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. 58, No. 11, NOV. 2015

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.**

2015 OFFICERS AND CHAIRS

President	Mike Cote	220-3272	Cab of the Month	Debra Frantz/Fred Zeferjohn	862-8876
1st Vice Pres.	Dave Dillon	272-7804	Field Trip Coord.	Larry Henderson	----------
2nd 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	Harold Merrifield	286-3548	AFMS Scholarship	Cinda Kunkler	286-1790
	Chuck Curtis	286-1790	Editor/Exchange Editor	Millie Mowry	267-2849
	George Reed	836-9277	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	open	--------	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.

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Words From Mike

The General Meeting in November will be on **November 20th** due to the Thanksgiving Holiday.

December 7th is TGMS Annual Christmas Dinner at McFarland's Restaurant at Gage Center. They have an elevator located on the south end of the building that the handicap people can use. Installation of Club Officers will be held at that time also for the 2016 year. You will be able to choose your own meal from the menu and you are responsible to pay for it. We encourage you to bring your spouse or significant other to make it an enjoyable night. Children are also welcome.

The 2016 Slate of Officers that are retaining their office are: Pres: Mike Cote`, VP: Dave Dillon, 2nd VP: Carolyn Brady, Secretary: Cinda Kunkler, Treasurer: Millie Mowry. For the Board of Directors: May Springer has consented to run for the next 3 year term.

President Mike and his Rock Stash!

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Word from our V. P.

Classes will end for the year on the 17th of November. We end the year due to cold weather and the week of Thanksgiving everyone is away for the holiday anyhow. Classes will start again next spring! Other than that I have nothing new to report at this time. Dave-

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Test Your Knowledge:

1. Amber, Jet, Coral, Shell, Pearl, and Ivory are collectively known as what?
2. Aquamarines & emeralds are part of what gem family?
3. True or False? Minerals found in some meteorites were formed in the outflows of red giant stars or around supernovas.
4. Faceting, cabochoning, & tumbling are all examples of what?

We still need Best Choice UPS Labels!

DENDRITIC OR PLUME AGATE??

by Jan Baumeister






Agates with inclusions are some of the rarest and most beautiful agates in the world. These inclusions may be *sagenitic (sagenite), plume, dendritic, or moss*. They are of the quartz variety, cryptocrystalline, formula: SiO_2 silicon dioxide with hardness of 6.5-7 on the Moths scale.

Dendrites, moss, plume and similar inclusions have added interest and value to gemstone for about as long as man has been aware of the beauty and gem potential of such "rock". But apparently up to now, man has been dependent on inclusions formed in nature. The process by which they developed in nature has been only vaguely understood and thought to require long periods of time, even in the geological concept of time. Any means, therefore, of inducing the formation of inclusions in gemstone is automatically of more than transitory interest.

It is not uncommon to see agates from West Texas labeled as dendritic, yet you see Montana agate labeled as plume agate. Some fine dendritic agates may not show a trace of dendrites when the agate is candled by passing light through it. It seems that the microcrystal of chalcedony have fiber-optic properties such that light passes in just one direction. I have seen some Montana agates that were cut and the slabs appear clear and devoid of plumes in one direction and were loaded with plumes in the other. Clarity is no sign that Montana agates will have not plumes. Some of the finer plumes come in some unlikely odd looking nodules, yet often the flat nodules will have the finer dendrites. These can also be found in the spaces between parallel bands of onyx variety of Montana agates. There is a fundamental difference between plume and dendrites.

The plumes are characterized by feathery inclusions made up of metallic sulfide minerals, usually marcasite or pyrite. Other sulfides like cinnabar, orpiment, and realgar have been seen to form plumes. It is known that minerals crystallize out of magma or lava in a given order: Olivine - Pyrozene - amphibole – Biotite, followed by feldspars, quartz, etc. The final product to crystallize is the sulfide minerals. These can crystallize in vugs formed by gasses in the magma or lava. The plumes are the first, after the lava flows have been extruded, the highly explosive volcanic eruptions or rhylitic lavas can deposit welded tuffs or ignimbrites over the Adestric rocks. The tuffs are excellent sources for silica. As the tuffs are weathered, the silica is leached from them and in turn is deposited in the vugs that contain the late stage plumes that crystallized in the vugs in rocks formed by previous eruptions. The plumes were first then the agate was formed around it.

Dendrites are formed by oxide minerals such as limonite, pyrolusite, and a host of other manganese and iron minerals. The dendrites form when the agate spends some time with the minerals. The dendrites are laid down in space between the bands of the agate is there first and the dendrites form within the agate. Dendritic agates have fern like patterns in them including matter deposited during agate-building include sagenitic growths (radial mineral crystals) and chunks of entrapped detritus (such as sand, ash, or mud).

