## Managing the Historic Industrial Landscapes at the Quincy Mining Company National Historic Landmark

Ruth E. Mills, Quinn Evans Architects, 219½ North Main Street, Ann Arbor, MI 48104; rmills@quinnevans.com

Brenda Williams, ASLA, Quinn Evans Architects, 1037 Sherman Avenue, Madison, WI 53703; bwilliams@quinnevans.com

FROM THE EARLY 1800s THROUGH THE 1900s, LAKE SUPERIOR NATURAL RESOURCES AND TRADE routes drew trappers, traders, miners, fishermen, mariners, and recreationalists to the area. The communities they created were typically built using local materials and expertise, reflecting the surrounding environment. Historical resources remaining in the region reflect responses to the extreme environmental conditions, and the unique situation of the Lake Superior region. This paper focuses on one example of a historic industrial landscape in the region, providing a brief historical background, an analysis of the cultural landscape resources, and a summary of landscape treatment recommendations subsequently developed for the Quincy Mining Company National Historic Landmark.

Keweenaw National Historical Park is home to an extensive industrial landscape, including impressive large-scale industrial buildings, and extensive associated landscape features. The 1,120-ac Quincy Unit is named after the Quincy Mining Company that transformed the northern wooded landscape from wilderness to an industrial site. The existing landscape includes extensive historic industrial resources related to copper mining, large expanses of native woodland, and threats from impending incompatible development.

For much of the nineteenth century, the majority of America's copper production came out of one of its remotest corners—the Copper Country of Michigan's Keweenaw Peninsula. During the 1850s, 1860s, and 1870s, Michigan produced more than 75% of the nation's copper, with that percentage peaking at 95% in 1869. Copper mining during that period was dominated by two companies: the Quincy Mining Company, and the Calumet and Hecla Mining Company.

The Quincy Mining Company, located north of Hancock, Michigan, ranked first nationally in copper production from 1862 to 1882. Founded in 1846, Quincy, like other mining companies, initially engaged in fissure mining, which yielded large, pure copper masses, but was expensive and time consuming. In 1856, Quincy switched to amygdaloid mining, which yielded lower grade, but more easily extracted and processed, copper. The Quincy Company successfully mined the rich Pewabic amygdaloid lode well into the twentieth century.

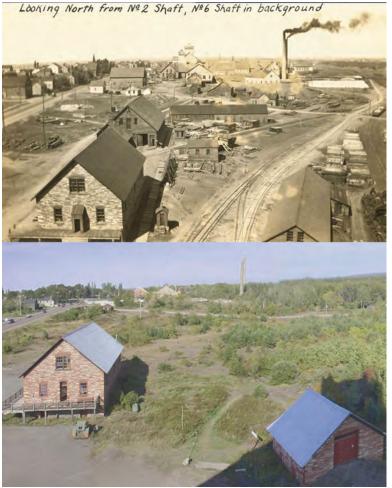
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Early explorers to the Copper Country found a forested wilderness, covered with dense vegetation, and only passable by narrow trails. While Native American cultures had worked surface copper deposits in the area for thousands of years, deeper deposits were hidden under the dense forest and thick ground cover. By the mid 1850s, the forest wilderness, which had originally covered the landscape, was extensively cleared to provide space, materials, and fuel for mining operations. Development of the Quincy site was originally concentrated on Quincy Hill, and included both the mining operations and worker housing. This early development included vernacular structures dedicated to the extraction of the mineral deposits, and arranged in the most efficient way possible to streamline the mining operation.

After the switch to amygdaloid mining, and the arrival of the copper mining boom in the 1850s and 1860s, the industrial and domestic settlement at Quincy became more formalized. The landscape was generally aligned along the axis of the Pewabic mineral lode below the surface, a geologic spine that ran from the southwest to the northeast. Mining operations were centered on the shaft houses that lined the lode (Figures 1, 2). Copper was brought up in the shaft houses, and then sorted and separated. "Poor rock" (rock with little or no copper) was discarded in piles nearby, while copper bearing rock was transported directly to the smelter via tramroads. Company buildings, including the mine office, were located nearby. Dirt roads and informal walking paths facilitated the transportation of goods and workers.

