The Topeka Gem and Mineral Society, Inc. 1934 SW 30th St. Topeka, KS 66611 Rock2Plate@aol.com



www.TopekaGMS or

Facebook: Topeka Gem and Mineral Society Field Trips

The Topeka Gem & Mineral Society, Inc. Organized December 3, 1948

Member of Rocky Mountain Federation of Mineralogical Societies American Federation of Mineralogical Societies





The Glacial Drifter, Vol. 66, No. 11 November 2023





The Purpose of The Topeka Gem & Mineral Society shall be exclusively educational and scientific: (1) to promote interest in geology and the lapidary arts; (2) to encourage the collection and display of rocks, gems, and minerals; (3) to encourage field trips and excursions of a geological, or lapidary nature; and (4) to encourage greater public interest and education in gems and minerals, cooperating with the established institutions in such matters.

Meetings: 4th Friday of each month, September to May, 7:15 pm, First Congregational Church, 1701 SW Collins Ave, Topeka, KS 66604. No meeting in December unless notified of a change. Picnic meetings are held, June, July and August.

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Dues: Individual, \$15.00; Couple, \$20.00; Junior (under 18 years of age), \$5.00. Dues are collected in December for the following year. Send dues to: **Millie Mowry, Treasurer, 1934 SW 30th St, Topeka, KS 66611.**www.TopekaGMS.org

2023 OFFICERS AND CHAIRS

President	President Brad Davenport 379		Cab of the Month	Donna & Russell Hedge	620-660-1651	
1 st Vice Pres.	1 st Vice Pres. David Dillon 2		Field Trip Coord.	Chuck Curtis	286-1790	
2 nd Vice Pres.	Cinda Kunkler	286-1790	Publicity	Donna Stockton	913-645-7677	
Secretary	Stacy Haug	1-857-3350	Welcome/Registration	Harold Merrifield	633-9745	
Treasurer	Millie Mowry	267-2849	Property	Chuck Curtis	286-1790	
Directors	Doria Skinner	231-9347	AFMS Scholarship	Cinda Kunkler	286-1790	
	Jim Baer	785-256-2432	Editor/Exchange Editor	Millie Mowry	267-2849	
	Shirley Schulz	n/a	Show Chairman	Millie Mowry	267-2849	
Historian	Cinda Kunkler	286-1790	Show Dealer Chairman	Dave Dillon	221-4315	
Federation Rep	Chuck Curtis	286-1790	Show Secretary	Cinda Kunkler	286-1790	
Corporation Agent	Millie Mowry	267-2849	Jr. Rockhound Leader	Jason Schulz	640-6617	
Librarian	Amy Fluke	862-8876	Show Case Coordinator	Cinda Kunkler	286-1790	
Web Master	Jason Schulz	640-6617		Area Code for all numbers is (785).		

EXCHANGE BULLETINS WELCOME

For exchange newsletters contact the club via mailing address listed above or email at rock2plate@aol.com. Permission is granted to reprint articles only if proper credit is given to the author, Glacial Drifter and the date.

Fodder from the president. Nov./2023



Howdy folks.

It's hard to believe that it has been another month since I visited with you last. But it has and the year dashes on to its conclusion. With it comes a few things we deal with annually.

At this month's general meeting we will hold our elections for officers and board members. I know you expect to see a slate of candidates that the Nominating Committee proposes. You do not have to take these as your only choices. If you would like to hold one of our positions, you can. Or if you would like to see one of our other club members elected, this is easy. You can contact Chuck Curtis, our Nominations Chairman, with your suggestions. His number is 785-286-1790. Or you can make a nomination from the floor at the meeting. Unlike what goes on in our government, we would love to see some new blood step up for the betterment of our club. We officers and board members do not have super paks and we have not been soliciting monies to promote our jobs. We make no campaign promises and not one of us will hold grudges and vendettas against the opposition. There is no opposition. Only wanting the best for the TTGMS.

With that, be aware that because of Thanksgiving our meeting is held one week earlier. So, make a note on your calendars that November 17th. Is the date. Then the next day we have the field trip that we had to cancel in Oct. planned at the Mt. Mitchell Heritage Prairie Park. This is an educational tour where there will be no collecting. If the river drops or we can find another site we can pick, we will do so.

