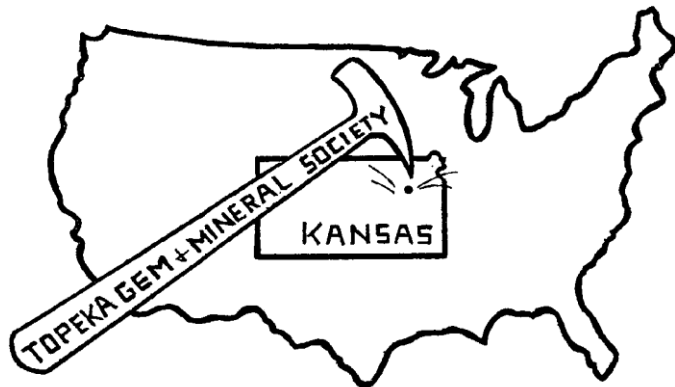


The Topeka Gem & Mineral Society, Inc.  
 1934 SW 30<sup>th</sup> St. Topeka, KS 66611  
 Rock2Plate@aol.com

# THE GLACIAL DRIFTER



[www.topekagemandmineral.org](http://www.topekagemandmineral.org)

Facebook: Topeka Gem and Mineral Society Field Trips



The Glacial Drifter, Vol. 56, No. 2, February 2013  
 The Topeka Gem & Mineral Society, Inc.  
 Organized December 3, 1948

Member of Rocky Mountain Federation of Mineralogical Societies  
 American Federation of Mineralogical Societies

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; (4) to encourage greater public interest and education in gems and minerals, cooperating with the established institutions in such matters.

Meetings: 4<sup>th</sup> Friday of each month, except December, unless notified of a change, September – May, 7:30 pm, Stoffer Science Hall, Room 138, Washburn University. Picnic meetings held during summer months, June – August.

Dues: Individual, \$15.00; Husband and wife, \$20.00; Junior (under 18 years of age), \$5.00. Dues are due in December for the coming year; they are delinquent after the January meeting. Send dues to Millie Mowry, Treasurer 1934 SW 30<sup>th</sup> St., Topeka, KS 66611.

## 2013 OFFICERS AND CHAIRS

President	Mike Cote`	220-3272	Cab the Month	Debra Franz/Fred Zeferjohn	862-8876
1 <sup>st</sup> Vice Pres.	Dave Dillon	272-7804	Field Trip Coordinator	Larry Henderson	272-8444
2 <sup>nd</sup> Vic Pres.	Carolyn Brady	233-8305	Publicity	Christy Bien	608-1890
Secretary	Cinda Kunkler	286-1790	Welcome/Registration	Jason Schulz	379-5538
Treasurer	Millie Mowry	267-2849	Property	M. Cote`/D. Dillon	220-3272
Directors	Clyde Burton	478-4778	AFMS Scholarship	Louellen Montgomery	354-1290
	George Reed	836-9277	Editor/Exchange Editor	Millie Mowry	267-2849
	Harold Merrifield	286-3548	Show Chairman	Harold Merrifield	286-3548
Historian	Deborah Scanland	273-3034	Show Dealer Chrm.	Dave Dillon	272-7804
Federation Rep	Harold Merrifield	286-3548	Show Secretary	Cinda Kunkler	286-1790
Corporation Agent	Millie Mowry	267-2849			
Librarian	Jim & Millie Mowry	267-2849			

Area Code for all numbers is 785.

# Meeting of the Topeka Gem and Mineral Society

## General Meeting Minutes – January 25, 2013

The meeting was called to order at 7:30 p.m. by Mike Cote`.

**Welcoming Committee:** There were 19 members and no guest present. Door prizes were given out.

**Cab of the Month Contest:** Fred Zepherjohn announced that there were 7 member cabs and 2 jewelry items.

**Treasurer’s Report:** Millie Mowry gave the treasurer’s report for the club. The balance was \$5839.44, with no bills presented.

