

2022 Year in Review

IRON ORE HERITAGE RECREATION AUTHORITY

IOHRA BOARD:

Don Britton, Chair, Chocolay

Glenn Johnson, Vice Chair/Secretary, Marquette Township

Lauren Luce, Treasurer, Marquette County

Al Reynolds, Exec Committee, Negaunee Township

Jim Brennan, Republic

Dawn Hoffman, Tilden Township

Larry Bussone, Ishpeming

Bob Hendrickson, Negaunee

Nick Leach, Marquette

Mike Springer, Alternative, Marquette Township

Staff: Carol Fulsher



BIG NEWS!



Millage Renewal

The voters overwhelmingly supported 6 more years of funds for the building, managing, maintenance of IOHT



Pavement Replacement
Upgraded 1320 linear feet of pavement



Negaunee Township Trailhead

Trailhead opened to public--Paved parking, vault toilet, lighting, signage, benches, bike rack



Pure Michigan Video

Pure Michigan released video highlighting the IOHT, 28.5K views on Insta

MORE NEWS



Awarded Trust Fund

Develop boardwalk in Negaunee's emergent marsh



New Bike Aggregate, Grading, Rolling in Ishpeming/Tilden



Awarded SORVA Grant

Purchased a mower and flail to beef up maintenance




ORV Grant


Paid for trail gravel/grading, trapping, and culvert maintenance

7 NEW INTERPRETIVE SIGNS DESIGNED BY SIGNAGE COMMITTEE AND INSTALLED 2022


Marquette's Waterfront Transformation




Marquette Waterfront 1908




Marquette Waterfront Today



Early Marquette settlement



Waterfront industry in 1870



Sailing ships at Marquette


Photo: Superior View

Photo: Superior View

Photo: Superior View

The lower harbor reminds us of our industrial heritage. It also represents an area of transition to a gorgeous Great Lake recreation area.


Energy Use In Mining



Drawing: Mike Lempen

HUMANS

Underground miners toiled long hours, blasting, picking, shoveling and scraping ore rock. They loaded the rock into mule carts for transfer.




"Sticking Tommy" miner's candle

Drawing: Mike Lempen

FUEL

Underground miners needed candles, kerosene lanterns, carbide lights, and electrical lighting. Machines ran on electricity and diesel fuel.




Marquette Harbor

Photo: Superior View

WIND


Sailing ships came to Marquette's harbor, bringing men, mules, and coal. Later, they delivered the first locomotives used on the mining range. The ships took on pig iron for the return trip to the lower lakes.



Drawing: Mike Lempen


WOOD

Wood choppers supplied wood for kilns used to make charcoal for the blast furnaces. Blast furnaces made pig iron, which was loaded on ships and sent to steel making centers.



Wood burning charcoal kilns near mouth of Carp River

Photo: Superior View




Locomotives used coal and water

Drawing: Mike Lempen

WATER

Cleveland Cliffs early director observed hydropower usage in Europe, and encouraged the construction of dams and water powered electrical plants on the Dead River.



Ore Dock Chutes

Photo: Marquette Regional History Center

GRAVITY

The pocketed ore dock used gravity to deliver ore to waiting freighters. Fortunately the rail trip to the docks was downhill with loaded railroad cars.


COAL

Until 2019, the mines operated off of coal-powered electrical plants. Locomotives were powered by coal until the mid 20th century.

MULES

Men and mules were the original power sources for work in the mines and transporting ore to ships at Marquette's harbor.

Coal and the Mining Range



An early view of the Spear Coal Dock


Photo: Superior View

COAL POWERS THE IRON RANGE

Anthracite coal made its first appearance in Marquette in 1864 and played a major role in our energy supply for 160 years. Ships filled with coal unloaded at the Spear Dock in the Lower Harbor. A massive 75-foot tall gantry crane lowered its 8-ton bucket into the hold of the ship, scooped up the coal and dumped it into waiting train cars or stockpiles on the dock.


