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

February 2025

SOUTHEASTERN - MICHIGAN

Midwest Mineralogical & Lapidary Society

2025 OFFICERS

President: Mike Bomba (313) 381-8455
Vice President: Dan Gumina (313) 766-8944
Recording Secretary: Andrea Rinker (734) 755-2570
Treasurer: Doris Snyder (313) 291-2133
Corresponding Secretary: Andrea Rinker (734) 755-2570
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
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

2025 Banquet: Andrea Rinker
2025 Club Picnic: Stacey Harper
2025 Swap: Lou and Cindy Talley
2025 Super Swap: Bill Barr
2025 Auction: Dwayne Ferguson

The Rockpile Staff : Editor Peter Kuzara,
email: Kuzara1126@gmail.com 734-675-5237

MMLS website - www.mmls.us
Email - rockhounds@mmls.us

General Club meetings are held at 7:30 p.m. on every third Tuesday of the month (except July and August) at the Democratic Club of Taylor, 23400 Wick Rd., Taylor, MI 48180
GUESTS ARE ALWAYS WELCOME

STUDY GROUPS

Lapidary: Workshop at Frank Konieczki
Bead Study: Diane Kuzara
Mineralogy: Frank Konieczki

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 1966-6
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
Dan Gumina 2021 - 2022
Mike Bomba 2023 -

THE ROCKPILE
February, 2025 Volume LXIX Issue 2

President Message: Whoo baby it's been cold outside. I hope everyone has been staying warm and doing well. Time really seems to be flying by lately, but I'm excited to get into another year of club activities. Our spring swap will be here before we know it. The Midwest Federation will be having their annual convention, hosted by the Lincoln Gem and mineral club in Nebraska this year April 5th and sixth at the Sandhills Global Event Center at 84th and Havelock in Lincoln Nebraska. Thursday the third they will be kicking things off with a field trip to Rose Clay pit for fishtail selenite and a road cut to collect fossils no charge. For details come to the meeting and we will let you know everything if you're interested in going out there. Until then stay warm and stay connected. Happy rock hunting. See you at the meeting.
Big Mike.

February Program: Video on mining artifacts and history by Leo La Font.

Welcome New Member
Daryl Howell

SAD NEWS
A former MMLS member Kenneth James Ricardi passed away. Kenneth Ricardi was 92. He was a member from April 1969 to 2014.

LOOKING FOR A NEW EDITOR!

Yes we are looking for one of our club members to become our Rockpile editor. Our present editor has had the job for the last 10 years. The editor was 84 years old in July and would like to retire. This job could be taken on by two people. Diane helps me with the Rockpile. If you are interested and want to know how we put the Rockpile together let me know. This does not mean you have to do it the same way.

Editor Pete

Looking for a new Program Chairman.

If interested and want to help check with Mike Bomba he will inform you what is required.

March 29th, 2025 52nd Annual Metro Rock Swap See flyer on page 6.

DUES ARE OVERDUE!!

Dates to Remember!

Before traveling a great distance call to make sure the meeting is still going on! If it gets very cold I know the lapidary work shop meeting is canceled because of insufficient heating.

February 3rd,17th& 19th 2025 Lapidary Work Shop 2009 W. Michigan Ave., Ypsilanti, Mi. 7pm. To 10pm.Space is limited so please call Frank Konieczki 734-323-2218 before attending.

February 6th & 20th 2025 Bead Study group will meet at the Kuzara's, 20281 Thomas, Brownstown at 7pm. Diane Kuzara 734-675-5237.

February 18th 2025 March Rockpile Deadline.

February 18th 2025 Board Meeting will be held at the Democratic Club of Taylor, 23400 Wick Rd., Taylor at 6:30 pm.

February 18th 2025 General Meeting will be held at the Democratic Club of Taylor, 23400 Wick Rd., Taylor at 7:30 pm.

February 20th 2025 Mineral Study Group will meet at the West Side United Methodist Church, 900 S. Seventh St., Ann Arbor at 7:30 PM. Contact for the group is Frank Konieczki 734-323-2218.

Mar. 3rd, 17th & 19th Lapidary Work Shop 2009 W. Michigan Ave., Ypsilanti, Mi. 7pm. To 10pm.Space is limited so please call Frank Konieczki 734-323-2218 before attending.

