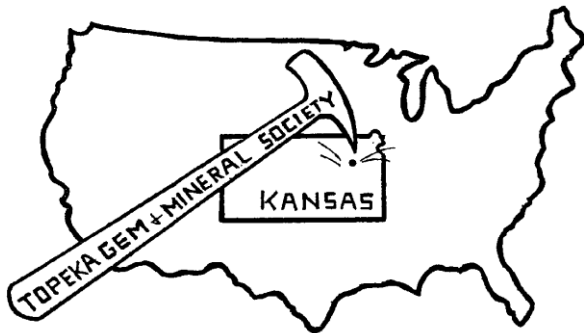


The Topeka Gem and Mineral Society, Inc.
 1934 SW 30th St. Topeka, KS 66611
 Rock2Plate@aol.com

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. 07, July 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	379-5538
Treasurer	Millie Mowry	267-2849	Property	M. Cote/D. Dillon	379-5538
Directors	Harold Merrifield	633-9745	AFMS Scholarship	Cinda Kunkler	286-1790
	Chuck Curtis	286-1790	Editor/Exchange Editor	Millie Mowry	267-2849
	May Springer	286-0742	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	379-5538
Librarian	open	-----	Show Case Coordinator	Francis Stockton	913-645-7677
Web Master	Jason Schulz	379-5538			

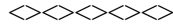
Area Code for all numbers is (785).

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.

Minutes of the Topeka Gem and Mineral Society

No meeting in the months of June, July and August



Words from Our President

We had a great turn out for the first picnic of the year with at least 40 people showing up. Even the shower beforehand didn't keep the members away. The auction afterwards was another great success. We have lots more rock to get rid of, so if the members would like to have another auction at the next picnic just let me, Dave or Millie know and we will get it set up. We are having some new people join us at the Barn for lessons and that is another sign that the members are interested in learning how to cut & polish as well as silversmithing.

President Mike and his Rock Stash!

Visitors are always WELCOME at our meetings!

Topeka Gem and Mineral Society has a new website:

www.TopekaGMS.org **Come and check us out!**

Lessons At The Barn

Lessons at the Barn will be every Tuesday from 6 – 9 p.m. unless there is bad weather. Watch your email for notice of cancellation if there is storm on the way.

Stone cutting, Polishing, Silversmithing, Casting (weather permitting) & wire wrapping
We have stones you can purchase to cut & polish, supplies for silversmithing, casting and wire wrap you will need to furnish or talk to Dave or Mike.

Again this year there will be a donation jar but the lessons are free to members.

Email for directions: rock2plate@aol.com davidd5124@aol.com mcote35@yahoo.com

ROCKS

make me
Smile!

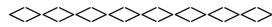
Show Dates:

- Jul 23-24 Mountain Home, Arkansas Baxter County Fairgrounds Educational Building, 1507 Fairgrounds Dr., contact Madelyn Anderson 870-421-4340.
- Sep 23-25 Tri-State Gem & Mineral, Free Admission, joplinmuseum.org@sbcglobal.net or 417-623-1180

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

Field Trip –Leslie Hartman

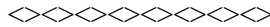
This month we will take a field trip to Flint Hills Discovery Center to see the “Amazing Dinosaurs!” This exhibit will only be on display until September 11, 2016. This field trip will cover the indoor field trip #8.5 badge and badge #3.7 fossils. We will be “discovering some of the most wondrous creatures that ever lived. Touch real dinosaur teeth and bones, explore their habitat, stand in their tracks and even dress up as a dinosaur yourself! Amazing Dinosaurs! Will amaze all ages and provide a new way to explore dinosaurs like never before.” We will meet at Flint Hills Discovery Center 315 South 3rd Street Manhattan, KS 66502 on Saturday, July 23rd at 10AM. This field trip is for everyone so hope to see all of you there.



Publicity

The Springer's and Stockton's went to attack Mt. Antero head on and we barely survived! But we were able to gain a rapport with the Cardwell's and they will be at our show as partners. They will give one 3-minute seminar each day and we reciprocate by giving them a free booth space. Also, they will bring rock material for the kids. Then I spent 30 minutes with the Busse family. Brian is still considering coming. He would be willing to speak as well. He sent us home with a bag of rock to share with the hounds. Hope to see you at the July 21 meeting at 7 pm. at St. Peters UMC.

Donna Stockton



The Orientation of Star Stones & Moonstone

By Earl Barnhart

The orientation of star stones and moonstone, I have found very easy. I am not the author of this system, I read it many years ago, but for me , it works very well.

