

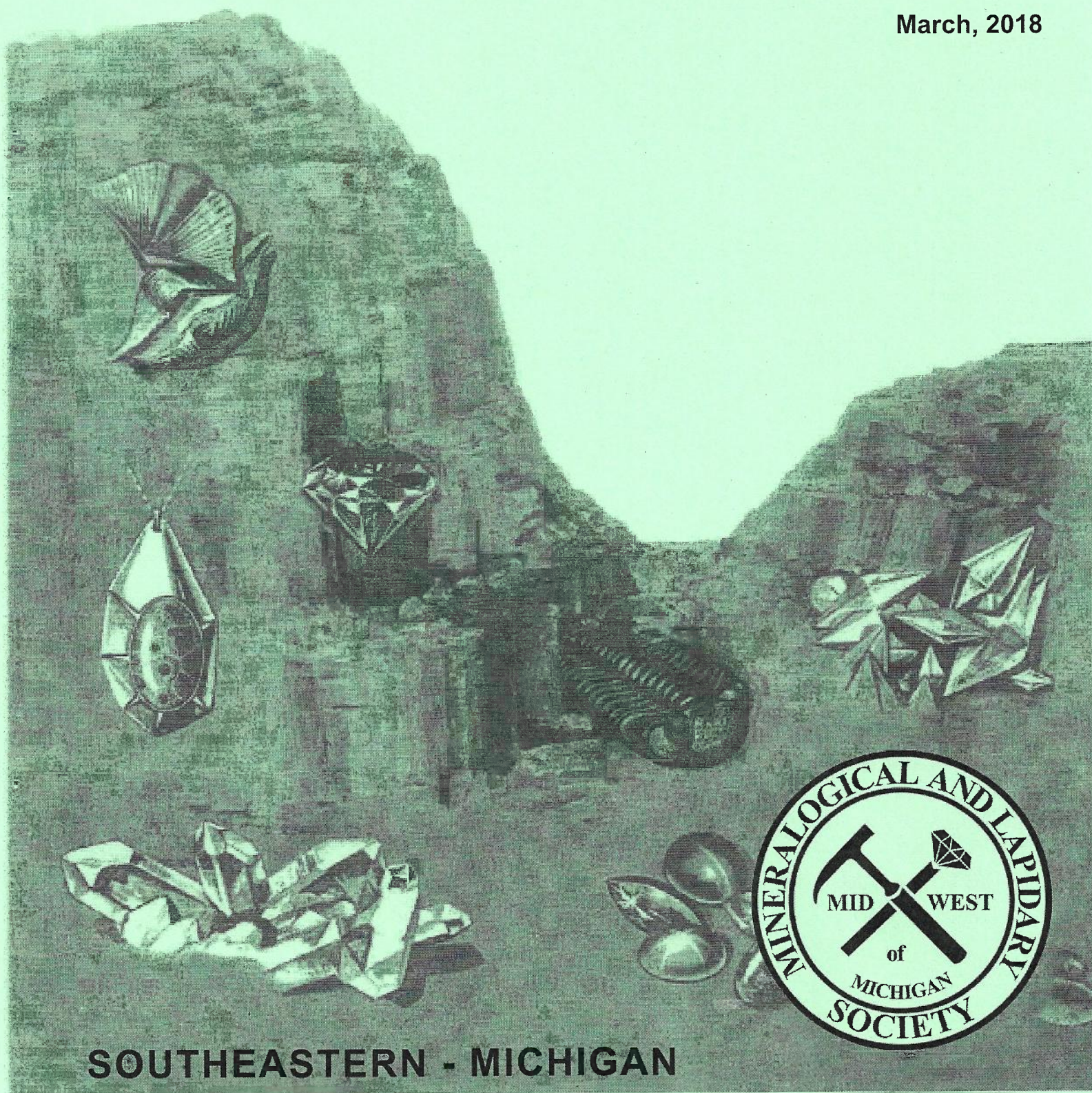
THE

# ROCKPILE

Official Publication of the Midwest Mineralogical and Lapidary Society

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

March, 2018



SOUTHEASTERN - MICHIGAN

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## Midwest Mineralogical & Lapidary Society

