

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

Sept.
June, 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
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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 Rothenhaler 1964-65
Robert Fedoruk 1966-67
John Good 1968-69
Cecilia Duluk 1970
Stanley Franczak 1971-72
E. Donald Stinnett 1973-74
Ralph Gonica 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

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From The President's Desk: Very important information for MMLS Members..Please Read!



Hi fellow rockhounds:
Well, here it is September coming up and we haven't been able yet to

get together for a meeting. Pete and I sincerely hope you are all doing well and staying safe. As of this writing I can't get a hold of the Democratic Club to see if they are re-opened or not, but I'm pretty sure we will still not be able to hold a General Meeting in September, or even beyond that. We'll have to play it by ear for now.

On Friday, August 7th I called a special Board Meeting at our house to discuss whether or not we would be able to hold our SuperSwap in October or our Auction in November. Nine of our board members (including myself) attended the meeting. After careful deliberation it was decided we should cancel both events for the safety and well-being of our members and the general public. We will try for next year.

In order to stay in touch with all of you, it was decided that Pete will continue putting out The Rockpile while we are on hiatus because of Covid-19 but at a reduced number of pages. Meeting dates and Club Events will not be published until we resume them. Sister Club events also will not be listed for the same time frame. We will bring you articles to read in their place. That way we can keep in touch with each other and give you all a little something "rocky" to read and maybe brighten your day.

It's only about 4 months till the end of my term as President, so I have appointed Mike Bomba and Dan Gumina (with their permission of course) to be the nominating committee for the 2021 elections for next year's Club Officers. We are ready for a change, so if you are called upon to serve as an officer for our great club, please say "yes" and give it your all. These positions have to be filled by the end of

October in order to have notice in The Rockpile and for the election to take place in November and for the new officers to be installed in December as my term ends. I have served 4 terms as President over the years of this great club and have done so proudly!

It is with a sad heart that I announce the passing of a friend and past MMLS member. Kitty Starbuck passed away on June 27th from Covid-19. She and her husband, Marve, gave much time to our hobby and the MWF. Kitty and Marve were members of the Kalamazoo Geological and Mineral Society and Kitty was instrumental in starting the MWF Endowment Fund. She will be greatly missed by us all!

We'll talk again next month, stay well and safe.

Diane

FIELD TRIPS

Mike Bomba our Field Trip Chairman is trying to put together a field trip. Any club member interested should contact Mike for details.

Sister Club Events

BECAUSE OF THE CORONA VIRUS PLEASE CHECK BEFORE ATTENDING THESE ACTIVITIES.

Sept. 4-6: TOLEDO, OH Toledo Gem & Mineral Club Annual Show. Fri 2 - 8 pm; Sat 10 am - 6 pm; Sun 10 am - 5 pm. Stranahan Theater, 4645 Heatherdowns Blvd, Toledo. Contact: Stephen Shimatzki, (419) 861-0147; jjs132@gmail.com
This show will only have Dealers.

SHOWS CANCELED BECAUSE OF THE CORONA VIRUS.

Sept. 18-20: HOLLAND, MI Tulip City Gem & Mineral Club Annual Show. **SHOW IS CANCELED**

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Sept. 19-20: **HOWELL, MI** Livingston Gem & Mineral Society Annual Show. **SHOW IS CANCELED**

Oct. 7-8: **MIDLAND, MI** Mid Michigan Rock Club Annual Show. **CANCELED**

Oct. 9-11: **WARREN, MI** Michigan Mineralogical Society Annual Show. **CANCELED**

Oct. 23-25: **MASON, MI** Central Michigan Lapidary & Mineral Society Annual Show. **CANCELED**

Michigan Mineral Beginning with the Letter P Prehnite $\text{Ca}_2\text{Al}(\text{AlSi}_3\text{O}_{10})(\text{OH})_2$.



Prehnite is an inosilicate of calcium and aluminium with the formula: $\text{Ca}_2\text{Al}(\text{AlSi}_3\text{O}_{10})(\text{OH})_2$. Limited Fe substitutes for aluminium in the structure. Prehnite crystallizes in the orthorhombic crystal system, and most often forms as stalactitic or botryoidal aggregates, with only just the crests of small crystals showing any faces, which are almost always curved or composite.

