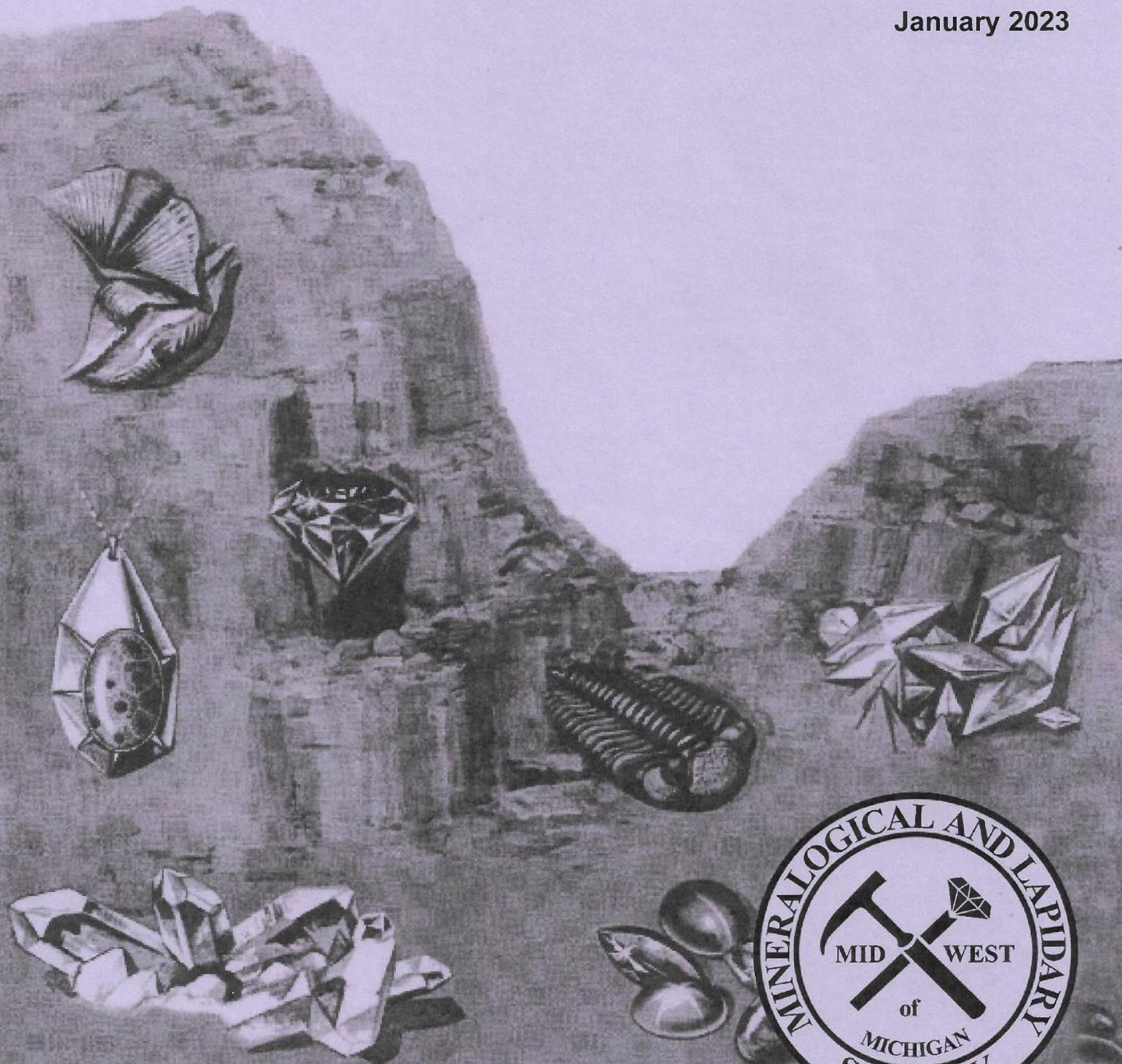


# THE ROCKPILE

Official Publication of the Midwest Mineralogical and Lapidary Society

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

January 2023



SOUTHEASTERN - MICHIGAN

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## Midwest Mineralogical & Lapidary Society

