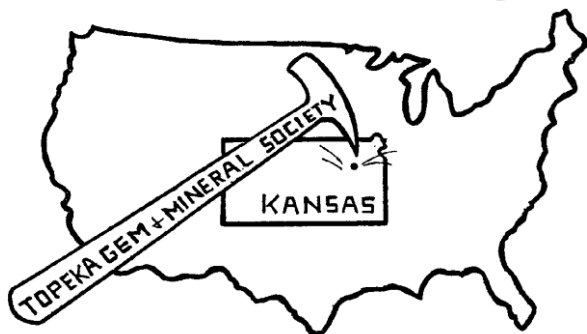


The Topeka Gem and Mineral Society, Inc.
 1934 SW 30th St. Topeka, KS 66611
 Rock2Plate@aol.com

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. 67, No. 2
 February 2024



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, 7:15 pm, First Congregational Church, 1701 SW Collins Ave, 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

2024 OFFICERS AND CHAIRS

President	Brad Davenport	379-8700	Cab of the Month	Donna & Russell Hedge	620-660-1651
1 st Vice Pres.	David Dillon	221-4315	Field Trip Coord.	Chuck Curtis	286-1790
2 nd Vice Pres.	Cinda Kunkler	286-1790	Publicity	Donna Stockton	913-645-7677
Secretary	Stacy Haug	1-857-3350	Welcome/Registration	Harold Merrifield	633-9745
Treasurer	Millie Mowry	267-2849	Property	Chuck Curtis	286-1790
Directors	Doria Skinner	231-9347	AFMS Scholarship	Cinda Kunkler	286-1790
	Jim Baer	785-256-2432	Editor/Exchange Editor	Millie Mowry	267-2849
	Shirley Schulz	n/a	Show Chairman	Millie Mowry	267-2849
Historian	Cinda Kunkler	286-1790	Show Dealer Chairman	Dave Dillon	221-4315
Federation Rep	Chuck Curtis	286-1790	Show Secretary	Cinda Kunkler	286-1790
Corporation Agent	Millie Mowry	267-2849	Jr. Rockhound Leader	Dennis Hippe	230-6729
Librarian	Amy Fluke	862-8876	Show Case Coordinator	Cinda Kunkler	286-1790
Web Master	Chad Skinner	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. JAN/2024

A good February to all of you.

Well, NFL Football is all done till August. Yea Chiefs. So I will now slide into a 6 month funk.

Fortunately the club doesn't need me to be fully functional since my role is really just watching the rest of you doing all the heavy lifting. Thank you.

So what's going on? We are proud to announce that Andrew Newman has completed all of his classes through our Junior Rockhound Program. Congratulations! I hope we receive his awards before our next meeting. He is now our fifth "Rock Star" Make sure to give him a pat on the back.

I/We were rather neglectful in naming our new Honorary Members last month. Let me correct this oversight. Now, included on our roll is Pat Gilliland. Pat has been by Will's side forever. She has helped us in our duties and activities for years. I apologize for this oversight.

This month's meeting program (Feb.23) will be Fossil Identification with Andy Connlay. Let's try to stump him. Bring your oddball Kansas fossils to test his metal. This should be fun.

The next day, Sat. 24th we will be having a field trip. The destination is yet to be determined. Keep your eyes trained on emails and the Facebook site for details.

Attendance on Tuesdays at the shops has been a little below normal. This means there are tools setting idle waiting for you to use them. Also, Jim is anxiously awaiting to train some new SilverSmiths. Rumor has it that Dave Dillon will be back amongst us, ready to teach. Just give them a call or drop them an email letting them know that you are ready to take their class. The same goes for Millie's Wire Wrapping lessons.

There is also a surprise on tap for the near future.

There are several regional rock shows coming up in the next few months. I share them on my Facebook site <https://www.facebook.com/groups/451222786937878>

It may look and feel like spring out there but, remember that we can get our biggest snows before the Daffodils bloom. Have you got your pruning done yet? I don't.

Brad

UP Coming General Meeting Program

February 23 will be a talk given by Andy Connally from the Kansas Geological Survey talking to us about Fossils from this region of Kansas. He encourages everyone to bring in fossils from their collection to have them identified regardless of where they got them. Additionally, if anyone wants to donate their extra fossils, the KGS is building fossil teaching kits for schools which he will gladly take our extras to use in building up the kits. Andy is a wonderful speaker. Everyone should come, be sure to bring your fossils!

