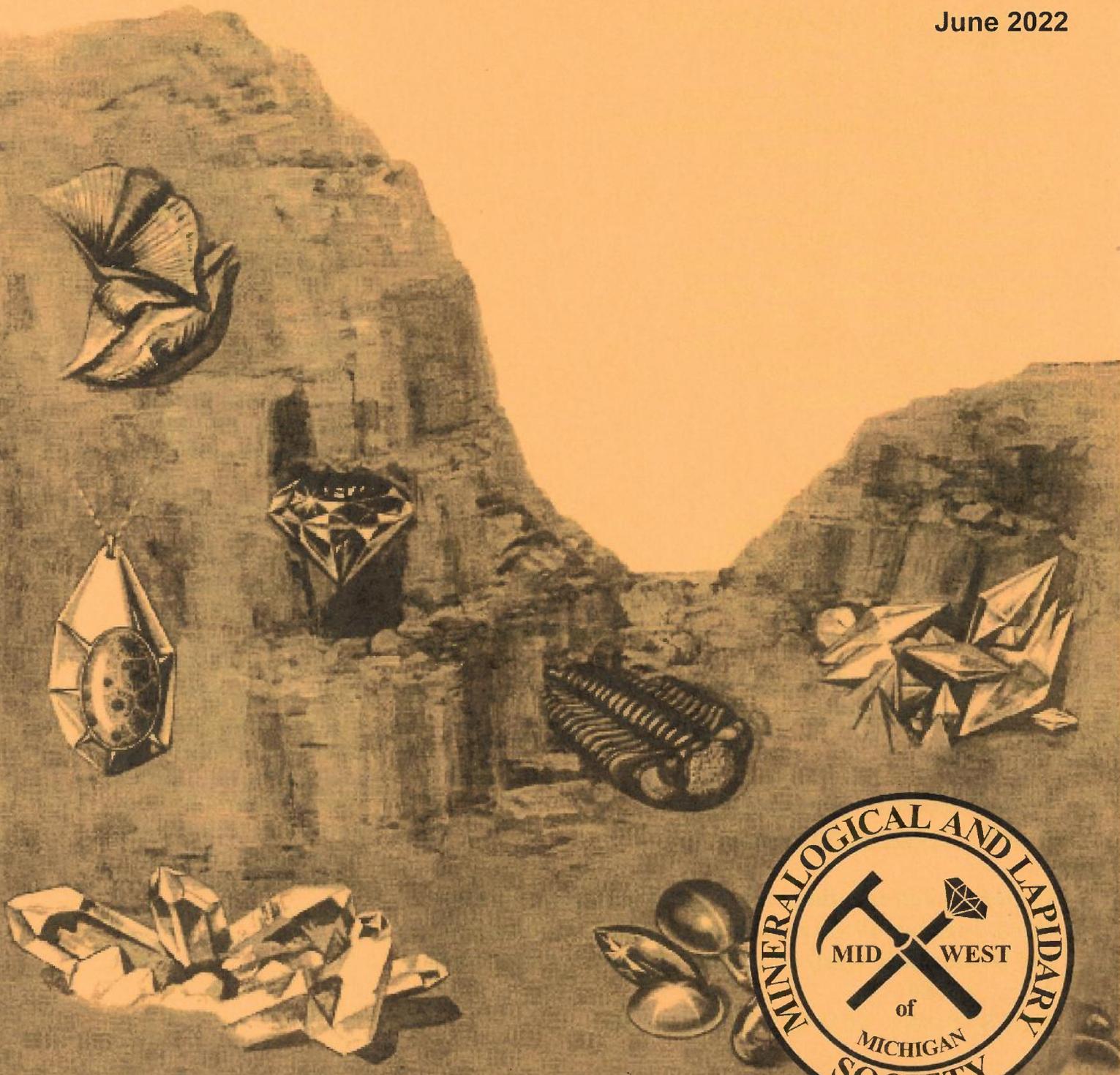


# THE ROCKPILE

Official Publication of the Midwest Mineralogical and Lapidary Society

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

June 2022



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 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  
Dan Gumina 2017 - 18  
Diane Kuzara 2019 -2020



### From The President's Desk

Hello Rockhounds . Welcome to June! Seems like I always start with a weather report . It's starting to feel like summer is upon us after some warmer heat waves last month. Be prepared and ready for sun block days.