### 2018 OFFICERS

President: Dan Gumina (313) 766-8944  
Vice President: Diane Kuzara (734) 675-5237  
Recording Secretary: Julie Knechtges (734) 444-9151  
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  
Local Field Trips - Mike Bomba/Gary Slominski  
Summer Field Trips - Bill Barr  
Education: Dave Hendershot  
Insurance:  
Historian: Tom Morris  
Michigan Material: Tom Morris  
Club Publicity:  
Membership: Ana Ferguson  
MMLS Scholarship: Velma Bradley  
Program Coordinator: Mike Bomba  
Property – Storage: Leonard Swisher  
Property – Meetings: Leonard Swisher  
Sunshine Reporter: Velma Bradley  
Refreshments: Gary Slominski  
Web Site: Stacey Harper

### ACTIVITIES

2018 Banquet:  
2018 Swap: Lou and Cindy Talley  
2018 Super Swap: Bill Barr / Tom Morris  
2018 Auction: Dwayne Ferguson

**The Rockpile Staff : Editor Peter Kuzara,  
email: [Kuzara1126@gmail.com](mailto:Kuzara1126@gmail.com) 734-675-5237**

**MMLS website – [www.mmls.us](http://www.mmls.us)  
Email - [rockhounds@mmls.us](mailto: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

Advanced Lapidary:  
Basic Lapidary:  
Bead Study: Diane Kuzara  
Faceting:  
Mineralogy: Bill Barr  
Paleontology:  
Wire Study: John Lindsay  
Silversmithing:

### 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

**The Prez Sez:**

Hello Rockhounds: It's now March and this year is moving on at full speed again! So in order to keep up with it, we might as well head over to the yearly planned activities. First our neighbor club, The Roamin Club annual auction, March 3<sup>rd</sup> and 4<sup>th</sup>, is followed by our club's annual spring swap on March 24<sup>th</sup>. Lou Talley has sold out his quota of tables for the swap. They went fast to our regular and ambitious club members! Hope everyone can get there and enjoy the day! March's General Meeting has a good program on the Sweet Home Mine. Stay healthy and show up!

Dan

**Board Meeting Summary: January 12, 2018**

Meeting called to order at 7:47 PM. Motions were made and carried to accept Secretary's report for December 2017. Treasurer's report December 1 - 31, 2017 motion to accept was made and carried. 2018 Budget was discussed and a motion was made to accept budget as written and carried. February program History of Tuscan Show and March is "Rhodochrosite Red Treasure of the Rockies - Sweet Home Mine." Next Board Meeting February 16, 2018 7:30 pm. Meeting adjourned at 8:50. Submitted by Julie Knechtges Secretary.

**March Program:** Will be the second half of the February program Treasures Of The Rockies.  
Mike

**Reinstatement:**

Don Baker  
35771 Ash Rd.  
New Boston, MI. 48164  
Tel. 734-654-3809 Cell 734-771-0829  
Email [dlbaker@charter.net](mailto:dlbaker@charter.net)

**Address Update:**

Tom Shipley  
Email: [tomtomship@gmail.com](mailto:tomtomship@gmail.com)

**WIRE WRAP CLASS** Anyone interested in a study group 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!!!!**

**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**

***HERE IT IS: THE 46<sup>TH</sup>  
ANNUAL METRO ROCK  
SWAP HOSTED BY OUR  
CLUB THE MIDWEST  
MINERALOGICAL &  
LAPIDARY SOCIETY.  
SATURDAY, MARCH 24, 2018,  
10AM TO 5 PM AT ST. JOHN'S  
LUTHERAN CHURCH, 13115  
TELEGRAPH ROAD, TAYLOR MI.  
FOR TABLE RESERVATION  
CALL 734- 837-8920  
TABLE RENTAL \$15.00 FOR AN  
8FT. TABLE  
PUBLIC INVITED...  
FREE ADMISSION..FREE  
PARKING...REFRESHMENTS  
AVAILABLE  
SEE YOU THERE!!!!***

March 2018

**Our Club Activities**

**March 1<sup>st</sup>, 15<sup>th</sup> 2018** **Bead study group** will meet at the Kuzara's, 20281 Thomas, Brownstown at 7pm.

