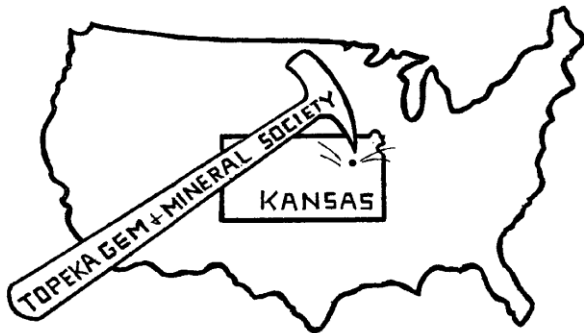


The Topeka Gem and Mineral Society, Inc.
 1934 SW 30th St. Topeka, KS 66611
 Rock2Plate@aol.com

THE GLACIAL DRIFTER



www.TopekaGMS.org 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. 63, No. 5,
 May 2020



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

2020 OFFICERS AND CHAIRS

President	Brad Davenport	379-8700	Cab of the Month	Debra Frantz/Fred Zeferjohn	862-8876
1 st Vice Pres.	Will Gilliland	286-0905	Field Trip Coord.	Will Gilliland	286-0905
2 nd Vice Pres.	Cinda Kunkler	286-1790	Publicity	TGMS Board	
Secretary	Stacy Haug	1-857-3350	Welcome/Registration	Harold Merrifield	633-9745
Treasurer	Millie Mowry	267-2849	Property	M. Cote/D. Dillon	220-3272
Directors	Chuck Curtis	286-1790	AFMS Scholarship	Cinda Kunkler	286-1790
	Francis Stockton	913-645-7677	Editor/Exchange Editor	Millie Mowry	267-2849
	George Reed	836-9277	Show Chairman	Millie Mowry	267-2849
Historian	Open		Show Dealer Chairman	Millie Mowry	267-2849
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	Millie Mowry	267-2849	Show Case Coordinator	Cinda Kunkler	286-1790
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

Greetings one and all

Another month has come and gone and life is still dysfunctional as eve. It is hard to filter out what is right or wrong. I hope everyone has their option to be smart and safe.

I can report that I am making progress in turning my tool crib into a lapidary shop. It has become painfully obvious that I have saved way too much stuff from my years being a contractor. Good stuff too. I still can't find it possible to throw stuff away. So, I am spending hours trying to find out of the way places to store stuff. I have had to empty and take cabinetry apart and relocate to provide adequate working room. Then fill them back up.

To all of you, don't buy any kind of fasteners until you ask me if I have some. Hundreds of types of nails, screws, anchors, hardware and a myriad of other odds and ins. Free stuff is the best and you don't have to wander through a hardware store. I also have many types of building materials.

We are still up in the air about upcoming picnics over the summer months. We will keep you informed.

If you have needs or concerns, please let us know. We have lots of resources from which we may be able to help with. Take care. I miss all of you and am cautiously looking forward to the day when we can get together.

Brad 785-845-6624 Brad7254@gmail.com

T-SHIRTS

If you have not paid for your t-shirts, please do so now. We will be picking them up soon. Send your money to Millie at 1934 SW 30th St., Topeka, KS 66611

Topeka Gem & Mineral Society



Has joined the Sertoma Great Topeka Duck Race for 2020
Go to www.topekaduckrace.org or see Millie for an envelope.

To adopt a duck for \$5.00 each.

A family of 5 for \$20,

A flock or 12 for \$50 and

A 'oodle' of ducks (27ducks) for \$100.00



The race is September 19, 2020 at Lake Shawnee

Check out all the Great Prizes you can win.

