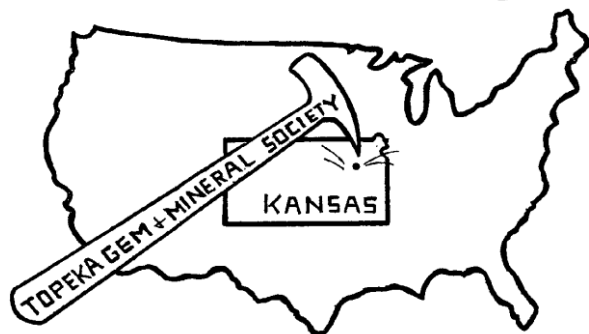


The Topeka Gem and Mineral Society, Inc.
 1934 SW 30th St. Topeka, KS 66611
 Rock2Plate@aol.com

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. 65, No. 3
 March 2022



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, University United Methodist Church, 1621 SW College, Topeka, KS 66604. 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

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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	
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Treasurer	Millie Mowry	267-2849	Property	D. Dillon	272-7804
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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.

Fodder from the president. March/22

Howdy all.

Another month has passed and my, how things have changed. A seemingly calm has entered our psyche. The virus we have fought for over two years appears to give us a respite. At least it appears so. Winter has been giving into spring. The slow greening is more than welcome replacing the browns we have had for the last few months. The migrating birds are a joy to those of us that are bird watchers. Gardeners have their starts, sunning in their window sills waiting for planting. March 17 was when people I knew planted Peas and Potatoes. I know a few folks that have had them in the ground for a couple of weeks. Optimists I believe.

Saturday, I went to the KC Gem & Mineral show. It and the crowds were huge. Folks were parking over a half mile away in two directions. I managed to find a small portion of muddy median just big enough for my car. There was a triple line of people backed up outside the building waiting to buy their tickets. Inside it looked like it was full up. But there was navigating room and I only tripped up a couple of people with my cane. I really took my time plying the dozens of rows of goodies. This was the first time since the end of November that I had attempted any kind of adventure since I went down with Covid. I managed much better than I thought I could. I was pleased to see ten of our club members there. I visited with several of our show vendors and they all seem to be doing well. It appeared that people were actually buying stuff. Not having their show last year and a very limited show the year before, folks were ready to get out and make up for lost time and opportunities. I did a lot of sitting and resting. People watching is one of my favorite pastimes and there were thousands to watch. Very young to Very old and all those in-between. I used great restraint and only purchased two spools of cordage for lanyards. I could have easily dropped a quarter of a million\$\$\$ before I was halfway through.


Dave Dillon finagled me a badge to let me enter the "Wholesale Only" portion of the show. I had never been in there before. I didn't buy anything there either. There were really interesting materials there. One huge glitzy vendor of fine jewelry out of the Orient and a guy with bulk stone out of North Africa along with easily the best beads under the roof.

Have I inspired you to get the fever up and come out and work on your gemstones and jewelry? Great, because our shop is open every Tuesday at 6:00. We had a good group last week but we had open machines for more of you. Silversmiths Dave and Jim, had no new students to help. So, get your name in the hat for this excellent opportunity.

Don't forget that there are four events centered around dinosaurs going on around town. Get out and take them in.

Our next general meeting is on March 25th. Toss off that lap blanket and be cool by showing up!

Brad



The Silent Auction scheduled for January will be held at the March Meeting.
This gives you another few days to keep cleaning out those shelves and boxes.
We need the Best Choice labels turned in also so we can get our rebate.
Cinda Kunkler



