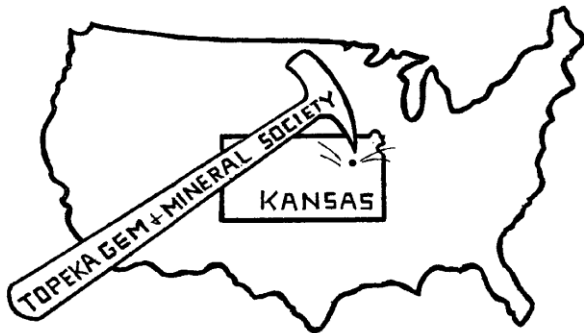


The Topeka Gem and Mineral Society, Inc.
 1934 SW 30th St. Topeka, KS 66611
 Rock2Plate@aol.com

THE GLACIAL DRIFTER



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. 60, No. 7, July, 2017

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

2017 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. | Leslie Hartman | 380-6016 |
| 2 nd Vice Pres. | Carolyn Brady | 233-8305 | Publicity | TGMS Board | ----- |
| Secretary | Cinda Kunkler | 286-1790 | Welcome/Registration | Russ & Rhonda Miller | 272-6408 |
| Treasurer | Millie Mowry | 267-2849 | Property | M. Cote/D. Dillon | 220-3272 |
| Directors | Harold Merrifield | 633-9745 | AFMS Scholarship | Cinda Kunkler | 286-1790 |
| | Chuck Curtis | 286-1790 | Editor/Exchange Editor | Millie Mowry | 267-2849 |
| | Brad Davenport | 379-8700 | Show Chairman | Harold Merrifield | 633-9745 |
| Historian | Deborah Scanland | 273-3034 | 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 | open | ----- | Show Case Coordinator | Francis Stockton | 913-645-1131 |
| 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



Hey Members! How do you like the trivet/coaster/souvenir that the girls came up with from Lardner Monuments. Pretty fancy with our logo on it I think and they have placed a limited order of them. If you want a TGMS souvenir you better get you name in quickly to Millie as she will be selling them.

At the June picnic we had a record number of people that came and stayed for the rock auction. Thank you very much. Be sure to show up for the July Pot Luck and bring your favorite dish.

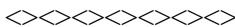
Mike and his Rock Stash



AS A REMINDER:
Classes at the Barn will resume in August. Mike and I hope to have things rearranged and cleaned up as much as we can by then.
Dave

Publicity

We also have been approved to have a booth at the Shawnee County Fair, July 20 thru 23rd. from 10 to 7 pm. WE NEED A LOT OF HELP HERE so let's all chip in and help out a few hours. This will be inside also. For more information on these activities, watch for emails or call Millie or Lesliee.

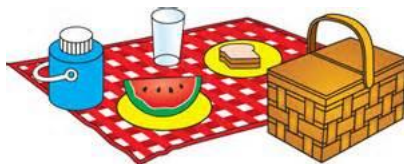


New Member

Virginia "Ginger" Chang



Visitors are always **WELCOME** at our meetings!



For the months of June July and August, we have pot luck picnics instead of the general meeting. They are held at Millie's house, where we eat inside where it is cool. So bring your table service and your favorite picnic food to share. Oh yes, and your spouses are welcome also. More on the calendar at www.TopekaGMS.org

Event Calendar

July. 2017

Aug. 2017

| | |
|-----|---|
| 1S | |
| 2S | |
| 3M | |
| 4T | NO BARN LESSONS IN JULY |
| 5W | |
| 6T | |
| 7F | |
| 8S | |
| 9S | |
| 10M | |
| 11T | |
| 12W | |
| 13T | Wire Wrap Class Millie's 1-3 p.m 7-9 p.m. |
| 14F | |
| 15S | |
| 16S | |
| 17M | |
| 18T | |
| 19W | Set up for SN CO Fair 4-8 p.m. |
| 20T | SN CO Fair 8 a.m. – 7 p.m. NO WIRE WRAP CLASS |
| 21F | SN CO Fair 8 a.m. – 7 p.m. |
| 22S | SN CO Fair 8 a.m. – 7 p.m. |
| 23S | SN CO Fair 8 a.m. – 5 p.m. |
| 24M | |
| 25T | |
| 26W | |
| 27T | Wire Wrap Class Millie's 1-3 p.m 7-9 p.m. |
| 28F | Club Pot Luck Picnic @ Millie's |
| 29S | Field Trip 10 AM Calhoon Bluffs meet @ Rees Fruit Farm |
| 30S | |
| 31M | |

