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

May 2024

SOUTHEASTERN - MICHIGAN

Midwest Mineralogical & Lapidary Society

2023 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
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

2023 Banquet: Andrea Rinker
2023 Club Picnic: Stacey Harper
2023 Swap: Lou and Cindy Talley
2023 Super Swap: Bill Barr
2023 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'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
Dan Gumina 2021 - 2022

THE ROCKPILE
May, 2024 Volume LXVIII Issue 5

From The President's Desk:

Hello everyone , I hope you all had a good time at the Swap in March, and on our Field Trip to the Sylvania Quarry in South Rockwood. I want to thank Velma Bradley for her extra effort in getting the scholarship fund applications printed out and sent out. Thank you Velma! So come to the meeting and we'll get to Rockin.

Mike

May Program: The May program will be a "Let's talk about Quartz" presentation by Tim McNamara.

Welcome New Members:

Alan Radue
Aileen Stewart
Jason Gibson
Theresa Stewart- Brown
Marc Hassen
David Zuzelski
Rebecca Mauney
Jeff Jamieson
Lin Stankiewicz
Shemica Frazier
Alphonse Prince (Junior Member)
Paul Slominski
Lauren Sibu
Jake Rochowiak

Reinstatement: Welcome Back

Dave Thomas

Dates to Remember!

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

May 6th, 20th & 22nd 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.

May 16th 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.

May 21st Board Meeting will be held at the Democratic Club of Taylor, 23400 Wick Rd., Taylor at 6:30 pm.

May 21st General Meeting will be held at the Democratic Club of Taylor, 23400 Wick Rd., Taylor at 7:30 pm.

June 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.

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

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

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

June 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!

.**May 3-5—KALAMAZOO, MICHIGAN:** Annual show; Kalamazoo Geological and Mineral Society; Kalamazoo County Expo Center, 2900 Lake St; Fri. 2-8, Sat. 10-6, Sun. 10-5; contact Dave Haas, (269) 370-3656; Email: stonehouserock@cs.com

May 4-5—SHARONVILLE, OHIO: Annual show; Cincinnati Mineral Society and the Cincinnati Dry Dredgers; Sharonville Convention Center, Geofair, 11355 Chester Road contact Terry Huizing; Email: tehuizing@fuse.net; Website: www.geofair.com

May 18, Parma Lapidary Soccer Sportsplex, 31515 Lorain Rd, North Olmsted, OH 44070, Ruth Sholtis-Furyes, parmalapidary@yahoo.com

May 11 KITCHENER, ONTARIO: Annual show; Kitchener-Waterloo Gem & Mineral Club; The Kitchener Auditorium, 400 East Avenue; Donna, (519) 571-1418; Email: dhollander@rogers.com; web site: www.kwgmc.com

May 31 - June 1 - 2 State Line Gem & Mineral Society Annual Show
WhereFulton County Fairgrounds, 8514 OH-108, Wauseon, OH 43567, USA (map)
Contact: Sherman Kardatzke, (517) 673-5487; sakardatzke@gmail.com www.statelinegms.com

June 8 Indian Mounds Rock & Mineral Club Rock Swap WhereWoodland Drive-In Church, 2600 Breton Rd SE, Grand Rapids, MI 49546. Kreigh Tomaszewski, (616) 243-5851; kreigh@gmail.com www.indianmoundsrockclub.com

Sunday, June 9 Mid-Ohio Mineral & Fossil Club Annual Show Fairhaven Hall, 750 N Home Rd, Mansfield, OH 44903, Tom Kottyan, (419) 561-3595;themineralhouse75@gmail.com www.midohiomineralandfossilclub.com

June 21, 22 & 23 Lawrence County Rock Club Annual Show Lawrence County Fairgrounds, 11265 US-50, Bedford, IN 47421 Kath Price, (812) 929-5367; www.lawrencecountyrockclub.org

