

07.21.11

**PORCUPINE
MOUNTAINS
WILDERNESS
STATE PARK**



Porcupine

Michigan



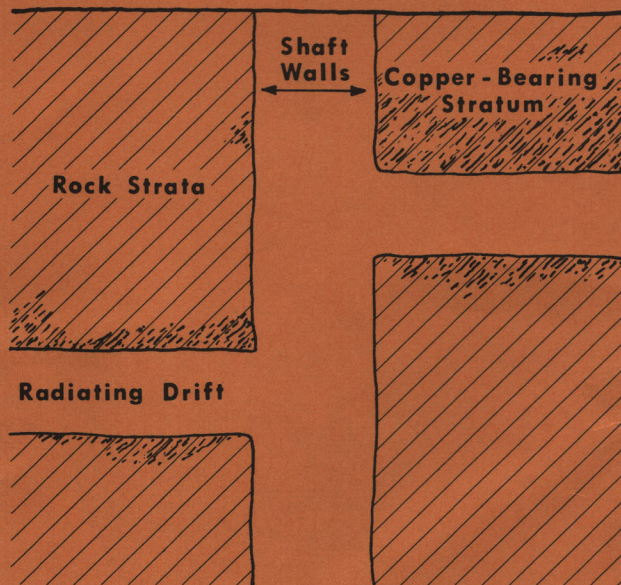
Trail

**Michigan Department
of Natural Resources**

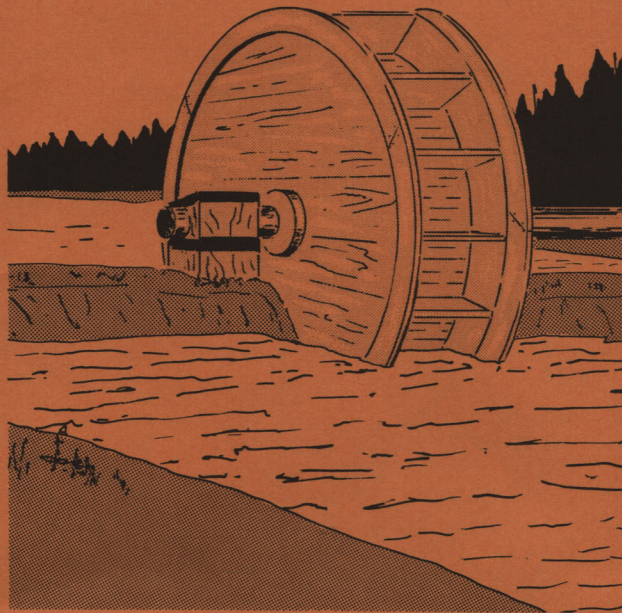
The Union Mine was the first mine in the Porcupine Mountains. Started in 1845 as the Isle Royale and Lake Superior Mine. It was a part of the first mining rush in the United States. Today, the forest has reclaimed the land and one has to look closely to see the remnants of man's endeavors. Anyone who has swung a pick against rock for a few hours can appreciate callouses and sweat that went with the unfulfilled dreams of wealth that were shared by the majority of prospectors in this area.

This trail covers the area worked in one of those early ventures. It will take about 45 minutes at a leisurely pace. The numbered stations along the trail correspond to the numbered paragraphs on your trail guide. As you walk, you might ponder the seemingly feeble efforts to scratch a fortune in red metal from the earth. One might reflect on what, a hundred and twenty five years hence, our own descendant may think of our various efforts to hit "pay-dirt."

1 William W. Spalding was put in charge of the operation of the mine; and in 1845, the first shaft was begun at this location. The shaft was much deeper with radiating drifts into the copper deposits. Take a look at the shaft then return here and continue down the hill.



- 2 One of the early methods of locating copper was to dig in a logical place and trust your luck and good judgement. In April of 1846, Spalding directed his men to dig this trench, hoping to strike a vein. Jim Paul, the founder of the town of Ontonagon, visited this location the day the ditch was begun.
- 3 Spalding must have known his business as his journal states that a shaft was begun on a new-found vein. This shaft was probably across the river, although the exact location has been obscured by time.
- 4 A dam and waterwheel were constructed at this spot to provide power. After a century and a quarter, we can still see the squared-out trough in which the wheel revolved, although the dam has long ago been destroyed by the heavy spring runoff from the high country.



5 William Spalding was a friend of Kon-te-ka a famous Chippewa Indian chief who visited him on this site. He was about 100 years old in 1846 when he viewed the operations of the Union Mine. During his lifetime, warriors from his band helped defeat General Bradock in Pennsylvania, participated in the massacre of the garrison at Michilimackinac in 1766 and the capture of Fort Mackinaw by the British in 1812.

- 6 The first wagon road in the district was finished from Union Bay on the lake to the Union Mine in July of 1846 by a crew of Indians. Roads connecting these two points were gradually improved until finally, in 1968, a paved highway was completed. Now in two minutes we can travel the distance that Spalding's oxen covered in half a day.
- 7 No profit was realized by the early investors. In 1864, the company was sold to a Detroit businessman. Under new management there were four shafts and a small stamp mill for crushing ore. The deepest shaft (400') was probably located about 100' south of this marker. Steam power was used to run the mill. The round structure is the remains of the smoke stack. The entire operation was eventually given up due to low grade ore and expensive production and shipping costs.
- 8 The rock in this area is some of the oldest in the world. This Copper Harbor Sandstone was deposited here in Pre-Cambrian time, 1.1 billion years ago.
- 9 Wild thimbleberries grow in abundance on the forest floor in this area. They are edible and make excellent jam. Early prospectors and miners who had to "live off the land" no doubt ate large quantities of these tart tasting berries during July and August. In the spring, the thimbleberry plant has white blossoms.



