



ROCK SOLID

FEBRUARY 2023 MONTHLY BULLETIN

A non-profit 501(c)3 group founded in March 1956, organized to educate the general public and members' knowledge of Mineralogy, Gems, Jewelry Making, Fossils and related earth sciences.

MEETINGS: The meetings are the first Thursday of each month except June, July, August and December. The Clubs annual holiday party is in December and the annual picnic is in June which includes a silent auction. Visitors are always welcome.

The meetings are at Hope Chapel (formerly Indian Creek Community Church), 12480 Black Bob Road in Olathe, Kansas. Meeting times are from **6:45 to 8:45** and we must be out of the building by 9:00. We meet on the lower level in room **018**. 6:45 to 7 PM is not structured, as member's fellowship and have a raffle. At the end of the raffle anyone who purchased tickets - and did not win anything - can go take one item from the table. The meeting starts at 7 PM followed by the guest speaker. Information is available at our website: olathegemclub.org

DUES: \$10.00 per year for individuals / \$5.00 per year for minors / children under the age of 12 are free. (Due by May meeting, and delinquent by September meeting)

OFFICERS and CHAIRPERSONS 2022 – 2023:

President: Norman Onnen (816)645-1333

Vice President: Vacant

Secretary: Alison Betts (913)962-9584

Treasurer: Barbara Crompton (913)492-6783

Website and Editor: Dan McDaniel (913)963-5357

Membership Chairman: Leslie Hartman (785)380-6016

Field Trip Coordinator: Leslie Hartman (785)380-6016

Field Trip Assistant: Larry Wells (913)787-5138

Programs: Vacant

Librarian and Historian: Norman Onnen (816)645-1333

Gem Show Chairman: Norman Onnen

Raffle: Lisa Hulbert

Association Delegates: Chet McLaughlin & Mandy Lorenz

Alternate Assoc. Delegates: Larry Wells

PRESIDENTS MESSAGE:

Meetings/Programs, etc.

Our OGMS club meeting on Feb. 2, 2023 program will feature a presentation entitled "Gold and Man-Made Diamonds" by Tom Tivol, with Larry Wells. Presentations by Tom are very informative and interesting and we always look forward to his vast subject knowledge, experience, and lively presentations. Be prepared to hear and learn more about the subject(s) than the title suggests!

A REMINDER: We meet the first Thursday evening of the months of Jan.-May and Sept.-Nov., with other periodic events/meetings, field trips, etc. occurring with notices distributed as needed. Meetings are at Hope Chapel, 12480 Black Bob Road, Olathe, KS, 66062, at 6:45 - 8:45 PM in room 018. Our meetings consist of greetings/introductions, a raffle, light refreshments and a presentation related to our gem and mineral interests. Guests and visitors are always welcome. Following each meeting, please plan to leave the building by 8:45 PM as security alarms are set to activate at 9 PM.

At our Jan. 5 meeting we were pleased to have a presentation by Stacy Cavanaugh, advisor, and three youth from the Olathe North Geoscience Academy discussing their vibrant program and interests. Cited were Geoscience Investigation, Geoscience Applications, Lithosphere and Hydrosphere Strands, and Geoscience electives. We look forward to associating with this group going forward and welcome them to all of our activities and meetings.

The program for the March 2 meeting will be announced soon. At this meeting we will also discuss and prepare for the March 10-12, 2023 Gem and Mineral Show that we annually participate in.

March 10-12, 2023 61st Annual KC Gem and Mineral Show

Our Olathe Gem and Mineral Society, as one of the seven area earth science focused organizations, participate in the planning, organization and execution of an annual gem and mineral show. Under the auspices of the non-profit educational Association of Earth Science Clubs of Greater Kansas City, the 61st Annual Gem & Mineral Show will occur March 10-12, 2023 at the KCI EXPO CENTER, 1730 NW Ambassador Drive, Kansas City, MO. Each club and their members as volunteers actively participate in the performance and success of each show which awards scholarships to area college students studying earth sciences.

Volunteers — Volunteers from the participating clubs are always needed and welcome. A list of those who have indicated they will volunteer has been submitted, however more are always needed. Should you have the time and desire to volunteer part time please contact one of the club officers, or Kara Paris who organizes and coordinates volunteer tasks and times. Kara can be reached at 816-682-5622 or threetrails@sbcglobal.net. Club volunteers are asked to identify to Kara the club they represent.