| | |
|-----|--|
| 1T | Lessons at the Barn 6 – 9 p.m. |
| 2W | Advisory Meeting at Millie's 7 p.m. |
| 3T | Jr Rkhd's @ TSCPL rm 202 Wire Wrap Class Millie's 1-3 p.m. only |
| 4F | |
| 5S | |
| 6S | |
| 7M | |
| 8T | Lessons at the Barn 6 – 9 p.m. |
| 9W | |
| 10T | Wire Wrap Class Millie's 1-3 p.m 7-9 p.m. |
| 11F | |
| 12S | |
| 13S | |
| 14M | |
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Any questions ask Millie at rock2plate@aol.com

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

TOPEKA JUNIOR ROCKHOUNDS

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

To register for the Junior Rockhounds or any of the classes, email: Leslie Hartman at: Hartman.12345@hotmail.com



JR ROCKHOUND CLASSES

(Some classrooms and dates may have changed so please watch for changes) ****Here are reminders of the next 2 months of classes:

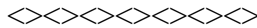
Topeka Shawnee CO Public Library sign in starting at 6:00pm and classes starting at 6:30pm.

- ❖ August 3rd World in Miniature Cinda Kunkler **Anton Room 202**
- ❖ September 7th Showmanship Pat Gilliland **Anton Room 202**

Volunteering is the heart  beat of YOUR club

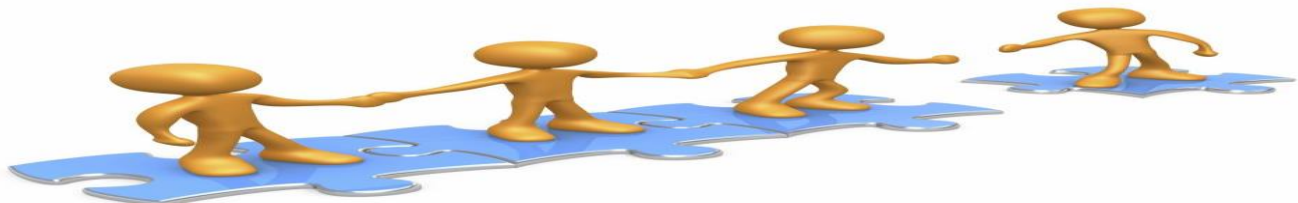
Future Field Trips

Saturday, July 29th at 10am we will be going to Calhoun Bluffs to find some fossils. We will need to meet at Rees Fruit Farm 2476 Hwy K4, Topeka, KS 66617 then we will drive over to Calhoun Bluffs. Bring water because it will be hot.



TGMS and Jr Rockhounds Activities

July 19-23 4-H at Expocentre Exhibition Hall with 2 tables inside. GMS will need volunteers to come to show their rocks, fossils, and minerals they have to the public. Wednesday July 19th, 4pm-8pm set up, Thursday July 20th 8am to 7pm, Friday July 21st 8am-7pm, Saturday July 22 8am-7pm, and Sunday July 23rd 9am-5pm. We need volunteers for each day but we do not need to be there the entire time. Email Hartman.12345@hotmail.com and let me know days and times you can help.



WORKING TOGETHER WORKS



JASPER

(Source: Hour Glass News May/June 2017, Compiled from many sources by Sue Ogden, photos by Sue Ogden, stones courtesy of Sue Ogden & John Haacke.)

Jasper is a stone known from ancient times. It's name comes from the Old French *jaspre* (a variant of Anglo-Norman *jaspe*, Latin *iaspidem*, Greek *iaspis*, Hebrew *jashpeh*, ancient Assyrian *ashpu* and ultimately the Persian *yashp*. It means "spotted stone" and was mentioned in the Bible in *Exodus 28:20* as representing the tribe of Benjamin. It is also found in the *Book of Revelation 21:11*. Egyptian priests wore jaspers and articles of jasper were placed in mummy wrappings for protection in the afterlife. Seals for the palace of Knossos have been found carved from jasper. In the Chinese Zodiac, jasper is the gemstone of the Rooster. Here it is linked to the Earth sign of Virgo. Some Native American Indian tribes used jasper to call rain and to dowsing for water.

