

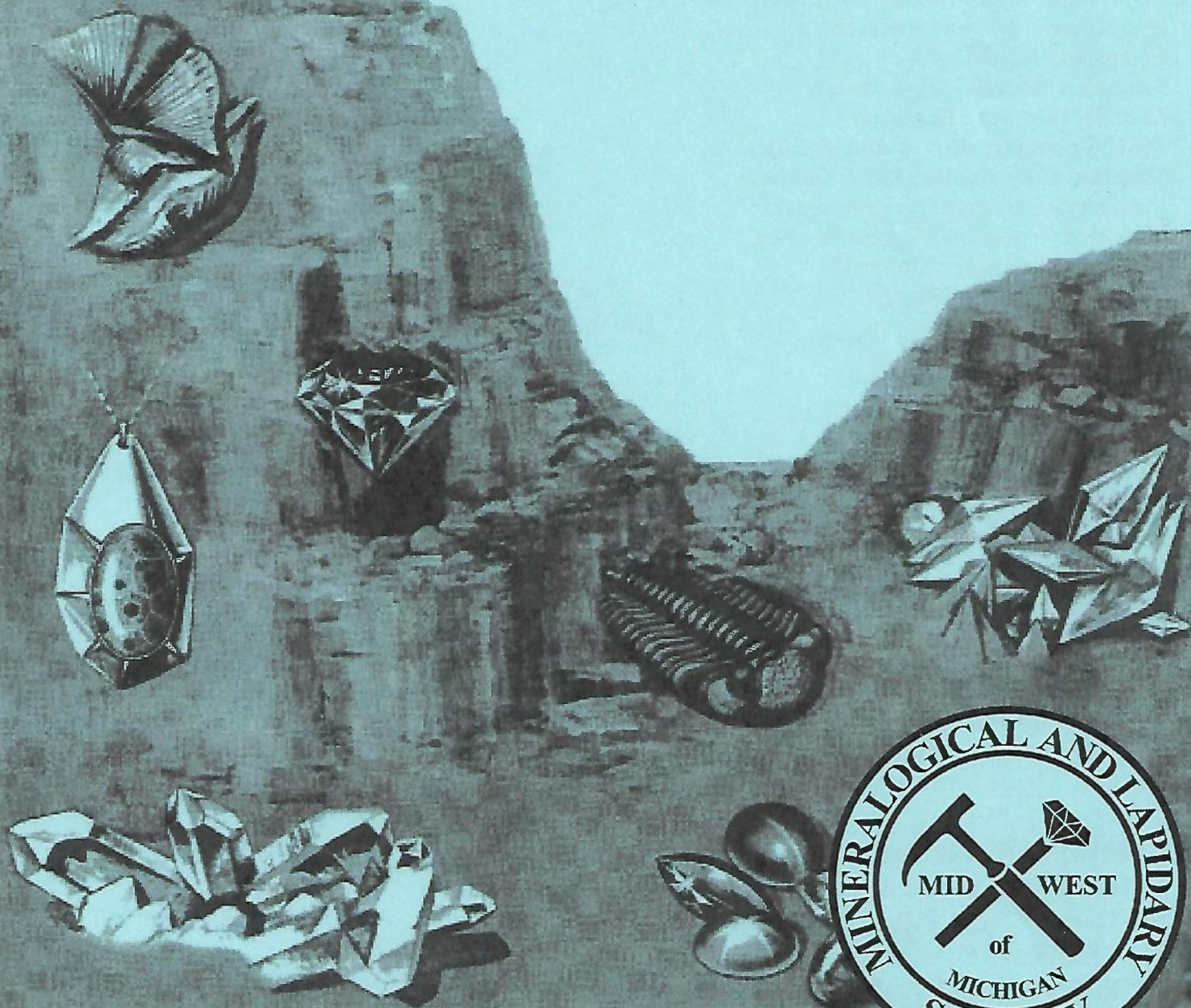
THE

ROCKPILE

Official Publication of the Midwest Mineralogical and Lapidary Society

AFFILIATED WITH • MIDWEST FEDERATION OF MINERALOGICAL AND GEOLOGICAL SOCIETIES • AMERICAN FEDERATION OF MINERALOGICAL SOCIETIES

