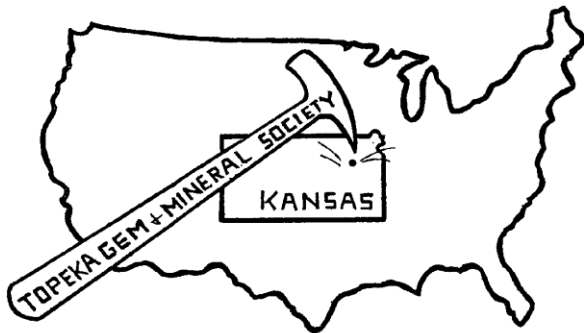


The Topeka Gem and Mineral Society, Inc.
 1934 SW 30th St. Topeka, KS 66611
 Rock2Plate@aol.com

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. 62, No. 07,
 July 2019



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

2019 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.	Will Gilliland	286-0905
2 nd Vice Pres.	Cinda Kunkler	286-1790	Publicity	TGMS Board	
Secretary	Carolyn Brady	233-8305	Welcome/Registration	Harold Merrifield	633-9745
Treasurer	Millie Mowry	267-2849	Property	M. Cote/D. Dillon	220-3272
Directors	Brad Davenport	379-8700	AFMS Scholarship	Cinda Kunkler	286-1790
	Will Gilliland	286-0905	Editor/Exchange Editor	Millie Mowry	267-2849
	Chuck Curtis	286-1790	Show Chairman	Dave Dillon	272-7804
Historian	Open		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	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 Top Rock!



Lessons at the Barn are CLOSED until September 10th. because of the heat. See you then.

As a reminder in the months of July and August, there will not be our regular club meetings, but, we will have pot-luck picnics at Millie's house on the 4th Friday of the month at 6:30 p.m.

The Shawnee County 4-H Fair is being held at the Kansas Expocentre main building will be held on July 26 – 28, 2019. We need volunteers to help pass out brochures to work a 2 hour shift during those dates. Call Millie to sign up.

Don't forget to go online and adopt a Duck for the Duck Race in September. It is a great way for our club to make some money.

Mike Cote`



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



POTLUCK PICNIC AT Millie's

1934 SW 30th St. 6:30 p.m.

July 26, 2019

Bring your own table service & favorite picnic food to share. We eat inside where it is cool unless you want to eat on the patio. I will furnish ice tea and coffee.

JR ROCKHOUND Classes & Reminders

Here are reminders of the next few months of classes: Topeka Shawnee CO Public Library sign in starting at 6:00pm 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

- Aug 1, 6 – 8:45 p.m., Marvin Auditorium Room 101A, Stone Age Tools & Art, Brad Davenport
- Sep. 5, 6 – 8:45 p.m., Marvin Auditorium Room 101A, Showmanship, Pat Gilliland
- Oct. 3, 6 – 8:45 p.m., Marvin Auditorium Room 101A, Earth Resources, Will Gilliland

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

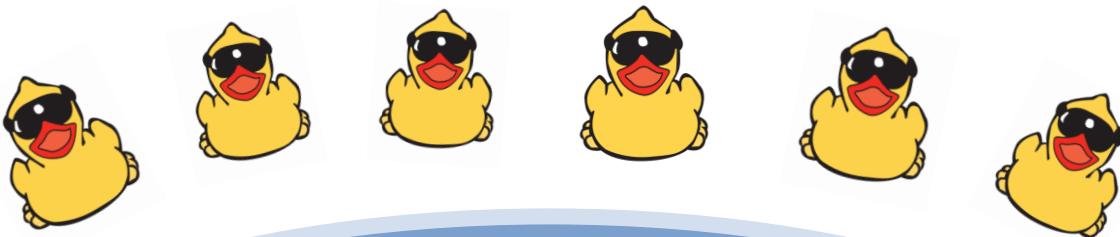
APOLLO II 50th ANNIVERSARY

The Apollo 11 50th anniversary celebration will be in Gage Park, Corral #2, July 20, 2019. Free and open to the public.

4-6 PM games, displays, activities & demos.

