

CMLMS
15785 Park Lake Road
East Lansing, MI 48823

**TIME VALUE
FIRST CLASS**

Rockhound News—April, 2016

Official publication of the
**Central Michigan Lapidary and
Mineral Society**
Affiliated with MWF and AFMS



Rockhound News

This bulletin is the official publication of the Central Michigan Lapidary and Mineral Society of greater Lansing, Michigan. It is published each month except July and August.

The Central Michigan Lapidary and Mineral Society is a non-profit organization, meeting to promote interest and increased knowledge in the fields of mineralogy, geology, paleontology and the lapidary arts. It was organized in May 1957 and celebrated its 50th Anniversary in 2007.

Meeting place: Masonic Center, 2175 Hamilton Street, Okemos, MI

Regular meeting date: Third Thursday, except July and August

Meeting time: 7:30 p.m., doors are open at 7:00 p.m.

Annual Dues: Adults \$10.00; Families \$15.00; Students under 18 \$2.00

Board meetings: First Tuesday, except July and August; 7:00 p.m., Okemos Library

OFFICERS 2016

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Affiliated With

Midwest Federation of Mineralogical and Geological Societies

<http://www.amfed.org/mwf/>

American Federation of Mineralogical Societies

<http://www.amfed.org>

ROCKHOUND NEWS

NEXT MEETING: Thursday, April 21, 2016

PROGRAM: DVD

REFRESHMENTS: Members with Initials A-L Please Bring Goodies

Location and Time: The CMLMS membership meeting will be held on April 21, 2016, at 7:30 p.m., at the **Masonic Center, 2175 Hamilton Street, beautiful downtown Okemos.**

Calendar for Spring 2016 and later

April 20, 2016, Wednesday, Fairview STEM School in Lansing, science night, 6 - 7:30

April 21, 2016 - 7:30 p.m., membership meeting, DVD

April 21, 2016 Laingsburg School science night, 5 - 7

May 3, 2016 - 7:00 p.m., board meeting, Okemos Library

May 19, 2016, Banquet, speaker Sally Labadie, mammoths, see Dan Sine or Ernie Aughenbaugh for tickets

June 2, 2016 - 7:00 p.m., **Thursday**, board meeting, Okemos Library - note day

June 16, 2016 - 7:30 p.m., membership meeting, work bee

July & August - off for summer

[Editor's note: the deadline for the newsletter is now the Sunday after the board meeting]

MAY BANQUET

Banquet date is May 19, 2016, 5:30 social hour, 6:30 dinner. Please bring a snack for the social hour. The speaker will be Sallie Labadie: "Michigan Mastodon Dig." Members are encouraged to bring guests and a display of mastodon or fossils. Tickets are now available - \$10 adults, \$5 children. Contact Dan Sine at 517-316-5713 or daniel.sine@opm.gov; Ernie Aughenbaugh at esaspladary@hotmail.com or 989-224-7619; or at the membership meetings.

BANQUET TICKETS AVAILABLE FOR TULIP CITY

Tulip City Gem and Mineral Club is holding its annual spring banquet and is offering us two tickets. Date is Wednesday, April 27, 2016, 6 p.m. punch, 6:15 p.m. potluck, speaker Doug Moore, place Howard Miller Public Library, 145 S. Church Street, Zeeland, Michigan. If interested RSVP to Linda Plumert by April 20, phone 616-669-6759, rlplumert@gmail.com.

ORANGE BARREL ALERT!!!

Okemos Road where the humpback bridge crosses the Red Cedar River has been undergoing repairs since last year. It is now open **southbound only** from Hamilton to Mt. Hope; northbound is completely closed. Plan to travel to the Masonic Center using routes other than Okemos Road between Hamilton and Mount Hope. The detour is via Hagedorn north to Grand River. Okemos Road is open both ways north of Hamilton.

