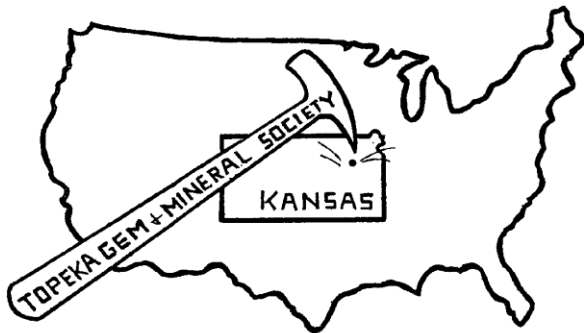


The Topeka Gem and Mineral Society, Inc.
 1934 SW 30th St. Topeka, KS 66611
 Rock2Plate@aol.com

THE GLACIAL DRIFTER



www.TopekaGMS or
 Facebook: Topeka Gem and Mineral Society Field Trips

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. 60, No. 8, Aug, 2017

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.**

www.TopekaGMS.org

2017 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	TGMS Board	-----
Secretary	Cinda Kunkler	286-1790	Welcome/Registration	Russ & Rhonda Miller	272-6408
Treasurer	Millie Mowry	267-2849	Property	M. Cote/D. Dillon	220-3272
Directors	Harold Merrifield	633-9745	AFMS Scholarship	Cinda Kunkler	286-1790
	Chuck Curtis	286-1790	Editor/Exchange Editor	Millie Mowry	267-2849
	Brad Davenport	379-8700	Show Chairman	Harold Merrifield	633-9745
Historian	Deborah Scanland	273-3034	Show Dealer Chairman	Dave Dillon	272-7804
Federation Rep	Harold Merrifield	633-9745	Show Secretary	Cinda Kunkler	286-1790
Corporation Agent	Millie Mowry	267-2849	Jr. Rockhound Leader	Jason Schulz	640-6617
Librarian	open	-----	Show Case Coordinator	Francis Stockton	913-645-1131
Web Master	Jason Schulz	640-6617			

Area Code for all numbers is (785).

EXCHANGE BULLETINS WELCOME

For exchange newsletters contact the club via mailing address listed above or email at rock2plate@aol.com .
Permission is granted to reprint articles only if proper credit is given to the author, Glacial Drifter and the date.

Words from Our President



Hey Members! We should have this TGMS Souvenirs by the August picnic or shortly after that, so if you want one let Millie know.

The lessons at the barn have resumed with many coming out to take part. If you are interested let either Dave or myself know.

The general meeting will start again in September on the 22nd at Stauffer Science Hall rm. 138. And the program for September will be the Silent Auction. If you have anything to donate to the club this is the time to bring it.

Mike and his Rock Stash

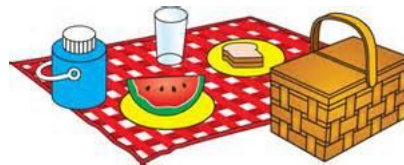


New Member

Marta M. Geeslin
St. Mary's, Kansas



Visitors are always WELCOME at our meetings!



August is the last month that we will have our pot luck picnic instead of the general meeting. It will be held at Millie's house, where we eat inside where it is cool. So bring your table service and your favorite picnic food to share. Oh yes, and your spouses are welcome also. More on the calendar at www.TopekaGMS.org This month we will be filling the grab bags for the show after we eat.