6-8 PM Apollo 11 Moon Landing, presentation by Brenda Culbertson, NASA/JPL Solar System Ambassador

9-12 PM observing the night sky (weather permitting)



Summer is here! Meetings are now our Summer Picnic's! For the months of July & August, we meet at Millie's home around 6:00, eating at 6:30. This gives us all a chance to get acquainted. Her address is 1934 SW 30th St, Topeka. Please bring a dish to share, place setting and yourself, guests are welcome (that includes grandchildren if you are watching them). Bring a rock if you want help identifying, surely someone can help with that! Millie provides coffee & tea. I

TGMS Event Calendar

JULY 2019		AUG. 2019	
1M		1T	TGMS Jr RHD's, Marvin Auditorium 101C 6 PM Wire Wrap Class @ Millie's 1-3 p.m.
2T		2F	
3W		3S	
4T		4S	
5F		5M	
6S		6T	
7S		7W	
8M		8T	Wire Wrap Class @ Millie's 1-3 p.m.
9T		9F	
10W		10S	
11T		11S	
12F		12M	
13S		13T	
14S		14W	
15M		15T	Wire Wrap Class @ Millie's 1-3 p.m.
16T		16F	
17W		17S	
18T	Wire Wrap Class @ Millie's 1-3 p.m.	18S	
19F		19M	
20S		20T	
21S		21W	
22M		22T	Wire Wrap Class @ Millie's 1-3 p.m.
23T		23F	No Meeting at Washburn—Club Picnic @ Millie's 6:30 P.M. Potluck
24W		24S	
25T	NO Wire Wrap Class today.	25S	
26F	CLUB PICNIC-NO GENERAL MEETING Millie's house 6:30 p.m. see page 2, SN CO 4-H Fair KS Expo 25 th -28th Friday Canceled	26M	
27S	SN CO 4-H Fair KS Expo 25 th -28th	27T	
28S	SN CO 4-H Fair KS Expo 25 th -28th	28W	
29M		29T	Wire Wrap Class @ Millie's 1-3 p.m.
30T		30F	
31W		31S	

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

LESSONS AT THE BARN ARE WEATHER PERMITTING – CLOSED UNTIL SEPTEMBER 10TH.

No general meeting at Washburn Univ. during months of July and August.
See you at the potluck picnics at Millie's house. See page 2.



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

Adopt me at www.topekaduckrace.org

Topeka Gem & Mineral Society

Has joined the Sertoma Great Topeka Duck Race for 2019
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
An 'oodle' of ducks (27ducks) for \$100.00

The race is September 14, 2019 at Lake Shawnee
Check out all the Great Prizes you can win.

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



A Beginner's Vocabulary: Quartz

AGATE: Translucent to semi-opaque cryptocrystalline chalcedony occurring in a great variety of colors and patterns.

Banded: Bands often appear in contrasting colors and seems to have formed in concentric circles - sometimes interspersed with iron, manganese and other elements.

Brecciated: The agate has been broken into sharp pieces by nature and consequently recemented by chalcedony.

Dendritic: Meaning bee-like, the dendritic patterns resemble moss, ferns, trees, flowers and plumes. This variation has several sub-varieties.

Eye: Concentric round eye-like patterns may cover portions of this agate, or on a bolder scale, make up the whole agate.

Fire: An iridescent agate with botryoidal, or grape-like internal construction.

Fortification: A variation of banded agates in which the highly complex and convoluted bands resemble ancient fortresses.

Iris: The colors of the rainbow are seen in this translucent agate composed of thousands of tightly packed layers. The colors are due to the breakup of light by diffraction.

Scenic: Scenic agate may have several colors and a combination of patterns that resemble pictures. As opposed to scenic jasper, scenic agate should be at least partially translucent.

AMETHYST: Violet or purple crystalline quartz.

AVENTURINE: Usually green cryptocrystalline quartz shimmering with inclusions of mica or an iron mineral.

BLOODSTONE: Dark green chalcedony with red spots. An old name for it is heliotrope.

CARNELIAN: Translucent cherry-red to orange-brown chalcedony.

CHALCEDONY: Cover name for a large group of microcrystal-line quartzes.

CHERT: Tough, grainy and opaque cryptocrystalline quartz, which when highly colored like Missouri Mozarkite, can be used for gem material.

CHRYSOCOLLA: Chalcedony colored blue-green by copper.

CHRYSOPRASE: Chalcedony colored green by nickel.

CITRINE: Crystalline yellow quartz.

ENHYDRO: Hollow quartz shapes, usually crystal lines, containing water.

FLINT: Tough, compact, opaque and similar to chert. Some times colorful and grading into other microcrystalline quartz. It can be used as a gem material.

GEODE: Quartz form often combining cryptocrystalline and crystalline varieties. Usually rounded, geodes are either hollow or show in their construction that they have been hollow.

