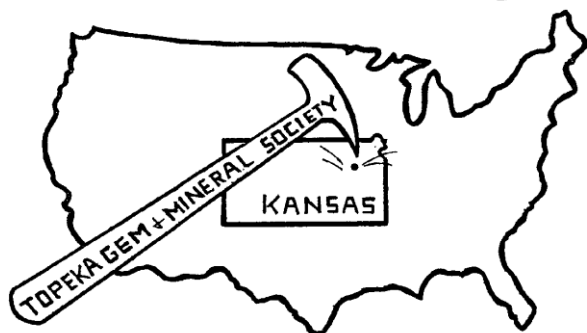


The Topeka Gem and Mineral Society, Inc.  
 1934 SW 30<sup>th</sup> St. Topeka, KS 66611  
 Rock2Plate@aol.com

# THE GLACIAL DRIFTER



[www.topekagemandmineral.org](http://www.topekagemandmineral.org)

Facebook: Topeka Gem and Mineral Society Field Trip

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. 57, No. 05, May, 2014

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: 4<sup>th</sup> 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 30<sup>th</sup> St, Topeka, KS 66611.**

## 2014 OFFICERS AND CHAIRS

President	Mike Cote	220-3272	Cab of the Month	Debra Frantz/Fred Zeferjohn	862-8876
1 <sup>st</sup> Vice Pres.	Dave Dillon	272-7804	Field Trip Coord.	Larry Henderson	-----
2 <sup>nd</sup> Vice Pres.	Carolyn Brady	233-8305	Publicity	Donna Stockton	913-645-7677
Secretary	Cinda Kunkler	286-1790	Welcome/Registration	Jason Schulz	379-5538
Treasurer	Millie Mowry	267-2849	Property	M. Cote/D. Dillon	379-5538
Directors	George Reed	836-9277	AFMS Scholarship	Cinda Kunkler	286-1790
	Harold Merrifield	286-3548	Editor/Exchange Editor	Millie Mowry	267-2849
	Chuck Curtis	286-1790	Show Chairman	Harold Merrifield	286-3548
Historian	Deborah Scanland	273-3034	Show Dealer Chairman	Dave Dillon	272-7804
Federation Rep	Harold Merrifield	286-3548	Show Secretary	Cinda Kunkler	286-1790
Corporation Agent	Millie Mowry	267-2849	Jr. Rockhound Leader	Larry Henderson	-----
Librarian	Lucy Hrenchir	267-3325	Show Case Coordinator	Francis Stockton	913-645-7677
Web Master	Jason Schulz	379-5538			

Area Code for all numbers is (785).



## Words from our V. P.

Classes started last night and we had a full house! Everything went very well and we had four new students and six regulars in attendance. Everyone was glad that we started up again and you couldn't of ask for a better night for temps. Looking forward to summer and the classes as we will be starting castings lessons for those who are wanting to do that. Will start with some of our regulars first that have gone through our stone cutting and silversmith classes already. Hopefully everyone will show up for our May regular meeting and then be ready for our summer picnics at Millie's house!!! Bring your cabs and jewelry projects for our monthly cab and jewelry contests! We will see everyone at the May meeting!! Dave-

\*\*\*\*\*

## Fieldtrip Calendar - April 2014

- The first and third Tuesday night the Fossil Special Interest Group will meet at 7:00 p.m. at Baker's Dozen, 4310 SW 21st St, Topeka, KS. We will discuss fossils and other collections. Come join us with show and tell on May 20.
- May 31, Field Trip, Holliday Drive and I-435, KC, Ks, to be hosted by Ken Stalder. Meet at site 10:00 a.m. or meet at McDonalds, 11<sup>th</sup> and Kansas, leave at 9:00 a.m. Ken will have a special presentation for the Junior rockhounds.
- June 3, 7:00 p.m. Fossil Special Interest Group, Show & Tell, at Baker's Dozen

Field Trip Saturday May 31, 2014

**This Saturday we will meet Ken Stalder, a geologist and past president of TGMS, at Kansas City at a site that has marine fossils. The prize find will be the Conularia and trilobites.**

We will meet at McDonalds, 11<sup>th</sup> and Kansas, here in Topeka, at 8:30 and leave at 9:00 a.m., to car pool to meet Ken at the site. Anyone wanting to meet us at the turnpike rest stop, east of Lawrence, let me know. Anyone wanting to meet in Kansas City, Ken will be there at 10:00 am.

