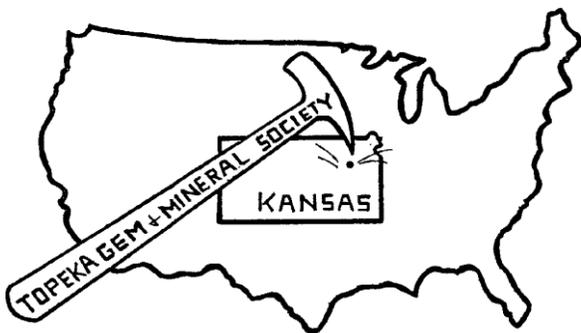


The Topeka Gem and Mineral Society, Inc.  
 1934 SW 30<sup>th</sup> St. Topeka, KS 66611  
 Rock2Plate@aol.com

# THE GLACIAL DRIFTER



[www.TopekaGMS.org](http://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. 68, No. 6  
 June 2025



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: 4<sup>th</sup> 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 30<sup>th</sup> St, Topeka, KS 66611.**

[www.TopekaGMS.org](http://www.TopekaGMS.org)

## 2025 OFFICERS AND CHAIRS

President	Cinda Kunkler	286-1790	Cab of the Month	Donna Hedge	620-660-1651
1 <sup>st</sup> Vice Pres.	David Dillon	221-4315	Field Trip Coord.	Chuck Curtis	286-1790
2 <sup>nd</sup> Vice Pres.	Desiree Gardner	221-8862	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](mailto:rock2plate@aol.com).  
Permission is granted to reprint articles only if proper credit is given to the author, Glacial Drifter and the date.

Editor's Note: There was not a Drifter for the month of May, 2025.



### *June Program*

In addition to the pot luck dinner at the monthly meeting for June, we will be having a rock swap/sale. Bring any rock, fossil or creation from the shop you have that you'd be interested in selling to or trading with club members. This will be slightly different than the silent auctions we do- proceeds will be kept by those selling their items, unless you'd like to donate to the club of course!

For the pot luck dinner, please bring a covered dish to share as well as your own plate/cup/utensils. Remember, we gather at 6:15 and start eating at 6:30 for the summer pot luck meetings!

-Desiree, 2nd Vice President TGMS

## PAUA, THE NEW ZEALAND OPAL

The paua shell occurs only in New Zealand. It is the same as abalone, but possesses a beautiful bright colors, blues and greens and pinks and yellows and lavenders. It is necessary to obtain a license in New Zealand to even own or keep these shells, much less export them.

There are basically 2 grades of paua shell – thick and thin. The thick shells are old large shell, called “carvers” as they are used for carving. Some of the shells are up to 10mm thick. Thick shells tend to be on or near limestone type deposits. The thin shells are generally from the North Island, recurring in only a few upper South Island sites. They are thinner due to a lack of feed and limestone in the water. The thin shells were the big money shells because of their use in inlay work in the Asian markets. The thin shells have great color but are usually disregarded by jewelers because they are too thin to work into cabochons.

The shells cannot be worked with water, as they produce chlorine gas, instant poisoning. Working dry with a vacuum unit to remove dust is the best way. The white lime-like outer coating must be removed from the shell and the shell soaked in hydrochloric acid to bring up the color. The shell is normally sliced just above the thick rim, the inside of the shell coated with thick black epoxy to strengthen it for cutting into strips, then squares and then cabs. The cabs are sanded with 180 and 320 grit belts, cleaned and sealed with clear nail polish. Unfortunately, the beautiful paua shell is frequently dyed for sale, losing its remarkable colors.

(Source: a reprint from The Drifter May 2004)

# TTGMS Event Calendar

JUNE 2025			JULY 2025		
1	S		1	T	Shop Classes are open 6-10pm at Brad's
2	M		2	W	
3	T	Shop Classes are open 6-10pm at Brad's	3	T	
4	W		4	F	
5	T	Jr RHD's Gather at 6 Meeting at 6:30p	5	S	
6	F		6	S	
7	S		7	M	
8	S		8	T	Shop Classes are open 6-10pm at Brad's
9	M		9	W	
10	T	Shop Classes are open 6-10pm at Brad's Casting Class 6 p.m.	10	T	
11	W	Casting Class 6 p.m.	11	F	Jr RHD's Gather at 6 Meeting at 6:30p
12	T		12	S	
13	F	NO BOARD MTG in SUMMER	13	S	
14	S		14	M	
15	S		15	T	Shop Classes are open 6-10pm at Brad's
16	M		16	W	
17	T	Shop Classes are open 6-10pm at Brad's	17	T	
18	W	Publicity Meeting 6:30 p.m. F.C. Church	18	F	
19	T		19	S	
20	F		20	S	
21	S		21	M	
22	S	Dover Heritage Day 9-2 pm	22	T	Shop Classes are open 6-10pm at Brad's
23	M		23	W	
24	T	Demo at Ward Meade 11-12 am: Shop Classes are open 6-10pm at Brad's	24	T	
25	W		25	F	Regular Mtg - Mtg. Gather 6:15 p.m. POT- LUCK Picnic eat at 6:30 pm FC Church 1701 SW Collins
26	T		26	S	Field Trip: Mike Meier's sandbar. See below
27	F	Regular Mtg - Mtg. Gather 6:15 p.m. POT- LUCK Picnic eat at 6:30 pm FC Church 1701 SW Collins	27	S	
28	S	Field Trip: Midwest Concret – see below	28	M	
29	S		29	T	Shop Classes are open 6-10pm at Brad's
30	M		30	W	
			31	T	