**March 5<sup>th</sup>, 19<sup>th</sup>, 21<sup>st</sup> 2018** **Lapidary work shop** 2009 W. Michigan Ave., Ypsilanti, Mi., 7pm to 10pm. Fee is \$2.50 for each evening.

**March 15<sup>th</sup> 2018** **Mineral Study** group will meet at Dave Esch's house, 227 Barton Shore Dr., Ann Arbor Mi. At 7:30pm.

**March 16<sup>th</sup> 2018** **Board Meeting** **ROCKPILE DEADLINE. TBA**

**March 20<sup>th</sup> 2018** **General meeting** will be held at the DEMOCRATIC CLUB OF TAYLOR, 23400 WICK RD., TAYLOR at 7:30pm.

**March 24<sup>th</sup> 2018** **The 46<sup>th</sup> ANNUAL SWAP**

**April 2<sup>nd</sup>, 16<sup>th</sup>, 18<sup>th</sup>** **Lapidary work shop** 2009 W. Michigan Ave., Ypsilanti, Mi., 7pm to 10pm. Fee is \$2.50 for each evening.

**April 5<sup>th</sup> & 19<sup>th</sup>** **Bead study group** will meet at the Kuzara's, 20281 Thomas, Brownstown at 7pm.

**April 13<sup>th</sup>** **Board Meeting** **ROCKPILE DEADLINE. TBA**

**April 17<sup>th</sup>** **General meeting** will be held at the DEMOCRATIC CLUB OF TAYLOR, 23400 WICK RD., TAYLOR at 7:30pm.

**April 19<sup>th</sup>** **Mineral Study** group will meet at Dave Esch's house, 227 Barton Shore Dr., Ann Arbor Mi. At 7:30pm.

**Sister Club Events**

**March 3<sup>rd</sup> & 4<sup>th</sup> 2018 Livonia MI** **The Roamin Club Silent Auction.** Schoolcraft Community College, 18600 Haggerty Rd., Livonia. Contact

Clarence Sterling at [c.w.sterling@sbcglobal.net](mailto:c.w.sterling@sbcglobal.net)

**March 2-4, 2018 RICHMOND, IN** Eastern Indiana Gem & Geological Society Annual Show. Fri & Sat 10 am - 6 pm; Sun 11 am - 4 pm. Wayne County Fairgrounds, 861 N. Salisbury Rd., Richmond. Contact: Judy Burton, P O Box 1724, Richmond 47375; (937) 339-1966; [jleeburton@woh.rr.com](mailto:jleeburton@woh.rr.com)

**March 16 - 18, 2018 Jackson, MI Michigan Gem and Mineral Society** American One Event Center, 200 W. Ganson St., Jackson, MI, Contact Sally Hoskins 517-522-3396. Web site <http://mgmsrockclub.com/annual-show.html>

**April 5-7: WYOMING, MI** Indian Mounds Rock & Mineral Club Annual Show. Thurs & Fri 9:30 am - 9 pm. Sat 9:30 am - 7 pm. Roger's Plaza Town Center, 28th & Clyde Park. Contact Kreigh Tomaszewski, 653 Burton SE, Grand Rapids 49507; (616) 243-5851; [kreigh@gmail.com](mailto:kreigh@gmail.com)

**April 28-29: CUYAHOGA FALLS, OH** Summit Lapidary Club Semi-Annual Show. Sat 10 am - 6 pm; Sun 10 am - 5 pm. Emidio and Sons Expo Center, 48 East Bath Rd., Cuyahoga Falls. Contact: Sandy Shorter, 8510 Grouse Ridge Dr., Chardon 44024; (440) 479-0069; [gemboree@outlook.com](mailto:gemboree@outlook.com)