Display cases — The clubs/club members place display cases for the duration of the show which include items of G&M related specimens, jewelry pieces they produce, collect etc. As of January 15 there have been indications from OGMS members who intend to place 11 display cases (A. Betts -1; B. Crompton - 1; L. Hines - 2; N. Onnen - 2; M. Purduski - 2; L. Wells - 3).

As clubs are credited and compensated for the cases displayed, we wish to place as many as possible.

FOR THOSE WHO PRESENTLY DO NOT HAVE CASES AND ARE WISHING TO DISPLAY, THERE ARE CURRENTLY 4 CASES AVAILABLE FOR LOAN (AND MORE CAN BE OBTAINED AS NEEDED).

(Contact Norm Onnen if you desire to obtain a case for display during the show —

onnenne@kc.rr.com or 816-645-1333).

Sales (SWAP) tables — A limited number of sales (formerly SWAP) tables are available, under contract, for interested club members. Leslie Hartman is the person in charge of the Sales Tables.

NOTE: This is an Association procedure new this year and needs immediate attention by those individuals intending to have a sales table. (Leslie's contact information is 785-380-6016; hartman12345@hotmail.com).

Leslie Hartman is the person in charge of the Sales Tables this year. We have discontinued using swap dollars so you must take cash or equivalent. You are responsible for any taxes collected or paid to Missouri Department of Revenue.

Set-up for the Swap will begin on the afternoon of Thursday, March 9, **starting at 1:00 p.m.**

Club members who want tables must work for the show, putting in at least 6 hours work at the show and paying \$60.00 per table for the three-day show. If you cannot work during the show, then the table price is \$125 per table. Non club members pay \$125.00 per table for the three days of the show. The show committee will set up the tables which cannot be moved without permission from the Swap Chairman. There will be no covers for the tables so you must bring your own. If you break the contract, you will be removed from the swap area anytime during the show. If you cancel the contract the week before the show Friday March 3, 2023, you will receive a refund minus 10% charge.

If you plan on being in the Swap, please let me know and give me a list of all people that will be manning your table by February 2, 2023. Mark Sherwood will print badges for you before the day of the show. That way you and your table workers will have access to the facility during any of the regular Vendors' hours. Remember, be there at 1:00 p.m. on Thursday to get your choice of table/tables—First Come, First Serve basis with a max of two tables/swapper, initially. This contract must be signed and sent back with payment (**cash or check**) by February 2, 2023.

"Fill the Bucket" — At the G&M show, the Association has a sales booth, the proceeds of which go to the Association Education Fund. The items sold at this booth are all donated. OGMS member Chet McLaughlin chairs this booth and we (OGMS) wish to assist him and the success of the activity. To this end we are asking members to search their rock shops and areas for surplus specimens, etc. which we can "fill the bucket" and donate to the cause. **Please bring any such surplus items to the OGMS General Meeting on February 2nd and help "fill the bucket(s)" that will be provided.**

OGMS T-Shirts

Providing each OGMS member matching T-shirts was suspended during the pandemic. Barbara Crompton is taking the lead on re-instating this program, and if she has not already, she will be contacting the newer members to determine size, style, etc.

Tucson

The 68th Annual Tucson Gem and Mineral Show (this year titled "Silica; Agates & Opals & Quartz, Oh My!") is the international premier G&M event of the year to take place in the U.S. While the extended unofficial activities begin in Jan. at Quartzsite, AZ (some of our club members are already there), the Tucson portion basically begins with people, vendors, etc. picking up converging on Tucson, AZ about Feb. 1 - and the formal show in the Tucson Convention Center will occur this year Feb. 9-12, 2023 - - after which most attendees, vendors, etc. disperse until the next year.

As a side to the annual Tucson show, many visited the Flandrau Science Center and Planetarium on the U. of Arizona campus (which had been an effort with very limited access and parking). The COVID pause was an unplanned benefit in that the museum was being moved and then re-opened in July 2022 as the Alfie Norville Gem and Mineral Museum (115 N. Church Ave.) in the Old Pima County Courthouse (walking distance from the convention center). This outstanding museum, which is open Tuesday thru Saturday, will rotate 20 percent of the specimens per year.

