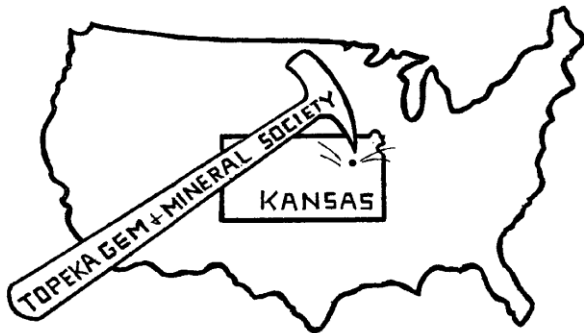


The Topeka Gem and Mineral Society, Inc.
 1934 SW 30th St. Topeka, KS 66611
 Rock2Plate@aol.com

THE GLACIAL DRIFTER



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. 60, No. 5, May, 2017

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

2017 OFFICERS AND CHAIRS

President	Mike Cote	220-3272	Cab of the Month	Debra Frantz/Fred Zeferjohn	862-8876
1 st Vice Pres.	Dave Dillon	272-7804	Field Trip Coord.	Leslie Hartman	380-6016
2 nd Vice Pres.	Carolyn Brady	233-8305	Publicity	TGMS Board	-----
Secretary	Cinda Kunkler	286-1790	Welcome/Registration	Russ & Rhonda Miller	272-6408
Treasurer	Millie Mowry	267-2849	Property	M. Cote/D. Dillon	220-3272
Directors	Harold Merrifield	633-9745	AFMS Scholarship	Cinda Kunkler	286-1790
	Chuck Curtis	286-1790	Editor/Exchange Editor	Millie Mowry	267-2849
	Brad Davenport	379-8700	Show Chairman	Harold Merrifield	633-9745
Historian	Deborah Scanland	273-3034	Show Dealer Chairman	Dave Dillon	272-7804
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	open	-----	Show Case Coordinator	Francis Stockton	913-645-1131
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

Say, have you seen the calendar on the TGMS web site. Check it out for all the up to date information as to what is happening and where. Remember—this is the last general meeting until September, but you will find all the Club activities on the new calendar on the web site. It will be updated as things arise so keep an eye on it. The program this month is a video on Amber.

Mike and his Rock Stash



AS A REMINDER:

Classes will be the barn from 6:00 to 9:00. There will be no classes the month of July this year. Whenever we have bad weather on the night of classes there will be no classes. This will include heavy rains and any time there are storms in the area. On Holidays whenever there is a holiday during week of class there will no class that night. Also whenever Mike or I go on vacations there will be no classes. We would let class know whenever vacations would come up. I will bring this up in our next Washburn regular meeting to explain in more detail. Hope to see everyone at the meeting! Dave-

Publicity

The t-shirts and hats are here—I think I have notified everyone that has ordered one. I will bring them to the May meeting for you to pick up if you have not contacted me before that.

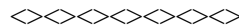
The Topeka Gives, activity at the Fairlawn Mall on June 6th has been Cancelled.

The TGMS Garage Sale, will be on June 10th with set up date on the 9th from 1-5 pm. Bring your donated items to the Lowman Methodist Church, 4000 SW Drury Ln, Topeka, KS. Just south of Gage Shopping Center. The Sale starts at 8 am until 2:30 pm. We need Volunteers for this sale.

We will be taking part in the Forest Park Retreat Center, activity on June 16th , so will need help with manning our booth. This will be inside and in the morning. More information will be coming. Please volunteer to help us out. Their address is 3158 SE 10th St. Topeka, KS 66607.

We also have been approved to have a booth at the Shawnee County Fair, July 20 thru 23rd. from 10 to 6 pm. WE NEED A LOT OF HELP HERE so let's all chip in and help out a few hours. This will be inside also.

For more information on these activities, watch for emails, or call Millie or Leslie.



New Members

Coda Mendes
Zoey Mendes
Janet Lee Jones
Nate Birnley
Alexis Birnley



Visitors are always **WELCOME** at our meetings!