**If interested in this trip, please let me know to expect you.**

### What to bring:

Something to pry fossils out of the ground.

Long screwdriver, rock hammer, or pry bar  
Something to put items in.

Plastic bags, boxes, bucket,

Eye protection, Magnifying glass,

Personal gear:

Hat, to shade sun; Suntan Lotion; Bug repellent.

Public Facebook Page: <http://www.facebook.com/pages/Topeka-Gem-and-Mineral-Society-Field-Trips/92795058262>

An up-to-date Calendar can be found on the Topeka Gem and Mineral Society Website:

<http://topekagemandmineral.org/calendar.html>

Trips dates are tentative and subject to additions and change. E-mail Larry if you have an interest in any of these trips

[LHenderson85@gmail.com](mailto:LHenderson85@gmail.com) Larry Henderson, Field Trip Chairman

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Conularia found on previous trip.



## Up Coming Show Dates

May 30 – June 1 Tulsa, OK. Expo Square 4145 E. 21<sup>st</sup> Fri 12-6, Sat 10-6, Sun 10-5 email [info@gemfaire.com](mailto:info@gemfaire.com) or [www.gemfaire.com](http://www.gemfaire.com)

June 7 - Delta, CO. Delta County Rock Wranglers; Heddles Recreation Center, 530 Gunnison River Dr.; Sat 9-5, free admission 970-856-3861 [masinton@tds.net](mailto:masinton@tds.net)

June 7 – Springfield, MO. Rock Swap & Gem Fair at Missouri Institute of Natural Science, 2327 W. Farm Road #190, Sat 9-5, Sun 10-4; free admission 417-882-8449 [llillich@mchsi.com](mailto:llillich@mchsi.com)

For additional listings of gem shows see [www.rockngem.com](http://www.rockngem.com)

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# Microcrystalline Quartz

By Beth Heesacker

Microcrystalline quartz is made up of such small crystals that they cannot be seen by the naked eye. They are also called cryptocrystalline. They come in two general forms: fibrous and grainy.

**FIBROUS** – quartz crystals are arranged parallel to each other

## Agate

Agate is translucent which means light can shine through it. This makes it different from jasper which is opaque. They can be any color caused by the impurities picked up by the quartz. Color banding is usual in agate and can be wall-lining banding (like the layers in an onion) or horizontal banding. In the wall-lining banding sometimes impurities are pushed up by the growing crystals and end up being bands of color between growths of crystals. These and horizontal banding can be found in many of our local thundereggs. Some of the more famous agates are Montana, Brazilian, Botswana and Lake Superior.

Montana Agate



## Carnelian

Translucent and a bright orange to red, this quartz is highly sought after. The color is from iron impurities. Sometimes duller carnelians are heat treated to bring out a brighter color. The best carnelian is red throughout but most only has an orange or red exterior and the inside is clear.



## Chrysoprase

Chrysoprase is one of my favorites. Its green color comes from the nickel impurity willemite in the serpentine rock. Most chrysoprase comes from Australia but some can be found in Poland.



## Tiger Eye

This rock originally formed as asbestos. Then the quartz and iron oxide comes along and transforms the asbestos into a beautiful pseudomorph.



## Petrified Wood

When wood is buried by a volcanic eruption the wood cells can be replaced by silica rich fluids and petrified. Also if the wood rots and leaves a cavity that can be filled by agate or jasper.



## Chalcedony

Chalcedony is a dense, usually botryoidal in form, type of quartz. It is not transparent nor is it opaque. Two examples are chalcedony roses or fire agate. The term can have many meanings depending on the context though.

Some consider chalcedony anything but jasper and chert. Others consider it anything not jasper and chert but also anything that does not fit in all the other classifications above.