### 2022 OFFICERS

**President:** Dan Gumina (313) 766-8944  
**Vice President:** Mike Bomba (313) 381-8455  
**Recording Secretary:** Diane Kuzara (734) 675-5237  
**Treasurer:** Doris Snyder (313) 291-2133  
**Corresponding Secretary:** Diane Kuzara (734) 675-5237  
**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

**2022 Banquet:** Dan Gumina  
**2022 Club Picnic:** Stacey Harper  
**2022 Swap:** Lou and Cindy Talley  
**2022 Super Swap:** Bill Barr  
**2022 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

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

### 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  
Diane Kuzara 2015 - 16  
Dan Gumina 2017 - 18  
Diane Kuzara 2019 -2020

January, 2023



**From The President's Desk:** Happy New Year from your new President me, Mike Bomba . I'd like to start the new year by thanking Dan Gumina and all the members new and old for helping to make our club a success in 2022. I can't say enough about our editor and liaison officer, Pete Kuzara, who, without him there would be no Rockpile. Needless to say, I am excited about a new year of learning, creating and going on new field trips. We are moving beyond Covid so please come to our general meetings and learn about our club and make new friends interested in all things, earth science and the lapidary arts.

Your President Mike Bomba.  
P.S. your dues are due!

**January PROGRAM:** We will finish our PBS, Nova program, Australia's first 4 billion years "The Paleogene " with host Richard Smith .

### Welcome New Members:

Dominique Davis  
Juliann Davis  
Steven L'Oftis  
Matt Shumate

### Reinstatement:

Jeff Piunti

**REMEMBER BEFORE TRAVELING A GREAT DISTANCE CHECK THAT THE EVENT IS STILL GOING ON!!!!**

### Dates to Remember!!

**January 2<sup>nd</sup> 16<sup>th</sup> & 18<sup>th</sup> 2023** Lapidary Work Shop  
2009 W. Michigan Ave., Ypsilanti, Mi. 7pm. to 10 pm.  
Space is limited so please call Frank Konieczki  
734-323-2218 before attending.

**January 5<sup>th</sup> & 19<sup>th</sup> 2023** Bead Study group will meet at the Kuzara's 20281 Thomas, Brownstown at 7pm. Diane Kuzara 734-675-5237

### January 13<sup>th</sup> 2023 Rockpile Deadline

**January 17<sup>th</sup> 2023** Board Meeting will be held at the Democratic Club of Taylor, 23400 Wick Rd., Taylor at 6:30 pm.

**January 17<sup>th</sup> 2023** General Meeting will be held at the Democratic Club of Taylor, 23400 Wick Rd., Taylor at 7:30 pm.

**January 19<sup>th</sup>** Mineral Study Group Will meet at Dave Esch's house, 227 Barton Shore Dr., Ann Arbor, MI. At 7:30 pm.

**February 2<sup>nd</sup> & 16<sup>th</sup> 2023** Bead Study group will meet at the Kuzara's 20281 Thomas, Brownstown at 7pm. Diane Kuzara 734-675-5237

**February 6<sup>th</sup>, 20<sup>th</sup> & 22<sup>nd</sup> 2023** Lapidary Work Shop 2009 W. Michigan Ave., Ypsilanti, Mi. 7pm. to 10 pm. Space is limited so please call Frank Konieczki 734-323-2218 before attending.

**February 16<sup>th</sup> 2023** Mineral Study Group Will meet at Dave Esch's house, 227 Barton Shore Dr., Ann Arbor, MI. At 7:30 pm.

### February 17<sup>th</sup> 2023 Rockpile Deadline

**February 21<sup>st</sup> 2023** Board Meeting will be held at the Democratic Club of Taylor, 23400 Wick Rd., Taylor at 6:30 pm.

**February 21<sup>st</sup> 2023** General Meeting will be held at the Democratic Club of Taylor, 23400 Wick Rd., Taylor at 7:30 pm.