UPCOMING PROGRAMS

The Vice-President's position is vacant. Let President, Sue Casler, or a board member know if you have any ideas for speakers, or other programs.

April 21, 2016 -, DVD, mineral diamond

May 19, 2016 - Annual banquet, speaker Sallie Labadie on "Michigan Mastodon dig"

June 16, 2016 - Show work bee, mineral moonstone and beryl, variety emerald

MINERAL OF THE MONTH

The board has decided to offer a **Mineral of the Month** feature at membership meetings to encourage society participation. Members can bring in samples of their specimens with a chance to speak briefly about them. This year will feature birthstones. April's birthstone is diamond. Everyone go through your stash and bring in samples of diamonds. Samples can include not only the mineral but beads, jewelry, etc.

Message from Roster Secretary Ernie Aughenbaugh

Dues are now being collected for 2016

If you have not paid dues for 2016, as of May 1, you will be removed from the club mailing list and will be unable to go on 2016 society-planned collecting activities/field trips. This will be your last copy of the Rockhound News. If you are receiving a paper copy and have a red check on the label this will be your final issue. Also, if you receive your newsletter or any other notifications by electronic means, PLEASE NOTIFY THE BOARD IF YOU HAVE A CHANGE IN YOUR E-MAIL ADDRESS.

VOLUNTEERS NEEDED FOR HOSPITALITY AND VARIOUS CHAIRS

We need members willing to set up hospitality on membership meeting nights. Please consider taking a few minutes to help out.

Show chair is open. Currently the board will pick up the duties but a permanent chairperson is needed.

Library chair is open. Please let the board know if you are interested in either position.

CLUB NEWS

Outreach Committee: Always in need of volunteers to help with school science fairs, talks and presentations at schools and other organizations, and educational opportunities. Contact committee chair Mary Gowans to lend a hand. gowans@msu.edu or 517-351-6135.

Received for our participation in Bennett Woods Elementary School science night:

Dear Mary

Please extend our great appreciation and thanks to the Michigan Lapidary and Mineral Society members who shared their love for science with our families and students at yesterday's family science night. Each year, the member tables are busy with lots of curious minds. We so appreciate your group's participation each year.

Thank you! Kyan [D. Zeller]

April 20, 2016, Wednesday, Fairview STEM School in Lansing, science night, 6 - 7:30.

April 21, 2016 Laingsburg School science night, 5 - 7. Need to know who will be interested in going to this one by **April 18** since this does compete with our membership meeting night.

Please let Roni Sionakides know if you can help out with either one. Phone 517-482-5986

Library: Check out the new books in the library boxes. Always something in there, old or new, for all interests.

Field Trips!

Paulding and Graymont, Ohio are being considered. See Dan Sine to sign up and for more information. Cell phone 517-316-5713 or daniel.sine@opm.gov. Please contact him if interested in getting emails as field trips are set up.

Minimum age for a quarry is 12. No children under 12 will be allowed at the quarries (their rule). Trips to other collecting sites may have no minimum, or maximum, age requirement. Safety rules in the **Field Trip Guide** are posted at the society website. They should be reviewed, printed out and **taken to every field trip**. Also, insurance coverage for the field trips by the Federation is very limited. It provides only for damage that members might do on-site. There is no personal injury coverage; no coverage underground. Coverage is only for members, so our policy is that field trips are only for members. Members should review this insurance information on our website. Let Dan know of any other locations and contact information that you may know about and would like to visit. Dan does a fabulous job getting these field trips lined up for club members so please take a moment to thank him personally for all his work.

Fossil Park Field Trip

Dave Berquist, who lives in Delta Township, is seeking up to 3 persons interested in going to Sylvania, Ohio to Fossil Park for a one-day car pool excursion. He has a van with room to bring back finds. He is will to travel any day, subject to schedules of all persons who are interested. he can be contacted by email at 3waverly@gmail.com or phone at 517 643-2301. For more information on Fossil Park their website is www.olanderpark.com.