Locomotives carried the coal to blast furnaces and electrical generation stations on the mining range. Spear & Sons trucks delivered coal to local homes and businesses for use in their furnaces. Coal fumes rose up through chimneys and out of smokestacks. Plumes of smoke hung over towns.

Slowly the use of coal diminished, replaced by other energy sources. With the decommissioning of the Presque Isle and Shiras power plants in 2019, the coal era ended on the Marquette Iron Range.




Home Coal Delivery at Marquette

Drawing: Mike Lempen




Spear Coal Dock

Photo: Superior View



Gantry crane at Spear Dock

Photo: Superior View




Early F.B. Spear Coal Truck

Drawing: Mike Lempen

Spear and Sons delivered coal to residences and businesses in Marquette. Houses had special coal chutes with access doors built into the foundation. The family owned company served the Marquette community for 125 years.

Tilden Mine



Open pit mining requires large powerful and efficient digging equipment.


Photo: Cleveland-Cliffs Iron Co.

THE TILDEN MINE

The Tilden Mine behemoth of today bears little resemblance to the original Tilden Mine of 1864. That 19th century mine barely opened before it was abandoned due to its unmarketable, low iron content, high silica iron ore rock.


Today, down in a 900 foot deep pit, modern mining uses explosives and large shovels to break up and load iron bearing rock on high tech, GPS equipped, two story production trucks. The trucks carry ore rock up out of the pit on long inclined roads called benches. Massive crushers, large slurry filled tanks, huge balling drums and 2200° kilns, convert rock with 38% iron content into a 65% iron pellet, ready to be transported by train and Great Lake ore carrier, to steel mills to the east and south.

Science, capital and labor transformed the Tilden Mine from earlier abandonment to the last iron mine on the Marquette Iron Range.




The sprawling Tilden Mine pit and process plant are shown at left. Iron ore bearing rocks are hauled out of the pit to the plant, where the ore is transformed into 65% iron content pellets.

Photo: Cleveland-Cliffs Iron Co.



The huge P & H shovels require an operator to climb two stories to access the control cab level. The scale of the bucket draws the vehicle.

Photo: Cleveland-Cliffs Iron Co.



Tau-Ming Han, a geologist and senior research laboratory scientist, and James Villar, R&D Manager and geologist, were instrumental in the lower grade iron ore refinement process.

