



Canada Hoodoos?

Thank you to everyone that attended the Halloween party last month. The costumes were almost as amazing as the presentation. November brings us another continued search of exploration in a land not so distant from us:

Have you ever wondered what rocks and minerals could be found in the vast lands of "O Canada! Our home and native land"? If it is important enough for the Canadians to sing about their native land then it is definitely worth it for us to find out what they might be singing about; eh. This month we are honored to welcome our friends Sally and John Hoskin to show us what lies beneath the soil of our neighbors to the north. I can't wait to hear and see more about it, eh. Maybe Sally will even have a few sneaky tips on where to find some of these fine specimens.

So if you have something amazing from Canada please bring it to show off in the rock/mineral of the month competition.

Thank you.

Bill McDonald

TCGMC

(Also, don't forget that your 2025 membership dues are now being accepted by Rhonda Gehringer)





Events



FOR OUR CLUB AND BEYOND!

2024 TCG&M Board

President - C.H. Falstad

V.P. - Bill McDonald

Secretary - Alexandria Vanderski

Treasurer - Kurt Brinks

Field Trips - Jon Mull

Historian - Betty Hoekstra

Junior Club - Shari Luttkhuizen

Liaison - Mary Johnson

Membership - Rhonda Gehringer

Newsletter Editor - Jodi Miller

Webmaster - Aaron Nelson

Show Chair - CJ Proos

Social Coordinator - Michelle Lanting

Dir. at Large - Gary Katt

Dir. at Large - Patsy Williamson

Past President - Michael B. Larson

Meetings are held at 7:00 pm at the Howard Miller Library (HML) or the Community Center (CC) in Zeeland.

11/20 (Wed.) Tulip City General Meeting (CC)

Identify it by Hardness by Harry Wagoner

Did you know that a good property in mineral identification is one that does not vary from specimen to specimen. In terms of reliability, hardness is one of the better physical properties for minerals.

Hardness is a measure of the resistance, which a smooth surface offers to abrasion. The degree of hardness is determined by observing the comparative ease of difficulty with which one mineral is scratched by another, or by a file or knife. A mineral can only be scratched by a harder substance. A hard mineral can scratch a softer mineral, but a soft mineral cannot scratch a harder mineral.

Therefore, a relative scale can be established to account for the differences in hardness simply by seeing which mineral scratches another. French mineralogist Friedrich Mohs developed and proposed a scale for measuring the hardness of minerals, the Mohs Scale. This scale is used world-wide as a way of determining the hardness of minerals. The higher the number, the harder the mineral.

- | | | | |
|-------------|---------------|------------|-------------|
| 1. TALC | 2. GYPSUM | 3. CALCITE | 4. FLUORITE |
| 5. APATITE | 6. ORTHOCLASE | 7. QUARTZ | 8. TOPAZ |
| 9. CORUNDUM | 10. DIAMOND | | |

To remember the Mohs Scale, try to remember this acronym: The Geologist Can Find An Ordinary Quartz, (that) Tourists Call Diamond.

A simple hardness rating can be determined by the following:

- Fingernail scratch—hardness 2.5
- A penny - hardness 3.5
- Glass or knife blade—under 5.5

(article taken from the Conglomerate, November, 2010)



Don't forget, the deadline for submissions to the Conglomerate are due the Friday after each board meeting.

Field Trips

John is currently working on finding individuals to host basement fieldtrips for this winter. If you have a showcase or two of specimens that you would allow the club to come and see, please notify him.



Pictures of our "Halloween" General Meeting

It was great that so many decided to dress up and participate in our "Halloween themed" meeting on October 30. Here are a few pictures from the evening.

Congratulations to Julia Sherwood on her "Scariest Rock" being chosen by the members.



No cattiness here!



A tiger with cell service!



TCGMC BOARD MEETING

Date: 11/4/2024

Attendance Total: 13

Guests in Attendance: 1 (Justin Moore)

Quorum: Yes

Location: Howard Miller Community Center

Call to Order: 7:04pm

Board Members Present: C. Falstad (President), W. McDonald (Vice President), A Vanderski (Secretary), K. Brinks (Treasurer), J. Mull (Field Trip Coordinator), E. Hoekstra (Historian), S. Luttikhuizen (Jr. Club Coordinator), M. Johnson (Liaison), J. Miller (Newsletter Editor), C.J. Proos (Show Coordinator), A. Nelson (Webmaster), P. Williamson (Directors at Large)

Approval of Agenda: Approved, with minor edits to remove past events.

