

# Littleton Gem and Mineral Club

## September 2020 Highlites Newsletter.



**September Program:** Pat Tucci and Zelda Bailey, Minerals from Namibia.

### President's Message

**September 2020**

“And now for something completely different”....that pretty much sums up 2020. The hot, summer heat wave, followed by fires, followed by snow this week and now..... no Denver Gem & Mineral show. There is a show, starting September 11, at the Crown Plaza where many of our local dealers will be if you need to get out amongst the rocks, minerals, and fossils again. The show has established safety protocols in accordance with state requirements for everyone's safety.

Keeping with the “something completely different theme”, we're planning to have our September meeting via Zoom. The meeting will be September 18<sup>th</sup> at 7:30 pm. The speakers will be Pat Tucci and Zelda Bailey who will talk about minerals from Namibia and a mineral collecting trip they took there. We will be sending out information to members for the meeting link in the near future.

Jim Hooten has also scheduled several field trips for the Fall. Additional information is available in the newsletter and our website.

We continue working on bringing our programs to members and hope that everyone finds some new activities that are entertaining and fun. My new, completely different activity was travelling with my family recently to Kemmerer, WY to find fossilized fish. I still prefer rockhounding for gemmy minerals, but it was fun wagering on who “catches” the 1<sup>st</sup> fish; the most fish; and the grand prize....biggest fish. It's funny how similar hunting for fossil fish and real fishing is. Everyone enjoyed the friendly competition but, at the end of the day, my brother-in-law couldn't stop talking about how he lost the biggest fish of the day after it broke into pieces as he was removing it! It's always the one that got away that's the most memorable and keeps bringing us back.

Be well, stay active and have fun.

Ron Wankner

President LGMC

### Selected upcoming LGMC and Earth Science Events

**September 18th** **LGMC September Meeting**, at 7:30pm via Zoom, link will be sent to your email.

**September 11-15<sup>th</sup>** **Colorado Mineral and Fossil Show**, Crowne Plaza DIA, 15500 E. 40<sup>th</sup> Ave, 9am to 6pm.

**September 15th** **Faceters and Cabbers** - The Faceters and Cabbers group continues to use Zoom for our regular monthly meetings. Our next meeting will be on Tuesday evening, September 15th, at 7:30pm. We will not be meeting in person for now. If you would like to join our group, and are not on our email list, contact me at [jkleber@att.net](mailto:jkleber@att.net) for the meeting information.

# Grab Bag News

## September Grab Bag News

If you would like to sew some bags while stuck at home, contact Lynette Warren at [flywithle123@comcast.net](mailto:flywithle123@comcast.net) or 303-956-4634 if you need any information on that. We would welcome any that you can make during our confinement.

If you have any specimens at home to donate for grab bags, let me know and I can arrange to pick them up. I can also arrange for supplies if you need any. Contact John Kleber at [jkleber@att.net](mailto:jkleber@att.net) or 303-570-8164 to make arrangements.

The Bag Party Lady and the Bag Begger

Lynette Warren and John Kleber



# Geology Corner

## Hibbingite - Swimming Pool Mineral

The discovery of a new mineral, named hibbingite, from Minnesota was announced recently, and details about it have just now appeared. It is an interesting mineral that may turn up in many unexpected places.



Hibbingite's formula is given as gamma  $\text{Fe}_2(\text{OH})_3\text{Cl}$ . The "gamma" distinguishes hibbingite from two other compounds with the same formula (referred to as alpha and beta) made artificially in the lab. Alpha and beta are hexagonal, but hibbingite is orthorhombic, making it quite different crystallographically. Hibbingite forms grains and veins with serpentine in drill core taken from 5 different spots in the Duluth Complex between Hibbing and Ely. It is colorless to pale green, weathering red and appears to have 1 cleavage. The largest known grains are 0.027 inches long, making its other optical and physical properties hard to establish. It is also very soluble in water. In fact, its solubility is so high that, in humid air the mineral would dissolve out of the investigator's slide, leaving a salty coating. Clearly few rockhounds have samples of this sitting unrecognized in their collections.

The mineral's solubility was the key to its discovery. In 1991, researchers noted that some drill core in their labs was being coated by salt and akaganite, another iron hydroxide. A study undertaken to see what in the cores was breaking down to form this coating discovered the hibbingite. Analysis, approval of the name by the International Mineralogical Association and publication of the data took 3 years.

