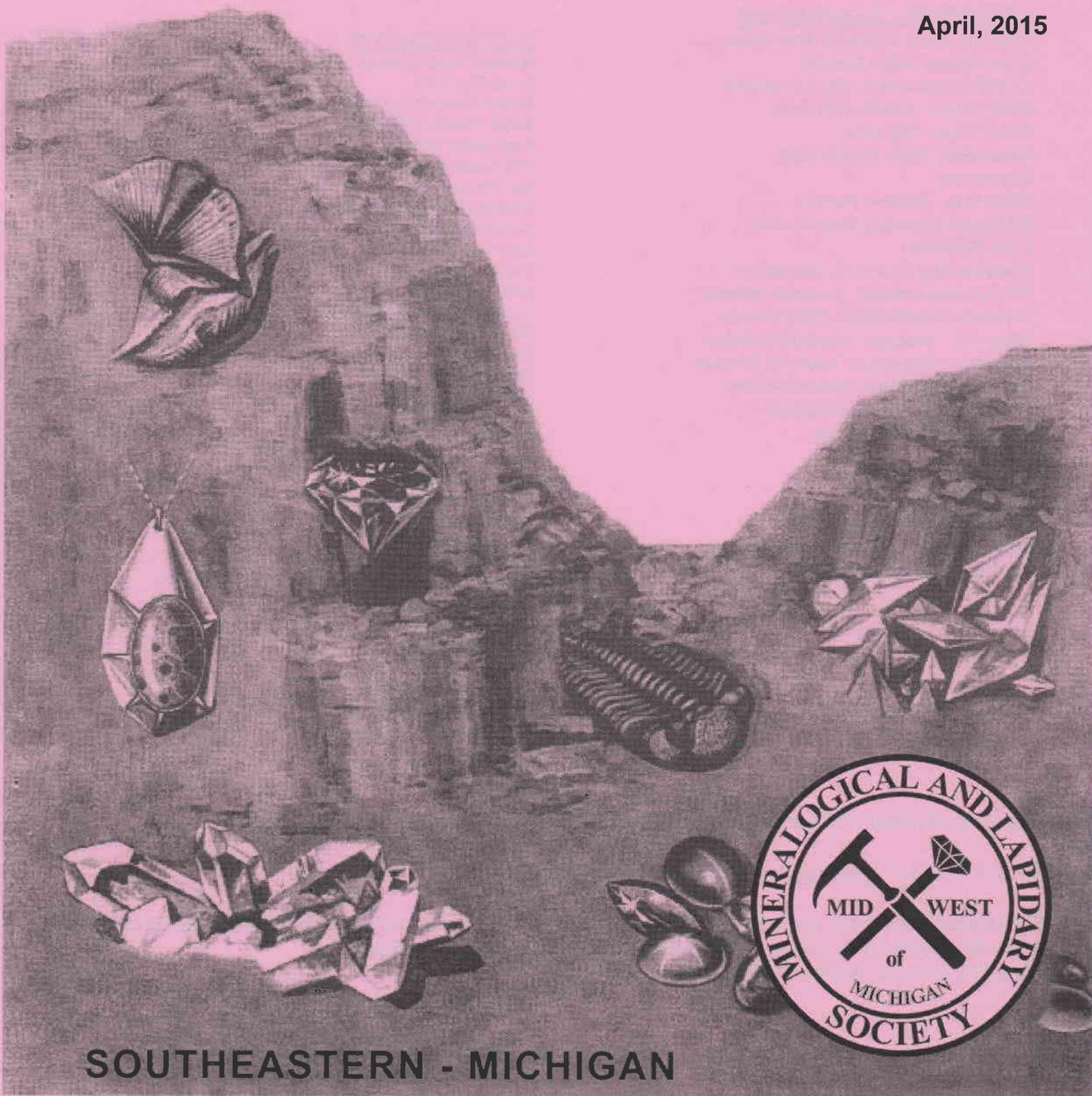


THE ROCKPILE

Official Publication of the Midwest Mineralogical and Lapidary Society

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

April, 2015



SOUTHEASTERN - MICHIGAN

Midwest Mineralogical & Lapidary Society

2015 OFFICERS

President: Diane Kuzara (734) 675-5237
Vice President: Gary Slominski (734) 379-3294
Recording Secretary: Edie Esche (734) 771-5269
Treasurer: Doris Snyder (313) 291-2133
Corresponding Secretary (Temp) Dan Gumina
(313) 766-8944
Liaison Officer: Leonard Swisher (313) 841-1606