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

DUES ARE DUE

TGMS Event Calendar

Mar 2022			April 2022		
1	T		1	F	
2	W		2	S	
3	T		3	S	
4	F		4	M	
5	S		5	T	Brad's Shop Open Wear Mask 6-9:30pm
6	S		6	W	
7	M		7	T	Jr Rockhounds, UUMC 6 p.m. sign in
8	T		8	F	
9	W		9	S	
10	T		10	S	
11	F		11	M	
12	S		12	T	Brad's Shop Open Wear Mask 6-9:30pm
13	S		13	W	
14	M		14	T	
15	T	Brad's Shop Open Wear Mask 6-9:30pm	15	F	
16	W	Jr Rockhounds Dinosaur Fieldtrip 10 a.m.	16	S	
17	T		17	S	
18	F		18	M	
19	S		19	T	Brad's Shop Open Wear Mask 6-9:30pm
20	S		20	W	
21	M		21	T	
22	T	Brad's Shop Open Wear Mask 6-9:30pm	22	F	General Meeting UUMC 7:30 p.m.
23	W		23	S	
24	T		24	S	
25	F	General Meeting UUMC 7:30 p.m. Silent Auction	25	M	
26	S		26	T	Brad's Shop Open Wear Mask 6-9:30pm
27	S		27	W	
28	M		28	T	
29	T	Brad's Shop Open Wear Mask 6-9:30pm	29	F	
30	W		30	S	
31	T	Last day for dues / Directory being printed	31	S	

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

DUES ARE DUE

JR ROCKHOUND Classes &

Reminders

Here are reminders of the next few months of classes: **University United Methodist Church, 1621 SW College Ave., Topeka, KS.** 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



---Everyone must wear masks!

Next Class: April 7, 2022 Stone Age Tools & Art...Brad Davenport

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



The Sertoma Duck Race has started for 2022

<https://www.duckrace.com/topeka>

Purchase your Ducks under Topeka Gem & Mineral as it is our only fund raiser of the year.

The Race is September 17, 2022 at Lake Shawnee.

Confusing Rockhound Definitions

BARIUM –What to do with your clothes after encountering a skunk.


CORAL –A place to keep horses.

FIELD TRIP –An impossible trek to an inaccessible place for nonexistent specimens.

MICROMOUNT –A very small horse.

ROCKHOUND –A person who scolds his little boy for picking up a piece of candy that was dropped in the dirt, but will lick a piece of agate to see if it will polish.

Reprint from The Glacial Drifter, 4/19




The Oklahoma State Council of Mineralogical Societies
presents the annual

Spring Rock Swap

April 2, 10am - 4pm


At the OSU Campus, Stillwater, OK,
in Parking Lot #29, located north of the
Noble Research Center Building,
Boone Pickens School of Geology,
(near Washington St. and Hall of Fame -
across from the stadium)



- ◆ Dealers with lots of beautiful gems, minerals, stones, fossils, lapidary equipment, jewelry, and much more.
- ◆ This is a family-friendly event.
- ◆ There will be a live auction at 11:30 am that is open to everyone.
- ◆ Proceeds from the auction go to the OSCMS Scholarship Fund.
- ◆ Free Parking, Free admission to the Swap
- ◆ Signs will be posted around campus for directions

Look for the special display set up on part of the International Lawn (inflatable JR) and inside the NRC atrium (interactive kiosks). The "In Search of Earth's Secrets" exhibit allows audiences to enjoy hands-on experience while learning about exciting science topics researched by the JOIDES Resolution such as earthquakes, volcanoes, and the extinction of the dinosaurs.

A very special Thank You to our Host for the Swap, the OSU Boone Pickens School of Geology. And a Big Thank You to the Geology Graduate Students' Association for their help in getting this OSCMS Swap together.



**BOONE PICKENS
SCHOOL OF GEOLOGY**
College of Arts and Sciences

For more information, contact Stan Nowak, OSCMS President, snowak48@yahoo.com

If coming from Tulsa direction: After merging onto US-177 S/N Washington St, head south on N Washington St (you should pass a U-Haul building and bowling alley, and Boomer Lake) (3.2 Miles, just continuously driving straight)

1. Make a slight right to stay on N Washington St (0.9 miles) (there are two horse statues where you have to make the slight right)
2. Continue straight on N. Washington St (slightly past the intersection of N. Washington St and W Hall of Fame Ave, the parking lot #29 will be on your right (right in front of the OSU Power Plant). For parking in parking lot #10, the parking lot will be on your left (outside of Boone Pickens Stadium).
3. The NRC will be directly in front of both parking lots (big glass building- hard to miss 😊).

If coming from OKC direction (OK-51):

From OKC-51, you should wind up on 6th Ave/OKC-51 heading east (you'll wind up passing lots of car dealerships and a Walmart, and lastly the OSU Botanic Garden).