Dendritic agate can be tricky to cut because the dendrite inclusions occur at various depths in the rough stone. The lapidary needs to cut the material to expose the most interesting patterns. Cutting nodules of plume agate to reveal plumes is not difficult if one remembers to cut the only in the longest, flattest direction – just as one would slice a biscuit. You can tumble the rind off these agates to get a view of what is inside or how it lays, or candle the agate by holding it above an electrical light. One method is to block up the agate in plaster or simply glue it to a board with Elmer's glue or a similar adhesive. Use a magic marker to make lines to which the cut is parallel.

References:1. "Agate" - www.wikipedia.org/wiki/Agate - "Plume or Dendritic " by Roger Pabian, *via Agate Picker, 9/1985*
2. "Chemically Inducted Fusions"- *www.ganoksin.com/borisat/nenam/dendrites - moss - plume.*
3. "Sagenite with Inclusions" by Pat McHan **-** *www.agateswithinclusions.com.html*. (Photos - www.Bing.com)

Moving material from one part of the country to another, rockhounds are almost as good as glaciers!
(Source: THE AMMONITE NOVEMER 2015)

Meeting of the Topeka Gem and Mineral Society – 10/23/15

Mike Cote' called the meeting to order. Jason Schulz announced 21 members and 1 guest were present for the meeting, door prizes were awarded.

The minutes from the September meeting were printed in The Drifter. Chuck Curtis made a motion and Mike Cote'2nd to accept as printed.

Treasurer's report was given by Millie Mowry a motion was made to accept the report, motion carried. No bills were presented.

Correspondence: several flyers were received and on the table for anyone interested.

Committee reports: AFMS – Cinda received checks to send in from the Scholarship table and sale of grab bags – Marjorye Heeney purchased $215.00!

Publicity – Donna thanked everyone for wearing their shirts. She hopes for donors and ideas for next year to raise money for the show, in hopes of trying to have billboards and more money to spend on advertising. We may do T-shirts again next year. Suggestions for the theme of our 60th year show of: 'Diamond Jubilee'. She thinks there is a possibility of getting some of the group from the Prospectors show to be there. May & Chuck are working on possible other event sights instead of the Expo Centre. Jason suggested Washburn, discussion was held briefly and tabled to let May, Larry & Chuck look into the options.

Historian – Deborah had nothing new to report.

Show Committee - Harold talked with the vendors, most of who were happy. Dave put his thoughts on the show in the Drifter. Some of the dealers were not happy, as they didn't sell as much as they had hoped. Next year we need more club participation to get our cases filled. Make sure to sign up to reserve one and get to thinking on what you want to display. 4-H only had 6 cases on display this year, so we may take away some of that area to allow for another vendor. If you know of a dealer that is interested let them know as much as possible about our venue. We can use more dealers with equipment – they are hard to find.

Field Trip – Larry has one planned for Calhoun Bluffs – Jr Rockhounds are encouraged to attend – all are welcome. Friday Nov 6 a trip to KC show, Nov 14 Linda Hall in KC with JR Rockhounds for fossil identification & techniques. He has an new intern Isaac Hartman who is helping him with the Juniors. Barbara has a presentation for home schoolers that she has been working on. We had badges to present to Juniors – but they were not at the meeting.

Webmaster – Jason, got the website changed back after the show. Facebook page had 7 new likes show weekend. 66 people like us on Facebook – if you are a Facebook person, make sure you like us too!

New Business: Nominating committee – Chuck reported they had talked to all officers except Carolyn and they will report in November, there will also be possible nominations from the floor. If you want to hold an office – speak up!

With no further business, Chuck moved and Cinda 2nd to adjourn to our program – a DVD given to us from the Bureau of Land Management at the Denver show.

Fred announced the Cab of the Month Winners are: Member Jewelry Mike Cote' Fire Agate Ring, Member Cab Larry Springer Korit Opal.

Respectfully submitted by Cinda Kunkler, Secretary

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Publicity Chairman

Hi Everyone,

We have had a very busy October and I have taken a few days off of doing much. I am putting To-Do lists together and trying to organize my tasks. First on the list is to meet with people who know how to approach Donors and Sponsors. Then to approach perspectives in that area. I feel stymied because we don't know where we will be next year. I need to also know what our theme will be and work on getting draws to our show, whether that be approaching the Prospectors or Shirley Strawn, the diamond lady from Murphreesboro, Ark. It will be our 60th so the show needs to be good. Be thinking about the theme and bring those ideas to the meeting. I want new T-shirts. It needs to be designed. So, as you can see, we need to start Now to plan for more effective publicity. I will be meeting with Lamar for billboard signage, in order to get the best places reserved. We have to have something(s) special to offer our customers. So, please be as pro-active with ideas as possible. Hope to see you all soon. Donna Stockton

Field Trip Calendar

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

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

On **November 14th** we will be going to Linda Hall Science, Engineering & Technology, Kansas City, Missouri, for a fossil identification field trip. They are having an exhibit on Kansas City area fossils. We will meet at McDonald's, 11th and Kansas Ave. to car pool there. We will leave at 9:00 AM and will arrive about 10:30. Let Larry know if you are meeting us there. Advance worksheets are available.

