



ROCK and MINERAL CLUB

THE JASPILITE

SPRING 2015 ISSUE

FROM THE PRESIDENT'S DESK...

Our Purpose:

*To enjoy, to learn, to
teach and conserve*

*The rocks, the gems, the
fossils and ores,*

*To collect, to admire, to
brag and to show*

*The material we've
found, we'll trade for
yours.*

*-Bob & Marian Markert
(founding members)*

INSIDE:

New Michigan
Mineral

Upcoming Events

Marquette County
Iron Mines

Children's Fair

Rocks 101

Gem & Mineral
Show 2015

After another long U.P winter, the snow is finally gone and the rock piles are bare! As we resume our rock collecting excursions, it's good to pause and review some basic safety practices. Don't let an avoidable accident spoil your outing - and your companions'!

Our environment, as pleasant as it may be, is also the source of some ever-present hazards. A beautiful sunny day can pose an obvious risk of sunburn, but overcast and cloudy days can be even more hazardous, as we may feel cool but still accumulate a heavy dose of burning ultraviolet rays. I once received a painful sunburn after being out all day bare-headed and bare-armed in a thick fog! Use sunscreen and wear a wide-brimmed hat and long sleeves.

Avoid dehydration - it can sneak up on you even on a mild day. Take plenty of water, and try to drink regularly before you feel thirsty. Don't worry about bringing too much water - you can always use it to wash rocks!

Biting insects are a fact of life for much of the summer. Mosquitoes can be

kept at bay with an insect repellent containing DEET. The higher the percentage of DEET, the better it seems to work, but the higher concentrations can irritate your skin. I've had good results in all but the worst mosquito conditions by spraying 100% DEET on the brim of my hat and the collar and cuffs of my rock-collecting shirt. (Don't do this with good clothes!) Black flies don't seem to be as repelled by DEET as are the mosquitoes. Some people have good luck using Avon Skin-So-Soft as a repellent - and even if it doesn't keep the bugs away, at least you'll have soft skin and smell nice!

One of the most important safety practices is to always let somebody know where you're going, especially if you're collecting alone. Even with a partner, you may become lost or your vehicle could get bogged down far from civilization. Cell phones can give a false sense of security, since they often lose their signal in remote areas, down between rock piles, or in mine pits.

Keep on Rocking!

-Dan Fountain

**HIGH SCHOOL GRADUATE DISCOVERS COPPER
MINERAL NEW FOR MICHIGAN'S COPPER
COUNTRY**

The mineralogy of Michigan's world-class native copper district has been well-studied, both from the academic and economic viewpoints as well as from specimen and collectible mineralogy. It is thus a rare event for a copper mineral new for the district to be found today. In fact, a review of the literature suggests that in the past decade, only four additional copper minerals have been discovered in Michigan's copper district. Enter Cullen Laughlin-Yurs. Cullen is a high school graduate from Sycamore, Illinois, who has recently moved to the Upper Peninsula of Michigan and who plans on majoring in mineralogy. In September 2014, Cullen brought to my attention some Michigan copper specimens that displayed blue coatings—similar to azurite but a little darker. Preliminary optical data were found to be inconsistent with azurite, so we analyzed this material at Michigan Technological University on October 30', 2014 using their JEOL 6400 SEM-EDS system—and based upon the consequent qualitative chemical data, conducted further work on the material via EMP-WDS and Raman spectroscopy. The result is the definitive identification of the uncommon copper mineral callaghanite—the first report of this mineral in the state of Michigan. If the mindat.org database is correct, it is only the 4th report of this mineral in the United States. More about this discovery will be written in an upcoming article in either Mineral News or Rocks and Minerals. So I offer my congratulations to Cullen for his discovery and ask everyone to extend a warm welcome to this up-and-coming mineralogist. Jests about "beginner's luck" aside, I would like to think that his discovery is more likely the product of a sharp eye and inquisitive spirit, and will be the first of many to come. Congratulations, Cullen!

- Shawn M. Carlson

Courtesy of Mineral News

UPCOMING EVENTS

MAY 16, 2015

Field Trip
Champion Mine, Champion, Michigan

MAY 17, 2015

Program Meeting
The White Pine Mine, presented by Dean Stone

JUNE 20, 2015

Field Trip
Location to be determined.

JULY 18, 2015

Field Trip
Location to be determined.