Jasper is an aggregate of microquartz and chalcedony [SiO₂]. Agate is another form of chalcedony with the main differences between jasper and agate being that jaspers have less regular patterns and are more opaque. Jasper has up to 20% of foreign material: organic material and mineral oxides. These materials are what determine the color and appearance of the stone. Because of this, jasper is rarely uniform in color. It's usually multi-colored, spotted, striped and/or mottled in appearance. Some types have patterns resembling landscapes and are called "picture" jaspers. They're a petrified or silicified mud that has dripped into gas pockets in molten lava, become superheated and then solidified into beautiful "landscape" patterns. Hydrothermal circulation is thought to be needed for the formation of jasper!

Jasper often forms when fine particulate materials are cemented by silica. The included particles give jasper its color and opacity. In a jasper, there are enough non-chalcedony materials to interfere with the passage of light through the stone. Jaspers also form when volcanic ash is cemented into a solid material from the precipitation of silica from solution. Jaspers are found world-wide including CA, OR, ID, UT, WY and WA. Jasper is the "State Rock" of Massachusetts and is a 6.5-7 on the Mohs Scale. It's relatively common and affordable stone but in antiquity, it was regarded as valuable. There are many types of jasper - here are a few beauties:

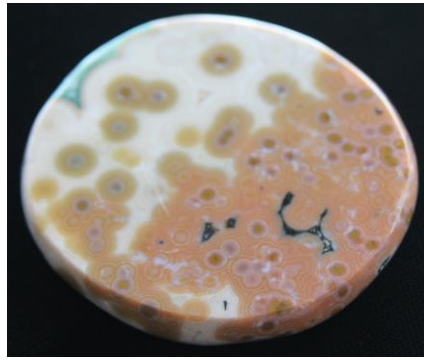
1. **Biggs Jasper** - from Biggs Junction, Oregon, with varying light and dark brown colored bands and scenic formations.
2. **Brecciated Jasper** - generally rounded fragments naturally cemented in a fine-grained matrix.
3. **Bruneau Jasper** - from Bruneau Canyon near Bruneau River, Owyhee County, Idaho. It has distinctive brown, cream and sometimes red &/or green banding with large banded circles. It's called a porcelain jasper as it takes a beautiful porcelain-like finish. It is highly prized.
4. **Bumble Bee Jasper** - bright yellows, oranges and blacks of bumble bees are what gives this stone its name. It's also called Eclipse Jasper and forms on the island of Bali near hot vents of Mount Papandayan, an active volcano. This stone is really a lithified sediment containing a volcanic brew that includes volcanic ash, gypsum, barite, sulfur and a little orpiment which is an arsenic material and must be handled with care. It's too soft to tumble.
5. **Deschutes Jasper** - from a deposit slightly east of Biggs Junction, Oregon, near the Deschutes River which is no longer being mined as it has been paved over. Deschutes takes on an extremely high polish with great depth of color and fabulous desert scenes.
6. **Dragon Blood Jasper** (AKA Dragon's Blood Jasper) this amazingly patterned stone has forest green hues of matrix (epidote) dotted with deep red drops of "dragon's blood" (red piedmontite). It's found only in Western Australia. Legend says it is the remains of ancient deceased dragons. This favorite of mine is relatively new on the market with lots of confusion about it. After tons of research, the information above has changed a bit. From The Rock Crystal Shop in Australia, I've learned this stone is a mix of Fuchsite (khaki green) with red iron oxide staining. It's found only in Pilbara, Western Australia, however some sources say it's mined only in South Africa. Regardless, it's an amazing stone but probably not a jasper. Another site states that it's serpentine!
7. **Morrisonite Jasper** - multicolored jasper from the Owyhee River gorge in Malheur County, OR.
8. **Ocean Jasper** - from the remote coasts of Madagascar (also known as Orbicular Jasper). It is reported to be a silicified rhyolite and may contain small, tight, concentric ring formations, translucent banded agate, opaque jasper and vug lines with druzy quartz crystals. It is so much more than "just jasper".



