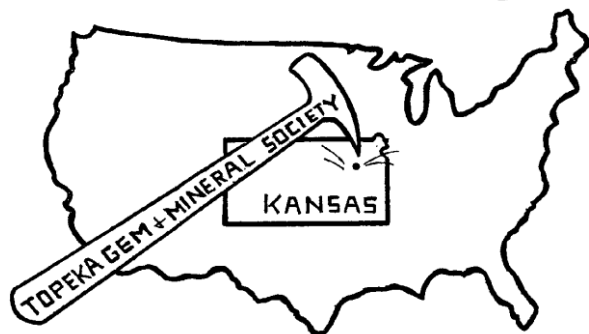


The Topeka Gem and Mineral Society, Inc.  
 1934 SW 30<sup>th</sup> St. Topeka, KS 66611  
 Rock2Plate@aol.com

# 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. 66, No. 4  
 April 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: 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)

## 2023 OFFICERS AND CHAIRS

President	Brad Davenport	379-8700	Cab of the Month	Donna & Russell Hedge	620-660-1651
1 <sup>st</sup> Vice Pres.	David Dillon	221-4315	Field Trip Coord.	Cole Collins	220-4027
2 <sup>nd</sup> 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](mailto: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. April/2023

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Howdy everyone.

Spring has sprung. Trees and flowers are blooming. Morel mushrooms are up as well as our temperatures. Folks are getting out and about. I hope everyone is doing something in our great outdoors.

Things are popping all around us. The Wichita Gem & Mineral show is this weekend. Anyone planning to attend. We will be going out to hunt some glacial drift with Kirby Marker on the 13<sup>th</sup> of May. We will be meeting up at Banner Creek Res. On that Saturday morning and then drive a few miles to the site we will be hunting. Remember that the cost of the hunt will be \$30 a person. The monies will get turned back into our club's scholarship fund. We will be miles away from toilets, drinking water and food, so come prepared. The exact time and location will be provided as the time grows nearer.

We have been informed that there are only four members that have signed up with Dillons Grocery rebate of funds into the club. Folks, we are missing an easy opportunity to receive FREE money donated into our bank account. Take your Dillons rewards card online and sign up. Look for the listing of The Topeka Gem & Mineral Society and give it a click.

Our next Publicity committee meeting is this Wed. 04/19/2023 At the Elmont Methodist Church at 6:30.

I know that everybody hates Insurance. That is unless you sell it for a living or have had an occurrence to use it. As a club we carry a minimal liability policy that we pay the AFMS through our dues.

Our Properties Committee chairman, (Chuck Curtis), has brought to the Board's attention that we probably need to address some of our other exposures and make some allowances and preparations just in case. Most of these issues concern the time we all spend in the workshops. First off, none of the tools or machines we use are covered beyond what my home owners' insurances might cover. We each have signed a Waiver disclaiming liabilities for loss or injury that may occur out here. Often times, these waivers carry no real teeth and do little to protect us or our equipment. I will be sitting down with my carrier and the AFMS policy to get a better grasp on our/ my current condition. If we need to purchase further coverage the club will be expected to pick up the cost of it. This may also reach out and cover some of our other exposures.

With that said, the shop will be instituting some rules and guidelines that should give us all a safer, more protected feeling while working in the shops.

The use of (PPEs) Personal Protection Equipment will be highly recommended. Safety glasses Should be worn when not only using the tools but in a close approximation of them. Our grinders and saws appear to be safe as we use them but, someone standing near them when in use is more of a hazard. Same with soldering, grinding or buffing in the smithing shop.

Chuck has also put together a service and maintenance log for all of our equipment. Beyond regular maintenance, we need every user to tell us if something is not operating the way it should. What's more, if you damage something, for gods sake tell me. Accidents happen. Don't just walk away from some issue that may injure someone or leave a tool not performing properly.

There will be some new signage in the shops. Read them and ask questions if you do not understand.

The chances are that we will be creating a Safety & Insurance Committee. If you can help with it, please step up to the plate.