JULY 31, 2015

Gem & Mineral Show Field Trip
Republic Mine

AUGUST 1, 2015

42nd Annual Gem & Mineral Show

AUGUST 2, 2015

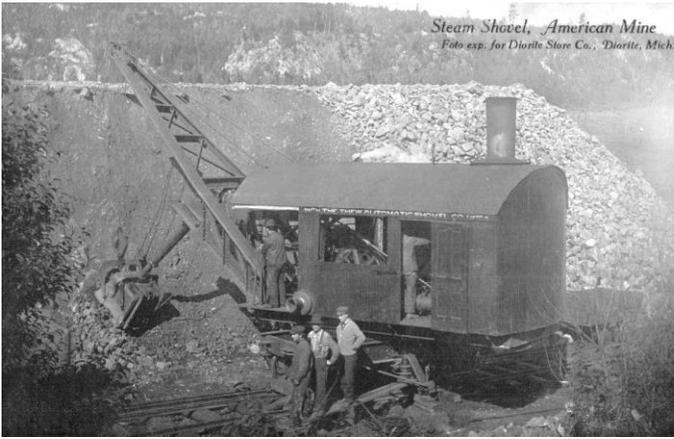
Gem & Mineral Show Field Trip
Lindberg Quarry

AUGUST 15, 2015

Field Trip
Location to be determined.

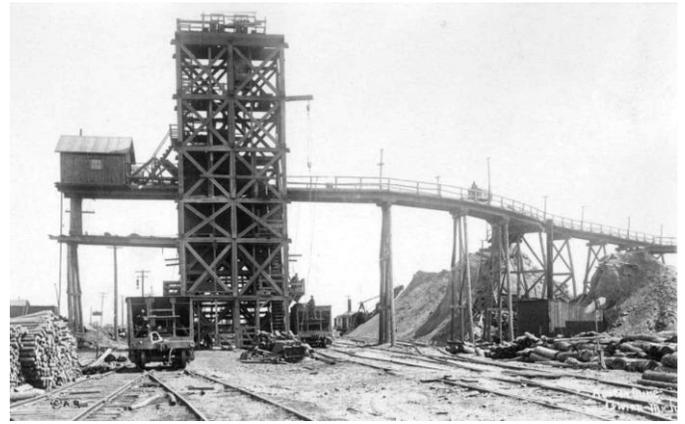
SEPTEMBER 19, 2015

Field Trip
Location to be determined.



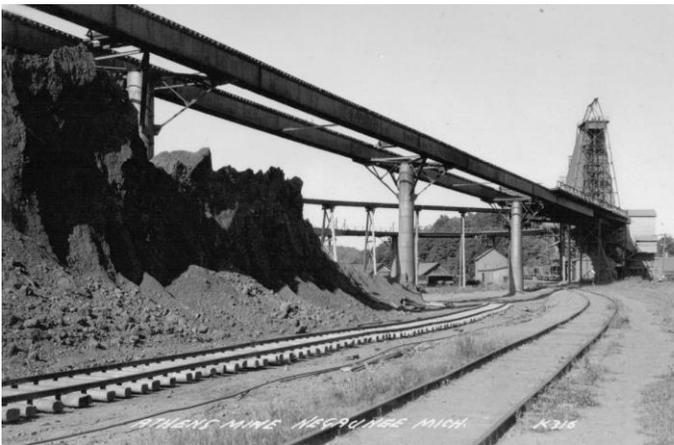
AMERICAN MINE
DIORITE LOCATION

Opened in 1880, the American Mine northwest of Ishpeming at Diorite included the Boston and Sterling Mine properties. The property operated until 1922. The American was an underground mine 2150 feet deep; the steam shovel in the picture was used to load railroad cars from the stockpile.



AUSTIN MINE
GWINN

The Austin Mine, located in Austin Location west of Gwinn, was a relatively shallow mine at 364 feet deep. It produced red hematite ore from two shafts between 1905 and 1929 before the ore body became mined out.



ATHENS MINE
NEGAUNEE

Located just south of Ann Street in Negaunee, the Athens Mine produced from 1913 until 1966. It was a 2407-foot deep underground mine that produced red hematite iron ore. In the later years, its ore was hoisted through the Negaunee Mine shaft a quarter mile away across the railroad tracks.



CASCADE MINE
PALMER

The Cascade Mine was one of several small mines, including the West End and Emma Mines, which were combined into the Volunteer Mine. The Cascade Iron Company started mining in 1871, and the combine properties ran until 1916. In the 1960s, the Empire Mine low-grade magnetite pit was opened to the north, and some of the old mines were buried in waste rock.



HARTFORD MINE
NEGAUNEE

The Hartford mine opened in 1889 as the Ben Neely Mine. It was operated by the Oliver Mining Company and the Republic Iron & Steel Company. In 1943 the Hartford became part of the Cleveland Cliffs Iron Company, which used the 1325-foot deep Hartford shaft to mine adjacent properties, and the mine became known as the Cambria-Jackson. The mine closed in 1959.