Event Calendar

May. 2017

1M	
2T	
3W	
4T	
5F	
6S	
7S	
8M	
9T	
10W	
11T	
12F	
13S	
14S	
15M	
16T	Lessons at the Barn/Cancelled/Weather
17W	
18T	Wire Wrap Class Millie's 1-3 p.m 7-9 pm
19F	
20S	Flint Hills Discovery Center 10 a.m.-5 p.m.
21S	
22M	
23T	Lessons at the Barn 6 pm – 9 pm
24W	
25T	Wire Wrap Class @ Barbara's 1 pm Wire Wrap Class @ Millie's 7-9 p.m.
26F	Genereal Meeting Stouffer Rm 138 7:30 pm
27S	
28S	
29M	
30T	Lessons at the Barn 6 pm – 9 pm
31W	

June 2017

1T	Jr Rkhd's @ TSCPL rm 202 Wire Wrap Class Millie's 1-3 p.m. only
2F	
3S	
4S	
5M	
6T	Lessons at the Barn 6 pm – 9 pm
7W	
8T	Wire Wrap Class Millie's 1-3 p.m Wire Wrap Class Millie's 7-9 p.m
9F	Garage Sale set up 1-5 pm Lowman Methodist Church
10S	Club Garage Sale 8 a. – 2:30 pm Lowman Methodist Church
11S	
12M	
13T	Lessons at the Barn 6 pm – 9 pm
14W	
15T	Wire Wrap Class Millie's 1-3 p.m Wire Wrap Class Millie's 7-9 p.m.
16F	
17S	
18S	
19M	
20T	Lessons at the Barn 6 pm – 9 pm
21W	
22T	Wire Wrap Class Millie's 1-3 p.m Wire Wrap Class Millie's 7-9 p.m.
23F	Club Pot Luck Picnic @ Millie's
24S	
25S	
26M	
27T	Lessons at the Barn 6 pm – 9 pm
28W	
29T	Wire Wrap Class Millie's 1-3 p.m Wire Wrap Class Millie's 7-9 p.m.
30F	

Any questions ask Millie at rock2plate@aol.com

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

Volunteering is the heart



beat of YOUR club

TOPEKA JUNIOR ROCKHOUNDS

<https://www.facebook.com/TopekaGMSJuniorRockhounds>

To register for the Junior Rockhounds or any of the classes, email: Leslie Hartman at: Hartman.12345@hotmail.com



Junior Rockhound Activity Center

We will have **the Activity Center open for Jr Rockhounds at 7:00**. We will meet at Washburn University 1700 SW College Ave., Topeka, KS in the Stoffer Science Hall Room 138.

JR ROCKHOUND CLASSES

(Some classrooms and dates may have changed so please watch for changes) ****Here are reminders of the next 2 months of classes: Topeka Shawnee CO Public Library sign in starting at 6:00pm and classes starting at 6:30pm.

1. June 1st Fluorescent Minerals instructor Will Gilliland
2. July 6th Earth Processes instructor Brad Davenport

Mineral of the Month of May

“**Gypsum** is a non-metallic mineral, found in rock form. It is composed of 79.1% calcium sulphate and 20.9% water, by weight. Chemists call it Hydrous Calcium Sulphate, and as there is one molecule of calcium sulphate combined with two molecules of water. It has the chemical formula $\text{CaSO}_4 \cdot 2\text{H}_2\text{O}$. By volume this works out to nearly 50% water in the mineral structure. This water however, is perfectly dry, and is known as "water of crystallization". It could be compared with ice, which, too is water in crystalline form, but there is this an important difference; ice will melt, or change to water, when it is exposed to a temperature above 32 F. Water of crystallization, in gypsum, does not change until it is subjected to heat above 212 F but at that temperature the water of crystallization changes form and becomes water vapor and is driven off from the gypsum just as steam is driven off from water at 212 F. Gypsum, an evaporate rock, formed at the base of the shallow Michigan basin as it dried up, leaving the $\text{CaSO}_4 \cdot \text{H}_2\text{O}$ deposits behind, as gypsum. In absolutely pure form, gypsum is white. However, gypsum normally contains impurities whose presence makes the rock appear gray, brown, pink, or even almost black.

Gypsum is found in many parts of the world. Gypsum deposits lie in flat beds of about six to eight feet in thickness, and are often inter-layered with limestone or shale. Gypsum deposits were formed millions of years ago when salt water oceans covered most of the earth, and as they receded, may inland "dead" seas were formed which, as evaporation continued, became more and more salty. As those salts precipitated, they formed various compounds in turn, one of which was gypsum. As millions of years passed, these salt deposits combined with decayed vegetation and other minerals, and eventually the result was stratified rock, with layers of gypsum and layers of limestone alternating, the whole covered over with many feet of glacial deposits.”

<http://geo.msu.edu/extra/geogmich/gypsummining.html>



Bright, cherry-red gypsum crystals 2.5 cm in height colored by rich inclusions of the rare mineral botryogen

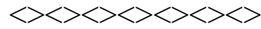
Picture From Wikipedia, the free encyclopedia

Future Field Trips

1. Flint Hills Discovery Center 315 S 3rd St, Manhattan, KS 66502. Saturday, May 20th from 10am to 5pm. (Jr Rockhounds and TGMS members who work with name badge first can get in free. If you don't have a name badge please come to see me there so I can get you in after you work.) **We will need your help!!!!**

2. Strataca is a salt mine museum in Hutchinson, Kansas. It was previously known as the Kansas Underground Salt Museum. 3650 E Ave G, Hutchinson, KS 67501. **Saturday, May 27th. We will meet at 10AM.** We will be part of the Underground tour of the museum and Dark Ride (30 minutes) which takes up to 2 hours together.

