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. 5 May 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.

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	Brad Davenport	379-8700	Cab of the Month	Donna & Russell Hedge	620-660-1651
1st Vice Pres.	David Dillon	221-4315	Field Trip Coord.	Cole Collins	220-4027
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	Millie Mowry	267-2849	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. May/2023



Howdy All,

With Spring in full swing there are tons of activities going on. There are dozens of gem & mineral shows going on through the center of the country. If antiques and flea markets are more to your liking there are some huge one. Some are community centered while others follow entire highways across the state. Garden tours are in full flower. Baseball or soccer more in your ballpark? Whatever it might be, I hope you are taking advantage of this wonderful weather. It will be too hot too soon.

Last Saturday, some of our youth, their parents, some of our leadership and a bunch of 4-H families were hosted by our own Pat and Will on a toasty field trip. We first spent some time on a huge sand/ gravel bar on the Kaw east of town. Lots of cool stuff was collected. Our own Ruyi Schirer took top honors with the right half of a bison skull.

From there we went to Calhoun Bluffs for some fossils and ticks. It was getting pretty toasty by the time my knees requested rest. They were to then proceed to the North end of Wanamaker Road for some more fossil time. I bailed.

I visited the McPherson Swap & Show last Friday. There were two school bus loads of grade schoolers passing through. I so enjoy their glee and enthusiasm. Seemingly each kid had a few dollars in their paws trying to figure out which treasures could not be passed up. The game went into overtime cause, a few just were really struggling with their decisions. I on the other hand was flush with funds but did not spend a dime. What I did do was have some great visits with club members and vendors. Woodies BBQ of course was the last stop before leaving town.

Saturday the 13th is or was our big hunt with Kirby Marker. I hope the rain gods are kind to us. Brad



David S. Blakley, M.D. Jane Hanni LeeAnn Skinner

TTGMS Event Calendar

May 2023			June 2023		
1	M		1	Т	Jr RHDS 6 p.m. at FC Church 1701 SW Collins Pat Gilliland Fossils
2	Т		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	F	Board Meeting at Millie's 7 p.m.
10	W		10	S	
11	T		11	S	
12	F		12	M	
13	S		13	Т	Brad's Shop Open 6-10 pm—Millie / Gone
14	S		14	W	
15	M		15	Т	<u> </u>
16	Т	Brad's Shop Open 6-10 pm	16	F	
17	W	Publicity Meeting –Elmont Church 6:30 pm	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	General Meeting First Congregational Church 7:15 p.m. 1701 SW Collins Ave
24	W		24	S	Charles 7.75 p.m. 1701 BW Collins 71VC
25	Т		25	S	1/<
26	F	General Meeting First Congregational Church 7:15 p.m. 1701 SW Collins Ave	26	M	
27	S	1701 ST COMMS 1170	27	Т	Brad's Shop Open 6-10 pm
28	S		28	W	
29	M		29	T	
30	Т	Brad's Shop Open 6-10 pm	30	F	

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.

 $\underline{https://www.facebook.com/TopekaGMSJuniorRockhounds}$

To register for the Junior Rockhounds or any of the classes, email:

Jason Schulz at: Fleetcommander@att.net



Next Class: June, 2023, Fossils with 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.

We need your BEST CHOICE UPC Labels --

Bring them to the monthly meeting, and give them to Cinda Kunkler.



For those that cut at home, we have a new dealer that has requested we save our chips & broken pieces for

him this year. There will be a bucket in the cutting room at Brad's shop also for you to place the items in. Please bring them to Millie and I will get them to him.









Will Gilliland, will present the program at the May general meeting on the "Kansas Glaciers and What They Carried." This will be a very interesting program so you don't want to miss it.

JUNE, JULY and AUGUST, are the months that we have a shared pot-luck picnic, (indoors) at the church. Bring your favorite dish or 2 to share along with your own table service, & drink. NO Ants here!









Please try to arrive before 7:30 -- see you there! Cinda Kunkler, 2nd Vice

President & AFMS Chairman





MARCH'S CAB OF THE MONTH CONTEST







Harold Merrifield with a Pinolith, Doria Skinner, Crazy Lace Agate, Millie Mowry, Plumb Agate

Specimen of the Month with a Double sided



was won also by Harold Merrifield Smoke on Quartz specimen.

Interesting uses for Borax https://urbansurvivalsite.com/surprising-uses-for-borax/

Borax (also known as <u>sodium borate</u>) is a naturally-occurring mineral found in soil, plants, and even our own bodies.

Keep Mice Away

Sprinkle it along pathways and anywhere you see signs of mice. This will deter them. You can also sprinkle bait with borax. With any luck, one of them will bring it back to the nest and poison the others.

Clean Sinks and Counters

Put 1 tablespoon of borax and 2 tablespoons of vinegar in a spray bottle, then fill it up with hot water and add a few drops of dish soap. This makes a great all-purpose cleaner.

Many more hints found at the web site.