January, 2020



SOUTHEASTERN - MICHIGAN



Midwest Mineralogical & Lapidary Society

2020 OFFICERS

President: Diane Kuzara (734) 675-5237
Vice President: Pat Rutkowski (313) 291-5861
Recording Secretary: Lori Haam (313) 562-5097
Treasurer: Doris Snyder (313) 291-2133
Corresponding Secretary: Julie Knechtges (734) 444-9151
Liaison Officer: Peter Kuzara (734) 675-5237

COMMITTEE CHAIRPERSONS

Club Services: Ana Ferguson
Door Prizes: Mike Bomba
AFMS Scholarship: Pat Rutkowski
Field Trips - Mike Bomba/Gary Slominski
Education: Dave Hendershot
Historian: Tom Morris
Michigan Material: Tom Morris
Membership: Ana Ferguson
MMLS Scholarship: Velma Bradley
Program Coordinator: Mike Bomba
Property – Storage: Gary Slominski
Sunshine Reporter: Velma Bradley
Refreshments: Gary Slominski
Web Site: Stacey Harper

ACTIVITIES

2020 Banquet: Dan Gumina
2020 Club Picnic: Stacey Harper
2020 Swap: Lou and Cindy Talley
2020 Super Swap: Bill Barr / Tom Morris
2020 Auction: Dwayne Ferguson

The Rockpile Staff : Editor Peter Kuzara,
email: Kuzara1126@gmail.com 734-675-5237

MMLS website – www.mmls.us
Email - rockhounds@mmls.us

General Club meetings are held at 7:30 p.m. on every third Tuesday of the month (except July and August) at the Democratic Club of Taylor, 23400 Wick Rd., Taylor, MI 48180

GUESTS ARE ALWAYS WELCOME

STUDY GROUPS

Lapidary: Workshop at Frank Konieczki's
Bead Study: Diane Kuzara
Mineralogy: Bill Barr at David Esch's
Wire Study: John Lindsay

PAST PRESIDENTS

Robert Ellison (interim) 1956
Louis Cox 1957
Robert Heldenbrand 1958-59
Ralph Gamble 1959-60
Fred Miller 1960-61
Bert Smart 1961-62
Leo Nieman 1963
Nicholas Rothenthaler 1964-65
Robert Fedoruk 1966-67
John Good 1968-69
Cecilia Duluk 1970
Stanley Franczak 1971-72
E. Donald Stinnett 1973-74
Ralph Goniea 1975-76
Norman Hanschu 1977-78
Thomas Gibbs 1979-80
Harry Nagy 1981-82
Elspeth Gibbs 1983-84
Loretta Franczak 1985-86
Roland Snyder 1987-88
Jay Ross 1989-90
Tom Morris Jr. 1991-92
Diane Kuzara 1993-94
Bill Orban 1995-96
Glenn Swain 1997-98
Bill Peach 1999-2000
Diane Kuzara 2001-02
Cecilia Duluk 2003-04
Russ Ranker 2005-06
Dick DePodesta 2007-08
Rich Williams 2009-10
Leonard Swisher 2011-12
Mike Bomba 2013 - 14
Diane Kuzara 2015 - 16
Dan Gumina 2017 - 18

From The President's Desk:



Hi fellow rockhounds:
The beginning of a brand new year, 2020! A time to renew our interest in the best hobby in the world - rockhounding! Field trips, making new friends in the hobby and renewing our relationships with old members in the hobby.

Attending board meetings, general meetings, and club events. Offering to serve on a committee or deciding to serve as an elected officer in the club. Think about hosting one of our board in your home. Bring new ideas to the club and help implement them. So many ways to join in the fun--woo hoo!!

Happy New Year Everyone

Thank You to a Member Segment:

This month's special thank you goes out to Dwayne and Ana Ferguson. They both joined MMLS in October, 2015. As soon as Ana joined, I quickly realized she would make a good Membership Chairman and she proved me right. She took over that position and is still doing that job today. Dwayne shortly after offered to become our Auction Chairman, taking over for Dan Gumina. He now has three under his belt as that chair. I know that they both really enjoy field tripping and they go frequently. Dwayne now cuts and polishes his finds and Ana is a member of the beading group. Thank you, thank you, thank you for all you do for MMLS Dwayne and Ana!