We have selected two MMLS scholarship candidates from Oakland University. The two young women have worked to earn the awards and the monies to aid in pursuing their careers. We would welcome Olivia Laconis and Melissa Dunsmore to attend a future meeting to meet with us if they are able and in our area. This is the half year of 2022 and then we shut down for our summer. I would believe that we as members have goals to meet and collection sites to visit and travels and events to new places in and out of our State Michigan. I wish you all safe and prosperous collecting and fun. See you in the fall with your memories to show and tell.

Prez Dan

### Our Club's Scholarship Recipients For 2022 Are:

Olivia Laconis Oakland University received \$1200.

Melissa Dunsmore Oakland University Received \$1000.

### June Program:

A video will be Australia's first 4 billion years. Of all the continents on earth, none preserves a more spectacular story of its origin than Australia! Directed by Richard Smith, a PBS special. Mike

**Field Trips:** Mike has some field trips planned so if you are interested contact Mike Bomba our field trip chairman.

### We Got Mail:

A.E. SEAMAN  
MINERAL MUSEUM  
OF MICHIGAN TECH

March 25, 2022

Dear Midwest Mineralogical & Lapidary Society,

It is officially spring but it doesn't look that way outside of the museum's windows, and winter is stubbornly resisting letting go of Copper Country. But looking back over this cold and snowy winter we have lots to celebrate at the museum. We have been working on updating some of the gallery sign age in the museum and hope to have some of that hung for better visitor way finding before the start of summer. Patty and I were also able to attend the Tucson gem and mineral shows, secure some great merchandise for our gift shop, acquire a few specimens for the collection, and exhibit copper chisel fans at the main show. We have also received some wonderful donations of specimens that I have added to our collection, and some of which are already on display in the galleries.

Many thanks for your donation to the museum this past winter. We appreciate your confidence in our team as stewards of a great collection and resources as work to inspire and educate people about the wonders of the mineral kingdom.

Sincerely,  
John A. Jaszczak  
Director and Curator

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

#### Dates to Remember!!

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

**June 6<sup>th</sup>, 20<sup>th</sup> & 22<sup>nd</sup>** **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.

**June 16<sup>th</sup>** **Mineral Study group** will meet at Dave Esch's house, 227 Barton Shore Dr., Ann Arbor, Mi. At 7:30 pm.

June, 2022

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

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

August 16 Rockpile Deadline for September

October 1<sup>st</sup> & 2<sup>nd</sup> The Super Swap

Where Wayne County Fairgrounds, 10871 Quirk Rd., Belleville, MI Contact: Bill Barr, (505) 803-4888; wbarr@wmich.edu

.SISTER CLUB EVENTS

June 3-5—WAUSEON, OHIO: Annual show; State Line Gem & Mineral Society; Fulton County Fairgrounds, 8514 SR 108, Wauseon, OH, contact Sherm Kardatzke, 1355 W. Maumee, Adrian, MI 49221, (517) 673-5487; Email: sakardatzke@gmail.com; Website: statelinegms.com

June 11<sup>th</sup> Indian Mounds rock and mineral club swap 9am – 12pm Woodland Drive-In Church, 2600 Breton Rd SE, Grand Rapids, MI 49546, Kreigh Tomaszewski, (616) 243-5851; kreigh@gmail.com; www.indianmoundsrohttps://calendar.google.com/calendar/u/0/http:ckclub.co

June 11-12—MANSFIELD, OHIO: Annual show; Mid-Ohio Mineral & Fossil Club; Richland County Fairgrounds, Fair Haven Hall, 750 North Home Rd; Show theme “ native copper and copper minerals”; contact Tom Kottyan, (419) 561-3595; Email: themineralhouse@netzero.net; Website: rrls.webs.com

June 24-26—BEDFORD, INDIANA: Annual show; Lawrence County Rock Club; Lawrence County Fairground, Hwy 50; contact Kathy Shaffer, (812) 671-8704; Website: lawrencecountyrockclub.org