## MARCH 18<sup>TH</sup> 2023 THE MIDWEST MINERALOGICAL & LAPIDARY SOCIETY 50<sup>TH</sup> ANNUAL ROCK SWAP

At: St Johns Lutheran Church  
Taylor, Michigan

13115 Telegraph Rd.

For Reservations and Information:

Call LouTalley 734-837-8920

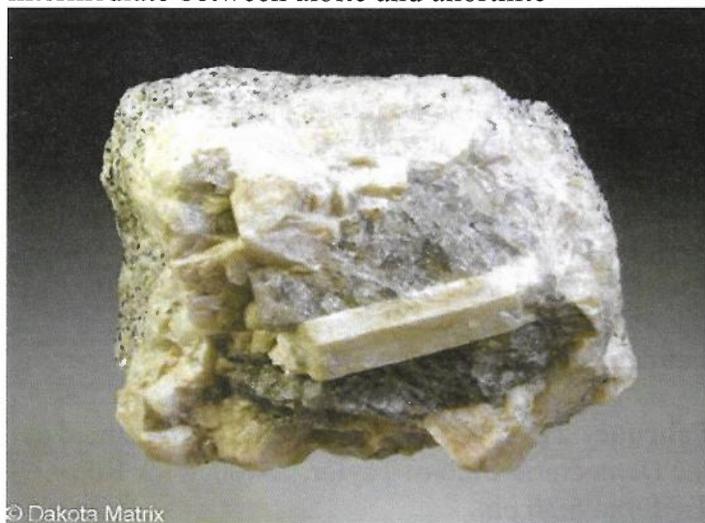
January, 2023

Sister Club Events

March 17-19, 2023 JACKSON, MICHIGAN: Annual show; Michigan Gem and Mineral Society; Jackson County Fairgrounds - American 1 Event Center, 128 W. Ganson; Fri. 10-6, Sat. 10-5, Sun. 11-5 contact Sally, (517) 522-3396; Email: saltoosal2@yahoo.com; Website: mgmsrockclub.com Facebook: Michigan Gem and Mineral Society

The Michigan Mineral Beginning with the Letter O: Oligoclase  $CaAl_2Si_2O_8$

Oligoclase is a rock-forming mineral belonging to the plagioclase feldspars. In chemical composition and in its crystallographic and physical characters it is intermediate between albite and anorthite



Hardness: 6 to 6.5 on the Mohs scale.  
 Color: White with shades of gray, green or red.  
 Occurrence: Dickinson and Marquette Counties.  
 From the internet Wikipedia

Michigan Jaspillite

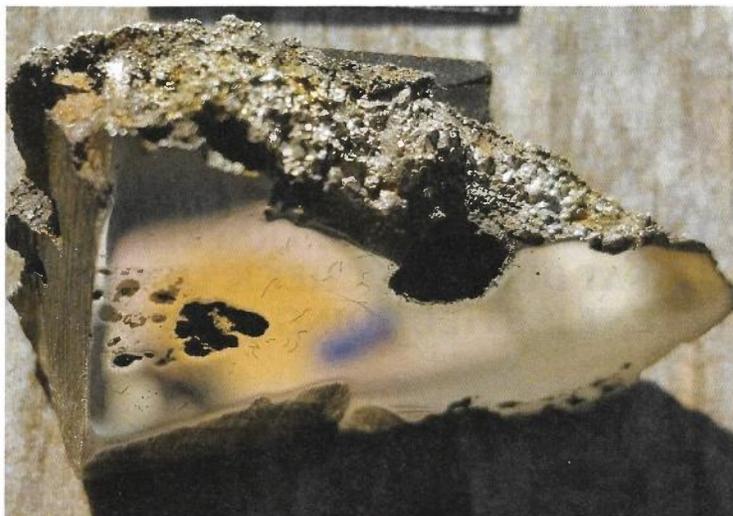
Jaspillite, or *jaspilite* also *itabirite*, is a chemical rock formed similar to chert, but is generally quite iron rich. It is also known as *jasper taconite*. Jaspillite is typically a banded mixture of hematite and quartz common in the banded iron formation rocks of Proterozoic and Archaean age in the Canadian shield.



Jaspillite is also formed as exhalative chemical sediments in certain lead-zinc ore deposits, and as a hydrothermal alteration facies around submarine volcanism.