NOTICE MMLS MEMBERS: THERE IS A DUES INCREASE COMING! DUES FOR 2020 WILL BE \$20 FOR ADULTS AND \$2 FOR JUNIORS. DUES ARE NOW PAST DUE!!!!

Program: January 21 The program for January will be Peach , Jaws and Claws by: Dale Gnidovec ! From the Orrin Museum, Ohio State university. Mike Bomba

WIRE WRAP CLASS Anyone interested in a class for wire wrap please contact John Lindsay for dates, time and more information.

NOTICE TO STUDY GROUPS IF THERE IS A CHANGE IN YOUR MEETING TIME OR PLACE, PLEASE LET THE EDITOR KNOW!!!!

Our Club Activities

Jan. 2nd & 16th 2020 Bead study group will meet at the Kuzara's, 20281 Thomas, Brownstown at 7pm. Diane Kuzara, 734-675-5237.

Jan. 6th 20th & 22nd 2020 Lapidary Work Shop 2009 W. Michigan Ave., Ypsilanti, Mi., 7pm to 10pm. Fee is \$2.50 for each evening. Frank Konieczki 734-323-2218 **PLEASE CALL AHEAD TO CONFIRM TIME AND DATE.**

Jan. 16th 2020 Mineral Study group will meet at Dave Esch's house, 227 Barton Shore Dr., Ann Arbor Mi. At 7:30pm. David Esch, 734-665-5574.

Jan. 17th At the Kuzara's home at 7:30pm
Rockpile Deadline

Jan. 21st 2020 General meeting will be held at the DEMOCRATIC CLUB OF TAYLOR, 23400 WICK RD., TAYLOR at 7:30pm.

Feb. 3, 17, 20, 2020 Lapidary Work Shop 2009 W. Michigan Ave., Ypsilanti, Mi., 7pm to 10pm. Fee is \$2.50 for each evening. Frank Konieczki 734-323-2218 **PLEASE CALL AHEAD TO CONFIRM TIME AND DATE.**

Feb. 6 & 20, 2020 Bead study group will meet at the Kuzara's, 20281 Thomas, Brownstown at 7pm. Diane Kuzara, 734-675-5237.

Feb. 14, 2020 Board Meeting TBA 7:30pm.
Rockpile Deadline.

Feb. 18, 2020 General meeting will be held at the DEMOCRATIC CLUB OF TAYLOR, 23400 WICK RD., TAYLOR at 7:30pm.

Feb. 20, 2020 Mineral Study group will meet at Dave Esch's house, 227 Barton Shore Dr., Ann Arbor Mi. At 7:30pm. David Esch, 734-665-5574.

Mar. 28, 2020 48TH ANNUAL METRO ROCK SWAP, Hosted by the Midwest Mineralogical & Lapidary Society. At the St. Johns Lutheran Church, 13115 Telegraph Road, Taylor, MI For table reservation and information call 734-837-8920

Michigan Mineral Beginning with the Letter J Jacobsite



Jacobsite is a manganese iron oxide mineral. It is in the spinel group and forms a solid solution series with magnetite. The chemical formula is $MnFe_2O_4$ or with oxidation states and substitutions: $(Mn^{2+}, Fe^{2+}, Mg)(Fe^{3+}, Mn^{3+})_2O_4$.

Hardness: 5.5 to 6.5 on the mohs scale.

Color: Black, Gray in reflected light.

Occurrence: Marquette County (Champion Mine)

From the internet Wikipedia and The Mineralogy Of Michigan by E. Wm. Heinrich.

New Jersey has no designated state gemstone

New Mexico State Gemstone is Turquoise



New Mexico designated turquoise as the official state gem in 1967. Nearly all important deposits of turquoise are located near copper deposits in arid desert regions of the world. Probably one of the oldest gemstones known, turquoise is an opaque, blue-to-green mineral. Only the prized robin's egg blue color is used to make gemstones. The majority of the world's finest-quality turquoise comes from western and southwestern United States (the largest producer of turquoise in the world).

Turquoise has been used extensively by Native Americans in the southwestern U.S. and Mexico since about 200 B.C. to make solid turquoise beads, carvings, and inlaid mosaics.