**New Business:**

- Millie presented the budgets for the up-coming 2013 year. The Club budget was approved by Dave Dillon and seconded by Mike Cote`. The Show budget was approved by Mike Cote` and seconded by Dave Dillon.
- Millie pasted out the Release of Liability form to those who were present and requested that they be signed and returned to her.
- Dave Dillon reported that the annual audit of the Club’s books was done by himself, Mike Cote` and George Reed and all were found in good shape.
- Carolyn Brady announced that sympathy cards were on the back table to be signed for Jim & Laura Baer and family for the loss of Jim’s mother, JoAnn Baer and Freda Taber who was Laura’s mother. There was a card for Chuck Curtis who lost his father Friday morning.

**Correspondence:**

Discount tickets for the KC Show were available.

**Committee Report:**

- Dave Dillon reported that he was working on getting Dealers for the show, but otherwise had nothing to report.
- Larry Henderson reported that he had set up a Facebook page for the Junior Rockhound’s Activity. For the Field Trips, he had a new calendar for those who wanted one.
- Dave Dillon made the announcement that in the coming year a committee of 3 would get together and decide who got the Member of The Year Award. Marion Brown gave the award to Jim Baer for the 2012 year.

**Old Business:** None

The meeting was adjourned at 8:05 p.m. for the Silent Auction.

**Cab of the Month Winners:**

Member Cab: Malachite by Dave Dillon

Member Jewelry: Fire Agate ring by Dave Dillon

Minutes were taken by Rick Knight and Debbi Jackson, typed by Millie Mowry

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### LESSONS

Lessons are still on hold until the weather gets warmer. See you all at this meetings

Dave Dillon, [davidd5124@aol.com](mailto:davidd5124@aol.com) Mike Cote`, [mcote35@yahoo.com](mailto:mcote35@yahoo.com)

\*\*\*\*\*

### \*\*\* Attention Members \*\*\*

To save some money we are going to start sending out the Drifter by email. To be sure you receive yours....make sure we have the correct email address. If you do not receive your copy.....or can not open it...contact Millie at [rock2plate@aol.com](mailto:rock2plate@aol.com) or you can also go to the website to get a copy. [www.topekagemandmineral.org](http://www.topekagemandmineral.org)



## From the President – Mike Cote`

The TGMS Board has approved the following changes to the By-Laws. They will be presented at the next General Meeting for your vote.

Under Membership

Article III Sec. 2 reads: There shall be three classes of membership: (1) Adult: (2) Junior (under 18): (3) Honorary.

Change to: There shall be three classes of membership: (1) Adult: (2) Junior (under 18) requiring at least one parent or guardian to be a member, who will be responsible for the Junior: (3) Honorary.

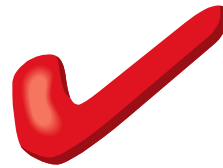
Adding Sec. 3: Members will be requested to sign a Release of Liability form.

Under Dues

Article IV Sec. 1 reads: Dues, payable at the December meeting for the next calendar year, shall be: Adult member, individual, \$15.00; man and wife, \$20.00; Junior members, \$5:00, per year. Honorary members will not be assessed dues. Members who are delinquent will be dropped from the membership rolls at the March meeting. Reinstatement of membership will require full payment of dues for the coming year.

Change to: Dues, payable at the December meeting for the next calendar year, shall be: Adult member, individual, \$15.00; man and wife, \$20.00; Junior members, \$5:00, per year. Honorary members will not be assessed dues. Members who are delinquent will be dropped from the membership rolls at the February meeting. Reinstatement of membership will require full payment of dues for the coming year.

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Your dues is due, as of January 1, 2013. If you joined in October – December 2012, your dues is not due. If you are in question as to, or, if you have paid, check with Millie, at [rock2plate@aol.com](mailto:rock2plate@aol.com) or call 267-2849.

The Board has approved a Release of Liability form that each member will be requested to sign. It will be effective immediately and available at the next meeting and sent with the paper copies of the Drifter as well as an attachment with the email copies. Please sign and return a.s.a.p. to Millie or any officer of the club.

