today, the skeletons of a blast furnace and charcoal kiln stand silent, lone remnants of the Katahdin Iron Works. In the past, these structures pulsed with activity as part of Maine's only nineteenth century iron works operation. Here the fires of the blast furnace flamed non-stop for as long as a year at a time, glowing against the night sky. Smoke poured from this charcoal kiln and many others like it. Mule, oxen or horse-drawn wagons rattled by constantly carrying ore, pig iron or wood.

Such sights and sounds must have seemed out of place in the Maine wilderness. Yet it was the wilderness, with its ready supplies of iron ore, fuel wood and water power that brought the iron works industry to this site.

Katahdin Iron works operated here for a total of about 25 years between 1843 and 1890. Although isolated, it was tied closely to outside markets and technological advances in the iron industry. Its beginnings, for example, paralleled a growing demand for iron farm tools, machinery and railroad car wheels. In the end, the iron works failed when huge mills in Pennsylvania brought the nation's new age of steel.

The heart of the Katahdin Iron Works was its blast furnace where intense heat separated iron from other materials in the ore. Workers poured ore, limestone flux and charcoal into the top of the furnace. The charcoal was then ignited from the bottom and the mixture was heated to high temperatures by a blast of air circulated through the base of the furnace.

As the iron melted, it dripped into a crucible, which held about two tons of liquid. When the crucible was filled, workers broke a clay plug in the tap hole. The liquid ran down a long trench onto the sand floor of the casting room and flowed into shorter trenches. Here, the molten iron cooled into pig iron ingots, each weighing about 80 pounds. In the 1880's when production was at a high, 18-20 tons of pig iron were produced daily.

Katahdin Iron Works once had 16 charcoal kilns like the one remaining today. These kilns each burned 50 cords of wood (which took 6 days to burn and 10 days to cool) at a time and produced charcoal vital in fueling the blast furnace. Cutting and hauling wood to burn in these kilns was a major activity and employed hundreds of men. One winter, when the iron works was at the height of its operation, 400 men, using 200 horses and oxen, cut and hauled 20,000 cords of wood, a year's supply for the kilns.

From the first firing of the blast furnace in 1844, Katahdin Iron Works had to cope with its remote location and problems in smelting the local iron sulphide ore. Several different owners saw KIW through expansion and lean times. It survived destructive fires and a railroad was built to lower transportation cost. But the iron works, which remained a relatively small scale, inefficient operation, was finally closed due to outside competition. In March 1890, the Piscataquis Observer reported the end of this fascinating and unique chapter in Maine's history:

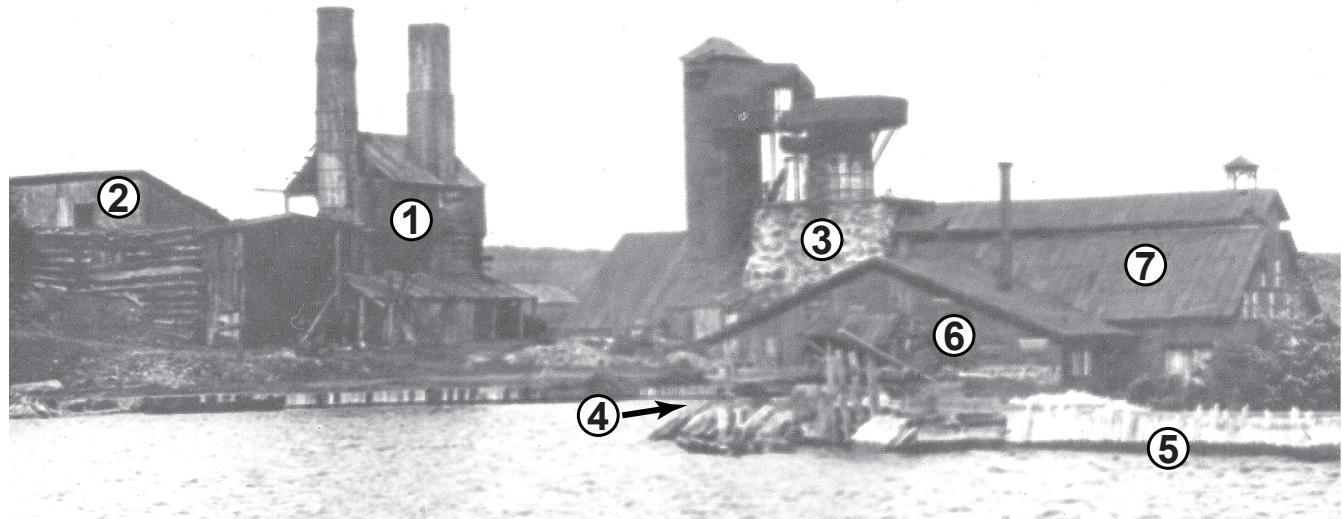
"Work will be suspended at the Katahdin Iron Works in a week or two, the kilns having been filled for the last time."

The people who opened the Katahdin Iron Works in 1843 built an iron works, town and roads in this remote location. By 1884, during the height of the KIW operation, the village had grown to include the homes of 200 workers. The 1880's also marked the beginning of the summer resort business here. Local springs, rich in iron, sulphur and other minerals, were widely advertised as health-giving and the area's scenery, outdoor sports offerings and Silver Lake Hotel became well-known.

Many townspeople moved away when the iron works and a later spool mill closed. The hotel burned in 1913. In 1927, the General Chemical Company leased Katahdin Iron Works as a reserve source of sulphur, which is contained in the iron sulphide ore. The company purchased the property in 1952, and donated the land containing the blast furnace and one remaining charcoal kiln to the State of Maine in 1968.

Katahdin Iron Works has operated as an historic site since 1965, and is currently managed by the Maine Bureau of Parks and Lands. For more information on the history of Katahdin Iron Works, visit our website at:

www.maine.gov/doc/parks



While ore was roasted in the Iron Kiln ① workers filled the Charcoal Storage Shed ② with charcoal from the brick kilns. The charcoal, ore, and limestone were dumped into the Furnace ③ and then superheated by pumped-in air. A Sluiceway ④ diverted water from the Dam ⑤ through the Machine House ⑥ where it powered cylinders that forced the air into the furnace. The melted iron then ran out into sand molds on the floor of the Casting House ⑦ where the pigs were formed.