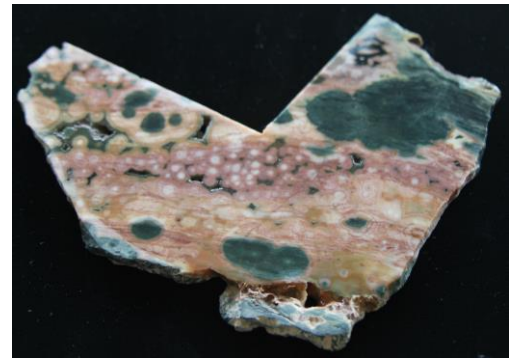
Various colors of Morrisonite jasper



Various colors



of ocean jaspers



9. **Owyhee Jasper** - from Owyhee Canyon in eastern Oregon. This stone is becoming rare as the area where it was mined was turned into a park and no mechanized removal equipment is allowed. This jasper has a stunning desert landscape in gold tones. Some stones have a very rare blue coloring.

10. **Pilbara Jasper** from the Pilbara region of Western Australia (also sometimes called Picasso Jasper) is a beautiful abstract with streaks of crimson, gold, black and chocolate.

11. **Poppy Jasper** from Morgan Hill (AKA Morgan Hill Jasper) is a famous but increasingly rare orbicular jasper that resembles “poppy flowers”. It is an astonishingly beautiful red, yellow, orange, gray and black stone from California. Another “poppy

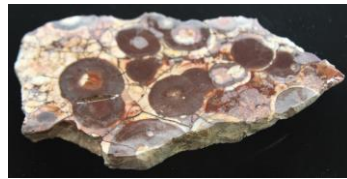


Lovely slab of Pilbara jasper.

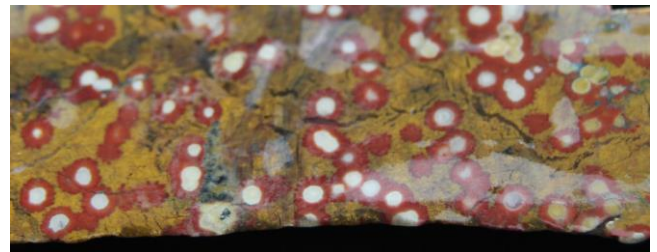
jasper” is called Guadalupe and also comes from northern CA close to the San Andreas fault system. From samples I’ve seen, Morgan Hill generally has a black background while Guadalupe has a yellow background; both with the red orbicular patterns and absolutely stunning.



Morgan Hill jasper



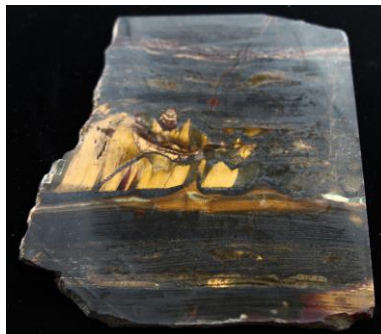
Brown orbicular



Poppy or Rainforest jasper



Gary Green jasper



Marra Mamba Tigereye jasper



Kona Dolomite from the Upper Peninsula of Michigan



Palm Root

FINAL NOTE: If you’d like to research jasper further, here are more names to check out. Some of these are really very beautiful. Brown Orbicular Jasper; Cave Creek Jasper - reddish stone found near Cave Creek, Maricopa County, AZ; Cherry Creek Jasper; Dalmation Jasper (not truly jasper); Egyptian Jasper; Gary Green Jasper (sometimes called Swamp Bog); Jaspelite; Kabamba Jasper; Kinradite; Kona Dolomite Jasper; Lavender Jasper; Leopardskin Jasper; very limited Marra Mamba Tigereye Jasper from Australia, Moss Jasper (there is also moss agate that’s more translucent); Noreena Jasper, Opalite Jasper (AKA Tiffany Stone) that some sources say is not a jasper); Picasso Jasper AKA Picasso Marble (from Utah and is dolomite marble); Palm Root jasper; Picture Jasper; Polychrome Jasper; Rain Forest Jasper; Red Jasper (also see Cave Creek Jasper); Royal Sahara Jasper; Sonora Jasper (may be Sonora Sunset which is Chrysocolla Cuprite from Sonora, Mexico); Stone Canyon Jasper; Wild Horse Picture Jasper (also from Owyhee Mountains); Willow Creek Jasper; and Zebra Jasper (AKA Black Zebra Jasper). And to intrigue you even more, a few photos of some special jaspers!

HOW TO CUT OBSIDIAN

Gold Sheen:

To get the most out of mahogany gold sheen obsidian, examine the stone to identify the banding and saw with the bands, as if they were a stack of plates that you want to unstuck. Watch for “Fire spots” in gold sheen. It is not plentiful but opal-like colors do sometimes occur in mahogany gold sheen.