Michigan Minerals Beginning with the letter: E Euclase (BeAlSiO4(OH)

Euclase is a beryllium aluminium hydroxide silicate mineral (BeAlSiO 4 (OH)). It crystallizes in the monoclinic crystal system and is typically massive to fibrous as well as in slender prismatic crystals. It is related to beryl (Be 3 Al 2 Si 6 O 18) and other beryllium
Color: Colorless, white, pale green to deep yellowish green, greenish blue, pale blue to deep blue, light red.
Hardness 7.5
Occurrence: Marquette County

Euclase, 3.0 x 1.6 x 1.6 cm. Lost Hope Mine Mwami, Mashonaland West Province, Zimbabwe

From the Internet Wikipedia

Jasper

Dead Camel Mountains
Found in Churchill County, Nevada

From the internet Mindat

Granite vs Gneiss: The Difference Between Gneiss and Granite

Granite and gneiss are both types of rocks that

belong to the category of igneous and metamorphic rocks, respectively. The geological study of granite and gneiss entails a meticulous examination of their respective textures, formations, mineral compositions, geographical distributions, distinguishing features, and applications. Let's explore the key differences between granite and gneiss.

Texture and Appearance

Granite an intrusive igneous rock, exhibits a coarse-grained texture resulting from the gradual cooling of magma beneath the Earth's surface. This slow cooling process facilitates the formation of interlocking mineral crystals, predominantly composed of quartz, feldspar, and mica. The overall appearance of granite varies from speckled patterns to more homogenous colorations, rendering it visually distinct.

Gneiss a metamorphic rock, demonstrates a foliated texture attributed to the impact of high pressure and temperature on pre-existing rocks, such as granite, shale, or schist. The recrystallization of minerals during metamorphism leads to the development of distinct layers, manifesting as alternating bands of light and dark minerals. This foliation contributes to the visual differentiation of gneiss from granite.

Granite & Gneiss Formation

Granite: An intrusive igneous rock formed by the crystallization of magma beneath the Earth's surface. Slow cooling promotes the growth of coarse-grained crystals, resulting in a hypidiomorphic-granular texture characterized by interlocking crystals of varying sizes. This equigranular distribution lacks preferred mineral orientation, leading to a homogeneous and massive appearance.

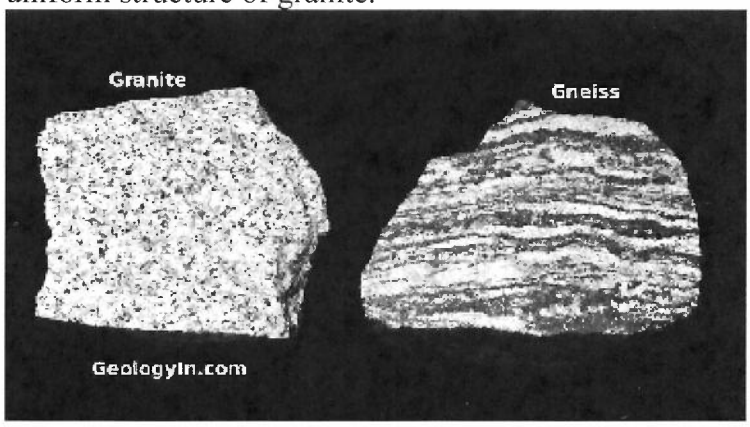
Gneiss: A metamorphic rock formed by the transformation of pre-existing rock (igneous, sedimentary, or other gneisses) under high pressure and temperature. This process, known as metamorphism, induces recrystallization and alignment of minerals, particularly platy or elongated ones, resulting in a foliated or banded texture. This preferred orientation creates distinct bands of light and dark minerals, visible as foliation or gneissosity.

Mineralogy and Composition

While both share similar primary minerals the presence of specific accessory minerals or the overall compositional variation can offer clues to the origin and classification.

