

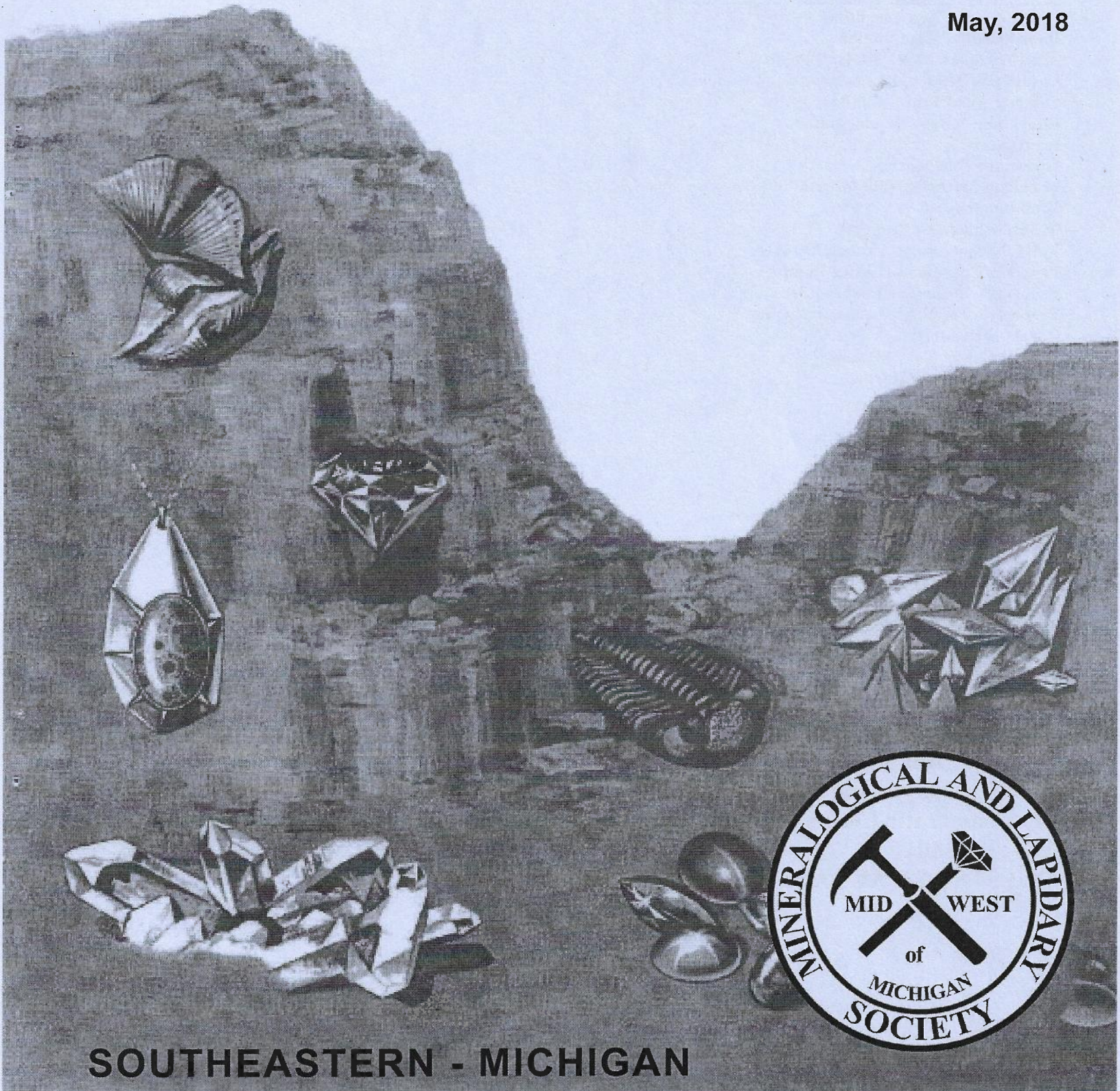
THE

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, 2018



SOUTHEASTERN - MICHIGAN

Midwest Mineralogical & Lapidary Society

2018 OFFICERS

President: Dan Gumina (313) 766-8944
Vice President: Diane Kuzara (734) 675-5237
Recording Secretary: Julie Knechtges (734) 444-9151
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
Local Field Trips - Mike Bomba/Gary Slominski
Summer Field Trips - Bill Barr
Education: Dave Hendershot
Insurance:
Historian: Tom Morris
Michigan Material: Tom Morris
Club Publicity:
Membership: Ana Ferguson
MMLS Scholarship: Velma Bradley
Program Coordinator: Mike Bomba
Property – Storage: Leonard Swisher
Property – Meetings: Leonard Swisher
Sunshine Reporter: Velma Bradley
Refreshments: Gary Slominski
Web Site: Stacey Harper

ACTIVITIES

2018 Banquet:
2018 Swap: Lou and Cindy Talley
2018 Super Swap: Bill Barr / Tom Morris
2018 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

Advanced Lapidary:
Basic Lapidary:
Bead Study: Diane Kuzara
Faceting:
Mineralogy: Bill Barr
Paleontology:
Wire Study: John Lindsay
Silversmithing:

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

May, 2018

The Prez Sez

Hello Rockhounds! It's May! Have I said this year is moving right along before? Well it certainly has been holding a steady pace.... So along with May flowers, trout and mushrooms comes new weather and exposed earth and rocks to find. It's also time to plan your field trip for the summer. Time to share our club experiences with others, have them like us, and move forward with us.....

Take care. Dan

Board Meeting Summary: for March 16, 2018

Meeting called to order at 7:33 PM. A motion was made and carried to accept Secretary's report for February 16, 2018, motion carried. Treasurer's report February 1 - 28, 2018 motion to accept was made and carried. A motion was made and carried to present Andrea Rinker for membership during general meeting. Next Board Meeting April 13, 2018 7:30 pm at the Kuzara house. Meeting adjourned at 8:50. Submitted by Julie Knechtges Secretary.