The Rocket via Rockcollector 5/97, via Breccia 05/98, via WGMS May 2019



(Con't. on page 6, June WGMS 2019)

A Beginner's Vocabulary: Quartz con't.

JASP-AGATE: A combination of jasper and agate. Jasper portions are more fibrous and opaque, and agate portions are translucent.

JASPER: Variegated fine grained, opaque, dense quartz, often colored by iron oxide.

Banded: Multicolored, usually wavy, banded jasper, often planar rather than concentric, and opaque.

Conglomerate: The conglomerate of the lapidary usually consists of small rounded pebbles of quartz materials cemented together by jasper.

Orbicular: The patterns are concentric round eyes in contrasting colors. Opaque. If translucent, it is orbicular agate.

Scenic: There are many variations of scenic or picture jasper found in the West.

Touchstone: This is velvety black.

MORION: Very dark smoky quartz

NOVACULITE: White and extremely fine and uniform in grain. This metamorphosed quartz is a fine abrasive and sharpener.

ONYX: Onyx to the lapidary is straight-banded agate. To the jeweler, it is black dyed chalcedony.

POLYHEDROID: Similar to geodes in that they are mostly hollow, polyhedroids are geometric agates that may have formed as fill-ins between vanished crystals.

ROCK CRYSTAL: The common name for colorless, clear, crypto-crystalline quartz.

ROSE QUARTZ: Pink, rose or rosy-lilac crystalline quartz.

RUTILATED QUARTZ: Needles of the mineral *rutile* penetrate the crystalline quartz. In agate, the needles are called *sagenite*. There are other needle like inclusions in quartz, known by the name of the inclusion, such as *tourmalinated quartz*.

SARD, SARDONYX: Brownish red chalcedony which is called *sardonyx* when straight banded.

SMOKY QUARTZ: Crystalline quartz in some tint or shade of gray, golden brown, brown or near black. Sometimes called *cairngorm*.

THUNDER EGG: Agate-filled nodules of silicified rhyolite.

The Rocket via Rockcollector 5/97, via Breccia 05/98, via WGMS May & June 2019

See all of us at www.topekaduckrace.org under Topeka Gem & Mineral Society,
Help us win the Race!



RED BERYL

Red beryl was formerly known as bixbite. It also has been marketed as red emerald or scarlet emerald, and both names are now prohibited to be used under Federal Trade Commission Regulations. The old synonym “bixbite” is denounced from The World Jewelry Confederation (CIBJO), because of the risk of confusion with the mineral bixbyite. Both were named after the mineralogist Maynard Bixby. It now is known as a red variety of beryl. It was first described in 1904 at the Maynard’s Claim. Thomas Range, Juab County, Utah.



Faceted red beryl, 0.56 ct, Utah US
Picture from Wikipedia, the free encyclopedia

Red beryl is very rare and has been reported from a handful of locations: Wah Wah Mountains, Beaver County, Utah; Paramount Canyon, Round Mountain, Sierra and Grant County, New Mexico. The greatest concentration of the gem grade of the red beryl is from the Ruby-Violet Claim in the Wah Wah Mountains of the Midwestern Utah.

Red Beryl has been confused with pezzottaite, a caesium analog of beryl that is found in Madagascar and Afghanistan. The cut gems of the two varieties can be distinguished from their differing crystal systems, pezzottaite trigonal, red beryl hexagonal. Synthetic red beryl is also produced but natural red beryl is usually highly included.

While gem beryls are ordinarily found in pegmatites and certain metamorphic stones, red beryl occurs in topaz bearing rhyolites. It’s formed by crystallizing under low pressure and high temperature from a pneumatolytic phase along fractures or within near-surface miarolitic cavities of the rhyolite.

(Source: Deming, N.M. Rock Chips Jan 2019)



How much do you know about dinosaurs?

Dinosaur Quiz (mark yes or no)