Our Team name is **“Topeka Gem & Mineral Society”**

THIS OUR YEARLY FUND RAISER FOR THE YEAR
GO ONLINE AND NOW & ADOPT YOUR DUCKS

TGMS Event Calendar

May 2020			June 2020		
1	F		1	M	
2	S		2	T	Jr Rockhounds - TBA Wire wrap class at Millie's 1 p.m.
3	S		3	W	
4	M		4	T	
5	T		5	F	
6	W		6	S	
7	T		7	S	Wire Wrap Class at Millie's 6:30 p.m.
8	F		8	M	
9	S		9	T	Wire wrap class at Millie's 1 p.m.
10	S		10	W	NO Board Meeting
11	M		11	T	
12	T		12	F	
13	W		13	S	
14	T		14	S	Wire Wrap Class at Millie's 6:30 p.m.
15	F		15	M	
16	S		16	T	Wire wrap class at Millie's 1 p.m.
17	S		17	W	
18	M		18	T	
19	T		19	F	Rocky Mountain Federation Convention
20	W		20	S	Rocky Mountain Federation Convention
21	T		21	S	Rocky Mountain Federation Convention Wire wrap class at Millie's 6:30 p.m.
22	F		22	M	
23	S		23	T	Wire wrap class at Millie's 1 p.m.
24	S		24	W	No General Meeting --summer schedule
25	M		25	T	
26	T		26	F	
27	W		27	S	
28	T		28	S	Wire Wrap Class at Millie's 6:30 p.m.
29	F		29	M	
30	S		30	T	Wire wrap class at Millie's 1 p.m.
31	S				

There is a corrected Events Calendar on the last page.

BECAUSE OF THE VIRUS –
Nothing is happening the rest of
this month.

If you are interested in Wire Wrap Classes, contact Millie, 267-2849 or rock2plate@aol.com

Check out the calendar on our web site

www.TopekaGMS.org



We need your **BEST CHOICE** UPC Labels --
Bring them to the monthly meeting, and give
them to Cinda Kunkler.

JR ROCKHOUND Classes & Reminders

Here are reminders of the next few months of classes: Topeka Shawnee CO Public Library sign in starting at 6:00 pm and classes starting at 6:30pm. 1st Thursday of each month...

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

To register for the Junior Rockhounds or any of the classes, email:

Jason Schulz at: Fleetcommander@att.net



The Library has canceled our lessons for the time being,

Reminder: If you want to earn the patches from the classes that you have attended you need to turn in your homework assignments.

Geology Under Your House

How many of you know what the geologic material is under your house? Have you wondered if it was deposited by a stream, river or even a glacier? Was it once a part of a sea floor before dinosaurs even lived? The Kansas Geological Survey (KGS) has information on-line that can help you answer the above questions. The KGS welcome page is www.kgs.ku.edu. Along the left side of the page are the major areas of information available.

Click on Geology.

Now click on Interactive Geology Map.

Go to any place on the Kansas map and zoom in for a more detailed view. You can click on any point and get general geologic information on surface material at that location.

Now to find out about what your home is built on:

Click on County Geologic Maps.

The counties in blue on the Kansas map are ones that have interactive maps. The other counties are older maps and are still being updated.

Click on your county (if blue).

Click on a location in the county.

The detailed maps cover up to four square miles; showing the geology, major roads, and streams. You can use the direction arrows at the top to move to adjacent areas. At the bottom of the maps is the legend showing the geologic formations. You may need to locate the area of your house by using landmarks on the maps, because most streets are not shown.

If you will let us know what you learn about the geology of your home, we will share it with the other Jr. Rockhounds. Then when we are able to meet together again, we can plot the locations on a topographic map to see how the geology effects the shape of the land.

If you have problems identifying the location of your home, please e-mail us and we will help you.

Information to how to use geologic maps is available from the KGS in Public Information Circular 38, Kansas Geologic Maps, www.kgs.ku.edu/Publications/PIC/pic38.html. Public Information Circular 20, The Public Land Survey System in Kansas, may also be of help for those living outside of towns.

www.kgs.ku.edu/Publications/PIC/pic20.html.

Additional information can be found under Other Maps and Charts and under the major heading of Publications.

A check of the county geology map for our house on Northeast 39th. St. in Shawnee County show glacial drift. This is correct and gives us a very heavy clay soil.

Will & Pat Gilliland gillilandp@aol.com

"GRAY GHOSTS" made by Bryan Reinhardt



These famous "flint spears" were made by Bryan Reinhardt beginning sometime in the 1940's and continuing well into the 1970's. No one knows how many of these 8 inch (20.3 cm) to 9 inch (22.8 cm) long "spear points" he made. A minimum order was a gross (144) so he must have made countless thousands of them. They were made by sawing out "blanks" of thin rectangular slabs of stone (Edwards Plateau chert). These were then pressure flaked into shape with some type of mechanical lever device he invented himself.

