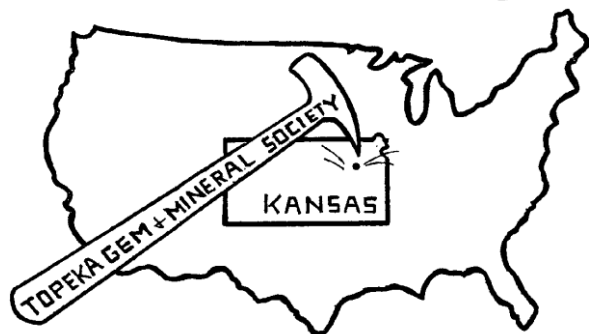


The Topeka Gem and Mineral Society, Inc.
 1934 SW 30th St. Topeka, KS 66611
 Rock2Plate@aol.com

THE GLACIAL DRIFTER



www.TopekaGMS.org 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. 67, No. 7
 July 2024



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.

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

2024 OFFICERS AND CHAIRS

President	Brad Davenport	379-8700	Cab of the Month	Donna & Russell Hedge	620-660-1651
1 st Vice Pres.	David Dillon	221-4315	Field Trip Coord.	Chuck Curtis	286-1790
2 nd Vice Pres.	Cinda Kunkler	286-1790	Publicity	Donna Hedge	620-660-1651
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	Dennis Hippe	230-6729
Librarian	Cinda Kunkler	286-1790	Show Case Coordinator	Cinda Kunkler	286-1790
Web Master	Chad Skinner	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. JULY/2024

Brad's computer is out of sorts, so no words of wisdom this month.

Reminders:

1. *The Shawnee County Fair, July 24 – 28, 2024, **WE NEED HELP!!!!** Contact Cinda. It is at the Stormont Vail Expo Center.*
2. *The T-shirts should be ready for pick-up at the next meeting.*
3. *At the August picnic, after we eat, we will be stuffing the grab bags for the show. It goes fast with h everyone's help.*
4. *Cinda requested that if you have a fan that runs quietly that you bring it to the picnic as it is warm in the meeting room.*



UP Coming General Meeting Picnic

Hello ALL! Summer is here, this month (July) is our 'picnic' pot luck dinner, 4th Friday as always, but starting at 6:30. Bring A covered dish or two to share, your own table service and drink. **If you have a fan that runs quietly, please bring it as it is warm in the meeting room and it will help circulate the air.** Sign-up sheets will be available for you to sign up for the show. We need everyone's help. Hope to see everyone there.

Cinda 2nd VP.

After the picnic dinner in August, we will be stuffing grab bag for the show. It won't take long under Cinda and Millie's guidance to stuff 600 + bags. If you have never done it, come and see how it is done.

TTGMS Event Calendar

July 2024			AUG 2024		
1	M		1	T	Jr RHDS 6 p.m. at FC Church 1701 SW Collins
2	T		2	F	
3	W		3	S	
4	T		4	S	
5	F		5	M	
6	S		6	T	Brad's Shop Open 6-10 pm
7	S		7	W	
8	M		8	T	
9	T		9		
10	W		10	S	
11	T		11	S	
12	F		12	M	
13	S		13	T	Brad's Shop Open 6-10 pm
14	S		14	W	
15	M		15	T	
16	T	Brad's Shop Open 6-10 pm	16	F	
17	W		17	S	
18	T		18	S	
19	F		19	M	
20	S		20	T	Brad's Shop Open 6-10 pm
21	S		21	W	
22	M		22	T	
23	T	Brad's Shop Open 6-10 pm	23	F	PICNIC TIME - Mtg. Gather 6:15 p.m. eat at 6:30 pm FC Church 1701 SW Collins
24	W	Shawnee CO Fair setup 24-28th	24	S	
25	T	At Stormont Vail Expo Center	25	S	
26	F	Shawnee CO Fair PICNIC TIME - Mtg. Gather 6:15 p.m. eat at 6:30 pm FC Church 1701 SW Collins	26	M	
27	S	Shawnee CO Fair	27	T	Brad's Shop Open 6-10 pm
28	S	Shawnee Co Fair	28	W	
29	M		29	T	
30	T	Brad's Shop Open 6-10 pm	30	F	
31	W		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:

Dennis Hippe at: go.purple@hotmail.com



Next Class: Aug 1, 2024 Gold Panning – Will Gilliland

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

Rocks for Juniors

Reminder to bring any extra rocks you might have that you would like to donate to the Junior Rockhound Club. We are trying to let the kids go on a "field trip" after class. Some of them really don't have much of a chance to add to their collection. We will have a table set up at the back of the room that they can come to and let them each pick out four rocks that you have graciously donated. This way they can add to their collection. Thank you so much for your contributions. This wouldn't be possible without you.