Yes	No	
<input type="checkbox"/>	<input type="checkbox"/>	1. Dinosaurs were reptiles
<input type="checkbox"/>	<input type="checkbox"/>	2. Dinosaurs are thought to be warm blooded
<input type="checkbox"/>	<input type="checkbox"/>	3. There are over 500 different types of dinosaurs discovered
<input type="checkbox"/>	<input type="checkbox"/>	4. Nearly all dinosaurs have 4 walking toes.
<input type="checkbox"/>	<input type="checkbox"/>	5. Adult Velociraptors were at least 3 foot tall.
<input type="checkbox"/>	<input type="checkbox"/>	6. Velociraptors had serrated teeth
<input type="checkbox"/>	<input type="checkbox"/>	7. Velociraptors could run very fast
<input type="checkbox"/>	<input type="checkbox"/>	8. Velociraptors had poor vision but an excellent sense of smell
<input type="checkbox"/>	<input type="checkbox"/>	9. Theropods were bird-like
<input type="checkbox"/>	<input type="checkbox"/>	10. T-Rex was a theropod
<input type="checkbox"/>	<input type="checkbox"/>	11. The foot of the T-Rex is wider than it is long.
<input type="checkbox"/>	<input type="checkbox"/>	12. Stegosaurus walked on two legs
<input type="checkbox"/>	<input type="checkbox"/>	13. The smallest theropod weighed a little over a pound.
<input type="checkbox"/>	<input type="checkbox"/>	14. More than 20 dinosaur genera have been discovered to have feathers
<input type="checkbox"/>	<input type="checkbox"/>	15. The Sauropod’s brain was relatively large in comparison to its body size.

(source: New Nuggets, Jan-Feb 2016)

Let’s see who reads the Drifter! Send your answers to Millie and if they are Correct, you will receive a special gift of her choice. Send them to: rock2plate@aol.com.

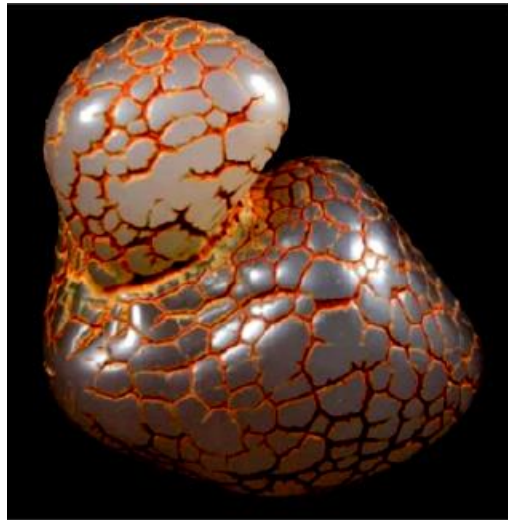


Snakeskin Agate

A dense, hard siliceous-rock with low porosity, cherts are tough, compact rocks with low porosity. That are composed mainly of microcrystalline quartz and varying amounts of impurities. The quartz occurs as randomly interlocked, microscopic quartz grains or fibrous chalcedony. Cherts occur in a variety of geological settings.

Magadi-type cherts, named after their occurrence at Lake Magadi, Kenya, form by leaching of alkali ions from silicates in silica-rich evaporates.

Magadiite is a hydrous sodium silicate mineral that was discovered by Hans Eugster, 1967, in late pleistocene lake sediments at Lake Magadi in the southern Kenya Rift Valley. Although rare, magadiite is a well-known precursor of non-marine chert. Quartzose “Magadi-type cherts”, which have formed by the diagenetic alteration of magadiite, have been reported from rocks of Precambrian to Holocene age.



Magadi-type chert is generally considered diagnostic of saline, alkaline lacustrine environments. Abiogenic cherts, so-called “Magadi-type cherts”, formed from magadiite or sodium silicate gels in alkaline environments, having been studied from outcrop samples in the lake Magadi basin for decades. More recent studies indicate a possible biogenic formation of chert precursors as well.

Characteristics of the type Magadi cherts are 1) a groundmass mosaic of fine quartz crystals that vary in orientation from random to rectilinear; 2) finely disseminated inclusions of silicate clays, zeolites, and/or carbonates (predominantly calcite); 3) large crystal molds (probably after trona) concentrated near sample margins; and 4) inward directed shrinkage cracks and/or more irregular internal voids filled with chalcedony, silicate clays, zeolites, and/or carbonates (predominantly calcite). Shrinkage cracks, which define surface reticulation patterns, are frequently cited as evidence of a Magadi-type origin for ancient lacustrine cherts, but they are not unique to alkaline lake cherts.

Based on a reconnaissance of ancient cherts of various origins, no single characteristic appears to be unique to Magadi-type chert, with the possible exception of the rectilinear or grid-work orientation of the quartz crystals. This texture appears to be inherited from the precursor magadiite, which displays similar extinction pattern due to the presence of 10-20 μ m spherical aggregates of plate-like crystals.

“Snakeskin agate” i.e. Magadi type chert, is found worldwide – Oregon, South Carolina, Wyoming, Africa, Scotland and other locales.

Compiled by Harry A. Wagoner
The Agate Explorer, September, 2017
Via the Clackamette Gem Sept 2017