"Gray Ghosts" have caused quite a lot of confusion for more than half a century now. The buying public has had such a hard time identifying them as either old or new artifacts that they have become a modern legend. The first ones were produced in Bryan Reinhardt's "flint spear" factory sometime in the 1940's. "Gray ghosts" are large modern-made "flint spears" that were made during the 40's, 50's, 60's and early 70's. "Gray ghosts" are scary only when the people that purchase or inherit them, believe they have ancient artifacts of great value. But they're actually nice examples of one man's modern flintknapping art. Each one is a little different and unique. True

"gray ghosts" are credited to Bryan Reinhardt because he made so many more than anyone else. He passed away in about 1982, by some reports, of silicosis of the lungs.

The term "gray ghost" comes from the color of the Edwards Plateau chert they were made from. This chert ranges in color from shades of gray to brown and a mixture of both. Edwards Plateau chert is found in Texas where Mr. Reinhardt was a resident. Ghost is a word that has been used to describe artifacts without a provenience (origin), like saying "that's a "ghost point." So it seems logical to call these large gray "flint spears" gray ghosts.

"Bryan Reinhardt began experimenting with flintknapping sometime before WW II. It's believed he started by making arrowheads by pressure flaking by hand without the use of any mechanical device. He was in the Army Air Corp during the war and may have been a mechanic. It wasn't until after the war that he started making long "flint spears" in large quantities.

After the war Mr. Reinhardt bought some rock saws and developed some type of mechanical device that drove off flakes either by direct or indirect pressure flaking. This enabled him to manufacture these large points by the thousands and the numbers must range into the tens of thousands. The fact that the preforms for "gray ghosts" were sawed slabs makes them easy to identify. Unlike most ancient large points that are "rounded" on one or both side in cross-section, "gray ghosts" are very flat. Lay one on a table and the "flint spear" will touch the surface from end to end, or nearly so. Another feature to look for are places where the original sawed surface is still visible and wasn't removed by the flaking process.

Bryan Reinhardt didn't sell his points to the public. They were sold wholesale only, to rock shops and other businesses where novelties like "flint spears" would have been sold. Many of them were purchased by the public along route 66 while on vacation. The minimum order was a gross (144) and it's been said that some orders were for a thousand or more. If that's true, his manufacturing technique was a resounding success.

In the 50's and 60's Mr. Reinhardt's price list stated that his points were .25 cents an inch. So a 9 inch point would cost \$2.25 but of course the minimum purchase was a gross (144). Today, large "flint spears" are still being made in a similar way, by cutting preform slabs on rock saws. They can sometimes be bought at knap-ins for \$2.00 to \$3.00 per inch.

"Gray ghosts" were made to look old. The "aged look" was done by lightly polishing the surface with a buffing wheel or other device and applying a light coating of dirt. Many people have bought them for what they are, a good example of a modern-made "flint spear." The creepy thing about "gray ghosts" is that not everyone is knowledgeable enough to know a modern ghost from an old ghost. People are still paying as much as a thousand dollars for just one so please beware of "gray ghosts." They are out there waiting, watching----for the next poor soul who believes a good story. "My great granddaddy----- Or-----Why I'm 90 years old now and I'm going to meet my maker soon. Do you think I would lie to you?"

From Boulder Busters, 8/10; via WGMS The Rockhounder May 2020





Clean Copper Jewelry in 60 Seconds!

In a glass or ceramic bowl, put enough lemon juice to cover half of your item, and about a tablespoon of salt. It's not an exact science, I even left the seeds in! I dipped the cuff half in, half-out at first (to see the before and after), but you can literally sit back and watch the copper clean itself in front of you. Leave it in the mixture of lemon juice & salt for about 30-60 seconds... A beautiful, shiny copper cuff, all done! All you have to do now is rinse & dry with a soft cotton towel or paper towels. Polish it with some beeswax or renaissance wax if you want to protect it for a little longer. For the full article follow the link below:

www.handmadeology.com/how-to-clean-copper-jewelry-in-60-seconds

From *Rockhound Ramblings* 12/15, via *The Rollin' Rock*, 8/19, via *WGMS* Oct 2019



The Mineral ZOISITE as a Gemstone and Lapidary Material

By Andrew Hoekstra

The mineral *zoisite* is a silicate of calcium and aluminum. It is the orthorhombic polymorph of the monoclinic epidote-group mineral *clino-zoisite* (*but zoisite is excluded from the epidote group, which currently is de-fined as monoclinic*).

