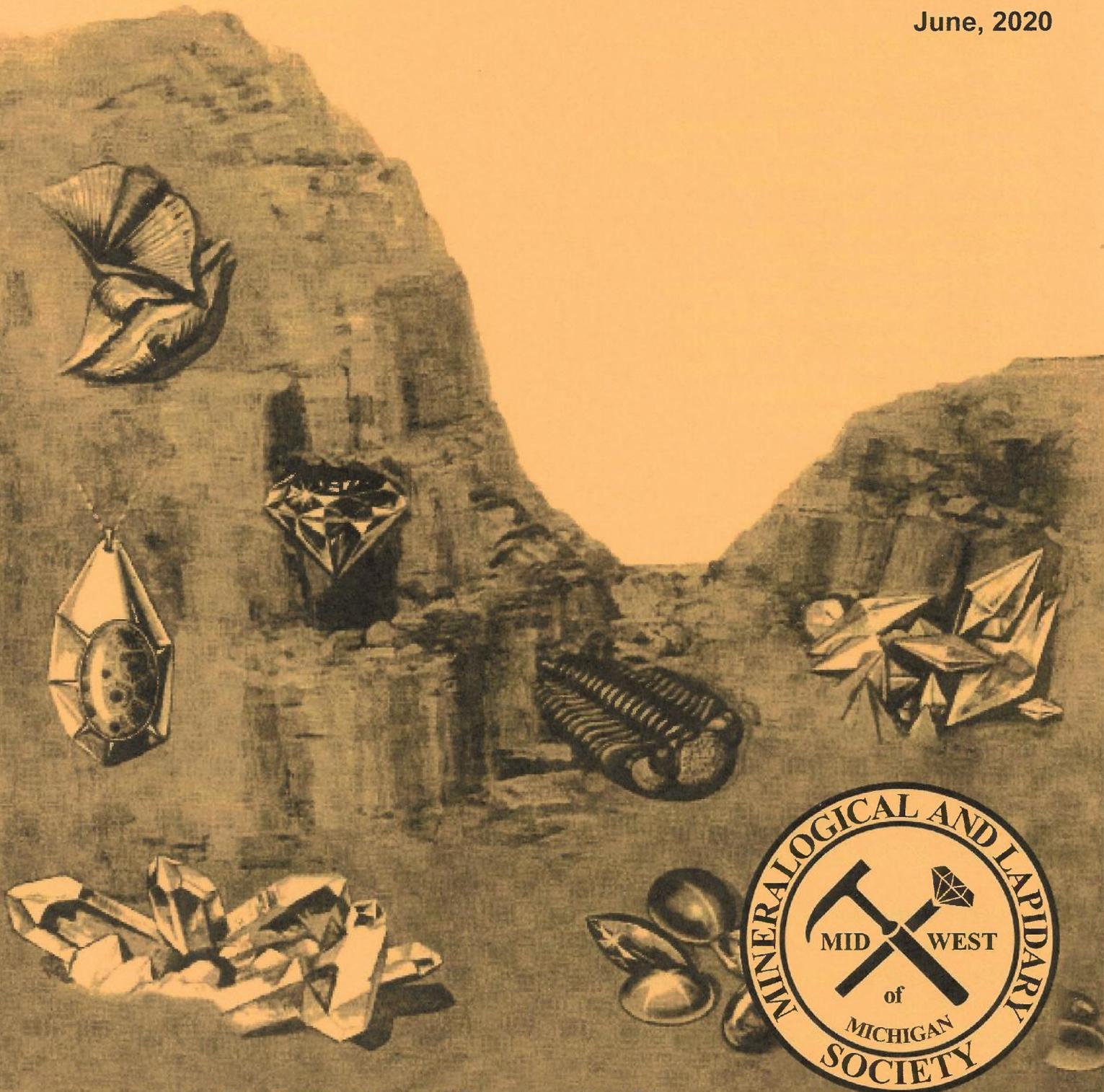


# THE ROCKPILE

Official Publication of the Midwest Mineralogical and Lapidary Society

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

June, 2020



SOUTHEASTERN - MICHIGAN

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## Midwest Mineralogical & Lapidary Society

