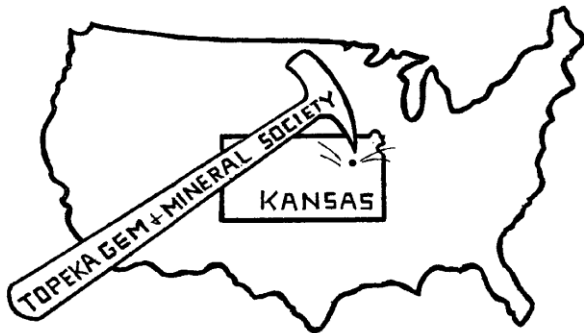


The Topeka Gem and Mineral Society, Inc.
 1934 SW 30th St. Topeka, KS 66611
 Rock2Plate@aol.com

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. 61, No. 9,
 September, 2018



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

2018 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.	Will Gilliland	286-0905
2 nd Vice Pres.	Cinda Kunkler	286-1790	Publicity	TGMS Board	
Secretary	Lettie Thomas	409-7026	Welcome/Registration	Russ & Rhonda Miller	272-6408
Treasurer	Millie Mowry	267-2849	Property	M. Cote/D. Dillon	220-3272
Directors	Chuck Curtis	286-1790	AFMS Scholarship	Cinda Kunkler	286-1790
	Brad Davenport	379-8700	Editor/Exchange Editor	Millie Mowry	267-2849
	Will Gilliland	286-0905	Show Chairman	Dave Dillon	272-7804
Historian	Jessica Reedy	230-3445	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	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 Top Rock!



The first two classes at the Barn went smooth with new member showing up for their first lesson. As a reminder the Barn will not be open Sept 24th thru the 29th, but will be open October 2, 9, 23, & 30th. Don't forget to sign up for the show in October. We need all the help we can get. Millie has the sign-up sheets so get with her and they will be available at the September meeting.

The program for September will be a silent auction. If you have anything you want to donate to the club, bring it to the meeting for the auction.

Field Trip.....Saturday, October 20, 2018



A field trip is being planned for Saturday, October 20, 2018. This will be the weekend after the TG&MS show. This trip we will be collecting fossils in the southern Flint Hills. Weather permitting there will be two to three stops to collect late Pennsylvanian and early Permian marine fossils. The location for the start of the trip, in Greenwood or Elk Counties, will be announced later. Please note that cell phone coverage is limited in that area and it may be difficult to contact us if you are late joining the trip.

Will Gilliland, 785-286-0905 gillilandp@aol.com

Make Welcome Our New Members

*Greta Anderson
Richard & Deloras Fields*

Pet Humor

- A cat is always on the wrong side of the door.
- My alarm doesn't have a snooze button. It has paws.
 - If cats could text you back, they wouldn't.
 - Dogs have owners. Cats have staff.
- If you don't talk to your cat about catnip who will?

Boulder Buster 8/18 via The Rockhounder 9/18

TGMS Event Calendar

Sept 2018

1S	
2S	
3M	
4T	
5W	
6T	TGMS Jr RHD's, 101A Marvin Auditorium 6-8-45p Wire Wrap Class @ Millie's 1-3 p.m.
7F	
8S	
9S	
10M	
11T	
12W	
13T	Wire Wrap Class @ Millie 1-3 p.m.
14F	BOARD MEETING 7 P.M. @ MILLIE'S
15S	
16S	
17M	
18T	
19W	
20T	Wire Wrap Class @ Millie's 1-3 p.m.
21F	
22S	
23S	
24M	
25T	Wire Wrap Class @ Millie's 6-9p.m.
26W	
27T	Wire Wrap Class @ Millie's 1-3 p.m.
28F	TGMS General Mtg. Washburn Stauffer Hall, rm. 138, 7 p.m.
29S	
30S	

Oct 2018

1M	
2T	Lessons At The Barn 6-9 p.m.
3W	
4T	TGMS Jr RHD's, Marvin Auditorium 101A Wire Wrap Class @ Millie's 1-3 p.m.
5F	
6S	
7S	
8M	
9T	Lessons At The Barn 6-9 p.m.
10W	
11T	NO Wire Wrap Class @ Millie's
12F	SHOW SET UP DAY 8AM - 8 PM
13S	SHOW—AT AG HALL- KS EXPOCENTRE 10-6
14S	SHOW 10-5
15M	
16T	NO Lessons At The Barn
17W	
18T	Wire Wrap Class @ Millie's 1-3 p.m.
19F	
20S	
21S	
22M	
23T	. Lessons At The Barn 6-9 p.m.
24W	
25T	Wire Wrap Class @ Millie's 1-3 p.m.
26F	TGMS General Mtg. Washburn Stauffer Hall, rm. 138, 7 p.m.
27S	
28S	
29M	
30T	Lessons At The Barn 6-9 p.m.
31W	

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

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

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

<https://www.facebook.com/TopekaGMSJuniorRockhounds>
To register for the Junior Rockhounds or any of the classes, email:
Jason Schulz at: Fleetcommander@att.net



JR ROCKHOUND Classes & Reminders

Here are reminders of the next few months of classes: Topeka Shawnee CO Public Library sign in starting at 6:00pm and classes starting at 6:30pm. 1st Thursday of each month... **PLEASE watch for a new email for the new updated classrooms, classes, and instructors schedule starting with December 2017 to November 2018.**

- October 4th Class Orientation—all Instructors Marvin Auditorium 101A
- November 1, Gemstone Lore & Legend, Pat & Will Gilliland, 101A Marvin Auditorium
- December 6, Communications, Millie Mowry 101A, Marvin Auditorium

Some of the Rockhounds were given notebooks for the Communication Patch. If you have written your story for the article in the Drifter, bring it in so that it can be counted, then published in the next Drifter. For those who do not have the note books, see Millie and she will give you one.

