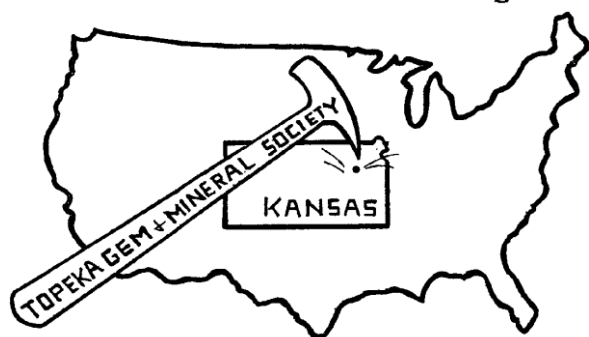


The Topeka Gem and Mineral Society, Inc.  
 1934 SW 30<sup>th</sup> St. Topeka, KS 66611  
 Rock2Plate@aol.com

# 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. 64, No. 12  
 December 2021



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, 7:30 pm, University United Methodist Church, 1621 SW College, 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)

## 2021 OFFICERS AND CHAIRS

President	Brad Davenport	379-8700	Cab of the Month	Debra Frantz/Fred Zeferjohn	862-8876
1 <sup>st</sup> Vice Pres.	Will Gilliland	286-0905	Field Trip Coord.	Will Gilliland	286-0905
2 <sup>nd</sup> Vice Pres.	Cinda Kunkler	286-1790	Publicity	TGMS Board	
Secretary	Stacy Haug	1-857-3350	Welcome/Registration	Harold Merrifield	633-9745
Treasurer	Millie Mowry	267-2849	Property	M. Cote/D. Dillon	220-3272
Directors	Chuck Curtis	286-1790	AFMS Scholarship	Cinda Kunkler	286-1790
	Jim Baer	785-256-2432	Editor/Exchange Editor	Millie Mowry	267-2849
	Dave Dillon	272-7804	Show Chairman	Dave Dillon	272-7804
Historian	Open		Show Dealer Chairman	Dave Dillon	272-7804
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](mailto:rock2plate@aol.com).  
Permission is granted to reprint articles only if proper credit is given to the author, Glacial Drifter and the date.

December 2021

Brad and his wife are both down with COVID this month, so we are giving him a break from writing an article for the Drifter.

We wish to thank everyone that attended the Annual Christmas Dinner at the Viking Grille. The games were a challenge according to some who had resorted to using their cell phones to look up the answers. Thank you Cinda for furnishing all the prizes for the games. Mark your calendars for December 9<sup>th</sup>, 2022 as we will return to the Viking Grille for another Christmas Dinner.

We have several new members and they are taking advantage of the free lessons at Brad's. Speaking of lessons, before we start up again after Brad gets feeling better, we will have a clean-up day to disinfect everything so it will be safe for all. On that note, MASKS will be a must at lessons whether you have had all your shots or not. There is a \$5 shop fee per night that helps pay for the lights, saw blades and wheels. Brad will let us know when he feels up to having class again.

The program for the month of January will be our Silent Auction. Clean out your unwanted rocks, machinery, or anything that you would like to donate to the Club and bring it on January 28<sup>th</sup>. For all the new members, here is your chance to pick up some good material to get started with.

few hope that everyone has a Merry Christmas and a Happy New Year! But be safe.



We need your **BEST CHOICE** UPC Labels --  
Bring them to the monthly meeting, and give  
them to Cinda Kunkler.



# DUES ARE DUE

# TGMS Event Calendar

DEC. 2021			JAN. 2022		
1	W		1	S	New Year's Eve
2	T		2	S	
3	F		3	M	
4	S		4	T	Lessons if Brad OK's
5	S		5	W	
6	M		6	T	Jr Rockhounds UUMC 6 pm
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 PM Wear Masks, have shots
12	S		12	W	
13	M		13	T	
14	T		14	F	Board Meeting Millie's 7 pm
15	W		15	S	
16	T		16	S	
17	F		17	M	
18	S		18	T	Brad's Shop OPEN 6 PM Wear Masks, have shots
19	S		19	W	
20	M		20	T	
21	T		21	F	
22	W		22	S	
23	T		23	S	
24	F		24	M	
25	S	<b>CHRISTMAS</b>	25	T	Brad's Shop OPEN 6 PM Wear Masks, have shots
26	S		26	W	
27	M		27	T	
28	T		28	F	General Mtg-UUMC 7:30 pm Auction
29	W		29	S	
30	T		30	S	
31	F		31	M	