### 2020 OFFICERS

President: Diane Kuzara (734) 675-5237  
Vice President: Pat Rutkowski (313) 291-5861  
Recording Secretary: Lori Haam (313) 562-5097  
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  
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

2020 Banquet: Dan Gumina  
2020 Club Picnic: Stacey Harper  
2020 Swap: Lou and Cindy Talley  
2020 Super Swap: Bill Barr / Tom Morris  
2020 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  
Wire Study: John Lindsay

### 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

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## From The President's Desk:



Hi fellow rockhounds:  
Hope this finds all our  
members safe and well!

**NO BOARD OR  
GENERAL  
MEETINGS UNTIL FURTHER  
NOTICE!!!**

Diane

THE NEXT ISSUE OF THE ROCKPILE  
WILL BE FOR SEPTEMBER.

EDITOR Pete

**OUR SUPER SWAP FOR OCTOBER 3<sup>RD</sup>  
AND 4<sup>TH</sup> IS TENTATIVELY STILL A GO.  
IN AUGUST WE WILL HAVE A BETTER  
HANDLE ON EVENTS THAT MIGHT  
EFFECT THE SWAP. PLEASE CHECK  
OUR WEBSITE AND THE ROCKPILE  
FOR ANY UPDATED INFORMATION.**

MMLS WEBSITE: [www.mmls.us](http://www.mmls.us)

*Coming on October 3<sup>rd</sup> &  
4<sup>th</sup>, 2020*

*Southeastern Michigan  
Gem, Mineral & Rock  
SuperSwap*

For more information call 313-278-5063 or email:  
[wbarr@umich.edu](mailto:wbarr@umich.edu)

## Our Club Activities

**BECAUSE OF THE CORONA  
VIRUS PLEASE CHECK BEFORE  
ATTENDING THESE ACTIVITIES.**

**June 1<sup>st</sup>, 15<sup>th</sup>, 17<sup>th</sup> Lapidary Work Shop**  
2009 W. Michigan Ave., Ypsilanti, Mi., 7pm to  
10pm. Fee is \$2.50 for each evening. Frank  
Konieczki 734-323-2218 **PLEASE CALL AHEAD  
TO CONFIRM TIME AND DATE.**

**June 4<sup>th</sup> & 18<sup>th</sup> Bead study group** will meet at the  
Kuzara's, 20281 Thomas, Brownstown at 7pm.  
Diane Kuzara, 734-675-5237. **CANCELED**

**June 12<sup>th</sup> Board Meeting CANCELED**

**June 16<sup>th</sup> General Meeting CANCELED**

**June 18<sup>th</sup> Mineral Study Group** are meeting on  
line contact Dave Esch or Bill Barr for further  
instruction.

**Aug. 21<sup>st</sup> Rockpile Deadline.**

**Sept. 3<sup>rd</sup> & 17<sup>th</sup> Bead study group** will meet at the  
Kuzara's, 20281 Thomas, Brownstown at 7pm.  
Diane Kuzara, 734-675-5237.

**Sept. 11<sup>th</sup> Board Meeting TBA 7:30pm**  
**Rockpile Deadline.**

**Sept. 15<sup>th</sup> General meeting** will be held at the  
DEMOCRATIC CLUB OF TAYLOR, 23400 WICK  
RD., TAYLOR at 7:30pm.

**Sept. 17<sup>th</sup> Mineral Study group** will meet at Dave  
Esch's house, 227 Barton Shore Dr., Ann Arbor Mi.  
At 7:30pm. David Esch, 734-665-5574.

