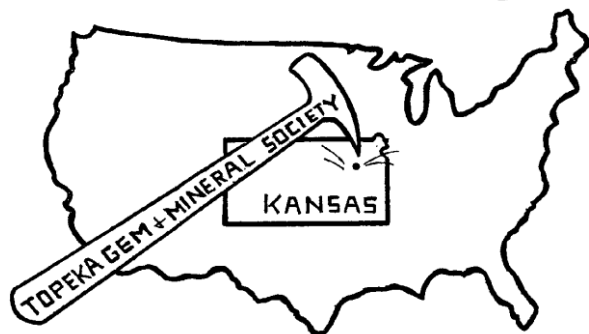


The Topeka Gem and Mineral Society, Inc.  
 1934 SW 30<sup>th</sup> St. Topeka, KS 66611  
 Rock2Plate@aol.com

# 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. 65, No. 6  
 June 2022



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)

## 2022 OFFICERS AND CHAIRS

President	Brad Davenport	379-8700	Cab of the Month	Donna & Russell Hedge	620-660-1651
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	Donna Stockton	913-645-7677
Secretary	Stacy Haug	1-857-3350	Welcome/Registration	Harold Merrifield	633-9745
Treasurer	Millie Mowry	267-2849	Property	D. Dillon	272-7804
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.

### Fodder from the president. June/22

Howdy everybody.

I don't have a lot to say this month so let's start with some reminders. If you intend to visit the big RMFMS convention in Las Vegas, you need to leave Thursday morning. To the best of my knowledge Cinda Kunkler and Chuck Curtis will be going.

Our June 24<sup>th</sup> meeting will be a covered dish dinner and rock Swap. So, if you have excesses of materials, bring them along. You will have to determine their value for trade or cash price. There are lots of you that do not have materials that you can trade so bring cash to make the deal. If you want to donate the proceeds to the club, this is fine too. I will bring along a set of scales if you want to sell by the Gram, Ounce, KG or Pound.

The shop has warmed up and the air conditioners are working well. I have been seeing some terrific projects turned out. So come on out and play.

Dave Dillon brought out a truckload of tools and equipment for setting up a casting station. He has run into a faceting machine that he forgot he had. We will need someone to help teach this as a class if there is interest.

I would like to plan on a "Shop Day" on Saturday the 25<sup>th</sup> of June starting about 10:00 in the morning. We will need help cleaning up the shop rooms, the garage, and creating two areas for Casting and Electroforming and a place we can drag out the large water cooled saw for use each Tuesday. If plenty of you folks show up, this shouldn't take too long. Let me know if you are willing to help. I will have a sign-up sheet set out for you. I will be reminding you through emails.

Brad

*Welcome to our new member.*

*Tracey Parrett*

We need your **BEST CHOICE** UPC Labels --

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



# TGMS Event Calendar

June 2022			JULY 2022		
1	W		1	F	
2	T		2	S	
3	F		3	S	
4	S		4	M	
5	S		5	T	Brad's Shop Open 6-9:30pm
6	M		6	W	
7	T		7	T	Jr Rockhounds, UUMC 6 p.m. sign in
8	W		8	F	No Board Mtg.....
9	T		9	S	
10	F		10	S	
11	S		11	M	
12	S		12	T	Brad's Shop Open 6-9:30pm
13	M		13	W	
14	T	Brad's Shop Open 6-9:30pm	14	T	
15	W		15	F	
16	T		16	S	
17	F		17	S	
18	S		18	M	
19	S		19	T	Brad's Shop Open 6-9:30pm
20	M		20	W	
21	T	Brad's Shop Open 6-9:30pm	21	T	
22	W		22	F	General Meeting UUMC 7:30 p.m.
23	T		23	S	
24	F	General Meeting UUMC 7:30 p.m.	24	S	
25	S	Shop Clean-up Day 10 a.m.	25	M	
26	S		26	T	Brad's Shop Open 6-9:30pm
27	M		27	W	
28	T	Brad's Shop Open 6-9:30pm	28	T	
29	W		29	F	
30	T	Publicity Meeting-Elmont Church 7 p.m.	30	S	
			31	S	

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)

**ALL MEMBERS.....SAVE THE DATES.....**

**OCT 7 thru 9<sup>th</sup>, 2022**

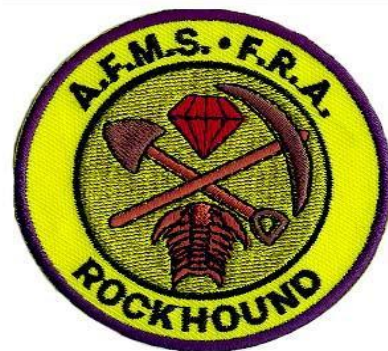
That is when our club show happens and we need EVERYONE to HELP not just for an couple of hours. Tell your boss you're sick, play hooky from work, take vacation days but we need your help. Sign up sheets will be available soon.