As the labor force grew, so did the demand for housing. In the early years, workers and offi-

**Figure 1.** View north from the No. 2 shaft-rockhouse ca. 1920s (above, source: Keweenaw National Historical Park Archives) and in 2007 (below, source: Quinn Evans Architects).



cials lived either in irregularly placed houses located on Quincy Hill, or in private boarding houses in nearby Hancock. By the early 1860s, the company began building housing, and renting to workers. These were mainly single-family dwellings, built to attract families to the area. The company preferred to employ married men, as single men were considered less likely to stay committed to the company and more likely to engage in undesirable behavior. The first houses built were constructed of logs, the later models were wood frame structures. Many of the houses were one and one-half stories tall. The company often built houses in batches, resulting in streets with a row of matching houses. Early housing settlements were associated with immigrant groups who came to the area to fill specific mining positions. Near Quincy, community names included Hardscrabble, Limerick, Swedetown, and Shantytown.

The Quincy Mining company continued to expand its operations in the following decades. The company acquired land and added support facilities to make their operations more profitable by consolidating more of the copper mining and processing operations in the immediate area. Technological developments increased production yields and created the need for new structures, like rock-crushing houses, and buildings to house equipment, such as compressors. Although the industrial character of the Quincy Mine continued



Figure 2. View from No. 6 shaft toward the No. 2 shaft-rockhouse, ca. 1920s (above, source: John F. Campbell collection, Keweenaw National Historical Park Archives) and in 2007 (below, source: Quinn Evans Architects).

to dominate the landscape, the influx of workers resulted in significant domestic development. The majority of the housing was modest, with spare, practical landscapes serving functional needs. Managers had larger homes that often included manicured lots instead of the livestock, privies, wood piles, and vegetable plots found in mine laborers' yards.

With the discovery of significant copper deposits in the western portion of the United States, Michigan's dominance of the copper industry was lost by the late nineteenth century. Nonetheless, operations continued to grow throughout the early decades of the twentieth century, as the Pewabic lode remained productive. Both Quincy and the neighboring Calumet and Hecla mines continued to dominate copper production on the Keweenaw Peninsula, managing to survive a major labor strike in 1913 and 1914. Increased demand for copper during World War I gave the company its last big boost. After 1920, copper mining on the Keweenaw Peninsula began a slow decline. By September of 1945, Quincy had closed all of its underground operations, although some reclamation operations continued through 1967.

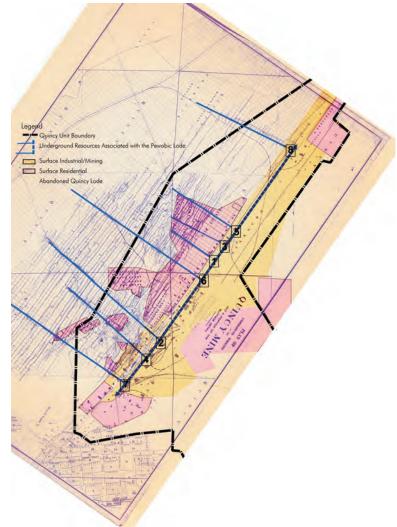
The shutdown of the Quincy Mining Company operations had a significant impact on the industrial landscape. Equipment was sold for scrap, buildings were demolished, and land was sold off for redevelopment. Buildings remaining were left to the forces of weather, and vegetation began to reclaim the formerly industrial landscape. However, the mining legacy of the region was not forgotten. As early as 1958, the Quincy Mine Hoist Association was founded, originally to preserve the No. 2 Nordberg steam hoist—the world's largest steam driven engine when it was constructed, in 1918. The association eventually expanded their mission to preserve buildings,

landscapes, and artifacts associated with the company, and they now offer tours of the steam hoist, hoist house, shaft rockhouse, and underground works. The No. 2 steam hoist was recognized as a National Historic Mechanical Engineering Landmark in 1984.