**Sept. 21<sup>st</sup> & 23<sup>rd</sup> Lapidary Work Shop**  
2009 W. Michigan Ave., Ypsilanti, Mi., 7pm to  
10pm. Fee is \$2.50 for each evening. Frank  
Konieczki 734-323-2218 **PLEASE CALL AHEAD**

June, 2020

**TO CONFIRM TIME AND DATE.****Sister Club Events****BECAUSE OF THE CORONA VIRUS PLEASE CHECK BEFORE ATTENDING THESE ACTIVITIES.**

**June 13-14: MANSFIELD, OH** The Richland Lithic Lapidary Society Annual Show **CANCELED**

**June 26-28: BEDFORD, IN** Lawrence County Rock Club Annual Show. **CANCELED**

**Aug. 3-7: KEWEENAW PENINSULA, MI:** Copper Country Rock & Mineral Club Keweenaw Week. Contact: Rob Grabarczyk, (906) 895-6414; [graburcz@up.net](mailto:graburcz@up.net); [www.ccrmc.info](http://www.ccrmc.info)

**Aug. 7-9: HOUGHTON, MI** Copper Country Rock & Mineral Club Annual Show. Fri 1 - 8 pm; Sat 10 am - 6 pm; Sun 11 am - 3 pm. Houghton Elementary School, 203 W. Jacker Ave, Houghton. Contact: Rob Grabarczyk, (906) 895-6414; [graburcz@up.net](mailto:graburcz@up.net); [www.ccrmc.info](http://www.ccrmc.info)

**Aug. 8: CLIO, MI** Flint Rock & Gem Club Rock Swap. 9 am - 4 pm. Flint Rock & Gem Classroom, 11350 N. Saginaw Rd., Clio, MI Contact: Bill Wendling, (810) 638-5796; [bwrockbarn@centurytel.net](mailto:bwrockbarn@centurytel.net); [www.flintrockandgem.org](http://www.flintrockandgem.org)

**Sept. 4-6: TOLEDO, OH** Toledo Gem & Mineral Club Annual Show. Fri 2 - 8 pm; Sat 10 am - 6 pm; Sun 10 am - 5 pm. Stranahan Theater, 4645 Heatherdowns Blvd, Toledo. Contact: Stephen Shimatzki, (419) 861-0147; [jjs132@gmail.com](mailto:jjs132@gmail.com)

**Sept. 18-20: HOLLAND, MI** Tulip City Gem & Mineral Club Annual Show. Fri 10 am - 8 pm; Sat 10 am - 7 pm; Sun 11 am - 5 pm. Soccer Stop Sportsplex, 5 River Hills Dr., Holland. Contact: Sue Goedert; [sonbeams2000@yahoo.com](mailto:sonbeams2000@yahoo.com); [www.tulipcity.org](http://www.tulipcity.org)

**Sept. 19-20: HOWELL, MI** Livingston Gem & Mineral Society Annual Show. Sat 10 am - 6 pm; Sun 10 am - 4 pm. Hartland Education Support Service Center, 9525 Highland Rd., Howell. Contact: Edward Oller, (810) 241-8801

**Now is your chance to attend a MWF Show AT THE LIVINGSTON GEM & MINERAL SHOW!!!**

**Please check to make sure these events are going on before you make the trip.**

**Sometimes the best thing you can do is not think, not obsess. Just breathe & have faith that all will work out for the best.**

xo notsalmon.com



**“Tough times never last, but tough people do.”  
Robert H Schuller**

**Two Eskimos have killed a walrus**  
and they are on their way to their settlement. They

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are pulling the walrus by the tail, but it's really hard to pull since its tusks keep digging into the snow and the tail continuously slips out of their grip.

Halfway home, they come across a geologist. The geologist sees their struggle and says:

"You should grab the walrus by its tusks, that way you can hold it better and the tail will just slide on the snow".

The Eskimos try that and it's indeed easier. So the Eskimos and the geologist part ways. In a few hours one Eskimo says:

"Geologist smart. Really easy to pull walrus". The other exclaims:

"Stupid your geologist! Look, we come back to ocean!"