This is from the website:

Fossil park itself is open year round. Please check the website at www.olanderpark.com and that will give you updates and what you can and can't do.

The rules for the fossils themselves is, what you find, you keep. I just ask if you could send pictures of what you find and the time you spent there to us, so we can put it on our face book page or you can put it on the face book page at The Olander Park System. It's nice to see what people get or find.

Tools are not allowed.

Hansen's quarry is still operating at full throttle. We have an agreement with them on fossils. They just blew up part of their southeast quarry and that's where we get the fossil from. The park people go in and load our trucks and take it to Fossil park.

There are restaurants, gas station, stores across the street and downtown Sylvania is only 2 miles away with the same things, plus our other parks are close by. The corner of Centennial Road and Sylvania Avenue will be closed for 68 days. This would be out of your way, but nice to know.

**PLACES TO GO AND THINGS TO DO—Check www.amfed.org/mwf
or our website www.michrocks.org**

Check out our website for items for sale. There are links to eBay and Craig's List.

UPCOMING SHOWS

April 30-May 1: KALAMAZOO, Michigan, Kalamazoo Geological and Mineral Society Annual Show, Kalamazoo County Expo Center, 2900 Lake Street, Kalamazoo. Fri 4-8; Sat 10-6; Sun 10-5. Contact Jerry VanNocker, (269) 979-3348; jervannocker@comcast.net.

May 11: WYOMING, Michigan, Indian Mounds Rock & Mineral Club Tailgate Sale, Wesley Park United Methodist Church, 1150 - 32nd Street, Wyoming. 9 - Noon. Contact Gordon Spalenka, (616) 249-0513; gnsपालenka@sbcglobal.net www.indianmoundsrockclub.com.

May 14-15: NORTH OLMSTED, Ohio, Parma Lapidary Club Annual Show, North Olmsted Soccer Plex, 31515 Loraine Road, North Olmsted. Sat & Sun 10-5. Contact John or Sue Zabrowski, (440) 213-1153; parmalapidary@yahoo.com.

May 14-15: ST. JOSEPH, Michigan, Blossomland Gem and Mineral Society, Lake Michigan Catholic Elementary School, 3165 Washington Avenue, St. Joseph. Sat 9-6, Sun 12-6. Contact Larry, tire309@yahoo.com, Nancy at 269-983-4900.

CMLMS MINUTES

CMLMS, Membership Meeting, March 17, 2016

Call to Order: President Sue Casler called the meeting to order at 7:47pm at the Okemos Masonic Hall.

Welcome and Introduction of Guests/Visitors: Our visitor for the evening was Tom Shipley.

Minutes of the Last Meeting: The February Membership Meeting minutes were printed in the March Newsletter. The March Board Meeting was cancelled because of bad weather.

Treasurer's Report: Elaine Beane submitted her report of January 1 through February 17, 2016.

Announcements:

Roger Laylin said he had taken 3 of the show table covers for cleaning at Baryames for \$20 each, a total of \$60. We will need to discuss the feasibility of continuing to dry clean and costs. A couple were washed but shrank.

Sue said that Sally Labadie would be our speaker at the May banquet. She will talk on the Michigan Mastodon dig in Saline. The banquet will be chicken. The program for April will be a DVD.

Ernie Aughenbaugh said he will be at the Jackson Show at the fairgrounds. The swap at Taylor was also mentioned.

Mineral of the Month: March birthstone, aquamarine, was presented by Theresa Hubbard. Members contributed samples of aquamarine and jewelry for a display during the meeting.

April's feature will be **diamond**. Members are asked to bring in specimens, stories, or information about diamonds for display or discussion during the meeting.

Adjournment: Sherry Sparks **made a motion to adjourn the meeting**. The motion was supported by Lyle Laylin. The meeting was adjourned at 8:10 p.m.

Program: Silent Auction.

