# The Cogwheel tram Gets a faceleft!



Keweenaw tram ways have disappeared since the close of the mining era. Today, most rail lines and tram ways are hidden by ATV and snowmobile trails. However, there is one remaining example of Copper Country tram ways – the Quincy Mine Hoist Association (Q.M.H.A.) tramway in Hancock, Michigan.

Keweenaw tramways were found throughout the Copper Country. The Quincy Mining Company established four tramways in the 1870s that served to transport copper ore from the shafthouses down to the stamp mill, located alongside the canal. Quincy's tramways were all designed by William Lapp. Quincy's tramways were complemented by the Quincy and Torch Lake (Q&TL) Railroad, which was the mining company's own railroad. Like the tramways, the Q&TL Railroad transported copper ore to processing facilities.

While the early tramways assisted the mining company in transporting metals from Quincy Hill to the mills, the cogwheel tramway in Hancock, MI assists the Q.M.H.A. in transporting people from Quincy Hill to the east adit. The cogwheel tram was created in 1996 as a complement to the Quincy Mine tours, which started in 1993. The project engineer was Robert D. Hitch of Hitch, Inc., of Houghton, the tramcar designer was Phil Quenzi, and the Royale Manufacturing Inc., of Laurium, constructed the tramcar. The Q.M.H.A.'s tram was the first, and thus far, the only cogwheel tramcar system in the State of Michigan. The tramcar features a large windshield and glass roof with open side windows. It is powered by 165-horsepower diesel engines which drive four hydraulic propulsion motors

connected to gears which engage the tooth-mounted rack.

Much work has been done to refurbish the tram during the 2009 winter months. New windows have been placed in the tram, making it easier not only to take the windows out of the frame, but also enabling tourists to take smudge-free photographs even when the windows are in place. The interior of the tramcar was repainted while the exterior of the tram was polished. The chairs within the tramcar have also been refurbished.

The Q.M.H.A. is a private, non-profit organization created to "restore and preserve the mining lore of the Michigan Copper Country." The cogwheel tramcar system is but one example of the restoration activities of the Q.M.H.A. in the Keweenaw Peninsula.

-Lindsey Shafer









# THE #6 LOCOMOTIVE IS HERE! **THE STORY IN PICTURES**













# QUINCY & TORCH LAKE RAILROAD ENGINE

This summer, rehabilitation work has begun on the Quincy & Torch Lake Railroad's Engine House here at the Quincy Mine!

At the beginning of the season. The engine house looked like an abandoned old building made of poor rock from the mine. The wooden roof had rotted and fallen in, leaving no roof at all over the structure. The only remanants of the roof were rusted steel beams, but those have temporaty supports added to them to keep them from collapsing under their own weight. Existing wooden doors at the four locomotive bays are still attached to the structurre. but are severely rotted and are beyond repair. The timbers under the tracks inside are rotted and it was belived that the entire wooden floor of the engine house was also rotted and for the most part gone, with only the soil visible. All of the windows are either broken or gone. Very little could be seen by looking into the bay doors for so much vegetationhas grown in the interior.

Now as you look at the Engine House, the vegetation is gone and some flooring and artifacts are now visible. That is because a limited archaeological investigation was done as a starting point of the rehabilitation project.



In preparation for upcoming rehabilitation work, faculty and students from Michigan Tech's Industrial Archaeology program have spent the summer investigating and documenting the Quincy and Torch Lake Railroad engine house. Graduate student Craig Wilson, assisted and advised by Dr. Sam Sweitz and Dr. Patrick Martin, performed archaeological excavations in several key areas around the engine house to learn more about the structure's history and to assist the QMHA in planning rehabilitation efforts.

Working with a crew of three undergraduate students from Michigan Tech, Wilson first cleared vegetation and debris from inside the structure. Large artifacts, such as a stationary boiler, a planer, a blacksmith's hearth, a tool rack, a grinding wheel, a window, and the overhead belt drive system were documented through photographs and measured

drawings. Each of these artifacts was also analyzed to determine current conditions and potential for inclusion in future museum exhibits. Wilson also performed traditional archaeological excavations in several locations throughout the engine house. The field crew excavated a 12.5 meter section in the machine shop area along the north wall of the engine house, exposing numerous original floorboards and recovering hundreds of artifacts. Crewmembers also excavated the first service pit to reveal original construction techniques. Three smaller excavations were performed at key locations around the engine house to expose the sub-floor structure. In all excavations, Wilson and the field crew gathered information about original construction techniques and current structural conditions to assist the QMHA and UP Engineers plan the upcoming rehabilitation work.



hoods from the locomotive that directed combusted coal exhaust through the

coal exhaust through the roof will be looked at and efforts will be made to try to salvage and reuse these if possible.

Existing stone walls will be re-pointed and the maintenance pits will be reinforced. Soil sediments from the maintenance pits will also be removed.

Plans also include installation of railroad track both inside the building on top of the maintenance pits and some track outside of the building, depending on budget contraints.

This next phase of the project is expected to begin in the Spring of 2010.

-G. Bierman, Craig Wilson

#### finished (the holes have been refilled and the floor recovered), Wilson is currently creating a report summarizing the summer's fieldwork and findings. This report, intended for submission to the QMHA, will include descriptions and analysis of all information generated during excavations. The report will also include a series of measured drawings and photos which record the current conditions of the large artifacts and features inside the engine house. If more funding becomes available. Wilson will also perform artifact conservation and exhibit planning to help the QMHA turn the engine house into a valuable addition to the Quincy Mine museum complex.

With on-site excavations

From this point, this proposed project will include replacement and rehabilitation of many aspects of the Engine House. All of the work for this project will be in accordance with the Secretary of Interior Standards for Rehabilitaion, and will be coordinated with the State Historic Preservation Office.

Replacements of the structure will include a new roof, in kind multi-pane wood windows, and engine house wood doors will be constructed for the locomotive bays. The wood interior columns will be salvaged and reused. The conical steel chimney

# WHAT'S NEW?

- Restoration work has been started on an on-site miner's house, better known as the Martin House. (More news to follow in the Winter 2010 Newsletter.
- Stabilization of the #7 Boilerhouse and the #4 Hoist House on the west end of the property by the Keewenaw National Historical Park.
- Cosmetic restoration of the Quincy & Torch Lake Railroad's Engine #5 completed in September. Thanks to volunteers Chuck & Jane Pomazal, of Dixon, IL, and Chuck and Pauline Trabert, of New Berlin, WI. Members of the Illinois Railway Museum at Union, IL.



Q&TLRR Engine #5