General Meeting Summary: for March 20, 2018

Meeting called to order at 7:30 PM. A motion was made and carried to accept Secretary's report for February 20, 2018, motion carried. Treasurer's report February 1 - 28, 2018 motion to accept was made and carried. March program is part 2: "Rhodochrosite Red Treasure of the Rockies – Sweet Home Mine. Wayne State Mineral Museum outing hosted by Dave Lowrie was a success. Next Board Meeting April 13, 2018 7:30 pm. Meeting adjourned at 8:09. Submitted by Julie Knechtges Secretary.

May Program: Will be a video about the Ocean View Mine by Jeff Swanger. This is the largest operating mine for kunzite, tourmaline and quartz.

***Death leaves a heartache no one can heal,
Love leaves a memory no one can steal.***

Gloria A. Schneider:

September 11, 1929-February 27, 2018

We have received notice that Gloria

Schneider, longtime member of MMLS has passed away. She was a member since 1965 along with her husband Richard (Bud). They were both active members, and at one time held the Lapidary Study Group at their home in Allen Park. The notice was sent to us by their daughters, Kathy Klingensmith and Carol Rudi, our condolences go out to them. Kathy and Carol told us how much joy and the many friendships that were brought into their lives by being members throughout the years.

Member Reinstatements:**Amjad Chohan**

21570 Quail Ridge Dr. N
Brownstown, MI 48193-8449
734-286-2882
Email: amjadchohan57@yahoo.com

Dolores Swekel

16054 Holz Dr. Unit 62
Southgate, MI 48195-6809
734-363-5453
Email: doloresswekel@gmail.com

Gus Povirk

394 Kings Highway
Wyandotte, MI 48192
248-497-3565
Email: bapovirk@gmail.com

Adrienne Wallace-Povirk

394 Kings Highway
Wyandotte, MI 48192
989-551-9106
Email: aewallace14@gmail.com

Jason Glenn

2009 Long Ridge Rd.
Stamford, CT 06903-2106
203-569-4946
Email: jdglenn71@gmail.com

Please add these members to your 2018 directory.