.....

### Address Changes / New Members

Betty White, 5301 Ralston, Raytown, MO 64133, 816-308-5336

Iona Faulk, 1021 SW Fleming Ct. Apt 208, Topeka, KS 66604-1851 785-440-0434

Amy Lister, 2200 SE Ratner Rd., Tecumseh, KS 66542 785-409-7270, amy.lister@yahoo.com

## Dates to Remember



March 15-17, 2013, Gem Show Kansas City, KCI EXPO Center 11730 NW Ambassador Dr.

<b>\$1.00 OFF</b>	<b>52nd Annual Greater Kansas City GEM &amp; MINERAL SHOW March 15th, 16th &amp; 17th, 2013</b>	<b>\$1.00 OFF</b>
<b>FREE PARKING</b>	<b>KCI EXPO Center 11730 NW Ambassador Dr. Exit 112th St off I-29 or KCI Exit off I-435</b>	<b>FREE PARKING</b>
<b>Admissions:</b> Adults: \$6.00 Children 5-12: \$3.00 Under 5: Free	<b>Multi-day tickets available:</b> 3 day pass...\$14.00 2 day pass...\$10.00	<b>Show Hours:</b> 9:00am to 8:00pm FRI. 10:00am to 7:00pm SAT. 10:00am to 5:00pm SUN.
<small>www.kcgemshow.org or www.gemshowkc.org</small>		
<b>One Coupon Good For Entire Group or Family</b>		

## Field Trips

Trips dates are tentative and subject to additions and change. Call or e-mail Larry if you have an interest in any of these trips 272-8444 or [LHenderson85@gmail.com](mailto:LHenderson85@gmail.com) We meet at McDonalds, 11<sup>th</sup> and Kansas Ave.

- February 19, 7:00 p.m. Coffee,, Show & Tell, at Classic Bean, Fairlawn Plaza.
- February 23, Trip to the Sternberg Museum, Hayes, Kansas  
<http://sternberg.fhsu.edu/> 7:30 a.m. McDonalds Leave at 8:00 a.m.
- March 5, 7:00 p.m. Coffee, Show & Tell, at Classic Bean, Fairlawn Plaza.
- March 15, K C Gem & Mineral Show –Friday 8:30 a.m. McDonalds Leave at 9:00  
We will car pool to Kansas City Expo Center near KC International airport for the spring show.
- March 19, 7:00 p.m. Coffee, Show & Tell, at Classic Bean, Fairlawn Plaza.
- March 23, Local Field Trip TBA 8:30 a.m. McDonalds Leave at 9:00
- April 2, 7:00 p.m. Coffee, Show & Tell, at Classic Bean, Fairlawn Plaza.
- April 5-7, Fossil Expo, Iowa City, Iowa
- April 6 – 7, 2013 Lincoln Gem & Mineral Show, Lancaster Event Center 84<sup>th</sup> & Havelock, Lincoln, NE.
- May 3-5, McPherson Gem & Mineral Sale & Swap
- May 17-19, Long weekend Field Trip-Near Rapid City, South Dakota, for Fairburn and other Agates, with stops at Sioux Falls in Sioux Falls, South Dakota, and Ashfall Fossil Beds Nebraska State Historical Park.

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We need your **BEST CHOICE UPC Labels** --- Bring them to the monthly meeting.



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## Fascinating Facts about Silver

