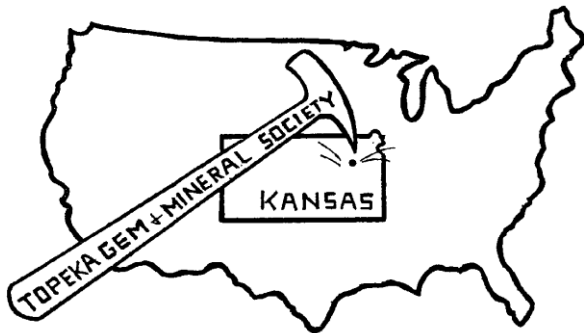


The Topeka Gem and Mineral Society, Inc.
 1934 SW 30th St. Topeka, KS 66611
 Rock2Plate@aol.com

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. 59, No. 02, FEB. 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.**

2015 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	Harold Merrifield	286-3548	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	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.



Minutes of the Topeka Gem and Mineral Society – 1/22/16

Dave Dillon called the meeting to order. Mike Cote' not feeling well tonight. Jason Schulz announced 20 members and 1 guest are present for the meeting, door prizes were awarded. Door prizes are needed – bring donations to the meeting!

The minutes from the November meeting were printed in The Drifter in December. Harold Merrifield made a motion and Jason 2nd to accept as printed.

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

Correspondence: Cinda reported on the RMFMS Convention to be held in Wichita in April. She also introduced our guests who also became members tonight – Bill & Janet Smith from Hardtner, KS – Bill is our RMFMS State Director.

Committee reports: AFMS – Cinda we received a letter from Richard Jaeger acknowledging the clubs contribution to the AFMS Scholarship Foundations. Our club is up to the 13600% level and just \$16.54 short of the 13700% level. He let us know that our club continues to be one of the top supporters of the Foundation in the Rocky Mountain Federation!

Publicity – May reported for Donna that there will be a publicity meeting Feb 11th at 6:30 at St Peters UMC. Kelly from Lamar advertising will talk to us about billboards. We hope to do these this year, but we need help from members to call on businesses to help with promotion costs. We are calling our 60th annual show – 'Diamond Jubilee has Many Facets'. Donna is trying to get the Diamond Lady from Murfreesboro and some of the 'Prospectors' to come give talks at our show. We hope to raise money to offset any costs. We need lots of members to help – all members at welcome at the meeting.

Historian: Deborah not here tonight. Cinda brought an album with old club items for everyone to look at.

Show Committee – Dave reported we usually have 18 dealers and are hoping to get 6 more for a total of 24 dealers. The food vendor will be the same this year – he is open to menu ideas. We need to have some special exhibits and club projects to display.

Field Trip – Larry announced the February 27th scheduled event will be the Children's Discovery Center where we will have a display and man tables to answer questions. Please volunteer to help. No field trip is planned for January. March will be the KC show, and April the Wichita show.

Junior Rockhounds – Larry reported they currently have 8 in the class right now.

Webmaster: Jason reported he submitted our web page to the AFMS contest – hoping to get some suggestions from them for changes we might need. The club page needs updated. We are up to 76 Likes on our Facebook page – 'like' us if you are on

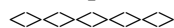
Facebook: We have 117 likes on Field Trips and 71 likes on Junior Rockhounds.

New Business: Dave reported the books are ready to be audited. The Audit Committee this year will be Dave Dillon, Chuck Curtis & Mike Cote'.

Millie presented the 2016 Club & Show Budgets for the club to review. Discussion was held on the Club Budget. Chuck moved to accept, Jason 2nd, motion carried. Discussion was held on the Show Budget. Chuck moved to accept, Harold 2nd, motion carried. Junior Rockhound patches to give out, but the Juniors were not in attendance. Shirley will take them to the Jr Rockhound meeting to present.

With no further business, Jason moved to adjourn to our program – Silent Auction, Chuck 2nd – we are adjourned!