## 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: July 7, 2022 Showmanship.....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.



The Sertoma Duck Race has started for 2022

<https://www.duckrace.com/topeka>

Purchase your Ducks under Topeka Gem & Mineral as it is our only fund raiser of the year.  
The Race is September 17, 2022 at Lake Shawnee.

## Selenite Towers

*Photo by Ken Smith*

Selenite (calcium sulfate; gypsum; alabaster) is a perfect mineral for carving. It stands up to wear but with a Moh's hardness of 2 is easy to carve with many types of tools. It also comes in a variety of colors. These pure white selenite towers were carved from single selenite crystals and when carefully illuminated. They glow with a beautiful white translucence. Sometimes a hole is carved for internal lighting; the selenite lamp! This pair could have come straight out of a fantasy novel! Think you might like to try carving? Grab some selenite or soapstone and give it a shot. It is a very rewarding hobby!





## Cabs - Jewelry - & Specimens of the Month of May 2022



Russ Miller



Brad Davenport



Aztec Gold-M. Mowry



Cinda Kunkler

### Ken's Chemistry Corner: All about Iridium

-Iridium (Ir) is named after the Greek word "Iris", goddess of the rainbow. It was named this because its compounds are often highly colored.

-The element was discovered when platinum was dissolved in aqua regia (the only acid capable of dissolving gold and platinum) and a black residue were left over. In 1803, analysis of this residue resulted in the discovery of two new elements, osmium and iridium.

-Iridium metal is quite remarkable, it is one of the most dense (second only to osmium), it is extremely hard and nearly impossible to work using conventional metallurgy (it must be fused as a powder), and has an extremely high melting point, maintaining good mechanical properties even as high as 1600 degrees C.

-In fact, Iridium was not successfully melted until 1813, 10 years after its discovery. In 1834 its first application was in fountain pen tips.

-Iridium is one of the least abundant metals in the Earth's crust. Gold is 40 times more abundant and silver is 80 times more abundant. Meteors, however, often contain as much as 0.5 ppm of iridium (500) times more than Earth's crust). It is known that iridium forms very stable alloys with iron, and it is thought that much of the iridium got trapped in the earth's core when much of the planet was still molten.

-Curiously, a thin layer of iridium-rich clay exists at the cretaceous - paleogene border. Analysis of this clay in 1980 lead to the now generally accepted hypothesis that a meteor collided with earth during this time leading to the extinction of the dinosaurs.

-Iridium is obtained industrially as a bi-product from nickle-copper mining and purification processes. The demand for iridium is highly variable. For example, it is used to make devices to grow single sapphire crystals at very high temperatures that are then used in LCD TVs, which caused demand to go up. But eventually every manufacturer that needs this device has one and since they may literally last forever, the demand then plummets.

-Iridium metal and its alloys are also used in high performance spark plug contacts, long-life airplane components, and corrosion resistant deep-water pipes. A platinum iridium alloy was also used as the vent pieces for cannons. Very fine iridium metal is jet black. Although expensive, it is the blackest paint for porcelain and most other black porcelain paints look grey next to it.

Source: The Sooner Rockologist Jan 2019

## A RUBY OF ANOTHER COLOR IS CALLED A SAPPHIRE

by André Mongeon

from Kitchener-Waterloo G&M Club, the Rockblast, 1/2014

via Rocky Mountain Federation News 2/2014

via Backbender's Gazette 9/2014 & Stoney Stmt's. Sept 2014

Ruby and sapphire are the best-known varieties of the mineral corundum (Al<sub>2</sub>O<sub>3</sub>).

Most people do not know that they are essentially the same mineral, differing only in their apparent color. I use the word “apparent” here quite intentionally, for the color of a gemstone may not always be exactly what it appears to be.

The color of most corundum crystals found rarely exhibit the color seen in faceted stones. Crystals are often opaque, cloudy, and weakly colored. They may contain undesirable inclusions or tints of unwanted colors. Many crystals may be made more attractive by heating them. This treatment can clear up the cloudiness found in many crystals—for example, those from Ratnapura, Sri Lanka. A dull, cloudy gray crystal may turn to a beautiful, cornflower-blue sapphire after treatment. The color enhancement is achieved by selectively destroying certain inclusions with heat, while leaving other impurities intact.