- Additional Show Dates:

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

Fossil Special Interest Group

The first and third Tuesday night 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.
*Nov. 17 *Dec. 1
Junior Rockhounds can get help on their collections.

TOPEKA JUNIOR ROCKHOUNDS

Facebook: http://www.facebook.com/TopekaJuniorRockhounds
To register for the Junior Rockhounds or any of the classes, email Shirley Schulz, Program Secretary, sschulz@kdheks.gov.

Classes start at 6:30 pm 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.
November 20th -We have a Junior Rockhounds Activities Center that is open at the general meetings. It begins at 7:00 pm and run through the meeting preceding the program. Door prizes and patch/badge presentations will be given out at that time.
December 3rd class-will be on "Fossils, the basics" by Larry Henderson. Advance worksheets are available.
December 7th is TGMS Annual Christmas Dinner at McFarland's Restaurant at Gage Center at 6 PM. You are responsible for your own dinner and we will meet downstairs.

Junior Rockhound - New Class Schedule

2015	
December 3	Fossils
2016	
January 7	Dinosaurs
February 4	Rocking on the Computer
March 3	Earth Resources
April 7	Stone Age Tools & Art
May 5	Maps
June 2	Leadership
July 7	Fluorescent Minerals
August 4	Special Effects
September 1	Earth in Space

Answers to Test Your Knowledge

1. Organic gems
2. Beryl
3. True
4. Gem cutting

WELCOME NEW MEMBER

Sara* Nelson (Niece of Elisabeth Nelson)

Make them welcome when you see them!

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BENCH TIPS FOR JEWERLY MAKING

BY: Brad smith

HOMEMADE WAX TOOLS

Save your used X-Acto or scalpel blades for utility work on the bench. They're wonderful for delicate wax work. Use a cutoff wheel or other type of grinding wheel to shape the blades to what you need. For instance, you can carve away excess metal on the spine to make yourself some narrow carving knives that do a great job of detailing small pierced areas of your waxes.

REMOVING A STONE FROM BEZEL SETTING

If you've forgotten to use dental floss and got your stone caught in a bezel, there's one thing you can try before starting to pry.

Find some sticky wax or beeswax. Roll it into a pencil-sized cylinder and stick the end onto the top of the stone. Mold it on well and yank.

But if the stone is really stuck, there are two other tricks - but each with risks and consequences. The first is to pry open the bezel with a sharp knife blade being very careful not to wrinkle or tear the bezel. If you try this, make sure to pry gently in several passes around the stone.

The last solution is to drill a small hole into the bezel setting from the back side so that you can push the stone out. Note that this does leave a hole, but in some cases you can use it to saw out a design under the stone.

More Bench Tips by Brad Smith are at facebook.com/BenchTips/or see the book "Bench Tips for Jewelry Making" on Amazon

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Ice

One October, my wife and I spent a vacation on Washington's Olympic Peninsula. We were eager to visit the rain forests near the coast, but we heard that snow slides had made some of the roads impassable. Although apprehensive about the conditions we might run into, we drove on.

Sure enough, we had only gone a short way up the Hoh Rain Forest road when we saw a sign that read, "Ice: 10 Miles." Five miles farther on, there was another sign that said, "Ice: 5 Miles." The next one read, "Ice: 1/2 Mile."

We practically crept that half-mile. We finally came to the last sign. It was outside a small grocery store and it said, "Ice: 75 Cents."