Fred Zeferjohn announced the Cab of the Month contest has 4 member cabs and 2 member jewelry items to vote on. The winner will display at the show. Winners are: Member Jewelry Dave Dillon Turquoise Sterling Pendant, Member Cab – Dave (again) Rhodonite. Respectfully submitted by Cinda Kunkler, Secretary



YOUR 2016 MEMBERSHIP DUES ARE DUE! If you joined the last of September or in October you are paid up for 2016. If you have any question about it, contact me. You have until the March meeting to stay on the roster. Millie rock2plate@aol.com

January 6, 2016

Cinda Kunkler
210 NE 35th St.
Topeka, KS 66617-1440

Dear Cinda,,


I wish to thank the Topeka Gem & Mineral Society, Inc. for your generous contributions to the AFMS Scholarship Foundation. Your club continues to be one of the top supporters of the Foundation in the Rocky Mountain Federation. The latest contributions put your club up to the 13600% level and just \$16.54 short of the 13700% level.

I'll look forward to seeing you at the RMFMS Show & Convention in Wichita.

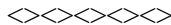
Sincerely,



Richard D. Jaeger
Scholarship Chairman - RMFMS



ALL WE CAN SAY IS
WOW!
WAY TO GO CLUB.



Words From Mike

This month's program will be presented by Ken Stalder on identifying fake rocks. We also will run a Silent Auction in conjunction with his program since the weather was so unpredictable last month and there were so few people at the meeting. Sorry for not making it to the meeting last month as I was under the weather, but feeling better now. So I'll see you all at Feb.

President Mike and his Rock Stash!



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>

- **February 27, Kansas Children's Discovery Center**
- **March 26, TBA**

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

Additional Show Dates:

- ✓ March 11-13, 2016 KCI Expo Center 11730 NW Ambassador Dr, Exit 112ST off I-29 or KCI Exit (Cookingham Dr.) off I-435, Fri 10-8, Sat 10-7, Sun 10-5. www.kcgemshow.org



55th Annual Gem & Mineral Show
Presented by: The Association of Earth Science Clubs
of Greater Kansas City — **March 11, 12, & 13, 2016**

PARK FREE at the **KCI EXPO CENTER** 11730 NW Ambassador Dr.
Exit 112th St off I-29 or KCI Exit (Cookingham Dr.) off I-435
One Coupon Good for the entire group!

Admission: Adults \$6, 2 Day Pass \$10,
3 Day Pass \$14, Children 5-12 yrs. \$3,
and Children 4 and under Free.
www.kcgemshow.org
or www.gemshowkc.org

Show Hours:
FRI 10:00 am to 8:00 pm
SAT 10:00am to 7:00 pm
Auction at 7:00 pm
SUN 10:00 am to 5:00 pm



 **Follow us: Kansas City Gem & Mineral Show**

\$1.00 OFF Coupon

\$1.00 OFF Coupon

Clip or copy & paste coupon for your use.

- ✓ April 22-24, 2016 Wichita, KS, RMFMS Convention & Show Cessna Activity Center 2744 George Washington Blvd., Fri 9-6, Sat 10-6, Sun 10-5.

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

Tiffany is planning a trip to the Crater of Diamonds, in Arkansas, this spring. If anyone is interested in joining them, please contact her at 785-640-8888 or tiffany@balaw.org.

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.

Feb. 16
Come join us with show and tell.

March 1
Junior Rockhounds can get help on their collections.

We still need Best Choice UPS Labels!

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.

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.

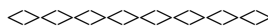
Youth must be accompanied by a parent or guardian to all events.

<p>Junior Rockhound - New Class Schedule 2016 March 3 Earth Resources- Ken Stalder</p>	<p>Junior Rockhound Activity Center General Meeting - Stoffer Science Hall - Washburn University 7:00 PM February 26, 2016</p>
<p>Green Fair-Countryside UMC, Burlingame Rd., April 1, 2016, 5:00-7:00 PM</p>	

Junior Rockhounds are encouraged to attend with vests and or exhibits.