August 8<sup>th</sup> - 11<sup>th</sup> Keweenaw Copper mine piles 11:00am – 4:30pm Contact: George Schriver, pres@ccrnc.info

August 12<sup>th</sup> , 13<sup>th</sup> & 14<sup>th</sup> Copper Country Rock & Mineral Club Annual Show 1pm – 8pm

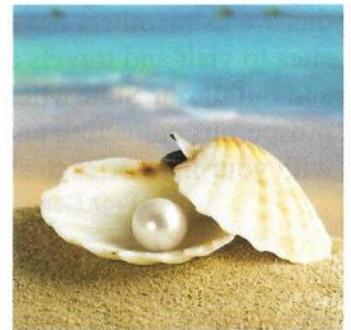
Houghton Elementary School, 203 W. Jacker Ave, Houghton, MI Contact: George Schriver, (906) 236-4716; pre@ccrnc.info

September 9<sup>th</sup> , 10<sup>th</sup> & 11<sup>th</sup> Toledo Gem & Rockhound Club Annual Show Wood County Fairgrounds, 13800 W Poe Rd, Bowling Green, OH 43402 Contact: Jerri Heer, (419) 344-0000

September 17<sup>th</sup> & 18<sup>th</sup> Livingston Gem & Mineral Society Annual Show Hartland Education Support, 9525 E. Highland Rd., Howell, MI Contact: Ed Oller, (810) 241-8801; www.livingstongems.com

The Birthstone for June: Pearl

The June birthstone pearl, has long been a symbol of purity. The ancient Greeks believed that the pearls were the hardened tears of joy from the goddess of Aphrodite, the goddess of love.



Alexandrite and Moonstone are also June birthstone.

The Birthstone For July: Ruby

The July birthstone ruby was regarded by ancient Hindus as the king of gems. It was believed to protect its wearer from evil. Today, the ruby’s deep red color signifies love and passion.



Birthstone info from the internet.

Humor From Velma Bradley

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.

June, 2022

## The Michigan Mineral Beginning with the Letter J Julgoldite

$(Ca,Mn)_2(Fe^{2+},Fe^{3+},Mg)(Fe^{3+},Al)_2(SiO_4)(Si_2O_7)(OH)_2 \cdot (H_2O)$



Black spheres of Julgoldite-(Fe<sup>2+</sup>)

Julgoldite is a member of the **pumpellyite mineral series**, a series of minerals characterized by the chemical bonding of silica tetrahedra with alkali and transition metal cations.

Color: black to greenish olive

Hardness: 4.5 on the Mohs scale

Occurrence: Keweenaw County

From the internet Wikipedia

## Water & Your Mineral Collection Part 2

There is another problem that some minerals have which is related to water. There are a number of minerals that have water in their crystal structure. Unfortunately these minerals are unstable: this means that they break down or fall apart. What happens is that the water in their crystal structure actually comes out of the mineral!

This is a process called efflorescence.

Common minerals which have this problem are chalcantite, melanterite, laumontite, borax, and the radioactive minerals autunite and torbernite. When these minerals effloresce they can become cloudy and white. For example, pure borax is glassy and colorless. But as it effloresces, it becomes white and dull. When borax loses its water it becomes the mineral called tinalconite. When tinalconite loses more water, it becomes a soft, white powder. Tinalconite specimens will actually fall apart into piles of powder just sitting on a display shelf. Other minerals, like autunite (pictured to the right) and torbernite, don't turn white, but they do fall apart into individual pieces that look like flakes.

Efflorescence occurs naturally. It is made worse by

heat and a dry air. So, the heat in your house in the winter is harmful to these minerals. Also, heat from light bulbs in your display case will harm these minerals. And, homes that have air conditioning in the summer (which cools the air but which also takes water out of the air) can speed up efflorescence.

The only known way to control this problem is to store these minerals in a cool, humid environment. A house that has a cool, damp basement is best: simply store these minerals in the basement. Recently large tinalconite specimens from California have appeared on the mineral market that have been sprayed with a coating. This seems to help but does not completely stop the problem. Many mineral collectors never purchase or collect these mineral species simply because it is difficult to control the problem of efflorescence.