Dennis Hippe

Dillon's 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

[1st quarter's rebate amounted to \\$50.64.](#)

[2nd quarter's rebate amounted to \\$57.98 Thank you 12 people](#)




The Library has moved.

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.

The library has currently moved to the church storage area, contact Cinda if interested in checking out a book.

We are still in need of a lot of UPC labels
From Best Choice products. Bring them in to Cinda
So, we can get our rebate.





FIELD TRIPS

Howdy Field Trippers,

No word from Chuck on a field trip for this month.

[Center for Kansas Studies Saturday July 6, 2024](#)

Such a HUGE turnout at [Topeka & Shawnee County Public Library](#) for today's geode event taught by CKS Fellow and retired Washburn Geologist Will Gilliland! It was so fun seeing so many kids excited about geology. We love what Will said about how when you open a geode, you are the first to see that particular Earth's creation.

[Washburn University College of Arts and Sciences; Washburn University Physics and Astronomy](#)



The Topeka & Shawnee County Library hosted the geode cutting and ice cream event expecting up to 100 people, but 530 showed up to have a hand at cracking a geode and taking home a half a geode. There was 7 tables set up and safety glasses were worn by all that cracked a geode, thanks to Brad Davenport, who saw that rule was carried out.



Such a fun, exciting day for everyone involved.

Publicity News:

We are planning on attending the 4-H air at the Stormont Vail Event Center. Set up will be on the 24th and we will have a table without famous Brad Davenport doing his magic, teaching all about rocks to the youngsters. We will be doing some rock painting also. Anyone who is interested please sign up. We will be glad for your help for the 24th through the 28th contact Cinda.

I talked to Ed Ramirez at the Embroidery Plus shop. He is still working on the T-shirts, and already has a bunch done. He will be finished on June 23rd for Millie and I to pick up. I haven't seen them yet but am stopping by tomorrow for a look. We want to be able to wear them at the 4-H Fair that week.

We discussed the upcoming Gem and Mineral Show. We still have 15 Vendors signed up, and Millie expects more. She checked on the possibility of having an ATM but was told there is no Bank in Topeka that rents them out. We still need Demonstrators so if you have an interest in that, please let us know. We also talked about setting up training for the Ticket Takers, streamlining the process to keep better track of those coming through the door. We hope to use the data to help us plan a better marketing strategy, etc., for the next year's show.

Donna Hedge

volcanic Ash Preserved Trilobite Fossils Providing Previously Unseen Details

The animals were buried in modern-day Morocco after volcanic ash blanketed them underwater more than 500 million years ago. This preservation created 3D fossils that revealed several new features of trilobites, researchers reported Thursday(27th) in the journal Science. Their summary for Science is quoted below.



“Knowledge of Cambrian animal anatomy is limited by preservational processes that result in compaction, size bias, and incompleteness. We documented pristine 3D anatomy of trilobites fossilized through rapid ash burial from a pyroclastic flow entering a shallow marine



environment. Cambrian ellipsocephaloid trilobites from Morocco are articulated and undistorted, revealing exquisite details of the appendages and digestive system. Previously unknown anatomy includes a soft tissue labrum attached to the hypostome, a slit-like mouth, and distinctive cephalic feeding appendages. Our findings resolve controversy over whether the trilobite hypostome is the labrum or incorporates it and establish crown-group euarthropod homologies in trilobites. This occurrence of moldic fossils with 3D soft parts highlights volcanic ash deposits in marine settings as an underexplored source for exceptionally preserved organisms.” If you have access to read the full article you can do so here: <https://www.science.org/doi/10.1126/science.adl4540> And it is also featured in the Smithsonian Magazine here: [https://www.smithsonianmag.com/smart-](https://www.smithsonianmag.com/smart-news/volcanic-ash-preserved-trilobite-fossils-in-surprising-detail-at-prehistoric-pompeii-180984629/)

[news/volcanic-ash-preserved-trilobite-fossils-in-surprising-detail-at-prehistoric-pompeii-180984629/](https://www.smithsonianmag.com/smart-news/volcanic-ash-preserved-trilobite-fossils-in-surprising-detail-at-prehistoric-pompeii-180984629/); via TRMS T-Town Rockhounder 7-2024.

