

UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

**NATIONAL REGISTER OF HISTORIC PLACES
INVENTORY -- NOMINATION FORM**

FOR FEDERAL PROPERTIES

FOR NPS USE ONLY

RECEIVED JUN 15 1977

DATE ENTERED

DEC 28 1977

SEE INSTRUCTIONS IN *HOW TO COMPLETE NATIONAL REGISTER FORMS*
TYPE ALL ENTRIES -- COMPLETE APPLICABLE SECTIONS

1 NAME

HISTORIC

Schoolcraft Furnace

AND/OR COMMON

Munising Furnace

2 LOCATION

STREET & NUMBER

CITY, TOWN

Munising

NOT FOR PUBLICATION

CONGRESSIONAL DISTRICT

11

STATE

Michigan

CODE

26

COUNTY

Alger

CODE

003

3 CLASSIFICATION

CATEGORY	OWNERSHIP	STATUS	PRESENT USE	
<input type="checkbox"/> DISTRICT	<input checked="" type="checkbox"/> PUBLIC	<input type="checkbox"/> OCCUPIED	<input type="checkbox"/> AGRICULTURE	<input type="checkbox"/> MUSEUM
<input type="checkbox"/> BUILDING(S)	<input type="checkbox"/> PRIVATE	<input checked="" type="checkbox"/> UNOCCUPIED	<input type="checkbox"/> COMMERCIAL	<input checked="" type="checkbox"/> PARK
<input type="checkbox"/> STRUCTURE	<input type="checkbox"/> BOTH	<input type="checkbox"/> WORK IN PROGRESS	<input type="checkbox"/> EDUCATIONAL	<input type="checkbox"/> PRIVATE RESIDENCE
<input checked="" type="checkbox"/> SITE	PUBLIC ACQUISITION	ACCESSIBLE	<input type="checkbox"/> ENTERTAINMENT	<input type="checkbox"/> RELIGIOUS
<input type="checkbox"/> OBJECT	<input type="checkbox"/> IN PROCESS	<input type="checkbox"/> YES: RESTRICTED	<input type="checkbox"/> GOVERNMENT	<input type="checkbox"/> SCIENTIFIC
	<input type="checkbox"/> BEING CONSIDERED	<input checked="" type="checkbox"/> YES: UNRESTRICTED	<input type="checkbox"/> INDUSTRIAL	<input type="checkbox"/> TRANSPORTATION
		<input type="checkbox"/> NO	<input type="checkbox"/> MILITARY	<input type="checkbox"/> OTHER:

4 AGENCY

REGIONAL HEADQUARTERS: (If applicable)

National Park Service, Midwest Regional Office

STREET & NUMBER

1709 Jackson Street

CITY, TOWN

Omaha,

VICINITY OF

STATE

Nebraska 68102

5 LOCATION OF LEGAL DESCRIPTION

COURTHOUSE,

REGISTRY OF DEEDS, ETC. Alger County Courthouse

STREET & NUMBER

CITY, TOWN

Munising

STATE

Michigan 48962

6 REPRESENTATION IN EXISTING SURVEYS

TITLE

Pictured Rocks National Lakeshore

DATE

August 1968

FEDERAL STATE COUNTY LOCAL

DEPOSITORY FOR
SURVEY RECORDS

Park Headquarters

CITY, TOWN

Munising

STATE

Michigan 48962

7 DESCRIPTION

CONDITION		CHECK ONE	CHECK ONE
<input type="checkbox"/> EXCELLENT	<input type="checkbox"/> DETERIORATED	<input type="checkbox"/> UNALTERED	<input checked="" type="checkbox"/> ORIGINAL SITE
<input type="checkbox"/> GOOD	<input type="checkbox"/> RUINS	<input checked="" type="checkbox"/> ALTERED	<input type="checkbox"/> MOVED DATE _____
<input type="checkbox"/> FAIR	<input checked="" type="checkbox"/> UNEXPOSED		

DESCRIBE THE PRESENT AND ORIGINAL (IF KNOWN) PHYSICAL APPEARANCE

The Schoolcraft Furnace site is located in Pictured Rocks National Lakeshore and is northeast of the town of Munising in Michigan's Upper Peninsula. The area of land on which the furnace, kilns, and accompanying buildings once stood is in and around a small valley which was formed by glacial movement. At present a second growth of trees and vegetation has grown up in the valley after being cleared a hundred years ago. This valley today is not only historic, but naturally beautiful. The furnace's foundation originally was blasted out of the side of the valley along Munising Creek approximately 1100 feet from the shore of Lake Superior. Visible evidence shows the remains of a blast furnace at mound B and a wooden log road or "corduroy" road and iron ore at A. (See Diagram) There are also several kilns up the hill from the blast furnace remains that can be seen as circular shapes protruding above the ground.