**April 28-29: TROY, OH** Miami County Gem & Mineral Club Annual Show. Sat 10 am - 6 pm; Sun 10 am - 4 pm. Miami County Fairgrounds-Duke Lundgard Building, North County Rd. 25-A, Troy. Contact: Dewey Buck, 160 Windemere Dr., Troy 45373; (937) 335-4375; [dewey.buck@pcmg.com](mailto:dewey.buck@pcmg.com)

**They are at it again**

E, NC (WSPA) – Museum officials in Asheville say a large emerald has gone missing from their collection. The Asheville Museum of Science says an emerald specimen from their gem and mineral collection with “immeasurable historical significance” has gone missing.

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The museum says they have filed a report with the Asheville Police Department and that there was no break-in. If you want to see a picture of emerald go to this site.

<http://wspa.com/2018/02/07/emerald-stolen-from-asheville-museum/>

### Michigan Minerals Beginning with the Letter A

Alunite  $KAl_3(SO_4)_2(OH)_6$ .

Alunite is a hydrated aluminium potassium sulfate mineral, formula  $KAl_3(SO_4)_2(OH)_6$ . It was first observed in the 15th century at Tolfa, near Rome, where it is mined for the manufacture of alum. First called aluminilite by J.C. Delam  therie in 1797, this name was contracted by Fran  ois Beudant in 1824 to alunite.



Alunite from Utah USGS

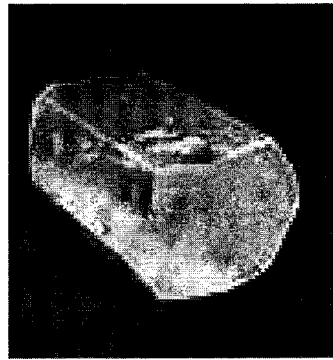
Hardness: 3.5 to 4 on Mohs scale

Color: White, pale shades of gray, yellow, red to reddish brown.

**Alunite** has been **used** to recover potassium and aluminum. **Alunite** forms from the action of sulfuric acids upon potassium rich feldspars in a process called "alunitization".

Some locations: Iron County Caspian Mine, Davidson #2 Mine, and the Hiawatha #2 Mine. From The Mineralogy Of Michigan by E.Wm Heinrich, the internet Wikipedia and Mindat.

### Colorado State Gem Stone is Aquamarine



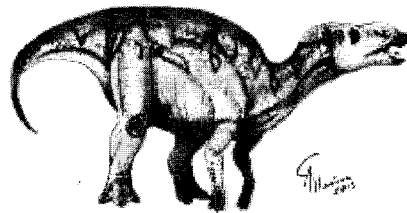
Aquamarine was recognized as the official state gemstone of Colorado in 1971. The mountain peaks of Mount Antero and White Mountain in Colorado contain some of the finest quality gem aquamarine known. Colorado's

geological symbols are red (rhodochrosite, the state mineral), white (yule marble, the state rock), and blue (aquamarine). From the internet State Symbols USA Picture from Bing.com

### Hadrosaurus

by MIKE BALDWIN

12.01.00--This duckbill dinosaur roamed the coast of Pennsylvania and other parts of the world.



Pict

ure from Internet

The Hadrosaurus, although huge, was a herbavore and not very ferocious.

Nearly as tall as a two-story building, the Hardosaurus weighed up to four tons and was a member of the dinosaur family known as "duckbills" because of the bird-like nature of their jaws and skull structure. The Hadrosaurus could grow up to 30 feet long from the tip of its nose to the tip of its tail.

It's demeanor could be compared to that of a cow. It was a plant eater that browsed leaves and

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branches along the marshes and shrub lands of the Atlantic coast of North America and other marshlands of the Cretaceous Era. It was a good swimmer and could have ventured out into the water a substantial distance from shore. Duckbills lived and traveled in herds. They laid eggs in nests. Some paleontologists believe they protected the eggs until hatched and then continued to nurture the brood for a period of time, just as birds do.