Granite predominantly comprises quartz, feldspar, and mica. Quartz, known for its hardness and durability, contributes to the resilience of granite, while feldspar imparts color variations. Mica, often present in dark varieties, adds a reflective quality to the rock. The specific mineral composition can vary, resulting in diverse types of granite with distinct color palettes.

Gneiss inherits its mineralogical composition from its parent rock, encompassing quartz, feldspar, and mica. However, the foliated texture and layering during metamorphism create a banded appearance. This distinctive layering sets gneiss apart from the more uniform structure of granite.



Granite & Gneiss Age

One of the main differences between granite and gneiss is their age.

Granite is typically much younger than

gneiss. Granite can form at any time, but it is most commonly found in areas that have been uplifted by mountains or volcanoes.

Gneiss on the other hand, can be billions of years old. It is often found in areas that have been subjected to intense heat and pressure, such as mountain belts.

Geographical Distribution

Granite exhibits a widespread distribution, forming large plutons in various mountain ranges and continental shields globally. Notable regions with abundant granite include the Appalachian Mountains, the Scottish Highlands, and the Western Ghats. The prevalence of granite in these areas contributes significantly to the geological composition of the Earth's crust.

Gneiss is commonly found in regions marked by tectonic activity and mountain-building processes. The Himalayas, Alps, and Rocky Mountains are examples of mountain ranges where gneiss is prevalent, reflecting the geological forces shaping these terrains.

Distinguishing Features

Granite is Characterized by its coarse-grained texture and lack of pronounced layering or foliation. The absence of distinct bands, along with its resistance to weathering and erosion due to interlocking crystals, serves as distinguishing features setting granite apart from gneiss.

Gneiss, in contrast, is defined by its banded appearance resulting from foliation. The alternating layers of light and dark minerals create a visually striking rock. Gneiss also displays greater color variability compared to granite, further aiding in its identification.

Uses and Applications

Granite durability, aesthetic appeal, and resistance to wear make it a preferred choice for various applications. Common uses include dimension stone in construction for countertops, flooring, and cladding. Granite is also prominent in monumental structures and memorials, exemplified by Mount Rushmore, showcasing its enduring qualities and aesthetic versatility.

Gneiss with its unique banded appearance, finds application in construction and decorative purposes. The rock's ability to be split into thin slabs makes it suitable for roofing material, flooring, and wall cladding. Additionally, gneiss is utilized in landscaping and decorative elements, and it may be quarried as a dimension stone for architectural and landscaping projects where its distinctive aesthetic is valued.

Conclusion

Granite and gneiss although sharing some compositional similarities, possess distinct formation processes and resulting textural and compositional characteristics. Understanding these differences is crucial for accurate rock identification and interpretation of geological history. Detailed analysis of texture, composition, and geographical context, often aided by advanced analytical techniques, is essential for differentiating these seemingly similar yet geologically distinct rock types.

From the internet GeologyIn

After dinosaurs disappeared, mammals grew bigger at a faster rate and died young

1 September 2022, by Bob Yirka

A team of researchers from the U.K., Canada and the U.S., has found evidence suggesting that after the dinosaurs went extinct, the mammals that remained began to grow larger and did so faster—and they died young, too. In their paper published in the journal *Nature*, the group describes their study of Pantolambda - a member of a clade (pantodonts) that included a range of mammals that began to thrive after the demise of the dinosaurs.

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Pantolambda - a member of a clade (pantodonts) that included a range of mammals that began to thrive after the demise of the dinosaurs.

Pantolambda skull. Credit: G Funston

Pantolambda teeth. Credit: G Funston

Approximately 66 million years ago, terrestrial dinosaurs went extinct after a large asteroid strike in what is now the Gulf of Mexico. In the void left behind, other creatures such as mammals began to thrive.