Also, on your calendars I hope you have our Christmas dinner marked boldly in ink. The date is Friday, Dec. 1st. At the Viking Grille up North of town. The format remains the same but for our new members, No reservations needed, you pay for your own dinner and we will have the installation of club officers and board members and games. I do hope all of you join us for a great evening.

With December fast approaching please remember that your club dues will need to be renewed. Lets all get them paid in the next couple of months so Millie does not have to chase people down into February and March. A little respect for her hard work will be appreciated. A Membership could be a great stocking stuffer for friends you would like to see join us.

The holiday generally does not affect shop nights. But Christmas falls on a Monday this year so lets say that the shops will be closed on Tuesday the 26th of Dec. I could be persuaded to change this if y'all really want to come out and share leftovers.

The furnaces are working properly and it has been toasty warm out here. Come on out and make something pretty.

So, enjoy your Thanksgiving with family and friends and know that you folks are MY family and friends and I appreciate every minute and hour I get to spend with you.

Brad

Good Day, Fellow Rock Hounds and Field Trippers:

I spoke with Andy Connolly of the Kansas Geological Survey yesterday and we have rescheduled our field trip to Mt. Mitchell for the Saturday following our monthly meeting this month. The monthly meeting is Friday, November 17th (a week earlier than usual due to Thanksgiving) so our field trip will be Saturday the 18th. We will meet at the Mt. Michell Heritage Prairie Park between I-70 and Wamego on Hwy. 99 at 10:00 am. We will not be allowed to collect at the site. So, if there is enough interest, we may try to go somewhere else afterwards to do some collecting. Maybe try to go somewhere else afterwards to do some collecting. Maybe Calhoun Bluffs, so don't forget your safety vests. See Ya then.

Chuck Curtis, Field Trip Coordinator

TTGMS Event Calendar

NOV. 2023			DEC. 2023			
1	W		1	F	Christmas Dinner-Viking Grille	
2	T		2	S		
3	F		3	S		
4	S		4	M		
5	S		5	T	Brad's Shop Open 6-10 pm	
6	M		6	W		
7	T	Brad's Shop Open 6-10 pm	7	T	Jr RHDS 6 p.m. at FC Church 1701 SW Collins	
8	W		8	F	No Board Meeting	
9	T		9	S		
10	F	Board Meeting at Millie's 7 p.m.	10	S		
11	S		11	M		
12	S		12	T	Brad's Shop Open 6-10 pm	
13	M		13	W		
14	T	Brad's Shop Open 6-10 pm	14	T		
15	W		15	F		
16	T		16	S		
17	F	General Mtg, First Congregational Church 7:15 p.m. gather 1701 SW Collins Ave,	17	S		
18	S	Field Trip see page 2	18	M		
19	S		19	T	Brad's Shop Open 6-10 pm	
20	M		20	W		
21	T	Brad's Shop Open 6-10 pm	21	T		
22	W		22	F	NO GENERAL MEETING	
23	T	THANGSGIVING DAY	23	S		
24	F		24	S		
25	S		25	M	CHRISTMAS DAY	
26	S		26	T	Brad's Shop CLOSED	
27	M		27	W		
28	T	Brad's Shop Open 6-10 pm	28	T		
29	W		29	F		
30	T		30	S		
			31	S		

As A Reminder!

If you are wanting to take a class in Silversmithing or wire wrapping you are to call either Jim Baer at 785-256-2432 or email him at jimbaer73@gmail.com, for wire wrapping contact Millie Mowry at 785-267-2849 or email rock2plate@aol.com the Monday before class to let them know you will be there.

JR ROCKHOUND Classes & Reminders

Here are reminders of the next months of classes: **First Congregational Church**, **1701 SW Collins Ave.**, **Topeka**, **KS.** Sign in starting at 6:00 pm and classes starting at 6:30 pm. 1st Thursday of each month.

https://www.facebook.com/TopekaGMSJuniorRockhounds
To register for the Junior Rockhounds or any of the classes, email:

Jason Schulz at: Fleetcommander@att.net



Next Class: Dec 7, Maps Pat Gilliland

Reminder: If you want to earn the patches from the classes that you have attended you need to turn in your homework assignments.

Dillons Community Reward Program

The Topeka Gem & Mineral Society has enrolled with the Community Rewards with Dillon's Store. You can enroll your shopper's card at: www.dillons.com/communityrewards once you sign up it will take about 7 to 10 days to be activated and our Club to start earning the rewards. At the bottom of your Kroger receipt you will notice "At your request, Kroger is donating to 'your organization name'.

