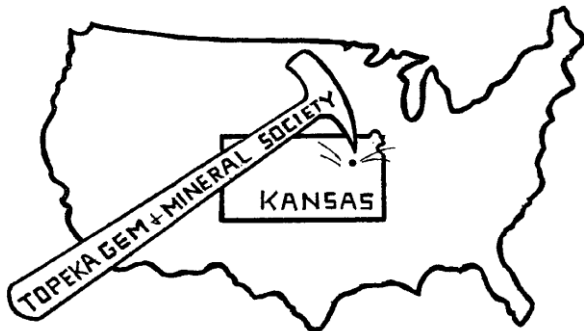


The Topeka Gem and Mineral Society, Inc.
 1934 SW 30th St. Topeka, KS 66611
 Rock2Plate@aol.com

THE GLACIAL DRIFTER



www.topekagemandmineral.org
 Facebook: Topeka Gem and Mineral Society Field Trip

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. 57, No. 11, Nov. 2014

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.**

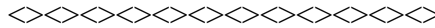
2014 OFFICERS AND CHAIRS

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.	Larry Henderson	-----
2 nd Vice Pres.	Carolyn Brady	233-8305	Publicity	Donna Stockton	913-645-7677
Secretary	Cinda Kunkler	286-1790	Welcome/Registration	Jason Schulz	379-5538
Treasurer	Millie Mowry	267-2849	Property	M. Cote/D. Dillon	379-5538
Directors	George Reed	836-9277	AFMS Scholarship	Cinda Kunkler	286-1790
	Harold Merrifield	286-3548	Editor/Exchange Editor	Millie Mowry	267-2849
	Chuck Curtis	286-1790	Show Chairman	Harold Merrifield	286-3548
Historian	Deborah Scanland	273-3034	Show Dealer Chairman	Dave Dillon	272-7804
Federation Rep	Harold Merrifield	286-3548	Show Secretary	Cinda Kunkler	286-1790
Corporation Agent	Millie Mowry	267-2849	Jr. Rockhound Leader	Larry Henderson	-----
Librarian	Lucy Hrenchir	267-3325	Show Case Coordinator	Francis Stockton	913-645-7677
Web Master	Jason Schulz	379-5538			

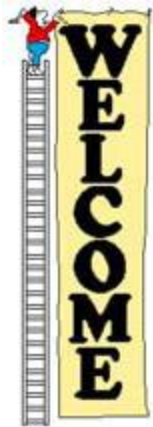
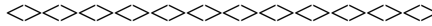
Area Code for all numbers is (785).

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.

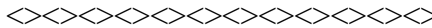


We still need **200** Best Choice UPS Labels before Cinda can turn them in.
Bring them in at the next meeting.



Make Welcome Our New Members!

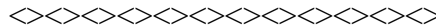
Barb Quaney & Doug Jones



Words From the President.....

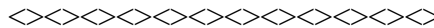
This month brings election of club officers. The Nominating Committee contacted the current officers and all agreed to retain their positions for the 2015 year. If you are interested in any office, you can be nominated from the floor at the general meeting on November 21st. The general meeting will be one week earlier this month because of Thanksgiving.

Mike and His Rock Stash!



Words from our V. P.

I do not have anything at this time. Getting that time of year when our class will be winding down for the winter. Getting cold out at Mike's! Everyone please bring their cabs and jewelry for our regular meeting on Friday the 21st.
See you then! Dave-



TGMS Ballot for 2015

- President.....Mike Cote'
- 1st Vice President.....Dave Dillon
- 2nd Vice President.....Carolyn Brady
- Secretary.....Cinda Kunkler
- Treasurer.....Millie Mowry
- Director.....George Reed

Write in candidates will be accepted at the November meeting.

There is no general meeting in December.....just the annual Christmas dinner on December 4, 2014.

Publicity

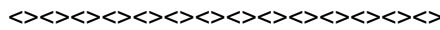
Dear Members:

We haven't stopped pushing our club wherever we go by personal testimony about the work of Topeka Gem and Mineral Society, Inc. I started putting together what worked and didn't work at this year's show the day before the end of the last show. I hope you back me in what we decide to do differently and are not shy in sharing your ideas and ideals for an even bigger and better show next year.

