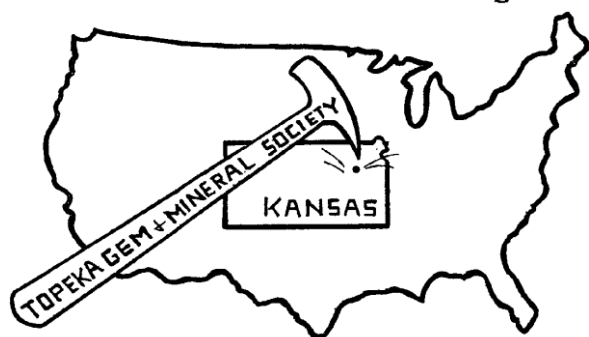


The Topeka Gem and Mineral Society, Inc.
 1934 SW 30th St. Topeka, KS 66611
 Rock2Plate@aol.com

THE GLACIAL DRIFTER



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. 3
 March 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
1 st 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. March/2023

Howdy all.

Wow halfway through the month of March and I am still waiting for the Lamb. Are you all caught up and anticipating Spring? I am neither. I would love to see the pastures all burned and the road graded. The shop is a mess and the garage needs a good cleaning. So many things to do.

Something that I did get done is that the bumper stickers are done and in my possession. These are just a teaser to get the public eye wondering what they are about. Donna Hedge did a great job on the design. Thank You. Every member gets one free. If you want more of them, they will cost you \$2.00. Get em while we got em! They cost just a bit more than that. I had 100 of them made. Let's get them on your vehicles. If all 100 get placed on cars we will get 3,000 days of exposure with them before the show. Not bad for a relatively small amount of advertising dollars. Pay attention over the next 7 months if anyone asks or mentions the stickers to you. Let us know if this happens. It would be nice to know if the stickers made an impact.

I have gotten two responses from folks that attended last weekend's KC rock show. Both said that our show is a better opportunity to purchase materials to work with.

And speaking of work, the shop is continuing to offer you the chance to create some real pretties. Come on out on Tuesdays and be creative. We are there to help you if you have any doubts about your capabilities. I am still waiting for a warmer Saturday to hold a 'Work Day'. The forecast just hasn't been cooperative. I will probably only be able to give you a few days' notice in advance.

Your agate in the rough

Brad

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

TTGMS Event Calendar

MAR. 2023			APR. 2023		
1	W		1	S	Lincoln Gem & Mineral Show 9a-5pm**
2	T		2	S	Lincoln Gem & Mineral Show 10a-5pm
3	F		3	M	
4	S		4	T	Brad's Shop Open 6-10 pm
5	S		5	W	
6	M		6	T	Jr RHDS 6 p.m. at FC Church 1701 SW Collins
7	T		7	F	
8	W		8	S	
9	T		9	S	
10	F		10	M	
11	S		11	T	Brad's Shop Open 6-10 pm
12	S		12	W	
13	M		13	T	
14	T	Brad's Shop Open 6-10 pm	14	F	
15	W		15	S	
16	T		16	S	
17	F	Board Meeting at Millie's 7 p.m.	17	M	
18	S		18	T	Brad's Shop Open 6-10 pm
19	S		19	W	
20	M		20	T	
21	T	Brad's Shop Open 6-10 pm	21	F	Wichita Gem Show 9a-6pm****see below
22	W	Publicity Mtg Elmont Church 6:30 pm	22	S	Wichita Gem Show 10a-6pm
23	T		23	S	Wichita Gem Show 10a-5pm
24	F	General Meeting First Congregational Church 7:15 p.m. 1701 SW Collins Ave	24	M	General Meeting First Congregational Church 7:15 p.m. 1701 SW Collins Ave
25	S		25	T	Brad's Shop Open 6-10 pm
26	S		26	W	
27	M		27	T	
28	T	Brad's Shop Open 6-10 pm	28	F	
29	W		29	S	HHHS-PAWS IN THE PARK?
30	T		30	S	
31	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.