Respectfully Submitted, Roni Sionakides, Acting Recording Secretary

CMLMS, Board Meeting, April 5, 2016

Board Members Present: Elaine Beane, Sue Casler, Theresa Hubbard, Alan Hukill, Nate Krupp, Lee Laylin, Roger Laylin, Lyle Laylin, Milt Gere, Dan Sine, Jan Sjoquist, Roni Sionakides, Dave Berquist.

Board Members Absent: Elaine Angstman, Ernie Aughenbaugh, Gaylord Brooks, Mary Gowans.

Members Present: Bob Mosher.

President: Sue Casler called the meeting to order at 7:07pm at the Okemos Library. She made these announcements:

1. Tulip City Club has invited CMLMS representatives to their banquet on April 27. Please obtain the contact information from Sue if you are interested in attending.
2. MSU invited anyone interested to attend the Dedication of "BIF", the 29- ton specimen of banded iron formation gifted from the City of Ishpeming. This will be held on Tuesday, May 3, 2016 at 1:00pm outside the north entrance of the Natural Science Building on Farm Lane. R.S.V.P. by April 25: natsci.msu.edu/iron.
3. MSU Scholarship process has been delayed. Lyle notified MSU last week but has had no response.
4. Board Meetings are scheduled for Tuesday, May 3 and for Thursday, June 2, 2016 at the Okemos Library.
5. Membership Meeting programs: April 21, DVD; May 19, banquet speaker will be Sally Labadie "Michigan Mastodon Dig". June 16 will be a work session and possible speaker.
6. Mineral of the Month: April (diamond) and May (emerald) will be combined. Theresa will not be at the April meeting and a presenter will be needed.
7. Banquet tickets are available for purchase. Adult tickets are \$ 10.00; children's tickets are \$ 5.00. Sue and Dan are preparing door prizes and special prizes. Roni will do the programs; Roger will order the number of meals, and is it expected that Elaine Angstman will do the hospitality table. Dan has prepared the tickets.

Treasurer: Elaine Beane will give a full report at the membership meeting following the arrival of the bank statement.

Recording Secretary: Jan Sjoquist's duties were filled by Roni Sionakides during February and March and the minutes have been included in the newsletters.

Corresponding Secretary: Theresa Hubbard, no contacts.

Directors: Gaylord Brooks (3 yr.) absent, no report. Lyle Laylin (2 yr): The current issue of *Rocks and Minerals* contains an item about some float silver found in the Keweenaw Peninsula. Lyle shared information about an application that labels land features as they are flown over: flyovercountry. Nate Krupp (1yr) inquired about getting programs presented by MSU Professors.

Roster Secretary: Ernie Augenbaugh, absent, report by Roger Laylin. The new membership directory will include member numbers. CMLMS has approximately 18 life members. Many dues have not been paid.

Liaison Officer: Alan Hukill surveyed the board to determine how many are MWF Newsletter recipients.

Past President: Elaine Angstman, absent.

Membership: Dave Berquist has no pending applicants. The new application form is not on the website as yet.

Field Trips: Dan Sine has contacted several quarries about scheduling field trips and expects dates to be forthcoming from Paulding and Graymont in Ohio. He will also contact the Charlotte Quarry. Irving Materials, Inc. (IMI) sent a letter to notify clubs that collecting in Indiana is suspended due to all of the legal and liability concerns.

Publications: Roni Sionakides: Newsletter deadline is the Sunday evening following the board meeting.

Education: Theresa Hubbard: Mineral of the month for April will combine with May; diamond and emerald.

Community Outreach: Mary Gowans, absent, report by Roni Sionakides: Thank you from Bennett Woods, Fairview will have their science night on April 20, 6-7:30pm. Please notify Roni if you can participate. Laingsburg's program will be on the same evening as our membership meeting, April 21, from 5-7pm.

Library: Lee Laylin, no report.

Display: Jan Sjoquist will have the CMLMS Memorial display at the Kalamazoo Show, April 29 through May 1, 2016.