From the internet

A Diamond With a Whole Other Diamond Inside. It Was Discovered in Siberia

MICHELLE STARR 9 OCT 2019

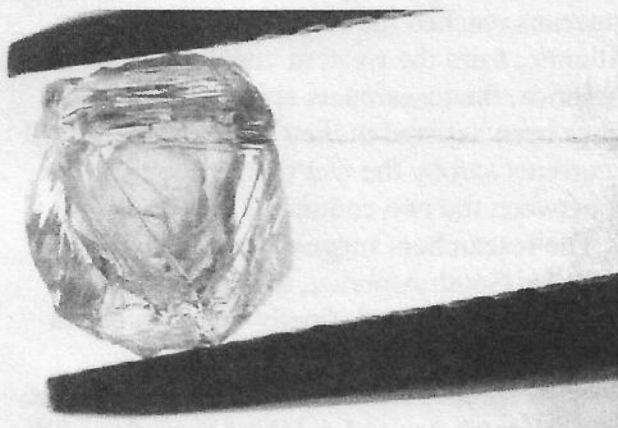
Humans have been mining diamonds for a long time, but a new stone hauled from the belly of the Earth could very well be a first. The diamond itself is hollow - and inside is another diamond, freely moving-around. -----

It was discovered in a Russian mine in Siberia, and has been named the Matryoshka Diamond, after the Russian nesting matryoshka dolls.

Inclusions and flaws in diamonds are

extremely common; in fact, most diamonds have some sort of flaw, or piece of mineral trapped inside. It's not a bad thing - in fact, we've gained access to some pretty rare stuff from deep underground because it's been trapped in diamonds as they form.

But a diamond in a diamond? That, according to Russian diamond mining group ALROSA, is a new one.

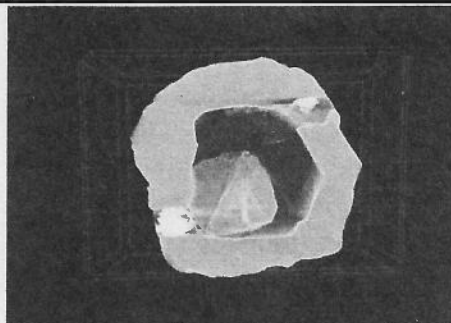


The Matryoshka Diamond is not a huge stone - just 0.62 carats (0.124 grams), with maximum dimensions of 4.8 x 4.9 x 2.8 millimetres. The inner diamond is even tinier - 0.02 carats (0.004 grams), measuring just 1.9 x 2.1 x 0.6 millimetres.

Sharp eyes detected something unusual about the stone during the sorting process, and it was sent to ALROSA's Research and Development Geological Enterprise for assessment. There, scientists subjected the diamond to Raman and infrared spectroscopies, and X-ray microtomography.

"The most interesting thing for us was to find out how the air space between the inner and outer diamonds was formed," said Oleg Kovalchuk of ALROSA's Research and Development Geological Enterprise. The researchers have a couple ideas which involve processes that may have occurred in Earth's mantle.

According to one of their hypotheses, "a layer of porous polycrystalline diamond substance was formed inside the diamond because of ultra-fast growth, and more aggressive mantle processes subsequently dissolved it. Due to the presence of the dissolved layer, one diamond began to move freely inside another, just like a matryoshka nesting doll."



X-ray of the Matryoshka Diamond

They also estimate that the diamond may be over 800 million years old, although that is yet to be verified. According to a Bloomberg report, the diamond is going to be sent to the Gemological Institute of America for further analysis.

Because it's such a rare find, the company has yet to estimate its worth.

"As far as we know, there has been no such diamond in the history of global diamond mining," Kovalchuk said.

"This is really a unique creation of nature, especially since nature abhors a vacuum. Usually, in a case like this, the minerals would be replaced by others without forming a cavity."

From The Michigan Gem News 12/19

Fossil find: Whale with legs could stand on land and swim in water



An ancient four-legged whale with hooves has been discovered, providing new insights into how the ancestors of the Earth's largest mammals made the transition from land to sea.

Cetaceans, the group including whales and dolphins, originated in south Asia more than 50 million years ago from a small, four-legged, hoofed ancestor. Now, researchers reporting the discovery of an ancient four-legged whale--found in 42.6-million-year-old marine sediments along the coast of Peru--have new insight into whales' evolution and their dispersal to other parts of the world. The findings are reported in the journal *Current Biology*.