COMMITTEE CHAIRPERSONS

Club Services: Lynda & Don Baker
Door Prizes: Mike Bomba
AFMS Scholarship: Pat Rutkowski
Field Trips – Local: Bill Barr
Field Trips: Bill Barr
Education: Dave Hendershot
Insurance:
Historian: Dolores Swekel
Michigan Material: Tom Morris
Club Publicity:
Membership: Lynda & Don Baker
MMLS Scholarship: Leonard Swisher
Program Coordinator: Mike Bomba
Property – Storage: Leonard Swisher
Property – Meetings: Leonard Swisher
Sunshine Reporter: Velma Bradley
Refreshments: Janet Slominski
Web Site: Stacey Harper

ACTIVITIES

2015 Banquet:
2015 Swap: Lou and Cindy Talley
2015 Auction: Dan Gumina

STUDY GROUPS

Advance Lapidary:
Basic Lapidary:
Bead Study: Diane Kuzara
Faceting:
Mineralogy: Dave Esch
Paleontology:
Wire Study: John Lindsay
Silversmithing: Don Brown

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 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

The Rockpile Staff : Editor Peter Kuzara, dpkuzara@peoplepc.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 Southgate Civic Arena, 14700 Reaume Parkway, Southgate, Michigan
GUESTS ARE ALWAYS WELCOME

Attention Exchange Bulletin

Editors:

We will no longer be sending The Rockpile to editors of newsletters that are not sending us a hard copy. We will continue to send a hard copy to those who send us one. If you wish to receive our club newsletter via the internet this is acceptable. Our email address is: dpkuzara@peoplepc.com

Attention MMLS members:

If you did not pay your dues for 2015 this is your last Rockpile.

The President's Corner



What we can't do alone we can do together!!!!
Cartoon from the 2/15 Backbender's Gazette

"What we can't do alone, we can do together."
Truer words were never spoken! I was recently given two large binders from past president, Russ Ranker that I never new existed. One of the binders included pictures of our many events and activities

over several years of time. I am not sure if this book was put together in 2001 or not, since many of the pictures I'm sure were taken of members long before 2001. I believe that possibly one of our former editors, Walt Voghtmann, put this book together for the club. Sections include activities such as the Swap, Show, Eddy Center, Lapidary, Bead Study, Mineralogy, Field Trips, Marshland Museum Demonstration Days and Demo Days at the Taylor Library. I will be bringing this book to our General Meetings for a few months for members to look thru before and after meetings. It's is a wonderful tribute to our club and to the many members who made our club "Great"! There many more empty pages to be filled yet in the book - plenty of space for you to help fill with things "You" can do to help with keeping our club happy, healthy and vibrant. Let's fill the book to overflowing!

Diane

The April Program is a 45 minute VHS Video titled "Mining Artifacts and History" featuring narrator Leo La Fond, miner and mining historian.

The Minutes of the February 13, 2015 Board Meeting....Briefly Summarized

Meeting called to order at 7:30pm by Diane Kuzara, President. Minutes of the last Board Meeting submitted and corrected, then approved. Treasurer's report read and approved.

Committee reports:

Correspondence - Stateline Gem and Mineral Show, May29th,30th &31st

Note in Rockpile received Midwest Federation Newsletter. It's the MWF's 75th anniversary.

Liaison - Leonard Swisher reported that scholarship applications are out.

Old Business: There was a report on the room in the Democratic Club where we will meet in Sept. It will be open for us 6:30pm thru 10pm. It will have a cabinet for the flag, tools, screen and equipment.