Mar. 6th & 20th Bead Study group will meet at the Kuzara's, 20281 Thomas, Brownstown at 7pm. Diane Kuzara 734-675-5237.

Mar. 18th April Rockpile deadline.

Mar. 18th Board Meeting will be held at the Democratic Club of Taylor, 23400 Wick Rd., Taylor at 6:30 pm.

Mar. 18th General Meeting will be held at the Democratic Club of Taylor, 23400 Wick Rd., Taylor at 7:30 pm.

Mar. 20th Mineral Study Group will meet at the West Side United Methodist Church, 900 S. Seventh St., Ann Arbor at 7:30 PM. Contact for the group is Frank Konieczki 734-323-2218.

Sister Club Events

February 23 12PM - 5:30PM Silent Mineral Auction at the Wayne State University Student Center Ballroom, 5221 Gullen Mall, Detroit. Benefiting the AIPGWSU Student Chapter. For further information Email:hd6696@wayne.edu or Gw4488@wayne.edu

February 28, March1st & 2nd Eastern Indiana Gem & Geological Society Annual Show, Wayne County Fairgrounds 861 Salisbury Rd., Richmond, IN
Contact: Judy Lee, (937) 216-5928; jleeburton@woh.rr.com
www.eiggs.weebly.com

Mar. 1st & 2nd Roamin Club Annual Auction
March 1·11:00am – 6:00pm Vista Tech Center, Schoolcraft College, 18600 Haggerty Rd, Livonia, MI 48152, USA
Contact: Clarence Sterling, (248) 884-0431; tripodsfrommars@gmail.com www.roaminrockclub.weebly.com

Mar.14-16—JACKSON, MICHIGAN: Annual show; Michigan Gem & Mineral Society Rock, Mineral, Fossil, and Gem Show; Amercan One Event Center - Jackson County Fairgrounds, 128 W Ganson; Fri. 10-7, Sat. 10-6, Sun. 11-5; ; contact Sally or John, (517) 522-3396; Email: saltoosal2@yahoo.com; Website: mgmsrockclub.com1

DUES ARE OVERDUE!!

Michigan Minerals Beginning With the Letter N: Nacrite $Al_2(Si_2O_5)(OH)_4$

Hardness: 2 to 2.5 on the mohs scale
Color: White, grey, yellowish, brownish
Occurrence: Marquette County

Name: From the French "nacre" (mother of pearl) alluding to its lustre.

From the internet Mindat.org

Rainforest Jasper (Rhyolite Jasper)

Rainforest jasper sphere photo provided by moonstone gypsy au

Rainforest jasper, also known as rhyolite jasper, is known for its greenish background. It has patterns that look like leaves, trees, or even whole landscapes that come in various colors, including yellow, brown, and red.
When a volcano erupts, the ash and sediment flow out and mix with silica. Over time, this mix hardens into the stone. The patterns in rainforest jasper are

made by the different minerals in the volcanic ash. It's not just beautiful, but also rare, which is why it's so valued. For some, it can help connect with nature and bring a sense of calmness and balance. This belief adds to the stone's value.

Where you can find rainforest jasper

A well-known location where you can find rainforest jasper is in Australia. In fact, it's where some of the most beautiful rainforest jasper comes from. This region has the right kind of volcanic history that's conducive to forming this stone.

From the internet Rockchasing

By Keith Jackson - Geologist

The Minerals That Attack Your Concrete Driveway

Dr. Bill Cordua, MWF Geology Chair
Seventh Place, 2024 AFMS Bulletin Editors Contest, Advanced Adult Articles

Those hard concrete driveways! How nice they are when first laid. Then they crack, crumble, spall, and need replacing. This is not only true of your driveway but of our whole concrete infrastructure, ranging from stadiums to dams to interstates, which costs the U.S. an estimated $150 billion a year. What eats the concrete?

It turns out that many of concrete's foes are minerals.

Concrete consists of cement paste (a complex mixture made mostly of calcium hydroxides and calcium aluminum silicates) and aggregate (sand and gravel). The process of making the cement begins with limestone and clay. These are mixed, heated, ground and treated with gypsum. Adding water to this starts a number of chemical reactions, forming calcium hydroxides (one of which is called portlandite), calcium aluminum silicates, and calcium sulfates (such as ettringite). These reactions continue for days until the cement is finally set and hard. What minerals attack this formidable material?