The Topeka Gem & Mineral Society has enrolled with the Community Rewards with Dillon's Store. To sign up for it, eligible participants shall be Plus Card holders and must have the card present when making a purchase. Purchases of gift cards, alcohol, tobacco, government assisted pharmacy expenses, postage stamps, Kroger CO. Stores gift cards, green dot prepaid reloadable products, MoneyPaks, 1-2-3- Rewards reloadable Visa prepaid debit card, Recharge cards, Am. Express gift Cards, Visa load gift cards, lottery & Promotional tickets, money orders, Western Union Fuel & sales tax are excluded form eligible purchases.

- 1. 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'.
- 2. You will have to re-register each year.

If you have any other questions email DCR@dillonstores.com

Eden Valley Fossilized Wood

Eden Valley fossilized wood was discovered in 1934 by Dr. Oliver Perry on the Hay Ranch, located in southwestern Wyoming, in what is known as the Green River Formation. The young forest flourished in the valley bordered by the Rocky Mountains and was killed where it stood during the Eocene Period epoch some 55 million years ago.

There had been sudden and great volcanic activity, and deep deposits of ash buried the trees without their being leveled by lava flows.

However, the volcanic ash washed away, and the trees were encased in a cement-like matrix. This happened again and again as the trees stood upright for millions of years.

Minerals gradually replaced the wood fibers, bark and charred cores. The fossilized Eden Valley wood carbonized, agatized and opalized – and is thus very unique.

Source: A reprint form The Drifter Oct 1985

THE BEST FIRST AID ITEM

One of the best FIRST AID items I have found is to carry a small container of ALOE VERA GEL along with you. It will stop sunburns, take the itch out of insect bites, and is very effective in helping small wounds to heal quicker. It is the best remedy of fever blisters (cold sores) that there is. As soon as you feel the first small swelling on the lip, put a dab of GEL on it. Add more for a few hours, it will disappear. If anyone suffers from sore gums, under your dentures, rub a little on the gums and also inside of the plate. No fooling, it is the best nature remedy.

Source: A reprint from the Drifter April 1984

Sagenite: The Mineral That Isn't

by Ray Lambert (from January 1981 P&S)

How to define this term was brought home to me the other day when a voice from on high said, "What is sagenite?" Was this a message from heaven? Not really. My eight year old daughter, who was recuperating from a virus in her upstairs bedroom, was looking through one of my books on agate. This seemed a reasonable question from a true bibliophile. (A connoisseur of books to the rest of us mortals.) The question should not have surprised me. Because of her reading habits, I have had to cancel some of our more risqué publications: Good Housekeeping, The Wall Street Journal, and the Lincoln Telephone Book.

Trying to explain what sagenite is, is difficult to anyone unless they are a real agate nut like myself. (Some people just consider me to be a nut that is agatized.) In trying to come up with an answer for an eight year old, I discovered how easy it is to know what something is and how difficult it is to teach it to others. If you really want to learn, try teaching. This article is basically a refresher for us old timers and an eye opener for the novice who would like to know more about inclusions in agates.

In "The Book of Agates", Leland Quick (1963) defines sagenitic agate as clear chalcedony containing tiny needles of foreign minerals. This is the broad definition used by most lapidary hobbyists. If the needles are short and stiff or slender, the agate is considered sagenitic. If it contains fluffy bits of moss or feather, it is termed a moss or plume agate. (Zeitner, 1964).

Dake (1950) states that sagenitic agates are "specimens with acircular or needle like inclusions. The acircular inclusions are caused by the presence of an impurity, and at some stage in the genesis of the agate this foreign mineral did not combine with the silica present but segregated itself into those unique needles running in various directions through the agate matrix. He lists the inclusions as "some of the ziolites and hydrous silicates, rutile, hornblende, actinolite, tourmaline, natrolite and others." Occasionally they "may be some metallic mineral like stibnite, marcasite and pyrite, but as a rule these metallic minerals present a moss like growth rather than acircular." Stibnite is probably the exception to the last statement. "Byssolite and crispate may be regarded as subvarieties."

Frequently the inclusions will be radiating like a fan from a common center. Others will appear as spiny sea urchins trapped under glass. Some agates show fine or course fibrous inclusions which are not necessarily straight and needle-like, but may be curved or even wavy. Still others will be very fine and wavy hair-like structures.

Dake feels that the included minerals were present in a vug or cavity prior to deposition of the agate. "These are frequently zeolite and hydrous silicate minerals attached to the walls of the cavity and point inward in numerous directions. When the agate in solution enters the cavity to complete the filling, the minerals are trapped within the agate." Most of Dake's observations were made using specimens of agate from the Pacific Northwest states which probably accounts for his recurring reference to the zeolite minerals which occur frequently in this area. Research by Sinkankas (1961) has indicated the inclusions to be "acircular needles of some unknown mineral or minerals, slender distorted rhombohedral and normal rhombohedral crystals of calcite, and dark brown curved rhombohedral crystals which may be siderite or possibly some other carbonate." In Mexican podules, angular breed

rhombohedral crystals which may be siderite or possibly some other carbonate." In Mexican nodules, angular breccia like fragments of a soft greasy pale colored mineral which may be an alteration clay mineral such as hallosysite occur. Calcite is abundant along the rims of unweathered nodules.

