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. 63, No. 10, Oct. 2020





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, 7:30 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 30th St, Topeka, KS 66611. www.TopekaGMS.org

2020 OFFICERS AND CHAIRS

President	Brad Davenport	379-8700	Cab of the Month	Debra Frantz/Fred Zeferjohn	862-8876
1st Vice Pres.	Will Gilliland	286-0905	Field Trip Coord.	Will Gilliland	286-0905
2 nd 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
	Francis Stockton	913-645-7677	Editor/Exchange Editor	Millie Mowry	267-2849
	George Reed	836-9277	Show Chairman	Millie Mowry	267-2849
Historian	Open		Show Dealer Chairman	Millie Mowry	267-2849
Federation Rep	Harold Merrifield	633-9745	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 nur	mbers 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.

Words from Our President

Howdy one and all.

Fall is in the air and I am just loving it. It is by far and away my favorite season here in the great state of Kansas. The Summer greens giving way to our glorious autumn colors can be breathtaking. The cool crisp morning temperatures please me to no end. The heat and humidity of Summer finds me inside with no desire to get out and do what needs to be done. These cooler mornings jump start my brain with a vigor to go out and catch up on all my procrastination.

Firewood is all split and stacked outside the kitchen door ready to warm our hearth. Other things around here are being winterized for the long Winters nap. I get a giggle when driving through town seeing folks starting their battle with falling leaves. Living out here in the sticks, nature does all this work for me. Today the leaves from the Hackberry trees are gently traveling North into the tree lines. A month from now they will be stampeding South like so many of nature's other members. I feel for all the rake raiders out there combating this annual event.

While many of nature's plants and animals are winding down for hibernation, I am pleased that our club has scratched our way out of our cocoon, spread our wings and are flying with a fresh enthusiasm. We have had our first club meeting in our new digs and we have now held two Junior Rockhound classes. There were 29 club members at our meeting last month. We had three Juniors at our first class and six at our second class. Let's hope this is an ongoing trend. Invite your friends, neighbors, kids and grandkids to come out and join our flock of butterflies. People are out there looking for opportunities to safely crawl from their own cocoons and get involved. Let's help them.

The Tuesday shop time is proving to be well accepted and taken advantage of. If you want to take our silversmithing classes, you need to get your name in the hat to be drawn for ongoing classes. Millie's Wrappers are turning out some beautiful & clever projects every week. If this is something you would like to learn, just show up any Tuesday and take off with some excellent instruction for you. The rock room, now being referred to as "The Crib" is running well and most of the bugs have been worked out of the systems. I am proud to say that some of the more experienced folks are stepping up to help those that are just learning.

Well, that's all of my prattle for this month. Everything looks bright for your club and we love to see folks involved. Grab a friend, get out of the house and join us in all that we are doing.

Brad

The Sertoma Duck Race is over, and our team did an outstanding job this year. We adopted a total of 80 ducks raising \$315. Of which the Club got in return the amount of \$157.50. Way to go team!



YES, we have moved the TGMS General Meeting and the Junior Rockhound's to the University United Methodist Church at 1621 SW College Ave, 66604. We will meet in the Fellowship Hall.

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



Best Choice Labels - I just submitted 1,000 labels to the 'Save-A-Label' program for the club. Keep them coming! Just bring to our next meeting or any other TGMS gathering. Thank you for your support!

OCTOBER'S PROGRAM

Jason Schulz, will present a program for the October meeting, hovering between three different topics, all centered around the Earth in Space. This should be very interesting!

Sternberg Museum of Natural History Collections

Data, images, and information on the material in the collections is now available on-line as a result of a four-year project at Fort Hays State University. The information can be accessed at Sternberg.fhsu.edu. Click on "Research & Collections" and choose "Paleontology" from the drop-down menu. Scroll down and click on the left-hand blue "Paleontology Collections" button. It was reported that more than 23,000 specimens are covered.