The presence of small hooves at the tip of the whale's fingers and toes and its hip and limbs morphology all suggest that this whale could walk on land, according to the researchers. On the other hand, they say, anatomical features of the tail and feet, including long, likely webbed appendages, similar to an otter, indicate that it was a good swimmer too.

"This is the first indisputable record of a quadrupedal whale skeleton for the whole Pacific Ocean, probably the oldest for the Americas, and the most complete outside India and Pakistan," says Olivier Lambert of the Royal Belgian Institute of Natural Science.

Some years ago, study co-author Mario Urbina of Museo de Historia Natural-UNMSM, Peru, discovered a promising area for digging fossils in the coastal desert of southern Peru, named Playa Media Luna. In 2011, an international team, including members from Peru, France, Italy, the Netherlands, and Belgium, organized a field expedition, during which they excavated the remains of an ancient whale they've since named *Peregocetus pacificus*. It means "the traveling whale that reached the Pacific."

"When digging around the outcropping bones, we quickly realized that this was the skeleton of a quadrupedal whale, with both forelimbs and hind limbs," Lambert says.

With the help of microfossils, the sediment layers where the skeleton was positioned were precisely dated to the middle Eocene, 42.6 million years ago. Anatomical details of the skeleton allowed them to infer that the animal was capable of maneuvering its large body (up to 4 meters long, tail

included), both on land and in the water. For instance, features of the caudal vertebrae (in the tail) are reminiscent of those of beavers and otters, suggesting a significant contribution of the tail during swimming.

The geological age of the new four-limbed whale and its presence along the western coast of South America strongly support the hypothesis that early cetaceans reached the New World across the South Atlantic, from the western coast of Africa to South America, the researchers report. The whales would have been assisted in their travel by westward surface currents and by the fact that, at the time, the distance between the two continents was half what it is today. The researchers suggest that, only after having reached South America, the amphibious whales migrated northward, finally reaching North America.

The international team continues to study the remains of other whales and dolphins from Peru. "We will keep searching in localities with layers as ancient, and even more ancient, than the ones of Playa Media Luna, so older amphibious cetaceans may be discovered in the future," Lambert says.

The above story is based on materials provided by Cell Press.

Read more at

<http://www.geologyin.com/2019/04/four-legged-whale-with-hooves-fossil.html#jqefSh2qUCglwgWO.99>

MORE ABOUT KENT COUNTY GYPSUM

Don Van Dyke

Much of the information for this article came from an article by the MSU Department of Geology and articles on Sink holes in Grand Rapids, all found on the Internet or the book, Bend in the River.

After Kreigh's great program on the gypsum in our area, principally about the Alabastine Mine, I started to think that there might be more to the story so I started a bit of research. I went On-line, checked some books etc. and found more information than I could digest. What follows is just 'the tip of the iceberg'.

The very 1st mention of gypsum in the Kent County area is that in 1827 an Ottawa Indian brought a specimen of a "soft white rock" that he had found

at the mouth of what is now known as Plaster Creek to the Baptist mission station and Rev. Isaac McCoy. This mission was located next to the trading post at the rapids of the Grand River near what is now downtown Grand rapids

In 1838 the Michigan State Geologist, Douglas Houghton, visited the Grand Rapids area looking for salt wells. He also investigated reports of gypsum in the area and wrote a very favorable report on what he had found. He again visited the area in the early 1840's to study the gypsum potential.

In 1841 a quarry and a mill to grind the rock was built by John Ball and Warren Granger where Plaster Creek crossed the Grandville Road. It was an open quarry and had to be pumped out before the ore could be taken out. By the end of the 1st year they were producing 40 tons a week. By 1850, 60 tons a day was being processed. All the gypsum on the east side of the river was coming from quarries. At that time most was used as 'land plaster' that farmers used to enrich their crop land.

The first mine opened on the west side of the river in Walker Township was opened by Wm. Butterworth in 1849. (In 1860 it was incorporated with another mine into the Grand Rapids Plaster Co.) The mines on the west side of the river were tunnels into the hillsides. One mine reported that the ceiling of it's mine, to an extent of several acres had collapsed. One mine on the banks of the Grand River shipped the gypsum rock by boat via the Grand River and Lake Michigan directly to Wisconsin where it was processed.