**Lincoln Gem & Mineral Show, Lancaster Event Center, 84th & Havelock, Lincoln, NE
 ****The Wichita Gem Show is held at the Cessna Activity Center, 2744 George Washington Blvd., Wichita, KS. Coupons: www.wgmsks.org

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: April, 2023, Earth Resources, 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.

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.

The March program will be presented by Andy Connolly. He is a great speaker and we welcome him back again.

Don't forget to bring your cabs, jewelry, or favorite specimen for the cab of the month contest. We will have coupons for our show in October and would like everyone's help and ideas on ways and places to get the word out. We will have refreshments and a chance to visit. Please try to arrive before 7:30 - see you there!

Cinda Kunkler, 2nd Vice President & AFMS Chairman

Aerie Rock Inventory Reduction Auction at, JBAuctions.Hibib.com current auction closes March 19th, 2023. They have all kinds of rocks listed for sale and would like everyone to take a look.

The Topeka Gem & Mineral Show
General Meeting, February 24, 2023 at 7:30 p.m.

Call to Order: President Brad Davenport calls the meeting to order at 7:34 p.m. There are 21 members present.

Approval of Minutes: Stacy Haug distributes copies of the minutes from the January meeting to all members present. Chuck Curtis moves to accept the minutes as they are written; Jason Schulz seconds. Motion carries.

Treasurer's Report: Cinda Kunkler reports the club account balance. Membership dues are due by March 1st. The club is now part of the Dillons Community Rewards program. Cinda presents the Topeka Gem & Mineral Society 2023 Budget which was worked on at the last Board Meeting. Jason Schulz moves to approve the budget as it is written, Ian Schulz seconds. Motion carries.

Communications: The 2023 RMFMS Convention will be held in Casper, WY on July 14th-16th. The hotel has a block of rooms for convention attendees for a reduced rate of \$107/night. Cinda has information on the convention for anyone who wants it. If anyone is interested in putting in a competitive or non-competitive exhibit, Chuck & Cinda are planning to go and can take them. The Wichita show is coming up in April. The McPherson show is in May and has free admission.

Show: Millie has been working on the vendor contracts. Four contracts and checks have been returned. Coupons for the show have been printed. Brad asks members to take coupons with them to distribute.

Publicity: The PR Meeting was Wednesday the 22nd. Donna Stockton has artwork she has been working on for the show for everyone to look over. Next meeting is March 22nd at 6:00 pm at the Elmont Methodist Church

Field Trips: Kirby Marker, the Heartland Gem Hunter on Facebook, has offered to take members of the club out hunting at a reduced rate of \$30/person. The club will pay for any Junior Rockhounds who want to attend out of money from their account. A date has not been set yet. There will be a sign-up sheet for those who are interested.

Junior Rockhounds: Next class is "Earth Processes" by Brad on March 2nd.

Old Business: None

Webmaster: Jason has been going through the website getting it prepared for submission to the RMFMS website contest. If anyone sees any changes that need to be made, please contact Jason.

Shop: There continues to be decent turnout at the shop. Shirley will be covering for Millie for the next 3 weeks in teaching wire wrapping. Brad asks if the shop was open on an additional night/day, would there be interest for members to attend? There is talk of opening up the shop on Saturday afternoons.

Historian: Nothing new to report

Membership: Cinda is collecting dues

New Business: Brad is proposing 2 new committees: Materials - Chuck to be committee head. Fundraising/pairing off from publicity - Sammy to be committee chair head. More new committees will be added in the future.

Adjournment: With nothing further to discuss, Jason moves to adjourn the meeting; Chuck seconds. Motion carries. Meeting is adjourned the program: "Broomcasting" by Jim Baer.

Submitted by Stacy Haug, TGMS Secretary

CARNELIAN

Carnelian was found in the oldest known pieces of wrought jewelry in the world. The pieces are about 8,000 years old and were discovered in 1900. They were found on the mummy of Queen Zer, whose burial site is considered most ancient of all those found in Egypt. The Summerians, the earliest inhabitants of Mesopotamia, were the first artisans known to actually cut or carve and polish carnelian. They particularly valued the deep red shades. A Babylonian cylinder of about 2000 B.C. bears this inscription: "With a seal of carnelian a man will never be separated from the protection of his God."