There will be a mailing to inform about our new digs the last week of August.

Next Board Meeting at the Kuzara's, Mar. 13th at 7:30pm. Board Meeting open to all Members.

Submitted by: Edie Esche

The Minutes for the General Meeting of February 17, 2015....Briefly Summarized

Meeting called to order at 7:31pm by Diane Kuzara, President. Minutes of the last approved.

Treasurer's report approved.

Reports: The Baker's need help with selling at the Swap tables.

Program: Pete will have a program of slate carving for March.

Liaison: Len is feeling better and has the scholarship applications mailed.

Correspondence: There are flyers for Midwest Fed. & Stateline Gem & Mineral show. The Midwest Federation 75th anniversary is in Chicago, May 23rd & May 24th

Membership: Ann Schimelpfenig is recommended for membership. Approved.

Old Business: Swap meet is Mar. 28th 10am to 5pm. Free admission and parking. All tables are sold.

New Business: Please let Diane Kuzara know if you can take pictures for the archives. Diane has signed a contract for using the Democratic Club room starting in September. She wishes to thank Dan Gumina for all his help.

Submitted by Edie Esche

HAPPY ANNIVERSARY

The Midwest Federation is celebrating it's 75th year. It will be celebrating at the 39th annual Chicago Gem & Mineral Association show. They will be hosting the Midwest Federation show this year. It will be held at the DuPage County Fairgrounds, Wheaton, IL, 2015 Manchester Rd.

May 23rd and 24th for more information the web site is: www.chicagolandgemshow.org

Please if any of the dates change for the upcoming study groups let us know!!
And if you are going to travel a long distance to attend any group it would be wise to call ahead to make sure that it still is going on that evening.
Editor's email address is dpkuzara@peoplepc.com

On A Sad Note former member Ted Pier passed away. For more information contact Gary Slominski.

Member Information Update

Edna Pitynski

Cell Phone# 313-330-0220 No more land line.

Dates to Remember

Contacts for study groups

Bead study, Diane Kuzara, 734-675-5237

Mineral study, David Esch, 734-665-5574

Wirewrap, John Lindsay, 734-604-8561

**Lapidary work shop, Frank Konieczki
734-323-2218**

Sliversmithing study group meeting is cancelled until further notice

April 1 Wire Wrap Class, Call John Lindsay for details

April 2 Bead study group will meet at the Kuzara's, 20281 Thomas, Brownstown at 7pm

**April 6 Lapidary work shop 2009 W. Michigan Ave., Ypsilanti, Mi., 7pm to 10pm.
Fee is \$2.50 for each evening.**

April 16 Bead study group will meet at the Kuzara's, 20281 Thomas, Brownstown at 7pm

April 16 Mineral Study Group will meet at Dave Esch's house, 227 Barton Shore Dr., Ann Arbor, Mi. at 7:30pm.

April 17 Board meeting at the Baker's, 35771 Ash Rd., New Boston at 7:30pm.

ROCKPILE DEADLINE

April 20 Lapidary work shop 2009 W. Michigan Ave., Ypsilanti, Mi., 7pm to 10pm.
Fee is \$2.50 for each evening.

April 21 General meeting will be held at the Southgate Civic Arena, 14700 Reaume Parkway, Southgate, MI at 7:30 pm.

May 4 Lapidary work shop 2009 W. Michigan Ave., Ypsilanti, Mi., 7pm to 10pm.
Fee is \$2.50 for each evening.

May 6 Wire Wrap Class, Call John Lindsay for details

May 7 Bead study group will meet at the Kuzara's, 20281 Thomas, Brownstown at 7pm

May 15 Board meeting TBA
ROCKPILE DEADLINE

May 19 General meeting will be held at the Southgate Civic Arena, 14700 Reaume Parkway, Southgate, MI at 7:30 pm.