Hardness: 6 to 6.5 on the mohs scale

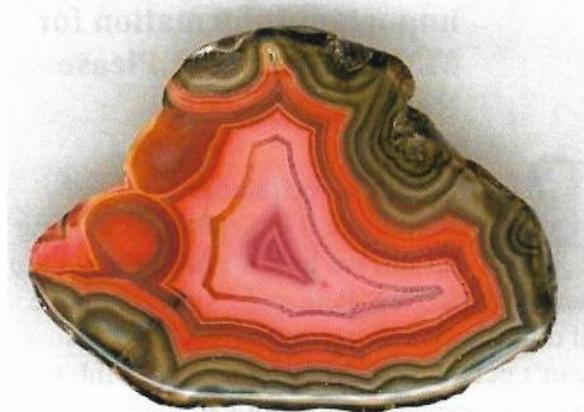
Color: Light green to yellow also colorless, blue, pink and white.

Occurrences: Gratiot, Houghton, Keweenaw and Marquette Counties.

From the internet Wikipedia

South Dakota State Gemstone: Fairburn agate

South Dakota designated Fairburn agate as the official state gemstone in 1966.



From the Internet

Dichroic Glass



Dichroic glass is glass which displays two different colors by undergoing a color change in certain lighting conditions. Modern dichroic glass is available as a result of materials research carried out by NASA and its contractors,

who developed it for use in dichroic filters. It is produced by stacking layers of glass and micro-layers of metals or oxides which give the glass shifting colors depending on the angle of view, causing an array of colors to be displayed as an example of thin-film optics. The commercial title of "dichroic" can also display three or more colors (trichroic or pleochroic) and even iridescence in some cases. The term dichroic is used more precisely when labelling interference filters for laboratory use. Dichroic glass is used in various dichroic optical filters to select narrow bands of spectral colors, for example in fluorescence microscopy, LCD projectors, or 3D movies. However, color changing glass dates back to at least the 4th century AD in Roman glass, though only a very few pieces, mostly fragments, survive. It consists of a translucent glass containing colloidal gold and silver particles dispersed in the glass matrix in certain proportions so that the glass has the property of displaying a

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particular transmitted color and a completely different reflected color, as certain wavelengths of light either pass through or are reflected. It was also made in the Renaissance in Venice and by imitators elsewhere; these pieces are also rare. [See e-pages for *additional information and photos.*]

Wikipedia

From Rocky Trails 7/20 Picture of cab from internet

More about Dichroic Glass

Modern dichroic glass

Multiple ultra-thin layers of different metals (such as gold or silver); oxides of such metals as titanium, chromium, aluminium, zirconium, or magnesium; or silica are vaporised by an electron beam in a vacuum chamber. The vapor then condenses on the surface of the glass in the form of a crystal structure. A protective layer of quartz crystal is sometimes added. Other variants of such physical vapor deposition (PVD) coatings are also possible. The finished glass can have as many as 30 to 50 layers of these materials, yet the thickness of the total coating is approximately 30 to 35 millionths of an inch (about 760 to 890 nm). The coating that is created is very similar to a gemstone and, by careful control of thickness, different colors may be obtained. The total light that hits the dichroic layer equals the wavelengths reflected plus the wavelengths passing through the dichroic layer. A plate of dichroic glass can be fused with other glass in multiple firings. Due to variations in the firing process, individual results can never be exactly predicted, so each piece of fused dichroic glass is unique. [John Shea quite enjoyed this aspect of the process.] Over 45 colors of dichroic coatings are available to be placed on any glass substrate. Artists can create images by removing the dichroic coating from parts of the glass, creating everything from abstract patterns to letters, animals, or faces. The corporate headquarters of Amazon.com in Seattle incorporates dichroic glass into the exterior of its high-rise building, reflecting light into various colors that depend on the time of the day.

Wikipedia

From Rocky Trails 7/20

WORLD'S SMALLEST DINOSAUR IS ACTUALLY A LIZARD SCIENTISTS ADMIT IN RETRACTION

Just a couple of months following a group of researchers trumpeted their discovery of the world's tiniest dinosaur, the exact researchers have retracted their conclusions, noting it was possible a lizard as a substitute.

A diminutive bird-like skull, exquisitely preserved in amber for almost 100 million years, did not belong to the smallest dinosaur ever discovered. It was probably a lizard. The skull was believed to offer a whole new lineage of birds, but the paper was retracted on Monday.

The story on tiny dinosaur, its skull measuring only 7.1mm long, smaller than the bee hummingbird, was reported by Prof Jingmai O'Connor and his team members referred to the specimen as "Teenie Weenie".