It is used as a gemstone.  
 From the internet Wikipedia

Scientists Discover Two 'Alien' Minerals In Meteorite



Two Minerals – Never Before Seen on Earth – Discovered in Massive Meteorite

A team of researchers has discovered at least two new minerals that have never before been seen on Earth in a 15 tonne meteorite found in Somalia — the ninth largest meteorite ever found.

January, 2023

“Whenever you find a new mineral, it means that the actual geological conditions, the chemistry of the rock, was different than what’s been found before,” says Chris Herd, a professor in the Department of Earth & Atmospheric Sciences and curator of the University of Alberta’s Meteorite Collection.

“That’s what makes this exciting: In this particular meteorite you have two officially described minerals that are new to science.

The two minerals found came from a single 70 gram slice that was sent to the U of A for classification, and there already appears to be a potential third mineral under consideration.

If researchers were to obtain more samples from the massive meteorite, there’s a chance that even more might be found, Herd notes

The two newly discovered minerals have been named elaliite and elkinstantonite. The first receives its name from the meteorite itself, dubbed the “El Ali” meteorite because it was found in near the town of El Ali, in the Hiiraan region of Somalia. Herd named the second mineral after Lindy Elkins-Tanton, vice pres

“The very first day he did some analyses, he said, ‘You’ve got at least two new minerals in there,’ ” says Herd. “That was phenomenal. Most of the time it takes a lot more work than that to say there’s a new mineral.”

Locock’s rapid identification was possible because the two minerals had been synthetically created before, so he was able to match the composition of the newly discovered natural minerals with their human-made counterparts.

“Whenever there’s a new material that’s known, material scientists are interested too because of the potential uses in a wide range of things in society.”

While the future of the meteorite remains uncertain, Herd says the researchers have received news that it appears to have been moved to China in search of a potential buyer. It remains to be seen whether additional samples will be available for scientific purposes.

The above story is based on Materials provided by University of Alberta.

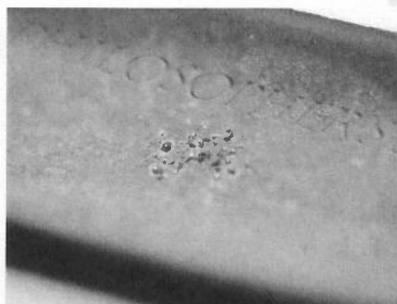
From the internet GeologyIN

## Researchers Discover Bacteria That Produces Pure Gold

### Bacteria eats poison, poops out gold

The gold you see in the photo above was not found in a river or a mine. It was produced by a bacteria that, according to researchers, can survive in extreme toxic environments and create 24-karat gold nuggets Pure gold.

This scenario may sound like a



biochemist’s version of a fairy tale, but it’s real and scientists at McMaster University have just described how the process works in an article published

online in the journal Nature Chemical Biology.

The bacteria is called *Delftia acidovorans*, and it turns out that its King Midas-like conversion is part of a self-defense mechanism. Gold ions dissolved in water are toxic, so when the bacteria senses them it releases a protein called delftibactin A. The protein acts as a shield for the bacteria and changes the poisonous ions into harmless particles that accumulate outside the cells.

Although the amount of gold that *Delftia acidovorans* release is tiny (the particles are 25-50 nanometers across) it’s possible that the bacteria or the protein could someday be used to dissolve gold from water or to help people identify streams and rivers carrying the mineral.

The bacteria is incredibly resistant to this toxic element. In fact, it’s 25 times stronger than

January, 2023

previously thought. The researchers' compact factory—which they named The Great Work of the Metal Lover—holds the bacteria as they feed it the gold chloride. In about a week, the bacteria does its job, processing all that junk into the precious metal—a process they believe happens regularly in nature.

So yes, basically, Cupriavidus metallidurans can eat toxins and poop out gold nuggets.

It seems that medieval alchemists were looking for the Philosopher's Stone—the magic element that could turn lead to gold—in the wrong place. It's not a mineral. It's a bug.