The equipment needed is a 75R/30 spot lamp (flood lamp will work, but not as well), a lump of modeling clay or Play Dough and a felt tipped pen.

Suspend the lamp from the ceiling, turn out the room lights and set the star stone or moonstone on the clay. Star stones have to be cut so that the star is showing. Place the clay with the stone slightly embedded in it on a smooth surface on the floor under the spot light in such a position that by kneeling over the stone the light from the spot light passes past your forehead to the stone without being in the shadow of your forehead.

Now rotate the clay and move the stone to a position where the star does not move across the stone or the moon appears to be stationary.

Now take the felt tipped pen, place it on some object that will keep it in a position where you can put a mark around the stone. This will be the line to cut to make the base of the stone. After cutting you will find that the star or moon will be centered on the top of the stone. Happy Cutting!!!

(From Rock Rollers 4/85; repeated from The Drifter 4/1986)

Event Calendar

July 2016

1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12T	Lessons at the Barn- 6-9 p.m.
13W	
14T	Wire Wrap Class at Millie's 1-3 p.m.
15F	
16S	
17S	
18M	
19T	Lessons at the Barn- 6-9 p.m.
20W	
21T	Wire Wrap Class at Millie's 1-3 p.m. Publicity Meeting 7 pm
22F	Club Picnic at Millie's. 1934 SW 30 th St Potluck, 6:30 p.m.
23S	
24S	
25M	
26T	Lessons at the Barn- 6-9 p.m.
27W	
28T	Wire Wrap Class at Millie's 1-3 p.m.
29F	
30S	
31S	

Aug 2016

1M	
2T	Lessons at the Barn- 6-9 p.m.
3W	
4T	Jr Rockhound meeting 6 p.m. TSCPL room 101A Wire Wrap Class at Millie's 1-3 p.m.
5F	
6S	
7S	
8M	
9T	Lessons at the Barn- 6-9 p.m.
10W	
11T	Wire Wrap Class at Millie's 1-3 p.m.
12F	
13S	
14S	
15M	
16T	Lessons at the Barn- 6-9 p.m.
17W	
18T	Wire Wrap Class at Millie's 1-3 p.m.
19F	
20S	
21S	
22M	
23T	Lessons at the Barn- 6-9 p.m.
24W	
25T	Wire Wrap Class at Millie's 1-3 p.m.
26F	Club Picnic at Millie's. 1934 SW 30 th St Potluck, 6:30 p.m.
27S	
28S	.
29M	
30T	Lessons at the Barn- 6-9 p.m.
31W	

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

Volunteering is the heart



beat of YOUR club

TIGER EYE HISTORY & FACTS:

First of all, tiger's eye, tigereye, tiger eye and tiger-eye are all accepted ways to write this name.

Tiger's Eye is a durable quartz composite with the usual quartz hardness of 7. It begins as the fibrous blue mineral called crocidolite, which is comprised of iron & sodium. Most of us know crocidolite as asbestos. The transformation begins when quartz becomes imbedded between the fibers of crocidolite. This process will result in one of two gemstones. A blue stone is called Hawk's Eye or the golden brown stone called Tiger's Eye.

During the process, the asbestos is completely dissolved. But the quartz takes on the fibrous formations and the blue color of crocidolite. This creates the parallel lines within the gem which gives it that ever shifting play of light and movement the stone is so loved for. This is also known as chatoyancy, the gleam that rolls across its surface, much like the eyes of a cat.



Even though the iron & sodium dissolve, traces of hydrated oxide of iron deposit between the crocidolite and quartz, creating the golden color that is common to Tiger's Eye. How much of this hydrated mineral is deposited will determine how Golden brown, red, green or blue, Tiger's Eye and Hawk's Eye will be. The rarer blue Hawk's Eye will have only the slightest amounts. The varying amounts of hydrated oxide of iron, actually cause several colors and mixes of color. When the color is a greenish gray, it is called cat's-eye quartz. A golden yellow reflection on a brown stone, is called Tiger's Eye. If the stone is blue gray or bluish, it's known as Hawk's Eye. Reddish brown, or mahogany colored stones, are known as bull's-eye or ox-eye.

Up until recently tiger eye has been considered to be pseudomorph but new evidence proves otherwise. It has long been thought that the crocidolite fibers were replaced with quartz much like the replacement that happens in petrified wood. New evidence proves this may not be the case and that quartz and the crocidolite co-exist.