The evidence at A, approximately 200 feet from the Park information center up the valley, shows a series of parallel logs which lead into Munising Creek. At one time there was a wood or "corduroy" road up to the furnace from the lake dock and this is probably the remains of that road. There is also a round metal mass on the opposite side of the Creek which is thought to be a piece of iron ore, or possibly part of the blast furnace.

Mound B is approximately 100 feet uphill from A and is the site of the blast furnace. Exposed quarried rocks, bricks, and pieces of metal which are the remains of the metal reinforcing bars of the blast furnace, are found in an area which is approximately thirty feet by thirty feet. A second growth of trees and vegetation now covers the area.

The area of the kilns up the hill from the furnace is of an undetermined size because of vegetation which conceals much of the evidence. The area is at least seven acres in size. The placement of some of the kilns can be seen during the spring when the vegetation is at its lowest point and the snow is gone. What can be seen are a number of raised circles of grass and dirt which have a diameter of approximately twenty feet which are the remains of the kilns foundations. There is also evidence of access roads and a culvert.

The area of the kilns, area A, and mound B are visible to visitors from the Pictured Rocks Information Center. They are accessible from a path which leads to Munising Falls, a quarter of a mile back at the end of the valley. The National Lakeshore staff also have an Interpretive series and tour of the Schoolcraft Furnace area and its history.

8 SIGNIFICANCE

PERIOD	AREAS OF SIGNIFICANCE -- CHECK AND JUSTIFY BELOW				
<input type="checkbox"/> PREHISTORIC	<input type="checkbox"/> ARCHEOLOGY-PREHISTORIC	<input type="checkbox"/> COMMUNITY PLANNING	<input type="checkbox"/> LANDSCAPE ARCHITECTURE	<input type="checkbox"/> RELIGION	
<input type="checkbox"/> 1400-1499	<input type="checkbox"/> ARCHEOLOGY-HISTORIC	<input type="checkbox"/> CONSERVATION	<input type="checkbox"/> LAW	<input type="checkbox"/> SCIENCE	
<input type="checkbox"/> 1500-1599	<input type="checkbox"/> AGRICULTURE	<input type="checkbox"/> ECONOMICS	<input type="checkbox"/> LITERATURE	<input type="checkbox"/> SCULPTURE	
<input type="checkbox"/> 1600-1699	<input type="checkbox"/> ARCHITECTURE	<input type="checkbox"/> EDUCATION	<input type="checkbox"/> MILITARY	<input type="checkbox"/> SOCIAL/HUMANITARIAN	
<input type="checkbox"/> 1700-1799	<input type="checkbox"/> ART	<input type="checkbox"/> ENGINEERING	<input type="checkbox"/> MUSIC	<input type="checkbox"/> THEATER	
<input checked="" type="checkbox"/> 1800-1899	<input type="checkbox"/> COMMERCE	<input type="checkbox"/> EXPLORATION/SETTLEMENT	<input type="checkbox"/> PHILOSOPHY	<input type="checkbox"/> TRANSPORTATION	
<input type="checkbox"/> 1900-	<input type="checkbox"/> COMMUNICATIONS	<input checked="" type="checkbox"/> INDUSTRY	<input type="checkbox"/> POLITICS/GOVERNMENT	<input type="checkbox"/> OTHER (SPECIFY)	
		<input type="checkbox"/> INVENTION			

SPECIFIC DATES 1867, 1877 BUILDER/ARCHITECT Peter White, H.R. Mather

STATEMENT OF SIGNIFICANCE

The Schoolcraft Blast Furnace was one of the most significant of the twenty-one blast furnaces that operated intermittently during the decade that followed the Civil War on different sites in Michigan's Upper Peninsula. The furnace's importance does not rely on the mere fact that it smelted iron ore, but that Peter White was involved in its existence and the furnace's relationship with the Bay Furnace across Munising Bay. Peter White was Northern Michigan's most successful nineteenth century banker who exemplified the rags-to-riches pattern. He was not only prominent within the Upper Peninsula of Michigan, but was well known in both political and financial circles of this country. He hoped to develop Marquette, Michigan and the surrounding area into an iron and steel center. The site of the Schoolcraft Furnace represents a time in the history of industry when men were searching for a more economical way to transport iron ore to the steel producing areas of America.