## 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](mailto:jimbaer73@gmail.com), the Monday before class to let Jim know you will be there. For wire wrapping contact Millie Mowry at 785-267-2849 or email [rock2plate@aol.com](mailto:rock2plate@aol.com), as she holds class at her house.

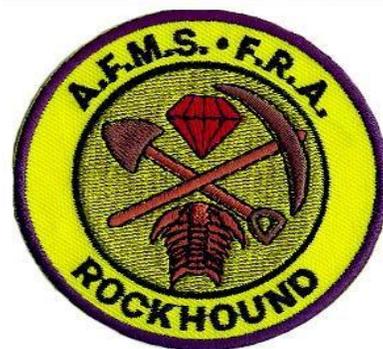
## JR ROCKHOUND Classes & Reminders

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](mailto:go.purple@hotmail.com)



Next Class: July 11, 2025 Special Effects, Brad Davenport

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

## *The TTGMS Library*

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.

### 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](http://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](mailto:DCR@dillonstores.com)

(You do not lose your fuel points).

[1<sup>st</sup> Quarter 2025 14 households TTGMS Rebate \\$39.40](#)

Greeting Fellow Rock Hounds,

The first one is for Saturday June 28<sup>th</sup> to the Midwest Concrete Materials quarry between Perry and Lecompton just north of the Kansas River. We will meet at the quarry at 10:00 am.

The second one is for Saturday July 26<sup>th</sup> to Mike Meier's sandbar. Like last time we will meet at the Park in Tecumseh. We will depart from the Park convoy style at 10:00 am sharp so be sure to be there early enough for Sign-In and Group Photo.

Look forward to seeing you all. Chuck Curtis, Field Trip Coordinator

Cab of the Month of MAY 2025



Shirley Schulz, Lapidary Art, Crystal Blue Valley Agate tree on Chalcedony base.



James Davis, dyed agated Knife



Larry Hendesty, Specimen polished Serpentine Stone

Cab of the month for April 2025



Doria Skinner, Sapphire Sky Agate



Cathy Lewis, Lapidary Art, Beaded Wire Tree on Petrified Wood



Doria Skinner, Jewelry, Mescalero Jasper earrings

No picture for Kim Wasson, who won the Specimen Category for a pretty Fluorite Specimen.

## WHERE DO OPALIZED CLAMS COME FROM?

Opal clams predominately come from an area in Coober Pedy Opal fields. Some areas produce larger amounts of clams and other very few. Not only clams are available, mussels and a wide variety of other shells and fossils come from this vast opalized area. Unfortunately, most of the mussels are not opalized but there are lovely specimens of mussel clusters currently available from many Coober Pedy miners.

The majority of clams shells are opalized, however only a small percentage contain gem opal. Those shells that so contain top gem opal were in the past sold and cut for jewelry use with no regard to the fossil value. Only recently has the fossil value of a clam become a saleable feature. But then not many [people] will pay the high price asked for a top gem opal clam as a specimen when compared to the money one could obtain from cutting the clam. What many people do not realize is that it is illegal to remove from Australia a fossil without consent from the government agency responsible for land care/conservation. If the fossil is of significant value to Australia as a specimen or a museum wants it, you are out of luck as far as exportation goes.

Once you start to carve a clam in order to polish it, you do risk lowering the value of the item. Tricks are to follow the contour of the shell line or what you consider to be the contour. Some have a sand type of material mixed within the opal making it difficult to polish. Once breaking through into this soft sandstone you may have destroyed what value the clam had. It takes time and many shells to gain the experience to know just where to grind, because if you do cut it wrong the value will plummet. I have seen a beautiful shell, all top Crystal Opal, sell for over \$300,000US, which would have been very cheap. There are only so many of these clams available. If you own one, then consider yourself lucky. There will not be many more produced.

In talking to miners these days, clams are mentioned as “oh, I only got 1 this year” or “I only got 15 or so this year” so you can see, depending upon the miner and of course the area being worked, most obtain 1 or 2 quantities of each year only. Other opalized turret type shells are talked about in 1 every so many years.

Another item worth collecting from this area is the belemnites. These come in white opal, Honey opal, and gem crystal opal. Very pretty and make wonderful jewelry items. Gain, just as rare if not more so, than the clams. The latest find I had in Africa was an opal deposit where after carving an egg-shaped stone it was apparent that we were indeed carving an egg, an opalized egg. It would be the size and shape of a hen's egg. Throughout the Australian opal fields from Coober Pedy to Andamooka to Lightning Ridge to Quilpie areas, there are many different fossils of opal content. These are all rare and well worth collecting as over time these can only but become scarce and the value can only but increase.