May, 2018

WIRE WRAP CLASS Anyone interested in a study group for wire wrap please contact John Lindsay for dates, time and more information.

NOTICE TO STUDY GROUPS IF THERE IS A CHANGE IN YOUR MEETING TIME OR PLACE, PLEASE LET THE EDITOR KNOW!!!!

Dates to Remember:

Contacts for study groups:

Bead study, Diane Kuzara, 734-675-5237
Mineral study, David Esch, 734-665-5574
Wirewrap, John Lindsay, 734-604-8561
Lapidary work shop, Frank Konieczki
734-323-2218

Our Club Activities

May 7th, 21st & 23rd Lapidary work shop 2009 W. Michigan Ave., Ypsilanti, Mi., 7pm to 10pm. Fee is \$2.50 for each evening.

May 11th Board Meeting ROCKPILE DEADLINE. TBA

May 15th General meeting will be held at the DEMOCRATIC CLUB OF TAYLOR, 23400 WICK RD., TAYLOR at 7:30pm.

May 17th Bead study group will meet at the Kuzara's, 20281 Thomas, Brownstown at 7pm.

May 17th Mineral Study group will meet at Dave Esch's house, 227 Barton Shore Dr., Ann Arbor Mi. At 7:30pm.

June 4th, 18th & 20th Lapidary work shop 2009 W. Michigan Ave., Ypsilanti, Mi., 7pm to 10pm. Fee is \$2.50 for each evening.

June 7th & 21st Bead study group will meet at the Kuzara's, 20281 Thomas, Brownstown at 7pm.

June 15th Board Meeting TBA ROCKPILE DEADLINE.

June 19th General meeting will be held at the DEMOCRATIC CLUB OF TAYLOR, 23400 WICK RD., TAYLOR at 7:30pm.

June 21st Mineral Study group will meet at Dave Esch's house, 227 Barton Shore Dr., Ann Arbor Mi. At 7:30pm.

Sister Club Events

May4-6: KALAMAZOO, MI Kalamazoo Geological & Mineral Society Annual Show. Fri 4-8 pm; Sat 10 am - 6 pm; Sun 10 am - 5 pm. Kalamazoo County Expo Center, 2900 Lake St., Kalamazoo. Contact: Jerry VanNocker, (269) 979-3348; jervannocker@comcast.net

May12-13: TOLEDO, OH Toledo Gem & Rockhound Club Rock/Jewelry Open House. Sat 9:30 am - 4:30 pm; Sun noon - 4 pm. St. James Lutheran Church Gym, 4727 West Sylvania Ave, Toledo. Contact Michelle Gregore, 9525 Wolfinger, Holland 43528; (419) 270-7507; mgrigoretgrb@gmail.com

May 5-6: SHARONVILLE, OH Cincinnati Mineral Society Annual Show. Sat 10 am - 6 pm; Sun 11 am - 5 pm. Sharonville Convention Center, 11355 Chester Rd., Sharonville. Contact: Jim & Judy Budnik; (513) 575-1990.

May 19-20: NORTH OMSTED, OH Parma Lapidary Club Annual Show, Sat 9 am - 6 pm; Sun 10 am - 5 pm. Soccer Sportsplus, 31515 Lorain Rd.