1. Turn left (head north) on S Western Rd
2. Continue on S Western Rd, which will then transition to W Hall of Fame Ave (at this point, you will be driving through the university and will pass the Colvin Recreation Center on your right).
3. Turn right at the intersection of W Hall of Fame Ave/N Washington St (this will put you on N Washington St). Parking lot #29 will be on your right, and parking lot #10 will be on your left.

If coming from OKC direction (I-44, US-177N):

1. From US-177N, you will end up on S Perkins Rd (heading north).
2. At the intersection of S Perkins Rd and E 12th Ave, turn left (head west on E 12th Ave).
3. Turn right onto S Duck St (head north)- this turn happens outside the Stillwater Public Library.
4. Continue north (straight) on S Duck St (which will change to N Duck St).
5. Turn left (head west) onto W Hall of Fame Ave (the National Wrestling Hall of Fame & Museum will be on your left at this point). Continue west on W Hall of Fame until you see N Washington St. At this intersection, turn left (the Wes Watkins Center will be on your right).
6. Parking lot #29 will be on your right, and parking lot #10 will be on your left.

Snake Stones, Toad Stones and Bezoars - Part One

By B. Jay Bowman

This will be a two part series on exotic Stones that were used for all sorts of cures, snake bites, poisons, plague and other maladies of the middle ages. Some of these are still used in parts of the world for those and other purposes. Many are sold on the internet today mostly as curiosities. In part one the author will discuss the "Toad Stone" and the "Snake Stone."

Rubies, sapphires, emeralds, and other precious stones were not the only stones revered by the ancients and sought after by rulers and others. Snake stones, toad stones, and bezoars were also sought after and highly valued by many people in the ancient world. All of these stones were thought to have medicinal value in one form or another. The bezoar in particular was thought to have the power to nullify any poison and in some cases even give indications that a poison was nearby. Many other concretions and fossils were also considered to have either magical or medical value. There were stones from the rooster, eagle stones, and other stones that bore some resemblance to various organs of the human body. Many of these stones were actually fossils, but in the middle Ages, no one really knew about fossils. Many were shaped like arrow points, and some were actually ancient artifacts and these were mostly called thunderbolts, because they were thought to have been deposited by lightning strikes.

In this writing, we will mostly be concerned with the snake stones, toad stones and bezoars. Most of these were some concretion thought to be either passed by the creatures or found in various organs after they had been killed.

We will begin with the toad stone. There are several stories about how the toad stone was obtained. In some cases, this stone was thought to be vomited up by the toad and there were various methods to force the toad to do this. Others believed that the stone was in the head of the toad, and it had to be killed and the stone removed. This belief was very prevalent during the time of Shakespeare. In his play called, *As You Like It* appears this line: "which like the toad, ugly and venomous, wears yet a precious jewel in his head." As well as being an antidote to poison the toad stone was also thought to give warning of its presence by becoming very hot. The wearer of such a stone therefore, had his stone set in such a way that part of it always touched the skin. In this way, he would be sure to have notice if any poison food or drink were offered to him. Many of the toad stones may have been concretions found in the head of a toad, by far the greater number were probably small pebbles sold as "toad stones" to those who really believed in the powers of such a stone and were ready to pay high prices for one. Some of these toad stones set in rings were found to be the fossil tooth of a ray, a species of fish.

The toad stone was also thought to be able to cure any bites or stings from rats, spiders, wasps, or any other venomous creature. This was accomplished by placing the stone on the spot where the bite occurred and the swelling and pain were then diminished.

One theory about the formation of the snake stone was that it was formed from the slime and saliva created by a knot of entwined ser-pents. When the moisture had coagulated and took on a spherical shape it was then tossed into the air. In order to be of value it must be caught in a linen cloth before it touched the ground. Snake stones were highly valued by the Romans. They believed the wearer would be the victor in all disputes.

There is one fable about getting the snake stone that grew independent-ly in two different countries. Both the Romans and the Laplanders believed it was very dangerous to attempt to get the stones as the snakes would chase anyone grabbing the stone. The person who got the stone must run to the closest river or pond and jump in or the snake would bite them and take the stone back.