In 2014 Water Street was extended through the Hartford Mine location, and a small vein of micaceous hematite was exposed in a rock cut. Numerous specimens were collected before the area was rehabilitated, the rock piles covered with soil and grass.



MAAS MINE
NEGAUNEE

The Maas mine operated for 60 years, from 1907 to 1967, producing from its 1438-foot shaft. After the mine closed, the area was turned into a subdivision, with nearly every trace of the mine obliterated.



MATHER MINE
ISHPEMING AND NEGAUNEE

In 1940, the Cleveland-Cliffs Iron Company and Bethlehem Steel formed a partnership to mine deposits of hematite found deep below some of the earliest iron mines. Production at the Mather "A" shaft in Ishpeming, above, began in 1944. The "A" shaft reached a depth of 3493 feet before closing in 1960.

The Mather "B" shaft, below, in Negaunee was completed in 1950, and became the sole production shaft in 1960, reaching a final depth of 3660 feet. Mining continued until 1979, when the mine was closed for good.

While the headframes and most surface facilities of the Mather Mine were removed after their closing, the office / dry building at the Mather "B" was remodeled and now is home to Negaunee High School.



Thanks to Glen Kivela for the iron mine photos.

MARQUETTE CHILDREN'S FAIR

Unfortunately, Kaleidoscope was cancelled this year due to inclement weather. The IRMC had a second chance to promote our club and have activities for children and adults through participation in the Marquette Children's Fair held at the Westwood Mall on Saturday, May 25th. We set up tables with a hands-on rock exhibit, a fluorescent box display, fossils, specimens to give away and a contest to guess the number of Apache tears in the jar. We were surprised at the numbers of children and adults participating. We gave away around 200 specimens. Adults took information about our club and the Rock & Mineral Show to be held in August.

Winner of the egg carton rock collection was Bella Corp from Ishpeming. Thanks to Dawn Hoffman, Al Smith and Ernie Johnson for their help. We all thought the time spent there was worthwhile. We should see some of the children and adults at the Show.

-Joyce Smith, IRMC Education Committee

The Ishpeming Rock & Mineral Club
Presents

ROCKS 101

Sunday, July 26, 2015

1:30 - 3:30

Cliffs Shaft Mine Museum
Ishpeming, MI

FREE ADMISSION!

A great family activity!

- * Introduction to rockhounding
- * Learn how and where to collect specimens
- * Learn how to identify minerals
- * Hands on experience with actual specimens
- * Receive a collection that you identify

Beginning rockhounds ages 8 and up are welcome.

Children **must** be accompanied by an adult.

Space is limited.

Participants must register before Friday,
July 24th,
by calling 906-225-0408.

40th ANNUAL UPPER PENINSULA Gem & Mineral Show

Saturday, August 1, 2015 9:30 a.m. to 4:30 p.m.
(All times Eastern Daylight Savings Time)

Ishpeming Elks Club Hall
597 Lakeshore Drive, Ishpeming, Michigan

Dealers

Silent Auction

Crackerbarrel

Displays

Kids Area

Working Demonstrations throughout the day

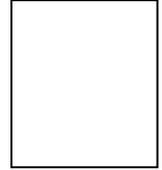
• **FREE Admission** • **Door Prizes** •

Field trips Friday and Sunday

For information, contact:

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ADDRESS CORRECTION REQUESTED

The Ishpeming Rock and Mineral Club

www.ishpemingrocks.org

President	Dan Fountain
Vice President	Ernest Johnson
Secretary	Dawn Hoffman
Treasurer	David McGowan
Program Chairman	Ernest Johnson
Jaspilite Editor	Dan Fountain
Trustees	Bob Clark
	John Crady
	Beverly Trynoski

The club meets at the Cliffs Shaft Mine Museum in Ishpeming at 1:30 p.m. on the third Sunday of the month, September through November and January through May. During the summer business meetings are held at 7:00 p.m. on the third Monday of the month.

WHAT IS (A) JASPILITE????

Well, it's a couple of things! It's been the title of the Ishpeming Rock and Mineral Club's quarterly newsletter since the club's founding in 1953. The club chose the name in recognition of a beautiful variety of banded iron formation found on the Marquette Iron Range, and in the Ishpeming and Negaunee area in particular. It's a rock with alternating layers of silvery specular hematite and red jasper, with the layers commonly folded and contorted. A 13-ton cut and polished boulder of jaspilite from Jasper Knob in Ishpeming is on display outside the Smithsonian Institution in Washington, D.C.