May 19-20: ST. JOSEPH, MI Blossomland Gem & Mineral Society Annual Show. Sat 9 am - 6 pm; Sun noon - 6 pm. Lake Michigan Catholic Elementary School, 3165 Washington Ave, St. Joseph. Contact: Nancy Wolff, 2816 Thayer, St. Joseph 49085; (269) 983-4900; blossomlandrockclub@gmail.com

May, 2018

June 1-3: WAUSEON, OH Stateline Gem & Mineral Society Annual Show. Fri noon - 6 pm; Sat 10 am - 6 pm; Sun 11 am - 4 pm. Fulton County Fairgrounds, 8514 SR-108, Wauseon. Contact: Glenda Gafner, 3720 Britton Hwy, Britton 49229; (517) 403-6310; ggafner@frontier.com

June 9-10: MANSFIELD, OH Richland Lithic & Lapidary Society Annual Show. Sat 10 am - 6 pm; Sun 11 am - 5 pm. Arts & Crafts Building, Richland County Fairgrounds, 750 N Home Rd. Contact Tom Kottyan, (419) 562-1152; themineralhouse@netzero.net

June 22-24: BEDFORD, IN Lawrence County Rock Club Annual Show. Fri 10 am - 6:30 pm; Sat 9 am - 6:30 pm; Sun 10 am - 4 pm. Lawrence County Fairgrounds, US Hwy 50, Bedford. Contact: Michael & Marjorie Tweedale, 375 Butterfly Ln, Bedford 47421; (812) 675-6054

Michigan Minerals Beginning with the Letter A

Anatase TiO₂



Picture from internet dakotamatrix.com

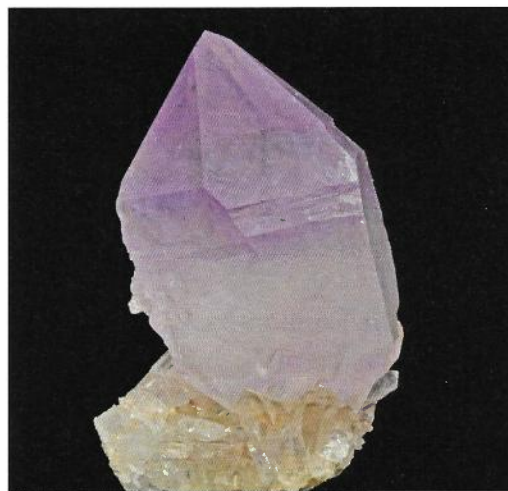
Anatase is one of the three mineral forms of titanium dioxide, the other two being brookite and rutile. It is always found as small, isolated and sharply developed crystals, and like rutile, a more commonly occurring modification of titanium dioxide, it crystallizes in the tetragonal system; but, although the degree of symmetry is the same for both, there is no relation between the interfacial angles of the two minerals, except in the prism-zone of 45° and 90°. Hardness: 5.5 -6 on the Mohs scale Color: black, reddish to yellowish brown, dark blue, gray

Occurrences: Houghton County as a minor constituent of the Jacobsville sandstone. Keweenaw County: Gay: Same as in Houghton County.

Ontonagon County: White Pine: As a rare microscopic grains in the Copper Harbor conglomerate (Hamilton, 1967)

From Wikipedia, The Mineralogy of Michigan by E. Wm. Heinrich

Georgia's Official State Gemstone is: Quartz

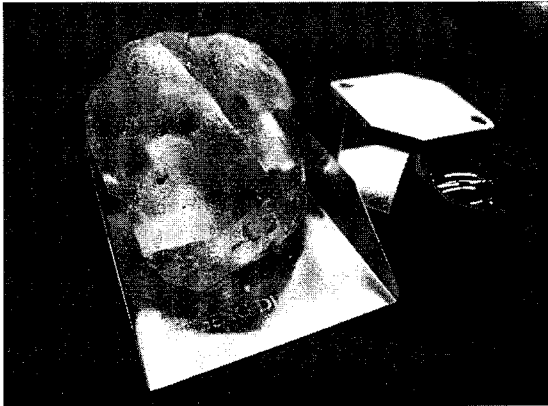


Georgia designated quartz as the official state gem symbol in 1976 (Georgia also Quartz is common in Georgia and can be found in a wide variety of colors. The state legislation cited two particular forms of

quartz - amethyst (used mostly in jewelry), and clear quartz (which resembles a diamond when faceted).
From the internet.