Ice is an obvious villain. Ice is a perfectly good mineral – inorganic, naturally occurring, and possessing a crystalline structure. When water freezes to ice, it expands by about 9%, exerting tremendous force on the sides of any cracks or pores into which it has seeped. As the cracks and pores enlarge, it is easier for more water to enter.

Salt is another enemy. As you spread salt on your driveway, or as salty residue drips off your car, the salt water soaks into the concrete. As the water evaporates, salt crystals grow, forcing apart cracks. Salt can have a more insidious effect, depending on what aggregate is in the concrete. If the aggregate contains poorly crystalline silica, in the form of opal or even chert, it reacts with sodium, converting the hard silica to a hydrated alkali gel. This decreases the strength of the concrete. Since the gel occupies more volume that the original chert or opal, it further cracks the concrete and helps more water to enter.

By the way, Scott Wolter, in his book "The Lake Superior Agate," describes some deposits of the solidified gel material in voids in concrete that show agate-like banding. This may help us to better understand the formation of agates.

Sulfur, which occurs in soils, seawater, and acidic rain, is another enemy. Portlandite, formed during the hardening of the cement, reacts with the sulfur-bearing water to make gypsum and more ettringite.

Gypsum is soft and water soluble, degrading the concrete. Both gypsum and ettringite cause an increase in volume, cracking the concrete. The more cracks, the more water and sulfate and salt can enter. This cycle limits concrete's lifetime.

Millions of research dollars are going into making concrete more resistant to these attacks. The only way to avoid this completely is to build where water, salt, and ice don't occur. The nearest surface like that is on the moon.

References:

Wenk, Hans-Rudolf and Andrei Bulakh (2004). Minerals: Their Constitution and Origin. Cambridge University Press.

Wolter, Scott (1999). The Lake Superior Agate, Third Edition. Burgess International Group Publishers.

From the MWF NEWS 1/25

The Largest Gold Nugget in North America Was Found Using a Metal Detector

Discovery Story

In 1989, an amateur prospector armed with a modest Fisher Gold Bug metal detector unearthed one of the most extraordinary gold nuggets ever discovered. This remarkable find occurred near Caborca in Sonora, Mexico, within the arid expanse of the Sonoran Desert. The region, known for its

rugged terrain and scattered placer gold deposits, had seen occasional prospecting activity but nothing on this scale.

The prospector, a local rancher named Gierhart, had no formal mining experience. Determined to try his luck, he taught himself to use the metal detector by practicing on buried coins and scrap metal. Guided by reports of gold-bearing canyons, he meticulously scanned the desert using a grid pattern, a methodical approach that demanded patience and precision.The prospector, a local rancher named Gierhart, had no formal mining experience. Determined to try his luck, he taught himself to use the metal detector by practicing on buried coins and scrap metal. Guided by reports of gold-bearing canyons, he meticulously scanned the desert using a grid pattern, a methodical approach that demanded patience and precision.The prospector, a local rancher named Gierhart, had no formal mining experience. Determined to try his luck, he taught himself to use the metal detector by practicing on buried coins and scrap metal. Guided by reports of gold-bearing canyons, he meticulously scanned the desert using a grid pattern, a methodical approach that demanded patience and precision.

After countless hours and numerous false signals, Gierhart's detector emitted an unusual tone. Digging carefully, he unearthed a massive gold nugget, its gleaming surface revealing its extraordinary size. Initially, Gierhart thought the nugget might be a piece of junk metal or scrap due to its size.

Shaped like the boot of a conquistador, the nugget measured over 10 inches tall and weighed 389.4 troy ounces (12.14 kilograms or 26.77 pounds). Its sheer size and distinctive form were nothing short of breathtaking, cementing its place as one of the most significant gold finds in history.

Physical Characteristics

Size and Weight: At 389.4 troy ounces (approximately 12.14 kilograms or 26.77 pounds), making it a significantly large piece of gold. it is the largest known surviving gold nugget in the Western Hemisphere.

Shape: Its natural boot-like form inspired the name "Boot of Cortez."