Volunteering is the heart  beat of YOUR club

Event Calendar

Aug. 2017

1T	Lessons at the Barn 6 – 9 p.m.
2W	Advisory Meeting at Millie’s 7 p.m.
3T	Jr Rkhd’s @ TSCPL rm 202 Wire Wrap Class Millie’s 1-3 p.m. only
4F	
5S	
6S	
7M	
8T	Lessons at the Barn 6 – 9 p.m.
9W	
10T	Wire Wrap Class Millie’s 1-3 p.m 7-9 p.m.
11F	
12S	
13S	
14M	
15T	Lessons at the Barn 6 – 9 p.m.
16W	
17T	Wire Wrap Class Millie’s 1-3 p.m 7-9 p.m.
18F	
19S	
20S	
21M	
22T	Lessons at the Barn 6 – 9 p.m.
23W	Show Committee Mtg @ Millie’s 7 pm
24T	Wire Wrap Class Millie’s 1-3 p.m 7-9 p.m.
25F	Club Pot Luck Picnic @ Millie’s
26S	Field Trip—Turkey Point 10 am see Future Field Trips for more info.
27S	
28M	
29T	Lessons at the Barn 6 – 9 p.m.
30W	
31T	Wire Wrap Class Millie’s 1-3 p.m 7-9 p.m.

Sept. 2017

1F	
2S	
3S	
4M	
5T	Lessons at the Barn 6 – 9 p.m.
6W	
7T	Jr Rkhd’s @ TSCPL rm 202, P Gilliland- Showmanship Wire Wrap Class Millie’s 1-3 p.m. only
8F	Board Meeting @ Millie’s 7 pm
9S	
10S	
11M	
12T	Lessons at the Barn 6 – 9 p.m.
13W	Advisory Meeting at Millie’s 7 p.m.
14T	Wire Wrap Class Millie’s 1-3 p.m 7-9 p.m.
15F	Williams Science & Magnet School 9 am-3 pm
16S	
17S	
18M	
19T	Lessons at the Barn 6 – 9 p.m.
20W	
21T	Wire Wrap Class Millie’s 1-3 p.m 7-9 p.m.
22F	General Mtg-Washburn Stauffer Science Hall rm. 138 7:30pm. Silent Auction
23S	
24S	
25M	
26T	Lessons at the Barn 6 – 9 p.m.
27W	
28T	Wire Wrap Class Millie’s 1-3 p.m 7-9 p.m.
29F	
30S	

Any questions ask Millie at rock2plate@aol.com

Check out the new calendar on our web site
www.TopekaGMS.org

Get Ready For The Show!

TOPEKA JUNIOR ROCKHOUNDS

<https://www.facebook.com/TopekaGMSJuniorRockhounds>

To register for the Junior Rockhounds or any of the classes, email: Leslie Hartman at: Hartman.12345@hotmail.com



JR ROCKHOUND CLASSES

(Some classrooms and dates may have changed so please watch for changes) ****Here are reminders of the next 2 months of classes:

Topeka Shawnee CO Public Library sign in starting at 6:00pm and classes starting at 6:30pm.

- ❖ September 7th Showmanship, Pat Gilliland **Anton Room 202**
- ❖ Thursday, October 5th Orientation class All instructors **Anton Room 202**. **The new class will give a chance for new students to meet the instructors and hear about each class that is being offered. The current students will have a chance to find out about classes they have not taken yet and possibly hear about previous classes taken and learn more of what they would like to expand on.**
- ❖ Thursday, November 2nd Stone Age Tools & Art class instructor Leslie Hartman **Anton Room 202**

Future Field Trips

TGMS and Jr Rockhounds Field Trip

August 26th at Turkey Point at 10am. The address given for Turkey point is 21748 S Hoch Rd, Osage City, KS 66523, but the area we will be hunting will be at the intersection of West 301st St/South Anderson and South Indian Hills Rd. You cannot miss the sign for Turkey Point and cars that will be there to greet you.

hartman.12345@hotmail.com or 785-380-6016



WORKING TOGETHER WORKS



MINERAL WITH THE HARDEST TO PRONOUNCE NAME - JEREMEJEVITE Don Shurtz, Pleasant Oaks Gem and Mineral Club of Dallas



The best way to describe the mineral Jeremejevite is “rare”. It is also extremely difficult to pronounce its name. Jeremejevite has origins in Germany, and in German the “J” is pronounced more like a “Y” – for instance “ja” (yes) is pronounced “ya”. So Jeremejevite would be “yer-eh-may-yeh-vite” or “yer-ehmay-yehv-ite” or even “ye-rem-ay-ev-ite” depending on the source you are listening to. If you listen to the pronunciation on some web sites you will also here it pronounced with a “j” or soft “g” sound such as “jer-eh-me-jer-vite”, but these do not match the German origin of the name. The bottom line is that it is as difficult to pronounce its name as the mineral rare.