Information per the October 3, 2020, Topeka Capital-Journal from the Hays Daily News, by Margaret Allen. William Gilliland

TGMS Event Calendar

OCT 2020				NOV 2020		
1	T		1	S		
2	F		2	M		
3	S		3	Т	Lapidary Class @ Brad's, 6 p.m. NO—wire wrap class	
4	S		4	W	*	
5	M		5	Т	Jr Rockhounds, UUM Church 6 p.m. Wire wrap class at Millie's 1 p.m.	
6	T		6	F		
7	W		7	S		
8	T	Wire wrap class at Millie's 1 p.m.	8	S		
9	F	BOARD MEETING 7 p. m. @ Millie's	9	M		
10	S	•	10	T	Lapidary & Wire Wrap Class @ Brad's, 6 p.m.	
11	S		11	W		
12	M		12	Т	Wire wrap class at Millie's 1 p.m.	
13	T	Lapidary & Wire Wrap Class @ Brad's, 6 p.m.	13	F	whe wrap class at winnes 1 p.m.	
14	W	Eupledity & Wife Wild Class & Blad 8, 9 p.m.	14	S		
15	T	Wire wrap class at Millie's 1 p.m.	15	S		
16	F	whe wrap class at winnes 1 p.m.	16	M		
17	S		17	T	Lapidary & Wire Wrap Class @ Brad's, 6 p.m.	
18	S		18	W	o p.iii.	
19	M		19	T	Wire wrap class at Millie's 1 p.m.	
20	T	Lapidary & Wire Wrap Class @ Brad's, 6 p.m.	20	F	General Meeting @ U.U.M. Church 1621 SW College Ave 7:30 p.m.	
21	W		21	S		
22	T	Wire wrap class at Millie's 1 p.m.	22	S		
23	F	General Meeting @ U.U.M. Church 1621 SW College Ave 7:30 p.m.	23	M		
24	S		24	T	Lapidary Class @ Brad's, 6 p.m. NO Wire Wrap Class	
25	S		25	W		
26	M		26	Т	THANKSGIVING	
27	Т	Lapidary Class @ Brad's, 6 p.m. NOWire wrap class	27	F		
28	W	•	28	S		
29	T	NOWire wrap class at Millie's	29	S		
30	F		30	M		
31	S	We come				
		HALLOWEEN				

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



--- Everyone must wear masks!

Next Class: Nov 5, 2020, Fluorescent Minerals, Will Gilliland

Dec 3, 2020, Minerals, Brad Davenport Jan 7, 2021, Rocks, Brad Davenport

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

Hey Rockhounds! WE'RE MOVING!

Starting November 5th, our classes will be at the University United Methodist Church. The dates and times won't change, just the place. The address is noted above.

Our next class is Fluorescent Minerals with Will Gilliland. Sign in starts at 6:00, and class will begin at 6:30. We're still going to need our masks (at least for now), so don't forget them!

In December, Brad Davenport covers Minerals, and also talks about Rocks in January.

See you then! Jason S.

Field Trip to a Kansas River sandbar. Saturday, October 10, 2020

Meet at 9:00 A.M. at the Gulf Station at SE 6th. St. (US-40) and Croco Road in east Topeka. This will be a joint field trip with the 4-H geology project. Please bring masks and plan to maintain social distance.

There will be about a half mile walk on a field road to the site. If it remains dry a few vehicles (3 or 4) may be able to drive closer to the sandbar. The owner reports that currently the sandbar is about a half mile long. If there is significant rain we may not be able to access the site.

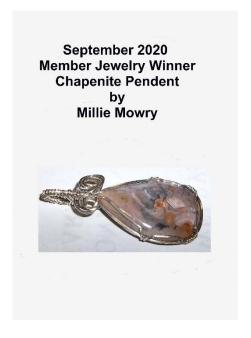
As this is a joint trip, **please let us know via e-mail if you plan to attend**. We may need to pre-arrange parking.

Will & Pat Gilliland gillilandp@aol.com



Cab of the Month Contest





Realgar and Orpiment (from Wikipedia, free encyclopedia)

Realgar, is an arsenic sulfide mineral, also known as "ruby sulphur" or "ruby of arsenic". It is a soft, sectile mineral occurring in monoclinic crystals, or in granular, compact, or powdery form, often in association with the related mineral, orpiment (As2S3). Realgar most commonly occurs as a low-temperature hydrothermal vein mineral associated with other arsenic and antimony minerals.