**GRAINY** – quartz crystals are arranged randomly

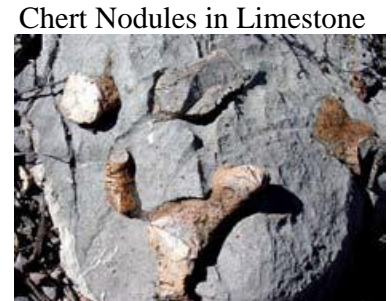
## Flint and Chert

These are very close cousins. Most people use the word “flint” for the nodules and “chert” for the more massive types. Other people classify them by color, the dull grays, browns, reds and yellows being flint and the brighter more colorful ones being chert.

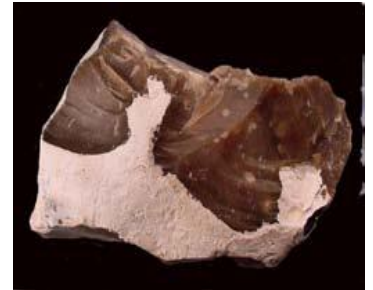
The differences in colors are caused by impurities and inclusions of organic material, metal compounds, etc. Sometimes cavities can be found in flint and chert in which small quartz crystals have grown.

Some nodules of flint can be found with a white coating which is silica. It has a conchoidal fracture and has been used by the Native Americans, along with other microcrystalline quartz materials, for making arrowheads and spear points.

Flint is found in sedimentary rocks and is composed of the skeletons of marine organisms cemented together with silica to form concretions .



Flint from England



## Jasper

This is a dense and opaque form of quartz. Again the colors come from impurities of many kinds. Jasper can form in veins in the cracks of volcanic rocks. The patterns in the jasper have been given many names such as “ocean”, “poppy”, picture, etc. One of my favorites is “brecciated” which forms when the jasper is broken by tectonic earth movement and then cemented together with more jasper or agate.

Jasper can be banded, spotted with other colors such as the green jasper with red spots known as bloodstone. Ocean jasper is particularly beautiful with its bands and orbicular formations.

Brecciated Jasper



Ocean Jasper



\*\* All images courtesy of R.Weller/Cochise College unless otherwise noted.

\*\*Information summarized from the website [www.quartzpage.de](http://www.quartzpage.de)

This is the last in this series. Many thanks to Amir Chossrow Akhavan for his knowledge and the willingness to share it with us all. Please visit his site [www.quartzpage.de](http://www.quartzpage.de) for more details and more beautiful pictures.

(Source: *The Clackamette Gem* October 2012)

# TOPEKA JUNIOR ROCKHOUNDS

Facebook:

<http://www.facebook.com/TopekaJuniorRockhounds>



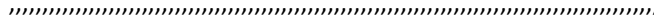
The Next Meeting Will Be:

Thursday, June 5, 6:30 p.m.

Town and Country Christian Church, 4925 S.W. 29th.

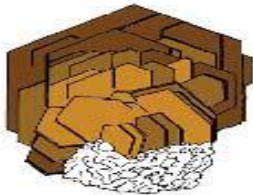
Rocking on the Computer (Jason Schulz)

Gemstone Lore & Legend (Will Gilliland and others)



## how tough is a mineral?

Mineralogists use a collection of special words to describe "how tough" a mineral is. These words describe how a mineral will break, crumble, split, bend or in some way change shape. Mineralogists call this *tenacity*. Have you seen any of these properties in the minerals in your collection?



**Elastic** a mineral is elastic when it is bent a little and, when you let it go, it returns to its original shape. Mica minerals like muscovite, biotite, phlogopite, and lepidolite show this property very, very well. Get a thin piece of mica and try it out yourself!

can be hammered into very thin sheets without breaking. Metallic minerals, all of which are native elements, are malleable. The malleable minerals are gold, silver, copper, and platinum.



**Malleable** A mineral is malleable when it



**Ductile** A mineral is ductile when it can be stretched into long wires. Minerals that are malleable are also ductile. so, the ductile minerals are gold, silver, copper, and platinum.

**Friable** A mineral is friable if it crumbles easily. Some marcasite specimens are friable when they begin to break down (a process called *sulfur decay*.)

**Sectile** A mineral is sectile if it can be cut into shavings with a sharp knife blade. Gypsum can be sectile.

**Fragile** A mineral is fragile if it breaks into pieces easily. This can apply to a number of different minerals including gypsum, calcite, fluorite, etc.