It is easy to imagine how the edges of conifer forests along the Cretaceous coast of Pennsylvania were once filled with duckbill dinosaurs. One of these Hadrosaurs most likely fell into fast moving water and died. Its body floated out to sea, where it sank and was quickly covered in mud and sediment.

After the flesh decayed, the bones absorbed minerals, surviving intact as a skeleton until about 70 million years later when William Parker Foulke, a Haddonfield, New Jersey workman, pulled it from the sticky clay, moved it into the sunlight and wondered aloud what it could possibly be. This Hadrosaurus became the first complete dinosaur skeleton ever to be discovered intact.

To learn more about the Hadrosaurus, visit this website <http://www.levins.com/dinosaur.html>  
From Memphis Archaeological and Geological Society 12/00

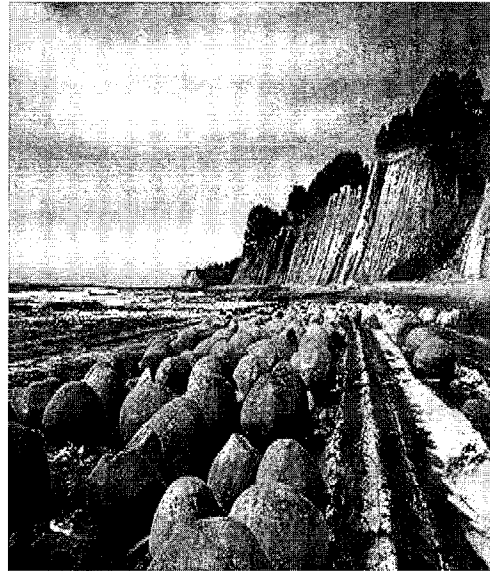
## Concretions

A concretion is a hard, compact mass of matter formed by the precipitation of mineral cement within the spaces between particles, and is found in sedimentary rock or soil.

Concretions are often ovoid or spherical in shape, although irregular shapes also occur. The word 'concretion' is derived from the Latin *con* meaning 'together' and *crescere* meaning 'to grow'.

Concretions form within layers of sedimentary strata that have already been deposited. They usually form early in the burial history of the sediment, before the rest of the sediment is hardened into rock. This concretionary cement often makes the concretion harder and more resistant to weathering than the host stratum. There is an important

distinction to draw between concretions and nodules.



*Concretions on Bowling Beach ( Mendocino County, California) weathered out of steeply tilted cenozoic mudstone*

Concretions are formed from mineral precipitation around some kind of nucleus while a nodule is a replacement body. Detailed studies published in peer-reviewed journals have demonstrated that concretions form after sediments are buried but before the sediment is fully lithified during diagenesis. They typically form when a mineral precipitates and cements sediment around a nucleus, which is often organic, such as a leaf, tooth, piece of shell or fossil. For this reason, fossil collectors commonly break open concretions in their search for fossil animal and plant specimens.



*This is a very large concretion in Bosnia*

Depending on the environmental conditions present

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at the time of their formation, concretions can be created by either concentric or pervasive growth. In concentric growth, the concretion grows as successive layers of mineral precipitate around a central core. This process results in roughly spherical concretions that grow with time. In the case of pervasive growth, cementation of the host sediments, by infilling of its pore space by precipitated minerals, occurs simultaneously throughout the volume of the area, which in time becomes a concretion.

Concretions are often exposed at the surface by subsequent erosion that removes the weaker, uncemented material.

Concretions occur in a wide variety of shapes, including spheres, disks, tubes, and grape-like or soap bubble-like aggregates. They are commonly composed of a carbonate mineral such as calcite; an amorphous or microcrystalline form of silica such as chert, flint, or jasper; or an iron oxide or hydroxide such as goethite and hematite. They can also be composed of other minerals that include dolomite, ankerite, siderite, pyrite, marcasite, barite and gypsum.