If you are interested in Wire Wrap Classes, contact Millie, 267-2849 or [rock2plate@aol.com](mailto:rock2plate@aol.com)

Check out the calendar on our web site [www.TopekaGMS.org](http://www.TopekaGMS.org)

# DUES ARE DUE

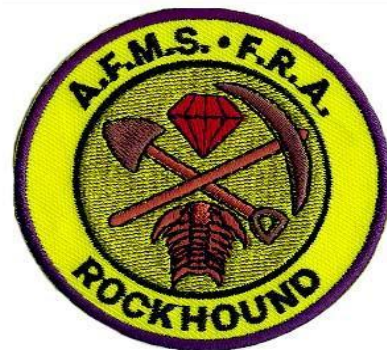
## JR ROCKHOUND Classes & Reminders

Here are reminders of the next few months of classes: **University United Methodist Church, 1621 SW College Ave., Topeka, KS.** Sign in starting at 6:00 pm and classes starting at 6:30pm. 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](mailto:Fleetcommander@att.net)



**---Everyone must wear masks!**

Next Class: TBA

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

The January program; Will be the Silent Auction. So, clean out all your unwanted rocks and donate them to the club so that others will benefit from them. We have a lot of new members that need a start in collecting. Refreshments, will be furnished by Cinda. Thank you all - Cinda Kunkler [cindakunkler@att.net](mailto:cindakunkler@att.net)

A warm  
welcome...

To our new members

Dennis Hippe  
Dennis Jones & Deb Korbe  
Doris Reece  
Kim Wasson  
Catherine Wasson-Lewis & Richard Lewis



Topeka Gem & Mineral Society  
General Meeting  
November 19, 2021

President Brad Davenport calls the meeting to order at 7:31 p.m. 29 members are present.

**Treasurer's Report:** Account balance was given. No outstanding bills.

**Old Business:** none

**Communications:** none at this time.

**Show Report:** Dave has new contracts ready, just waiting for the flyers. All dealers from the show want to return next year. Next year's theme is "Oceans of Kansas." We need to come up with some type of logo to use for flyers, etc. Simplistic - not heavy art. If anyone has any ideas, let Brad know.

**Board Meeting:** The show ended up costing us about \$180. Millie has paid out a little bit more since then. With a few more dealers, the costs should even out. We still have rocks, minerals, & fossils for the scholarship table and grab bags left over. We are planning to raise ticket prices; they haven't been raised in a long time.

**Juniors:** The next class is "Lapidary." If anyone knows of any kids who might be interested in joining, please pass on information to them.

**Webmaster:** Would be nice to have an online forum for members who cannot make it out to the shop. Dave has been taking pictures of people in the classes working on projects and posting them to his Instagram page; photos have received many "Likes."

**Shop:** There has been decent participation, with 4 or 5 new members over the past few weeks. Silversmithing - there are 2 teachers. Anyone interested in Silversmithing needs to put their name in the hat to be drawn. \$5 per class.

**Historian:** nothing new to report. Anyone interested in becoming Historian, let one of the officers know.

**Membership:** We signed up 16 new members from the show.

Millie is taking membership fees which are due in December. If you do not pay before March 1st, you will be removed from the directory.

December 3rd @ 6:30 p.m. - Christmas party. Everyone pays for their own meals.

**Field Trip:** - tomorrow. Mill Creek - gravel bars. Limestone & chert, fossils, artifacts; may be some glacial material. Wear rubber boots. Bring a scrubbing brush to clean moss off specimens. Meet at the winery. Don't have to pay the campground fee to participate in the field trip.

**Unfinished business:** Discussions continue on changing our corporate status; would like to get this change made. If anyone knows of a lawyer who could help with this, let Brad know.

**Elections:** all officers presently holding office have agreed to stay in office for another year.

President - Brad Davenport

Vice Presidents -

1st Vice President (fills in when the President is unable to officiate) - Will Gilliland

2nd Vice President (is in charge of programming) - Cinda Kunkler

Directors: Chuck Curtis & Dave Dillon

Treasurer: Millie Mowry

Secretary: Stacy Haug

Harold moves to close nominations & vote on officers as they stand; Chuck seconds. All in favor. Motion passes.