Approval of Previous Meeting Minutes: Approved

Board Member Reports:

- President - Continued enthusiasm for Howard Miller Library display.
 - Vice President - Sally Hoskins to present Canadian Rocks
1 of 2 show storage trailers to be moved to new location
 - Past President - Not present.
 - Secretary - Nothing to report.
 - Newsletter Editor - Submit all November Conglomerate information by November 10th.
Request for a printer for Newsletter Editor use.
 - Fieldtrip Coordinator - No field trips planned for the remainder of the year. Field trip to Lake Cumberland went very well and photos of the event are currently uploading to Google Workspace.
 - Directors at Large - Nothing to report.
 - Treasurer - Two CDs are coming due next year. Discussion concerning current funds in account and creation of new CDs.
Filling out annual forms for Midwest Federation. Looking forward to the 2025 annual show location.
 - Historian - Nothing to report.
 - Jr. Club Coordinator - Will add a few updates to the children's page on the TCGMC website.
 - Liaison - Nothing to report.
 - Membership Coordinator - Not present.
 - Show Coordinator - Final show meeting wrapped up well. Location of the 2025 show has not yet been determined.
 - Social Coordinator - Not present.
- Webmaster—
- Update on Midwest and American Federation Website Competition. Only two websites entered the Midwest Federation competition. Website competition score sheets also arrived back from the American Federation. Feedback from Midwest Federation positive via Zoom. Feedback from the American Federation was inappropriately destructive and disappointing.
 - Request to purchase a microphone to facilitate hybrid board meetings. Motion to approve the purchase of ~\$120 microphone, approved.

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Recurring Business:

- Update from nominating committee (Justin Moore)
- Several positions remain open: Jr. Club Coordinator, President, Secretary, Historian, Newsletter Editor and one Director at Large.
- Bylaws do allow persons to hold more than one position (with expectation of the President and Treasurer). Fears that not having each position individually filled will decrease the success of the board.

William Holland School of Lapidary Arts Scholarship - Discussion concerning the potential to offer a TCGMC internal scholarship for the continued education in the lapidary arts (similar to the William Holland School of Lapidary Arts Scholarship). More information needed to understand the number of scholarships and amount each scholarship will be worth.

New Business:

- None.

Correspondence: Three Rivers Gem and Mineral Club had their trailer stolen with all the rocks and materials from their show. Discussion to make a donation to assist Three Rivers in the replacement of the stolen items. Motion made and approved to donate \$200.

Notes:

- Motion to approve the purchase of ~\$120 microphone for use of streaming hybrid meetings, motion approved.
- Motion to approve a \$200 donation to the Three Rivers Gem and Mineral Club to support the replacement of stolen equipment. Motion presented by Bill and second by Jodi, motion approved.

Items From Visiting Members: Update on Board Nominating Committee (Justin Moore)

Adjournment: 8:12pm

Next General Meeting: 11/20/2024

Next Board Meeting: 12/4/2024

Meeting Minutes Recorded and Submitted By: Alexandria Vanderski



Identifying Minerals and Rocks!

Junior Section

Hey Juniors,

Juniors, do you have a cool rock at home, but you aren't sure what it is? How can you figure it out (the rock I.D. Apps for your phone are notorious for being wrong!) Come to the Juniors Club this month and explore different characteristics of Rocks and Minerals. (Spoiler alert: color is not the best way to tell what a rock or mineral is. Most people are fooled by this.) There are many clues or characteristics of minerals that you can learn that will help you learn your specimen's true identity.

Join us Wednesday night for a fun evening....lots of samples will be provided for your personal collection!

See you soon, Shari



Lake Cumberland, Kentucky

October, 2024

Field Trip Report

By Mary Johnson



Early one fine Friday October morning, 15 Tulip City members set off from West Michigan with dreams of collecting amazing Kentucky fossils! We were not disappointed, although there were some bumps in the plan as often occur....

