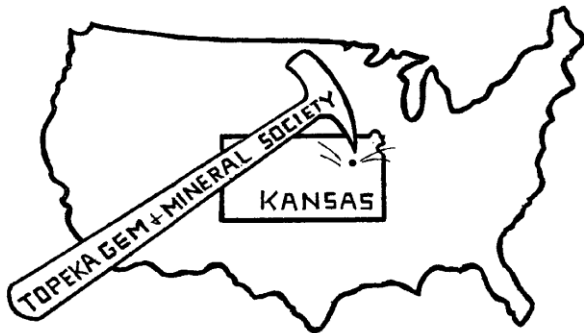


The Topeka Gem and Mineral Society, Inc.
 1934 SW 30th St. Topeka, KS 66611
 Rock2Plate@aol.com

THE GLACIAL DRIFTER



www.TopekaGMS or
 Facebook: Topeka Gem and Mineral Society Field 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. 59, No. 12, Dec. 2016

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.**

2016 OFFICERS AND CHAIRS

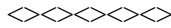
President	Mike Cote	220-3272	Cab of the Month	Debra Frantz/Fred Zeferjohn	862-8876
1 st Vice Pres.	Dave Dillon	272-7804	Field Trip Coord.	Leslie Hartman	380-6016
2 nd Vice Pres.	Carolyn Brady	233-8305	Publicity	Donna Stockton	913-645-7677
Secretary	Cinda Kunkler	286-1790	Welcome/Registration	Jason Schulz	640-6617
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.

Topeka Gem and Mineral Society have a new website:
www.TopekaGMS.org Come and check us out!



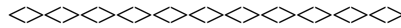
Words from Our President

Membership Dues Are Due! That is the word this month. Be sure to get your dues in to Millie as soon as possible. We do not want to lose any member. I hope that everyone enjoyed the Annual Christmas Dinner at McFarland's as there were 31 people attending, with plenty of games and prizes. Lesliee did an outstanding job. President Mike and his Rock Stash!

COMMENTS OF The V-P!

Merry Christmas to everyone and a Happy New Year! Enjoy the holidays everyone! Dave.

Visitors are always WELCOME at our meetings!



THANK YOU!

A big THANK YOU to the publicity team Donna Stockton, May Springer, Lesliee Hartman and Deborah Scanland, who all worked really hard at getting sponsors for the show as well as other committee members. A special THANK YOU to Donna, Jr Rockhound Parents and others who organized and brought food for the breakfast to be enjoyed by the sponsors, vendors and club members on Saturday morning before the show. There were lots of good things to eat and even though we didn't have a good turn out from the sponsors who had special invitations – we had good fellowship to start off our day.

Volunteering is the heart  beat of YOUR club



CLUB DUES ARE DUE BY DECEMBER 31, 2016!
IF YOU ARE IN QUESTION ABOUT YOUR DUES---CONTACT ME AT
Rock2plate@aol.com or 267-2849

Event Calendar

Dec. 2016

Jan. 2017

1T	
2F	
3S	
4S	
5M	
6T	
7W	
8T	
9F	
10S	
11S	
12M	
13T	
14W	
15T	
16F	
17S	
18S	
19M	
20T	
21W	
22T	
23F	No general meeting this month
24S	Christmas Eve
25S	Christmas Day
26M	
27T	
28W	
29T	Publicity Mtg St. Peter's Church 7 p.m.
30F	
31S	New Year's Eve

1S	
2M	
3T	
4W	
5T	Wire Wrap Class @ Millie's 1-3 p.m. Jr Rockhound Mtg Rm 202 Anton
6F	
7S	
8S	
9M	
10T	
11W	
12T	Wire Wrap Class @ Millie's 1-3 p.m.
13F	Board Meeting- Millie's 7 p. m.
14S	
15S	
16M	
17T	
18W	
19T	Wire Wrap Class @ Millie's 1-3 p.m.
20F	
21S	
22S	
23M	
24T	
25W	
26T	Wire Wrap Class @ Millie's 1-3 p.m.
27F	General Mtg. Stauffer Hall Rm 138 7:30 p.m.
28S	
29S	
30M	
31T	

Any questions, contact Millie at rock2plate@aol.com or 785-267-2849

Field Trip –Leslie Hartman

Due to the Christmas holiday and News Years coming at the end of the month, there will be no field trip for December. From January to May, the field trips will be determined by the weather. Watch for monthly updates.

TOPEKA JUNIOR ROCKHOUNDS

The Facebook page for the Topeka Junior Rockhounds also has a new website page. Take a look and place a 'LIKE' on it.

<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.

(Some classrooms and dates may have changed so please watch for changes) ****Here are reminders of the next 3 months of classes: Topeka Shawnee CO Public Library sign in starting at 6:00pm and classes starting at 6:30pm.

