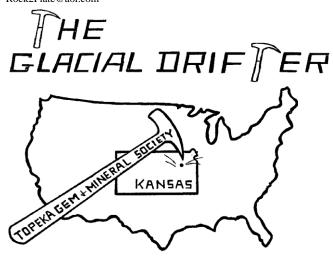
The Topeka Gem and Mineral Society, Inc. 1934 SW 30th St. Topeka, KS 66611 Rock2Plate@aol.com



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. 65, No. 4 April 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 30**th **St, Topeka, KS 66611.**

www.TopekaGMS.org

2022 OFFICERS AND CHAIRS

President 1st Vice Pres.	Brad Davenport Will Gilliland	379-8700 286-0905	Cab of the Month Field Trip Coord.	Donna & Russell Hedge Will Gilliland	620-660-1651 286-0905
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Historian	Open		Show Dealer Chairman	Dave 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 $\underline{\text{rock2plate@aol.com}}$. Permission is granted to reprint articles only if proper credit is given to the author, Glacial Drifter and the date.

Fodder from the president. April/22

A good day to you all. Another month has passed, Spring is trying it's darndest to get established here

in NE Kansas. Are your gardens ready, have you had to start mowing your yard? Have you been out catching a batch of Crappie? Have you found any Morel mushrooms? Have you found any agates or cool fossils? Yeah, me too neither.

All these things are happening right now. I can't seem to get my mind and body to participate. My "to do" list grows daily. I have been able to keep club stuff on the top of my list and let me share with you what is going on.



On the 7th our Juniors met and learned a little about stone age tools and art. They learned how to braid twine into rope and how to create coiled grass baskets. We had 7 students.

Your board has been working on changing our corporate status. This has been quite an undertaking. Special thanks goes out to Miss Millie and Miss Cinda for spending many hours excavating past financial records and taxes for the effort. Chuck has been doing lots of research to keep us compliant with what Uncle Sam wants and needs. Stacy has been doing a great job of recording all that we attempt.

Next Friday the 22nd our general meeting will feature Jim Baer teaching us about Precious Metal Clay (PMC) It should be very interesting. Come check out a real different method of creating art from Silver clay.

Next weekend the 22nd-24th is the Wichita club's show. It should be a good one. I know several of our members are going down on Saturday. Keep an eye out for us.

Get out and get busy...Bradford!!!!!!

Till next month, Keep Rockin!

April's Program

Jim Baer, will be our guest speaker. His topic will be on Precious Metal Clay (PMC). You don't want to miss this meeting.

Cinda Kunkler



We need your BEST CHOICE UPC Labels --

Bring them to the monthly meeting, and give them to Cinda Kunkler.

TGMS Event Calendar

April 2022		May 2022				
1	$\boldsymbol{\mathit{F}}$			1	S	
2	S			2	S	
3	S			3	M	
4	M			4	T	Brad's Shop Open Wear Mask 6-9:30pm
5	T			5	W	
6	W			6	T	Jr Rockhounds, UUMC 6 p.m. sign in
7	T			7	F	
8	F			8	S	
9	S			9	S	
10	S			10	M	
11	M			11	T	Brad's Shop Open Wear Mask 6-9:30pm
12	T			12	W	
13	W			13	Т	
14	T			14	F	
15	F			15	S	
16	S			16	S	
17	S			17	M	
18	M			18	T	Brad's Shop Open Wear Mask 6-9:30pm
19	T	Brad's Shop Open Wear Mask 6-9:30pm		19	W	
20	W			20	T	
21	T			21	F	
22	F	General Meeting UUMC 7:30 p.m. Wichita Show		22	S	
23	S	Wichita Show		23	S	
24	S	Wichita Show		24	M	
25	M			25	T	Brad's Shop Open Wear Mask 6-9:30pm
26	T	Brad's Shop Open Wear Mask 6-9:30pm		26	W	
27	W	^ ^		27	Т	General Meeting UUMC 7:30 p.m.
28	Т			28	F	
29	F			29	S	
30	S			30	S	
31	S			31		

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

ALL MEMBERS.....SAVE THE DATES..... OCT 7 thru 9th, 2022

That is when our club show happens and we need EVERYONE to HELP not just for an couple of hours. Tell your boss you're sick, play hooky from work, take vacation days but we need your help. Sign up sheets will be available soon.