Suggestions for upcoming meetings are welcome, please let me know if you are interested in a particular subject. Hope so see some of the Juniors attending the meetings - especially in February. Hope you all are staying warm! Please join us, visitors are always welcome! Cinda Kunkler

TTGMS Event Calendar

FEB. 2024			MAR. 2024		
1	T		1	F	
2	F		2	S	
3	S		3	S	
4	S		4	M	
5	M		5	T	Brad's Shop Open 6-10 pm
6	T		6	W	
7	W		7	T	Jr RHDS 6 p.m. at FC Church 1701 SW Collins
8	T		8	F	Board Meeting Millie's 7 p.m.
9	F		9	S	
10	S		10	S	
11	S		11	M	
12	M		12	T	Brad's Shop Open 6-10 pm
13	T	Brad's Shop Open 6-10 pm	13	W	
14	W		14	T	
15	T		15	F	
16	F		16	S	
17	S	Lawn & Garden Show 10 a.m. to 7 p.m.	17	S	
18	S		18	M	
19	M		19	T	Brad's Shop Open 6-10 pm
20	T	Brad's Shop Open 6-10 pm	20	W	
21	W	Publicity Mtg 6:30 p.m. Elmont Church	21	T	
22	T		22	F	General Mtg. Gather 7:15 p.m. FC Church 1701 SW Collins
23	F	General Mtg. Gather 7:15 p.m. FC Church 1701 SW Collins	23	S	
24	S	Field Trip TBD	24	S	
25	S		25	M	
26	M		26	T	Brad's Shop Open 6-10 pm
27	T	Brad's Shop Open 6-10 pm	27	W	
28	W		28	T	
			29	F	
			30	S	
			31	S	

As A Reminder!

If you are wanting to take a class in Silversmithing or wire wrapping you are to call either Jim Baer at 785-256-2432 or email him at jimbaer73@gmail.com, for wire wrapping contact Millie Mowry at 785-267-2849 or email rock2plate@aol.com the Monday before class to let them know you will be there.

JR ROCKHOUND Classes & Reminders

Here are reminders of the next months of classes: **First Congregational Church, 1701 SW Collins Ave., Topeka, KS.** Sign in starting at 6:00 pm and classes starting at 6:30 pm. 1st Thursday of each month.

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

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

Dennis Hippe at: go.purple@hotmail.com



Next Class: March 7, 2024 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.

Dillons Community Reward Program

The Topeka Gem & Mineral Society has enrolled with the Community Rewards with Dillon's Store. You can enroll your shopper's card at: www.dillons.com/communityrewards once you sign up it will take about 7 to 10 days to be activated and our Club to start earning the rewards. At the bottom of your Kroger receipt you will notice "At your request, Kroger is donating to 'your organization name'".

1. You will have to re-register each year.

If you have any other questions email DCR@dillonstores.com

[This quarter's rebate amounted to \\$50.64.](#)



The Library has moved.

In the TTGMS Library there are well over 100 books to choose from That cover a vast array of subjects of lapidary art and geology.

The library has currently moved to the church storage area, contact Cinda if interested in checking out a book.



**DUES ARE DUE
LAST CHANCE TO PAY YOUR DUES**

Topeka Gem & Mineral Society
General Meeting - January 26, 2024 at 7:15 p.m.

Call to Order: President Brad Davenport calls the meeting to order at 7:32 p.m. Harold Merrifield reports there are 36 members and 1 visitor present. Five door prizes were given out.

Treasurer Report: Millie Mowry reports the club balance. She is accepting dues tonight. Cinda Kunkler submits a few bills from the show.

Old Business: Chuck reports there are now 2 first aid kits for the club. One will stay in Cinda's vehicle since she is present at all functions. The second kit will stay in Brad's vehicle since he, too, is present at all club functions. Brad, Chuck, and Cinda attended the "Stop the Bleed" event put on by Stormont Vail and report that it was very informative and they recommend others to take this free class. Chuck has a kit here tonight for people to look over. If anyone has any ideas for other things that need to be included in the kit, please let him know.

Communications: Cinda has a printed flyer for the McPherson Gem & Mineral show in May. The Wichita show will be held in April. Brad has been visiting with Belinda Gomez at the Topeka Lawn & Garden Show regarding a table we will use there on February 17th. At the table, we will focus on materials of Northeast Kansas plus give a few presentations. Brad asks members for help with this.

Show: We currently have 3 contacts that have been returned with payment. There will not be a theme for the show this year. We do need to come up with a new shirt design. Members are encouraged to bring their collections and put them on display at the show. Any member wanting to put something in a case, please contact Cinda.