In 1865 the railroads reached Grand Rapids and soon gypsum products were being shipped as far as New Orleans and California, Gypsum was a major industry in Grand Rapids. In all the quarries and mines were operated by 13 separate mine owners.

What was known in 1876? I have an atlas of Kent and Ottawa County with the following; "...the gypsum beds... are by all odds the most valuable mineral deposit yet discovered in this part of the state. The order at several of the worked beds seems to be commencing at the top with masses of reddish gypsum....followed by flinty limestone and shales, water limestone,

Continued on page 6

NOTICE DUES FOR 2020 ARE DUE

Dear MMLS member:

It 's that time again when you are asked to renew your membership for the year (2020) in the Midwest Mineralogical and Lapidary Society. (Membership runs from January through December each year.)

May we ask your cooperation by renewing now. Doing so will ease our Treasurer's job, save the cost of an extra mailing and assure your receipt of The Rockpile without interruption.

Just use the handy Membership Renewal Form. Complete the form, enclose your check made payable to MMLS and mail to our treasurer:

Doris Snyder
9728 Pardee
Taylor, Mi 48180

It's that easy! If you would like your membership card mailed to you, please include a SASE.

Midwest Mineralogical And Lapidary Society

Adult Dues: \$20.00

Juniors (under age 18) \$2.00

Yes I wish to renew my/our membership in MMLS for 2020 and continue to receive The Rockpile

Name(s) _____

Address _____

City _____

State _____ Zip _____

Phone (____) _____

Email address _____

Dues paid after December 31st is subject to a \$3.00 reinstatement fee. Add to your check.

Enclosed is my check payable MMLS for \$_____

Would you like your Rockpile sent to you by email?

Yes _____ No _____

DO IT TODAY BEFORE YOU FORGET!!!!

INTENTIONALLY

LEFT BLANK

INTENTIONALLY

LEFT BLANK

INTENTIONALLY

LEFT BLANK

INTENTIONALLY

LEFT BLANK

INTENTIONALLY

LEFT BLANK

then by five or six feet of plaster, which is separated by several inches of shale from the lower and principal bed of gypsum, often thirteen feet or more in thickness. This last is the most important member of the group. Half a million dollars or more are invested in seven mills and quarries.

In 1893 the 1st shaft mine was started by Wm. Powers in north-west Grand Rapids, at what is now the west end of the Blue Bridge. It mined a layer of gypsum 60 feet below the surface and encompassed an area of 9 acres, extending from Pearl St. to Fulton St. It ceased operations in 1909.

In the 1860's a large tree blew down in Grandville exposing Gypsum. Ultimately 3 quarries with 3 mills opened south of what is now downtown Grandville, in the general area of Wedgewood Park, extending as far west as Division Ave, and east to east of Wilson Ave. Several of the mills burned before the quarrying ceased.

Today there is little sign of the mines, however every few years they are remembered. In the 1990's the US 131 Freeway at the S curve had to be moved and rebuilt because the ground was sinking due to the dissolving gypsum or collapsing mines. When GVSU was developing its Grand Rapids campus a 'sinkhole' developed next to the Eberhard Center exposing old mining timbers of the Powers Mine. In 1965 a house at 269 Garfield was partially destroyed when a sinkhole developed beneath it. Before the house was built the empty lot was called the mystery lot. Now it is again a vacant lot.

From the Arrowhead News 12/19



From the Rockpile Staff

THE MIDWEST MINERALOGICAL AND LAPIDARY SOCIETY (MMLS) is an educational non-profit organization founded in 1956. The Society now has more than 100 members and is affiliated with the Midwest Federation of Mineralogical Societies and the American Federation of Mineralogical Societies. Significantly, MMLS has been recognized numerous times by the Midwest and American Federations with first place (gold level) awards in the annual All American Club Awards Program.

PURPOSE: The purpose of The MMLS shall be (1) to promote interest in and increase knowledge in the fields of mineralogy, geology, and paleontology, including lapidary and related arts; (2) to publish articles and information pertaining to these fields; (3) to encourage collections and to display specimens in these fields; and (4) to arrange field trips in support of the interests and activities specified.