The snake stone was said to be worn by Druid priests. These stones were said to float in water. They may have been very similar to quartz globes that have been found in north western United States that had a very thin quartz shell filled with air that would float. More probably they were the fossilized shells of sea-urchin. In England also the many descriptions of the stone could really be ancient glass beads made by either the Romans or the Celts themselves. These all had holes in them and the hole was explained in various ways. One was that a stick was pushed into the center of a coiled snake and the snake exuded a slime that solidified around the stick. Another explanation was that the snake exuded the slime and then stuck its tail in the slime while it hardened.

The uses of the snake stones were mainly to cure snake bites. Some of the descriptions of these procedures are rather bizarre. One said that if the skin was not broken then it must be cut in order to cause bleeding. The stone was placed on the spot and left there until it fell off. The stone must then be cleaned by using mother's milk but cow's milk could be used if the mother's milk was not available. The milk turned the color of puss when all the poison was leached from the stone.

Con't on page 7

Snake Stones, Toad Stones and Bezoars con't.

In India the Snake stone was particularly revered. Tavernier, an early traveler and gem merchant, described the Indian snake stone as a stone that stuck to the palate tenaciously and when placed in water caused bubbles to rapidly rise appearing to make the water boil.

George Kunz believes that this stone was probably tabasheer. According to Kunz tabasheer is a type of opal that is formed in the knuckles of certain types of bamboo. He compares it to hydrophane, a type of opal originally found in Colorado in the late 1800s. Both have great absorption qualities and when completely saturated turn almost completely transparent. Many of the "Snake Stones" of India were made by the Brahman caste, the only ones allowed to sell them. In Ceylon (Now called Sri Lanka) the people believed the male snake exuded a stone that at night illuminated a spot and attracted the female snake. The native people would spot these illuminations and then during daylight would go pick up the stone to keep as a cure for snake bite. Kunz believed these were chlorophane, a type of fluorite that phosphoresces with heat. Some of these glow with very little heat and they get brighter as the heat is increased.

As Mentioned earlier most of these are for sale on the internet and a great deal of information about them is also available. The tabasheer is being sold and touted as an aphrodisiac. This is widely believed in China. The next part will be about the bezoar. This was more widely used than the others and instances of use were worldwide including the Americas and Africa.

In part one, we briefly discussed the toad stone and snake stone. In part two we will discuss the bezoar. The word bezoar is a derivative of the Arabic word padzahr (pad, expelling; zahr, poison). It was often used by the Arabs for anything that they thought would cure a poison. They would say that such or such material was the bezoar for a particular poison. The first known writing about bezoars was by the Arabian Aristotle. In all probability no one person was known as the Arabian Aristotle, but probably a collection of writers in the 7th or 8th century who believed Aristotle's writings and carried them even further. The bezoar was even described among precious stones of the time. The bezoar is also mentioned and recommended in early Persian medical writings.

The usual belief on the finding of the bezoar was they were found in the liver or intestines of a goat or a deer. Some Arabs described the origin of the bezoar in a rather fanciful way. They said that at certain periods the deer would eat snakes and other poisonous creatures and would quickly run to the nearest pond, and submerge themselves until only their nostrils were above water. They stayed in the water until the heat caused by the poisons they had consumed was alleviated. While they were under water stones formed in the corners of their eyes. When they left the water, the stones fell out at the edge of the pond where the Arabs then picked them up. The Arabs believed them to be an antidote for poisons of all kinds. They could either be ground to a powder and taken internally or were simply attached to the injured part. They effectively cured by inducing heavy perspiration.

During the 12th century the bezoar was introduced to Europe by the Moors through Spain. This was during the time the plague was causing great problems in Europe.

Bibliography

George Frederick Kunz, (Reprint 1989) *The Curious Lore of Precious Stones*; Bell Publishing Company, New York, NY
George Frederick Kunz, (Reprint 1997) *The Magic of Jewels and Gems*; J. B. Lippincott Company, Philadelphia and London

Via The Sooner Rockologist, 12-14 & 1-15; via WGMS 8-2020

Sugilite

Sugilite is named after a Japanese geologist Kenichi Sugi, who discovered the first tiny specimens in Japan in 1944. It is a rare ore, potassium sodium iron lithium silicate, ranging in color from pink to purple. The primary gem deposit was found in 1979 at the 3,200 ft. level in the Wessels Manganese Mine, 14 miles northwest of Hotazel, South Africa, in the Kalahari Desert. Smaller deposits occur in Brazil and Canada. Sugilite usually occurs in Pegmatites of Alkaline magmas and crystallizes into opaque masses. It occasionally occurs as small crystals or inclusions within quartz, and very rarely, in a translucent gemmy form known as "gel". It is frequently found in combination with manganese [black streaks], Bustamite, a calcian variety of rhodonite [orange/brown areas], and sometimes with Richterite [blue].