Jeremejevite was originally identified as a unique mineral in 1883. The mineral was initially found in the Adun-Chilon Mountains of Siberia but has since been found in Tajikistan, Namibia, Germany, and most recently in Madagascar. Jeremejevite is named for the Russian Mineralogist Pavel Eremeev; his last name becomes Jeremejev in German, thus the source of the name. It normally shows up in top 10 lists for rare and expensive gems ranging from 9 to 2 in most lists. It is significantly rarer than most diamonds, the exception being red diamonds. Its rarity is on a par with Red Beryl which is found only in Utah and New Mexico.



Jeremejevite’s chemical formula is $Al_6B_5O_{15}(F,OH)_3$. The color can be clear, yellow, or blue. Those from Germany are generally of the blue color. It has a Mohs hardness of 6.5 to 7.5 and exhibits a white streak. Although most cut Jeremejevites are less than a few carats, the Smithsonian has a 12.78 carat specimen and the Perot Museum has a 43 carat specimen. The Smithsonian specimen is clear and has numerous hollow tube inclusions stained by iron.

The Perot Museum specimen is clear and if you examine it closely you can see a red crystal inclusion under the table facets. For many years, the largest cut Jeremejevite was a 59.68 carat that is pale blue in color. However, recently a faceted 106.5 ct Jeremejevite has been documented by the American Gemological Laboratories.

Ref:

- Proquest, <http://search.proquest.com/>
- Smithsonian National Museum of Natural History, <http://geogallery.si.edu/>
- Wikipedia, <https://en.wikipedia.org/wiki/>

Pictures:

- Blue Crystals: Rob Lavinsky, iRocks.com – CC-BY-SA-3.0
 - Faceted Stone: Don Shurtz, specimen on display at Perot Museum of Nature and Science
- Via SCFMS January-February 2017 news-letter. Via: Stoney Statements Aug 2017



He Burns Coffee Grounds in His Backyard. The Reason? Genius!

OK, I found another way on the Internet to get rid of mosquitos. Hope someone tries this and lets me know if it works.

Easy! Take your used or fresh coffee grounds, put them in a bowl and cover it with aluminum foil.

Leave this bowl in a dark, cool place and let the grounds dry completely.

Then, place the grounds (either in a bowl or on a sheet of foil) on a flat area outdoors and burn them like you would incense. If you’re indoors and trying to keep mosquitos out, open your windows. If you’re using this method at an outdoor gathering, just leave the bowl burning in a central place.

Still too many mosquitos plaguing you? Add some fresh bay leaf to the coffee grounds and burn them together.

If it’s a windy day or the area you’re trying to de-bug is large, you may wish to place as many as 5 of these burning bowls around to make sure the area is well covered.

And that’s it! How cool is that? It’s green, cheap, and you don’t have to spray all sorts of chemicals on yourself or your children.

Millie Mowry, TGMS Editor

All about Chromium!

Ken's Chemistry Corner- OGMS Member

- Chromium (Cr) comes from the Greek word chroma, meaning "color". This is because compounds (and minerals) of chromium are highly colored.
- Chromium compounds were used as pigments back into the 1700's. Although now replaced by pigments not containing heavy metals, "chrome yellow" is the famous yellow school bus color and "chrome oxide green" is a famous green pigment used in paints, ceramics, plastics, and cosmetics.
- Chromium is also a "natural" dye, rubies (as well as spinel and red topaz) get their red color and emeralds get their green color from traces of chromium ions.
- Although chromium in the +3 oxidation state is non-toxic and is an essential nutrient, chromium in the +6 oxidation state (known as hexavalent chromium) is toxic, carcinogenic and occasionally contaminates groundwater due to natural or industrial sources.
- Chromium metal is extremely important in the world around us. It is a component of stainless steel (~12%) and can be electroplated onto surfaces for the famous "chrome" look, but mostly because it is corrosion resistant.
- The most important ore of chromium is chromite (iron chromate). Much of the world's chromite ore comes from South Africa, followed by India, Russia, and Turkey.
- The first chromium mineral used as a pigment was crocoite (lead chromate) which forms beautiful bright red crystals (although it is yellow when powdered).
- Other minerals include stichtite, which is a beautiful lilac-colored chromium magnesium carbonate formed when chromite containing serpentine is altered and the rare uvarovite, a bright emerald green garnet.