From the Coordinator, for August, 2018

This month's Rockhounds class was about Gold Panning. Will Gilliland (with help from a few of his friends) talked about how panning was done, then took the kids outside to let them try it themselves! A lot of fun was had by all.

Next month's class will be the yearly orientation—a session giving brief overviews of each of the twenty badges in the program and a chance to ask (and answer) any questions. This class will be in Marvin 101A.

The Rockhounds classes are held at the Topeka & Shawnee County Public Library on the first Thursday of each month. The classes are downstairs in Marvin Auditorium, in room 101A or 101C. Sign-in starts around 6pm, and class starts at 6:30.

Those who have completed their homework for previous classes don't forget to bring them in so you can get your patch for the class.

Jason Schulz



Topeka Junior Rockhounds panning for gold and other gems

What Makes Rose Quartz Pink?

Quartz, like many minerals, occurs naturally in a variety of colours, and there are many causes for the color varieties. Rose Quartz ranges from very light pink to medium pink in intensity and is often milky or hazy, and it may lack good transparency. It turns out that scientists are not sure what causes the pink color. For many years microscopic inclusions of rutile (TiO₂) were thought to be the cause. Other proposals included the presence of irradiation induced colour centers (the cause of colours in amethyst, citrine, and smoky quartz) in included minerals or in the quartz itself. Colour centers are imperfections in crystals that cause color by absorption of light. They are most often due to radiation damage (exposure to gamma rays) because of the presence of radioactive elements (U, Th, K) in adjacent minerals. When the quartz is subjected to radiation, electrons are excited and removed from their normal sites, bounce around, loose energy, and eventually come to rest in a vacant site in the quartz (see figure below). Electrons in specific traps absorb only a certain range of wavelengths; the color that is seen is the colour not absorbed by these trapped electrons. The pink colour disappears upon heating rose quartz (as it does with amethyst, citrine, and smoky quartz) but it takes temperatures above 500°C, much higher than the temperatures required to bleach other quartz colours. Heated rose quartz will not regain its color upon irradiation, but can produce smoky quartz. It is therefore unlikely that the colour is caused by irradiation induced colour centers. It was also suggested that fibrous inclusions of the mineral dumortierite (Al,Fe)₇[O₃ | BO₃ | (SiO₄)₃] are responsible for the haze and colour of rose quartz (although dumortierite is usually deep blue, there are pink variants). More recently two scientists dissolved rose quartz from various locations in hydrofluoric acid and extracted mats of a fibrous, rose-coloured mineral that is related, but apparently not identical to dumortierite. That mineral makes up only about 0.05% - 0.15% of the overall weight of rose quartz. Like rose quartz, the mineral bleached when heated above 500°C and did not regain its colour when irradiated. However, heat treatment in a reducing atmosphere did turn heated and paled material rose-coloured again. So there you go Marv, rose quartz gets its colour from minute inclusions of an unknown borosilicate – MAYBE. There is also a rare, different variety of quartz called pink quartz, first discovered in the 1930's in Maine then "rediscovered" in Minas Gerais, Brazil. Its pink colour is thought to be caused by trace amounts of phosphate or aluminum.

From Cedar Valley Gems 3/17 via The Fossil 6/18 via WGMS the Rockhounder 9/18,

A Dinosaur's Crabby Poop Surprises Scientists

By Jim Brace-Thompson

Karen Chin studies poop. Fossil poop that is. More genteelly referred to by scientists as "coprolites". Formerly a local gal as a professor at UC Santa Barbara, Karen is now a paleontologist at the University of Colorado, Boulder. In studying 75 million year old coprolites left by hadrosaurs (duck billed dinosaurs) in Utah's Grand Staircase-Escalante National Monument, she discovered the herbivores were not entirely herbivores after all. Slicing, dicing, and examining their coprolites, Karen found evidence that in addition to plants, they ate crustaceans and decomposing logs that may have housed tubeworms and other critters. Not exactly the bloodied stuff of Tyrannosaurus Rex, but a surprise nonetheless. It is hard to be 100% vegan.