Hibbingite has since been found in a number of other environments, and may be relatively common, if hard to spot and preserve. It has also been found in gabbros at Sudbury, Canada and Noril'sk, Russia. It occurs in crusts formed during the weathering of several iron meteorites. The discoverers, a group of European mineralogists, speculate that the mineral forms when chlorine-rich fluids percolate through iron-rich rocks. Such fluids have been implicated in concentrating ore deposits of platinum group metals in gabbros. If so, hibbingite may be a good mineral to look for in exploring for such deposits. It may also be widespread in the ocean crust where sea water circulates through basalt lavas. The authors also speculate that hibbingite might occur in the Martian soil. Spectral data from the Red Planet confirm the presence of iron hydroxides there, but no one knows what minerals these chemicals might appear in. Finally, hibbingite has been found in corroded steel bars around swimming pools, where chlorinated waters seeped into and around the steel. Who knows, maybe the first known cabinet-sized specimen of hibbingite crystals is forming right now in your back yard under that leaky pool!



- Dr. Bill Cordua, University of Wisconsin-River Falls

Reference: Saini-Eidukat, Bernhardt, Henryk Kucha and Hans Keppler, 1994, "Hibbingite - Gamma Fe<sub>2</sub>(OH)<sub>3</sub>Cl, a New Mineral from the Duluth Complex with Implications for the oxidation of Fe-bearing compounds and the transport of metals"; American Mineralogist, vol. 79, p. 555-561.

## Calendar of Coming Earth Science Events!

**Wed.-Sun., Sept. 9-13**, 10 a.m. – 6 p.m., **Dave Bunk Minerals and Lithos** are having a Fall Open House and Fresh-air Mineral Market; in their adjoining shops and in the parking lot, at 5695 Yukon St., Old Town Arvada. All are welcome; of course, social distancing will be observed, and you must wear a face mask.

**Fri., Sept. 11 – Tues. Sept. 15**, 9 a.m. – 6 p.m. daily, **Colorado Mineral and Fossil Show**, at the Crowne Plaza Hotel Denver, Airport Convention Center, 15500 E. 40<sup>th</sup> Ave. Free admission & parking.

“Retail, wholesale, minerals, fossils, meteorites, handmade jewelry, and more. We are confident we will have a safe show for our public, our dealers, their crews, our show and hotel / convention center staff. We will be following all State and Local Health Department Safety Guidelines. Masks are mandatory, so remember to bring your favorite! Hand sanitation and masks will be available throughout the show as well.” See <https://www.coloradomineralandfossilshows.com/>.

**Fri. Sept. 11 – Sun. Sept. 20**, 10 a.m. – 6 p.m. daily, **“The Denver Show” mineral, fossil, gem and jewelry show**, at the National Western Complex and Event Center. Free admission & parking. I-70 exit 275-B at Brighton Blvd. “Due to limited capacity the show is ADULTS ONLY this year. Come on the weekdays and avoid crowds! The part of our show that was in the Denver Coliseum has moved to the larger Events Center on the north side of I-70. It’s next to the NWC Main Building, so we are still at Exit 275B. One big show in two huge buildings. Face mask required per Colorado state mandate. Denver Police will be on-site to enforce the face mask requirement, which are required even when outside at the tents. See <https://www.coliseumshow.com/>.

Thurs., Oct. 8, 7:00 p.m., Colorado Scientific Society annual Emmons Lecture,

**21st Century Field Geology on the New Frontier**, by Dr. Michael Zolensky, Planetary Scientist, Astromaterials Research & Exploration Science, NASA Johnson Space Center, Houston, TX.

“Samuel Franklin Emmons’ life was dedicated to geological field studies, and the exploration of Colorado and the rest of the American west. We are now living through the golden age of the geological exploration of the Solar System. Just as the 19th century geological survey exploration parties would send runners out to nearby mountains to retrieve a few hopefully representative rocks for examination, the space-faring nations are now sending out robotic “runners” to return rocks from asteroids, a comet, the moons of Mars and ultimately the other terrestrial planets. This talk will focus on the current missions to retrieve samples from two primitive asteroids and the largest moon of Mars. The first of these spacecrafts, Hayabusa2, will arrive back on Earth just two months from this lecture.”

This will again be an online Zoom presentation; see <https://coloscisoc.org/> for the abstract and speaker biography, and where the link to the Zoom presentation will be posted.

**Sept. 15**, and following: **America’s Geoheritage: Identifying, Developing, and Preserving America’s Natural Legacy**. The National Academies of Sciences Distinguished Speaker Webinar Series:

The series of eight webinars will be presented throughout fall 2020 on Tuesdays at 11:00 a.m. ET/8:00 a.m. PT, starting on September 8. These events are free and open to everyone. For a complete list of webinar dates, topics, and speakers in the series, and to register, please visit

<https://www.nationalacademies.org/our-work/americas-geoheritage-ii-a-workshop>.