*The study was published online in the journal Nature Chemical Biology.*

From the Internet Geologyin

## Dinosaur teeth reveal what they didn't eat

### New analysis of T. rex and other dinosaur teeth gives insight into their eating habits

Date: December 9, 2022

Source: University of Tokyo

Summary:

Scratches on dinosaur teeth could reveal what they really ate. Dental microwear texture analysis (DMTA) has now been used to infer the feeding habits of large theropods, including Allosaurus and T. rex. By taking 3D images of individual teeth and analyzing the pattern of marks scratched into them, researchers could reason which dinosaurs may have frequently crunched on hard bone and which may have regularly eaten softer foods and prey. This technique opens up a new avenue of research for paleontology, helping us to better understand not only dinosaurs themselves but also the environment and communities in which they lived.

From the internet Science News

## Mineral Cleaning for Amateurs - How to Use Oxalic Acid

By John H. Betts

Anything that has the word "acid" sounds ominous. But oxalic acid is easy to find, use and the safest for the home. In fact it is found in many vegetables including spinach. It is used to dissolve the iron oxide (brown) stain on all minerals. To make this as simple as possible I will give a step by step guide to its use. Do not take any shortcuts or make substitutions.

Purchase a one pound box of Oxalic Acid (OA) powder at your local hardware store in the paint department or at a paint store. It is used as wood bleach and will be labeled as such. The most common brand is Rainbow.

Fill a plastic one gallon container 3/4 full with **distilled** water. Pour in the OA crystals and stir for five minutes. Be careful not to inhale any powder when adding the crystals. Once the OA is dissolved top off the container to a full gallon. Label the container and put out of reach of children or pets.

When you are ready to use it place your specimens in a plastic container and add enough OA solution to cover. Set aside for several days. Heat speeds up the reaction, as does agitation. If you have a hot plate and can set up outdoors or in an area with good ventilation the repeat step 4 but heat the solution to bath water hot (110° f.). Never Boil! You will find that an hour in hot solution will usually do the trick.

Best of all is an ultrasonic cleaner with built in heater. Sometimes only 30 minutes is necessary. But you should not put the OA directly into the stainless steel basin. Make a double boiler type of arrangement by partially filling the ultrasonic cleaner basin with water. Then place your specimens and OA solution in a plastic container or heavy duty plastic bag that is suspended in the water.

You can reuse the solution over and over. As it dissolves more and more iron it will get darker often taking on a green color. After it gets really dark I would discard it and mix a new batch.

Safety is important. OA solution is highly toxic. It can be absorbed through the skin and builds up in your organs cumulatively. Same goes for the fumes, which is why you never boil the solution and always have proper ventilation when using the heated solution. Be careful not to spill the solution on porcelain and keep away from food preparation

surfaces.

After the iron color has disappeared then you can remove the specimens (with gloves on) and wash under running water for three hours. NOTE If you have hard water in your area, it is smart to use distilled water for the first few rinses to prevent the formation of insoluble oxylates that will stain the specimen yellow when dry. Then soak in clean water for a day changing the water as often as possible.

The best way is to place the rocks to be washed in a 5 gallon bucket. Drill a small hole in the bottom, then fill with water and adjust the flow of the water trickling in to equal the flow out through the settle to the bottom and flow out through the hole. The trickle in ensures that all specimens are covered with water.

In spite of the fuss, this is the best all-around method of cleaning minerals. I keep a large five-gallon bucket with tight fitting lid filled and ready, I drop specimens in as I collect them. It always works and the large volume does not exhaust quickly.

Mastering this technique will provide an important tool in your mineral cleaning and preparation arsenal.

This article and others can be found at Mr.

Betts web site:

<http://www.johnbetts-fineminerals.com> Via the *Agate Explorer 9/*

## The World's Oldest Jewelry

by Kat Koch, Cascade Mineralogical Society

Today both males and females adorn themselves with jewelry of various types. But do we ever think about how long humans have been doing this? It has been discovered that human beings have been wearing necklaces, bracelets, earrings, and other forms of jewelry for a lot longer time than archaeologists and anthropologists ever theorized.