An approximately 7.5 hour drive took us all south around Indianapolis, over the bridge into Louisville and through the rolling hills and curvy roads of Kentucky towards the Jamestown and Lake Cumberland region. Three members had chosen to stay in a cabin in Jamestown, while the other 12 were planning to stay at a 6-bedroom VRBO in nearby Russell Springs, which had been booked and paid for in advance, and confirmed by both VRBO and Evolve, the management company for the property, as recently as that Tuesday.

Imagine our horror (I was riding with our intrepid leader, Jon Mull), when we get a desperate call from Chuck Parks (whose group had arrived first at the VRBO, getting into the gated community and reaching the house) to find the house was occupied by a new owner with large dogs who informed him it was no longer a VRBO and was his house!! Twelve rockhounds with no where to sleep in a quite rural part of Kentucky! Yikes!

Thank goodness for smart phones! Quick communication with Michelle Lanting, who was staying in the cabin, and texts and calls with the owner of M and M Lodge in Jamestown resulted in the booking of the 2 empty cabins (each with 2 bedrooms, 4 beds, bath, full kitchen and living room with couch) assuring everyone some place to sleep! Communication with the other vehicles and a meeting at the Dollar General in Jamestown's parking lot confirmed everyone was good with the new plan. Phew!! Disaster avoided!

Saturday was collecting day! Our first stop was at the Lily Creek boat launch. Water levels in the fall on Lake Cumberland are substantially lower, and expose areas of an amazing crinoid reef. Peter Riemersma, who has brought GVSU geology students to the area, gave us a brief intro to the area and its history. It was very interesting and informative, although I must confess photos will likely show many of us listening but looking at the ground as there were treasures even in the parking area! It was a huge area for collecting, and the further you explored the more untouched the material. Climb up on and through the rocks, brush away some leaves, and it was amazing what kind of an abundance of material you would find! I found a piece of crinoid stem the size of a 50 cent piece, many found large sections of stems, some found calyxes and all found some sizes of stems and many clusters and plates! Rain eventually made it slippery, and you can only carry so many rocks, so we regrouped and went back to the cabins for lunch and a short break.

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The afternoon found us at Pleasant Hill boat ramp. Not as much parking there, but enough for us all. Easy steps down to the shore, where we again found much exposed material with the lower water levels, provided easy picking of plates, stems, and also in some areas geodes!! Of particular interest was a huge piece spotted by Rick Smith, with 2 long, fairly thick stems all in one piece (showing they had lived right there and fallen and been preserved!), one including a visible calyx!! Through a huge group effort, lots of digging and some trimming of the host rock, involvement of a local with a winch on his Kawasaki ATV and room being made in a vehicle, it has found its way back to Michigan! A truly stunning piece!

Saturday night we had a fabulous group dinner, with everyone contributing food and wonderful camaraderie and conversation! Chicken chili, salad with various fixings, appetizers with sausage, bacon and cheese, hot from the oven, corn bread, French bread, Margaritas, pie, cookies, etc.—a veritable feast!!

A sleepy crew woke up Sunday morning to begin the journey home. A few groups decided to check out a couple more sites, but I have not heard that any would be recommended for a group destination. The two we visited on this field trip were absolutely amazing, however, and highly recommended! Now for all the final work sorting out the mess and refunds from the VRBO fiasco, putting that all behind us, and looking forward to the next field trip. Thanks, everyone, especially to Jon for all the planning and making it happen, for making the trip so enjoyable and rewarding for all! If you have never been on a Tulip City field trip, I highly recommend them!



From the Library Shelves

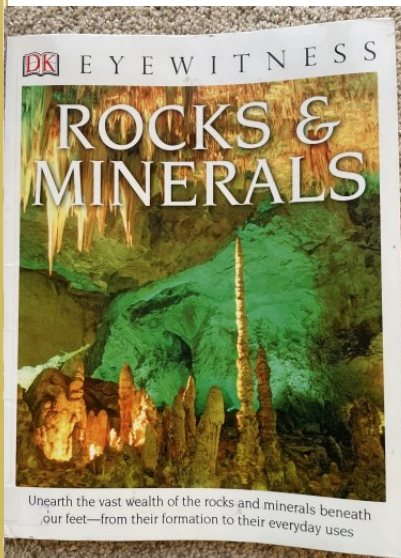
Tulip City GMC Books to Borrow

This is an ongoing feature in the Conglomerate. Below is a list of books that we had returned to us from Zeeland Public Library and are now available for TCGMC members to borrow:

- American Mineral Treasures (Staebler & Wilson),
- Geology of Michigan (Dorr & Eschner),
- Kentucky Agates (McIntosh & Anderson),
- Cave Geology (Palmer),
- The River Runs North (Harmon),
- Totality (Littman),
- Rocks & Minerals (Eyewitness),
- Lithography - Amethyst, Lithography - Apatite, Lithography - Diamond, Lithography - Fluorite, Lithography - Opal, Lithography - Rubelite, Lithography - Topaz,
- Emma's First Agate (children's book).