Organized by U.S. National Committee for Geological Sciences. Sponsored by American Association of State Geologists, American Geosciences Institute, Geological Society of America, National Association of Geoscience

Teachers, National Earth Science Teachers Association, National Park Service, U.S. Geological Survey.  
Supported by the National Science Foundation.

The first two seminars will be:

**Sept. 8, Celebrating America's Geoheritage** Speaker: Tim Badman (International Union for Conservation of Nature) Discussant: Patty Limerick (University of Colorado, Boulder)

**Sept. 15, A Survey of Geoheritage Initiatives in the U.S.** Tom Casadevall (USGS) Tim Connors (NPS) Asier Hilario (IUGS Geoheritage Commission)

If you are reading this now you may have missed the first seminar but, they are being recorded so if you check on the above website link, after a few days we expect they should be posting a link to view the past webinars.

*Thank you once again to Pete Modreski for sending us all the upcoming science events!*

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## New Field Trip Added

### NEW FIELD TRIP -- Saturday, September 26, 2020 -- FLORISSANT FOSSIL QUARRY

Trip Leader: Jim Hooten (303-548-7412 / [jahooten@msn.com](mailto:jahooten@msn.com))

Something different, for those interested. Instead of mineral collecting, this is a scheduled LGMC field trip to collect fossils at the **FLORISSANT FOSSIL QUARRY**, a privately owned property adjacent to the Florissant Fossil Beds National Monument at Florissant, CO. **There is a fee for collecting of \$10/hour/person.** The owner said that you can spend as much time as you want, but normally, you can find some nice specimens with only 1 hour of work.

This area is part of an ancient lake (Eocene Age—approximately 34 million years old) that was covered with volcanic ash, thus preserving many forms of plants, insects, flowers and other life forms from that time period. The ash was interspersed with layers of clay and mud that formed “paper shales” which contains the beautifully preserved fossils. You can split apart these thin layers to reveal the fossils. The majority of fossils are leaves, but there are occasional bees, dragonflies, snails, beetles, ants, spiders, fish, and many other fascinating goodies. The quarry owners do state that any extremely rare or unusual specimen can be claimed by them. You can check out information on-line by going to [FlorissantFossils@yahoo.com](mailto:FlorissantFossils@yahoo.com).

You are provided with ample pieces of “paper shale” from their quarry (collected fresh daily) that you can work on at conveniently placed picnic tables at the site. If you wish, they will provide tools to use for splitting the shale, but you might want to bring your own rock hammer (don't need a big one), small chisel or putty knife for splitting the shale, and spray water bottle.

**We will meet at 10:00 am**, at the parking lot adjacent to the quarry entrance. **DIRECTIONS:** To get to the quarry, go to Colorado Springs, take Highway 24 west through Woodland Park and Divide, then another 8 miles to Florissant. The town of Florissant isn't very large. There is only one highway branching off of Hwy 24, **Teller County 1**, going south in the middle of “town”. Turn south at the Thunderbird Inn, a favorite local restaurant and “watering hole”, and proceed just a short distance (1/4-mile) where you will see a small sign on your right directing you to the Florissant Fossil Quarry. Drive down this dirt road and park at the designated parking area. You can't miss it. Walk up the steps to the check-in shed. Our group will meet there.

Depending on how long you stay, you can bring your own lunch and drinks, or there are 3 places in Florissant where you can eat. You also may want to consider driving on down Teller 1 a couple of miles to the **Florissant Fossil Beds National Monument**. They have a \$10 admission for anyone age 16 and older (15 and under are free). Their outdoor exhibits are open, as is their 14-mile walking trail through the Monument. You can see the

gigantic petrified stumps of 34-million-year-old Redwood trees (Sequoias), plus many other sites to see and read about on the trail loop. There is also an old homesteader's home (The Hornbeck House), that you can hike to and tour, or you can drive there and park right next to it. It's right off the highway and you will pass it going to the entrance to the Monument. Due to the COVID-19 situation, it's not certain whether the inside facilities (museum, gift shop, etc.), will be open to the public. Read more on the internet.

All in all, it should be a fun day of fossil collecting, viewing Colorado history and geology, or just taking a beautiful drive through the Colorado mountains. And don't forget, this could be a peak weekend for viewing the beautiful aspen colors! Hope you can join the fun. Be sure to sign up on the Club's website (Field Trip section), and also print out the liability forms to bring with you. If you're going, sign up as soon as possible, as I will need to contact the quarry owner with an approximate head-count a few days before the trip.