The late 1980s and early 1990s marked a renewed appreciation for the significance of the mining landscapes of the Keweenaw Peninsula. In 1989, the National Park Service (NPS) established two National Historic Landmark (NHL) districts, one centered on the former Quincy Mining Company property, and the other located at the site of the former Calumet and Hecla Mining Company in Calumet.

On the heels of those designations, the NPS established a new and unique national park in 1992. Keweenaw National Historical Park is unusual in several ways. First, it encompasses resources throughout the region with a main emphasis on two large non-contiguous sites: the Quincy Unit, and the Calumet Unit at the site of the former Calumet and Hecla Mining Company. Second, the ownership and management of the park does not follow the traditional NPS model of a federally-owned, self-contained property run by NPS staff. Instead, it is a "partnership park," where the NPS collaborates with local governments, individual landowners, and private and non-

**Figure 3.** Quincy Unit 1920 land use overlaid on "The Underground tection than would be possible or politic under the Workings of the Quincy Mine and a Portion of the Surface Detail," ca. traditional model of acquiring land, either through 1900s (Quincy Unit Cultural Landscape Report, Chapter IV, page 13, by Quinn Evans Architects). sponsibility for management, protection, and pro-



profit groups to create a more extensive area of protection than would be possible or politic under the traditional model of acquiring land, either through willing sellers or eminent domain. The shared responsibility for management, protection, and promotion of both (limited) park-owned lands and associated sites can include seeking federal funding, planning collaboratively, and developing cooperative educational opportunities.

One of the most recent planning efforts engaged in by the NPS is the commissioning of cultural landscape reports for both the Quincy and Calumet Units. Cultural landscape reports are standard planning tools for the NPS, and require documentation and evaluation of historic landscapes to determine their integrity, and provide a plan for future use. The recently completed cultural landscape report for the Quincy Unit incorporated rigorous historical research (e.g., Figure 3), and in-depth environmental analysis into the planning process, leading to a rich understanding of the multiple layers of history that are represented in the current landscape. This knowledge will be utilized in the future to enhance site interpretation.

Assessing the historic landscape of Quincy was challenging. The landscape changed considerably since the height of the company's mining operations in the late nineteenth and early twentieth centuries. Passing time and a lack of maintenance reshaped the landscape since the mine was operational. All but one of the many shaft rock houses, once visible for miles on the horizon, have been scrapped—torn apart for their valuable steel. Capping mine shafts to improve public safety has

left many mine shafts indistinguishable from the surrounding terrain. As the structural integrity of the extant smokestacks declines, they become expensive maintenance dilemmas and safety hazards. As a result, a number have been recently demolished. Weathered industrial buildings, crumbling masonry ruins, and rotting timber continue to erode beneath the immense weight of heavy annual snowfalls. Unsecured structures sometimes meet alternative fates, including fire and vandalism. Broken windows and decayed building shells are common sights in the district. Historic company housing complexes are often fragments of their former selves. Monumental poor rock piles once dominated the landscape; these have been diminished, as the rock is crushed for construction activities.

New development also threatens the integrity of the historic mine landscape. Former company homes are often modified to meet the changing needs of today's occupants. Modern ranch homes, signs, and billboards located along US Route 41 (itself widened and altered from its original character) now represent new commercial endeavors, while new roads bisect former housing locations. Quincy has been marked by modern industry as well, as communication towers blink into the night from strategic points on the hilltop. Volunteer vegetation now grows on once-barren mining lands, where it hides views, buildings, ruins, and landscape features.