Bradford

# TTGMS Event Calendar

April 2023			May 2023		
1	S		1	M	
2	S		2	T	Brad's Shop Open 6-10 pm
3	M		3	W	
4	T		4	T	Jr RHDS 6 p.m. at FC Church 1701 SW Collins Pat Gilliland -- Dinosaurs
5	W		5	F	
6	T		6	S	
7	F		7	S	
8	S		8	M	
9	S		9	T	Brad's Shop Open 6-10 pm
10	M		10	W	
11	T		11	T	
12	W		12	F	
13	T		13	S	Field Trip – Banner Creek Res. Kirby Marker
14	F		14	S	
15	S		15	M	
16	S		16	T	Brad's Shop Open 6-10 pm
17	M		17	W	
18	T	Brad's Shop Open 6-10 pm	18	T	
19	W	Publicity Mtg Elmont Church 6:30 pm	19	F	
20	T		20	S	
21	F	Wichita Gem Show 9a-6pm****see below	21	S	
22	S	Wichita Gem Show 10a-6pm	22	M	
23	S	Wichita Gem Show 10a-5pm	23	T	Brad's Shop Open 6-10 pm
24	M		24	W	
25	T	Brad's Shop Open 6-10 pm	25	T	
26	W		26	F	General Meeting First Congregational Church 7:15 p.m. 1701 SW Collins Ave
27	T		27	S	
28	F	General Meeting First Congregational Church 7:15 p.m. 1701 SW Collins Ave	28	S	
29	S		29	M	
30	S		30	T	Brad's Shop Open 6-10 pm

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), for wire wrapping contact Millie Mowry at 785-267-2849 or email [rock2plate@aol.com](mailto:rock2plate@aol.com) the Monday before class to let them know you will be there.

\*\*\*\*The Wichita Gem Show is held at the Cessna Activity Center, 2744 George Washington Blvd., Wichita, KS. Coupons: [www.wgmsks.org](http://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](mailto:Fleetcommander@att.net)



Next Class: April, 2023, Dinosaurs, 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.

The RMFMS Program library has #97 **Lake Superior Agates Naturally.** Script, tape and 140 slides. This will be different, but hopefully informative. Hoping everyone can come join us!

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](http://JBAuctions.Hibib.com) current auction closes March 19<sup>th</sup>, 2023. They have all kinds of rocks listed for sale and would like everyone to take a look.

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

**Call to Order:** President Brad Davenport calls the meeting to order at 7:33 p.m. There are 30 members and 1 guest present. Five door prizes were given out.

**Approval of Minutes:** Minutes from the February meeting were printed in The Drifter which is now also available on the website. Jason Schulz moves to accept the minutes as they are written, Chuck Curtis seconds. Motion carries.

**Treasurer's Report:** Millie Mowry reports the club balance. The first half of the Expocentre has been paid in the amount of \$3750. Bumper stickers were printed for \$202.

**Old Business:** None

**Communications:** Cinda Kunkler reports that there are some coupons and flyers for our show, for the Wichita show, and a variety of other shows available for people to take with them. The RMFMS Conference is July 14th-17th in Casper, Wyoming. Cinda has an information packet available to email to anyone who is interested in attending.

**Show:** Millie reports we have payment from 4 vendors so far. We have a new vendor who has a flume and is requesting that we save chips and broken rocks for him. These will be used in his buckets that the kids can sift through. Please give these to Millie and she will pass them on to him. We will need to have as much help as possible from members at the show.

**Publicity:** The Publicity Meeting was Wednesday, March 22nd. Bumper stickers have been printed. They are vague but are meant to just be a talking point. There will be another bumper sticker printed later containing more information about the show. It was suggested that we go to as many craft shows as we can to hand out our flyers, coupons, etc. There was talk of creating a booklet to be given out to prospective donors and sponsors. They are working on getting packets out to the schools before summer so teachers can use the information when planning their curriculums. We have been given permission to put up a poster, advertising the 4-H competition at our show, at the 4-H State Geology Field Trip in June. There is still talk about doing the scavenger hunt; this will need to be done soon. The next publicity meeting is scheduled for April 19th at 6:30 p.m. at the Elmont United Methodist Church. If anyone has magnetic car signs, bring them in so they can be updated. Jason would like pictures taken at the shop, shows, meetings, etc. - anything showing people involvement for t.v. ads this fall.