(Source: The Oklahoma Mineral and Gem Society, The Sooner Rockologist Aug 2017)



TURRITELLA AGATE – THE NAME IS FALSE!



Turritella agate is found in Sweetwater County, Wyoming and around Superior and Wamsutter, Wyoming too. The little snail that inhabited the shell lived in the Eocene, about 40 million years ago. These fossils were not laid down in a sea, but in a fresh-water lake. The shell is highly silicified, more so than the brown matrix from which they can be etched. Whoever named this agate only knew that the sea snail Turritella had a high spiral shell. He jumped right in with this name without bothering to check the species out. The name has stuck, causing many people to be misled. These fossils are not even in the Turritella family; the true name is *Oxyterma genera*. Few years ago this species was known

as *Goniobasis genera*, but further research caused the additional name change.

You better check your collection right now and perhaps bring your identification up-to-date with the correct name on the beautiful little gastropod.

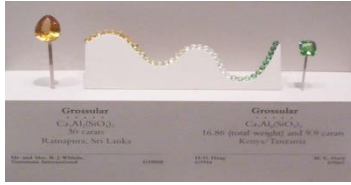
(From Gem Cutters News 2/03, via Rock Buster News, 11/14, via Rock Collector 5/15, via Stoney Statements May 2015)



GEM PROFILE—Tsavorite and Green Garnets

Gem Profile by **Layna Palmer** – [wire-sculpture.com](http://www.wire-sculpture.com)

We'll take a look at the green garnets. *Editor's note: while green garnets are beautiful, they are extremely hard to come by... so we are pleased to feature even more red garnet wire jewelry made by talented readers like you in this Garnet article!* Green is a color for a Garnet? Well, yes it is! Uvarovite, Grossularite, and Andradite garnets range in color from a light yellow-green to an intense green – nearly the same color as the finest Emerald.



The color range of grossular garnet, from champagne to a vivid green. (via <http://en.wikipedia.org/wiki/File:GrossularShades.jpg>)

Tsavorite

Tsavorite is a deep green stone discovered in 1967 by Campbell R. Bridges, a British Geologist. He was camping in the mountains in northeastern Tanzania when he came across some curious nodules of rock. After breaking them open, he discovered beautiful green crystals he later found to be of the grossular group, though these were too small to facet. (See a then lived in a be picture of Tsavorite here. Via <http://en.wikipedia.org/wiki/File:Grossular-4jg61a.jpg>) Bridges continued to search for a viable gem-quality source of the stone in Kenya where he not only tree hut to protect himself from animals, but was successful in finding larger stones that could faceted. (so Mom, the next time your boy builds a fort from your couch cushions, remember Campbell Bridges and tsavorite!) Since the stones were first found in Tanzania near the Tsavo preserve, Tiffany and Co president Henry Platt named the stones Tsavorite. So far the stone has only been found in Madagascar and Kenya. Tsavorite has a refractive index of 1.74 giving the stone fire that is said to be seen even while hid-den by cloth. It is also rare to find the Tsavorite in larger than 2 – 3 carats with most of the stones being less than 1carat, though in rare instances larger carat stones have been found like the 325 carat beauty found in 2006.



(See a then lived in a be

Demantoid Garnets

Another type of green garnet is the Demantoid Garnet, my personal favorite. Demantoid doesn't refer to a condition, but rather it means it's an andradite garnet that ranges in color from yellow green to deep emerald green. It has amazing luminosity with a 0.057 dispersion and 1.80-1.89 refractive index making the —fire! of the Demantoid greater than that of a diamond.