### Michigan Mineral Beginning with the Letter O Olivine $(\text{Mg}^{2+}, \text{Fe}^{2+})_2\text{SiO}$

The mineral **olivine** (*'ɒlɪ, vɪ:n/*) is a magnesium iron silicate with the formula  $(\text{Mg}^{2+}, \text{Fe}^{2+})_2\text{SiO}$ .

Thus, it is a type of nesosilicate or orthosilicate. The primary component of the Earth's upper mantle, it is a

common mineral in Earth's subsurface, but weathers quickly on the surface.

Hardness: 6.5 to 7 on the mohs scale

Color: Yellow to yellow green

Occurrences: Houghton, Iron, Keweenaw, and Marquette Counties.

From Internet Wikipedia and Minerals found in Michigan.

### Pennsylvania and Rhode Island do not have an official state gemstone.

**South Carolina State Gemstone:** Amethyst was designated as the official State Gem Stone by Act Number 345 of 1969. Amethyst is a purple variety of quartz with shades varying from a light violet to deep grape color. South Carolina is one of three states where the amethyst of good quality is found in the United States.



Picture from the Internet

### Fire Agate: What is fire agate? How fire agate is formed?

*Excerpted from an article in the Geologypage.com (January 13, 2020)*

Picture from internet



Fire agate is a semi-precious natural gemstone which has only been discovered in certain areas of northern Mexico, New Mexico, Arizona and California. Fire agate gemstone deposits were formed in these particular regions approximately 24-36 million years ago when the area was subjected to massive volcanic activity during the Tertiary Period. Geological conditions

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within these different regions vary which produce differences in the type and style of fire agate found in each region. The agate formation, size, color and fire layer thickness all vary within these different geographic locations.

It is a type of chalcedony (SiO<sub>2</sub>) which contains multiple, extremely thin layers of the iron oxide minerals of Goethite (FeO(OH)) and Limonite (FeO(OH)·nH<sub>2</sub>O) imbedded within, and commonly completely enclosed by, semi-transparent to translucent layers of chalcedony. When cut and polished down to the layers containing the iron oxides, the stone displays a metallic, shimmering iridescence known as the Schiller Effect, where light is reflected and refracted off the various layers containing the Goethite and Limonite iron oxides to give the exquisite play of colors—or “fire”—for which the gemstone is named. Colors displayed by the “fire” vary greatly, the most common being shades of orangish brown, but also all shades and tones of yellow, orange, red, and green, and more rarely, purples and blues. It is by far more rare than diamonds, emeralds or rubies. The following is a list of some different minerals sites. Some of these sites are open for public rockhounding and other are private mining claims or are situated on a restricted public country where any form of mineral collection is forbidden.

Black Hills, Arizona – BLM Public Rockhounding Site

Oatman, Arizona – Cuesta Fire Agate Mine

Opal Hill, California – Opal Hill Fire Agate Mine

Round Mountain, Arizona – BLM Public Rockhounding Site

Saddle Mountain, Arizona – Outdoor Recreation and Fire Agate Rockhounding Site  
Deer Creek, Arizona, Fire Agate Location  
Slaughter Mountain, Arizona – San Carlos Apache Fire Agate Mine

Read more :

<http://www.geologypage.com/2020/01/fire-agate.html#ixzz6CGv3tHPk>

From the Lapidarian 3/20

### A true story you might enjoy . . .

(told by an anonymous Rockhound)

A rockhound was asked to talk about fossils at a local middle school. . . . . She does have a varied collection and enjoys sharing the samples of past life. In addition to showing the fossils, she likes to have a sample of a current example – especially items the students might not be familiar with. One of the unusual samples she had recently added to her collection was a fossil acorn. Since she thought some students may not have seen / handled a ‘living’ acorn, she wanted to have a sample or two.