Dendrites vs Moss Agates: Orbicular Jasper vs Polka Dot Agate



We are usually delighted but not surprised to find inclusions in crystals, eg., quartz of one color or another, rutile, sagenite 'stars'. The appearance of inclusions in microcrystalline varieties of quartz, however, have a mysterious ambiance that brings out the *name-making* propensities of collectors. When our vision of inclusions is obscured, our imagination takes hold. Chalcedony (clear to cloudy), agates (clear but usually banded), and jasper (opaque) are all variations of silica oxides, with hardness between 6 and 7, which makes them very suitable for polishing. They may all have included material and the nature of the inclusion is dictated by the composition of the host rock material and the manner of rock formation. Dendritic chalcedony and moss agate are terms or names frequently applied to the same material. They are basically similar, but dendrites can form not only in chalcedony and agate, but also on limestone and soapstone and some sandstones. The dendrites, so called from the Greek *Dendron*, or tree, are branching structures of mainly manganese and iron oxides, in or on the host material. Dendrites occur in many places in the world, basically wherever water rich in oxides flows across rocks. The dendrites form on a surface and are two dimensional, like snowflakes or frost crystals on a windowpane. If the rock is chalcedony, the dendrite forms on the surface, but more chalcedony may entomb it. The dendrites are usually earthy, black, brown, reddish, but near Four Corners, in the eastern Mojave, near the junction of highway 58 & highway 395, rockhounds reputedly find blue. The 'mosses' of moss agate, not organic material at all but *chlorite* or *celadonite*, are visible impurities in the agate. Scientists attempt to distinguish between the two by determining, if possible, whether the dendrite/ moss or the mineral rock formed first. The moss forms while the chalcedony is still gel-like and can then form three dimensional shapes within the stone. Moss agate, also widely distributed, can be a variety of colors, green, black, white, yellow, red, orange, and tan. It is widely used in jewelry, and polishes beautifully, if care is taken not to cut into and pluck the moss. Multi-colored balls can appear in rhyolite flows. Rhyolite is a fine-grained igneous rock that, if it contains sufficient silica to take a brilliant polish, and is sometimes called jasper. Orbicular material usually appears as a mass of rhyolite that has silicated. As the rhyolite cools, sometimes excess silica starts to precipitate out of the magma, forming spherical balls. The ball shape is the form that any extremely concentrated silica (cristobalite) takes, as opposed to the crystal from in dilute concentrations. However, any material that by composition or consistency is immiscible (not mixable) with the host magma will also form balls. Regional metamorphism can also form orbicular jaspers. We hear names like Rainforest Jasper from Australia, Leopardskin Jasper from Mexico, Poppy Jasper from California, and Ocean Jasper from Madagascar. We may find one color surrounding another, or bands of balls, or veils of lighter colors staining the background. Polka Dot Agate from Oregon, has iron rich spheres floating in a snowy extremely fine-grained jasper, along with veils of golden brown. This material is so fine-grained it is almost chert, and resembles porcelain. The rockhound distinction of jasper and chert is; if its a t t r a c t i v e , its j a s p e r ; if its d u l l , its c h e r t . Some jasper represents replaced limestone or dolostone, some occurs as nodules, and sometimes it is part of the *gangue* of mineral deposits by hydrothermal or metasomatic processes. Agates are *translucent* and usually banded, with subvitreous luster; jasper is *opaque* with a dull to pearly luster; to a rockhound *jasp-agate* is a fine mixture of these beautiful oxides.

Source: Calumet Gem, via PGGGS Petrograph 6/03, via Golden Spike News 7/06 Via Strata Gem