GENERAL MEETINGS: the third Tuesday of each month, September through June, 7:30 p.m. at the Democratic Club of Taylor, 23400 Wick Rd., Taylor, MI 48180 **GUESTS ARE ALWAYS WELCOME.**

MEMBERSHIP: Applications for membership can be obtained at any general meeting or from any MMLS member. DUES: Entrance fee - \$3.00; annual dues - \$20.00 (adult), \$2.00 (junior) on a year basis. Membership expires each Dec. 31.

ANNUAL EVENTS:

March - Spring Rock Swap and Sale, Banquet Fall- 2 Day SuperSwap and Sale November Annual Auction
Yearly Picnic

STUDY GROUPS: Special-interest study groups meet monthly, September through June. Currently the following groups are active: Bead Study, Mineralogy, Wire Study is conducted on individual basis.

FIELD TRIPS: Several one day field trips and one longer (one to two weeks) field trips are conducted each year. Mostly, these field trips focus on the collecting of mineral and fossil specimens at quarries, mines, and other known collecting sites in the United States and Canada. Field trips are restricted to MMLS members.

SCHOLARSHIP FUND: MMLS has established a scholarship Endowment Fund which provides scholarships to qualified students enrolled in an accredited college or university in southeastern Michigan who have completed at least their junior year and have a major in geology, mineralogy, paleontology or lapidary and related arts.

SEAMAN MINERAL MUSEUM: MMLS has designated the A.E. SEAMAN Mineral Museum, Houghton, Michigan, as it's "adoptive" museum, pledging to support it with gifts to the museum's endowment fund and the donation of mineral specimens and services.

INTERNET WEB SITES OF INTEREST:

Midwest Federation:
www.amfed.org/mw11index.html American
Lands Access Association: <http://amlands.org>

American Federation:
www.amfed.org

The Rockhound's 10 Commandments:

Thou shall not touch thy neighbor's minerals unless he places them in thy hands.

Thou shall not test the strength of crystals by pushing, squeezing or biting.

Thou shall not drop thy neighbor's fossils, for many do not bounce properly.

Thou shall not place thy neighbor's specimens in thine own pocket.

Thou shall not collect at a neighbor's land unless thy neighbor knowst he's there.

Thou shall not argue names of minerals too violently; for sometimes thou couldst be wrong.

Thou shall not climb above thy neighbor's head when on a field trip, lest thou art willing to spend the rest of the day digging him out.

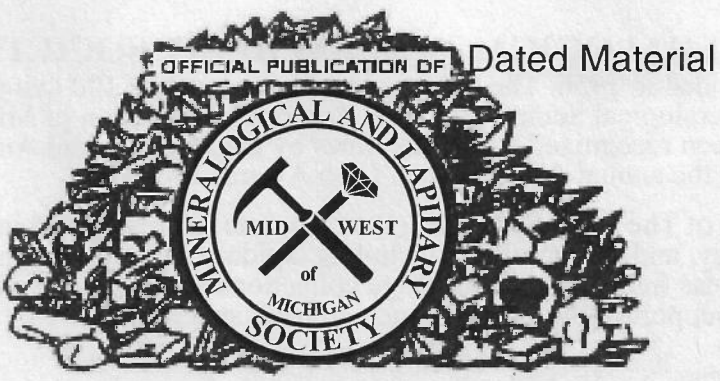
Thou shall protect thine eyes, hands & feet, so that they mayst enjoy many future field trips.

Thou shall not encroach upon thy neighbor's diggin's, lest thy neighbor's hammer be dropped upon thee.

Thou shall not break uncollectable specimens.

Midwest
Mineralogical and
Lapidary
Society of
Michigan

EDITOR
20281 THOMAS
BROWNSTOWN, MI
48183



The ROCKPILE

Bulletin Editor Contest Awards



- 1993 - 1st Place (Large Bulletin) AFMS
- 1991 - 1st Place (Large Bulletin) MWF
- 1990 - 1st Place (New Editor) AFMS
- 1990 - 1st Place (New Editor) MWF



Midwest
Mineralogical and
Lapidary
Society of
Michigan
EDITOR
20281 THOMAS
BROWNSTOWN, MI
48183