May 21 Bead study group will meet at the Kuzara's, 20281 Thomas, Brownstown at 7pm

May 21 Mineral Study Group will meet at Dave Esch's house, 227 Barton Shore Dr., Ann Arbor, Mi. at 7:30pm.

Our Sister Club Events

April 9th, 10th & 11th Wyoming, MI, Indian Mounds Rock and Mineral Club Show; Rogers Plaza Town Center; 972 28th St. For information:
www.indianmoundsrockclub.com

April 11th & 12th Canton, Ohio Stark County Gem and Mineral Club Show; Stark County Fairgrounds; 305 Wertz Avenue NW. For information:
donelisedougan@gmail.com

April 11th & 12th Columbus, Ohio; Columbus Rock And Mineral Society Show: Northland Performing Arts Center; 4411 Tamarack Blvd.; For Information
www.columbusrockandmineralsociety.org

April 25th and 26th Troy Ohio, Brukner Gem & Mineral Club annual show, 912 Kent Lane. For more information website:
www.bruknergemandmineralclub.com

April 25th and 26th Cuyahoga Falls, Ohio; Akron Mineral Society and Summit Lapidary Club: Expo Center, 48 E Bath Rd. for more information Email:
gemboree@outlook.com

May 1st 2nd and 3rd Kalamazoo, Michigan: 2900 Lake St., Kalamazoo Rock Club
Information: KalamazooRockClub.org

May 29, 30 and 31st Wauseon, Ohio; Fulton County Fairgrounds; State Line Gem & Mineral Society Show. Information: <http://statelinegms.com>

Internet Web Sites of Interest

Midwest Federation:
www.amfed.org/mwf/index.html

American Federation:
www.amfed.org

From the Editor, my two cents. This newsletter will be sent to the printer before the March General Meeting. I hope everyone that gets to do the slate carving enjoys themselves. I had to restrict my slate carvers to about four member and I have about three volunteers. If this is successful we can do it again in the future. Our President is trying to talk a few

other members to do some demonstrations at our General Meeting. I hope she is successful. It is sad but many club activities went by the wayside, maybe if enough interest is shown we can get things going again. Pete

A Bit Of News

Company secures financing for U.P. mine

A company that plans to develop a gold and zinc mine in Michigan's Upper Peninsular says it has secured financing to continue the process of obtaining permits. Aquila Resources Inc. say it has reached an agreement with Orion Mine Finance to provide \$20.75 million for the next stage of developing the Black Forty project in Menominee County. Radio Station WYKX-WDBC reports that the company has already spent more than \$60 million exploring a mineral rich volcanic belt in the southern U.P. Aquila took 100% ownership of the project last year. Communications Director Robin Quigley says the company expects to be ready to begin constructing the mine by the end of 2016. The company expect to produce more than 15 million tons of ores that could include gold, silver, zinc, copper and lead.

Taken from the Detroit Free Press 2/5/2015

How To Deconstruct and Rehabilitate an Opal Triplet

by James Marburger from Pick & Shovel 8/2014 via The Backbender's Gazette 10/2014

An opal triplet is a composite stone of three different materials. The base of the triplet is usually made up of almost any black material: basalt, agate, jade, or onyx even some hard plastic materials or ceramics have been used. This layer might even be opal patch, a non fire opal with lamp black in the epoxy or glue to give a black background under the fire opal layer. The fire opal layer is a very thin section of that might have been salvaged from or

layers of opal that would not cut a solid cabochon. On top of this a cap is added to protect and magnify the opal's play of colors. This layer can be optical clear quartz, natural or man grown quartz, or even glass. Opal triplets are fantastic for opal jewelry. The color play usually is bright and vivid. With a quartz cap on the opal, the hardness and durability is increased. However triplets need some special handling. The play of colors in the opal actually is water in the spherical makeup of the opal. Therefore the best advice is to avoid extreme heat or cold because the water contained in them will either convert to steam or freeze, thereby breaking the opal. Opals are like people; if one can stand the temperature, the opals can, too. Submersion in water will pose problems for the glue used in an assembled triplet. If a triplet becomes cloudy or has bubbles under the clear cap more than likely it is water damage. The glue probably has failed due to temperature change or to over soaking in water, such as while washing dishes. To repair this damage, we now come to the deconstruction of a triplet.