Many years ago I purchased a beautiful hand-sized specimen of tinalconite crystals for approximately \$35. I really enjoyed the sharp, bright white crystals for a long time. It sat on my display shelf for about 10 years. One day I looked at it and saw that most of the crystals had fallen into a pile of powder. When I went to pick it up the whole specimen crumbled in my hand. I love the shape of tinalconite crystals, but I don't buy any now. When purchasing specimens, you have to know how to take care of them so that they last for you. You, too, may decide that there are some mineral species that are not worth buying because they will break down.

From *Mini Miners Monthly* Vol. 10 No. 9 September 2018

From the Quarry 11/18

## Oddities of Obsidian

Dolores E. Rose, Stoney, via WGMS 9-2019, via The Glacial Drifter, March 2022.

Obsidian is an extrusive igneous rock formed when the magma of an erupting volcano reaches the earth's surface and cools rapidly. It is an extrusive rock because it was pushed out onto the surface. The cooling of the extrusive rock occurs so rapidly that the magma doesn't form minerals at all, but a volcanic glass.

It derives its name according to Pliny, an

ancient Roman naturalist, from a fellow named Obsius, who found it in Ethiopia. Originally, it was named “obsianus”, but the spelling was changed over the centuries to its modern form.

Obsidian occurs in many colors, black being the most common. It can also be red, brown or even green. It can contain inclusions of magnetite, ilmenite, iron oxide, potassium oxide, sodium, oxide, lime and magnesium. It is composed of 66-77% silica, with about 13-18% alumina. Magnetite most likely gives obsidian its black color, and oxidized magnetite or hematite the reds and browns.

With slow cooling, silica crystals Cristobalite form, giving the “snowflake” obsidian or “flowering” obsidian. Iridescence reflected from minute inclusions arranged in layers is known as “rainbow obsidian”. Another kind with gold inclusions with a strong metallic luster is called “gold sheen obsidian”, and if the inclusions are grayish silver in color, it’s called “silver sheen”.

Obsidian is interesting in many ways, but mainly, for all practical purposes, it is a true glass. It has a hardness of 5- 5.5 on the Mohs hardness scale. It represents a quickly congealed mass of molten rock, for if it had time to cool slowly, it would have crystallized into a rock similar to granite or rhyolite.

It shows no trace of crystalline structure nor possesses any established composition and must be considered a rock instead of a mineral. It is amorphous, having no regular internal arrangement of atoms as in crystals. The word amorphous is taken from the Greek and means “no form” because there is no pattern to amorphous materials. The atoms are jumbled together in small groups like particles in a pile of sand. It is extremely brittle and breaks easily with shiny, black conchoidal fractures – a feature so perfectly developed that it is easily identifiable in the field. It is translucent and will not soften when heated to a bright red.

Obsidian is found throughout the western United States, mostly in Alaska, Colorado, Utah, New Mexico, Arizona, Wyoming, Oregon, Nevada and California. It is also found in B. C. and throughout Mexico. American Indians valued obsidian highly. Its perfect texture and easy fracture made it a prize possession for chipping into arrowheads and large ceremonial spear points. The

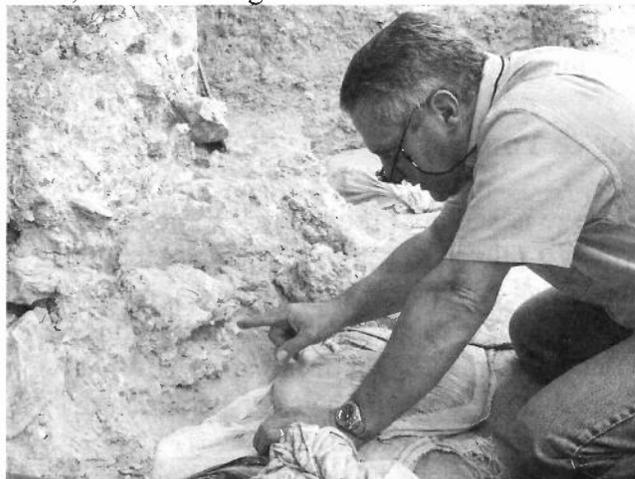
Aztecs called obsidian “iztli”, “teotal” or “divine stone” because of its usefulness in carving ceremonial blades. Even one of their gods was named “Itzoppziotl”, meaning “obsidian butterfly.”