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



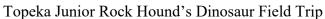


--- Everyone must wear masks!

Next Class: May 6, 2022 Field Trips......Pat Gilliland

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









Brad's class on stone Age Tools & Art







The Sertoma Duck Race has started for 2022

https://www.duckrace.com/topeka

Purchase your Ducks under <u>Topeka Gem & Mineral</u> as it is our only fund raiser of the year. The Race is September 17, 2022 at Lake Shawnee.

March 2022 Cab of the Month Winners





Brad Davenport

Ashleigh Vallis

Amazing Math Puzzle

Here is a math trick so unbelievable that it will stump you.

- 1. Grab a calculator (you won't be able to do this one in your head.)
- 2. Key in the first three digits of you phone number (not the area code.)
- 3. Multiply by 80.
- 4. Add 1.
- 5. Multiply by 250.
- 6. Add the last 4 digits of your phone number.
- 7. Add the last 4 digits of your phone number again.
- 8. Subtract 250.
- 9. Divide number by 2.
 Do you recognize the answer? Don't you wonder who comes up with these?
 Original source unknown, reprint from the Glacial Drifter March 2004

Victoria Stone -When man-made is worth as much as natural

By Crazy Cabbers, Gina Webb CM

Taken from the August edition of the High County Glemmings newsletter of the Henderson County Gem & Mineral Society

This is a cab I recently cut from this material.

There aren't many designer cabochons cut from Victoria Stone that truly showcase the phenomenal patterns and chatoyant character of this material. In fact, there are very few cabochons cut from this material at all, relatively speaking.

The reasons for this are twofold. Number one, there is only a limited supply of this material left in the world for reasons I will address shortly. And, two, much of this material was decompressed hastily and improperly which rendered it useless for any lapidary purposes.

Production of Victoria stone ceased upon the passing of its creator, Japanese scientist Dr. S. Limori, in the 1980"s. Yes, it is a lab created mineral and the secret of its formula was lost with his passing. It is not, however, considered to be a synthetic or simulated gemstone, but rather a re-constructed stone

made from a very laborious process using natural raw minerals (quartz, feldspar, magnesite, calcite, fluorspar, etc.). The entire process took months to complete. The final result was an entirely new mineral similar to nephrite jade, but the arrangement of actinolite crystals is quite different. Instead of the crystals interlocking and tying together as they do in jade, they have crystallized into fan-like shapes that provide the chatoyant patterns that characterize this material.

The raw minerals were first heated to extremely high temperatures into a mol-ten magma to which special crystallizers and crystal habit regulators were add-ed in a controlled environment. The magma was then poured into boules and placed under incredibly high pressures, around 2000 pounds of pressure to be more precise, and then cooled over a period of about 35 to 40 days during which time the chatoyant crystals were formed. Upon completion, the boules were sold with specific instructions on how to decompress the material for use in lapidary purposes. It was a difficult and tedious process to decompress the boules properly.

Victoria Stone has a hardness of 5.5 to 6.0 on the Moh's scale, a specific gravity of 3.02, and a refractive index of 1.62. It is said to have been created in 20 different colors, but evidence of only 15 has been found. Produced from 1960 to the 1980"s, they are green, sky blue, reddish purple, yellow green, blue green, sky indigo, chocolate, yellow, deep indigo, white, quiet green, quiet yellow, quiet blue, grey, and black.

There was also a transparent, or translucent, variety of Victoria Stone that was created for faceting purposes. It was cooled down in one day so that it wouldn't crystallize to form chatoyant patterns. It came in 8 different colors, including sapphire blue, emerald green, amethyst purple, ruby red, topaz, aquamarine, garnet, and peridot green.