**Field Trips:** We have been given an opportunity to go out with Kirby Marker, a.k.a. the Heartland Gem Hunter, on an agate hunt. He normally charges \$50-\$60 per person, but he is offering a discount rate of \$30/person for this hunt. This money will then be given back to the club for our scholarship program. Juniors who want to go will be paid for by the club from the Junior's fund. There is a sign-up sheet for those interested in attending.

Brad would like to try to get permission from Mike Meiers to hunt on the riverbank. Cole has a few ideas for places to go on field trips in the future.

**Junior Rockhounds:** The next class is "Earth Resources" taught by Will Gilliland on April 6th. He will send out an email with homework before the class.

**Webmaster:** None

**Shop:** There will be a work day tomorrow, March 24th, starting at 11:00 a.m. All machines and countertops need to be cleaned, floors swept, etc. If anyone has any old absorbent cotton rags that can be used, please send them out to the shop.

**Historian:** Nothing new to report.

**Unfinished Business:** We still need graphic ideas for shirts, posters, etc.

**Adjournment:** With nothing further to discuss, Chuck moves to adjourn the meeting, Cinda seconds. The meeting is adjourned at 8:08 p.m. to the evening's program presented by Andy Connolly.

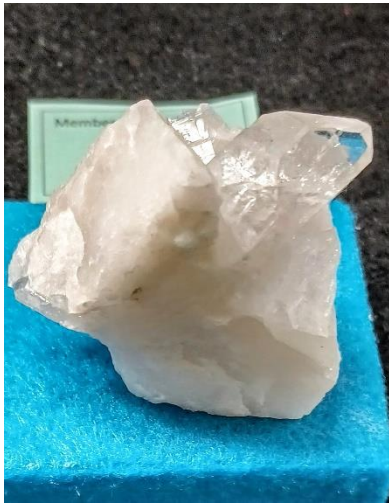
Submitted by: Stacy Haug, TGMS Secretary

In Loving Memory of: **Louis F. "Fred" Zeferjohn, Jr.** 1949 - 2023

Louis F. "Fred" Zeferjohn, Jr., 73, of Berryton, passed away on Saturday, April 15, 2023 at a Topeka hospital. He was born November 20, 1949 in Topeka, the son of Louis F. and Lydia (Price) Zeferjohn, Sr. Fred graduated from Highland Park High School. He was employed as an Electronic Technician for the U.S. Postal Service for over 35 years before retiring. He was a member of the Topeka Gem & Mineral Club. Fred married Debra "Debby" Frantz on July 4, 1987 in Topeka. She survives. Also surviving are several nieces and nephews. A Celebration of Fred's Life will be held at 1:00 p.m. Saturday, May 6, 2023 at Dove Southeast Chapel, 2843 SE Minnesota Ave. Private inurnment will take place at a later date.



## MARCH'S CAB OF THE MONTH CONTEST



- 1 Heart. Agate by Doria Skinner
- 2 Pair, Maramamba Ying and Yang by Sammy Wall
- 3 Pendant. Coco Weave by Millie Mowry
- 4 Specimen. Clear Quartz, Larry Hardesty

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](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'."
2. You will have to re-register each year.

If you have any other questions email [DCR@dillonstores.com](mailto:DCR@dillonstores.com)

## Charoite

Charoite is the name of a purple to violet silicate mineral with a striking appearance. Its vibrant purple color grabs a person's attention. Then, upon closer examination, the viewer discovers interesting banding, swirls, scales, or radial and parallel habits. Many rocks that contain abundant charoite will accept a beautiful polish. As a result, high-quality pieces of charoite can be cut into spectacular purple cabochons, or used as an ornamental stone to veneer a delightful jewelry box. A pearly luster or chatoyance often increases the beauty of this gem.

Charoite is a rare mineral, found in commercial quantities only in a few small and closely spaced deposits in the Sakha Republic of eastern Russia. It received its name from the Chara River, which drains that geographic area.