With nothing further to discuss, Brad moves to adjourn; Chuck seconds. Meeting is adjourned to the evening's program – Video: "Dinosaur - Fossils & Paleontology from the Dinosaur National Monument."

Submitted by Stacy Haug, Secretary

## Report from Will Gilliland on Dr Goldberg's latest Geonuggets Video.

Please see the link below to Dr. Goldberg's latest Geonuggets video. This year, Dr. Goldberg has created a YouTube Channel to explain geological things we may encounter in our daily lives to increase the interest for and knowledge of geology.

<https://www.youtube.com/watch?v=Af98C95ON0o>

Dr. Goldberg's first "Geonuggets" is on past environments at

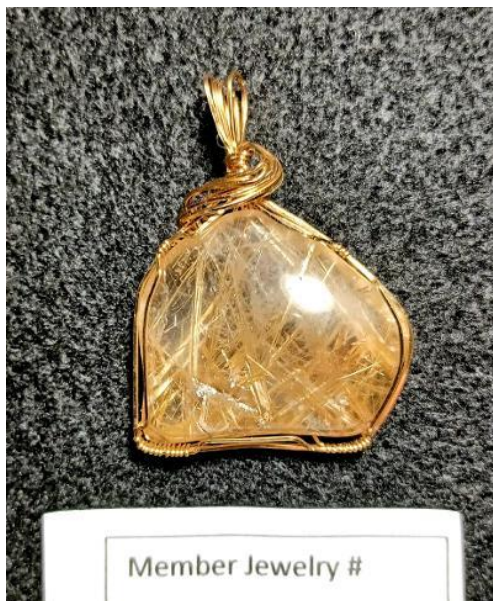
<https://www.youtube.com/watch?v=4i4qXSvhNus> . #3 will be spring 2022 "Drilling for oil".

## [Geonugget #2 - Karstic terrains](#)

Please join me on a trip to Missouri and Florida to learn about caves and sinkholes. We'll discover together the cool features you can find in karstic terrains! [www.youtube.com](http://www.youtube.com)

### November 2021 Cab & Jewelry of the

Millie Mowry



Sammy Wall



Brad Davenport



## TUMBLING MOZARKITE

<https://rocktumbler.com/rough/mozarkite/> via Halsey Farms Cattle  
and Mozarkite blog via: Pick & Shovel 12/21

Mozarkite is a local name for pieces of colorful chert found in residual soils and talus derived from the Cotter Dolomite at many locations in central and southern Missouri. It is also found as pebbles and cobbles in streams that drain areas near the Cotter Dolomite.

Most mozarkite is white, gray, or brown in color, but in many locations collectors can easily find beautiful pieces with patches and swirls of pink, red, purple, orange, and yellow. Rockhounds collect these colorful pieces and use them in a variety of craft and lapidary projects.

Mozarkite can be tumble polished using the standard rock tumbling instructions. We started with 1-inch to 2-inch pieces of broken mozarkite similar to the pieces shown in the photograph [here]. We tumbled them using the steps shown below. Mozarkite is a very durable rock and required one month of tumbling in coarse grit to shape the stone to our liking. The tumbling was done using a Thumler's Model A-R1 and A-R2 tumbler.

- Two weeks in coarse grit (60/90)
- Two additional weeks in coarse for better shaping
- One week in medium grit (150/220)
- One week in fine grit (500F)
- One week in TXP aluminum oxide polish

That tumbling produced the stones shown in the photograph [here].

### Chert? Flint? Chalcedony? Jasper?

Mozarkite is a local name, used for the colorful rocks found in Missouri. Similar rocks are found at many other locations throughout the world.

What kind of rock is it? Mozarkite is made up of the mineral named quartz and, the quartz in mozarkite is in crystals of microscopic size. Across the planet and through time, many different names have been used for rocks composed of microcrystalline quartz. Here are a few of them: chalcedony, jasper, chert, flint. Each of these names is correct.

Chalcedony is a name used for any variety of microcrystalline quartz. Jasper is a name used for opaque chalcedony.

