## Miners Castle

Pictured Rocks National Lakeshore National Park Service U.S. Department of the Interior

"Wild Beauty on the Lake Superior Shore"



# Miners Castle is one of the icons of Pictured Rocks National Lakeshore, towering for centuries as a sentinel along the Pictured Rocks shoreline.

The Pictured Rocks cliffs hold great spiritual significance to the Anishnabeg or Ojibwa people who have lived in this area thousands of years. Imagine canoeing into this region and seeing the cliffs for the first time in a sixteen foot birch bark canoe.

Miners Castle was named by Englishman Alexander Henry's employees when they were exploring the area for minerals in 1771. Though no minerals were ever found, the name "Miners" has endured. Had you been sailing by back then, what would you have called it?

The area was prominently featured in Henry Wadsworth Longfellow's 1855 *Song of Hiawatha*, an epic poem based on the history of the local Anishnabeg people as recounted in *Algic Researches*, written by Sault Ste. Marie Indian Agent Henry Schoolcraft.

To the geologist, Miners Castle is an open textbook, revealing the history of the earth at the distant edge of the Michigan Basin. The Pictured Rocks Escarpment is one of the primary landscape features along the entire south shore of Lake Superior.

Commercial tours have been providing boat tours past the Castle since the 1940's. This rocky cliff is a highlight of the 2.5 hour cruise that continues east to Chapel Beach.



There are no pictographs or petroglyphs on the cliffs, but colorful patterns may have given rise to the name Pictured Rocks. These patterns are caused by mineral stains on the rock surface as mineral laden water seeps from cracks and between layers in the rock. Blue and green stains are copper; black is manganese; and yellow, red, and orange are iron.

#### Why is this rock here?

The Pictured Rocks cliffs are made of three formations of Pre-Cambrian and Paleozoic age sandstone, the Jacobsville (bottom), Munising (middle), and Au Train (top). These layers represent different periods of time, sources of sediment, and physical characteristics. The Jacobsville was formed in river and coastal deposits. The Munising and Au Train were formed in shallow seas. Weathering, ancient and current great lakes levels and several glacial events have carved the rocks into the forms we see them today.

#### Why is this rock interesting?

Look for numerous layers in the sandstone cliffs. Each layer represents very long periods of deposition of sand and other minerals. The oldest layers are on the bottom, the youngest toward the top.

Within some layers are crescent shaped structures of sand, known as cross-beds. Cross-beds indicate the direction of river sediment flow. The Miners River is creating cross-beds in the stream channel as it moves sand toward Lake Superior.

Most of the waterfalls in this area are the result of water running over a shelf or cliffs of limey sandstone called the Munising Formation. This formation of rock extends from Tahquamenon Falls, some 75 miles east of the Lakeshore, to Laughing Whitefish Falls, about 30 miles west of the Lakeshore. The Munising formation is also called the Northern Michigan cuesta or escarpment.

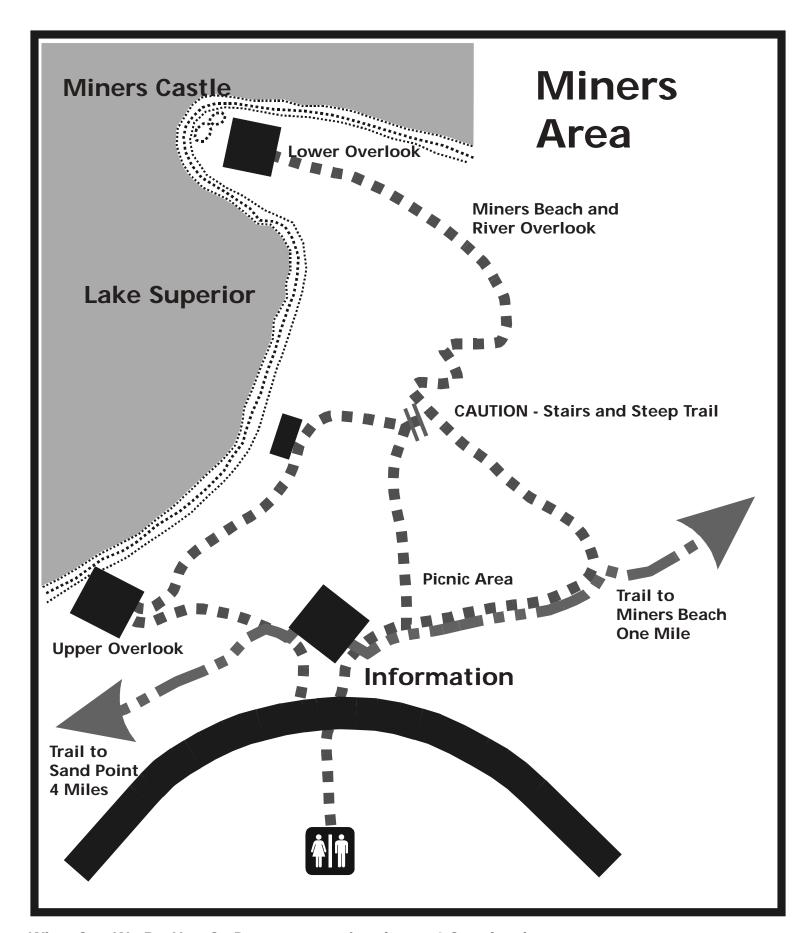


Miners Castle



Once again in human figure, Full in sight ran on before him, Sped away in gust and whirlwind, On the shores of Gitche Gumee, Westward by the Big-Sea-Water, Came unto the rocky headlands, To the Pictured Rocks of sandstone, Looking over lake and landscape.

From "Hiawatha" by Henry W. Longfellow - 1855



### What Can We Do Here? - Pets are permitted on a 6 foot leash.

Hike to the three overlooks Hike to Miners Beach Drive to Miners Beach Hike to Sand Point Picnic here while watching for a bald eagle Stroll along Miners Beach Hike to Miners Lake Hike to Mosquito Beach