Unfortunately it wasn’t fall - there had been time for squirrels and rakes to ‘harvest’ them. But she was determined to try to find some, so she started off down her street. There are many trees including oaks . . . Looking ‘high and low’ – ‘hither and yon, she had ventured some blocks from her home. . . . [You can imagine the scene. You’ve probably done the same – but in a quarry or at the beach – looking for interesting samples.] After a while, our rockhound noticed a local police car was following / observing her. The officer stopped and approached – asking was she ok? What she was doing? [a concerned home owner must have called the police station.] The officer didn’t believe her explanation about looking for acorns — after all it wasn’t the season! He insisted on taking her home – treating her very cautiously. Clearly he thought rather than looking for acorns, she must have ‘lost her marbles’!! . . . No doubt in the past, he had returned someone who was truly lost and confused. He just didn’t know how determined a sane rockhound can be.

To repeat – the facts of this incident are true - unimportant details are left out. Whether or

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not any acorns were found before presentation day was not reported. . . . Happy Hunting when you get a chance!!

## The Newest Theory on the Dinosaur Extinction

It's widely accepted that a *giant asteroid hitting Earth is what spelled the end of the dinosaurs.*

But new research has suggested that massive volcanic eruptions in the Deccan Traps province of India lasting a million years may also have played a role in the great lizards' extinction.

Scientists analyzed fossil marine mollusk shells including oysters and clams from around the world and found what they said appear to be signs of sudden warming of the oceans as well as elevated mercury concentrations.

Volcanoes are the largest natural source of mercury entering the atmosphere, they said.

Scientists analyzed fossilized mollusk shells and found elevated levels of mercury (SWNS)



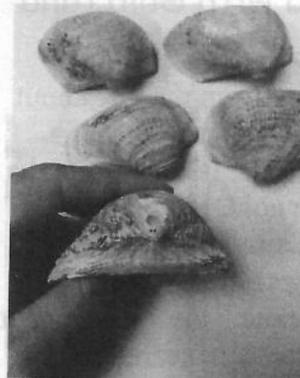
When the researchers on the University of Michigan-led study compared the mercury levels from the ancient shells to concentrations in freshwater clam shells at a present-day site of industrial mercury pollution in Virginia, the levels were roughly equivalent.

Their study, published in the journal Nature Communications, suggests dinosaurs may have survived the asteroid impact but that the long running eruptions from the Deccan Traps-which

began before the asteroid hit - may have poisoned the air and seas with mercury, spelling their final demise.

"For the first time, we can provide insights into the distinct climatic and environmental impacts of Deccan Traps volcanism by analyzing a single material," said lead author Kyle Meyer, who is now at Portland State University in Oregon.

"It was incredibly surprising to see that the exact same samples where marine temperatures showed an abrupt warming signal also exhibited the highest mercury concentrations, and that these concentrations were of similar magnitude to a site of significant modern industrial mercury contamination"



The scientists analyzed the fossilized shells collected from around the world. (SWNS)

Mercury is a toxic trace metal that poses a health threat to humans, fish and wildlife. the site the researchers collected clam shells from at Virginia's South River is contaminated with mercury and residents are warned not to eat fish from it.

Sierra Petersen, co-author of the study, said: "The modern site has a fishing ban for humans because of high mercury levels.

"So, imagine the environmental impact of having this level of mercury contamination globally for tens to hundreds of thousands of years."

The researchers think the fossilized shells of oysters and clams could simultaneously record a rise in sea temperature as well as the mercury contamination associated with the Deccan Traps eruptions.

They used a new technique to analyze the composition of the shells to determine marine

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temperatures as well as measuring the amount of mercury in the fossil shells, which were collected in Antarctica, the United States, Argentina, India, Egypt, Libya and Sweden.

"Mercury anomalies had been documented in sediments but never before in shells," said Ms Petersen.

"Having the ability to reconstruct both climate and a volcanism indicator in the exact same materials helps us circumvent lots of problems related to relative dating. So, one of the big firsts in this study is the technical proof of concept."

From Michigan Gem News 1/20

## The Streets Are Paved with Gold (and Platinum)

By Tim Worstall, London Forbes Media LLC

An interesting little story from the UK about how the streets are quite literally spread with platinum and other valuable metals. It's not quite the same as their being paved with gold, but with the right technology, it could have similar results.