Chert is a name that means a microcrystalline quartz that occurs as beds or nodules in a limestone or dolomite. Flint is a name often reserved for microcrystalline quartz that is fashioned into tools or weapons. All of these names are correct. Which name is proper? It often depends upon the background of the person speaking.

A gemologist might call the material that makes up mozarkite "chalcedony" or "jasper" based upon the material that it is composed of. A geologist might call them "chert" because it describes how they occurred within their parent rock unit. And, an archaeologist might call them "flint" because it refers to their use in tools. None of these names are incorrect. Each of these names is correct from a different perspective.

### Official State Rock of Missouri

During the 1950s, rock tumbling and lapidary work became popular in many parts of the United States. Rockhounds in Missouri discovered that carefully selected pieces of mozarkite could be used to make beautiful cabochons, tumbled stones, and other lapidary items. Soon mozarkite was being mounted in jewelry and sold at local arts and crafts fairs. Many people were delighted by their colorful new "Missouri gemstone". On July 21, 1967, mozarkite was adopted as the "official state rock of Missouri" by the 74th Missouri General Assembly. This generated significant interest in the stone, and mozarkite jewelry and other lapidary items started to appear for sale in local gift and tourist shops.

### The Name: "Mozarkite"

Mozarkite is a portmanteau, a word that mixes the sounds and meanings of other words. The name "mozarkite" was created by combining the word "Missouri", the word "Ozarks", and "ite", a suffix that is frequently the last three letters of mineral names.

### Other Examples of Mozarkite



[statesymbolsusa.org](http://statesymbolsusa.org)



[americangeosciences.org](http://americangeosciences.org)



[lakeexpo.com](http://lakeexpo.com)

## On the Color of Smoky Quartz

By Paolo Sanchez, Junior Member  
of the Pasadena Lapidary Society

The practical mineral collector would've most likely encountered some of the mineral smoky quartz at least one time in his or her life. Whether it would be at gem shows or at rockhounding trips, this crystalline form of silicon dioxide has not really been a major interest of rockhounds. Usually, smoky quartz would just be sold as a faceting material for beginners, or as crystals serving as decor or paperweights.

However, in the scientific community of mineralogy, one thing about this mineral remains of interest: the color. As implied by the name, the color of smoky quartz is, well, **smoky** - ranging from a light tint of brown to a blackish hue. While many people would consider the mineral's color to be rather drab, the origin of this color is actually unique in the mineral world.

A good majority of minerals receive their color from certain elements in their intrinsic chemical composition or from the light absorption and reflection properties of the mineral's crystal lattice. These minerals are known as idiochromatic. Other forms of minerals include allocromatic minerals, where traces of accessory elements alter the absorption of different colors of light throughout the crystal lattice. Smoky quartz, however, gets its color from a rather surprising source.

Smoky quartz is known to form in granitic pegmatites, associated with different minerals and gemstones including tourmaline, cleveite, and aquamarine. What is unique about these pegmatites is that they contain a significant amount of radioactive elements, particularly the elements uranium, radium, and thorium. Because these elements decay from their radioactivity, they emit gamma rays that are then absorbed by the surrounding rock. When quartz (particularly clear quartz) is in close proximity to these elements, the gamma radiation that is absorbed causes aluminosilicate ion impurities [AlO<sub>4</sub>] within the quartz to lose an electron, forming a neutral, aluminosilicate compound which absorbs multiple colors of light.

This coalition between chemical impurities and radioactivity eventually results in the unique, brown to blackish color that gives smoky quartz its name. Fortunately, there is no need to worry about the radioactivity that smoky quartz is exposed to, for the amount of radioactivity in the quartz is so minuscule that it doesn't cause any damage to living species nor the surrounding environment.

While this rather common species of silicon dioxide is often underestimated in most of the rock collecting community, the formation of color in smoky quartz still stands as a unique and relatively rare process in the mineral world.

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- Smoky Quartz. The Quartz Page: Smoky Quartz. N.p.,n.d. Web. 1 Nov. 2016.
- Webster, Robert. Practical Gemmology: A Study of the Identification of Gemstones, Pearls, and Ornamental Minerals. New York: Arco Pub., 1978.

*From PLS Rockhound Ramblings, 4/17 via The Rollin' Rock, 9/17; via; The Rockhounder Oct 2017*