The Glacial Drifter, Vol. 60, No.4, Apr. 2017



Saturday Kidsfest Event

Saturday May 7, 2017 Leslie Hartman

As you all know we had Kidsfest yesterday at the west Ridge mall. It went better than I thought it would. There were about 30 people we gave information to who just wanted to start with information and 58 people signed in for more information and there were several who wanted to join. I gave them information to come check us out first to see if we are the right group for them. There were many others but they live far away even into another state just here visiting relatives. I told them of groups in those areas.

Don't get me started with the kids. We had several kids and they had a blast especially with my dino poop and Isaac's spider. My rocks I was giving away are now all gone. I will need a refill on rocks and shells if I continue. There were kids who should and want to join the group.

One lady wanted to come just to get her thunder egg cut open. So I gave her the information so she can look into it. Sometimes just doing one thing for someone can possibly lead to many people by word of mouth.

Carolyn came to help all day but her tent was not complete so the club's very own Jr rockhound Andrew's dad stepped up to help made something for us to have shade but the sun still got us. We became red lobsters.

The group was requested to come to a girl scouts fun day in the fall or spring of next year. They are working on their fall schedule and will email to let the group know when they want the group to come.

Another group asked us to come to their summer day camp at Forest Park in June.

Andrew and his dad could only stay an hour before going to boy scouts for their big celebration. Thanks to them they saved the day.

It was a good day and well worth it for the group here in Topeka.



WORKING TOGETHER WORKS



If you have any of the following and willing to donate, we could use them for our activities that we are planning. Contact Leslie or Millie.

Polished rocks (small to medium size)
Shells-any size
Acrylic paints-any color
Rocks to paint on-- or
Money to purchase these items

Bench Tips by Brad

See all Brad's jewelry books at Amazon.com/author/bradfordsmith

DRILL PRESS VISE

A drill press vise is a versatile tool to hold a workpiece securely and in precise alignment. It reduces the risks of working with high power motors, use of larger drill bits, and higher heat generated in the operation. The vise can be clamped to the drill press table if needed and is quite handy for use at the bench to hold things for sawing or riveting.

You can find them at stores that carry machine tool supplies. My feeling is that the best ones are made from steel. In particular, I like the ones with V grooves cut into the jaw plates. That lets me hold a punch straight upright or hold a rod horizontal. To find a supplier, search on "drill press vise" at sites like micromark.com mscdirect.com enco smallparts.com grizzly.com sears.com



DENTAL GOLD

You might think that a couple pieces of dental gold would be valuable, but if you only have a small amount, it can be a problem. Sending it to a refiner is expensive for small amounts of metal.

I made the mistake of thinking I could melt it and roll out my own sheet. However, the trace metals that dental gold contains to make it a good material in your mouth cause it to crack if you try to forge it or roll it out as a sheet. It ruined my whole ingot.

So what to do with a couple gold crowns? A reasonable alternative is to try incorporating the metal into your jewelry. If you have enough material to do a casting, that's probably the best use for dental gold. If you're not into casting, try melting it on a solder pad and while molten, divide it into small pieces with your solder pick. Then re-flow each piece to make little gold balls for use as accents on your designs. The balls can also be planished a bit to make small discs or struck with a design stamp to add texture.



For the months of June July and August, we have pot luck picnics instead of the general meeting. They are held at Millie's house, where we eat inside where it is cool. So bring your table service and your favorite picnic food to share. Oh yes, and your spouses are welcome also. More on the calendar at www.TopekaGMS.org

Japan's Cherry Blossom Stone



Image: John Rakovan et.al.

An intriguing geological peculiarity has found in the Japanese city of Kameoka, which lies just over the western mountains of Kyoto city. It's a small subhexagonal-shaped stone of very fine-grained muscovite mica hosted on a type of metamorphic rock called "Hornfels". Interestingly when cracked and opened, their internal cross-sections appear just like tiny golden-pink flowers. They're exclusively called "Cherry Blossom Stones", after the revered flower of Japan and one of the most renowned icons of the country.