Tiger eye has a fibrous structure and in the lapidary shop must be oriented properly to get the chatoyancy and/or the "cats eye" effect. Cuts must be exactly parallel to the length of the fibers to get the full chatoyancy. If the saw cut is perpendicular, or 90% to the fibers, you end up with a lifeless, dark brown to black stone with no chatoyancy or light play at all. Orientation of cutting is critical to getting good chatoyancy and color out of tiger eye.

These fibers in Tiger Eye may be up to about two inches long and very thin. Most are only 0.001 millimeters, or 0.000039 inches in diameter and are not always straight making it even harder at times to cut good chatoyant stones.

TREATMENTS:

In most cases, but not always, red tiger eye is not a natural occurrence. It is usually the result of heating and can be done using the kitchen oven. Here's a basic recipe for heat treating tiger eye.

To protect the tiger-eye from thermal shock during heating, cover slabs of ordinary, gold tiger eye in fine clean silica sand, at least 3" all around the slab.

Place the metal container in a cold oven and increase the temperature by 50 degrees every hour until it reaches 400 degrees. Then turn the oven off and **DO NOT OPEN THE DOOR**. Allow plenty of time for the container to cool all the way through. (If you heat treat tiger eye to sell

BE SURE you let it be known it has been treated, it's only right and it's the law.)

There are natural occurrences that tiger eye can be found with red color. And other known ways have been from brush fires where the deposits are found and also when miners would build fires next to the seams to help crack it up into smaller pieces, remember most of these miners had nothing but hand tools to work with.

Not long after tiger eye was first discovered for lapidary, the world famous Idar-Oberstein lapidaries discovered by using hydrochloric or oxalic acid they could bleach tiger eye to an



(continued from page 5)

evenly colored light, translucent yellow. When cut properly they produced "cats eye" stones that look much like the rare variety of chrysoberyl but can be distinguished very easily between the two by gemologists.

Other treatments but not usually done, never by me, but some do it. In pietersite and bighamite stones especially, it is very common to run into pits, cracks, or voids called vugs. These are some-times filled with wax, super glue or opticon in the last steps of sanding and polishing the stone. I never do any of these treatments but as I said it is and has been done by others.

There are many other types of stones that display a "cats eye" or shimmering chatoyancy. The word "Chatoyant" comes from the French word for "cat" or to glow like a cat's eye.

Tigereye is the anniversary gemstone for the 9th year of marriage

Editors Note: Remember tigereye has asbestos, so always use a face mask and/or keep tigereye under water when sanding and polishing.

Article Provided by Top Gems, via The Palomar Gem 2/05 with additions from the internet, Via Chips 'N Splinters 5/16 Via: The Rockhounder June 2016



Jewelry Bench Tips

www.BradSmithJewelry.com & <http://amzn.to/1XoblsP>

"Bench Tips for Jewelry Making" and "Broom Casting for Creative Jewelry" are available on Amazon

SHEET & WIRE STORAGE

The more you work with jewelry, the more problems you have finding the piece of metal you need. My pieces of sheet were generally stored in various plastic bags, and the wire was in separate coils. Few were marked, so it often took me a while to locate that piece of 26 ga fine sheet I bought last year, especially since I usually take my supplies back and forth to classes.

A tip from a friend helped me organize everything. I bought an expanding file folder from the office supplies store (the kind that has 13 slots and a folding cover) and marked the tabs for each gauge of metal I use. Then I marked all my pieces of sheet with their gauge, put them in plastic bags, marked the gauge on the bag, and popped them into the folder. I usually store coils of wire loose in the folder, but they can also be bagged if you prefer. I use one tab for bezel wire and one for the odd, miscellaneous items.

The resulting folder is really convenient when I want to take my metal out to a class or workshop, and it's colorful enough for me to easily find in the clutter of the shop !



LITTLE BALLS

I often use little balls of silver and gold as accent pieces on my designs. They can be made as needed from pieces of scrap. Cut the scrap into little pieces, put them on a solder pad and melt them with a torch.

Then throw the balls into a small cup of pickle.

If you need to make all the balls the same size, you need the same amount of metal to melt each time. The best way to do that is to clip equal lengths of wire.

But there's an easier way to get a good supply of balls. Some casting grain comes in near perfect ball form. Just grab your tweezers and pick out the ones you need.

When you need larger quantities of balls, pour the casting grain out onto a baking pan, tilt the pan a bit, and let all the round pieces roll to the bottom. Bag the good ones, and pour the rest back into your bag for casting. Balls can be sorted into different sizes using multiple screens.



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

No General Meeting at Washburn— For the Months of June July & August. The next scheduled meeting is August 4th at the TSCPL room 101A.