Many have spent thousands of dollars trying to reproduce this material, but none have succeeded. So, alas, Dr. Limori's secret formula remains a mystery. Not even his son could reproduce it. All that remains in the world is what was produced and purchased 30 to 50 some years ago (that which was decom-pressed properly, that is).

Hence, its value remains steady and rising, even in this economy.

In Japan, Victoria Stone is considered to be a sacred mineral and purported to bless that which it touches. I'm not sure about that, but I do love working with this material. I find it to be quite easy to cut and polish. It is a relatively soft stone, not as soft as, say, Onyx, but enough so that the 80 grit grinding step may be skipped altogether when rough shaping a cabochon. In fact, I would suggest that due to its coarse grit that it be skipped, but that's a personal call.

A good starting point is the 120 or 180 grit wheel, although you may start at the 100 grit grinder if so desired, but be careful as this mate- rial grinds away fairly quickly. Once a decent rough shape is acquired, the remaining steps are usually a breeze. Next, I proceed to the 220 grit grinder to smooth out what will be the final shape, also making sure I have a well rounded dome at this point, before beginning with the pre-polishers.

Pre-polishing starts with the 320 grit belt, moving on to the 400 grit belt, and ending with the use of the 600 grit belt. It should take no more than about a minute or so at each pre-polishing step. After pre-polishing, I then use a 3000 diamond grit polishing belt, taking my time at this step to achieve maximum desired results.

A final polishing option is the use of Linde A polishing powder on a special buff, but this step is not really required for this material. I usually have a very nice high sheen after finishing with the 3000 diamond grit. I've read that polishing Victoria Stone can also be done using a dry leather buff with tin oxide, but I haven't tried that method.

I hope this has been informative. I really enjoyed researching this material further and learned even more this time around. When you get the opportunity, please take the time to stop by the lapidary workshop in the back of the Miner-al and Lapidary Museum and check out for yourself what we're working on or, better yet, come work in the shop yourself. The supervisors are very helpful and newcomers are always welcome.

Via The Goldrush Ledger 10/11; via WGMS Jan. 2012



WGMS Editor's Note: The following technique is described in detail for treating opals with Opticon to repair and/or stabilize the stones. In theory, it should work as well for other hard-to-polish or soft stones (dinosaur bone comes to mind).

Treating Fractured Opals

This is an e-mail I received from a good friend and a customer on treating fractured opals.... I cannot personally vouch for the procedure because I have not tried it but he swears by it and I have seen some amazing pictures of opals that he has treated in this manner.

Hev guvs, this works!

Here is my procedure on Opticon for opals. This is done without the use of a vacuum machine and the results are very good! First, I cut my opals to the desired shape with my opal blade (.006 diamond blade). I also use my saw blade to rough dome my cabs. This is done very slowly. Most people will grind the dome with their first stage of grit. After you have roughed in the stone and it is dry, place the stone or stones in a pint mason jar. It is more cost efficient to do several stones at once.

Fill the jar with Opticon (resin) to just cover all the stones by 1/8-1/4 inch over the stones. Place the jar on a coffee machine burner, like an old Mr. Coffee machine. Turn on the machine like you would if you were making coffee and cover the pint jar with a doubled piece of foil (do not put lid and ring on). Cook the opals for 6-8 hrs. After you are done cooking the opals remove the opals from the heat, take off the foil and pour as much of the Opticon out of the jar as you can, use oven mitts...that jar is mighty hot!!!! After you have gotten the hot resin out, put back on heat for a minute or so. Once you've done this procedure a few times you can empty out the resin pretty fast and don't have to return it to the heat. The whole point is to keep the stones hot. After you empty the resin, place the lid and ring on the jar and tighten. Set aside for 8 hrs. When it cools the lid will pop and create its own vacuum. I usually start in the morning and then let the jar cool overnight. After it has set for 8hrs or more, open up the jar and remove the opals one by one, cleaning off the resin with a paper towel. Use gloves (surgical or latex) when doing this. You do not want to get this stuff on your hands!!!! Get another pint jar out for the hardener, ring and lid also. Place opals on a piece of foil and take hardener bottle and apply it to the stones (don't use a whole lot but the stones have to be wet). Get a pair of chopsticks or shishka-bob sticks and roll the stones so every part is wet with hardener. Take the jar and run it under as hot of water as your sink puts out, (pre heating it. Don't get the inside wet). When the jar is fairly warm, place the opals (on the foil) down in the jar. I normally shape the foil first to fit down into the jar. Place the jar on the coffee machine burner and cook 2hrs, covering it with foil. About 1 hour into the cooking, get your chopsticks and roll the stones in the hardener at least once. It is very important that you do not breath the fumes; hold your breath when you do this.