Lesotho Diamond Weighs More Than a Baseball

By Richard Perez-Pena, The New York Times,
January 15, 2018



LONDON — High in the mountains of a small southern African kingdom, miners have unearthed one of the largest diamonds ever found, a glittering giant weighing 910 carats, or 6.4 ounces, and probably worth tens of millions of dollars. The stone, found in the Letseng mine in Lesotho, is the fifth-largest gem-quality diamond ever found, and the largest in Lesotho's history. It weighs more than a regulation baseball (about 5 ounces), and more than half as much as the average male human heart (about 10 ounces).

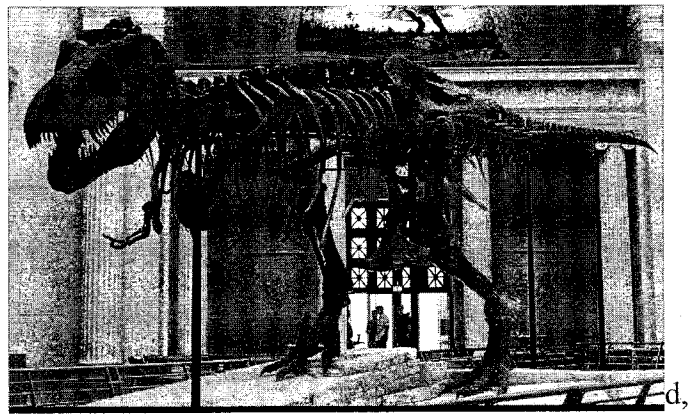
Gem Diamonds, the London-based company that owns a majority stake in the mine and that announced the find on Monday, described the diamond as being of extremely high quality. It said the stone is a Dcolor, Type IIa diamond, meaning it is colorless and very radiant, without any yellow tint or impurities like nitrogen that absorb light and decrease luster. Gem Diamond's stock jumped sharply on news of the discovery.

How much the rough stone will fetch at auction remains to be seen, and it will depend in part on any imperfections that limit the size of the cut and polished stones it can be fashioned into. The previous

largest find in Lesotho, the 603-carat Lesotho Promise diamond, sold for \$12.4 million in 2006, and" diamond prices have increased significantly since then. Stones of that size can make some of the world's most extravagant finished jewels seem like mere baubles. Elizabeth Taylor's famous collection of hefty jewels included a 33-carat diamond ring that sold at auction for \$8.8 million in 2011, and a 69-carat diamond, both bought for her by Richard Burton in the late 1960s. The largest gem-quality diamond, the Cullinan Diamond, weighed more than 3,100 carats, nearly three times as much as the next-biggest. Several of the world's largest finished diamonds were cut from it and incorporated into Britain's Crown Jewels.

The Letseng mine, at an elevation of 10,000 feet, is known for producing large, high-quality diamonds. The government of Lesotho, a constitutional monarchy surrounded by South Africa, owns a minority stake in the mine. Diamonds and garments make up almost the entire export economy of Lesotho, a country with high rates of poverty and H.I.V. infection. It ranks 160th out of 188 countries on the United Nations' Human Development Index
From the Livingston Gem Mineral Society 2/18

Study of Sue reveals extensive injuries by mike baldwin



Picture from internet Sue, the most complete Tyrannosaurus rex found was tough enough to survive extensive injuries during its lifetime, say

palaeontologists who have completed the first detailed postmortem of the whole skeleton. However, the cause of Sue's death remains a mystery.

The Field Museum of Natural History in Chicago bought Sue for \$8 million in 1997, but palaeontologists had to remove the bones from the surrounding rock before they could be properly studied. Elizabeth Rega, now at the Western University of Health Sciences in Pomona, California and Chris Brochu of the University of Iowa conducted the post mortem. They say the 13 meter-long, six-ton dinosaur had been a tough customer Rega and Brochu found evidence of numerous injuries that had healed before the giant carnivore died. Fractures of the right and left ribs indicate Sue recovered from two traumatic blows to the body. Studies of arm and leg bones showed they had healed from infections. Both sides of the jaw also showed lesions common in other large tyrannosaurs. And bony growths on vertebrae indicated back problems.