Steven Kuhn, a University of Arizona anthropologist, working with researchers from Morocco's National Institute of Archaeological Sciences and Heritage in Rabat, Morocco, led several excavations from 2014 through 2018 at Bizmoune Cave, which is located 10 miles inland from Essaouira, on Morocco's Atlantic coast.

Continued on page 6.

### NOTICE DUES ARE DUE

Dear MMLS member:

It's that time again when you are asked to renew your membership for the year (2023) in the Midwest Mineralogical and Lapidary Society. (Membership runs from January through December each year.)

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

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

Doris Snyder  
9728 Pardee  
Taylor, Mi 48180

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

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Midwest Mineralogical Lapidary  
Society Adult Dues: \$20.00  
Juniors (under age 18) \$2.00  
Yes I wish to renew my/our membership in MMLS  
for 2023 and continue to receive The Rockpile

Name(s) \_\_\_\_\_  
Address \_\_\_\_\_  
City \_\_\_\_\_  
State \_\_\_\_\_ Zip \_\_\_\_\_  
Phone (\_\_\_\_) \_\_\_\_\_  
Email address \_\_\_\_\_

**Dues paid after December 31<sup>st</sup> is subject to a \$3.00 reinstatement fee. Add to your check.**

Enclosed is my check payable MMLS for \$ \_ \_

Would you like your Rockpile sent to you by email?  
Yes \_\_\_\_\_ No \_\_\_\_\_  
**DO IT TODAY BEFORE YOU FORGET!!!!!**



During these digs, the scientists uncovered 33 ancient sea snail shell beads that had been modified. These seashell beads have been dated between 142,000 and 150,000 years old, making them the oldest jewelry and tools found anywhere in the world. The small jewelry beads were about a half-inch (about 12 mm) wide and had round holes carved through their centers.

The shell beads showed signs of being frequently used because of the interior wear, suggesting they had been strung and worn as a bracelet or necklace.

These *Tritia Gibbosula* mollusk shells are small sea snails with richly colored pearlescent shells. During the period that the cave was inhabited, the coastline was some 30 miles from the coast, so it is improbable that these seashells ended up in the cave by chance. The cave contents were dated using Uranium-series dating by measuring certain radioactive isotopes in the surrounding strata to establish the age of the seashells and tools. These are not only beautiful pieces of jewelry; this new cave find has dramatically impacted human history. From *The CMS Tumbler*, Dec 2022. Bibliography: Don Hitchcock - donsmaps.com, Smithsonian Magazine, Ancient Origins, Artnet News, Guinness World Records

*From the Michigan Mineralogical Society  
Conglomerate 12/22*

*Velma Bradley Humor*

4. *It's the start of a brand new day, and I'm off like a herd of turtles.*
5. *The older I get, the earlier it gets late.*
6. *When I say, "The other day," I could be referring to any time between yesterday and 15 years ago.*
7. *I remember being able to get up without making sound effects.*

*Happy New Year From The Rockpile Staff*

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

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

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

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

### **ANNUAL EVENTS:**

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

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

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

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

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

### **INTERNET WEB SITES OF INTEREST:**

Midwest Federation:  
[www.amfed.org/mw11index.html](http://www.amfed.org/mw11index.html)  
Lands Access Association: <http://amlands.org>

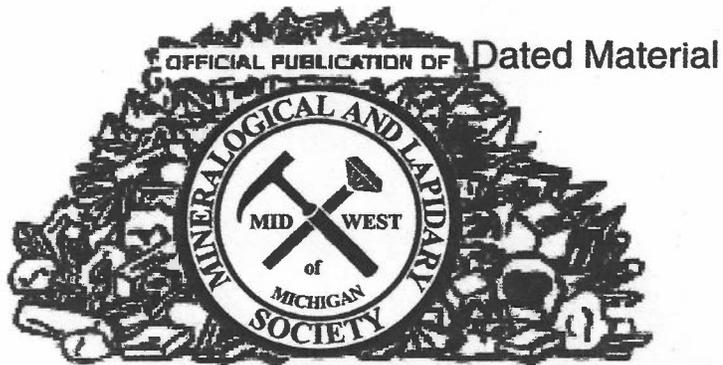
American Federation:  
[www.amfed.org](http://www.amfed.org)

### **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  
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