Like the epidote-group minerals, zoisite generally occurs in metamorphic rocks.



Ruby in Zoisite ("Anyolite")
Arusha region of Tanzania
Popular for cabochons and spheres
Photo: Wikimedia, courtesy Hannes Grobbe

Zoisite, Variety Tanzanite

This is the same double crystal seen from two different positions: note the color change as the crystal is rotated 90°

Photo: Wikimedia, courtesy Rob Lavinsky/iRocks



Tanzanite is the sapphire-blue to violet gem form of zoisite. The crystals are actually brownish when mined and turn blue by heat-treatment. Tanzanite is found in the Merelani area of Tanzania, associated with gneiss. Yellow, pink and greenish zoisite crystals also occur in this area of Tanzania. Crystals are elongate and prismatic, finely striated on their faces, and desirable for faceting as a gemstone

Large (to >3 cm) green crystals of zoisite are found in Switzerland (Gandegg), and large (to >8 cm) green or colorless crystals at several localities in Pakistan. Tanzanite and other zoisite crystals exhibit *pleochroism* - they change color when rotated in respect to the light source - and are *trichroic*, exhibiting three different hues when viewed along each of the three crystal axis. This occurs

because each axis of an orthorhombic crystal is of a different relative length.

Massive green chromium zoisite (trade name *anyolite*) from Longido, Tanzania, is found with bright red ruby crystals and black amphibole and, as *ruby in zoisite*, is popular for cabochons and spheres. Sometimes called anyolite, it is a metamorphic rock composed of green zoisite, red ruby (corundum), and blackish pargasite (amphibole). Many tons have been mined. When cutting and polishing, care must be taken because the ruby (corundum) is harder (~9) than the zoisite matrix (<6.5).

Thulite (sometimes called rosaline) is the pink massive variety of zoisite. It is usually not transparent enough to facet and large crystals are rare, but massive *thulite* is used for cabo-chons, beads, and carvings. It sometime has green accents. Techni-cally, much of what is called “thulite” is actually clinothulite (a variety of clinzoisite) or piemontite. The difference between zoisite/thulite and clinzoisite/ clinothulite is the crystal structure. Thulite may be called pink jade (“Wyoming Pink Jade” is thulite), and it can resemble rhodonite. The pink color is due to the presence of manganese (as is the pink color of rhodonite and rhodochrosite). Thulite is mined at several Norwegian locales, and occurs in California, including at certain quarries in Riverside County. Local rockhounds find thulite near Ludlow, although some have questioned whether this material is actually thulite.



Norwegian Thulite. Wikimedia, courtesy Zbynek Burival

Reference: The Collector’s Guide to the Epidote Group, by Robert J. Lauf (Schiffer, 2008)