We will feature a review of one of the books each month so that the membership can see what each is about. If you are interested in borrowing one of these, please email tcgmc.news@tulipcity.org



Book Review: Eyewitness Rocks and Minerals - (Donated in memory of Marie Zigler) This book begins with explaining what rocks and minerals are and how they are formed. It is filled with beautiful pictures and is written in an easy to read and understand format. It would be ideal for new rockhounds and juniors to study and learn about rocks and minerals. The book ends with how to cut and polish stones and a wonderful list and pictures of tools that can be used to look for rocks in nature. Finally, the last pages are about how to identify if a stone is a rock or a mineral.



Board Positions

It's that time again. The TCGMC is looking for individuals to serve on the board of directors. There are several people in current positions who are willing to continue to serve, but there are still positions that need to be filled. Please see the list below and if you are able and willing to fulfill one of the duties please contact someone on the nominating committee: Mike Larson, Rhonda Gehringer, or Justin Moore. Or you can email mblarson300@yahoo.com

President:	Jodi Miller
Vice-President	Justin Moore
Treasurer	Kurt Brinks
Secretary	_____
Field Trip Coordinator	Jon Mull and Gary Katt
Historian	Betty Hoekstra
Junior Club Coordinator	Rick Smith and Shari Luttikhuizen
Liaison	Christine Silich
Membership	Rhonda Gehringer
Newsletter Editor	Megan Moore
Show Coordinator	C.J. Proos (would like a co-SC)
Social Coordinator	Michelle Lanting
Webmaster	Aaron Nelson
Director at Large	Bill McDonald



Did you know (from our archives)

- ◆ Kurt Brinks (our treasurer) became a member in this month in 2010.
- ◆ There is a replica of "Big Red" Lighthouse that was built by TCGMC members that is currently located on Windmill Island.
- ◆ During November in 2007, The Norm Gibson scholarship was established.

Some other things you might want to know about From the Midwest Federation.

Lapidary Work Safety Involves Equipment, Clothing, and Organization

David Rich, MWF 2nd Vice President and Chair, MWF Safety & Field Trips Committee

Lapidary work, involving the cutting, grinding, and polishing of stones, requires meticulous attention to safety to prevent accidents and health hazards. Whether you are a hobbyist or a professional, adhering to safety protocols is crucial.

1. Personal Protective Equipment (PPE)

- ⇒ N-95 Masks: Always wear an N-95 mask when working with lapidary machines to protect yourself from inhaling fine stone dust and oil mists. These particles can be harmful to your respiratory health over time.
- ⇒ Safety Glasses: Protect your eyes from flying debris and fragments by wearing safety glasses at all times. This is especially important when using grinders, saws, and polishers.

2. Appropriate Clothing

- ⇒ Avoid wearing loose clothing, jewelry, or accessories that could get caught in machinery. Opt for fitted clothing and secure long hair to prevent entanglement in moving parts.

3. Equipment Handling

- ⇒ Lapidary Grinders and Polishers: Ensure that all machines are properly maintained and in good working order. Check that guards are in place and functioning correctly. Always use the appropriate wheel or disc for the material you are working on, to avoid accidents.
- ⇒ Trim Saws: Before using a saw, inspect the blade for any damage or wear and replace it if necessary. Use a steady, controlled motion when feeding the stone into the blade, and never force the material through.

4. Workspace Environment

- ⇒ Keep your work area clean and organized to reduce the risk of accidents. Ensure that all tools and materials are stored properly when not in use.
- ⇒ Maintain proper ventilation to minimize the buildup of dust, fumes, and oil mists. Consider using an exhaust system or working near a window to improve air circulation.