From Rockhound Rambling 10/17, via The Tumbler 04/18, via The Cowtown Cutter 5/18 via WGMS the Rockhounder 9/18



Topeka Gem & Mineral Society
62nd Annual Show

Opal It Is

October 13 – 14, 2018

Kansas Expocentre Agricultural Hall
17th & Topeka, Topeka, Kansas

Admission

Adult \$5.00 Student (13-17) \$1.00
Child under 13 with Adult – FREE

Hours

13th – 10 am - 6 pm
14th – 10 am – 5 pm

\$1.00 OFF COUPON

One Coupon Good For All Adults In Group
Email: rock2plate@aol.com

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



RECIPE FOR A GOOD ROCK CLUB

Assemble a group of Rockhounds in assorted
sizes and personalities.

MEASURE ACCURATELY:

1 cup friendly words
1 cup courtesy
1 cup understanding
1 cup patience

- SIFT CAREFULLY to remove all malice and ego.
- ADD a dash of wit and humor, a heart full of cooperation and praise, where needed.
- MIX WELL until blended into a smooth running organization.
- SPRINKLE with Good Times and Fun. Garnish with New Members. Serve with Warm Greetings. Plenty for all.

(Source: Gems of the Rogue—March 2012 via Deming Gem & Mineral Society)

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 (As_2S_3). 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.

(Stoney Statements June 2018)

Minerals of the Museum: Kyanite

Stacy Walbridge, of the Gem & Mineral Society of Franklin, N.C.

Within the North Carolina room at the museum is one of the few minerals that has a split personality. In one direction Kyanite can be as hard as quartz at a 6.5-7.0 Mohs hardness and in another direction, it can be as soft as fluorite with a Mohs hardness of 4.5-5.0. That property makes Kyanite a challenge to form into faceted gems but it has another unique property that makes it useful in the production of re-fractory products like bricks and porcelain. Unlike most minerals, Kyanite is one of the few minerals that expands when it is heated. Added to porcelain, Kyanite helps produce a strong and stable material in spark plugs, sinks, and bathroom fixtures.

With a chemical composition of Al_2SiO_5 Kyanite is classified as a silicate which are composed largely of Silicon (Si) and Oxygen (O). Kyanite is found mainly in metamorphic rocks and can be accompanied by Staurolite, Garnets, and Corundum. It is not uncommon to find Kyanite nearby in places like Buck Creek, Ellijay, Mason Mountain, and Winding Stair Gap. Perhaps on a future field trip or outing you may find the mineral with the split personality.



Source: The Mountain Gem, Aug 2018

Word Search for Kyanite

To prepare you for finding Kyanite in the field you can look for Kyanite and other words in the following word search puzzle. The words are hidden and may be spelled in any direction

Word List
CORUNDUM
ELLIJAY
FACETED
FLUORITE
GARNET
KYANITE
MOHS
PERSONALITY
PORCELAIN
QUARTZ
REFRACTORY
SILICATE

```
S F G V J C L Z O M U D N U R O C Y T H
G Z G G N Y G A R N E T W Q R T J K A Q
N L V O L E Q M V N H F D S A Q T E B O
T L K K W Z B J X P Z H J B R Z R U C O
M Y X T T D C W C N N C N V A K Y V U Q
M S W R F S M W K A C I V A B D G Q M F
C C A O R S V N S X A Y U Y B I E M Z Y
N U J R L T D H Z L B R A K Y A N I T E
Q G T J D Z O N E I X E T J J V E X R O
O J G R K M A C O A G O M G I F J D B Q
X R T G Z K R L X L X G J V N L J F E I
L B Y P E O X S S G J S N W W L L M L O
A M R G P P K F Y B O F Z P I W R E L S
Y E C E T I R O U L F R R V K B L B O E
R L G J E C L R N C E H T I O M L C X D
F A C E T E D I V O Y Y J H S B P J V W
Z R D Y T I L A N O S R E P G H P L S G
E Z D L K K H W Y T Z S I L I C A T E D
B F J R P D X W M M R E F R A C T O R Y
K Y V L D P B S V O N Z S X Q Q Q W G Q
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Source: The Mountain Gem, Aug 2018

Rose Ebony Beads

Rose ebony is an old-fashioned type of scented jewelry that was popular in Victorian times. It is easily made at home. The principal ingredient is fragrant rose petals, which are ground up in a food grinder. The pulp and juice are thoroughly stirred in an iron skillet, which turn the mixture black. It is left in the skillet for a day, and turned occasionally to make certain it is entirely black. Then the mixture is ground again, dried, and ground again. The latter process is repeated daily for 9 (nine) days. On the final day a little water is added, after which the ebony mixture is rolled into little round or oval balls. A pin is inserted thru each one and they are left to dry. After a few days the pins are removed, and the small balls become beads. They are hard and durable and smell like the roses. They retain their fragrance for many years. Ours were made in 1896.

(Source: reprint from The Glacial Drifter June 1986)

(Editor's Note: At <https://www.motheearthnews.com/diy/make-rose-beads-zmaz83jazshe> is an article on making these beads if interested.)

Shop Hints

For that gloss finish on tigereye, polish once, dry the stone, then put a drop of vinegar on it. Leave a couple of minutes and then give it another polish. The result will be a deep gloss finish.

For apache tears, try using chrome oxide when polishing, it's a lot faster than other compounds.

(repeats from the Glacial Drifter, 9-83)