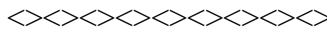
1. First Thursday, January 5th, Badge # 7 Communication - instructor Jason Schulz, Room # 202 Anton.
2. **Second Thursday, February 9th, Badge # 17 Special Effects – Instructor Barbara Smith, Room # 101B Marvin Auditorium.**
3. **1st Wednesday, March 1, 2017, Badge # 1 Minerals—instructor Brad Davenport, Room #202 Anton.**

Junior Rockhounds you can always bring a new friend to class who are interested in rocks and minerals. You and your friend will get a surprise.

ROCKS, FOSSILS, MINERALS of the MONTH

Starting December 1, 2016, each Jr. Rockhound will receive one of the following each month rock, fossil, or mineral. Each Jr Rockhound will be given information about that month's rock, mineral, or fossil to take home to read, possible little game like a crossword puzzle to have fun, some questions to look up about the item they received, reminders of how to label and record. This will help them to build their collection (Badge #5) and fill up a display case (Badge #6.4) at the next 2017 show. The 2017 show, if any Jr Rockhounds does not have enough rocks, fossils, or minerals for a display case, that will be ok. We can come together to share a display case and you will still earn credit for Badge #6.4. This will be a learning experience for each Jr Rockhound to improve on their skills for 2018 show.

If any TGMS member has any rocks, minerals, and/or fossils that is not needed anymore or just want to clean out the closet. It can be big or small in size. We can cut the big sizes down to make more. Please consider bringing these donations to any general meeting, Jr rockhound class, or meet me anywhere. If possible, please have the list of names and locations from where these donations come from such as Cidaras Echinoid Morocco so the Jr Rockhounds can label them once they receive the donations. Your donations will be greatly appreciated. Thank you in advance



Please welcome our new Jr Rockhounds Connall and Fiona to our TGMS group.

Congratulations to Maddie for her 2 year anniversary and Mitchell 1 year anniversary this month of December in the TGMS Jr Rockhounds.

Birthdays of December:

Say Happy Birthday to Kaitlynn, Robert, Zach and Adam.

A.F.M.S. F.R.A Rockhound with 6/20 badges accomplished by this month of December: Congrats Trillian.

Over 12/20 badges by this month of December: Congrats to Zach and Isaac.

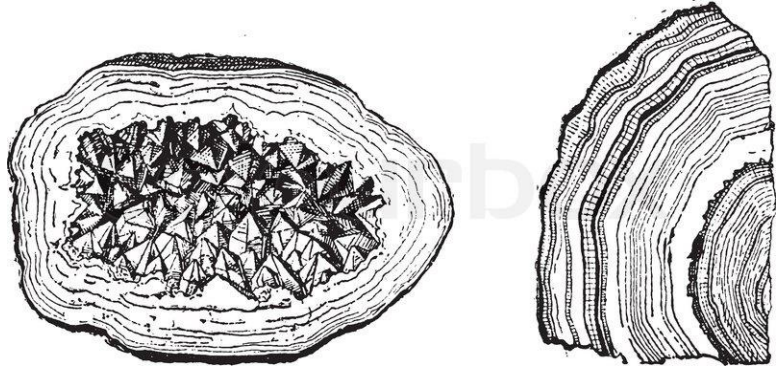
Rock Of the Month for December

Geodes-- a small cavity in rock lined with crystals or other mineral matter. Rocks which are completely filled with small compact crystal formations such as agate, jasper or chalcedony are called nodules. The only difference between a geode and a nodule is that a geode has a hollow cavity, and a nodule is solid.

The water lines a thin crust of minerals inside of the cavity. As water flows through the geode, additional mineral layers are deposited in its hollow interior.

Over thousands of years, these layers of minerals build crystals that eventually fill the cavity. How

long this takes depends on the size of the geode — the largest crystals can take [a million years](#) to grow.



Read more: <http://www.desertusa.com/desert-prospecting/geode.html#ixzz4QhNQD41p>

JR ROCKHOUND OF THE YEAR

Zach for going the extra mile of doing homework on time, asking questions and answering questions, taking the special field trip this past summer and reporting to the TGMS group general meeting, and so much more.

Runners up: **Isaac** for helping with the students and instructors and helping in the October show. **Andrew** for answering questions, helping with the general meeting with the silly holiday moments, doing his homework, and so much more. **Ian** for helping in the show and doing so well with the jewelry and different shaped rocks for the 4-H and making us all laugh. **Robert** for helping in the show and making the neat rock tree and different shaped rocks for the 4-H and making us all laugh.

Show Dates:



For additional listings of gem shows see: www.rockngem.com



NEW MEMBERS

John Hartman

Eric & Rebecca Stevenson, * Connall and *Fiona Stevenson



Minutes of the Topeka Gem and Mineral Society

Meeting of the Topeka Gem and Mineral Society – 11/18/16

Mike Cote called the meeting to order. Jason Schulz announced 31 present of which 4 are guests for the meeting, door prizes were awarded.

The minutes from the October meeting were printed in The Drifter. Dave Dillon made a motion and Chuck Curtis 2nd to accept as printed.

Treasurer's report was given by Millie Mowry a motion was made by Dave to accept the report, Chuck 2nd, motion carried. No bills were presented. Millie is accepting dues.