By following these safety guidelines, you can minimize risks and ensure a more enjoyable lapidary work

**MIDWEST FEDERATION OF MINERALOGICAL & GEOLOGICAL SOCIETIES
ANNUAL SHOW AND CONVENTION
APRIL 5 & 6, 2025
HOSTED BY THE LINCOLN GEM & MINERAL CLUB
CELEBRATING THEIR 65TH ANNUAL SHOW**

Sandhills Global Event Center
Ag Society Hall
84th & Havelock
Lincoln, Nebraska

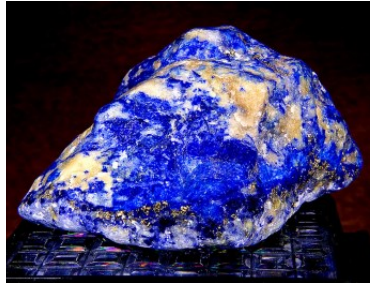
News From Around the World

What do you know about Lapis Lazuli?

Physical Properties of Lapis Lazuli	
Classification	A metamorphic rock that contains enough of the mineral lazurite to impart a distinct blue color. It may also contain significant amounts of calcite, pyrite, and minor amounts of other minerals.
Color	Blue. Often with white calcite veining or mottling, and gold grains of pyrite.
Streak	Blue.
Luster	Dull, but polishes to a bright luster.
Diaphaneity	Semi-translucent to opaque.
Cleavage	None, though it may split easily along foliation or calcite veins and layers.
Mohs Hardness	Varies between the 3 of calcite and the 5 to 5.5 of lazurite. Not well suited for use as a ring stone or in bracelets.
Specific Gravity	2.7 to 2.9 or more depending upon the amount of pyrite
Diagnostic Properties	Blue color, association with pyrite, and hardness.
Uses	Cabochons, beads, carvings, spheres, inlay, and pigments.

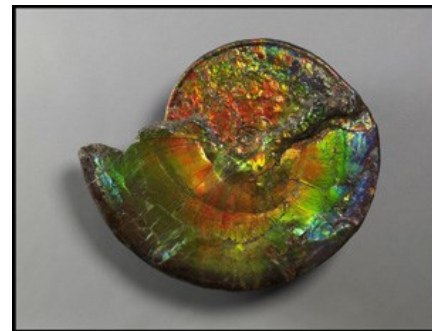
Unlike most other gem materials, lapis lazuli is not a mineral. Instead, it is a rock composed of multiple minerals. The blue color of lapis lazuli is mainly derived from the presence of lazurite, a blue silicate mineral of the sodalite group.

A wonderful article about Lapis can be found at [Lapis Lazuli](#).



The Incredible Canadian Ammolite. An Organic gemstone with a spectacular flash of iridescent colors!

Author: Hobart M. King, PhD, GIA Graduate Gemologist



Ammolite is a rare material. All of the world's commercial production comes from a small area along the St. Mary River in southwestern Alberta, Canada. There, two companies mine Ammolite from thin layers in the Bearpaw Formation where the ammonite fossils are found.

The color-producing shell layer of Ammolite is usually very thin (often less than one millimeter) and attached to a dark gray to brown base of shale or siderite. Exceptional pieces can be cut into gems without stabilization.

The highest quality rough is usually cut into freeform shapes to produce gems of maximum carat weight. These are used in designer jewelry. Other grades of material are cut to standard shapes for use in commercial jewelry.

For more information on [Ammolite](#), continue reading this article by Dr. King.



Meetings are held monthly on the last Wednesday of the month at the Howard Miller Community Center 14 S. Church Street, Zeeland, MI at 7pm, unless otherwise noted in the **TULIP CITY CONGLOMERATE**.

Our Junior Club welcomes and encourages young rockhounds and meets separately during the meeting. To become a member, complete the form at www.tulipcity.org

Advertising rates for club members are: \$5 for business card size, \$10 for 1/4 page, \$15 for 1/2 page, \$30 for full page. non-member rates are double. Make check payable To: TCG&M with ad copy to Editor.

Our club is a non-profit 501c3 organization. It is a member of the Midwest Federation and the American Federation of Mineralogical Societies. The general purpose of this club is to develop interest in and increase knowledge of minerals, rocks, gems, fossils, and the lapidary arts. The objectives of this club shall be promoted whenever possible, through family participation.

Tulip City Conglomerate
Jodi Miller, Editor
Sparta, MI 49345



Background photo is Malachite