Finance: Milt Gere inquired about the MSU Scholarship. Lyle reported on the delay.

Web Master: Lyle Laylin has a list of items to be addressed.

Show: Roger Laylin had some tablecloths dry cleaned and reports that the shrinkage was considerably more than on the ones that he and Lee washed in cold water. Neither method was able to remove some brown stain. He and Lee will wash the remaining tablecloths in cold water. Exit gift specimens were discussed.

Old Business:

New Business:

Adjournment: Alan Hukill made a **motion to adjourn the meeting**. The motion received a second by Elaine Beane and the meeting was adjourned at 8:32pm.

Respectfully Submitted: Jan Sjoquist, Recording Secretary.

DID YOU KNOW?????

The Lincoln Memorial in Washington, DC is covered with Yule Marble. Yule Marble comes from a quarry in Colorado. It is considered to be the world's finest marble. Yule Marble is also used in the Tomb of the Unknown Soldier, the Lincoln Memorial and a myriad of other buildings in the United States. [From an article in *Rock and Gem*, May 2015, and found in CMLMS Library].

DIAMOND - APRIL

Word origin by Roni Sionakides

Diamond is from diamant from Old French, from Medieval Latin diamas, diamant, a corruption of Latin adamas and used to separate the mineral from other substances, from Greek adamas meaning "the hardest metal" and probably referring to steel. The Greek root daman means tame and placing the prefix 'a' before the work makes it negative - untamed. But is also means unconquerable, unalterable, inflexible [*Greek-English Lexicon*, Liddell and Scott]. Adamas is also one of the two modern Greek words for diamond; the other is diamanti.

From Theresa Hubbard

Diamond is the birthstone for April and the central motif for the state flag of Arkansas, the only state that mines diamonds. In the atomic arrangement of diamond, each carbon atom is linked to four equidistant neighbors, creating a close-knit, dense, strongly bonded structure. This strong covalent bonding between its atoms gives it unsurpassed hardness. In particular, diamond has the highest hardness and thermal conductivity of any bulk material on Earth. These properties determine the major industrial application of diamond in cutting and polishing tools and the scientific applications in diamond knives and diamond anvil cells. Because of its extremely rigid lattice, it can be contaminated by very few types of impurities. Small amounts of defects or impurities (about one per million of lattice atoms) color diamond blue (boron), yellow (nitrogen), brown (lattice defects), green (radiation exposure), purple, pink, orange or red. Diamond also has relatively high optical dispersion (ability to disperse light of different colors).

Most natural diamonds are formed at high temperature and pressure. Diamonds need pressures of over 50,000 atmospheres to form. This corresponds to a depth below Earth's surface of 87 to 118 miles, well into the upper peridotite of Earth's mantle. Carbon-containing minerals provide the carbon source, and the growth occurs over periods from 1 billion to 3.3 billion years (25% to 75% of the age of the Earth). Once formed in the upper mantle they remained there for millions of years before being blasted to the surface in volatile eruptions. Thus, the majority of diamonds, are found in kimberlites and lamproites. Kimberlite (named after Kimberley, South Africa the center of the South African diamond-mining industry) is a form of peridotite that occurs in pipes which are intrusive igneous bodies roughly circular in cross section with vertical sides and usually less than $\frac{3}{4}$ mile in diameter. They tend to be found in the uplifted centers of continental platforms, and appear to be roughly the same age, having formed during the late Cretaceous Period (100 to 65 million years ago). It appears that the kimberlite was injected into zones of weakness in the crust as a relatively cool "mush" of crystals rather than as a liquid magma that crystallized within the pipes themselves, as there is usually little contact metamorphism with surrounding rocks. Weathered

kimberlite is yellowish in color, and is called yellow ground. It is in areas of yellow ground that diamonds were first discovered in South Africa and later in Arkansas, Colorado, Montana and Wyoming. The Crater of Diamonds State Park in Arkansas is open to the public, and is the only mine in the world where members of the public can dig for diamonds. It is a lamproite pipe. The lamproite diamond source is unusual, as almost all diamonds are mined from kimberlite and from alluvial deposits of diamonds weathered from kimberlite. The most prominent lamproite diamond source is the Argyle diamond mine in Australia.