Demantoid garnet, also called —Ural Pearls, were discovered in the Ural Mountains of Russia in 1868 and soon graced workshops in St. Petersburg – most notably, that of Carl Faberge. Faberge, who created the famous Faberge eggs, loved the demantoid for its brilliance. Only occasionally seen on the market after World War I, the demantoid made a rather dramatic return in the 1996 when more of the material was found in the Spitzkoppe range of Namibia.

A Namibian goatherd was just wandering around, minding his own business, when he stubbed his toe on the gem. (I don't know about the toe part, but he did find the stones in the dirt and thought they should be looked at by the village elders...what a great story!)

So what differentiates the Demantoids found in Russia versus the ones in Namibia? Well, they are equal in brilliance, color and fire, but differ in one minor detail: the horsetail inclusions. Generally when we think of inclusions in gemstones, the fewer there are, the greater the value of the gem. This does not hold true for the humble Demantoid. The inclusions are called —horsetail because they're golden brown threads usually seen radiating from the center of the stone, looking like the hair on the tail of a horse. The horsetail inclusions are chrysotile, a form of asbestos. Because these inclusions are only found in the demantoid garnets of the Ural Mountains, these stones are rare and thus priced high-er than the equally beautiful yet inclusion-free ones from Namibia.

Uvarovite

Last but not least is Uvarovite, one of the rarest of garnet, was discovered by Germain Henri Hess in 1832 and named for Count Sergei Semenovitch Uvarov. The small crystals form a druze in the marble and schist deposits in the Ural Mountains and the Outokumpu range in Finland and has also been found in Quebec, Canada, Norway, and South Africa. The bright green of uvarovite is due to the chromium content within the garnet structure. Uvarovite is the **only** garnet that has a consistency to its green color!

Green Garnet Metaphysical Properties

Tsavorite is said to bring strength during difficult or new phases of life. It is a stone of wealth and positive feeling helping the wearer in financial, creative, and physical health.

Demantoids are said to reduce loneliness, increase love and help remove emotional obstacles. They help promote growth in relationships and decrease the feelings of emotional inequality. Green Andradite is the color of the earth giving the wearer a sense of awakening, helping one to persevere and is an excellent talisman of pow-er.

Uvarovite is a calming stone that is said to strengthen the heart and other organs as well as bringing a sense of self-worth, especially to heal negative emotions caused by a feeling of scarcity.

Resources & Recommended Reading

Green Crystals Meanings – Crystal Vaults; Garnet on Minerals.net; Garnet on Wikipedia; Tsavorite on Wikipedia; Uvarovite on Wikipedia; Demantoid on Wikipedia; International Colored Gemstone Association – Demantoid Garnet International Colored Gemstone Association – Tsavorite Garnet; via The Rockhound Gazette Dec 2013

Junior Rockhound Miniature Class—a record number of students attending!



Slicing of one of the Legendary Bill Boltz' Agates

By: Jason Schulz, TGMS Member

On July 30th, Bradford Davenport and Will Gilliland cut a slice out of an agate from Bill Boltz' legendary collection.

Brad worked with Bill many years ago, and Bill was Brad's mentor in the Lapidary arts. Will is a Professor Emeritus from Washburn University, where he taught classes until December of last year. Both are active members of the Topeka Gem and Mineral Society.

They'd analyzed, agonized, and examined the agate for quite a while deciding where and how to make the cut. Once they got it in place, it took Brad's large rock saw a little more than twenty-two minutes to cut through the eleven pound (and change) agate.

In the end, it turned out remarkably well. The pictures can't do it justice. There's some more work to do--some polishing and beveling--but the stone will eventually end up on display in Washburn's collection.

We will have the Bill Boltz' Agate collection at our TGMS Annual Show, October 14-15, 2017 at the Kansas Expocentre Agricultural Hall, 17th & Topeka Blvd., Topeka, KS. Discount Coupons are available on our web site TopekaGMS.org.