Sublimation process for transformation of the yellow part called Realgar to red Orpiment occurs in geothermal conditions. Sublimation is an endothermic process that occurs at temperatures and pressures below a substance's triple point in its phase diagram, which corresponds to the lowest pressure at which the substance can exist as a liquid.

Occasionally, Realgar Sublimates to form gemmy Orpiment crystals that look just like a Ruby, but they are much softer than ruby. Mohs hardness of Orpiment is 1.5 to 2, compared with 9 for Ruby.

A ruby is a pink to blood-red colored gemstone, a variety of the mineral corundum (aluminium oxide). Other varieties of gem-quality corundum are called sapphires. Ruby is one of the traditional cardinal gems, together with amethyst, sapphire, emerald, and diamond. The word ruby comes from ruber, Latin for red. The color of a ruby is due to the element chromium.

The quality of a ruby is determined by its color, cut, and clarity, which, along with carat weight, affect its



value. The brightest and most valuable shade of red called blood-red or pigeon blood, commands a large premium over other rubies of similar quality. After color follows clarity: similar to diamonds, a clear stone will command a premium, but a ruby without any needle-like rutile inclusions may indicate that the stone has been treated. Ruby is the traditional birthstone for July and is usually more pink than garnet, although some rhodolite garnets have a similar pinkish hue to most rubies. The world's most valuable ruby is the Sunrise Ruby.



Records and famous rubies

Rubies at the National Museum of Natural History, Washington, D.C., USA. The Smithsonian's National Museum of Natural History in Washington, D.C. has some of the world's largest and finest ruby gemstones. The 23.1 carats (4.62 g) Burmese ruby, set in a platinum ring with diamonds, was donated by businessman and philanthropist Peter Buck in memory of his late wife Carmen Lúcia. This gemstone displays a richly saturated red color combined with an exceptional transparency. The finely proportioned cut provides vivid red reflections. The stone was mined from the Mogok region of Burma (now Myanmar) in the 1930s.



In 2007 the London jeweler Garrard & Co featured on their website a heart-shaped 40.63-carat ruby.



On December 13/14, 2011 Elizabeth Taylor's complete jewelry collection was auctioned by Christie's. Several ruby-set pieces were included in the sale, notably a ring set with an 8.24 ct gem that broke the 'price-per-carat' record for rubies (\$512,925 per carat, i.e. over \$4.2 million in total), and a necklace that sold for over \$3.7 million.

The Liberty Bell Ruby is the largest mined ruby in the world. It was stolen in a heist in 2011.



The Sunrise Ruby is the world's most expensive ruby, most expensive colored gemstone, and most expensive gemstone other than a diamond. In May 2015, it sold at auction in Switzerland to an anonymous buyer for US \$30 million.

A synthetic ruby crystal became the gain medium in the world's first optical laser, conceived, designed and constructed by Theodore H. "Ted" Maiman, on the 16th of May, 1961 at Hughes Research Laboratories. The concept of electromagnetic radiation amplification through the mechanism of stimulated emission had already been successfully demonstrated in the laboratory by way of the Maser, using other materials such as ammonia and, later, ruby, but the Ruby Laser was the first device to work at optical (694.3 nm) wavelengths. Maiman's prototype laser is still in working order.

Source: Stoney Statements June 2018

Stone Colors

If someone should ask you for a stone of a particular color, here are some examples of what you may offer.

Red	Yellow	Purple	Brown
Carnelian	Amber	Amethyst	Amber
Coral	Beryl	Garnet	Chrysoberyl
Garnet	Citrine	Sapphire	Garnet
Ruby	Garnet	Sugilite	Sard
Spinel	Sapphire	Spinel	Smoky Quartz
Tourmaline	Topaz		Topaz
Orange	Green	Pink	Blue-Green
Amber	Emerald	Coral	Aquamarine
Carnelian	Garnet	Garnet	Topaz
Citrine	Jade	Kunzite	Tourmaline
Coral	Malachite	Morganite	Turquoise
Fire Opal	Peridot	Pearl	
Garnet	Tourmaline	Rose Quartz	Blue
Sapphire		Sapphire	Lapis Lazuli
Topaz	Violet	Topaz	Sapphire
	Iolite	Tourmaline	Topaz
	Tanzanite		Tourmaline
			Zircon

Source: Hourglass News Jan/Feb 2010