For those planning a visit to a Tucson annual show (by other than air transportation which would make rock collecting difficult) a suggested circle route is I-40 to Flagstaff and south on I-17 and I-10 to Phoenix and Tucson. Return on I-10 to Las Cruces, NM and north on I-25 to Alb., NM. There are specific reasons (if ample time is available), as follows: Between the NM/AZ state line and Flagstaff good stops are Painted Desert/Petrified Forest National Park, Homolovi State Park at Winslow (1 mi. N. of the highway - no collecting), Meteor Crater (18 mi. south of the highway), Walnut Canyon National Monument, and the outstanding Museum of Northern Arizona at Flagstaff. On the I-17 and I-10 path a good (but rather distant side trip in Jan.) is to Quartzsite, AZ - where you might see some OGMS members. Leaving Tucson on I-10 one should not miss the exceptional free museum at Deming, NM where an outstanding display of geodes and thundereggs (the Geode Kid collection and Baker Ranch nodules) and Mimbres artifacts are housed. From there on I-10 to I-25 in Las Cruces and the NM State University, and the adjacent to campus private Zuhl petrified wood museum is located. Then north on I-25 to the free new Socorro, (NM) Mineral Museum. (Unfortunately, the Socorro Museum was scheduled to exhibit at our KC show this March but had a conflict of schedule and had to cancel). Remember - Bring lots of water to the SW, and return with many rocks, minerals and specimens!!!!.

Picnic Time

Not jumping the gun, or exhibiting cabin fever (Johnson County, KS operates on a first come basis for reservations), we have scheduled our annual summer picnic for Saturday, June 3, 2023 (3:30 - 10 PM). This will once more be at shelter #3 in Johnson County's Kill Creek Park (in Olathe, KS). For those who plan their summer vacations early, please place this picnic on your respective for calendars coordination

purposes. Thanks to Dan McDaniel for once again working with Johnson County Parks and Recreation Dept. in arranging this event for us.

FIELD TRIPS:

I am looking into a few places to start either February or March to begin the field trip depending on weather.

If you have any ideas for a field trip, please let me know by email or text hartman.12345@hotmail.com or 785-380-6016. Lesliee.

NEWS, VIEWS AND REVIEWS

Quartz twins - - or how winter doldrums affect some (but not all) rockhounds

First of all Alpha (low-quartz - stable below 1,063 degrees F) and Beta (high-quartz - stable above 1,063 degrees) are not the names of the Quartz twins (gender unknown). Nor is left- and right-handedness related to the writing ability (or the lack of being ambidextrous) of quartz twins. This all leads to the procrastination of wishing to understand crystallography (without expending the prerequisite effort to fully or adequately understand the topic properly). Thus, the winter about us, and the desire to be out and about rocks, leads to random activities of reading about, touching and organizing (to various and always unfinished degrees) our collections.

Which leads to an article in the Nov./Dec. 0222 The Mineralogical Record entitled "Reichenstein-Grieserental Quartz Twins: Two Angles Named in a single Twin Law", by mineralogist Bob Morgan. His interest in the relatively rare V-shaped Japan-law twin quartz clusters morphed into the study of other, and rarer, twin types - of which over 15 various types have been confirmed, and more are suspected. One of these is named the Reichenstein-law (originally found in 1851 in Poland). Another somewhat similar cluster named the Grieserental-law was found in Switzerland in 1905. From this evolves the Bob Morgan account of several relatively rare Japan-laws being collected from the Devils Mountain Claim in King County, Washington and the nearby Mt. Teneriffe Claim. Of these it was recognized that some exhibited the Reichenstein profile, while others were thought to have the Grieserental feature - - and eventually it was considered that while some are separate, others were combined, thus the "R-G Law". So, currently being able to collect several of the rare Japan-law twins, and now possibly the rarer R-G laws has generated renewed interest and enthusiasm. That points to recognition of Arkansas, arguably the most prolific quartz crystal collection location in the U.S.