Gold Purity: With a purity exceeding 94%, the nugget gleams with a rich, golden-yellow hue, interspersed with traces of quartz.

Dimensions: Approximately 10.75 inches tall and 7.25 inches wide.

From the internet GeologyIN

Gemstones the Color of Life are Formed by "Romeo and Juliet of Elements"

Heath Shive From the May 2017 Strata Data of Three Rivers Gem & Mineral Society (IN)

Diamonds are forever? But historically speaking, emeralds have been the most prestigious of gems. In ancient history, Egypt was the only major source for emeralds. According to legend, Cleopatra once greeted Caesar from atop a pile of emeralds. Egyptian emeralds and gold funded Roman coffers. In the sixth century, Emperor Justinian decreed that only aristocracy could wear emeralds. Napoleon favored emeralds precisely because of their connection to ancient imperial power.

Why does history favor emeralds over diamonds? Diamonds require facets to shine, and faceting technology wasn't revolutionized until the late 15th century. Emeralds don't need complex faceting. Emeralds don't sparkle – they shine! They look wet. That's why emeralds are usually made with a "table cut" – a long flat surface – instead of with many facets.

The emerald's crystal structure creates the natural luster. Emeralds are beryls – beryllium aluminum cyclosilicates – and thus have a simple hexagonal crystal shape. Chromium contamination in beryl imparts the green color. Incidentally, the gemstone aquamarine is just a beryl with an iron contamination.

That chromium combines with beryllium at all is a freak occurrence in nature. Chromium occurs in minute traces in ultramafic ocean-floor rock. Beryls

are formed in granitic pegmatites on land in mountain ranges. When two continents collide, the ocean floor is pushed under a continent (subduction). When the ocean rock melts, the chromium mixes into the rising fluid and finds its way into the growing beryl crystals.Author and jeweler Aja Raden writes that beryllium and chromium are "the Romeo and Juliet of elements" because under "no normal circumstances should these rare substances ever find each other."Raden's book *Stoned* is a must-read for gem enthusiasts, as she examines how jewelry (especially the emerald) has had a driving effect in history.

Today Colombia dominates emerald production. Scattered lesser sources for emeralds exist, even in the United States. In fact, North America's largest emerald was discovered in North Carolina in 2009. Starting at an impressive 310 carats, it was cut down to about 65 carats and named "the Carolina Emperor."

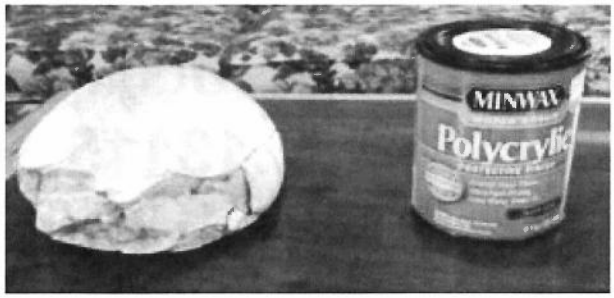
Cone cells in the human eye see red, blue, and green. But all cone cells are sensitive to light wavelengths of 510 nanometers, i.e., the eye is most receptive to green. It's the color of life, especially as life renews in spring. Appropriately, May's birthstone is the emerald. Emeralds are prestigious, but spring . . . that's priceless.

Sources:
Finlay, Victoria. *Jewels: A Secret History.* New York: Ballantine, 2006. Print.
(Continued from page 11)
Raden, Aja. *Stoned: Jewelry, Obsession, and How Desire Shapes the World.* New York: HarperCollins, 2015. Print.
Gast, Phil. "North Carolina emerald: Big, green, and very rare." CNN.com. 1 September 2010. Retrieved from cnn.com/2010/US/08/31/ north.carolina.emerald.
From the MWF NEWS 6/19

Here's One Way to Preserve Fossils

Charles "Wooly" Wooldridge, Board Member
Lincoln Gem & Mineral Club (NE)
From the May, 2022 Pick & Shovel

Lynn Borysenko from Ainsworth, Nebraska recommended a product for preserving fossils. A MINWAX water-based protective finish, Polycrylic, provides a crystal clear finish, is fast-drying, and is easily cleaned with soap and water. Use the clear satin finish for a natural appearance. Besides the obvious advantages, it provides a rock-hard (excuse the pun)
finish and is dissolved by acetone. Lynn Borysenko from Ainsworth, Nebraska recommended a product for preserving fossils.