When questioned whether it was a bird or a dinosaur, Prof O'Connor then told media that the lines were extremely blurry. "We think it's a bird – the skull has a shape that only occurs in birds and some dinosaurs. However there are no skull characteristics that define birds, therefore it could be a dinosaur or even something else," she said. "It's the weirdest fossil I've ever been lucky enough to study."

Co-author Dr Luis Chiappe, from the Natural History Museum of Los Angeles County, said: "It's lucky this tiny creature was preserved in amber, as such small, fragile animals aren't common in the fossil record."

Retracted Now

New findings revealed that it did not belong to the smallest dinosaur ever discovered. "I agree we were wrong and an unpublished specimen will eventually prove it," palaeontologist and study author Jingmai O'Connor told Retraction Watch, though she disagreed with the choice to retract the paper. New evidence suggests that the specimen, trapped in amber in what is now Myanmar nearly 100

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million years ago, might actually be a lizard.

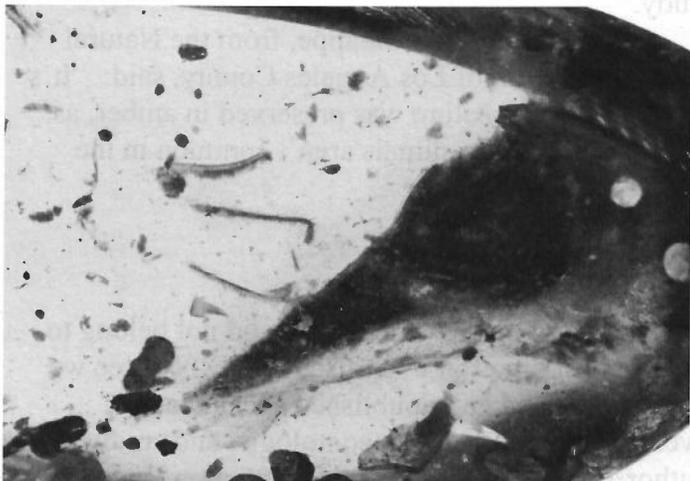
The authors of the paper, published in Nature on 11 March, say that their original description of the fossil — a bird-like skull less than 2 centimetres long, its mouth packed with dozens of teeth — is still accurate but its classification as a dinosaur is incorrect.

The new data “do definitively say that we were wrong”, says O’Connor, a palaeontologist at the Chinese Academy of Sciences Institute of Vertebrate Paleontology and Paleoanthropology in Beijing, who co-lead the now-retracted study.

Andrea Cau, a vertebrate palaeontologist in Parma, Italy, said the fossil has several characteristics typical of lizards that have never before been seen in a bird-like fossil from that era. “The idea that it was instead a lizard could not be excluded,” said Cau who is not surprised by the retraction, and notes that reclassifications, especially of incomplete fossil specimens from unknown groups, are not uncommon in the field.

Although the fossil is no longer thought to be the smallest-known dinosaur, O’Connor and Cau both believe that it is still compelling because of its unusual combination of features. “The specimen is still very interesting to science,” O’Connor said.

Co-author Dr Luis Chiappe, from the Natural History Museum of Los Angeles County, said: “It’s lucky this tiny creature was preserved in amber, as such small, fragile animals aren’t common in the fossil record.”



This fossil trapped in amber was thought to be a dinosaur but is likely a lizard. Credit: Lida Xing
From the internet Geology In

A BLAST FROM THE PAST!

Take a look at a summer field trip we had in 1989 written by members Walt Vogtmann and his wife Kay. Enjoy!

Indian Summer in the Upper Peninsula

Although the temperatures were in the sunny 70 's in the Detroit area when we left for our week's field trip to the Upper Peninsula on Friday, September 22, by late afternoon the weather changed to strong NW winds (a car was blown off the Mackinac Bridge), rain, sleet, snow and temperatures dropping to the low 30 's overnight. At St. Ignace, several freighters spent the night at anchor in Lake Huron to avoid the 12-foot waves they would have to face as they passed through the Mackinac Straits.

Our field trippers pulling trailers or in motor homes had a harrowing trip as the gusts of wind battered their vehicles. Jay Ross described it as "a white-knuckle drive" and Earl Northrop, being buffeted by the wind from the Flint area on, almost turned back. Saturday was an equally bad weather day, but fortunately, no mishaps to any of our members, whose destination for our first collecting stopover was the Champion-Michigamme area.