In "The Frequency of Twin Types in Quartz Crystals" by H. R. Gault (American Mineralogist, Vol. 34, 1949) there was a description of a study for 1,179 crystals from six locations in Arkansas which revealed "that twined quartz crystals are much more common than untwined and that frequencies of twin types and the ratios between twin types vary from locality to locality." (Which brings the mention of Dauphine and Brazil laws - a function of left- and right-handedness held for a separate discussion). In the study, the majority of the specimens came from what was then the Fisher mines about seven miles from Mt. Ida, Montgomery County, Arkansas. Of these 46% exhibited some form of twin laws. The point is that

collectors who have frequented the Arkansas quartz mines should re-examine their collections of quartz clusters and familiarize themselves with the possibility of having desirable twinned quartz in their holdings. A good start for this would be to familiarize one's self and understand Japan-law and the c-axis of the crystal. N. Onnen

Specific gravity presentation - and jade

Thanks to Mike McClurg for his specific gravity presentation at our Jan. 2023 meeting. Continuing this topic, Mike suggests interested persons visit "Quick Test Method for Determining Specific Gravity of Mineral Specimens" (johnbetts-fineminerals.com) (Prior to his presentation Mike applied his testing procedure to each jade/jadeite vs. jade/nephrite piece offered in Dec. 2022 at the Robinson dispersal sale. It is understood that he identified only one piece of jadeite from the collection, the rest all being nephrite.

Which brings the opportunity to discuss historical jade. Jade has been used by man as much as 5,000 years ago for weapons and tools based upon its toughness and wearability (even over metals), and it was not until 1863 that gemologists determined that jade was actually two different minerals - nephrite and jadeite, that had different chemical and crystal structures. (Nephrite, a Sodium magnesium and calcium silicate with intertwining crystal structure, and jadeite, a Sodium aluminum iron silicate with interlocking crystal structure). In ancient times, within what was then China, all "jade" (which was actually nephrite) was from the far west Kunlun Mountains in what was then a part of Turkestan (this area acquired by China in border expansion following WWII.) In fact, jade (jadeite or nephrite has never been found in original China. (Although, nephrite has been reported as having been mined on the east side of the island nation Taiwan). As to be expected, in China jade was highly revered and controlled by the ruling class. Upon the discovery and importation of jade ("jadeite") from Burma, only as recently as the late 1700's, this became the most highly cherished and precious form of jade - a circumstance that continues, but does not displace or discredit, the excellent carvings of nephrite jade produced by "state sponsored" artisans preceding the transformation. N. Onnen



This softball sized jadeite is in the Maya exhibit, presently at Union Station until March 12th. Note the "crust" which is typically looked for covering jade (jadeite and nephrite) prior to being worked.

Prehistoric Kansas

A recent (Jan. 11, 2023) Prairie Fire presentation by Kallie Moore (Paleontologist, Author and Co-host of

PBS Eon) entitled “Tales of Prehistoric Kansas; 303-283 million years ago” included Late Paleozoic Era finds in the Hamilton quarry (near Hamilton, KS), and at the Elmo site (south of Abilene, KS). The Elmo site, while inaccessible, is known for insect fossils including 30” wide dragonfly wings. The Hamilton quarry is of interest in that the OGMS hosted a field trip to there on Oct. 23, 2021. It is significantly recognized not only as a “Lagerstätte” (a sedimentary deposit that exhibits extraordinary fossils with exceptional preservation), but a “Konservat-Lagerstätte” (a conservation lagerstätte due to the quality and preservation of soft tissue and skin preservation. This site is unique in that it is a preserved “paleovalley that was incised into the surrounding Carboniferous cyclothemic sequence during a time of low sea level and was then filled in during a subsequent transgression.” The paleobiota contains finely preserved terrestrial, freshwater, aquatic, brackish and marine fossils (i.e., vertebrates, arthropods, mollusks, other animals, lycophytes, ferns, gymnosperms, spores, pollen, and fusulinids). An extensive (from thesis) listing of the paleobiota is available in the Wikipedia reference.

This important site is owned by, managed by, and designated as an Emporia State University (ESU) natural area. The (field trip) challenges regarding the site are informally identified in the KGS reference - these being that the site is a long-abandoned quarry with poor exposure because of heavy vegetation and much of the surface rock is not in situ due to lag or backfill during quarry operations. It is stated that “over the past 40 years of fossil collecting, good exposures of the rock units, primarily the fossiliferous limestones above the conglomerate, were removed or greatly disturbed.” Additionally, it is reported that the KGS re-investigation (Open File Report 2005-13) raises questions about the accuracy of the 1999 published geologic map of Greenwood County, K - and corrections are proposed, which because of lack of exposure would suggest/necessitate only core drilling and study.