Carnelian is a lovely translucent stone which may vary from a pale to deep yellow, through orange, red, and red-brown. It may also occur banded or shaded. It has its own variant, sard, which is orange and is sometimes classified as a precious gem. Put very simply—carnelian is chalcedony tinged reddish with iron oxides. Carnelian usually occurs as nodules or nodule sections of common chalcedony which has been infiltrated by solutions bearing iron salts which precipitated as iron oxide. The iron oxide then creates carnelian out of common chalcedony by coloring it with its typical yellow-to-red-to-brown tints. It occurs mainly in Brazil and India, with the loveliest coming from the state of Bombay.

(Source: Reprint from The Drifter July 1991)

FEBRUARY'S CAB OF THE MONTH CONTEST



Sterling Silver Fire Opal Ring & Blue Mt. Jasper Cab by Sammy Wall

Cinda Kunkler's Blue Petrified Wood

Tidbits From Wooly
by Charles "Wooly" Wooldridge
Pick & Shovel, March 2023



I took some time this week to finish a poem I had started some time ago...

LAKER!

Hopping from gravel bar to gravel bar,
Crossing the river swift and cold
Searching intently and walking far
I find one with lines bright and bold.

I gaze upon its waxy luster
Surface pitted, save one face
That shows the banding I was after.
I ponder how it traveled to this place.

Amazed at its size and unique design
Colors red and white, band upon band
A large, one of a kind personal prize
Delivered from a far north land.

DID YOU KNOW?

George Washington, wore a gold ring with a lock of his own hair set in glass? The glass was framed in red, white and blue enamel set with 13 pearls.

Abraham Lincoln, once purchased a string of pearls, earrings, and other jewelry for his wife which amounted to \$2600? Mary Lincoln loved jewelry and even slashed her gloves to display her rings.

Franklin Pierce, our 14th President, was presented a remarkable ring weighing more than a pound? Designed by a San Francisco mechanic, the circular portion on the ring was cut into squares, each depicting a scene from California history. The part of the ring reserved for the State Seal was covered by a solid plate of gold, with the arms of the State and the U. S. Flag.
(Source: A reprint from the Drifter July 1991)

Dendrites vs. moss agates: Orbicular Jasper vs. Polka Dot Agate

We are usually delighted, but not surprised, to find inclusions in crystals, e.g., quartz of one color or another, rutile, sphenite, and "stars". The appearance of inclusions in microcrystal-line varieties of quartz, however, have a mysterious ambience 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 whenever 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, or reddish, but near Four Corners, in the eastern Mojave, near the junction of Hwy 58 & Hwy 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 with 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 the, 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 (cristbalite) takes, as opposed to the crystal form 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, Leopard Skin Jasper from Mexico, Poppy Jasper from California, and Ocean Jasper from Madagascar. We may find one color surrounding another, or bands of balls, 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. The material is so fine-grained it is almost chert and resembles porcelain.

The rock distinction of jasper and chert is: if it's attractive, it's jasper; if it's dull, it's chert. Some jasper represents replaced limestone or dolomite, some occurs as nodules, and sometimes it is part of the gangue of mineral deposits by hydrothermal or meta-somatic processes. Agates are translucent and usually banded, with sub-vitreous luster; jasper is opaque with a dull to pearly luster; to a rockhound, jaspagate is a fine mixture of the beautiful oxides.

Via Rock Chip Reporter, 4/08; via Petrograph, 6/03; ref: Calumet Gem via Breccia 9/08

Agate Varieties

The names of agate varieties are chosen more or less arbitrarily according to their visual appearance, usually that of a cut and polished stone - there are no strict rules or definitions. With such a terminology it is no surprise that there is a countless number of agate "varieties", Zenz, 2005, lists 122 different varieties, for example. A few terms are widespread and people agree on their meaning. Some of the names have very little to do with the properties of the agate itself, but with the way the agates have been cut: "eye agate" is probably the best example.