The **Science Alert** explains the pattern of these flowers weren't always made of mica. They began their existence as a multifaceted matrix of six prism-shaped crystal deposits of a magnesium-iron-aluminum composite called cordierite, radiating out from a solitary dumbbell-shaped crystal made from a magnesium-aluminum-silicate composite called indialite in the center. Moreover; cherry blossom stones are hosted in a matrix of hornfels, a very fine-grained, contact metamorphic rock shaped underground about 100 million years ago by the intense heat of molten lava. The subhexagonal formed masses of cordieriteindialite in the hornfels contain seven individual crystals. At the center of each mass is a dumbbellshaped indialite crystal very narrow at the center, and fairly wide at the ends. Adjacent the indialite crystal are six prism-shaped cordierite crystals. They're widest at the center of each cherry blossom stone and narrowest at the ends.

The cordierite-indialite masses underwent a 2nd metamorphic event when they were uncovered to a type of hot water called hydrothermal fluids. These fluids altered the chemical composition of minerals inside the cherry blossom stones, producing mica to change the original cordierite-indialite inclusion. Since they have to undergo two penetrating and very specific types of metamorphosis in order to shape, cherry blossom stones are extremely rare, and found only in central Japan. Therefore; cherry blossom stones that underwent a whole replacement of their internal minerals during their geological lifetime are so subtle inside that they can without difficulty be snapped in half or crushed between one's fingers. In order to preserve the prettiness of their subtle mica patterns, the Japanese locals coat them in a diluted solution of wood glue mixed with water to keep everything in place.

Sources: www.Charismaticplanet.com

www.AmusingPlanet.com

Rocks & Minerals

Science Alert

Additional from the Japanese Kiseki Museum of World Stone:

Mineral called cordierite turns into mica when hydrothermally altered. The altered mineral is called cerasite (cherry blossom stone).

Normally cordierite has amethyst color, but cordierite from Sakura Tenmanguu has rose-pink color by the action of iron oxide, and it looks just like cherry blossom.

Today ceriste from Sakura Tenmanguu is designated as natural monument.

Source: <http://www.kiseki-jp.com/english/e-index.html> Via *El Gambrisino* 11/16; via *WGMS Rockhounder* May 2017



Banalinga

By Anastasia Chaparro



Banalinga are most popularly known as Shiva Lingam. In the ancient form of Sanskrit Shiva Lingam means a sign or symbol. They are also called Svayambhu Linga which means, “Selfexistent mark or sign of God”. By this they mean that it is natural and not carved or crafted by human hands. These are naturally formed river rock, made of cryptocrystalline quartz that are oval in shape and contain earth colored hues, which are generally two-toned. Their chemical composition is SiO₂ with inclusions of iron and magnesium. They are a 7 in hardness.

These only come from one place on earth, and that is the Narmada River in the Madhya Pradesh state of India. This is one of the seven holy rivers, and these stones are worshiped by the

Hindus. The river and the stones within them have been considered sacred objects for thousands of years. This river is said to have sprung from the body of Lord Shiva, created in the form of a lovely damsel. It is believed that these stones give happiness and salvation to the owner. So every year there are celebrations when the Hindu people will collect them from the Narmada river and bestow them upon family and friends in a ritual.

The wonderful shape of these stones is natural. They are hand polished, and generally are used as icons, or talisman to bring happiness to the home. As jewelry, they do have small ones that you can find, but I would not want to cut into one as their formation is considered a blessing. Most people will wrap them and use them as pendants. I have personally seen them in sizes of one inch to about 4 feet long, but I understand that they can be found much larger. I have seen photos of them larger than 11 feet in length.

Today they are highly sought after as collectables, but are quickly becoming endangered by projects to dam the Narmada river. When this happens, the jumping waters which form this river rock will be stilled and they will be lost forever. At this time, you can purchase them on numerous sights and I suggest that everyone should own one in honor of the ancient traditions.

Via The Hound's Tale 3/1; via WGMS Rockhounder May 2017



Evaporite Deposits

Evaporite deposits are considered sedimentary, but instead of coming from “solid” sediments are considered “chemical” sediments.

-As you might guess, evaporites come from the evaporation of oceans, or ancient lakes.

-Marine evaporites are quite common and often extremely extensive. They can arise anywhere as ocean gets cut off from its source and then evaporates.

-These produce minerals such as calcite, halite, and gypsum.

-Death Valley is a perfect example of a non-marine evaporite deposit. It was once a series of lakes that dried up as much as a million years ago producing deposits of common sodium salts as well as borax which is still mined there today.

-Peru and Chile have extensive nitrate evaporite deposits which are mined to make fertilizer and explosives.

-Deep evaporite beds are often impervious to water making them natural storage for oil and natural gas, as well as “unnatural” storage for nuclear and other types of waste.

Via OMGS May 2017