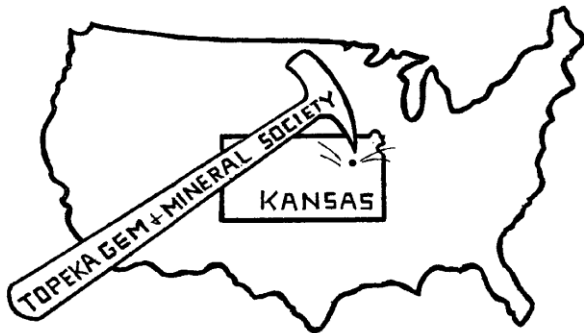


The Topeka Gem and Mineral Society, Inc.
 1934 SW 30th St. Topeka, KS 66611
 Rock2Plate@aol.com

THE GLACIAL DRIFTER



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. 63, No. 2,
 February, 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, Stoffer Science Hall, Room 138, Washburn University. 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
1 st 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 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.

Words from Our President

Howdy all.

Here we are pushing the first of March and the end of winter. Our minds start to imagine the rights of Spring. Preparing our gardens while we peruse through the newest seed catalogs. Ponder this year's battles with Dandelions and other obnoxious weeds in our yards. The first fishing trip or family picnic. Many of us dream fondly of picking our first batch of Morel mushrooms.

Of course, we grow anxious to get out and do some rock and fossil hunting. What is on your wish list to find? A big Lake Superior Agate. Maybe your first Trilobite. I'm still looking for my first. Fossils found on the gravel beds of the Kansas river are often nothing shy of fascinating. Last years high water levels made hunting there impossible. But by the same token, imagine how many fabulous new specimens have been brought downstream?

So, we have a few more weeks of the Winter's lion before the lamb of Spring frees use to wonder. Now is the time to start planning for the year's adventures. Kickstart your brains. Tickle your imagination. Challenge your courage and determination.

Brad 785-845-6624 Brad7254@gmail.com

Program for the Meeting on January 24th, 2020.

The program for the February 28th meeting will be a video on picture jasper, and I would like to have members bring a sample of any picture jasper they might have so we can compare and talk about the different varieties that are available.

Cinda Kunkler

Welcome Our New Members

Don Nichols
Doria Skinner
Russell & Donna Hedge
Jephthah Schlingensiepen & *Siah Schingensiepen



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

NEW T-SHIRTS ARE IN THE WORKS FOR THE 2020 TGMS ANNUAL SHOW.
We will start taking orders at the next general meeting. This is the new design & color.
The cost for Adult sizes is only \$15.00. See Millie to order.



DUES ARE DUE NOW.

**The club directory will be printed the 1st of March.....
Will your name be in it??????**

TGMS Event Calendar

Feb. 2020			Mar. 2020		
1	S		1	S	
2	S		2	M	
3	M		3	T	Wire Wrap Class at Millie's 6:30 p.m.
4	T		4	W	
5	W		5	T	Jr Rockhounds TSCPL rm 101C 6:30 p.m. Wire wrap class at Millie's 1 p.m.
6	T		6	F	
7	F		7	S	
8	S		8	S	
9	S		9	M	
10	M		10	T	Wire Wrap Class at Millie's 6:30 p.m.
11	T		11	W	
12	W		12	T	Wire wrap class at Millie's 1 p.m.
13	T		13	F	Board Meeting 7 P M @ Millie's
14	F		14	S	
15	S		15	S	
16	S		16	M	
17	M		17	T	Wire Wrap Class at Millie's 6:30 p.m.
18	T	Wire Wrap Class at Millie's 6:30 p.m.	18	W	
19	W		19	T	Wire wrap class at Millie's 1 p.m.
20	T	Wire wrap class at Millie's 1 p.m.	20	F	
21	F		21	S	
22	S		22	S	
23	S		23	M	
24	M		24	T	Wire Wrap Class at Millie's 6:30 p.m.
25	T	Wire Wrap Class at Millie's 6:30 p.m.	25	W	
26	W		26	T	Wire wrap class at Millie's 1 p.m.
27	T	Wire wrap class at Millie's 1 p.m.	27	F	General Mtg Stauffer rm 138 7:30 p.m.
28	F	General Mtg Stauffer rm 138, 7:30 p.m. Program on Picture Agate	28	S	
29	S		29	S	
30			30	M	
31			31	T	Wire Wrap Class at Millie's 6:30 p.m.

If you are interested in Wire Wrap Classes, contact Millie, 267-2849 or rock2plate@aol.com

LESSONS AT THE BARN ARE WEATHER PERMITTING – Watch for emails

Check out the calendar on our web site
www.TopekaGMS.org

JR ROCKHOUND Classes & Reminders

Here are reminders of the next few months of classes: Topeka Shawnee CO Public Library 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

- Mar. 5, 6-8:45 p.m., Marvin Auditorium, 101C, Gemstone Lore & Legend, Will Gilliland
- Apr. 2, 6-8:45 p.m., Marvin Auditorium, 101C, Field Trips, Pat Gilliland
- May 7, 6-8:45 p.m., Marvin Auditorium, 101C, Collecting, Cinda Kunkler & Millie Mowry

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

FOUR RECIPES, FOR TIGEREYE

**A reprint from the Glacial Drifter March 1991
(Editor's Note: Best done under adult supervision)**

Take 4 golden tigereye cabs
1 pie pan with 1 inch of sand in it.
1 pint fruit jar ½ full of full strength bleach.

Finish and polish all 4 cabs. Place 2 in the pie pan and cover with sand. Place in cool oven and raise temperature to 400 degrees. Bake at this temperature for 1 hour, then turn oven off and allow to cool with oven door closed. This turns them red.

Now take 1 red and 1 golden cab and place them in the bleach. Close the lid and leave for one to two weeks. Remove and wash.