News

- ❖ Rocky Mountain Federation Convention, April 22-24, 2016, Wichita, Kansas
 Juniors from Topeka should be thinking about having a Junior exhibit at the convention.
- ❖ A new banner for the Junior Rockhounds is in the works.
- ❖ Sponsorships for fundraising was discussed at the Advisors meeting Thursday night, February 4th.
- ❖ A new policy was adopted by the Advisory Board: We will accept worksheets as proof of completion of activity and eligibility for the badge. Preferably, the lead instructor for that badge will sign off on that activity. The same instructor is responsible for the proper documentation of evidence of completion of that activity, within the guidelines of the American Federation of Mineralogical Societies.



RAREST MINERAL

According to many, including the Guinness Book of World Record, **Painite** is the world's rarest mineral. For decades, only two crystals were known to exist. The mineral is made up of aluminum, calcium, boron, zirconium and oxygen.

<http://www.miningglobal.com/top10/1393/PHOTOS-Top-10-Rarest-Gems-Found-on-Earth>

(Source Stoney Statements Feb 2016)





YOUR 2016 MEMBERSHIP DUES ARE DUE!

If you joined the last of September or in October you are paid up for 2016. If you have any question about it, contact me. You have until the March meeting to stay on the roster.
Millie rock2plate@aol.com



Publicity Committee Is Off and Running

TGMS Publicity Committee met at St. Peters United Methodist Church at 6:30 p.m. to discuss the nuts and bolts of preparing for our Donor and Sponsorship campaign. Kelly Hewins, Account Executive, from Lamar Advertising, spoke to the group of 9 participants from the club. She discussed the time frame to secure billboards and suggested four being a good number for good coverage of Topeka, at a cost of around \$1,700. This amount represents half the cost normally charged to For Profit businesses. By going with billboards, once our billboard is wrapped, it will not be bumped by political ads and will be displayed for a month. She shared the benefits of billboards and suggests that research shows that they provide 4x the impressions per dollar than radio and magazines, 8x more than TV and 11x more than newspapers.

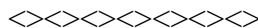
May Springer and I produced several possible letters to be used to introduce TGMS to our perspective Donors/Sponsors along with a written agreement that spells out several levels of giving and includes what we will provide to them and gives them choices of levels of giving.

The group decided to meet again before the general meeting at 6:30 p.m. to finalize changes to the letter and agreement. We are gathering lists of potential Donors and Sponsors. If you have an idea who we could add to our list, please contact Donna Stockton, May Springer or Millie Mowry. We will be calling people to set up dates to call on these perspective Donors/Sponsors. We are networking through people we already know so if you know a business owner or work for a company, pass them on to the committee. We will role-play how to approach these companies before we break into teams of two to approach the Donors/Sponsors. If this part of our plan piques your interest as something you are gifted to do, please let the committee know.

And, I received a response from Tracie and Craig Cardwell from “**Prospectors**”. They would like to set up a booth at our show and are willing to do a seminar each day. What a draw this will be for our show! Things are coming together for our 60th celebration.

Hope to see you all at the General Meeting and silent auction.

Donna Stockton



10 MOST DEADLY ROCKS AND MINERALS

by Jim Karstell March 7, 2013

from Red Stick Rockhound News 11/2015 via Backbenders Gazette 1/2016 via Stoney Statements 1/2016

We often wonder if the Earth beneath our feet could swallow us up. The truth is more insidious. Drop that rock you just picked up . . . you could get poisoned. This list details the ten most toxic and potentially deadly minerals that crystalize in the Earth’s rocks, presenting a dangerously deceptive array of stony beauty. These rocks don’t have to be thrown to hurt you.

1) Cinnabar

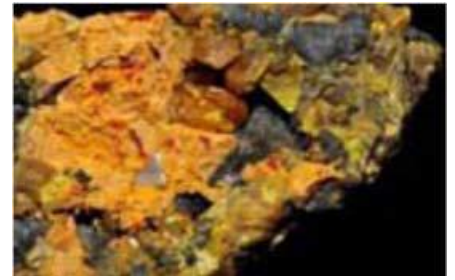
Cinnabar (mercury sulfide) is the single most toxic mineral to handle on Earth. The name of the crystal means dragons blood, and it is the main ore of mercury. Forming near volcanos and sulfur deposits, the bright red crystals signal danger of the worst kind.