1. You will have to re-register each year. If you have any other questions email DCR@dillonstores.com



To June 2023......5 Households signed up....... Rebate of \$49.70 July to Sept 2023......7 Households signed up....... Rebate of \$29.68



Book Review From Our Librarian!

In the TTGMS Library there are well over 100 books to choose from That cover a vast array of subjects of lapidary art and geology.

Well worth the read, and can be checked out thru the TTGMS Library by sending an email to Amy at Jayhawk1072@gmail.com

Hope you all will attend our next to last meeting for the year November 17, please arrive by 7:15, meeting starts at 7:30. We will have elections to be followed by our program which will be a U-Tube video on Picture Jasper. (maybe even two). If you have examples of picture jasper, please bring them so we can have a closer look! The last meeting of the year is our Annual Dinner to be held at The Viking December 1st, where we will swear in the Officers. See the note from Chuck Curtis about our next field trip! Hope to see you all there. Cinda



Our New Members are:
Anita McKinney
Isaac McKinney
Timothy & Dawn Vice
Clifford & Sherry Hill

Rainbow Hematite

Rainbow Hematite is found in an iron mine near the city of Belo Horizonte in the Brazilian state of Minas Gerais. Scientifically it could be described as iridescent specular hematite. Specular simply means mirror-like

and describes the sparkle that the mineral gives off as the light reflects from the myriad microscopic crystal faces of the hematite as the specimen is turned in the sun.

The material is completely natural, has mot been altered in any way, and is believed to be color stable. It was found in a vertical five-foot wide vein running about thirty feet up a face in the iron mine. The exact cause of the iridescence is not known, but it is known that it is selectively oriented on hematite. Scanning electron microscope photos show that some faces of the microscopic hematite crystals, that comprise the specimens, contain a small but significant concentration of phosphorus and aluminum. Other faces of the hematite



crystals are apparently unaltered, still highly reflective but without the rainbow colors. The material also has substantial magnetic components, probably caused by intermixed grains of magnetite. Further studies at the California Institute of Technology may eventually discover the cause of the iridescence.

(Source: A Reprint from the Drifter April 2004)



Join us for our annual Christmas dinner, Friday, at 6 p.m., December 1, 2023 at the Viking Grille, 4731 NW Hunters Risge Circle, Topeka, KS 66618. See their menu at www.vikingsgrille.com/menu

Take HYW 75 north to 46th St., go half way around the first round-about and head north until you see the Viking Grille. Spouses-boyfriends-girlfriends are welcome!

TTGMS General Meeting Minutes October 27, 2023

The Topeka Gem & Mineral Society general meeting was called to order by Brad Davenport on October 27, 2023. Harold Merrifield reported we have a total of 32 present. 5 guests were included in the total. Door prizes were awarded.

Millie Mowry gave the Treasurer's report and reported on our annual show. We had a total of 814 paying guests through the doors for total admissions of \$4,040.00 (sales taxes due aprox. \$346.). The Scholarship table raised \$365.80 which will be sent to the AFMS Scholarship Foundation. Raffle raised \$402.00, Wheel \$70.00, Silent Auction \$737.80, Books \$122.25, T-shirts (at the show) \$175.00 and Donations. We were short a dealer or two, but came out ahead. Thanks to all who helped!

The Publicity committee will meet November 8 at 6:30 at the Elmont UMC. We will be discussing plans for next year's theme for our show. Please join us with idea's for next year! Contracts for dealers will go out in January. We hope to make a plan so we can get t-shirts ordered early to help advertise for next year.

Junior Rockhound's will meet November 2, class is 'World in Miniature'. Brad will present his 'dog & pony' show to an after-school group at Lowman Hill that day also.

Shop has been well attended by lots of new members. We hope that many of you come join us. Brad is considering adding another class on Saturday's so the juniors can attend. Please let us know if you are interested.

November meeting is early 3rd Friday on the 17th. We will be voting for Officers for the 2024 year. All current Officers have agreed to continue and were listed in last month's The Glacial Drifter. If you are interested in running for a position, there will be an opportunity for nominations from the floor. You are also welcome to attend the Board meetings next one is November 10, to see what they are about.

Since Stacy Haug was on vacation, the minutes are not as complete as her report. The meeting was adjourned to our program on Mineral Identification presented by our new member Dr. Tambra Eifert, professor at Washburn University.