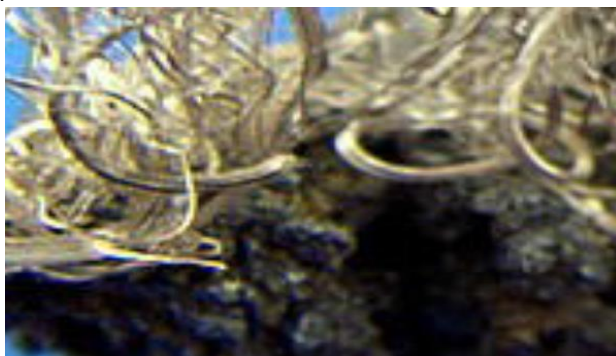
Although silver was discovered later than gold and copper, it has been known and used by humankind since prehistoric times. Herodotus, the Greek historian, knew of silver used to make coins and beads, exploited from the river sands of the Pactolus in Lydia. The Chinese wrote of silver metals in 2500 BC. In the earliest prehistoric strata at the site of Troy, considerable deposits of silver and gold treasure have been extracted. Among the artifacts, silver bracelets and gold earrings, ornaments placed in a silver cup and more than 8000 beads were buried in the ancient city 2000 years before Christ. The most ancient silver miners of importance were in Asia Minor and on islands in the Aegean Sea. The Romans obtained most of their silver from Spain until supplies be-came scarce during the Middle Ages. After the discovery of the Americas in 1492, Mexico became the largest silver producing country in the world. Canada and the United States also produce significant amounts of silver. Silver is a lustrous white metal widely distributed in nature. In ores, it is commonly associated with gold, lead, and copper.

Much of the world's silver is obtained as a byproduct of smelting these other metals. Horn silver (AgCl) is found in the oxidized portions of ore which lies near the surface. Small amounts of silver in the oxidation zone form as the more complex compounds erode and weather. At deeper levels silver occurs as sulfides, arsenides and antirnonides (compounds of silver with sulfur, arsenic, and antimony). In these deposits, formation is the result of deposition from primary hydro-thermal solutions. Argentite occurs in low temperature hydrothermal veins in association with other silver minerals or sometimes in the cementation of lead and zinc deposits.

When found in a metallic state, it is called native silver. Native silver usually occurs in dendritic and wire-like forms which are aggregates of minute crystals. Silver may also occur in thin sheets or in large masses. In Kongsberg, Norway, magnificent crystalline wire specimens occur in association with sulfides, calcite, barite, fluorite, and quartz. The world's largest specimen of massive silver was mined in Aspen Colorado, and weighs in at 844 pounds. On the Keweenaw Peninsula of Michigan, small amounts can be found in association with native copper. In Mexico, the Guanajuato Mine has been in operation since the year 1500 AD. During that time, more than 5000 billion kilos of silver have been mined.

About 3/4 of the world's silver production is used for monetary purposes, either as coins or as bullion that governments hold to redeem paper currency. The leading industrial use of silver is for the manufacture of tableware and jewelry. The second largest consumer is the photographic industry. When compounded with bromide or chlorine, silver forms salts which register light and shade on photographs. Silver has the highest thermal and electrical conductivity of any substance, making it ideal for use in electronic equipment. Silver is second only to gold in malleability. One ounce of silver can be drawn into wire 30 miles long. A silver leaf can be beaten to a thickness of 1/100,000 of an inch.

From *Golden Spike News*, 12/99 via: *Rock Rustler News*, 2/12, via *THE ROCKCOLLECTOR - Newsletter for the Rochester Lapidary Society* March, 2012; Lithnics 1-2013.



# Notes and Safety Tips on Using Oxalic Acid

by Duane Leavitt from the Rocky Road, date unknown

One often reads about and sees reference to oxalic acid (wood bleach) in publications such as our newsletter when the topic of cleaning minerals is discussed. Oxalic is used to dissolve the iron oxide (brown) stain on all minerals. This chemical, while an excellent cleaner for some types of minerals, poses some serious health risks which are not widely understood and can be confusing when considered in light of other acids that are sometimes used for cleaning purposes.

Oxalic acid, chemically  $H_2C_2O_4$ , is an organic acid, which means that it contains, among other things, the element carbon. At room temperature it is a white, crystalline, odorless, solid looking a lot like granular sugar in physical appearance.

When we look at oxalic acid we find that, as acids go, it is quite weak. Acid strength is measured by how much hydrogen acids give up in water solutions. It is obvious that oxalic acid is nowhere near as strong or as soluble in water as hydrochloric acid or nitric acid. These two acids, are also used in mineral cleaning. There is NO correlation between acid strength and how poisonous it is, its toxicity.