Cinnabar may release pure mercury if disturbed or heated, causing tremors, loss of sensation and death. In the Middle Ages and late 1700s, being sent to work in Spanish mines containing cinnabar formations was widely considered a death sentence. Cinnabar was widely used in Chinese history for ornamental food dishes, and intricate carvings were created from chunks of it, sometimes at the expense of the artisans. Even more incredibly, some ancient medical practitioners believed cinnabar held healing powers, and prescribed it for certain conditions.



2) Orpiment

The only thing worse than arsenic itself could be a rock made from arsenic and sulfur. The lethal and chemically reactive orpiment crystals are found growing below the surface in mineral formations, often near hydrothermal vents. The colors are seductive, but holding the crystals in your hands may release carcinogenic, neurotoxic arsenic powder. Like cinnabar, the Chinese made extensive use of this mineral, but to far more terrifying ends. Arrows would be rubbed on crushed samples of these stones and then launched to poison the enemy in a rather fancy way to throw a rock. Orpiment is known to give off a strong garlic smell due to its arsenic content, and may crumble into dangerous powder when exposed to light. The mineral was used as a primary component of ochre paint, and likely poisoned many of the artists who used it.



3) Stibnite

Stibnite is antimony sulfide, but it looks like silver. For that reason, the huge, shining metallic crystals of this unstable compound were once fashioned into magnificent eating utensils. But the sword shaped crystals bore the powers of death to those who used them. Stibnite's antimony-laced crystals killed a number of people before it became known that use of the mineral was causing food poisoning of the worst kind. Even in collections, stibnite samples should be handled with great caution to avoid poisoning.

Hand washing is advisable after any contact. Mines near Oksaku in Japan have produced the best stibnite crystals in the world, measuring up to a foot in length. Many stibnite samples have the appearance of a miniature steeple.



4) Torbernite

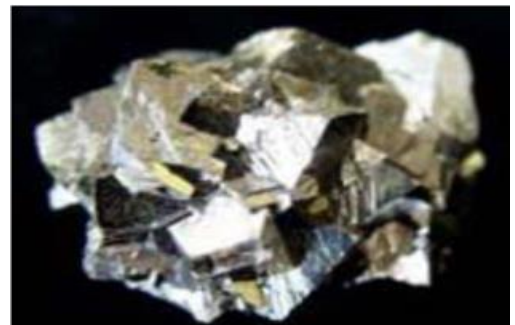
Torbernite is the mineral from hell. The prism shaped green crystals form as secondary deposits in granitic rocks, and are composed of uranium. Formed through a complex reaction between phosphorous, copper, water, and uranium, the stunning crystal displays have seduced many mineral collectors into taking a sample for a shelf collection. If the uranium decay from a pocket-sized Chernobyl were not enough, lethal radon gas capable of causing lung cancer slowly releases from these hot rocks. This is one crystal to leave alone. Torbernite can occur in granite, so your stone countertop just might contain traces of torbernite. The bright green crystal blooms were used by prospectors as indicators of uranium deposits.



5) Arsenopyrite

Arsenopyrite is fool's gold, but with a difference. One would not just be a fool to mistake it for gold. Equally foolish would be a decision to pick up this mineral on a hike at a quarry, and proceed to use your hands to put trail mix in your mouth. Arsenopyrite is arsenic iron sulfide, which is the same type of mineral as pyrite (fool's gold, iron sulfide), but with a heavy addition of arsenic. If one attempts to heat or in any way alter the mineral, a strong garlic odor of arsenic will be produced as lethally toxic, corrosive and carcinogenic vapors are released.

Just handling the mineral brings one into contact with unstable sulfuric arsenic salts. Interestingly, arsenopyrite may be identified by striking a specimen with a hammer. The powerful garlic odor of arsenic can be briefly detected as the sparks fly.



6) Asbestos Chrysotile and Amphibolite

Asbestos is not a manmade product, but one of most terrifying minerals on the planet. Where other minerals act as toxins through their chemistry and sicken victims of accidental poisoning, Asbestos conducts full scale mechanical sabotage on the human lung. Asbestos is a fully natural category of minerals composed of silica-the most abundant of Earth's hard elements, iron, sodium, and oxygen.