Internet Humor

October Birthstones

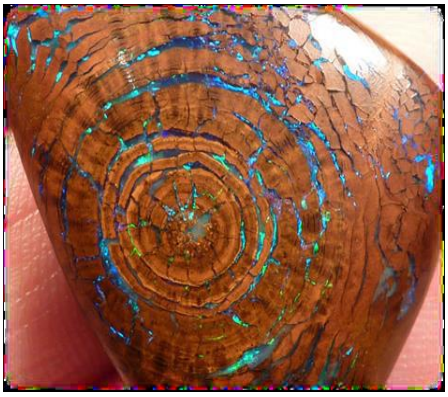
By B. Jay Bowman

October is one of the months that the jewelry council decided, in 1912, would have two birthstones. They are opal and tourmaline.
Opal is a silicate with a hardness of 5 to 6.5, a specific gravity of approximately 2.15, and a refractive index of about 1.45. Fire opal may have a refractive index as low as 1.37. We should point out here a misconception many people have about opals and the play of color associated with them. The play of color is not "fire" but just that, a play of color. Fire opal is a bright red to orange jelly opal that is generally found in Mexico but is also found in other places. It may or may not have a play of color. Usually it does not. Jelly opal of various colors is frequently facetted rather than cut in cabochons. So called "precious opal", the white or black varieties that have play of color are usually cut in cabochons. The play of color is usually in a very thin band within the matrix and they are frequently made into doublets and triplets to enhance the play of color. Natural black opal shows off the play of color better and is more costly than the white opal. Frequently the white opal is treated to make it appear black.
Common opal can be found almost anywhere. It is generally dark gray or brown and is opaque. It has no play of color and is generally worthless except as a curiosity. It does fluoresce, as do the opals used for gems. Much of the common opal can be confused with chalcedony.
Gem opal was found in Hungary and was known long before Australia was inhabited by Europeans. . Wearing of opal was also considered beneficial to ones eyes and was sometimes called the eye stone. This is not to be confused with the eyestones made from banded agate that looked like eyes when finished. It was thought to render the wearer invisible by enhancing the eyesight of the wearer and diminishing the sight of anyone in the area. It was called the friend of thieves.
Opal was thought by some to be an unlucky stone but this was probably due to a misunderstanding of Sir Walter Scott's novel, "Anne of Geirstein." Another possibility as to the legend that opal is unlucky may be due to the fact that many cutters of opal had their stones fracture in the process.
Although opal was previously thought to bring good fortune to the owner it was during the 19th century that opal was generally thought to be unlucky. The black opal, however, was considered a particularly lucky stone. Black opals were not originally found in nature but were made by dipping the stone in ink or introducing burnt oil into the stone. About 1900 black opal was discovered in New South Wales, Australia.
There are many other legends about opals that may be found in the literature.
The second stone approved for October was the tourmaline. Tourmaline, like garnet, is actually a group name for similar minerals. The name is presently out of favor with mineralogists. The various separate names like schorl, elbaite, dravite, etc., are being used. Tourmaline can be found in almost every color.
Tourmaline is an aluminumous borosilicate. The various tourmalines having slightly different chemical formulas. The hardness is 7-7.5, specific gravity of 3.03 – 3.25, it is double refractive with indices of 1.610 and 1.675.
George Kunz opposed the inclusion of tourmaline because of its relative short history, having only been identified in the late 19th century. Because of this, there is no particular lore or superstitions associated with tourmaline. In recent years some very old stones that were called something else, (ruby, topaz etc.) based on the color, have been found to be tourmaline.

The piezoelectric properties of tourmaline have made it a favorite with the "New Age" mystics who believe that this property amplifies the psychic energy and neutralizes the negative energies.

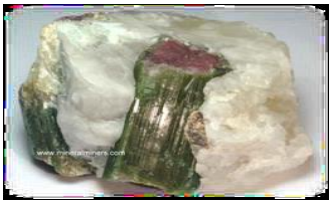
(Source: Sooner Rockologist Nov 2015)

The many faces of opals



Fossilized tree with opal

A mesmerizing opal drop necklace



The many colors of Tourmaline

SODALITE

Sodalite is a rich royal blue tectosilicate mineral widely enjoyed as an ornamental gemstone. Although massive sodalite samples are opaque, crystals are usually transparent to translucent. Sodalite is a member of the sodalite group with hauyne, nosean, lazurite and tugtupite.

Discovered in 1811 in the Ilimaussaq intrusive complex in Greenland, sodalite did not become important as an ornamental stone until 1891 when vast deposits of fine material were discovered in Ontario, Canada.

A light, relatively hard yet fragile mineral, sodalite is named after its sodium content; in mineralogy it may be classed as a feldspathoid. Well known for its blue color, sodalite may also be grey, yellow, green, or pink and is often mottled with white veins or patches. The more uniformly blue material is used in jewelry, where it is fashioned into cabochons and beads. Lesser material is more often seen as facing or inlay in various applications.

Although somewhat similar to lazurite and lapis lazuli, sodalite rarely contains pyrite (a common inclusion in lapis) and its blue color is more like traditional royal blue rather than ultramarine. It is further distinguished from similar minerals by its white (rather than blue) streak. Sodalite's six directions of poor cleavage may be seen as incipient cracks running through the stone.

It is sometimes referred to as "poor man's lapis" due to its similar color and the fact that is much less expensive. Its name comes from its high sodium content. Most sodalite will fluoresce under ultraviolet light and hackmanite exhibits tenebrescence.

https://en.wikipedia.org/wiki/Sodalite (Source: STONEY STATEMENTS Oct 2015)

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