Natural ruby and sapphire crystals are often heat-treated, a process usually called an “enhancement.” This is not generally considered deceptive, especially if the buyer is told about it. However over the years, enhancement has come to include some very deceptive things. One such practice is heating faceted stones in various solutions (beryllium compounds,

for example) just until the outer millimeter or so melts, taking on some of the solution. The stones are cooled and re-faceted into stones of stunning new (often too intense to be true) colors.

Natural colors of corundum are caused by minute metallic impurities (known as chromophores) in the crystal. The red color of ruby is due to the presence of traces of chromium, which replaces some of the



aluminum in corundum. If iron is also present, rubies can take on an unwanted brown hue. All other colors of corundum are termed sapphire. Pure corundum (seldom found) is colorless, as it lacks any chromophores. Corundum can (and often does) contain more than one chromophore. Heat treatment can selectively destroy some of them, which allows the ones remaining to impart a more desired color.

Rubies with lower amounts of chromium will blend into pink sapphire. The exact shade at

which ruby becomes a pink sapphire is rather subjective, but many sellers tend to pass off strong pinks as rubies. Blue sapphire is caused by a mixture of iron and titanium impurities. Heat treatment can make some crystals turn blue, but many turn so dark that they appear almost black. These darker stones are often passed off as blue, but that is usually a stretch. Violet and orange sapphires can both be colored by vanadium. Dominance of iron imparts a yellow color. Green

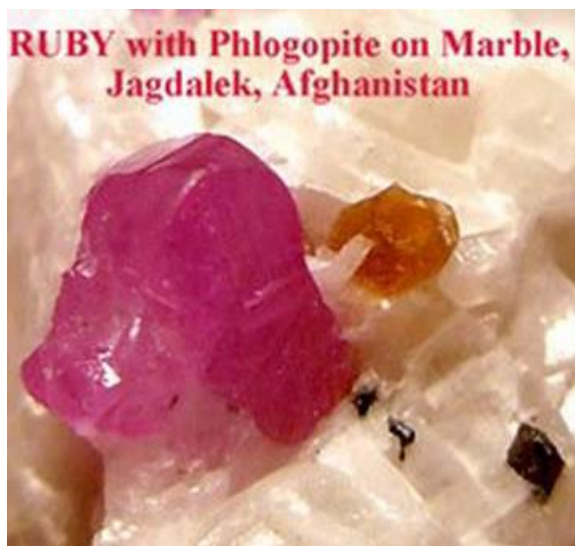


sapphires can have a mix of iron, titanium, and vanadium, but this is not very common. Under



a microscope, a green sapphire is often revealed to be composed of alternating bands of blue

and yellow sapphire, and thus only appears green. Uniform green coloration can indicate a synthetically produced sapphire—a process perfected over a century ago.



One other interesting inclusion in corundum is that of needle-like rutile crystals. Smaller amounts can impart a “silky” quality to the stone. Larger amounts, oriented in three directions, can result in a stone that displays asterism. These are usually cut into cabochons and are called “star rubies” or “star sapphires.” Unfortunately these are also synthetically produced, with the very best (sharp and distinct)

asterism, usually indicating that it is manmade. Most natural star corundum has a more smudgy-looking star, increasing in price as the quality increases. Synthetics usually provide stones with nice eye-appeal at a low price, but be careful that they are not passed off as amazing natural stones. You must also keep in mind that natural stones can be enhanced, making it possible for cheap, second-class gems to be passed off as far better than they really are.

### **LIMB CAST OR FOSSIL LIMB SECTION?**

Do you know the difference between a fossil limb section and a limb cast? Some call a specimen by either name, not realizing that there is a difference. A limb cast occurs when a buried limb has decayed and the resulting void has been filled with agate or some other material. The cast is in the form of the original limb, but no cell or ring patterns have been preserved.

A fossil limb section is a portion of petrified wood. As the wood decayed, it was gradually and completely replaced by mineral deposits, cell by cell. Thus, a part of the wood structure’s cells and rings have been preserved.



via Grindings, 01/2005 via El Gambrisino, 2/15 via The Rock Collector, 2/15, via Stoney Stmtts. Feb 2015

June 24, 2022  
At UUMC, 1621 SW College  
Join us for our summer time fun.  
Bring your favorite dish or two to share, table service, and something to drink.



**SQUARE POINT OF SALE  
IS HERE NOW!**  
We have added this feature so that, membership dues,  
shop fees, show admissions, and other purchases can be made.

### ALOE VERA GEL

One of the best FIRST AID items 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 for fever blisters (cold sores) that there is. As soon as you feel this 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: reprint from The Drifter April 1984