Obsidian is also used to make attractive jewelry as cabochons or faceted. Thin slabs can be cut with a common glass cutter. Due to its extreme heat sensitivity, great care must be taken in working obsidian. Industries use obsidian as a raw material to make rock wool. Surgeons have even used thinly chipped obsidian knives in surgery because of the fine exact cut an obsidian knife makes. From the AFMS Newsletter 4/22

## New Fossil Discovery in Morocco Will rewrite Human History

By Myth

Well, time to change the textbooks...



Until now, researchers believed that the first ever modern humans or Homo sapiens, came out of East Africa about 200,000 years ago. But in Jebel Irhoud a remote region of Morocco in what was once a cave. A team of European and Moroccan scientists has found five fossil remains that date back to about 315,000 years ago, which would make them the oldest modern humans ever found.

This is a huge breakthrough because it would mean our species evolved across Africa more than 100,000 years earlier.

According to a report in the scientific journal *Nature*, an international team of researchers led by Jean-Jacques Hublin who directs the department of human evolution at Germany’s Max

Planck Institute for Evolutionary Anthropology uncovered a skull, bones along with some stone tools.

In a statement, Hublin said, "This material represents the very root of our species, the oldest Homo sapiens ever found in Africa or elsewhere,"

"We used to think that there was a cradle of mankind 200, 000 years ago in east Africa, but our new data reveal that Homo sapiens spread across the entire African continent around 300,000 years ago," he explains. "Until now, the common wisdom was that our species emerged probably rather quickly somewhere in a 'Garden of Eden' that was located most likely in sub-Saharan Africa,"

"Long before the out-of-Africa dispersal of Homo sapiens, there was dispersal within Africa," he added.

The fossils found were surrounded by a gazelle and other animal bones and scientists believe that these homo sapiens mainly hunted for their food. The fossil also shows that although our ancestor's brains functioned differently they did have similar faces as our own.

The discovery of the site was not new, a few pieces of skull and flint blades were found by Moroccan miners at the Jebel Irhoud site in 1961, but the horrendous dating techniques used back then estimated the remains to be only 40,000 years old. It wasn't until the 1980s when Jean-Jacques Hublin took a closer look at one jawbone that he realized something didn't add up.

Hublin said although the teeth were similar to modern humans, the shape seemed very primitive. Thus starting in 2004 Dr. Hublin and his team started to excavate Jebel Irhoud once again and found more fossils, including five skull bones and burnt flint blades. Scientists used a method called thermoluminescence to estimate how long it has been since the blades were burned and estimated the blades to be around 300,000 years old.

Of course, a claim so big could not be without its detractors.

John Hawks, a paleoanthropologist at the University of Wisconsin said that it was a plausible idea, but that recent discoveries of fossils from the same era raise the possibility that they were used by other hominins. The only way to resolve the question will be to find more hominin fossils from the time

when our species emerged.

From the internet Beyond Science

## *Who Dug the Gold Mine?*

from Sabine Parish Library Authors: Florian, Louisiana Before 1940 by Samuel J. Touchstone, and Who Dug the Gold Mine by Dorothy Seals. via The Rock Rattler 01/2018, via Huntin' & Diggin' 07/2018

Natives of Florian believe that their section of the state has the only gold mine ever heard of in Louisiana. Nobody knows how old the abandoned site is or who dug the many beehive tunnels which traverse the approximately seven acres of high ground, deep in the woods west of Florian.

According to Kile Salter, a resident of rural Florian, that section of Sabine Parish was settled about 1882, and those early settlers said the "mine" was old when they first came. He said there are three legends surrounding the hill, which towers approximately one hundred feet and is covered with underbrush and trees.

Ancient Indians could have dug those tunnels. Spaniards could have dug them when they held that section of the state. It could have served as a hideout for the desperate Murrell outlaw gang which operated in the Free State of Sabine before it became a part of Louisiana.