We need more involvement in the area school districts by taking our show, (our talks and seminars) on the road to the classroom and at the very least to the Science and Art teachers at the Middle School and high school levels. Then we have the Elementary Schools. The teacher is the key to the lock and making a genuine attempt to share our passion for all aspects of rock, mineral and fossil discovery. That will filter to the students. Likewise, Parents and their children often share their passion for discovery and we need to foster that. Once we get people signed up, we have to offer well-planned, interesting general meetings. Then, we need to put these members to work to keep them coming back. We all need to take responsibility for that. We need to keep educating ourselves and be aware of what the membership needs to stay interested and active.

One thought I had, to include YOU as part of the advertising team, without taking up a lot of your time next year. Tee Shirt advertising. A month before our next October show, we commit to live in those shirts. They advertise Who we are, time, place of show, cost. A Tee Shirt gives those who see it a chance to ask us questions about our club. The kids can wear them to school, church and other activities while adults would cover the grocery store and Dept. store runs. People do ask while standing in those long lines. Some of our members might not feel comfortable approaching strangers and speaking in public but the shirt could do most of the talking for us. We wouldn't have to wait till Sept. to wear them, but our commitment would be for the month of September. TGMS Tees, Don't leave home without one!

Grace and Peace, Donna Stockton, your TGMS Publicist



58th Annual TGMS Show



Mike Cote` and Dave Dillon



Barbara Sky



Jo Ussery

Meeting Minutes

Meeting of the Topeka Gem and Mineral Society – 10/24/14

Mike Cote' called the meeting to order.

Jason announced 29 members & 2 guests (Ray & Serena Sampson) are present for the meeting, door prizes were awarded.

The minutes from the September meeting were printed in The Drifter. Rick made a motion and Harold 2nd to accept as printed.

Millie Mowry gave the treasurers report. Motions were made to accept the report, by Jason and Chuck 2nd, motion carried.

Correspondence: Millie received postcards from the University Press of Kentucky, selling a book 'Kentucky Agate'. Committee reports: AFMS-Cinda, still collecting Best Choice labels. Publicity-Donna, WIBW did not put 7 of the 40 spots for the show on TV, due to political ads. They will refund some of our money. We need to think about new ways of advertising. Historian-Deborah, has finished her floors! Thursday she, Carolyn & Donna will meet to get started.

Show Chair-Harold thinks the show was good, there was only one incident reported and it was false. Show Secretary-Cinda, Millie gave her a check from proceeds of the scholarship table for \$258.61 to send to AFMS, along with another check from a club member who purchased grab bags to give away as advertisement for our club in the amount of \$225.00! Show Dealer Chair-Dave thanked everyone for all the help setting up and getting ready for the dealers, maintaining the various club tables and taking it all down. Chuck Mike & Dave got it all put away in our new storage unit. The pebble pile needs more material, if you have any donations for it, let him know. Only one dealer will not be coming back, we may add more dealers next year. The 4-H exhibits had low attendance this year; we may take away some space from that area next year. The security guard, mostly sat and did not do much. Junior Rockhounds-Larry, got some prospects at the show with 3 Juniors signed up to join the club. They made start-up fossil kits at the show and will get another fossil when attending a meeting. About 10 start-up kits were done at the show.

New Business: Millie has 614 grab bags cut, pressed and ready to sew! We will have another sew day earlier in the year.

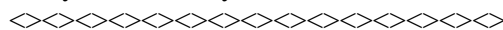
Field Trip-Larry will be going to the KC Show Friday 10/31/14. He's open to ideas for field trips. Junior Rockhounds will meet on Nov 6 – Stone Age Tools & Art will be taught by Julie. Webmaster-Jason, our resource page is down. Our Facebook page now has 31 likes, we only had 5 before the show. Nominating Committee-Fred reported that all current officers were contacted and will be retaining their positions. If anyone is interested in a position, let him know.