One of the (UK's) biggest street cleaning firms has announced it is to "mine" the sweepings it collects from roads and pavements, in search of gold and other precious metals. Veolia Environmental Services believes it can find at least £1 million (Editor's Note: approximately \$1.165 million USD) worth of materials like platinum (Pt), palladium (Pd) and rhodium (Rh) from the muck swept up from Britain's streets each year.

The background to this is that all cars and trucks now have catalytic converters for pollution control. These are made with zirconia (zirconium oxide) and a small amount of the platinum group metals (PGM). Those for diesel engines might have 1 gram of platinum per half kilo [1.1 lb.] brick of zirconia, and those for (gasoline) engines a mixture of platinum, palladium and rhodium. A small car (say, a Ford Fiesta) might have a single half kilo brick in the converter, a large car say a V12 Jaguar, 8 such bricks. There's a well-developed market for collecting and refining these converters when they come to the end of their working lives. . . Sometimes the converters fail and some part of that zirconia ends up coming out of the back of the exhaust pipe of the vehicle. . .

Pt, Pd and Rh derived from catalytic converters that reduce poisonous exhaust emissions are enriched in road dust. Studies of PGM concentrations (in) surface samples from UK roads, urban waste and natural sediments show that these elements are dispersed into natural and artificial drainage systems finding their way eventually into the sea. Maximum values of PGMs in road dust from the city of Sheffield (England) were found to be as high as 408 ppb of Pt, 444 ppb of Pd and 113 ppb of Rh. (Editor's Note: These figures are parts per billion and the mining industry measures such things in parts per million (ppm), so the amounts of Pt, Pd and Rh are 0.408 ppm, 0.444 ppm and 0.113 ppm, respectively.) That's actually a bit low for a PGM ore. You wouldn't go and dig up a mountain for these values. . . .

So, don't go out sweeping the road and thinking that you're going to get rich. However, for the people who are already sweeping the road, collecting the dust and having to landfill that dust, it might well be an attractive operation to try to recover those metals' values. . . .

Read the full article at [www.forbes.com/-A.F.M.S. Newsletter, April 2020sites/timworstall/2013/07/15/the-streets-are-paved-with-gold-and-platinum/#67a3f19a1fa8](http://www.forbes.com/-A.F.M.S. Newsletter, April 2020sites/timworstall/2013/07/15/the-streets-are-paved-with-gold-and-platinum/#67a3f19a1fa8).  
Source: Worstall, Tim. The Streets Are Paved with Gold (and Platinum). Forbes Media LLC, July 15, 2013. Accessed March 15, 2020. via The Pick and Dop Stick, Chicago GMS, April 2020. Published in the A.F.M.S Newsletter, May 2020 From A.F.M.S. NEWS LETTER 5/20



**STAY SAFE**

**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 its "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) American  
Lands Access Association: <http://amlands.org>

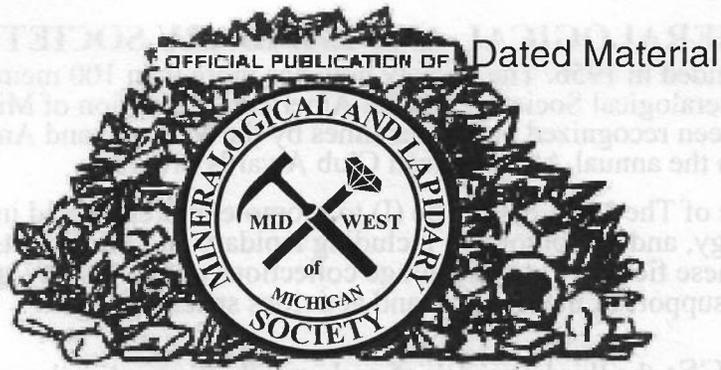
American Federation:  
[www.amfed.org](http://www.amfed.org)

### **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

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