Historically, diamonds were found only in alluvial deposits in Guntur and Krishna district of the Krishna River delta in Southern India. India led the world in diamond production from the time of their discovery in approximately the 9th century B.C. to the mid-18th century A.D., but the commercial potential of these sources had been exhausted by the late 18th century and at that time India was eclipsed by Brazil where the first non-Indian diamonds were found in 1725. Diamond extraction from primary deposits (kimberlites and lamproites) started in the 1870s after the discovery of the Diamond Fields in South Africa. Today, the major gem diamond reserves are in Botswana, Australia, Russia, Congo and Angola. Canada has several diamond mines in kimberlite pipes still to come to full production and may soon be producing at least 15-20 percent of the total world diamond output.

In Michigan diamonds have been known to occur in the Lake Superior region for well over a century. A large Diamond, 10.875 carats, known as the Dowagiac diamond, was found near the Indiana border in a glacial moraine. However, most of the diamond discoveries in this area have been in glacial deposits in southeastern Wisconsin, mainly in the late 1800s when water wells were dug in the glacial drift. It is believed that they were brought down from Michigan's Upper Peninsula. The following abstract is from the U.S. Geological Survey Circular 842:

Between 1876 and 1913, diamonds were found in at least seven localities in southern and central Wisconsin. All were found in Pleistocene glacial deposits or Holocene river gravel. The bedrock kimberlite source for the diamonds is unknown but has been presumed to be in northern Canada, the only area north of Wisconsin previously known to contain kimberlites. Recently, a kimberlite pipe, here named the Lake Ellen kimberlite, has been found in Iron County, Michigan. That find suggests the possibility that drift diamonds in Wisconsin have come from a more local source - kimberlites in northern Michigan and Wisconsin. The Lake Ellen kimberlite is very poorly exposed, but a strong positive magnetic anomaly indicates that it is roughly circular in plan and about 200 meters in diameter. Although the kimberlite is entirely surrounded by Precambrian rocks, it contains abundant inclusions of fossiliferous dolomite, probably from the Ordovician Black River Group that overlay the area when the kimberlite was intruded. The post-Ordovician age of the kimberlite leads us to suspect that other possible cryptovolcanic structures in Paleozoic rocks in the region were formed over kimberlite pipes that are not yet exposed by erosion. Such structures include Limestone Mountain and Sherman Hill, in Houghton and Baraga Counties, Michigan; Glover Bluff, in Marquette County, Wisconsin; and possibly an area along the Brule River south of Iron River, Michigan. No diamonds are known in the Lake Ellen kimberlite, but it has not been adequately sampled. The cryptovolcanic structures could not be the source of the drift diamonds in Wisconsin because even if the structures are caused by kimberlites, those kimberlites have not yet been exposed by erosion. Elsewhere in the world, kimberlite is seldom found as a single isolated body; clusters of bodies are more common, and the presence of one kimberlite implies that others may exist nearby. The discovery of additional kimberlites may be very difficult because of the extensive cover of glacial drift and the typical small size of kimberlite bodies. If all are magnetic, they might be found by detailed aeromagnetic surveys. However, the magnetism of the Lake Ellen kimberlite appears to be caused by secondary magnetite formed during serpentinization of olivine, so an unserpentinized kimberlite may not be strongly magnetic. We suggest that one or more diamond-bearing kimberlites may exist in northern Michigan or Wisconsin, but the discovery of such bodies is unlikely unless a very thorough search is undertaken. [Source: *Wikipedia.*, R. L. Bonewitz, *Smithsonian Rocks and Gems.*]