Results: 1 natural golden tigereye, 1 blond tigereye, 1 strawberry-blond tigereye, and 1 red tigereye.



Scientists Have Cracked The Mystery Of How Fossil Concretions Form

[David Bressan](#) Contributor
[Science](#)

I deal with the rocky road to our modern understanding of earth



Concretions are fascinating to geologists and rockhounds alike. All over the world, well-preserved fossils and crystals are frequently been found inside these roughly spherical rocks. The Mazon Creek fossil beds in Illinois are famous for the concretions found there, which display well-preserved fossil plants if split apart. The Paraná Basin in South America has concretions containing fossil fish preserved in three dimensions, providing unique snapshots of the past. Some of those fossils even show larger fish swallowing the smaller ones.



The predatory fish Calamopleurus from the Cretaceous of the Paraná Basin and his last prey. DAVID BRESSAN

Concretions, despite being common in sedimentary rocks, are still a sort of geological mystery. Do dead animals or plants play a role in the formation of concretions, or do concretions simply preserve fossils better as the surrounding rocks? How long do they take to grow? Some documented concretions are [more than nine feet in diameter](#). If they can become so large, what exactly controls their growth and why do they suddenly stop growing (as the sharp contact between a concretion and surrounding rocks suggests)?

Continued on next page



"Comiestone"- concretions from Spain. DAVID BRESSAN

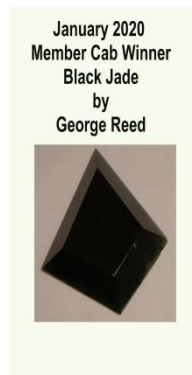
Researchers at Nagoya University have analyzed dozens of concretions from three sites across Japan, England and New Zealand. Studying the chemical composition in a transect from the outer layers of a concretion towards the surrounding rocks, the researchers were able to crack some of the open questions. The chemical composition shows also that indeed the fossils play a role in the origin of the concretions. The element calcium, cementing smaller sedimentary particles together and forming the hard, compact matter, comes from the decaying organic remains.

More surprising were the results of the growth rates. Concretions were thought to take hundreds of thousands to millions of years to form. However, they instead apparently grow at a very fast rate over just several months to several years. This new observation could also explain why the fossils found inside the concretions are so well preserved.

As an animal or plant dies, the remains become embedded in sedimentary layers deposited on the bottom of a lake or of the sea. The decaying organic matter releases calcium, which reacts to form the mineral calcite. The calcite then cements together sand and clay particles. This happens quickly, before the animal or plant decays completely, helping preserve the fossil.

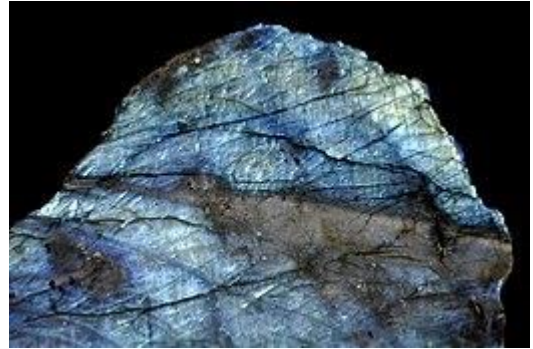
More and more sediment is cemented together over time, forming the hard, compact concretion around the fossil. As soon as the formation of calcite stops, as there is no more enough calcium present in the sediment, also the growth of the concretions suddenly stops, forming a sharp contact between the concretions and the surrounding sediment. Erosion removes the softer sediment, leaving the weathering resistant concretions intact. Finally, a geologist or collector comes along and hoping to make a unique find, will split open the concretion with a hammer.

January 2020 Cab of the Month Winners



Labradorite
(a reprint from the Glacial Drifter, January 1986)

In 1770 a Moravian missionary collected this stone at the Isle of St. Paul, off the coast of Labrador. Later in 1775, Bishop Launitz introduced the rough material to the European gem cutters. In the early days it was known as Labrador Stone.



Picture from Wikipedia

In Europe it became popular and of great value. It is recorded that pieces weighing less than a pound, polished on a surface, were snapped up at \$100.00. When the ship captains learned of its great value, they would stop long enough at Isle St. Paul to send hands out to quarry a few blocks, and this added supply eventually brought the price down.

Later, fine grade Labradorite was found far inland, and original coast locality became exhausted. The earlier gem cutters had great difficulty with this material. They had to learn that in order to get the best play of color, it was essential that each rough piece must first be carefully studied and then cut at the correct angle. Labradorite is a good deal like the layered opal of Australia, where the finest play of color rests in a thin vein or layer. Locating the layer is even more tricky in Labradorite than in opal.

At one time, Labradorite was widely used to ornament costly table tops. Skilled gem cutters were employed to saw the rough into slabs for table tops. These were in wide demand throughout Europe. At the time of their popularity, gem cutters did not have the modern precision diamond saw. The circular saws in use at the time could not be used to cut large sections of this high cleavage material. So they were obliged to use the old hand operated bow and wire, with crude emery grit.

These table tops were unique in that when viewed from one direction the surface appeared like ordinary gray marble. With a slight change in position, the viewer would be struck by a blaze of color reflections. The remarkable play of red, blue and green colors on the polished surface is not due to any chemical constituent. It is purely an optical property. Along the cleavage plane; there is a lamellar structure, similar to a complex system of gratings. The light falling upon this surface is, in part, broken up into various primary colors.

This material has a marked cleavage, so for reasons of mechanical strength, slabs should be cut thick. It is rather soft and easy to cut by even a “worn” diamond saw.



IF YOU ARE IN DOUBT ABOUT IF YOU HAVE PAID YOUR DUES---CHECK WITH MILLIE.