Publicity: If anyone would like to help on the Publicity Committee, please join this committee.

Field Trips: We do not have a field trip planned for January. Chuck is looking for volunteers to be on the Field Trip Committee and has a sign-up sheet here tonight. If anyone has ideas for field trips, please contact Chuck. April 13th will be the field trip with Kirby Marker. We will meet in Holton at Casey's at 9:00 a.m. There will be no charge for this field trip.

Junior Rockhounds: Teachers and helpers met in the middle of December and planned out upcoming classes for 2024. Cinda will teach February's class on Collections. Meetings are held on the first Thursday of every month; doors open at 6:00 p.m. and class starts at 6:30 p.m. Everyone is welcome to attend.

Webmaster: Nothing new to report. The website has been updated with a new look. Chad states that, if we add a blog to the website, members will be able to contribute content to the site. Brad would like to see a level of activity from members on this blog.

Shop: Brad has got the snow moved but it is still muddy. It will be open on Tuesday. He asks that members park on the gravel to keep from getting stuck in the mud. The 8-inch oil saw is still not running; it might need to be replaced.

Historian: Nothing new to report. The library materials will be at Brad's house next week. Cinda will look into getting the library set up at the church.

Membership: Dues are due.

Chuck reports that this will be Brad's last year as the President of the club. If anyone has a desire to be the club president, please contact Chuck as he is on the nominating committee.

Time-Sensitive: Cinda wants to remind everyone that Andy Connelly will be here at next month's meeting and will be talking about fossils. If anyone has fossils they would like identified, please bring them along.

At the last board meeting, members nominated and accepted four Honorary Members for the club - Will Gilliland, Harold Merrifield, Millie Mowry, and Andy Connelly.

New Business: None

Adjournment: With nothing further to discuss, Chuck moves to adjourn the meeting, Harold seconds. Meeting is adjourned at 8:15 p.m. and a silent auction is opened.

Submitted by: Stacy Haug, TTGMS Secretary

Working Obsidian and Other Fragile Stones

By Noel and Deb Runyan

Santa Clara Valley Gem and Mineral Society Breccia, San Jose, CA September 2023, Via Backbender's Gazette, October 2023, Via Pick and Shovel Feb 2024

In this article we talk about working with brittle, glassy stones, Obsidian, Volcano Glass, Rhyolite, etc. and answer the question, why do so many people try tumbling Obsidian only once?

Because it is difficult to avoid getting an ugly rash on the curved portions of the stones. The big secret to polishing Obsidian and other fragile stones is that they are fragile, so Be Gentle!

The cavities trap dirt, grit, or polish that gives the stone a speckled appearance, especially when the particles are of a color different from the stone. The cavities also trap calcified scale when wet stones are allowed to dry out without rinsing in distilled water.

Mitigating Rash and Bruising

- • Consider using grit and polish of the same color as the stone.
- • Clean stones with a combination of:
- • Use a pin or needle to clear the holes
- • Burnish in soapy water with lots of cushioning media
- • Soak in vinegar or muriatic acid to dissolve any

calcium scale

- • Use an upholstery pressure sprayer
- • Use a dental water pick
- • Use an ultrasonic bath

It is best to avoid the rash by being gentle and not getting the micro cavities in the first place!

How to Work Rocks Gently

Be prepared to be patient; being gentle means it will take longer to get nice results. Especially after coarse grinding, you want your stones rubbing each other, not banging into each other, so use lots of media and water to cushion them. Over-fill your barrels to cushion the stones. Cushioning with extra water helps and does not present dissolving problems for glassy stones.

Vibrating tumblers can be more gentle than rotating tumblers, but they can still let stones rap against each other too hard if you do not have enough media and water to cushion them. If you hear stones rattling against each other, it is not gentle enough.

Cushioning Stones with Thickened Liquid

Especially when doing stone-on-stone burnishing, you need cushioning. Thickened solutions for cushioning may include:

- • Concentrated soap
- • Mineral oil
- • Antifreeze (ethylene glycol)
- • Apple sauce
- • Molasses
- • Sorghum
- • Cane sugar
- • Honey

A rockhound friend who was also a beekeeper tried using honey as a tumbling thickener, because he knew that honey did not ferment easily. However, when supplied with the necessary nutrients from the dissolving rocks, his unattended tumbler exploded from fermentation, leaving a horrible mess of sticky and hardened tumbler cement.