### Geologic Occurrence

The charoite of the Sirenevy Kamen ("purple stone") deposit of eastern Siberia is thought to have formed when an alkali syenite intrusion encountered a dolomite containing a significant amount of terrigenous clastic sediment. The result was a complex geochemical environment of hydrothermal metasomatism.

Mineral-rich fluids permeated the dolomite and surrounding rocks, forming charoite and a variety of other rare minerals with complex chemical compositions. The charoite in these rocks is impure and intimately mixed with microscopic particles of other rare minerals.

**Charoite's Chemical Composition** Charoite is a complex silicate mineral. Published chemical compositions are in disagreement. We checked numerous references, and each one presented a different composition. The compositions reported below are from the Glossary of Geology [3], the International Mineralogical Association [4], and Mindat.org [1].

$(K,Na)_5(Ca,Ba,Sr)_8Si_8O_{46}(OH,F)_nH_2O$  [3]

$(K,Sr,Ba,Mn)_{15-16}(Ca,Na)_{32}[Si_{70}(O,OH)_{180}](OH,F)_4 \cdot nH_2O$  [4]

$(K,Sr)_{15-16}(Ca,Na)_{32}[Si_{60}O_{11}(O,OH)_6]_2[Si_{12}O_{18}(O,OH)_{12}]_2[Si_{17}O_{25}(O,OH)_{18}]_2(OH,F)_4 \sim 3H_2O$  [1]

Determining a composition for this mineral might be difficult for two reasons: 1) well-formed crystals and specimens of pure charoite have not been found; and, 2) charoite is always intimately associated with and intergrown with numerous other minerals.

Charoite is only known from rocks that are either charoite-rich or charoite-dominated. The name used for these rocks is "charoite". Most people in the gem and lapidary trades simply refer to them as "charoite" and may not suspect that they are a rock which contains a variety of rare minerals.

Charoite is a contact metamorphic rock that usually contains a variety of alkaline calcium silicate accessory minerals. These can include miserite, benstonite, canasite, tinaksite, pectolite, and fedorite. These are often associated with textural varieties of charoite and include: massive (miserite), parallel fibers (benstonite), and radially fibrous (canasite and tinaksite).

### Uses of Charoite

Rocks containing abundant charoite with a pleasing color and interesting pattern are often cut into gems or used as an ornamental stone. Charoite cabochons, beads, tumbled stones and other items made of high-quality material can sell for high prices. Charoite is also used to make small sculptures and small utilitarian items that include vases, spheres, goblets, desk sets, small boxes, and decorative tiles.

High-quality charoite rough and items made from charoite are not abundant in the marketplace because the material is rare, costly, not regularly mined, and much of what is produced is consumed in Russia.

[https://geology.com/minerals/via\\_WGMS\\_Rockhoulder\\_Nov\\_2020](https://geology.com/minerals/via_WGMS_Rockhoulder_Nov_2020)