Photo: May Ann Villar

NEW SIGNS (CONT) PLUS 6 ADDITIONAL MILE MARKERS

Cliffs Shaft Iron Mine



Postcard image of early Cliffs Shaft Mine

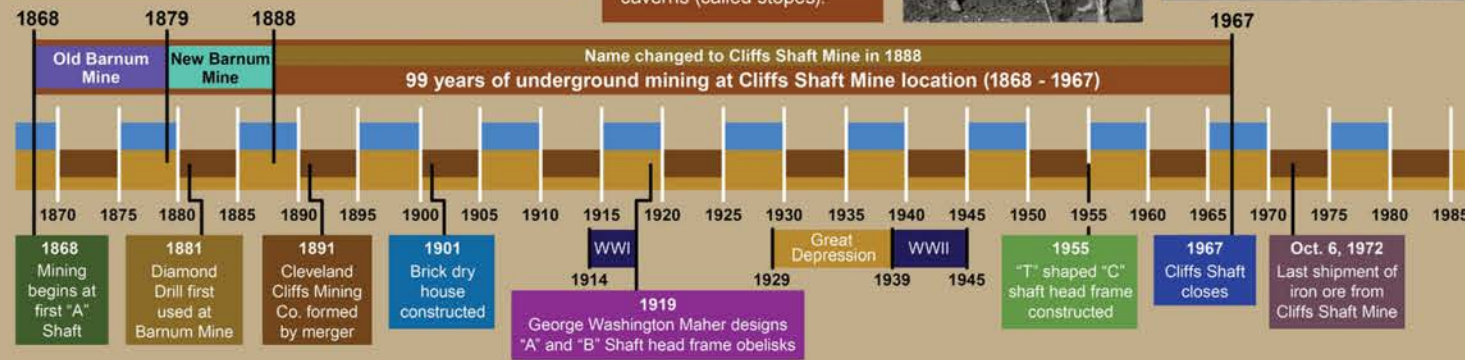
CLIFFS SHAFT MINE

The first "A" and "B" shafts were sunk in 1867. Lift cages were suspended from timber head frames. The cages were raised and lowered to underground workings by steam powered hoists using wire rope and sheave wheels. In 1919 the original timber headframes were enclosed by concrete obelisks. These two obelisks can be seen today.



View of Cliffs Shaft Mine looking north. (Photo taken after 1955)
Photos: Cliffs Shaft Museum

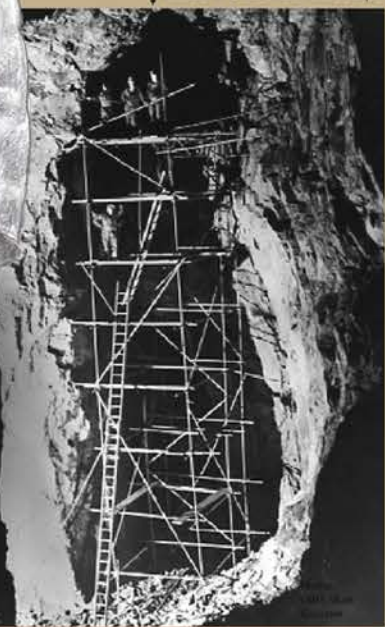
The Cliffs Shaft Mine was once the world's largest producer of Hematite Ore. Hard ore extraction created large, open, pillar supported caverns (called stopes).



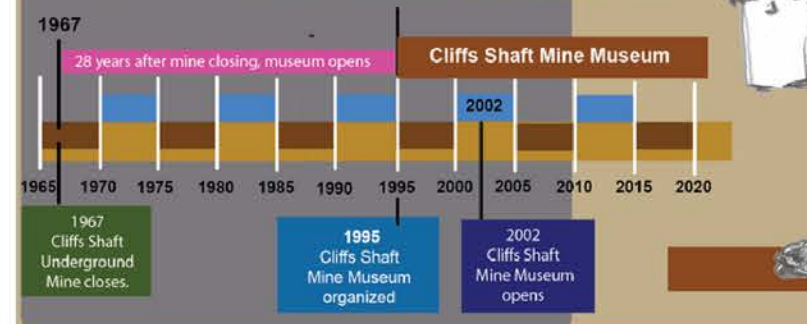
Cliffs Shaft Mine Museum



Miners in Cliffs Shaft Mine Stope



Early Cliffs Shaft underground miner with lunch pail



Ski Jumping at Ishpeming



"The sight of a snowflake used to make my heart flutter", Coy Hill, a Ski Hall of Fame inductee and Ishpeming ski jumper, exclaimed, "It was beautiful to fly through the air on skis."

Coy Hill Photo: U.S. Ski Hall of Fame

SKI JUMPING ORIGINS ON THE MARQUETTE IRON RANGE

Hilly terrain, drifts of snow, and Norwegian immigrants served up a cultural staple on the Marquette Iron Range. Ski jumping and organized skiing have been a part of our culture since 1887, when the Norden Ski Club (now Ishpeming Ski Club) formed in Ishpeming.

Joining the Norwegians, waves of Finnish and Swedish immigrants moved here for mining jobs, and ski jumps proliferated. Every Scandinavian neighborhood had a jump and the Ishpeming Ski Club became a powerhouse of flyers, winning 20 national titles, placing 13 members on Olympic teams, and inducting 13 members into the U.S. Ski Hall of Fame.

The legacy of ski jumping continues. Visit the U.P. Nordic Ski Complex on Cliff's Drive where you will see 30, 60 and 90-meter jumps. A ski jumping tournament is held at the Complex every winter with spectators cheering on those defying gravity.