*Giant calcite septarian concretion, AKA the Moeraki Boulders South Island, New Zealand*

Concretions are found in a variety of rocks, but are particularly common in shales, siltstones, and sandstones. They often outwardly resemble fossils or rocks that look as if they do not belong to the stratum in which they were found. Occasionally, concretions contain a fossil, either as its nucleus or as a component that was incorporated during its growth

but concretions are not fossils themselves.

Concretions appear in nodular patches, concentrated along bedding planes, protruding from weathered cliffsides, randomly distributed over mudhills or perched on soft pedestals.

*Wikipedia Taken from Rock e trails 1/18*

### The Four Ways Diamonds Are Formed

How old do you think the average diamond is? One thousand years? One million, maybe? Try one to three billion years old. Diamond formation is not a fast or simple process. In addition to time, it also takes incredible heat, massive pressure, and carbon to produce diamonds. The rare conditions necessary to produce diamonds are part of what makes them so precious.

**The Earth's Mantle:** The earth's mantle is one of the few places on earth where the temperatures are high enough and the pressure is great enough to form diamonds. But only a small portion of the earth's mantle is suitable for diamond formation. The carbon rocks and high temperatures needed for diamond creation can be found 90 miles deep into the earth's crust. But the pressure needed to create diamonds isn't as predictable as the temperature. Scientists theorize that the pressure needed to create diamonds is present beneath the center of continental plates, where the pressure is steady. Diamonds are created and stored in these "diamond stability zones" until they're brought to the earth's surface in a deep-source eruption. This incredibly rare type of eruption rips out a piece of the mantle, and carries it to the surface at an extraordinarily rapid rate.

**Subduction Zones:** Another way diamonds are formed is in what's called a subduction zone, which occurs when two tectonic plates collide, and one is forced down into the earth's mantle. When carbon rocks from the surface are subjected to the increasing heat of the mantle combined with the pressure from the colliding plates, tiny diamonds are formed in these rocks.

This process can occur at slightly lower

temperatures and shallower depths than those necessary for diamond formation in the “diamond stability zones.” When the subducted rocks return to the crust, these small diamonds can be found within them. Subduction-zone diamonds’ small size and lack of clarity make them unsuitable for industrial or commercial use.

**Impact Sites:** An asteroid colliding with carbon rocks creates the pressure and heat needed to produce diamonds. The theory that an asteroid impact could create diamonds has been supported by the presence of very small diamonds found at asteroid crash sites. Like subduction-zone diamonds, impact-site diamonds aren’t suitable for use, because they’re small and of low quality.

**Space Diamonds:** Scientists from both NASA and the Smithsonian have found diamonds in meteorites. With carbon in the meteorites, and the heat and pressure necessary for diamond formation present in the meteorites’ creation, it’s logical that diamonds could be found in meteorites. Unfortunately, much like subductionzone diamonds and impact-site diamonds, meteorite diamonds aren’t fit for industrial or commercial use.  
<http://katu.com/sponsored/sell-gold/the-four-waysdiamonds-are-formed>

**Red and Green Rock-with diamonds:** Russian miners at the Alrosa’s Udachnaya diamond mine pulled out a strange red and green stone out of the ground; they knew by instinct that they have something extraordinary. The red and green stone looked different from the thousands of tons of earth and ore they process each day. The workers had just unearthed a 30 mm rock- which contained 30,000 diamonds, 1 thousand times higher than normal. However, the diamonds are so small that they cannot be used as gems. Larry Taylor, a geologist at the University of Tennessee, according to Live Science said, “The exciting thing for me is there are 30,000 itty-bitty, perfect octahedrons, and not one big diamond. It’s like they formed instantaneously. Taylor in close association with scientists at the Russian Academy of Sciences has been studying the Udachnaya diamonds. The scientists used industrial

x-ray tomography scanner much akin to the medical CAT scanner to study the structure of the Diamond. The scientists also used electron beams to identify the chemicals trapped in the spaces between the lattices. The findings revealed that the diamonds were created by liquids from the subducted oceanic crust, made of a thick rock called peridotite.