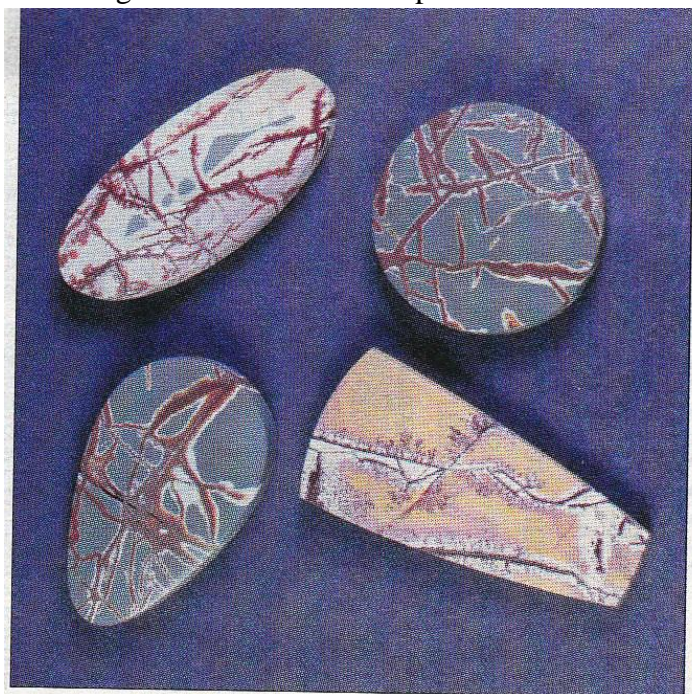


## Sonoran Dendritic Rhyolite

One of the newer materials to show up at mineral shows is Sonoran dendritic rhyolite. Rhyolite is an igneous (volcanic) rock and is formed when very thick and slow-moving lava is extruded or expelled from a volcano or volcanic rift. The lava cools and solidifies on the earth's surface rather than deep underground.

Generally, the rhyolites favored by lapidaries have a high silica content and are very fine-grained.

When slabbed they look a lot like jasper. Sonoran dendritic is hard, compact rhyolite, very suitable for cutting and polishing. It has gorgeous, flowery red and white dendritic inclusions on a blue/gray or tan pink background. It looks similar to Apache Canyon dendritic rhyolite from New Mexico. The first time I cut this material, I found it to be a pleasure to work with. It is easy to use the colors and dramatic dendritic patterns to make a nicely designed gem. Like all rhyolites, Sonoran dendritic is relatively soft material, but it is fairly solid and not especially prone to chipping. The dendrites form along fractures that, in many cases, healed naturally through further silicification. Some, however, did not heal enough to create a very strong bond; the weak bonds look a little dry and porous under magnification.



There are a couple of ways to deal with this issue. One is to apply pressure to break the weak joins and make your cabs from the pieces in between the breaks. Another is to seal the slab before you cut and sand. Since one of the dendrites that really caught my eye was on one of these dry fractures, I sealed the slab beforehand so I could use the pattern in a cab. I used Krazy Glue, a cyanoacrylate adhesive. It is the thinnest or most watery brand I have found. A thin glue is more effective than a thicker type because it will penetrate the gaps. Another way to ensure good penetration is to apply the sealant when the slab is heated; I set it in the sun on hotter days or on top of the space heater if the weather is not cooperating. When the slab is hot to the touch, I apply the sealant to one side and return it to the heat source until it is completely dry and hard. Then I seal the other side and return it to the heat source for curing. When the slab is thick and I am going to cut it down well below the surface, I re-seal it after the 220 grit step, when there will be no further significant removal of material.

When the sealant has dried completely, I sand off the glue with the 220 belt and go on smoothing through the finer grits. I was able to rough grind this softer material quickly on a 260 grit metal bond wheel and avoid the deep scratches I get from my 100 grit wheel. After that, I did my doming on a 220 grit belt on an expanding drum to eliminate any faceting left over from the hard wheel used in the roughing step. After sanding with the 220 belt, I went straight to a 600 grit belt, skipping the 400 grit step. Sanding with a 1200 belt didn't quite produce the satin finish I wanted, so I sanded it with a 6 mic (about 3000 grit) belt. This gave it a nice satin finish with a nice sheen. If you want a satin finish, you can stop at this point.

Getting a glossy polish on rhyolites can be a bit tricky. First I tried tin oxide on a poly pad, but the results were not very impressive. Next I used Pro-Polish (0.5 micron aluminum oxide) powder on a Polypad polishing disk which brought much better results. By polishing the cab completely while the pad was wet, I was able to improve the finish, but when I did a glossing pass after the pad had dried out to the point that it pulled on the stone a bit, the finish became nice and glossy. A good way to tell if the pad is in the sweet spot for glossing is to check the amount of polish left behind after each pass; if the layer is thin, the pad is too wet. When the pad is just right it will leave a clean surface and will show a nice polish.

*Author: Scott Empey, owner of Gerard Scott Designs, creates hand-cut gemstones, designer jewelry, and props for the motion picture industry. His Web site is [www.gerardscottdesigns.com](http://www.gerardscottdesigns.com).*

*Source: Rock N Gem Magazine 3/13 via Deming Rock Chips 4/13, via WGMS Rockhouser May 2013*