Members of the Norden Ski Club formed in 1887. Photo: Superior View



"Flying Beetles" Finnish-American skiing family. Photo: Superior View



Each year since February 26, 1926, the Ishpeming Ski Club has hosted a ski jumping tournament on Suicide Hill. Photo: U.S. Ski Hall of Fame



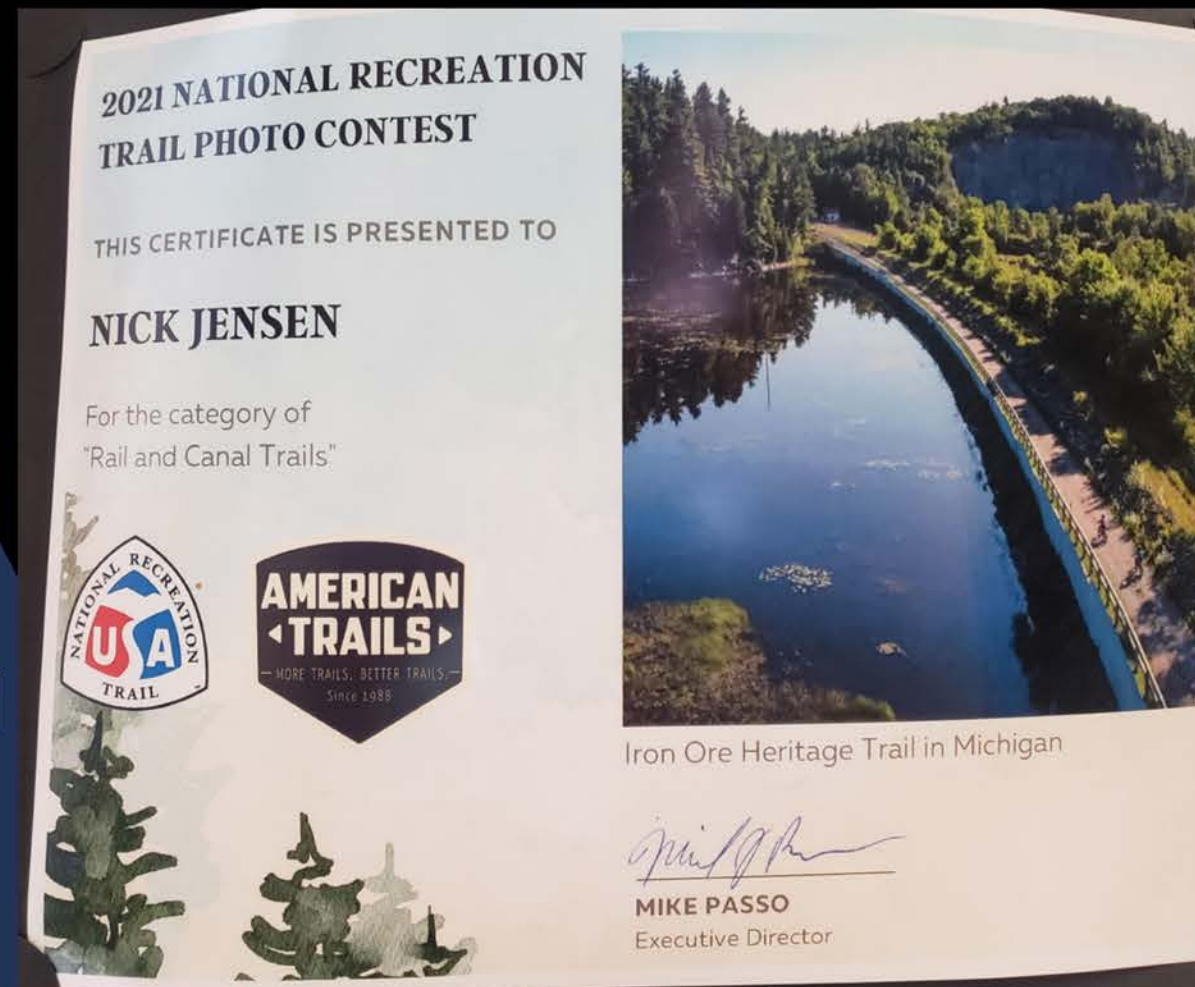
Backyard ski jump at Negaunee. Photo: Superior View