Using Solvents

Historically, many types of glue have been used in the making of triplets. How do we dissolve or loosen the glue? One way is to use a solvent such as mineral oil, paint thinner, alcohol. Lacquer thinner, or acetone. All of these carry a fire danger, so use of a sealable glass jar and plenty of ventilation is needed, as well as a work area free of flame hazards. If this does not work, a commercial product called "Attack," by Hughes Associates, might be used. This product is methylene chloride, and it is nasty stuff. The use of a NISOH-approved full-face respirator with organic vapor cartridges and major ventilation is needed when using "Attack." The use of solvents poses another problem-both glue joints will be affected. If you are lucky, they will separate from one another. Clean off any remaining glue from all the pieces, and then carefully wash the pieces to remove any remaining solvent. Be careful! Breakage of the thin opal layer is possible. Once the

layers are cleaned, reassembly can begin. Manual Deconstruction (when solvents are ineffective) The safest deconstruction of a triplet is to start from the black side. Grind off the backing material down to the opal layer. When grinding the material, the hardest part will be trying to keep the stone flat. Use of a horizontal lap or facet lap will be the safest way to control the flatness of the stone. Proceed slowly so the stone does not slip off of parallel to the opal layer. Use a 600 grit wheel to finish off the grinding. Once the opal layer is exposed, the new backing can be glued to the opal. Adding a small amount of "lamp black" to the epoxy when mixing will add color to the glue. "Lamp black" can be made by burning a candle and placing an old spoon just above the flame upside down. The soot will collect in the spoon. After it cools, the epoxy can be mixed in the spoon, thus turning the epoxy black. The back material is glued to the to the opal and dried for 24 hours. Now start to grind the cap off in the same manner as the back. Once the cap is ground down to the opal, and you finished using a 600 grit wheel, a new cap can be added. You can use quartz to make your own cap or a new, ready-made quartz cap can be used. Mix the epoxy slowly so air bubbles are not introduced to the mix. The most common epoxy used is 330 Epoxy by Hughes Associates because it dries water-clear and is a slow set (24 hour) for maximum strength. When gluing the cap, apply the epoxy to both surfaces. The cap is placed on the opal using a screwing twist motion of the cap to force out any air bubbles and excess glue. If air bubbles are trapped, separate and reapply glue. Once you are happy with it, a spring clothespin can be used to act as a glue clamp. Now that you have the triplet back together. the backing material can be shaped to match the cap if a commercial cap was used. Otherwise, both the cap and backing material will need to be shaped and polished. Use super glue as a dop medium if a dop stick is used. Once the triplet is polished. you have a reconstructed, rehabilitated opal that will please someone for another bunch of years.

Finding Fossils From Space

In 1993, after three summers of trudging across the barren rust colored hills and deep sands of Mongolia's Gobi Desert, paleontologist Mike Novacek and a team of researchers from the American Museum of Natural History stumbled upon one of the richest fossil bed ever found. The site, known as Ukhaa Tolgod, produced countless skeletons of Velociraptors, several species of dinosaur embryo fossils, hard-to-find fossils of the bird-like Mononykus, and skulls of Mesozoic mammals.

Since their big discovery, the researchers have traveled back to the Gobi every summer to locate additional sites and to work Ukhaa Tolgod. Despite the scientists' experience and their earlier success, locating potential fossil beds in the Gobi continues to be a difficult task. The desert is vast and inhospitable with few roads, harsh winds, and 100-degree (Fahrenheit) temperatures. Maps are often inaccurate and trails are unmarked. Traipsing about looking for these outcrops of reddish-brown sandstone where fossils are often found requires an enormous amount of time and money.