Correspondence: None

Committee reports:

Show – Harold Merrifield reported that the last show committee meeting was held in conjunction with the board meeting November 9th. The theme of the 2017 show will be: Of Quartz It Is!

AFMS – Cinda nothing to report. Publicity – no one here to report. Historian – Deborah Scanland, nothing to report.

Field Trip – Leslie plans going to Turkey Point on Saturday, everyone should meet there. She gave out maps. Junior

Rockhounds – Jason reported that Facebook for both the Jr Rockhounds and TGMS have had some updates. The AFMS Website contest for this year is coming up, if you have any comments for him on the Website, let him know. Leslie has badges to present to Juniors. She also gave out special awards, cards and hats to all members present at the meeting. She requested members bring rocks & fossils for the Juniors to help build their collections.

The next class is December 1, Maps.

New Business: All current Officers will retain their positions for 2017. Nomination and vote to accept Brad Davenport as a Director was made and passed.

With no further business, we adjourned to our program: Treasures of the Czars.

Fred Zeferjohn announced the Cab of the Month contest winners are: Member Cab TIE- Dave Dillon, Malachite & Dryhead Agate; Member Jewelry Dave Dillon Sterling Opal Ring; Class Cab Ian Schulz Ying Yang Jasper and Class Jewelry Pam Mortenson Wire Wrapped Botswana Agate.

Respectfully submitted by Cinda Kunkler, Secretary

2016 Christmas Dinner



What is Rutile?

What is Rutilated?

Compiled by Karen Leibold

Rutile the mineral

Rutile is the most common mineral composed of titanium dioxide. Rarer polymorphs include Brookite and Anatase, both which also form unique and distinctive crystals. The name Rutile is derived from the Latin "Rutilus", in reference to a common color habit of this mineral in dark red but lustrous crystals.



Densely Reticulated Rutile, Brazil

Forms as long and slender, straight prismatic crystals, often deeply striated and with steep complex terminations. Also forms in short prismatic and thick stubby crystals. Twinning is very common, with various forms including sixlings, eightlings (both in the form of endemic rutile twins), knee-shaped twins, and v-shaped twins.



Golden Rutilated Quartz, India

Rutile needles

Rutile is well known for its habit of forming needle-like inclusions within other minerals, thus the term "rutilated." This occurs especially in Quartz, in the form of long and slender yellow straw-like crystals. These inclusions can range from scattered needles to dense parallel fibers within a host mineral. Possible colors include dark-red, metallic-gray, brownish-red, orange-red, reddish-black, golden-yellow, straw yellow and dark green.

Chatoyancy

Rutile inclusions are also responsible for the asterism or chatoyancy effects on some gemstones, such as Star Sapphire and Mogok Sapphire.

Information from: <http://www.minerals.net/mineral/rutile.aspx>
More information about rutile on this website:
<http://www.mineralexpert.org/rutile-mineral-overview.php>
Rutile molecular structure:
<http://www.uwgb.edu/dutchs/Petrology/Rutile%20Structure.HTM>



Mogok Sapphire

Photo: John I. Koivula/microWorld of Gems
<http://www.ruby-sapphire.com/the-silk-road-rutile-in-corundum.htm>

(Source: News Nuggets Dec 2016)

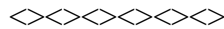


What the heck is Alibates anyway?

Alibates flint was quarried in the Texas panhandle back into the prehistoric era, where during the ice age, spear tips of Alibates flint were used to hunt mammoths. More recently, the Antelope Creek people quarried the material in pits four to seven feet deep. They lived in the Texas panhandle between 1200 and 1450 A.D. They were the ancestors of the Caddo, Pawnee and Wichita tribes and lived in permanent villages with slab buildings containing up to 100 rooms! The flint quarries are now preserved as the Alibates Flint Quarries National Monument near Amarillo, Texas. To learn more about this National Park and the history of Alibates flint, visit: <https://www.nps.gov/alfl/index.htm>



(Source: OMGS- The Sooner Rockologist Nov 2016)



Bench Tips by Brad

SANDING/POLISHING IN TIGHT PLACES

Often you'll need to sand or polish an area that's impossible to reach with even a small wheel on a flexshaft. Other times it might be the bottom of a pocket or inside bottom corner of a box that needs to be finished. One trick for these nit-picky jobs may be left over from your last Chinese dinner - a chopstick.

I've found quite a few uses for these in the shop. Prepare the tip by simply sawing it off at a 45 degree angle. Then apply whatever abrasive grit you will need for the job or hold a strip of sandpaper around the end. Loose grit can be held onto the tip with a bit of vaseline or oil. Tripoli or rouge can be just rubbed onto the end of the chopstick.



OCHRE APPLICATOR

Yellow ochre is used when you want to be sure the solder won't flow on an area of your piece while you're soldering another area. The only problem with ochre is coming up with a good way to store and apply it.

I use recycled nail polish bottles. They seal well and have a built-in brush applicator. Just clean them out with a little acetone or nail polish remover, and they're ready to go.



See all Brad's jewelry books at [Amazon.com/author/bradfordsmith](https://www.amazon.com/author/bradfordsmith)