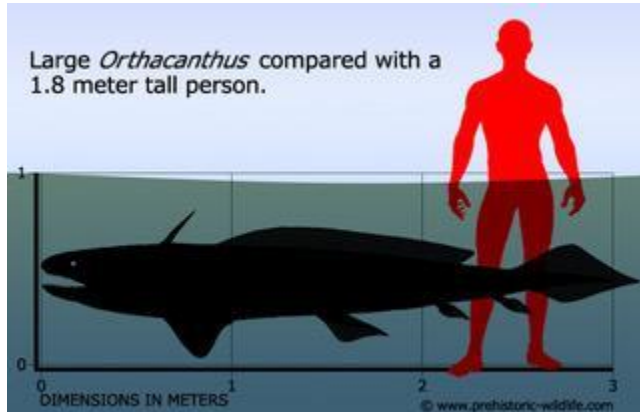
Ms. Moore attended UMKC and graduated from Emporia State University (B.A. Geology/Earth Science) in 2007. Her senior thesis was “Taxonomic Diversity of Invertebrate Fossils from the Severy Formation (Upper Pennsylvanian) of Turkey Point, Melvern Lake (a site OGMS has visited numerous times for field trips). She also had a paid internship at Ashfall Fossil Beds State Historical Park, Nebraska. She is currently the Collections Manager at Montana University, Missoula, MT.

References: The Surficial Geology of the Hamilton Quarry Area, Kansas Geological Survey (KGS) Open-file Report 2005-13.

Hamilton Quarry (<https://web.archive.org/web/20050208022256/http:emporia.edu/earthsci/museum/>)

Hamilton Quarry; Wikipedia

(Below: An Orthacanthus - reported (via thesis) the largest vertebrate that might have been found in the subject environment. Let us know if you have one in your collection you’d like to display).



Name: *Orthacanthus* (Vertical spike).

Phonetic: Orf-ah-can-fus.

N. Onnen

RMFMS Delegates Meeting

The following information is from Linda Jaeger, RMFMS BEAC Chair. These are the minutes of the June 18, 2022 RMFMS Delegates Meeting. RMFMS President, Sheri Johnson, asked that this information be shared with all the club editors and can be reprinted as part of their newsletter.

I have decided to include this information as a link on our website. The link is

<https://olathegemclub.org/wp-content/uploads/2023/01/RMFMS-Delegates-Meeting-Minutes-June-18-2022.pdf>

Dan McDaniel

UPCOMING EVENTS

Upcoming Events and Shows

If you have interest in any of the shows listed here, please check the status of the shows and promoter notices.

Feb 2 – OGMS monthly club meeting: 6:45 - 8:45 PM

Feb 9 – 12 – (Main Show) Tucson Gem and Mineral Show

<https://www.tgms.org/show#:~:text=February%209%E2%80%9312%2C%202023>

Mar 2 – OGMS monthly club meeting: 6:45 - 8:45 PM

Mar 9 – KC Gem and Mineral Show – Set Up

Mar 10 – 12 – KC Gem and Mineral Show; KCI Expo Hall

Apr 1, 2 – Lincoln Gem and Mineral Show <https://www.lincolngemmineralclub.org/happenings/annual-show>

Apr 6 – OGMS monthly club meeting: 6:45 - 8:45 PM

Apr 21 - 23 – Wichita Gem and Mineral Show, Cessna Activity Center

<https://wichitagemandmineralsociety.org/show/>

May 6 – OGMS monthly club meeting: 6:45 - 8:45 PM

May 12 - 14 – Central Missouri Rock and Mineral Show

<https://cmrlc.org/rock-%26-mineral-show>

Jun 2, 3 – Ozarks Gem and Mineral, Springfield Rock & Gem Fair

<https://ogms.rocks/events/>

Jun 3 – OGMS Annual summer picnic at Kill Creek Park

Jul 7 - 9 – Rocky Mountain Federation Congress, Casper, WY (Exact dates, field trips, etc. being confirmed – so subject to change).

Jul 15, 16 – Tulsa Rock and Mineral Show

<https://tulsarockandmineralsociety.org/shows>