After about 2 hrs., remove from heat and place lid and tighten ring on jar. Set aside for 6-8 hrs., the lid should pop or suck down on this also. After it has set 6-8 hrs., open up jar and remove stones (with gloves on) and wipe off any remaining hardener. Let stones sit for a day or until they don't feel sticky. Dop up your stones and proceed to polish them. Keep in mind; the Opticon only penetrates so far into the stone, 1/16-1/8 inch maybe. So, the less gouges in the stone the better. I have yet to replace a ring on either jar, they keep sealing (10 times so far on both rings).

Opticon is an optical grade polymer resin, clearest of clear. It can save a stone that normally would have to be re-cut or used for chip in-lay...crushed. There is nothing wrong with using Opticon but you need to state that the opal has been treated with it. Paul Downing has a good view on morals of the use of this product. Some people will treat their high-end stones with Opticon to stabilize the stone from possible damage in the future. Opticon will protect or save you from future grief. Opals are so awesome and I if you can keep one whole or save a fractured stone all the better. You just need to state the fact that you treated the stone. It doesn't harm or affect the beauty of the opal and can only be detected under a microscope and special lights. The stone will "fluoresce" or glow a reddish color under magnification, otherwise it is undetectable by the human eye, even with a loupe. This procedure does not make the stones invincible but they will last a whole lot longer, be less fragile, and much more stable. P.S. I don't treat every opal I cut, just problem ones.

Hopelessly addicted

Jeff Norman

From The Opal Express, 11/11via WGMS Jan 2012

Cordierite or Iolite?

Can you guess what this stone is? Have you ever heard of cordierite? Yes...No



How about Iolite? I knew you would get it. Iolite, aka Cordierite, is an absolutely outstanding smoky grey, to purple, to blue mineral that can be faceted as well as turned into cabochons. This mineral is a magnesium iron aluminium cyclosilicate. What is a cyclosilicate you may be thinking? It is a silicate-based crystal that forms in a ring-shaped pattern, in the case of iolite it is a six-sided ring shape. This makes it a stable ring patternlike beryl and tourmaline. What give it the remarkable blue/purple colors are the combinations of the magnesium iron and aluminium. More magnesium moves it towards the purple/blue side, more Iron moves towards the smoky side.

Variations of this stone can be found all over the world. In the United States, it can be found in Connecticut and Wyoming. Internationally, it can be found in India, Madagascar, Tanzania, Brazil and Canada as well as in other countries not named. The largest Iolite crystal was found thus far was found in Wyoming and it was more than 24,000 carats. Yikes!

Fun facts about Iolite: the name of the stone comes from the Greek word violet. This was not the first Greek name for this stone though, it was originally called dichroite meaning "two-colored rock". This comes from the fact that the color of the stone can change depending on the angle through which light passes through the ring structures within the stone. If you think of the ring structure as a six-sided donut with a hole down the middle, if you are looking down the middle of that ring, the color gets washed out and the color changes to a smoky grey, light blue color. If you are looking at the side of the ring (no hole in sight) and shine a light on the stone, the light will reflect off six sided angles, showing the magnesium/iron/aluminum imbedded in the ring and will reflect the deeper colors of blue and purple.

Another name for the stone is "water-sapphire" or "Viking Compass" because this was the fabled stone Viking's used to determine the direction of the sun on overcast days.

Via Rock-A-Teer, 4/20via WGMS June 2020

Welcome Our New Members

Aaron, Mark & Quinn Thompson-Aaron

Jackman, Gaige & Emily