With no further business, the meeting was adjourned to our program "How to Build a Dinosaur".

Fred Zeferjohn announced the Cab of the Month Winners are:

Member Cab: Dave Dillon – Malachite, Member Jewelry: Mike Cote' – Wire Wrapped Fire Agate Necklace. There were a total of 12 entries. There was no Class Jewelry or Class Cab tonight.

Respectfully submitted by Cinda Kunkler, Secretary



With colder weather moving in, it was time to search my recipe books for soups/stews. In 'Hardrock's International Rockhound Cookbook' by the San Diego Mineral and Gem Society, San Diego, CA published July 1984 I found the following recipe submitted by Julie (Bellflower CA):

Dinosaur Stew

1 dinosaur (large) brown gravy

2 rabbits (optional) salt and pepper to taste

Cut dinosaur into bite-sized pieces. This should take about 2 months.

Add enough brown gravy to cover.

Cook over kerosene fire for about 2 weeks at 465* or until tender.

This will serve 3,800 people. If any more are expected, 2 rabbits may be added.

Do this only if necessary.

Field Trip Calendar - October 2014

The first and third Tuesday night the Fossil Special Interest Group will meet at 7:00 p.m. at Baker's Dozen, 4310 SW 21st St, Topeka, KS. We will discuss fossils and other collections. Come join us with show and tell.

An up-to-date Calendar can be found on the Topeka Gem and Mineral Society Website:

<http://topekagemandmineral.org/calendar.html>

Public Facebook Page:

<http://www.facebook.com/pages/Topeka-Gem-and-Mineral-Society-Field-Trips/92795058262>

November 18, 7:00 p.m. Fossil Special Interest Group, Show & Tell, at Baker's Dozen,

November 22, Field trip, To Be Announced .

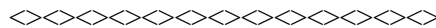
Meet at McDonalds, leave at 9:00 am.

Tuesday, November 25, 2014 North Central Kansas Rock and Gem Club; Pony Express Café, 10 miles east of Marysville Ks. on Highway 36, 7:00 PM Dr. Diffendall will speak on Nebraska sea fossils.

E-mail Larry if you have an interest in this trip.

December 2, 7:00 p.m. Fossil Special Interest Group, Show & Tell, at Baker's Dozen,

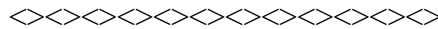
Trips dates are tentative and subject to additions and change. E-mail Larry if you have an interest in any of these trips LHenderson85@gmail.com Larry Henderson, Field Trip Chairman



Additional Show Dates:

For additional listings of gem shows see

www.rockngem.com



TOPEKA JUNIOR ROCKHOUNDS

Facebook: <http://www.facebook.com/TopekaJuniorRockhounds>

Top register for the Junior Rockhounds or any of the classes, email Shirley Schulz, Program Secretary sschulz@kdheks.gov.

Call Dave Dillon 272-7804, or email davidd5124@aol.com for information on lapidary classes.



Rockhounds awarded new badge/patches

New Member Badges

Kiamoni Tindall
Codi Tindall
Zach Smith

Earth Processes

Andrew Newton
Zach Smith

Special Effects

Zach Smith

You Are Invited To Our Annual Christmas Dinner At



McFarland Restaurant Gage Center
December 4, 2014 6 P. M.
(down stairs dining room—elevator located at south end of building)

Bring your spouse & children as we need at least 25 people. We will be ordering from the menu at your own expense.

THE POTTY

A LITTLE THREE YEAR OLD BOY IS SITTING ON THE TOILET. HIS MOTHER THINKS HE HAS BEEN IN THERE TOO LONG, SO SHE GOES IN TO SEE WHAT'S UP. THE LITTLE BOY IS SITTING ON THE TOILET READING A BOOK. BUT ABOUT EVERY 15 SECONDS OR SO, HE PUTS THE BOOK DOWN, GRIPS ONTO THE TOILET SEAT WITH HIS LEFT HAND AND HITS HIMSELF ON TOP OF HIS HEAD WITH HIS RIGHT HAND.