Social Behavior

Yet the dinosaur may have reached old age, says Rega. "The maturity of the specimen and the clear evidence of healing indicate that Sue was a robust individual who survived many insults," she says.

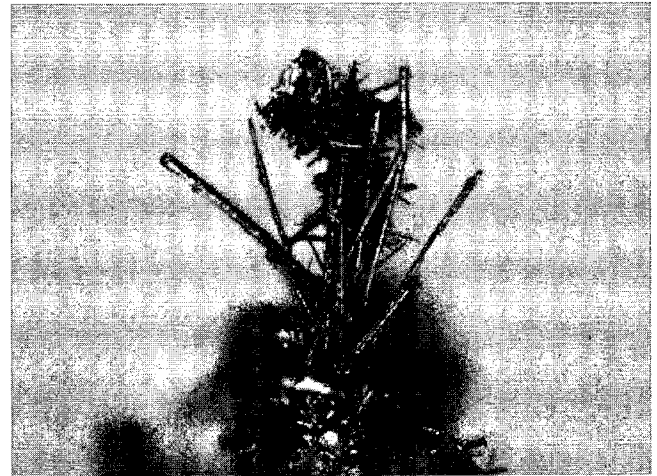
Rega and Brochu concluded that infections accounted for holes in the jaw - rather than bites by other dinosaurs, as had been suggested. The spacing of the holes did not match the teeth of potential suspects, they say. In fact, careful examination of the skeleton found no evidence of what finally killed the dinosaur. Peter Larson of the Black Hills Institute of Geological Research in Hill City, South Dakota, whose group originally found the skeleton in 1990, thinks the evidence of extensive injury suggests that Sue could not have survived without "complex social behaviour such as spousal care." The scientists presented their research at the annual conference of the Society of Vertebrate Paleontology in Montana. The information is via Jeff Hecht article on <http://geology.about.com> Via Mags

Close up of the new mineral merelaniite

Date: October 29, 2016

Source: Michigan Technological University

Summary: The scroll-like structure of the newly discovered mineral merelaniite grows into tiny, silver-gray whiskers. A physicist has found the mineral on a sample of larger minerals from the Merelani Mining District in Tanzania.



The tiny, silvery, cylindrical whiskers are a new mineral—merelaniite—named for a mining region in Tanzania.

Credit: Michigan Tech, John Jaszczak

In the age of fast-paced global communication, it's no wonder that teasing apart the anatomy of the new mineral merelaniite took a team from around the world. Most mineral discoveries start with boots on the ground -- or, rather, below the ground. The Merelani mining district is a well-known locale. Not only for prized tanzanite and tsavorite used in jewelry, but also for hosting a suite of other minerals increasingly prized by mineral collectors.

"The Merelani district has been famous since the late 1960s for the blue gem variety of zoisite known as tanzanite, but this is really a mineral collector's paradise and an exciting place to look for new minerals," says John Jaszczak, a physics

professor at Michigan Tech and the lead author on a new study published in *Minerals* the importance of the area is the reason we wanted to give tribute to the miners and name merelaniite for the district."

There are 5,179 minerals listed by the International Mineralogical Association and their Commission on New Minerals, Nomenclature and Classification (CNMNC) receive more than 80 proposals each year for new ones. Many turn out to be variations of existing minerals. To discern the new from the variable, Jaszczak and his team put the tiny merelaniite whiskers through a battery of rigorous tests, particularly to discern its chemistry and crystal structure.

"It is one thing to find a mineral that is probably new, it is quite another thing to be able to perform all of the required analyses to satisfy the CNMNC for approval of its status and a new name," Jaszczak says.