Asbestos deposits consist of aggregates of thousands of tiny, fibrous crystals that can become airborne and lodged in the human lung.



Carcinogenic effects occur through persistent irritation of the lung tissues, leading to scarring. Asbestos formations can also be uncovered among any set of silica rocks, warranting caution when exploring. Strangely, natural weathering leads to natural distribution of asbestos in Earth's atmosphere. As a result, many humans carry some asbestos fibers in their lungs.

7) Galena

Galena is the principle ore of lead, and forms glistening silver cubes with almost unnaturally perfect shapes. Although lead is normally extremely flexible, the sulfur content of galena makes it extraordinarily brittle and reactive to chemical treatment. Galena is capable of taking an equally heavy toll on workers and amateur researchers who are exposed to it. Contact with specimens may lead to lead dust exposure, while workers in mines face a high risk of poisoning from contact with the mineral and the deadly dusts released through production. Once extracted, the lead content from this mineral poses environmental and health threats during treatment and extraction. Galena has a cubic fracture, and if hit with a hammer, the crystal will shatter into multiple smaller replicas of its original shape.



8) Hutchinsonite—Thallium

Thallium is the dark twin of lead. This thick, greasy metal is similar in atomic mass but even more deadly. Thallium is a rare metal that appears in highly toxic compounds consisting of rather strange combinations of elements. The effects of thallium exposure are even more peculiar, and include loss of hair, serious illness through skin contact, and in many cases, death.

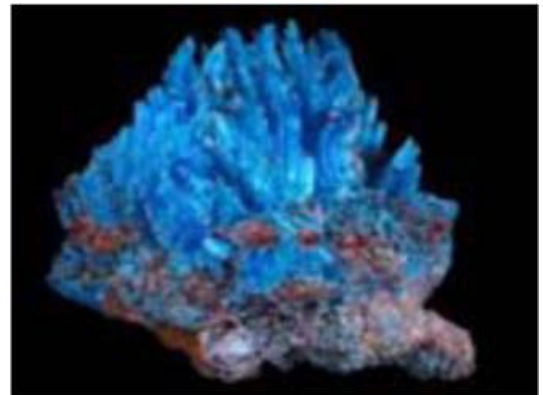
Hutchinsonite is a hazardous but dramatic mixture of thallium, lead, and arsenic. The three poisonous metals form a lethal mineral cocktail that should be handled only with great caution. Hutchinsonite was named after John Hutchinson, a prominent mineralogist from Cambridge University. The mineral is found in mountainous regions of Europe, most frequently in ore deposits.



9) Chalcanthite

Seductive blue chalcanthite crystals are composed of copper, combined with sulfur and other elements, and

water. This arrangement turns copper, which is required by the body but toxic in excess quantities, into an extremely bio-available crystal. In another words, the copper becomes water soluble, and it may be assimilated in great quantities by any plant or animal, rapidly weakening it and then killing it by shutting down body processes. Chalcanthite should never be taste tested by amateur scientists for salt content, or an extremely serious overdose of copper could result. Just releasing crystals of the blue mineral has killed entire ponds of algae, and posed great environmental threats. Because of the incredible beauty and rarity of chalcanthite, an enterprise dedicated to growing artificial crystals and passing them off as genuine specimens for sale has developed within the geological community.



10) Coloradoite

Coloradoite is a recently discovered crystalline mineral originating in magma veins. The mineral is a mercury telluride compound formed when mercury fuses with tellurium, another extremely toxic and rare metal.

Coloradoite therefore poses a doubly toxic threat to anyone daring to handle it. The combination of the two elements poses the risk of serious poisoning if carelessly handled. If heated or chemically altered, deadly vapor and dust is released by this strange mineral. Interestingly, the mineral may be mined for its tellurium content. Tellurium minerals may combine with gold, but were previously not recognized. In a strange twist of fate, the streets of Kalgoorlie in Australia were mined in a bizarre gold rush after the realization that gold-bearing tellurides had been used to fill potholes.



<http://hibiscusmooncrystalacademy.com/resources/toxic-crystals-stones/#sthash.q9YAe1DC.dpuf>