(Source: a reprint from the Drifter April 2004)

## ALABASTER

Have you often wondered what alabaster is? We have heard the expression “pure as alabaster” and about the “gleaming alabaster cities undimmed by human tears” in “America the Beautiful”. Chemically it is hydrated calcium sulphate. It is a form of gypsum and comes massive, non-crystalline and translucent. The alabaster of the ancients was really marble. True alabaster can be told from marble by applying acid, and if it doesn't bubble, it is alabaster. It does occur in a pure white form and is used for carving, as it is soft and takes a good polish. Sculptors use it for statues and vases and other are objects. It is also found in pink, yellow, and one kind has fine dark lines running through it like spider webs.

The word “alabaster” comes from Latin meaning “perfume jar” which ancient Egyptians made all kinds of, as it was easy to shape and seal. The Egyptians also used it for building blocks and small ornaments.

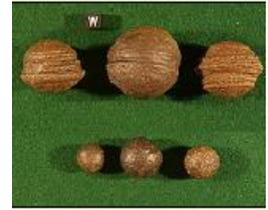
Alabaster is found in beds mixed with red sandstones and marls in beds of salt deposited years and years ago. It is found in England, Michigan, Tennessee, Colorado, and large deposits are found in Italy. It dates back to the Miocene and Pliocene eras.

(Source: a reprint from the Drifter August 1984)

## Iron oxide concretions (Moqui marbles)

Moqui Marbles, hematite concretions, from the Navajo Sandstone of southeast Utah. Scale cube, with "W", is one centimeter square.

The Navajo Sandstone is also well known among rockhounds for its hundreds of thousands of iron oxide concretions. They are believed to represent an extension of Hopi Native American traditions regarding ancestor worship ("moqui" translates to "the dead" in the Hopi language). Informally, they are called "Moqui marbles" after the local proposed Moqui



native American tribe. Thousands of these concretions weather out of outcrops of the Navajo Sandstone within south-central and southeastern Utah within an area extending from Zion National Park eastward to Arches and Canyonland national parks. They are quite abundant within Grand Staircase-Escalante National Monument.[4][5] The iron oxide concretions found in the Navajo Sandstone exhibit a wide variety of sizes and shapes. Their shape ranges from spheres to discs; buttons; spiked balls; cylindrical hollow pipe-like forms; and other odd shapes. Although many of these concretions are fused together like soap bubbles, many more also occur as isolated concretions, which range in diameter from the size of peas to baseballs. The surface of these spherical concretions can range from being very rough to quite smooth. Some of the concretions are grooved spheres with ridges around

their circumference.[4][5]

The abundant concretions found in the Navajo Sandstone consist of sandstone cemented together by hematite ( $\text{Fe}_2\text{O}_3$ ), and goethite ( $\text{FeOOH}$ ). The iron forming these concretions

Interior of a Moqui Marble came from the breakdown of iron-bearing silicate minerals by weathering to form iron oxide coatings on other grains. During later diagenesis of the Navajo Sandstone while deeply buried, reducing fluids, likely hydrocarbons, dissolved these coatings. When the reducing fluids containing dissolved iron mixed with oxidizing groundwater, they and the dissolved iron were oxidized. This caused the iron to precipitate out as hematite and goethite to form the innumerable concretions found in the Navajo Sandstone. Evidence suggests that microbial metabolism may have contributed to the formation of some of these concretions.[15] These concretions are regarded as terrestrial analogues of the hematite spherules, called alternately Martian "blueberries" or more technically Martian spherules, which the Opportunity rover found at Meridiani Planum on Mars.[4][5]

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Field Trip Phobias  
By Dee Grover, FGMS Member

This next amusing play on words is from Lithosphere, Feb/98 from The Fallbrook Gem & Mineral Society, Inc  
These phobias and resulting fears will really upset your enjoyment of field trips:

Phobia \*\*\* Fear

Batophobia Walking  
Eagophobia Work  
Kyphobia Stooping  
Mysophobia Dirt  
Ombrophobia Rain  
Sitophobia Food  
Thixophobia Touching  
Trapophobia Making Changes  
Vestophobia Clothing

Then there is the phobia I couldn't find - the fear of spelling long words. Here is a word to test anyone's phobia (it's the name of a hill in New Zealand):

- Taurapatawkatanfhangakouauamateopokaiwhenuakitanatatau

(And the Lithosphere editor's note: And there's always the disease some miners get from inhaling very fine particles of silica dust:

- Pneumonoultramicroscopicsilicovolcanoconiosis

(Footnote) These dust particles must not be larger than 5 microns in size and will penetrate through the finer air passages and reach the actual breathing spaces where the absorption of oxygen from the air takes place. With sufficient time and concentration, death can result \*\* so says Encyclopedia Britannica.

Source: WGMS The Rockhounder, May 2019

Don't forget the Club Pot Luck Dinner on June 27<sup>th</sup> at the church. Bring a covered dish, something to drink, your eating utensils, and come to have a good time.