Kay and I arrived at the Philomena Motel in Michigamme Saturday afternoon, but the rest of the group were to stay at the Michigamme Shores campground near Champion. We went to the Mt. Shasta restaurant for dinner, where we saw Norm and Joyce Hanschu and Bob and Pat Rutkowski. After dinner we drove to the campground to check the next day's schedule. We talked to Vic and Mary Kostukoff and Jay Ross and were told that Rol and Doris Snyder and Pete and Diane Kuzara were there (the Kuzaras' had arrived on Thursday). Being cold and windy, there was no camp meeting that night, but Jay told us that Sunday's collecting trip would begin at 9:30 a.m.

Sunday morning began somewhat cool (29 degrees), but it was a bright, sunny day and the temperature got into the 60's. This set the weather pattern for the rest of the week, with each succeeding day getting a little warmer until it reached the high 70's by the weekend. We were experiencing Indian Summer in the U.P.

The following additional members had arrived to join the group: Ed and Wanda Wargo, Chuck and

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Marge Collins (having traveled in luxury in a newly-acquired 1973 GM motor Home on its shakedown trip), Bud and Eleanor Littlepage, Jan and Mary Whitman and Bill Orban.

The Sunday destination was the Taylor Mine, an old iron mine, near Alberta, where we collected pyrolusite (abundant) goethite and quartz. On our return to the campground we found that Earl and Esther Northrop had joined us.

On Monday, still in iron country, we visited the Old Richmond Mine near Palmer to collect hematite. Earl Northrop and Bob Rutkowski each found especially nice hematite specimens, although no one came away empty-handed. Several of the group, including Bill Orban, on his first field trip with the club, were focusing their search on micro-minerals and seemed to be quite engrossed with their finds as they were almost frozen in the stance of looking at specimens through their 10-power magnifiers.

On the return trip to the campground we stopped at the Champion Mine to collect specular hematite to be used for grab bags and "minerals for minors" at our next show.

The Kuzaras had to leave for home today to meet a work schedule. But Tom and Elspeth Gibbs had arrived at the campground today and were to join us for the remainder of the week.

Tuesday was a travel day for the trip to our second and last base camp of the week at Hancock. Trip leader Jay Ross had arranged for a 3:00 p.m. tour of the Seaman Mineral Museum at Michigan Technological University. Stan Dyl II, museum curator, conducted a one-hour tour, providing interesting background data on the museum and its collection. He proudly called our attention to a magnificent, large specimen of quartz encapsulated copper which he identified as having been donated in 1987 by Chuck and Marge Collins. (I'm told that a careful review of the museum's displayed specimens would reveal that a number of MMLSD members have donated specimens.)

Don and Katy Brown had arrived at the Hancock campground during the day, bringing the total number of members who participated in this field trip to 28.

Wednesday's itinerary took us to Kearsarge to the Wolverine Mine where we collected copper,

epidote, microcline and micros. That evening we participated in a swap with the Copper Country Rock and Mineral Club in Laurium in a restored theater/ballroom dating back to the turn of the century. The Laurium club brought some very nice specimens and graciously provided refreshments.

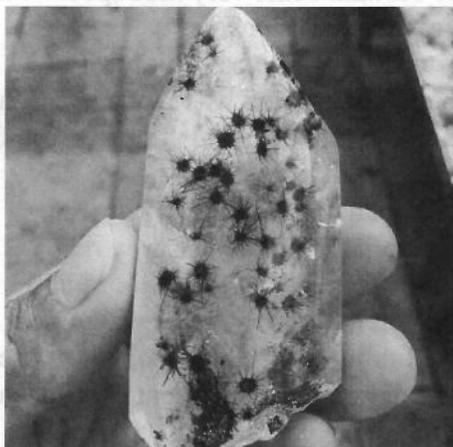
Thursday took us to the Champion Mine at Painesdale, where the best find was Norm Hanschu's 35 lb. copper mass. The rest of us didn't do as well. It would have been better if we had been here 2 1/2 weeks earlier when road construction crews were removing dump material for fill at a nearby road construction. We were told that a thousand or more people were swarming the freshly bulldozed mine dump surfaces and finding many large copper masses, and that until a few days before, excellent copper was being taken from the road construction area itself after the workers quit at 5:00 p.m. On the day we were there, the road work had been almost completed, with the trucks now dressing the road shoulders with sand and top soil. It was like the fisherman being told, "You should have been here yesterday." As if in consolation, a local "entrepreneur" offered to sell us at \$1.00 a pound copper he had retrieved from the dump. He said he had 1,600 lbs. nearby in a truck trailer. Some of us went over to look and to buy. That evening we visited Rich Whiteman's Red Metal Minerals shop in his home on the Hancock Canal to make some mineral purchases.