Respectfully submitted – Cinda Kunkler

Topeka Gem & Mineral society, Inc. Scholarship Report 2023-2024 Kansas State University

Letter from Fall 2023 recipient:

Primarily, this scholarship will make it easier for my family and me to pay for the rest of my schooling here at K-State. I chose K-State because it felt like home. Originally, I was planning on going to KU, but my college visit there felt off. When I went to K-State, although Manhattan is about 10 times larger than my hometown, it felt like home. The people seemed friendly and everyone seemed close and interested in welcoming me.

I think what drew me to geology was the big history aspect of the study. By looking at the rocks and the landscape you can create an image of how the earth looked at another time. You can see how a sea advanced and retreated across the land or how the course of a river changed as time went on. These things have always fascinated me and I'm excited to work in the field.

I've very much enjoyed the clubs I've been a part of. I feel like some of the best friendships I've ever made started in the clubs. I've also really enjoyed my geology classes here. My favorite one was Dr. Goldberg's stratigraphy and sedimentology class. I like Dr. Goldberg as a professor and the material was very interesting to me.

Thank you so much for your contribution to the K-State geology department scholarships. It really helps us to pursue careers that interest us and I'm so honored that you would continue to support the students of the department through your generous giving.

Sincerely, Isaac Kubacka, Junior, Garnett, KS College of Arts and Sciences, Major: Geology

Cerussite

By Eric Fritzsch (as published on LGMC's Facebook feed)

Cerussite is one of the mineral species that I like. One of the habits that I like in cerussite is that it often forms cyclic twins. Cerussite will frequently twin at 120 degrees to other cerussite crystals forming a snowflake pattern seen in

this specimen. Other good cyclic twinning minerals include chrysoberyl, chalcocite and ice. Snowflake crystals are also commonly cyclic twins. Because it is a lead mineral, it is fairly dense for its size or has a high specific gravity. It's specific gravity is

roughly 6.55 or more than twice that of quartz. You'll often find cerussite growing on or associated with galena,

another lead mineral.

The word cerussite comes from the Latin word for white lead (cerussa) and people have been making white lead

(hydrocerussite or cerussite with a couple OH anions) for over 2,300 years. They used to make hydrocerussite in Omaha. Lead smelted from galena was combined with vinegar to create hydrocerussite. Hydrocerussite is white and was added to paint to make it white (so called "lead paint"). It was a big

business in Omaha in the 19th century and much of downtown Omaha is polluted because lead smelting and

hydrocerussite production. Omaha is either the largest or one of the largest EPA superfund sites due to lead contamination in residential soils. Pictured is a large specimen of cerussite from my collection. It was recently collected in Mindouli, Congo, where some really neat specimens



are coming from these days. Excellent specimens of cerussite have also come from Tsumeb, Namibia and elsewhere. Is there danger in handling this specimen? No, not really. Everyone should exercise good care and hygiene when handling mineral specimens. I almost always wash my hands before handling mineral (to avoid transferring oils to the specimen) and after (to wash off any specimen or dust). You need to be mindful of crumbs, dust, and other small fragments. If you don't need to handle the specimen, then perhaps you shouldn't. It also reduces the risk of breaking it or dinging it.

A good practice is not to eat or drink around your collection. I avoid food in my collection because it can also attract pests. Source: Pick & Shovel Nov 2023

Here Are Just A Few Of The Rocks, Minerals and Metals That Affect Our Lives Every Day. **Kaolinite**

Kaolinite is a very fine, white clay used as a filler in many products, for coating pages in magazines and newspapers to prevent ink from running, and as a whitener and abrasive in toothpaste.

Limestone

Limestone is used as dimension stone in buildings and as a component of cement which is used in the construction of everything from homes and sidewalks to bridges and skyscrapers. It is composed primarily of calcium carbonate which is The primary ingredient in such things as anti-acid tablets and liquids we all require from time to time for an upset stomach.

Lithium

Lithium compounds are used in ceramics and glass; in primary aluminum production; in the manufacture of lubricants and greases; rocket propellants; vitamin A syntheses; silver solder; batteries; medicine.