Fossil turtle sealed with Minwax Polycrylic. Photo by "Woolly" Wooldridge.

A Polycrylic is normally used on interior wood surfaces and furniture. My wife used it to seal the knotty pine walls in our cabin and I used it to restore the coffee table pictured. It is important to use products such as finishes and glues that can be dissolved, usually by acetone, in case you make a mistake.
From MWF News 11/22

HAPPY VALENTINES DAY!!!

DUES ARE OVERDUE!!

52nd Annual
Metro Rock Swap

Hosted By
The Midwest Mineralogical & Lapidary Society

Saturday, March 29th 2025
10:00 A.M. to 5:00 P.M.

At

St. John's Lutheran Church
13115 Telegraph Road
Taylor, Michigan

Same Location

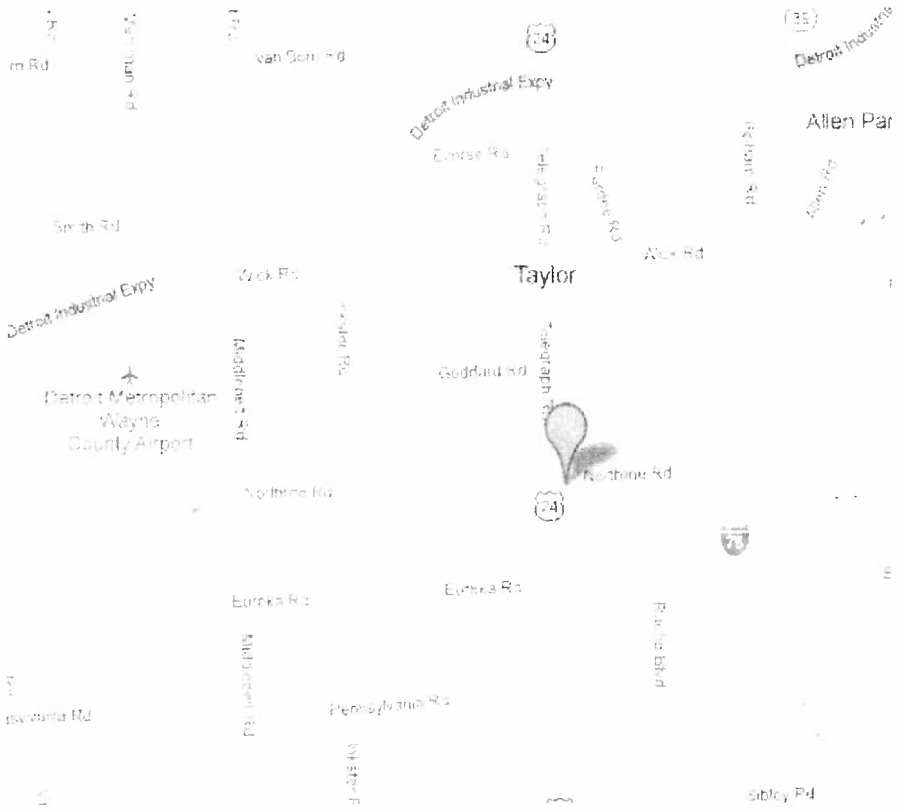
For Table Reservations and Information Call:
734-837-8920

$15.00 per 8-Foot Table

Public Invited
Free Admission
Free Parking
Refreshments Available

Swap - Sell - Buy

Minerals	Crystals
Fossils	Slabs
Jewelry	Lapidary Items
Beads	Related Books



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 (I) 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 though 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/mw1lindex.html American
Lands Access Association: http: //amlands.org

American Federation:
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

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BROWNSTOWN, MI
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OFFICIAL PUBLICATION OF

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MINERALOGICAL AND LAPIDARY SOCIETY
MID WEST of MICHIGAN

The ROCKPILE

Bulletin Editor Contest Awards

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1993 – 1st Place (Large Bulletin) AFMS
1991 – 1st Place (Large Bulletin) MWF
1990 – 1st Place (New Editor) AFMS
1990 – 1st Place (New Editor) MWF

MID WEST FEDERATION

AFMS