Junior Rockhounds earning their Lapidary patches, cutting and polishing rocks.



Here is an update for the next 3 months of classes: Topeka Shawnee CO. Public Library sign in starting at 6:00 pm and classes starting at 6:30 pm.

1. August 4th, Badge #11 Earth in Space - instructor Jason Schulz, Room #101A Marvin Auditorium
2. September 1st, Badge #12 Gold Panning and Prospecting - instructor Will Gilliland, Room #101A Marvin Auditorium
3. October 6th, Badge #16 World in Miniature - instructor Cinda Kunkler, Room #202 Anton

FIELD TRIP for July 23rd:

This month we will take a field trip to Flint Hills Discovery Center to see the "Amazing Dinosaurs!" This exhibit will only be on display until September 11, 2016. This field trip will cover the indoor field trip #8.5 badge and badge #3.7 fossils. We will be "discovering some of the most wondrous creatures that ever lived. Touch real dinosaur teeth and bones, explore their habitat, stand in their tracks and even dress up as a dinosaur yourself! Amazing Dinosaurs! Will amaze all ages and provide a new way to explore dinosaurs like never before." We will meet at Flint Hills Discovery Center 315 South 3rd Street Manhattan, KS 66502 on Saturday, July 23rd at 10AM. This field trip is for everyone so hope to see all of you there.

No meeting at Washburn University instead TGMS is having a club potluck picnic at Millie's, 1934 SW 30th St. at 6:30pm on July 22nd.

Lessons at the Barn from 6-9pm every Tuesday except for holidays and bad weather. 4910 Clark RD. Meriden, KS. Side note for the Junior Rockhounds: We will need to have a field trip to the barn for the Lapidary Arts #4 badge.

HOW ARE THE RED HORN CORALS FORMED?

Briefly: The carnelis is introduced in silica solutions which precipitate as an agate mineral in the pre-existing coral in the sedimentary fossil bed. The fossil bed was laid down in a very ancient ocean 400,000,000 years ago. In detail:

The Uintah Mountains coral lived during the Mississippian and Pennsylvanian geologic ages of time. In ancient seas they grew on reefs and rocks on the ocean floor as separate and distinct solitary corals. Some floated, some were attached to anything solid. Distinct in character from the enclosing seawater and sea bottom, the myriad corals in the colony began to be buried in limy silts and oozes which came from the eroding continental land masses nearby. Some reliable sources estimate that the tiny particles accumulated at the rate of 1/4" in 400 years. As the corals experienced a natural death, they were slowly entombed by sediments along with crinoids, pelecypods, and brachiopods. Excess silica on the ocean floor and different cracks and openings deposited as gelatinous silica gem which would harden later into chert.

Millions of years passed. With the accumulations of thousands of feet of sediments and the drying up and resurgence of various oceans, one above the other upon the sedimentary column, the intense pressure and weight hardened the oozes into solid limestone rock. The layers were separated only by clay and shale beds representing times when the surrounding seas became shallower.

The Uintah coral colony was and is not an ordinary coral colony. In relatively recent times, the coral beds were fractured by jointing and folding and other slight crustal movements and then were buried by a lava flow of early Tertiary age. The pyroclastic lava exuded from the earth and covered the existing erosion surface, lakes and rocks with over 180 square miles of jumbled, steaming lava formations. Cooling rainwater and underground upward circulating meteoric waters carried silica, calcite, manganese, iron and other constituents into the fractured fossil gray coral layer. Trapped beneath a thin layer of green clay which overlies the coral layer above it about 10 or 12 feet, the silica bearing waters gradually soaked the fossil material. The silica was probably colored by the manganese or other minerals and was precipitated upon the walls of solution cavities, joint cracks and, especially, into the interior of a great many of the fossil corals. Probably in an ion-for-ion exchange of silica for limestone (calcite) in a process known as selective replacement, the fortification and fine-grained carnelian silica filled the once living organic fossils.

A few crinoids, pelecypods, and brachiopods and their fossil parts have been preserved in carnelian agate, although not as bright as the red coral in color. They are decidedly rare in occurrence and are very expensive but complete, except for the full crinoid calyx and stem.

The final process of formation was the exposure by erosion of the sunlit ridge once covered by lava and sedimentary cover, to reveal the rockhound coral "gold" treasure of the Uintahs.....

(From The Gemrock 2/84; repeat from The Drifter 12/87)

We need lots of volunteers for the annual show in October.....sign up now and get your choice of when you want to work the two hour shift.

Contact Millie to sign up.