As an organic acid, oxalic acid, and/or its water solutions, can be absorbed directly through the skin into the bloodstream, powders from the dry acid and vapors from solutions can be absorbed into the body through the lungs. This has serious implications for those who like to clean specimens in a crock pot of simmering oxalic acid solution in their basement; residues from improperly neutralized and rinsed specimens may be absorbed through later handling. Dust from the solid acid can damage the cornea of the eyes.

In the body, oxalic acid removes calcium from the blood, forming insoluble crystalline masses of calcium oxalate that eventually wind up in the kidneys where they will obstruct and abrade the kidney tubules causing the kidneys to bleed. They may block the kidneys and have to be removed surgically - kidney stones. In respiratory passages the material will cause severe irritation, possible hemorrhaging of these tissues and burns. When the material gets into the digestive tract it causes severe gastroenteritis and vomiting, shock and convulsions, cardiovascular collapse and/ or kidney failure can lead to death. A lethal dose of oxalic acid is somewhere between 5-15 grams. Severe health problems occur at much smaller levels of exposure. OSHA recommends a threshold limit value (TLV) for airborne concentration of no more than 1 mg (that is one thousandth of a gram)/ cubic meter. For comparison, 1 restaurant packet of sugar contains about 1 gram of material or 1000 times the recommended exposure value!

Unlike neutralized hydrochloric, muriatic and nitric acids, the products of "neutralized" oxalic acid are STILL poisonous - they just are no longer acidic. Oxalate compounds of any nature are still a threat to your health. People wishing to use oxalic acid can do so successfully and safely provided they incorporate the following procedures into their mineral cleaning:

1. Always use long sleeved rubber gloves, a splash proof apron, and full eye/nose protection when handling either dry oxalic acid crystals or oxalic acid solutions.
2. Avoid heating solutions of oxalic acid.... it will work cold, it just takes longer.
3. Keep containers of soaking specimens covered so that acid vapors stay inside the container. Lids should NOT be airtight.
4. Rinse any specimens cleaned with oxalic acid with copious amounts of water and test with pH paper to ensure that all acid is gone. A post treatment bath in dilute (household) ammonia or sodium bicarbonate solution is a good idea.
5. In the event of a spill removed affected clothing immediately, rinse affected areas with copious amounts of water, rinse and wash affected clothing. If there is any doubt as to the severity of the exposure seek medical help immediately.
6. Small amounts of used solutions of oxalic acid can be disposed of by the following method:
  - a. Neutralize the solution with sodium bicarbonate or sodium hydroxide; TEST with pH paper to make sure it is neutral (or slightly basic).
  - b. Dilute the solution from step A above, 20 fold with water (example, to 1 pint of neutralized acid solution add 20 pints of water).
  - c. Pour solution B down the drain with plenty of cold water. This disposal technique is identical to Flynn Scientific disposal technique 24A (Flynn,2006).
7. Read up on cleaning techniques (Cleaning and Preserving Minerals by Richard Pearl is a good place to start) and educate yourself about techniques, materials and alternatives.

Summary:

- Poison! Danger!
- May be fatal if swallowed
- Corrosive
- Causes severe irritation and burns to skin, eyes and respiratory tract
- Harmful if inhaled or absorbed through skin
- May cause kidney damage

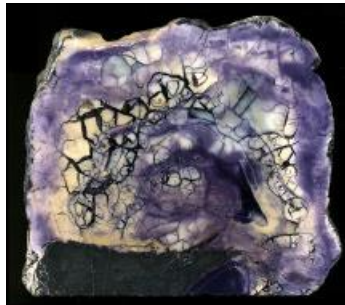
Source: Gem Cutters News – February, 2013

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## Bertrandite var. Tiffany Stone

by Ken Casey from the Geogram, June 2009

When thinking of a rare opal, which also may occur with purple fluorite, what do we call it? Why Bertrandite, of course. Also called “Tiffany Stone” and “Opalized Fluorite”, among other titles, this crackled, mottled rock was introduced recently as a lapidary stone. Though pure Bertandite is a mineral all its own, it forms part of the gemmy matrix of “Tiffany Stone”.