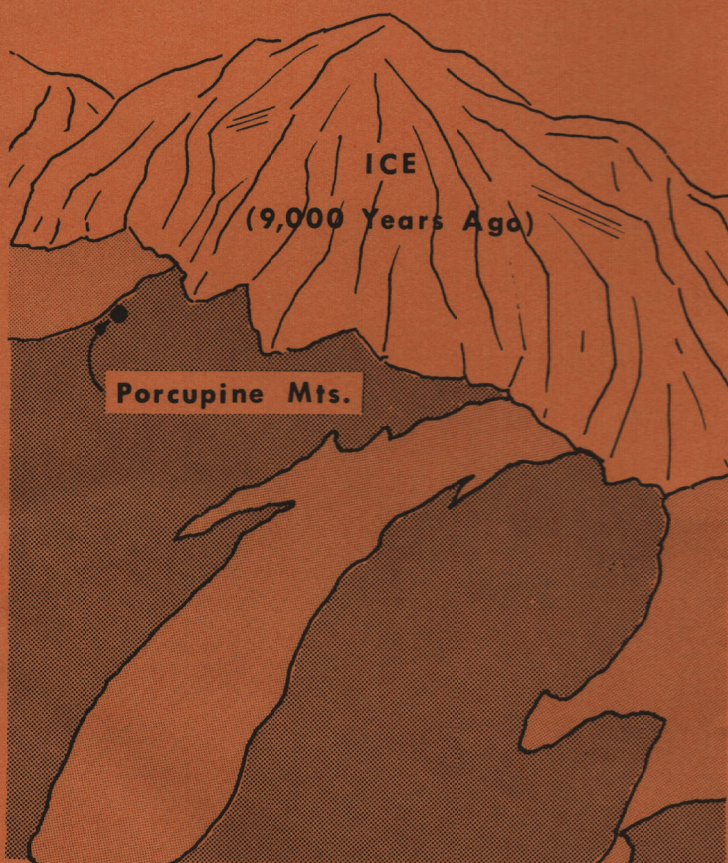
10 *Yellow Birch and Sugar Maple* — These dense strong woods had many uses in building construction and as supporting timbers. They produced excellent charcoal and had hot burning qualities as firewood for the steam engine in the stamp mill.

11 It is doubtful if this site saw any commercial logging operations. The rotted stumps are at least a century old and the trees were probably used for firewood, building or mining timbers.

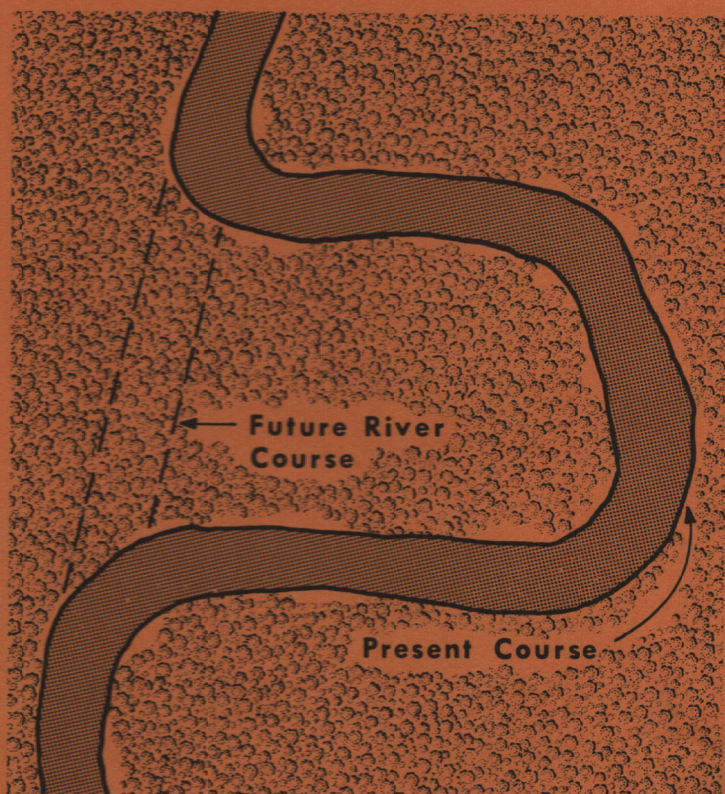
12 *White Cedar* — This tree was used for mine timbers. Its resistance to rot when in contact with the soil made it a favorite.

13 *Hemlock* — This tree was a poor second choice for mine timbers. Its wood is not particularly strong or durable. Exploitation of the hemlock for pulp and lumber occurred long after the mining rush in this area had subsided.

14 This is another of the shafts sunk by the Union Copper Company. Notice the shallow layer of humus above the bedrock. The last glaciers receded from this area about 10,000 years ago and the layer of humus has been forming ever since.



15 Geologically speaking, this is a young river. As it grows older, its course will become straighter. Eventually, the water will cut its way across this U-shaped "ox-bow", which will dry up and no longer be a part of the riverbed.



16 Many of the early prospectors knew little of the geological formation of the region. So, their search for copper was easier in the riverbeds where the rock strata was exposed to the eye. This method saved lots of shovel work.

17 While solid copper masses of several hundred tons were found in some mines east of Ontonagon, Porcupine Mountains copper was found in small particles and flakes in the rock cavities. Unless ore was very rich, the old-time methods of extracting the copper were painfully expensive and inefficient. The only mines to make a profit did so at certain times when copper prices were high enough to overcome the production costs.

The Union, LaFayette, Halliwell, Cuyahoga, and many others were all unsuccessful mines for basically the same reasons.