Iridescent:

There are two types of iridescent obsidian. In cutting both correctly, the orientation of the color is most important. One type is banded and the color lies in the bands. The other type is un-banded and the surface has to be chipped to find the color. Additionally, the banded type will have several colors or shades, while the un-banded will have only one. Cut the banded type parallel to the bands to get the effect. To get rainbow effect, cut the stone at an approximately 15 degree angle across the bands.



Midnight Lace:

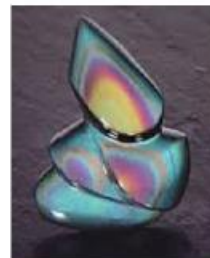
Lace pattern obsidian should be cut across the pattern that you desire to show.



Rainbow:

Cut parallel to flow layers. These can be seen by examining fractured surfaces using an overhead lamp bulb. They are not always straight; it may be necessary to turn the stone slightly in the saw. Examine each slab set with either water or oil to see if the correct angle has been obtained.

Grinding and polishing obsidian: Approach your grinding wheel with the material at a slight horizontal angle. If brought straight in, it may be a “Shattering” experience as obsidian fractures conchoidally, and this is a sure way to do it. Though obsidian is comparatively soft, it is still very important to sand away all scratches before going to polish. Some advise that wet sanding be done, since obsidian is heat sensitive and very brittle. For final polish, felt with cerium oxide is the choice. Keep the polishing wheel wet. A dry polish will result in blisters and scratches. After obsidian is sawed, be sure to bevel the edge on you fine grinding wheel to keep them from flaking and chipping. Should you be faceting some particularly gemmy obsidian, try cerium oxide on Lucite – but keep it wet.



Safety: Wear goggles at all times. A small chip of obsidian can be close to transparent and if it got into your eye, it could be very hard to see – even with a powerful magnifying glass. The sharp edges of the chip may cut and damage the surface of your eye before you can get it removed.

(Quarry Quips 5/04; via Emerald Gems, via Chips & Splinters 6/14; via the Clackamette Gem 5/17)

More thoughts from forums on obsidian

For a banded effect cut at a 90 degree angle to the bands.

If you want a more chatoyant effect (and the ob you're cutting supports it) cut anywhere from dead on “with” the bands to 12 degrees off-plane. Cutting with the bands is also a good way to get that circular eye effect if you dome it. For good tiger eye effect I always cut dead on parallel with the bands and I try to do it atop a thick band or thick gathering of bands of the same color. If you can see the teeny fiber-like structure when you do this and you're making a long cab then orient the fibers 90 degrees off the length (perpendicular to the length) so they run up and down the narrow direction (like a keyboard and they're the keys). When domed you should get a tiger's eye that goes back and forth the long way when turned in the light. I also cut most of my ob slabs (for this kind of thing) extra thick because sometimes you have to move past impurities in the grind or finesse the orientation to get it dead on.

The further off plane you cut, the wider the bands (and the gaps between the) will appear.

That's just how I do it for the larger free-form garden and palm stones/paperweights I've made and it's worked really well. I have a 1” thick piece of Davis Creek about the size of a pack of cigarettes that I cut that way and it looks like one of those eyes in war of the worlds when you turn it in the light.

(Obsidian con't)

If you have enough material I recommend making a test cut into it first so you can see what you're dealing with re colors and all. I do this by finding the bands on the outside on the outside (or making some wafer thin slices (or a quick shallow grind here and there) then cutting a slice at 30 to 50 degrees off plane (the more you have to test with, the further you go toward 50 degrees for a wider thicker band spread) Get a dish of water, drop it in and hold it under a light as you turn it (ob always goes into fullest unpolished glory completely submerged) to see what you've got to work with and be sure to keep each test slice with it's parent rock. You never know – there are sometimes some really amazing surprises mixed in with otherwise boring looking bands. I found baby blue beneath harsh green when I ground away just enough of the green to see through to the blue. I got an eerie (wavery looking) yellow.



MOSQUITO YARD SPRAY

I found this on the Internet so try at your own risk, it just sounded like a good way to rid the pesky mosquito's in your yard and maybe even while camping.

Big bottle of blue cheap mouthwash

3 cups Epson Salts

3 stale 12 oz. cheap beers

Mix all together until salt is dissolved. Put into spray bottles and spray around yard, won't harm plants or flowers. Keeps mosquitos away approx. 80 days. Millie M.



Pictures from recent field trips