Bertrandite itself was named after French mineralogist Emile Bertrand in 1883. It was found first near Nantes, France. Perhaps the “Tiffany” part was after renowned jeweler and stained-glass lamp maker, Louis Comfort Tiffany.

This mineral occurs in Beryllium-rich pegmatites as those found in western Maine, or as an alteration product of beryllium ore as in the western United States. The former occurrence is as Bertandite crystals, the latter as an opalized micro-conglomeration of associated minerals.



Some of the constituents of the opal-byproduct, known as “Tiffany Stone” are: opal, fluorite, beryllium ore, rhodonite, dolomite, quartz, and manganese oxides. With weathering, they somehow combine to form a radiant violet-hued gem, prized by lapidaries. The crystalline-structured form has chemical formula:  $Be_4Si_2O_7(OH)_2$ .

The gemmy, purple variety is more of a trade-named “mineralogical mutt”. A few years ago, it was featured as a novel and rare gemstone at the Tucson, Denver, and Moab Shows.

A bit pricy, this loosely-named “Bertrandite” gem is difficult to come by, as its main source is from a beryllium mine in Utah, closed to collecting. Perhaps you may be lucky enough to find another source on one of your adventures out west. If you stake a claim for the club, we members will be forever grateful.

Source: Gem Cutters News February 2013

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For transporting material from one part of the country to another, rockhounds are almost as good as glaciers.

Reprint from The Glacial Drifter 5/87

## Topeka Gem & Mineral Society Junior Rockhounds

Members of the Topeka Gem and Mineral Society are putting together the Junior Rockhounds group for the Junior members of our club. Goals are being set to have a "Training Aid Roundup" and getting classes started.

There has to be a **lot** of support from the adult members for the Junior group. First of all, there must be several people who are the specific advisors of the Juniors, and the younger parents have to do their parts to bring the youngsters to the meetings. (Car pools, maybe). The advisors must really be dedicated to what they are doing and willing to spend a lot of time planning opportunities for the Juniors, whether it be speakers for the meetings, field trips, special activities like rock swaps, ways for the youngsters to participate in the local show, and others. The older members of the club can support the Juniors with gifts of their time (to give programs), talents (to teach the various lapidary skills), and specimens (to be given as door prizes). Having a viable and active Junior group will not happen without the support of all of the members of the club, but what a great insurance policy this would be to ensure that the club would go on.

One of the givens in life is that children grow up, and Junior clubs are constantly losing the older members. So, another big job of the adult club is to keep up their efforts to attract young couples with children or young children with parents. (Many adults become interested in this hobby because of the fascination of their children.)

It is a way to keep the youth interested in our great hobby and we all can learn more by helping out. If those who can spare a few hours a month to help get this program off and running I'm sure it would benefit all of us.

The Training Aid Roundup will be held February 16, 2013 at the Town & Country Christian Church located at 29<sup>th</sup> & Fairlawn from 3 p.m. to 6 p.m.

Let Larry Henderson know if you are willing to help out with this program at [LHenderson85@gmail.com](mailto:LHenderson85@gmail.com) or call him at 785-272-8444.

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### Smallest Tyrannosaur - Raptorex



The king of all dinosaurs, Tyrannosaurus Rex, measured about 40 feet from head to tail and weighed 7 or 8 tons--but its fellow tyrannosaur Raptorex, which lived about 60 million years earlier, tipped the scales at 150 pounds, max, an object lesson in how plus-sized creatures evolve from wee ancestors. (By the way, some people insist that Nanotyrannus, the "tiny tyrant," was the smallest tyrannosaur, but the weight of current opinion is that this controversial genus was actually a juvenile T. Rex.)