HIS MOTHER SAYS: "BILLY, ARE YOU ALL RIGHT? YOU'VE BEEN IN HERE FOR A WHILE."

BILLY SAYS: "I'M FINE, MOMMY. I JUST HAVEN'T GONE POTTY' YET."

MOTHER SAYS: "OK, YOU CAN STAY HERE A FEW MORE MINUTES, BUT, BILLY, WHY ARE YOU WHY BUT WHY ARE YOU HITTING YOURSELF ON THE HEAD?"

BILLY SAYS: "WORKS FOR KETCHUP."

ENJOY LIFE NOW....IT HAS AN EXPIRATION DATE
Internet Humor



Chrysoberyl

Lawrence H. Skelton, Geologist, Wichita Gem & Mineral Society

Chrysoberyl, sometimes also known as cymophane, is a mineral that crystallizes in the orthorhombic crystal system and often forms contact and penetration twins that form pseudo-hexagonal crystals. The “hexagonal” crystals may have reentrant angles giving a “notched” appearance to the crystal edge. It displays an unusual degree of hardness, 8.5 on the Mohs scale, exceeded among naturally occurring gems only by corundum (ruby, sapphire, etc) and diamond. The specific gravity which is relatively high for a non-metallic mineral ranges from 3.5 to 3.84. Chemically, chrysoberyl is beryllium aluminate, BeAl_2O_3 . It typically is pale green or yellow and is transparent to translucent with a vitreous (glassy) luster.

The name derives from two Greek words: *chrysos* meaning golden and *berullos* or beryl. Chrysoberyl, in fact, is an anciently known mineral. Pliny the Elder (A.D. 23 – 79) discussed the *chrysoberullus* in his Natural History: “The most highly esteemed beryls are those that reproduce the pure green of the sea, while next in value are the so-called ‘chrysoberyls.’ These are slightly paler, but have a vivid color approaching that of gold.”

The Romans and Greeks would have recognized chrysoberyl by its unique hardness: softer than sapphire and harder than beryl, topaz or peridot all of which may resemble it in color. The more familiar names of the latter three gems cause them to be more popular than similarly colored chrysoberyls.

The loss of popular favor to similarly colored stones, however, is compensated by the popularity and value of two chrysoberyl varieties: alexandrite and cat’s-eye. Alexandrite is a rare variety that changes color depending on the type of light shining on it. It is grass-green to emerald-green in natural daylight and red to raspberry-colored in incandescent light. The change is caused by differences in the range of wavelengths of light and their effect on small amounts of chromium replacing some of the aluminum in the crystal structure. Natural daylight is rich in blue and green wavelengths (think of light shining through a prism) and has little red whereas incandescent light is dominated by red wavelengths. Alexandrite was discovered in 1830 in emerald mines about 55 miles east of Ekaterinburg (formerly Sverdlovsk) near Tokovaya in the Ural Mountains of Russia. The discovery allegedly took place on the day when the Tsarevich Alexander (later Tsar Alexander II) became of age and the new stone was named in his honor. That the red and green colors exhibited by the gem also were the national military colors of the Russian Empire added to the charm.

Cat’s-eye, the other rare chrysoberyl is translucent to semi-transparent and is known for its chatoyancy and is always cut en cabachon to display that optical effect. The name is applied only to the chrysoberyl gem among the varieties of chatoyant gemstones. The chatoyant or cat’s-eye effect is caused by a myriad of parallel micro-inclusions, either needle-like crystals or hollow channels, which are parallel to the C (long) axis of the crystal. When the cabachon is cut, the eye or band of light is at right angles to the direction of the long axes of the

inclusions. The cat’s-eye, according to Max Bauer, is the form of chrysoberyl also known as cymophane, a name that refers to its wavy appearance which may have an opalescent look. The cat’s-eye may be whitish-gray, gray-green, bluish-gray or yellowish in color. The most lovely (in my opinion) is the yellow variety, a honey-color resembling the yellow of a feline eye. The eye portion is a pronounced, sharp silvery line that moves as the stone is rotated.