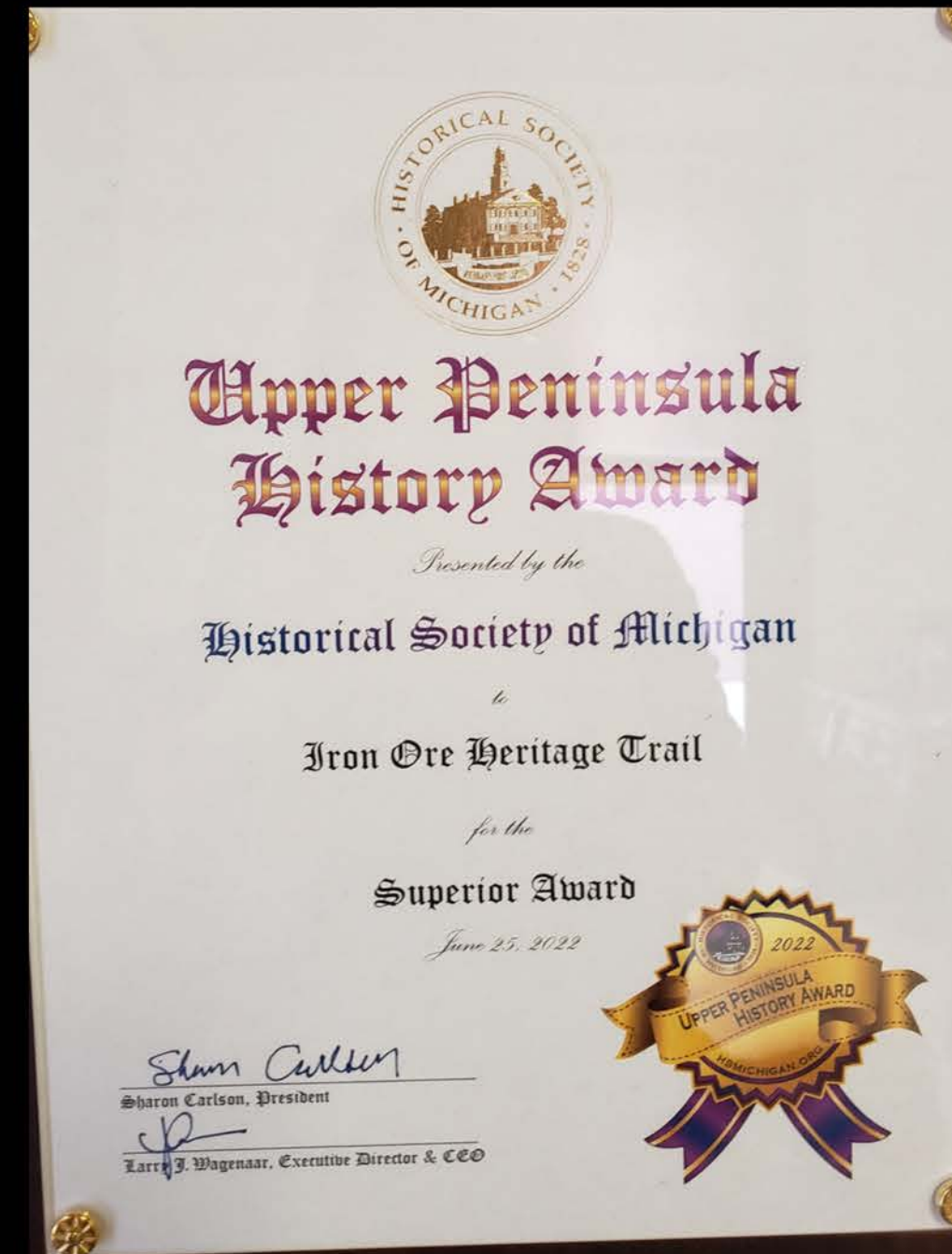
In the News



Iron Town Documentary Debuted at Fresh Coast Film Festival. Features IOHT



Notified in early 2022 National Recreation Trail Photo Contest Winner



Awarded U.P. History Award by Historical Society of Michigan



In the News...