Prior research has suggested that mammals first appeared approximately 210 million years ago. But because of the dinosaurs, they did not really thrive. They remained small—about as big as a modern housecat—and many only came out at night. After the Chicxulub impact event, it took some time for the creatures that survived to regain their footing. But once they did, mammals soon began to rise to a more prominent role. One such animal, the Pantolambda, did particularly well. Just 4 million years after the disappearance of the dinosaur, it had grown in size to that of a modern sheep. In this new effort, the researchers took a closer look at several Pantolambda specimens to learn more about the creature and perhaps how it was that mammals came to become so dominant.

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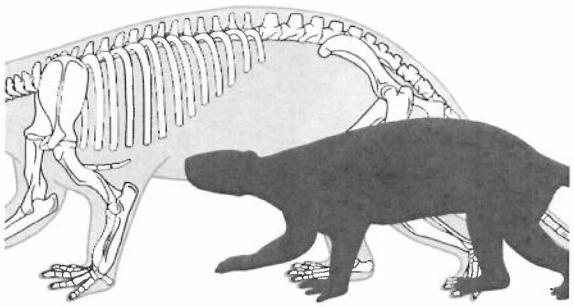
The researchers studied the fossilized teeth of the specimens. Each was cut into very thin slices and then studied to learn more about its makeup. Such study can reveal information about the history of its original owner, such as how long it was in the womb, what it ate over the course of its life and how long it lived.



Pantolambda reconstruction - juvenile and adult. Credit: S Shelley

The researchers found that Pantolambda gestated for approximately seven months—long enough for the fetus to develop into a baby that could survive almost on its own right after birth (it already had teeth). The researchers found they only nursed for a month or two. They also found that the creatures quickly grew to full size and did not live long—just 10 years.

The researchers suggest such characteristics gave the creatures the best shot at survival, allowing them to survive childhood and then to reproduce as quickly as possible—clues that might help explain how mammals became so dominant in the following years.

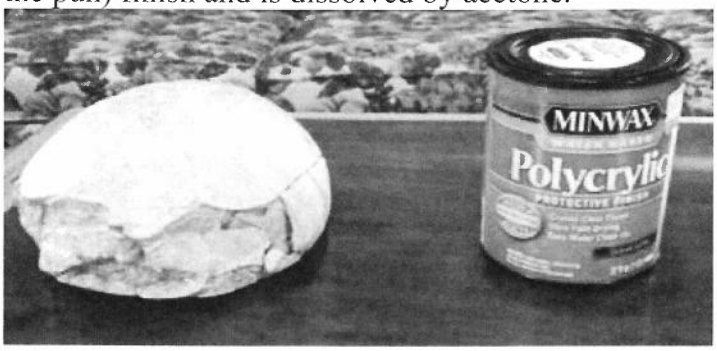
Source:
https://phys.org/news/2022-09-dinosaurs-mammals-grew-bigger-faster.html

From the Michigan Mineral Society Conglomerate 9/22

SOME THING TO TRY

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.



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

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 the MWF NEWS 11/22

LABRADORITE TRIVIA:

According to Inuit legend,labradorite fell to earth from the shimmering Aurora Borealis, which lights up the far northern skies. It is a member of the feldspar family, and has an almost holo-graphic playof color called *labradorescence*. It is composed of layers of material that refractlight and can shimmer is shades of blue,green, yellow, gold, copper. It was discovered in 1770 in Labrador, Canada and was named for the area by Moravian missionaries. It is supposed to be a powerful protective stone, which can strengthen natural energies and protect against negativity and misfortunes.

-via EIGGS Feb. 2018 From Strata Data 2/18
Photo also EIGGS

Month of May

For all the diapers
that you changed,
For all the play dates
you arranged.
For all the trips
back and forth to school,
For cleaning all the spit up
and the drool.
Why is there only
one Mother's Day?
You should have at least gotten
the ENTIRE month of May!
~ Anon

Happy Mother's Day 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 (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

EDITOR
20281 THOMAS
BROWNSTOWN, MI
48183

Dated Material

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