Chrysoberyl and its varieties form in granitic rock and pegmatite and mica schists and frequently is recovered from alluvial gravels that result from weathering of host rocks. For a rare stone, it is found in many locations: the Ural Mountains of Russia, Myanmar (Burma), Sri Lanka (Ceylon), Madagascar, Victoria, Australia; Niger and Namibia in Africa, Andhra Pradesh in India, Colorado, New England and Nome Borough, Alaska in the United States, several locations in Europe, Itabira in Minas Gerais, Brazil and surprisingly in western Enderby Land in Eastern Antarctica. A new discovery in Tanzania, Africa is a mint to bluish-green vanadium containing chrysoberyl. The first four locations and Brazil are the most prolific producers.



Alexandrite changes color in different types of light. Photos by Donna Rhoads. Courtesy of D & J Rare Gems.



Above: Cat’s Eye Chrysoberyl. Below: Faceted Chrysoberyl. Photo by Donna Rhoads. Courtesy of D & J Rare Gems.

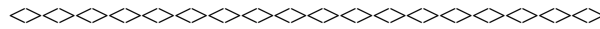


Faceted chrysoberyl retails from \$50.00 to \$150.00 per carat depending on color, quality, cut, etc. Alexandrite and cat's-eye are another matter. The very best grade of alexandrite may retail for \$15,000.00 per carat for gems up to one carat. Larger stones of equal quality may start at \$50,000 per carat and go up. An internet check found 0.50 and 0.75 carat stones at \$8,500.00 per carat. Top grade cat's-eye in the most desirable colors range from around \$1,000.00 to \$2,000.00 per carat in two to five or six carat sizes. Neither alexandrite nor cat's-eye commonly occur in large sizes and those rare specimens that are found and cut are of astronomical value. The Smithsonian possesses a magnificent alexandrite which may viewed on the Institute's website at http://mineralsciences.si.edu/collections/new_acquisitions/2009/alexandrite09.htm.

References

Bauer, Max, 1969 (originally publ. in English in 1903), *Precious Stones*: Rutland, VT, Charles E. Tuttle Co.
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Klein, Cornelis and Hurlbut, Cornelius S., Jr., 1985, *Manual of Mineralogy* (after James D. Dana), 20th ed: New York, John Wiley & Sons.
Pliny the Elder (Gaius Plinius Secundus), trans By Eichholz, D. E., 1962, *Natural History, Books 36 – 37*: Cambridge, MA, Harvard University Press.

(Source: QUARRY QUIPS Aug 2012)



Junior Rockhounds

November 6th class well attended

Thirteen students attended the Stone Age Tools & Art class put on by Julie Bremenkamp. More than half will be new members of TGMS.

Activities Director appointed

Barbara Smith had consented to be in charge of activities for the juniors. She and Brad Davenport have consented to do activities for the juniors at the general meetings. They will start at 7:00 pm and run through the meeting preceding the program.

Two classes for December 4, 2014

Reaching Across Generation class-Outside Activity Required

This activity will allow the Junior Rockhound to spend some time with a senior rockhound or geologist. They will be able to talk with them, interview them, and just spend time with them. A parent or guardian needs to accompany them. This is an activity that is outside of the class room. In class we will discuss what they learned from the senior. This required activity, for this badge, would include six hours with the senior. This would have to be divided into two or three sessions. The Junior Rockhound will need to contact Larry Henderson at LHenderson85@gmail.com to receive advance handouts and to set up an appointment with a senior.

Earth in Space

Jason Schulz will be having an alternative class on earth in our vast solar system around us. They will learn about the solar system. They will be introduced to visitors from space.

Classes start at 6:30pm at the Town & Country Christian Church, 4925 SW 29th Street.
The Topeka Junior Rockhound Advisors will meet at 6:30 pm.

Junior Rockhounds are encouraged to attend the club meetings to receive Patches and Badges.

Facebook: <http://www.facebook.com/TopekaJuniorRockhounds>