He feels that the included minerals grew within a silica bearing solution. His hypothesis is that the chalcedony precipitated from a true solution upon the inclusions or that it came from thin viscous gel layers.

Pabian (1976) states that Ford (1958) included tourmaline, geothite, stibnite, asbestos, actinolite, hornblende and epidote as sagenitic minerals.

Pabian (1980) concludes that "agates develop from saturated silica solutions into which some impurity is introduced: spherulitic crystallization takes place and the impurities are deposited in the troughs between crystal aggregates, and the bands are produced." Inclusions in nodular agates from basaltic deposits have formed under conditions of low temperature and pressure.

He states that in geologically young agates (those from Northern Mexico, West Texas and Oregon) the sagenitic minerals were generally unaltered forms of aragonite, calcite, barite, gypsum, goethite, and rutile. Many agates contain chalcedony pseudomorphs after "sagenitic" minerals, especially the geologically older agates (e.g., Lake Superior agates). It is his opinion that the sagenitic minerals were present before the agate formed and were subsequently trapped in silica gel. According to his hypothesis much of the "sagenitic" minerals are restricted to the non-banded exterior portion of the agate.

As one can see, many of the old timers were on the right track, they just weren't on the express. Current research, as shown in articles by Pabian, is probably the most reflective of the theory of agate formation. The term "sagenite" is thoroughly embedded in the language of the lapidary hobbyist. Although it is not very useful to the research scientist, it is still valuable as the adjective "sagenitic" and is generally understood by most agate collectors. Hopefully, this article will refresh old memories and increase interest in the inclusions in agate. (cont' on next page)

References: Dake, H.C., 1950: The Agate Book; The Mineralogist Magazine, Portland, Oregon, pp. 31-32, Pabian, R.K., 1978: Inclusions in agate and their origins and significance. Gems and Gemology, Vol 16, pp. 16-28, Pabian, R.K. 1980: Lake Superior Agates - Characteristic structures and inclusions, Lapidary Journal, Vol. 34, pp. 1284-1299, Quick, L., 1963: The Book of Agates; Chilton Book Company, Radnor, Pennsylvania, p. 45, Sinkankas, J., 1964: What do we really know about the formation of agate and chalcedony?, Agates of North America, Arts and Crafts Press San Diego, California, pp. 6-10, Zeitner, J.C., 1964: Plume - The Regal Agate Lapidary Journal, Vol. 18, p. 133, Via: Pick & Schovel May 2023



LAPIS – LAZULI

By: Bill Hollis, Prospectors Pickings

Lapis – lazuli was highly regarded as a gemstone in ancient times, and has been mined for over 6,000 years. It was known in Babylonia and Egypt. Various articles made from lapis-lazuli have been found in ancient tombs. Some of these items are on display in major museums.

The ancient Chinese also knew of lapis-lazuli. The pulverized it into a powder to prepare eyebrow paint. In the Western world, the Greeks and the Romans pulverized it to prepare the intense blue pigment known as "ultramarine" to artists. This practice was discontinued in modern times with the advent of a synthetic product.

Lapis-lazuli is properly classified as a rock rather than a mineral. It is composed primarily of the blue mineral, lazurite, plus variable amounts of calcite, pyrite, and minor amounts of other minerals. It is formed by the heat of an igneous mass intruding nearby.

The most highly regarded lapis is from Afghanistan, where it occurs in remote, rugged mountains at high altitudes. The mining methods are still primitive due to the difficulty in transporting modern equipment into the area. The lapis from Afghanistan is described as intense, evenly colored, slightly dark violetish-blue with little or no pyrite and no white calcite veining.

Lapis also occurs in Siberia and the Pamir Mountains of Russia, in the Andes Mountains in Chile, and the Rocky and Sierra Nevada Mountains of the U.S. The main component of Lapis-lazuli is lazurite, which is a member of the sodalite family.

Lapis is always opaque to semi-translucent, usually slightly violetish-blue, occasionally speckled with flecks of pyrite, and posts or veins of white calcite. Its hardness is 5 or 6 on the Mohs scale. The toughness is fair, the fracture is granular and uneven, and there is no cleavage plane. Fracture surfaces are dull, but polished surfaces appear vitreous to waxy.

Lapis is fashioned into cabochons, beads, carvings, and other ornamental objects. It is an excellent gem for men's jewelry such as rings, cuff links, tie tacks, or other items. It is equally excellent in ladies' jewelry such as necklaces, pendants, earrings, rings, or other items. And the cost of the best quality is relatively modest in comparison to other gemstones.

Source: A reprint from the Drifter Nov. 1983