[www.apextribune.com/strange-rock-embedded-with30000-diamonds-puzzle-scientists/22496](http://www.apextribune.com/strange-rock-embedded-with30000-diamonds-puzzle-scientists/22496)  
Via The Quarry 2/18 via *Rocky Trails* December 2017 via *The Franklin County Rockhounder* – January 2018 via *THE ROCKCOLLECTOR* - January, 2018

### ***Quick, what's the hardest material in the world?***

Did you say "diamond?" We bet you did, because we just planted that word in your mind. In fact, though, the joke's on all of us. In 2009, scientists realized that two rare substances are even harder than diamonds. According to the *Scientific American*, “Wurtzite boron nitride and lonsdaleite are harder than diamonds. The first resists indentation with 18% more fortitude than a diamond, and the second—a whopping 58%.” Still, no one's claiming that wurtzite boron nitride is a girl's best friend. And that's not the only problem with the competition between these rare materials and diamonds. A 2004 public letter from a group of crystallographers, published in the journal *Nature*, points out that the claims about these materials are based on simulated models—scientists just haven't collected enough of the super-rare wurtzite boron nitride or lonsdaleite to perform physical experiments. In fact, the authors of the letter claim, “experimental measurements of their bulk properties, such as hardness, strength, toughness and abrasion resistance, is less than clear.” Meanwhile, in 2015, a team of researchers at North Carolina State university aimed a laser into a lump of carbon and produced a substance they're calling “Q-carbon,” which, while human-made, is also harder than a diamond. Say what you want about wedding rings: Diamonds just can't win.  
From *Rock Trails* 2/18



**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 - \$15.00 (adult), \$1.00 (junior) on a year basis. Membership expires each Dec. 31.

### **ANNUAL EVENTS:**

March – Rock Swap and Sale    November – Auction    Coming is October 2016 our second Rock Swap and Sale!!

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

Currently the following groups are active:

Basic Lapidary    Advanced Lapidary    Wire Study    Bead Study    Mineralogy    Silversmithing (Silversmithing is now on hold until further notice.)

**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.

**SEAMAN MINERAL MUSEUM:** MMLS has designated the A.E. SEAMAN Mineral Museum at Michigan Technological University, 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/mwf/index.html](http://www.amfed.org/mwf/index.html)

American Federation: [www.amfed.org](http://www.amfed.org)

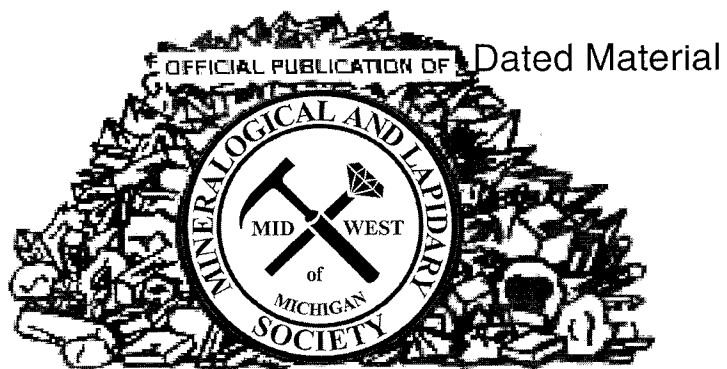
American Lands Access Association: <http://amlands.org>

### **The Rockhound's 10 Commandments:**

1. Thou shall not touch thy neighbor's minerals unless he places them in thy hands.
2. Thou shall not test the strength of crystals by pushing, squeezing or biting.
3. Thou shall not drop thy neighbor's fossils, for many do not bounce properly.
4. Thou shall not place thy neighbor's specimens in thine own pocket.
5. Thou shall not collect at a neighbor's land unless unless thy neighbor knowst he's there.
6. Thou shall not argue names of minerals too violently; for sometimes thou couldst be wrong.
7. 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.
8. Thou shall protect thine eyes, hands & feet, so that they mayst enjoy many future field trips.
9. Thou shall not encroach upon thy neighbor's diggin's, lest thy neighbor's hammer be dropped upon thee.
10. 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

