

# Michigan Time Traveler

An educational supplement produced by Lansing Newspapers In Education, Inc. and the Michigan Historical Center Foundation.

## KIDS' History

### Archaeology at the Carp River Forge

This month's Time Traveler finds industrial archaeologists investigating the site of the first iron forge in the Lake Superior region.



### The Carp River Forge

The Carp River Forge near Negaunee operated from 1848 to 1855. It forged iron from ore mined at the nearby Jackson Mine. Over time the forge settlement was slowly reclaimed by nature. Today building foundations and heavy industrial artifacts are all that remain. They are part of the Michigan Iron Industry Museum.

In the photo, archaeologists from Michigan Technological University in Houghton work at the site of the Carp River Forge.



### The Industrial Archaeologists

Industrial archaeologists study artifacts left behind from industries such as mining sites, factories, logging camps, and bridges and railroads. Students and their professors from Michigan Technological University have investigated the Carp River Forge site since 1996. They study historical documents about the forge and information about other forges that did similar work. Then they do the work at the archaeological site, called a "dig."

At Carp River the archaeologists have found an 1850 bank token from the Bank of Upper Canada and a pewter (spoon?) handle with "Simons, Bro. And Co." on it. Other items include heavy cast iron plates that may have been part of the furnaces. They have also unearthed ceramics, clay pipes, glassware, iron ore, slag (waste rock) and heavy iron plates from the forge. The object in the photograph is called a gudgeon and was once part of the water wheel that powered

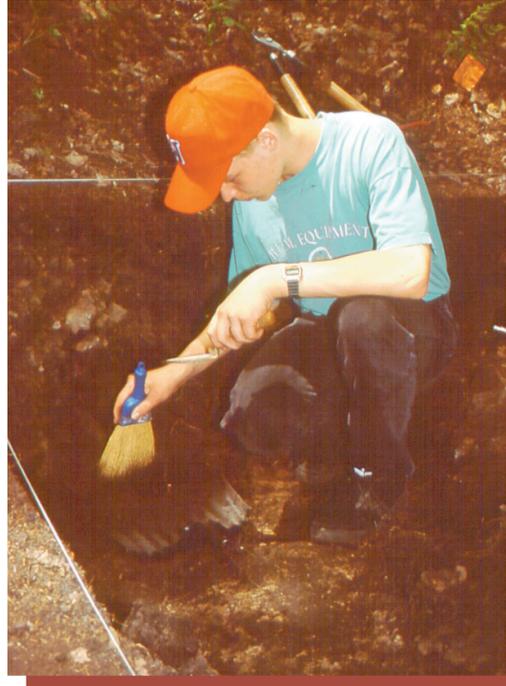


the forge. It was discovered in (and later removed from) the Carp River by underwater archaeologists.

Based on their work, the archaeologists have a much better idea of where things were located at the site. This will help the museum create interpretive walking trails. Objects like slag with iron still in it will help museum visitors understand how hard it was to forge iron in the 1850s.

### What Happened at the Forge?

The Jackson Iron Company built the forge to separate the iron from the rock and make easy-to-ship iron bars. At the Carp River, workers built a dam to hold the water and release it in the amounts needed to turn a water wheel to generate power. Loggers cut trees, then colliers burned the wood in kilns to make charcoal. The forge workers burned the charcoal in furnaces to heat the ore to a very high temperature to help separate the iron from the waste rock. Then the ore was beaten by hammers driven by the water wheel to remove the waste rock. The workers shaped the bloom—or mass—of iron that remained into a wrought iron bar. The Carp River Forge was a type of forge called a "bloomingery."



This summer, as part the Michigan Iron Industry Museum's Archaeology Days, elementary, middle and high school students tried their hands at archaeology - digging for clues left behind by the people who lived there over 150 years ago.

### Carp River Forge Time Line

- 1844** Iron ore is discovered near present-day Negaunee.
- 1846** The Jackson Mining Company of Jackson, MI, opens the first iron mine at this location and begins building the forge.
- Feb. 10, 1848** Forge workers produce its first iron bar.
- Spring 1849** The dam that turns the water wheel breaks. Iron cannot be made until it is repaired in fall.
- 1850-1855** At least four forge fires are in operation, but the persons operating the forge change several times.
- 1855** The Carp River Forge is abandoned.
- 1973** The first archaeological survey looks for clues to life and work at the forge site.
- 1974** An archaeological excavation of the forge site identifies and maps the forge buildings and operations.
- 1987** The Michigan Iron Industry Museum opens to visitors.
- 1996-2002** Michigan Technological University School of Industrial Archaeology holds summer Field Schools at the forge site.
- 2002** The Michigan Iron Industry Museum begins a fund-raising drive to expand its interpretation of the Michigan iron industry and the Carp River Forge.

### Why Did the Forge Fail?

Three things were needed to make iron at the Carp River Forge: iron ore, water power and charcoal. Iron ore was plentiful. The Carp River, however, was undependable. In spring 1848 it flowed so hard it broke the dam. At other times there was not enough water to turn the water wheel. As more trees were cut to make charcoal, loggers had to go farther to get the wood to fuel the forge.

The most difficult problem was transportation. The wagon roads were muddy and rough, with stumps, stones and steep hills. It was difficult to get people and supplies to the forge from Marquette, the closest port, nine miles away. It was expensive to pay for the men and the teams of animals to take a wagon or sleigh loaded with over a ton of iron bars to the port.

### Things to Do

- Look in the newspaper for advertisements for things made of iron and articles about issues in the iron and steel industry today.
- Identify objects made of iron or steel around your home or neighborhood.
- Take the one of these "Photo Tours" on Michigan's Historic Sites Online ([www.michiganhistory.org/preserve/michsite](http://www.michiganhistory.org/preserve/michsite)): Bridges, Depots, Factories, Mills, and Mines and Quarries. Or use the "Search Wizard" to find other industrial sites. Look under "historical significance" -> "site type" -> "industry."



Two archaeologists sift the dirt at the Carp River Forge site, looking for the tiniest fragments of artifacts.

### At the Michigan Historical Museum

- Visit with archaeologists and learn about their excavations at Michigan Archaeology Day, Saturday, October 12, 2002, from 11 a.m. to 3:00 p.m.
- Discover more about Michigan's mining history in the "Mining in Michigan" exhibits on the museum's second floor.

The Michigan Historical Museum, 702 W. Kalamazoo St., Lansing is located two blocks west of the Capitol in downtown Lansing. Museum admission is free. Hours: Monday through Friday, 9 a.m. to 4:30 p.m.; Saturday, 10 a.m. to 4:00 p.m.; Sunday, 1 to 5 p.m. The museum telephone hotline: (517) 373-3559. The museum is part of the Michigan Historical Center, Department of History, Arts and Libraries. Visit us on the Web: [www.michiganhistory.org](http://www.michiganhistory.org)



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