In 1844, iron ore was discovered in the Marquette Range fifty miles west of the Schoolcraft Furnace site. This discovery caused entrepreneurs to build blast furnaces to reduce the ore to iron. All of the blast furnaces were closer to the Marquette Range than to the Schoolcraft Furnace located east of Munising Bay on Lake Superior. The Schoolcraft Blast Furnace was considered profitable because of the presence of a natural harbor and a large supply of hardwood in the surrounding area. This was true even though the iron ore was shipped from Marquette and limestone, used as flux, was brought from Lake Erie. The profitability of the Munising site for a blast furnace was reinforced two years after the Schoolcraft Furnace was in operation with the building of the Bay Furnace, six miles across the bay. The Bay Furnace became a companion to the Schoolcraft Furnace and the crews of both often met socially.

Peter White and H. R. Mather formed the Schoolcraft Iron Company in 1866. Money for this venture was supplied by Philadelphia financiers. The company was formed as a result of three previous attempts to make the Munising area profitable. The first attempt was the Munising Company which tried to start a resort community on the southeast shore

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of Munising Bay in 1850 and was sponsored by Philadelphia investors. A tract of land containing 87,000 acres was purchased at a cost of eighty-five cents an acre. The plan was never realized. A road cut through to Bay de Noc on Lake Michigan, following an old Indian trail, and the planning of a village were the only accomplishments. After the Munising Company's capital was exhausted a new company called the Grand Island Ore Company was formed. The latter also lasted a short time. People who remained in the area survived by living off the land. The third company, founded by S. F. Church and H. R. Mather in 1863, was named the General Mineral Land Company. It also had financial setbacks. White and Mather purchased the General Mineral Land Company in 1866, renamed it the Schoolcraft Iron Company, and started construction of the Schoolcraft Furnace on May 17, 1867. The furnace foundation was 1100 feet from Lake Superior at the time of construction. The cost of the structure was increased because the stone had to be quarried on Grand Island and floated across the Bay.

The first blast of the Furnace was on June 12, 1868. The first "pig" iron production was slowed by water-logged charcoal, but after this problem was solved, production was 100 tons per week. The Furnace consisted of one large engine (for the hot air blast) and two smaller engines, (one for the water pump and the other for the ore crusher). All the mechanical parts were made at the Washington Iron Works, Newbury, New York. As a safety measure an 8,000 gallon water tank filled with water from Munising Creek was put on the hill in the event of a fire.

A water balance carried the crushed ore and limestone to the top of the stack to be loaded. Originally five kilns were built in the immediate area and six others were located approximately four miles away in the heart of hardwood forests.

The Schoolcraft Iron Company prospered for two years, but because management officials in Philadelphia had overextended the company financially, iron ore ran out at the site and the furnace closed down. Peter White then bought the bankrupt company on July 12, 1871, for \$65,000 and called it the Munising Iron Company. Under this new ownership, the furnace blasted again on April 8, 1872. The Furnace was operated intermittently for several years. The lack of supplies and the closing down for an addition of a bell and hopper to stop the loss of gas when loading the furnace were the reasons.

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Of the twenty-one original furnaces in Michigan's Upper Peninsula nine were in blast in September 1875. The Depression of 1873 contributed to the demise of blast furnaces in the Upper Peninsula. The Munising Iron Company never recovered. Also, other coke smelting processes were found to be less expensive. The furnace was leased to Major Henry Dickands from the summer of 1876 to November 1876, later to Dan Rankin from July 14, 1877 to November 24, 1877, after which it was closed down permanently. Both of these men failed because of a lack of fuel, a lack of iron ore, and the economic conditions of the times. In 1901, the Lake Superior Iron and Metal Company of Hancock purchased the old machinery and moved it to their plant in Hancock.

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LaFayette, Kenneth, "Schoolcraft Iron Company at Munising"; part of an unpublished book on the history of mining in Michigan's Upper Peninsula; 1976.

Dunbar, Willis F., Michigan: A History of the Wolverine State, William B. Eerdman's Publishing Co., Grand Rapids, Michigan; 1965.

Information from Pictured Rocks National Lakeshore's file on the Schoolcraft Furnace.

SCHOOLCRAFT
FURNACE
SITE

AREA OF
KILNS

INFORMATION
CENTER

H
58

MUNISING
CREEK

MUNISING
FALLS
(50' TALL)