Dist = 60-70 mi.    4WD = Opt    Kids = OK    Tools = D

**Don't forget to go to Club website and sign up online, list the number of people attending, and print out the waiver and liability forms.**

## Club Announcements

**Moving?** Change of Address, Email or Phone Number?

Ready to go paperless?

Please notify **Ian Duncanson** of any changes at [idunc@q.com](mailto:idunc@q.com) or 303-798-9174.

**Club Vests** Show your club support **Ian Duncanson** has club vests available for sale. Price includes vest, sewed on club patch (on back) and a club pin

\$18 for small and medium sizes

\$19 for large and X-large sizes

\$20 for XX-large and XXX-large

*Do you know someone who could use some sunshine?* Nobody knows everybody. If you know of a club member or family who is having a health problem or other problem, and who could be encouraged by receiving a thinking-of-you card, please let us know so that we may encourage them. Send a note to our sunshine coordinator and let her know, **Lynette Warren**, [flywithle123@comcast.net](mailto:flywithle123@comcast.net).

## LGMC Website

**Our website has been updated!**

Please check out the new "Member" section of the website! We'll archive Newsletters, share photos, and get details of upcoming field trips.

To view the "Member" section, you must register as a member of the website:

<https://littletongemandmineralclub.com/register/>

As only LGMC members will have access to this material, we'll be checking your name against the current club roster, so if you haven't yet, reach out to Ian Duncanson to pay your 2020 dues!

Thanks,  
Gus



**Like us on FaceBook**

LIKE and FOLLOW us @LittletonGemAndMineralClub

**What are you working on?**

Send us what you are doing and we will include it in next month's newsletter.

[Jacobstammy80@gmail.com](mailto:Jacobstammy80@gmail.com)

Thanks to everyone who contributed to the newsletter! ~Tammy



Rhodochrosite & Fluorite  
on Tetrahedrite  
Detroit City Portal  
Sweet Home Mine  
Alma, Park County, CO

Collector's Edge Minerals, Inc.  
Riley Owen photo

## Colorado Mineral and Fossil Show

*Crowne Plaza DIA*  
15500 E. 40th Ave., Denver, CO 80239

September 11 - 15, 2020  
Hours 9AM - 6PM Daily

*We will be following all State and Local  
Health Department Safety Guidelines.  
Masks are mandatory, so remember to bring your favorite!  
Hand sanitation and masks will be available  
throughout the show as well.*

**Everything You Want at One Show!**  
**Quality Retail & Wholesale Dealers Indoors and Outdoors**  
**Fossils, Minerals, Cabochons, Cutting Rough**  
**Meteorites, Tektites, Gems, Jewelry**  
**Carvings, Decorator Items & More**

**\$100 SHOW DEALER VOUCHER**  
**GIVEAWAYS EVERY HOUR ON**  
**OPENING DAY 11:00AM - 5:00PM**  
**YOU NEED TO BE PRESENT TO WIN**



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“ “	<b>John Kleber</b>	720-851-8510
Mineral Study Group	<b>Bob Zartman &amp; Nick North</b>	303-973-0405

**Meetings:** The Littleton Gem & Mineral Club meets the third Friday of each month, September through May, at the St Philip Lutheran Church, 7531 S. Kendall Blvd, Littleton, CO 80128. Doors open at 7:00 p.m. and the meetings begin at 7:30 p.m. All meetings are open to the public. Club and section meetings may deviate from their regular schedules due to holidays, shows, inclement weather, etc.

The Littleton Gem and Mineral Club is affiliated with the American Federation of Mineralogical Societies, The Rocky Mountain Federation of Mineralogical Societies, The Colorado Federation of Gem and Mineral Societies, and the Greater Denver Area Gem and Mineral Council.

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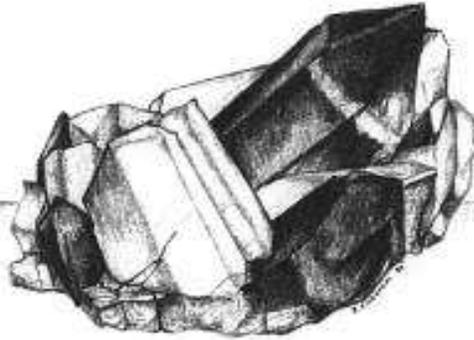
**\*\*The deadline for submissions is the 1<sup>st</sup> Friday of each month.** Please send your material by email to [jacobstammy80@gmail.com](mailto:jacobstammy80@gmail.com).

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# *HighLites*

LITTLETON GEM & MINERAL CLUB



HARRIS PARK AMAZONITE & SMOKY QUARTZ

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FIRST CLASS MAIL