Friday was the last collecting day before the trip home for rest of us, and we visited the Laurium Mine near Calumet hoping to find copper, silver, epidote, prehnite and a very rare azure blue micro copper carbonate mineral called kionoite. Well not as rare anymore, because Doris Snyder, Earl Northrop and Jay Ross each found a kionoite specimen here. Don Brown found a beautiful 4-inch cluster of copper crystals and my best find was some sheet copper. It was a collecting site that seemed quite productive for everyone.

That evening at the campground, in celebration of a fine week in the U. P. and our last day before heading home, we practiced our hobo pie dinner ritual, after which Norm Hanschu made certain that the cooking irons have never ever been washed as clean. It was a great Indian Summer week in the U.P.

-- Walt and Kay Vogtmann

Star Hollandite Quartz



Rare Urchin Quartz (Quartz crystal with Mannardite phantom inside) from Brazil
Photo: Mike Bowers

Star Hollandite Quartz is a type of quartz crystal that has very small inclusions of Hollandite in it, that look like tiny black stars.

Hollandite is an oxide mineral. A monoclinic-prismatic white mineral containing aluminum, barium, iron, lead, manganese, oxygen, silicon, and sodium. It is the barium-manganese (III) endmember of the coronadite group.

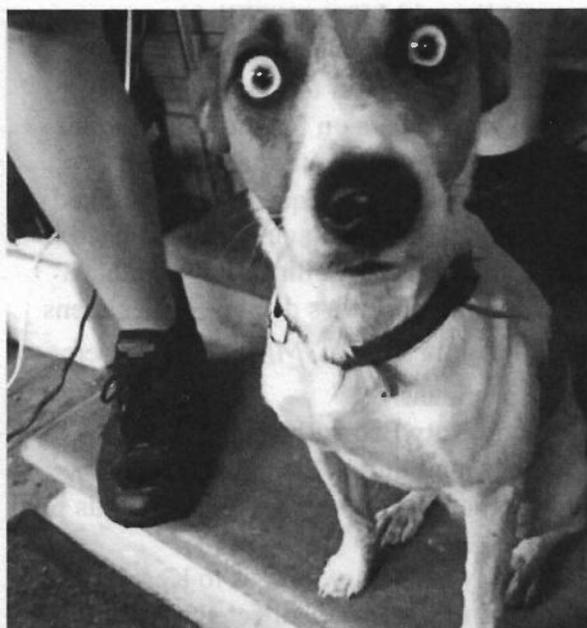
Rare quartz inclusion Hollandite Quartz is a variety of Quartz, silicon dioxide, which has dark grey/black six-pointed “star” inclusions of the mineral Hollandite. Star Hollandite formations are formed when deposits of Hollandite become trapped within Quartz during its formation. As the Hollandite becomes subjected to high thermal temperatures within the Earth, the Hollandite bursts into star formations within the Quartz. This variety of quartz is very rare.

Quartz is a hard, crystalline mineral composed of silicon and oxygen atoms. Quartz belongs to the trigonal crystal system. The ideal crystal shape is a six-sided prism terminating with six-sided pyramids at each end. Common colored varieties include citrine, rose quartz, amethyst,

smoky quartz, milky quartz, and others. These color differentiations arise from the presence of impurities which change the molecular orbitals, causing some electronic transitions to take place in the visible spectrum causing colors
From the internet Geology In



The emotional support dog after I get done telling it my problems.



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>

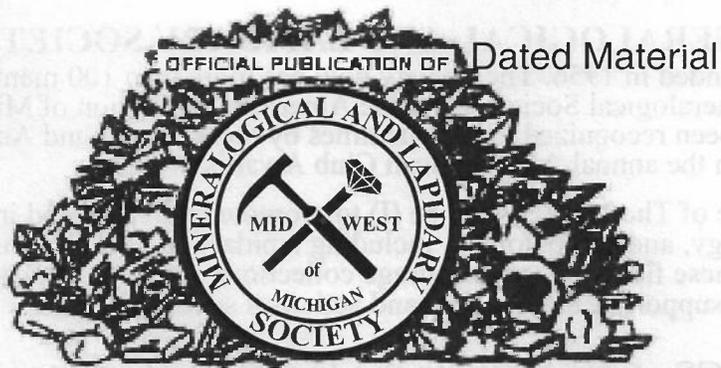
American Federation:
www.amfed.org

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 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
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Michigan

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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