*Moody on the Market,
October 8, 2022*



A DEEP DIVE ON 'COLOR TOUR' ROUTES IN WEST MICHIGAN

By MoodyOnTheMarket.com | Posted October 8, 2022 | What's Happening

Color in West Michigan.

Northern West Michigan & Upper Peninsula Color Tours
From hiking, biking or even driving – there are multiple trails and overlooks for leaf peeping in Marquette County, from the Iron Ore Heritage Trail, a 47-mile, multi-use, interpretive trail, to Thomas Rock, a hidden gem scenic lookout. For visitors looking for a quick trek with an exceptional view, head out to Harlow Lake and soak in the reflections of autumn on the glassy lake, or take to the accessible trail at Thomas Rock for an underrated panoramic view of Marquette County. Adventure over to CR 510 Bridgeview, for an overlook that is drivable and offers views of copper and auburn leaves with deep greens.

*Cleveland.com
April 12, 2022*

Travel

20 of the best bike trails in the U.S., the 326-mile Ohio to Erie Trail

Updated: Apr. 12, 2022, 12:22 p.m. | Published: Apr. 12, 2022, 7:39 a.m.



The Gr... Signed-in readers now can bookmark stories to read later. X ...rn Pennsylvania draws cyclists from a... to

Iron Ore Heritage Trail, Michigan

Michigan has an embarrassment of riches — 2,500 miles of rail-trails — so it's difficult to highlight just one or two, but the unique Iron Ore is among the most beautiful and fascinating. Located in the Upper Peninsula, it cuts 47 miles across the Marquette Iron Range and a long, lovely stretch hugs Lake Superior. **Website:** ironoreheritage.com

Advertisement

*Awesome Mitten
August 1, 2022*



#MIAWESOMEMITTEN · #MIAWESOMEPLACES · EASTERN UPPER PENINSULA · WESTERN UPPER PENINSULA

THE Best Things to Do in the Upper Peninsula in 2022

Cycle Along the Iron Ore Heritage Trail

If you're searching for a summer activity in the Upper Peninsula that will spark your imagination, take you on a tour through history and give you a chance to stay active, then the Iron Ore Heritage Trail near Marquette is the best opportunity for you.



Other Operational Work



Leased land from Lakenenland, Thomas LLC and Dan Perkins Construction for trailhead developments

Submitted Grants to MDARD, Michigan Natural Resources Trust Fund, Michigan Spark, West End Health Foundation, American Trails, MISORVA, DNR ORV

IRON ORE HERITAGE RECREATION AUTHORITY

DRAFT
11.15.22

RECREATION PLAN | 2023-2028



MICHIGAN TRUST FUND BOARD PRESENTATION: LAKENENLAND EXTENSION

Members and Contributors to Respect Marquette and Marquette County Trail Sustainability Committees



Manage 11 Adopt-A-Mile Organizations



2023 PLANS

- **Maintenance Capacity Building: Equipment and Personnel**
- **Purchase Koski Trust Land, 176 acres in Marquette & Negaunee Townships**
- **Trailhead development: Winthrop in Ishpeming, Expanded Stoneville Road, Tilden, and Lakenenland, Chocolay**
- **Republic Millage Renewal**
- **Boardwalk Development, Negaunee**
- **Negaunee Township Aggregate Rejuvenation**
- **Hire Administrator**
- **ORV Maintenance, \$60K Grant**



Lakenenland



Republic Trail



ORV Trail Grading



Negaunee Township
Aggregate