Jaszczak teamed up with Mike Rumsey and John Spratt at the Natural History Museum in London to determine the chemical composition of the new mineral with precision. To help with understanding the crystal structure, Steve Hackney, professor of materials science at Michigan Tech, was able to provide crucial high-resolution images and diffraction patterns using transmission electron microscopy on ultrathin samples prepared with a diamond knife by Owen Mills, director of Michigan Tech's Applied Chemical & Morphological Analysis Laboratory.

The growing team then sought out the help of Luca Bindi, a professor at the Università di Firenze in Italy and an expert in solving complicated crystals

structures. He helped run x-ray diffraction studies to put all of the pieces together. The results revealed a complex structure made up of layers of molybdenum disulfide alternating at the atomic scale with layers of lead sulfide, along with other elements, including vanadium, antimony, bismuth, and selenium. The layers curve inward, growing into a scroll-like cylinder.

Although it is not a showcase gem, merelaniite is attractive, and as the analyses show, it has an intricate, microscopic internal beauty as well. A better understanding of the crystal chemistry of these exotic materials may eventually find useful applications.

Echoing physicist Richard Feynman, Jaszczak notes, "Science is about taking pleasure in finding things out and we're delighted to have uncovered and described this beautiful new mineral."

Story Source: Materials provided by **Michigan Technological University**. Original written by Allison Mills. Note: Content may be edited for style and length.

Journal Reference: John Jaszczak, Michael Rumsey, Luca Bindi, Stephen Hackney, Michael Wise, Chris Stanley, John Spratt. **Merelaniite, Mo₄Pb₄VSbS₁₅, a New Molybdenum-Essential Member of the Cylindrite Group, from the Merelani Tanzanite Deposit, Lelatema Mountains, Manyara Region, Tanzania.** *Minerals*, 2016; 6 (4): 115 DOI: 10.3390/min6040115 Taken from Science Daily

Happy Mother's Day

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 - \$15.00 (adult), \$1.00 (junior) on a year basis. Membership expires each Dec. 31.

ANNUAL EVENTS:

March - Spring Rock Swap and Sale Fall- 2 Day SuperSwap and Sale November Annual Auction

STUDY GROUPS: Special-interest study groups meet monthly, September through June. No additional fees are involved. Currently the following groups are active: Basic Lapidary Advanced Lapidary Wire Study Bead Study Mineralogy Silversmithing (Silversmithing is now on hold until further notice.)

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

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

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

INTERNET WEB SITES OF INTEREST:

Midwest Federation:
www.amfed.org/mw11index.html 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 thy neighbor knowst he's there.

Thou shall not argue names of minerals too violently; for sometimes thou couldst be wrong.

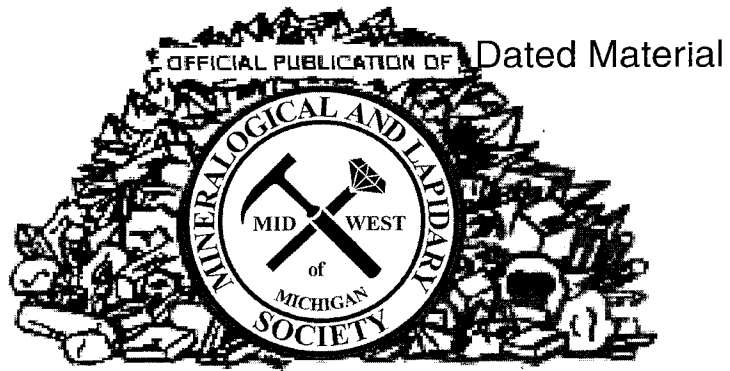
Thou shall not climb above thy neighbor's head when on a field trip, lest thou art willing to spend the rest of the day digging him out.

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. 10. Thou shall not break uncollectable specimens.

Midwest
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Michigan

EDITOR
20281 THOMAS
BROWNSTOWN, MI
48183



The ROCKPILE

Bulletin Editor Contest Awards



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