Media Types to Use and to Not Use

To Use:

- • Ceramic pellets
- • Glass craft marbles (cheaper than game marbles)
- • Small obsidian stones
- • Chunks of broken glass (not quartz glass)
- • Plastic beads (work well, but destroyed quickly by coarse grit; can't be reused with finer grit stages)

- • Sand (not quartz sand) Avoid After Coarse Grind:
- • Ceramic micro beads
- • Chunks of broken quartz glass
- • Quartz half inch gardening stones
- • Gravel may have hard scratchy bits
- • Quartz sand.

It is best to pre-polish any hard media to smooth its surfaces before using with fragile stones.

Dry Tumbling Media (generally not needed for glassy stones because they don't dissolve easily):

- • Crushed corncobs
- • Crushed walnuts
- • Roasted garbanzo beans
- • Rice
- • Soft media should not be reused for finer runs.

Thermal Stress

Repeated heating and cooling cause stress in glassy stones. You should cut or grind slowly to prevent overheating. You can anneal the stones in a furnace or self-cleaning oven at 850 to 900 °F.

Single Stone Tumbling

If you are trying to tumble a single stone, you need lots of small stones, sand, and/or other media to rub against and to cushion the stone. When tumbling a single stone, you may get less grit breakdown than you are used to, so you may need to use a range of grits, both for coarse and fine grits. A range of several finer and finer polish may also be needed, if there are not multiple rocks to grind the polish finer and finer.

Grinding and Polishing

Our best results come from using Silicon Carbide grit for 80, 220 and 500 grit, then Aluminum Oxide for 1,100 prepolish and polish. Silicon Carbide particles have jagged edges that gouge grooves in stone surfaces, and Aluminum Oxide has flat edges that tend to shave rock surfaces flat. Some of the available cheaper Aluminum Oxide polish is more like 2,000 grit. TXP or other 3-micron polishes work well. Rapid Polish 61 gives a good shine in vibrating tumblers, but is not recommended for soft stones like turquoise. In general, people are starting to find that using only a quarter the normal amount of polish may work better than the traditional recommended amount; probably because the limited amount of polish quickly breaks down more thoroughly into a consistently very fine polish. We've tried all types of polish and found that using the proper polishing procedure is more important than the type of polish used.

Buffing Wheel Polishing

I improved the polish on a large obsidian stone by hand buffing. However, when I washed it, the nice finish washed off. The buffing compound had left a layer of wax, and that is what buffed into a shine. This wax surface may be the cause of some buffed finishes dulling or yellowing with time. To avoid this, you could buff with polishing powder mixed with water, or you could also use a non-oxidizing oil mixed with the polishing powder.

Apache or Indian Tears

Apache tears are found in perlite in Arizona. There are also tears found in pumice in New Mexico, and in tuff in Nevada. In the Jemez, NM, mountains, we found another type of Indian Tears, ejecta, or Sky Tears, which were from outgassed hot pools of glass that were blown up to 20,000 feet high in the atmosphere and cooled into small blobs, as they fell back to Earth. Despite the popular misconception, rain drops and ejecta obsidian drops are not actually tear shaped. Although a liquid droplet forming under a faucet or spout will start as a tapered tear drop, it will reshape into a spheroidal blob after breaking off and falling free. Obsidian tears must be tumbled gently, even though they are small. You may get flattened sides when tumbling tears, if they slide along the side of a roller barrel without turning and tumbling. We use a thick O-ring placed side wise in the barrel to prevent the tears sliding. With a Mohs hardness of 5 to 5.5, obsidian saws and grinds pretty easily. Sometimes it is better to break or cleave obsidian, rather than sawing it. Gentle tapping can chip off edges, and pressure knapping also works, if you avoid high impact knapping or smashing. You can also squeeze obsidian in a vise. A nibbler tool, pliers, and vise grips can be handy for breaking edges. You can also dress knife edges by directly tapping with a hammer.

Summary

Be gentle. Cushion fragile stones with lots of small stones and/or media, or thickened liquid. Avoid tumbling harder stones with obsidian.

Cab of the Month Winners

James Davis won 1st place Specimen with his hand made knife. Chris Anderson won 1st place in the Cab category for his African Queen (Picture Jasper). Donna Hedge won 1st place in the Jewelry category for the copper wire wrapped Jasper.



Silversmith work done at the shop by Renee.



The shop is open on Tuesday nights at 6 p.m. to all members.

You can learn how to cut and polish rocks, wire wrap, and do the silversmithing like Renee. There is instructors here each Tuesday night to guide you thru the process.