Magnetite

An ore of iron which is used in making steel, nails, kitchen appliances, furniture, tools, bridges, buildings, automobiles, construction equipment, manufacturing machinery, highway construction, shipbuilding, trains, railroads etc. Picture what life would be like without steel! Powdered iron is used in magnets; high-frequency cores; auto parts; and as a catalyst. Radioactive iron (iron 59) is used in medicine and as a tracer element in biochemical and metallurgical research. Iron blur is used in paints, printing inks, plastics, cosmetics and paper dyeing, Black iron oxide is used as a pigment and in polishing compounds, medicines and magnetic inks.

Con't on page 8

Malecite

USES: Copper is used in making most of the wiring used to carry electricity in our homes, automobiles, electronic equipment, and appliances. It is also used to provide shaded of green in cosmetics and was used by primitive peoples for making paint.

Marble

Used as dimension stone in building construction and for making decorative items such as pillars, floor and bath tiles, table tops etc.

Mica

Micas commonly occur as flakes, scales or shreds. Sheet muscovite (white) mica is used in the manufacture of electronic insulators. Ground mica is added to paints and cosmetics to add "sparkle", in joint cement, as a dusting agent, in well-drilling muds as well as in plastics, composition roofing, rubber and welding rods.

Molybdenite

An ore of molybdenum which is alloyed with steel and other metals to improve hardness, strength and resistance to abrasion and corrosion. It is used in the manufacture of jet engines, in oil refining, in lubricants and as pigmentation in dyes, inks and paint. As a pure metal, molybdenum is used as filament supports in light bulbs because of its high melting point -4,730 degrees F – in metalworking dies and furnace parts.

Perlite

Perlite is used in roof insulation boards as a filler, in aids and for horticulture applications.

Platinum Group Metals

The Platinum Group Metals (PGM) Includes platinum, palladium, rhodium, iridium, osmium and ruthenium. They commonly occur together in nature. Platinum is used principally in catalytic converters for the control of automobile and industrial plant emissions but is also used in making jewelry. PGM metals are also used in catalysts to produce acids, organic chemicals and pharmaceuticals as well as in bushings for making glass fibers used in fiber-reinforced plastic, in electrical contact, in capacitors and in resistive films used in electronic circuits. They are also used in dental alloys for making crown and bridges.

Phosphate

Phosphate rock is used to produce phosphoric acid for ammoniated phosphate fertilizers, feed additives for livestock, elemental phosphorus, and a variety of phosphate chemicals for industrial and home consumers. Phosphoric acid also helps provide the "tingly" taste you experience when drinking many soft drinks.

Potash

Potash is a carbonate of potassium used as a fertilizer, in medicines, in the chemical industry and to produce decorative color effects on brass, bronze and nickel.

Pvrite

Pyrite is used in the manufacture of sulfur, sulfuric acid and sulfur dioxide. Pellets of pressed pyrite dust are used in the recovery process of iron, gold, copper, cobalt and nickel. It is also used to make inexpensive jewelry.

Pyrolusite

An ore of manganese, a metal used in the steel making process to help provide different characteristics (such as hardness, heat resistance etc.) which are preferred and often required for some specific applications of steel.

Rare Earths

Rare Earth Elements (lanthanum, cerium, praseodymium, neodymium, promethium, samarium, europium, gadolinium, terbium, dysprosium, holmium, erbium, thulium, ytterbium and lutetium) are primarily used as catalysts in petroleum fluid cracking processes. They are also used as metallurgical additives, and in ceramics and polishing compounds, permanent magnets and phosphors.

Silica

Your daily contact with silica is most often in the form of an anti-caking agent when you use a powdered form of foods such as milk, chocolate, sweeteners etc. For example, those little packets of sweetener you use for your coffee instead of sugar are as much as 95% silica sand – ground so finely that is will dissolve. Silica is also used in the manufacture of computer chips, glass and refractory materials, ceramics, abrasives, water filtration processes, as a component of hydraulic cements, as a flatting agent in paints and as a thermal insulator. It is also used as a filler in the making of paper.

Silver

Without silver, you could not take a single picture with your camera. Besides it is use in photography, silver is also used in chemistry, jewelry, in electronics because of its very high conductivity and as currency in the form of coinsusually as an alloy. Other uses included in lining of vats and other equipment for use as chemical reaction vessels and in water distillation processes. It is also used as a catalyst in the manufacture of ethylene, in making mirrors, as plating for flatware, dishes and tea sets, and in dental, medical and scientific equipment.

(Source: Rockytier Dec 2012 Balance of article will appear in the Dec Issue of the Drifter)