## **Walls Sparkle**

At any rate, the walls of the tunnels sparkle here and there with a golden dust, and the sandy soil topping the hills gleams with the same substance when closely inspected. Salter said in the early 1930s that carloads of the gold-flecked dirt was shipped out of state by a company working the site, and some people baked and chipped some of the soil with the hope of getting enough "dust" to do some good. Salter said legend also has it that a room filled with a fortune in gold supposedly is sealed off from one of the tunnels.

Through the years, various prospectors have dug down into the hillcrest as deep as seventy-five feet in the hope of penetrating the treasure room. Nobody has yet succeeded. Area folks believe the flecks to be gold dust, but as to the who, when, or

why of the tunnels-which are over a hundred years old-the mystery remains a mystery.

From THE BACKBENDER'S GAZETTE 11/2018



**Another method of drilling a gemstone.**

**DRILLING A STONE** By Brad Smith

One of the things my students often ask to do is drill a hole through a piece of gemstone. The usual thought is to get a diamond drill, but I've been disappointed with them. I think the reason is that the tip of the drill is just pivoting in the hole and does not cut well. When it looks like the drill isn't cutting, the tendency is to push with more force. The drill get shot, and the diamond grit falls off. A much better approach is to use a core drill. This is a small, hollow tube with a coating of diamond grit at the business end. The diamonds easily carve out a circular arc without undue pressure or heat buildup. Core drills are readily available from lapidary and jewelry supply companies. They come in sizes as small as 1mm and are very reasonable in price. For instance, a 2mm-diameter drill is about \$6. Chuck up the core drill in a drill press, Dremel, or Foredom and be sure to keep the drilling zone wet to cool the tool and to flush out debris. Also, if you're drilling a through hole, go very easy on the pressure when the drill is about to cut through. Otherwise, you will usually chip off some of the stone surface around the hole.

From The Backbender's Gazette 5/16

**Lake Mono's tufas**



*Excerpted from an article in geologyIn.com*

Located in Owen's Valley, California, Lake Mono is one of North America's oldest lakes—over 1 million years old in fact, with a salinity of about 2.5 times than the ocean. Rivers and streams that flow down from the Sierra Nevada give the lake its unusually high salt and mineral content. The lake is also well known for being very alkaline with a pH of about 9.8, due to its high concentrations of carbonates.

Seemingly out of a science fiction film, formations, called tufas, rise up from the depths of the lake. Tufas are formed when calcium rich fresh water from springs interacts with the high alkaline lake water that is rich in carbonates. The ending results are these tufas which are actually your common limestone. The limestone builds from the ground up, creating these odd looking structures in the lake that have formed over millions of years. The formations used to be completely submerged beneath the lake until the 1940's when major rivers were diverted from the lake to provide water for the city of Los Angeles. After the diversions, more water evaporated from the lake, which over time, gave rise to the submerged tufas

From Santa Cruz mineral and Gem Society Lapidarian 3/21

Humor from Velma Bradley

- 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.

**See you all in September 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/mw1/index.html](http://www.amfed.org/mw1/index.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.

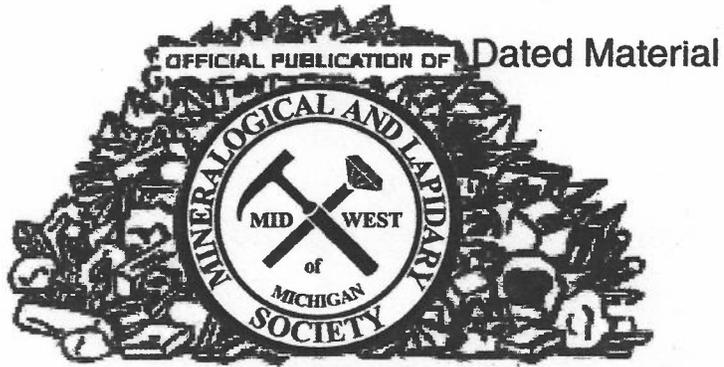
Thou shall protect thine eyes, hands & feet, so that they mayst enjoy many future field trips.

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