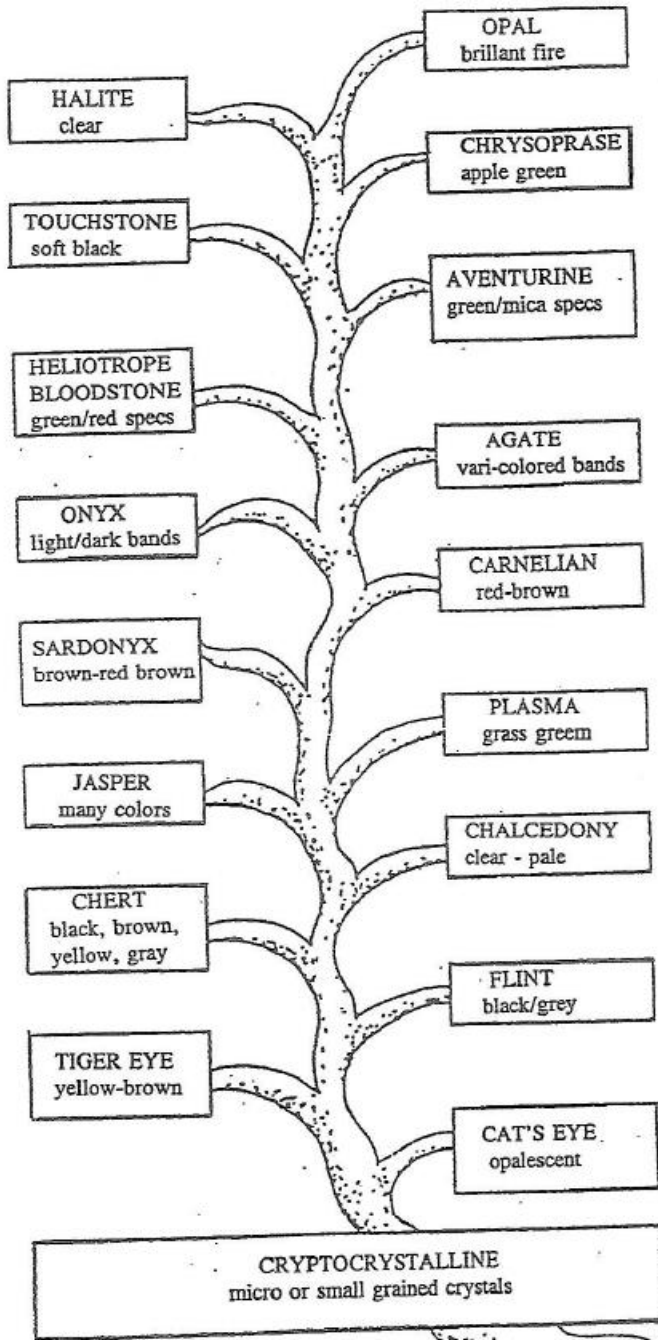
<http://www.classicgems.net/Pleochroism.htm>, <https://en.wikipedia.org/wiki/Pleochroism>

<https://www.gemsociety.org/article/what-is-gemstone-pleochroism/>

By Andrew Hoekstra via Delvings, 9/19; via WGMS Oct 2019



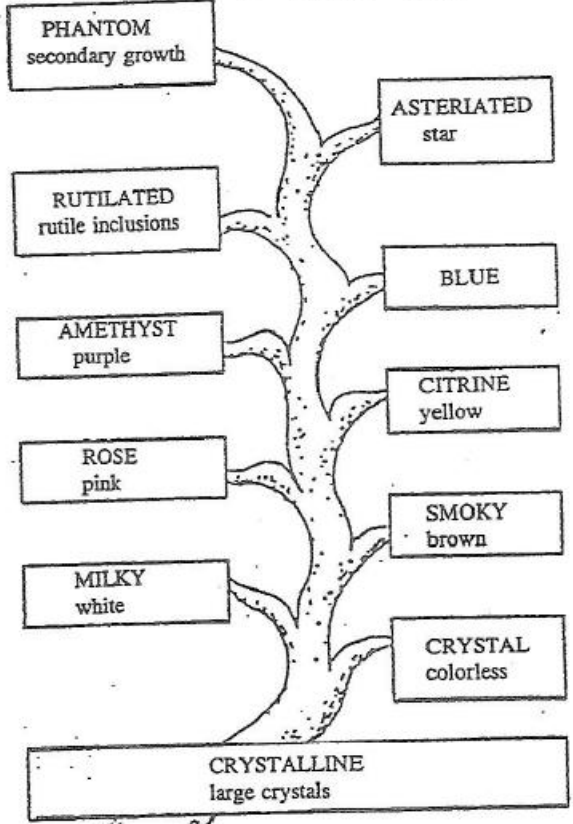
I’m lost
Adopt
me.



QUARTZ FAMILY TREE

by Freida Duffy

via ROCK ROLLERS 11/92



QUARTZ

References: Chesterman, C.W., *Audubon Society Field Guide to North American Rocks and Minerals*, 1978; Knopf, Lester J. *Minerals of Georgia*; *Georgia Mineral Newsletter*, Winter 1959 via *Tips and Trips* et.al.



Don't forget to buy a duck for the race.

TGMS Event Calendar

May 2020			June 2020		
1	F		1	M	
2	S		2	T	Wire Wrap Class at Millie's 6:30 p.m.
3	S		3	W	
4	M		4	T	Wire wrap class at Millie's 1 p.m.
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28	T		28	S	
29	F		29	M	
30	S		30	T	Wire wrap class at Millie's 6:30 p.m.
31	S				