Recently, in an effort to improve their chances, the museum researchers have turned their attention to orbiting satellites. Using the images these satellites produce of the Earth, Novacek and his team have found a way to locate potential fossil beds before they even set foot in the desert. Already their efforts uncovered one site last year that produced several good specimens. In the future they hope the images will not only cut down on the time they spend trekking around the desert, but will also ensure that they never stop retrieving remarkable specimens from the reddish-brown sandstone of the Gobi.

NASA Earth Observatory via the internet

HOW DO DIAMONDS FORM?

From Michigan Mineralogical Society's Conglomerate Kids Corner 2/15

A newsletter feature from MMS Education Chair John Peters

1) **Diamond Formation in Earth's Mantle** Geologists believe that the diamonds in all of Earth's commercial diamond deposits were formed in the mantle and brought to the surface by deep volcanic eruptions. These eruptions produce the kimberlite and lamproite pipes that diamond prospectors hunt for. Diamonds that weather (or erode) from these pipes end up in sediment deposits of streams and coastlines. The formation of natural diamonds requires very high temperatures and pressures. These conditions occur in limited zones of Earth's mantle about 90 miles below the surface where temperatures are at least 2000 degrees Fahrenheit.

2) **Diamond Formation in Subduction Zones** Tiny diamonds have been found in rocks that are thought to have been subducted deep into the mantle by plate tectonics. At a boundary where ocean crust collides with continental crust, the oceanic crust slides under the edge of continental crust - then is returned to the surface. Diamond formation in a subducting plate might occur as little as 50 miles below the surface and at temperatures as low as 390 degrees Fahrenheit.

3) **Diamond Formation of impact Sites**

Throughout its history, Earth has been repeatedly hit by large asteroids. When these asteroids strike the earth, extreme temperatures and pressures are produced. For example, when a six mile wide meteor strikes the earth, it can be traveling up to 9 to 12 miles per second. Upon impact the meteor would produce an energy burst equivalent to millions of nuclear weapons and temperatures hotter than the sun's surface. The high temperatures and pressures of such an impact are more than adequate to form diamonds. This theory of diamond formation has been supported by the discovery of tiny diamonds around several asteroid impact sites.

4) **Diamond Formation at impact Sites**

NASA researchers have detected large numbers of nanodiamonds in some meteorites. (Nanodiamonds are diamonds that are a few nanometers - billionths of a meter in diameter). About three percent of the carbon in these meteorites is contained in the form of nanodiamonds. These diamonds are too small for use as gems or industrial abrasives, however, they are a source of diamond material.

NOTE:

Many people believe that diamonds are formed from the metamorphism of coal. That idea continues to be the "how diamonds form" story in many science classrooms. But coal has rarely played a role in the formation of diamonds. Since coal is formed from terrestrial plant debris and the oldest land plants are younger than almost every diamond that has ever been dated, it's easy to see coal has almost nothing to do with the formation of Earth's diamonds.

Source: <http://geology.com/articles/diamonds-from-coal/>

THE MIDWEST MINERALOGICAL AND LAPIDARY SOCIETY (MMLS) is an educational non-profit organization founded in 1956. The Society now has more than 200 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 Southgate Arena, 14700 Reaume Parkway, Southgate Michigan **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 - \$15.00 (adult), \$1.00 (junior) on a year basis. Membership expires each Dec. 31.

ANNUAL EVENTS:

March -- Rock Swap and Sale
May - Anniversary Banquet
May -- Gem, Mineral & Jewelry Show
November -- Auction

STUDY GROUPS: Special-interest study groups meet monthly, September through June. No additional fees are involved. Currently the following groups are active:

Advanced Lapidary	Faceting	Paleontology
Basic Lapidary	Wire Study	Bead Study
	Mineralogy	Silversmithing

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 collection 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.

GEOLOGICAL OUTREACH COMMITTEE: A permanent committee that serves in an advisory capacity to the Geological Survey Division, Michigan Department of Natural Resources, and meets with its staff in Lansing and at the Eddy Discovery Center, near Chelsea, Michigan, on a regular basis.

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

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Bulletin Editor Contest Awards

The ROCKPILE