Language barriers cause more difficulties. A "flame agate" in English is not the same as the literal equivalent "Flammenachat" in German. The same is true for "coral agate" which can be a chalcedony pseudomorph after coral (and thus not really an agate), but also a reddish agate with a certain growth pattern.

Most of the agate names have no mineralogical significance.

Onyx and Sardonyx

Onyx is simply a black-and-white agate and sardonyx a red-white and rarely red-white-black variant. There would probably be no separate name for it if there wasn't a long tradition of cutting cameos from onyx and sardonyx.

Onyx is not to be confused with **onyx marble**, a banded marble (consisting of calcite, not quartz) used for ornamental works, which is frequently sold as "onyx".

Except for the color, with the black parts being opaque in good specimen, there is nothing specific that cannot be found in other agates. The "ideal onyx" is made of parallel alternating layers of black and white and thus cut from agate of the Uruguay-type.

There is a long tradition of dyeing agates to turn them into onyx for ornamental and lapidary uses and it can be very hard to tell a real onyx from an artificially dyed one.

Enhydros

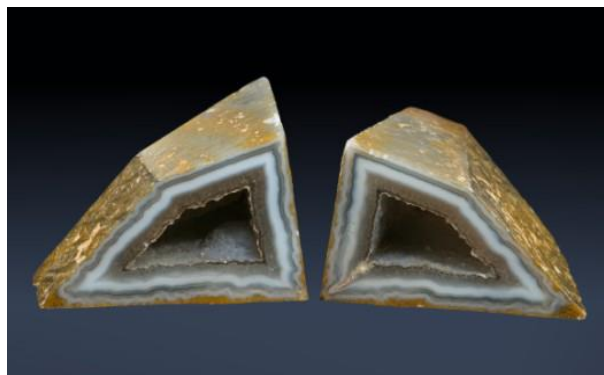
Occasionally agate geodes are found that still have some of the water captured in a central cavity, so called **enhydros**. You can sometimes hear the water when you shake the specimen. These will slowly loose their water as it escapes through tiny capillaries and evaporates at the surface.

There is nothing special about enhydros except for being quite rare, they simply did not dry out yet, like all the other agates did. The presence of water in the geode is sometimes interpreted as an indication of an agate formation in a watery environment, but of course the water could just as well have entered the geode later.

Polygonal Agate

In the 1970s agate slices with the shapes of irregular polygons appeared on the market. They were found in great quantities in the Brazilian state of Paraíba, but currently the locality is not productive any more. They are known as **polygonal agates** or **Paraíba agates** (the second name was used in Germany).

Sometimes groups of neighboring polygonal agates were found that apparently were once separated by thin platy crystals. The former crystals are now completely dissolved and replaced by clay and quartz.



The first image shows the not so common case of two halves of a polygonal agate that was not cut into many slices. The agates are usually made of a thin layer of white, gray or bluish, but hardly ever colorful agate, followed by another layer of quartz crystals that outlines a central cavity. In this specimen the quartz crystals are covered by another thin layer of chalcedony.



The second photo shows both halves put together again. In the center you can see the cut running through the geode horizontally. The geode is bounded by perfectly plane "faces" with a polygonal outline, but the shape is asym-metric with random angles between the "faces" and thus is not related to any crystal class. This irregular shape can only be explained as a cavity bound by crystal faces of neighboring crystals that got outlined by chalcedony and quartz. The triangles and criss-cross patterns present on the surface are interpreted as negative imprints of the surface patterns of calcite crystals which enclosed the cavities that would later host the agates.

A typical example of agates from Wendelsheim, west of Alzey, Rheinland-Pfalz. The agate has filled the voids between platy crystals that have later been dissolved and replaced by chalcedony and small quartz crystals. In a sense, this is the miniature version of polygonal agates.

<http://www.quartzpage.de/agate.html>

(Source: WGMS The Rockhounder Jan 2015)