Source: EL Paso The Voice Jan 2011

Oddities of Obsidian

Obsidian is an extrusive igneous rock formed when the magma of an erupting volcano reaches the earth's surface and cools rapidly. It is an extrusive rock because it was pushed out onto the surface. The cooling of the extrusive rock occurs so rapidly that the magma doesn't form minerals at all, but a volcanic glass.

It derives its name according to Pliny, an ancient Roman naturalist, from a fellow named Obsius, who found it in Ethiopia. Originally, it was named "obsianus", but the spelling was changed over the centuries to its modern form. Obsidian occurs in many colors, black being the most common. It can also be red, brown or even green. It can contain inclusions of magnetite, ilmenite, iron oxide, potassium oxide, sodium, oxide, lime and magnesium. It is composed of 66-77% silica, with about 13-18% alumina. Magnetite most likely gives obsidian its black color, and oxidized magnetite or hematite the reds and browns.

With slow cooling, silica crystals Cristobalite form, giving the "snowflake" obsidian or "flowering" obsidian. Iridescence reflected from minute inclusions arranged in layers is known as "rainbow obsidian". Another kind with gold inclusions with a strong metallic luster is called "gold sheen obsidian", and if the inclusions are grayish silver in color, it's called "silver sheen".

Obsidian is interesting in many ways, but mainly, for all practical purposes, it is a true glass. It has a hardness of 5-5.5 on the Mohs hardness scale. It represents a quickly congealed mass of molten rock, for if it had time to cool slowly, it would have crystallized into a rock similar to granite or rhyolite.

It shows no trace of crystalline structure nor possesses any established composition and must be considered a rock instead of a mineral. It is amorphous, having no regular internal arrangement of atoms as in crystals. The word amorphous is taken from the Greek and means "no form" because there is no pattern to amorphous materials. The atoms are jumbled together in small groups like particles in a pile of sand. It is extremely brittle and breaks easily with shiny, black conchoidal fractures – a feature so perfectly developed that it is easily identifiable in the field. It is translucent and will not soften when heated to a bright red.

Obsidian is found throughout the western United States, mostly in Alaska, Colorado, Utah, New Mexico, Arizona, Wyoming, Oregon, Nevada and California. It is also found in B. C. and throughout Mexico. American Indians valued obsidian highly. Its perfect texture and easy fracture made it a prize possession for chipping into arrowheads and large ceremonial spear points.

The Aztecs called obsidian "iztli", "teotal" or "divine stone" because of its usefulness in carving ceremonial blades. Even one of their gods was named "Itzoppziotl", meaning "obsidian butterfly".

Obsidian is also used to make attractive jewelry as cabochons or faceted. Thin slabs can be cut with a common glass cutter. Due to its extreme heat sensitivity, great care must be taken in working obsidian. Industries use obsidian as a raw material to make rock wool. Surgeons have even used thinly chipped obsidian knives in surgery because of the fine exact cut an obsidian knife makes.

By Dolores E. Rose, from Stoney; via WGMS 9-2019

TANZANITE

A blue-to-violet variety of zoisite



Crystalline zoisite is found in various colors: colorless, brown, yellow, blue, purple, green and pink. The best-known variety is tanzanite. This gem was first promoted by Tiffany and Company in the late 1960s. It is often heat treated to exhibit saturated purple/blue. Many inclusions have been identified in tanzanite, including calcite, gypsum, graphite, hematite, ilmenite, staurolite, rutile, titanite, zircon, quartz diopside, and tremolite-actinolite. Fluid inclusions have been found in healed "feathers". The inclusions of the trace element vanadium is responsible for the purple/blue color of tanzanite. R.I.=1.691-1.700. Specific gravity=3.35. Hardness=6.5-7. Orthorhombic. Very strong pleochroism: violet-blue, brown.

Source: El Paso The Voice Jan 2011