While vegetation obscures the signs of industry, it also provides clues to settlement patterns and building locations. In some places, apple trees, lilacs, and lilies lead the eye toward ruins and small scale features, like fences and paths. Like tributaries, these features can be traced back to their source, often company-built roads and houses still in use. These subtle features offer glimpses of an earlier time, despite the layers of additions that have been made to the landscape and its structures. Although time and neglect have taken their toll, much of Quincy is still visible on the landscape today. What remains is the most complete mining company landscape on the Keweenaw Peninsula.

By comparing those elements still visible, to the extensive historic documentation gathered during the research phase of the cultural landscape report, it is possible to analyze the integrity of the landscape. Careful documentation of the existing conditions is compared against historic photographs, maps, diagrams, and written accounts. Landscapes are evaluated based on landscape characteristics, tangible and intangible aspects that collectively make up the historic character of a property. Some of the characteristics that were significant at the Quincy Mine site included land use, spatial organization of the landscape, the presence or absence of vegetation, topography, views into and out of the property, how people and vehicles circulated into and through the landscape, the variety of buildings and structures, and numerous small scale landscape features.

A few techniques were particularly useful in analyzing the landscape. Overlaying diagrams of the underground mine with plans of surface operations provided an uncommon opportunity to analyze the relationship between the mine shafts, drifts, and stopes, and the above-ground land use. This approach revealed that locations used for massive industrial operations were downhill from the shafts, close to the underground mineral lode, but not above the underground operations. Development above the lode itself was limited to lighter land use, including housing and commercial activities.

Survey records and aerial photographs were also useful in providing an understanding of large-scale changes to vegetation over time. According to an 1860s survey, the entire area was covered with "timberland, mostly sugar maple." During the historic period, the majority of the timber was removed to facilitate mining operations, as is clearly seen in historic photographs. Today, second-growth forest vegetation is reclaiming many formerly open areas of the landscape.

Addressing the preservation and rehabilitation of such a complex and significant landscape is a challenging task, not least because there is no single entity "in charge" of the whole landscape at this partnership park. Despite individual planning efforts, the stakeholders associated with the



Figure 4. Quincy Unit historic core landscape treatment zones (prepared by Quinn Evans Architects, 2010).

Quincy property had not previously come together to discuss long-term management of the resources, or the desired visitor experiences at the site.

To formulate a treatment approach, the unit was divided into management zones (Figure 4). These corresponded to nine landscape character areas: the No. 6 (shaft) area, the visitor center area, the miners' residences, Campus Drive, the dryhouse area, the No. 7 (shaft) and railroad corridor, the mine management area, the No. 2 and No. 4 (shafts) area, and the lower Pewabic area. A plan for rehabilitation and management, based on integrity, intended use, and local conditions was developed for each management zone.

Overall recommendations for the site focused on providing a unified visitor experience in the landscape, and preserving and interpreting the historic industrial landscape. Specific recommendations include: rehabilitating the former Blacksmith Shop and Machine Shop into a joint visitor center and world-class mineral museum; utilizing historic rail routes to link key resources with an interpretive multi-use trail providing a visitor-oriented circulation system; rehabilitating the No. 2 Shaft-rockhouse to provide increased visitor access, interpretation, and an overlook; preserving and interpreting extant landscape features, including the ruins of industrial buildings and equipment; restoring selected landscape features that are critical to understanding and interpreting the

site, such as portions of the railroad tracks and the pulley system; removing vegetation that impacts historic resources and obscures historic views; and preserving and interpreting the remaining poor rock piles, which were a key feature of the landscape during the historic period.

Although these once-dynamic industrial sites are now still and silent, their resources provide powerful reminders of the stories of miners and their families, and the industrial development of our country. The fact that many of these stories are painful, that the landscapes associated with them are not generally considered pleasant environments, and that their stories are not immediately clear to casual visitors, presents challenges to preserving the resources for future generations. The cultural landscape report provides a framework for future management of the property.

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