



Flatirons Facets

Flatirons Mineral Club of Boulder County, Colorado

Volume 67, Number 1

March-April 2024

Coming April 8, a total solar eclipse in the United States. Although the Denver area will only see a partial eclipse, with the moon covering 65% of the sun, it will become noticeably darker at the peak of the eclipse.

The eclipse starts at 11:28 am and reaches its peak at 12:40. So order your eclipse glasses and watch the show.

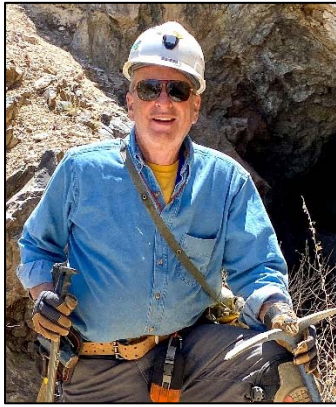
Photo: 2017 total eclipse from Brian Walko, Earth Extractions, LLC, used by permission



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The Flatirons Mineral Club is a non-profit organization, which is dedicated to developing and maintaining interests in Earth science and associated hobbies. The purpose of this Club includes, but is not limited to, studying geology and Earth science, teaching others about our hobby, including young people, collecting gem, mineral and fossil specimens, and learning lapidary skills.

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



President's Message

Preparing for Collecting Season

Daylight Saving Time is this weekend and the first day of Spring is only two weeks away. Now is the time to start preparing for another fun season of collecting. In Colorado the collecting activities are based on altitude and land's exposure to sunlight. It could start now, barring any heavy spring snowstorm.

Boulder County Open Space and Mountain Parks (OSMP) has an excellent web page entitled Geology on OSMP (<https://bouldercolorado.gov/geology-osmp>). There are detailed self-guided geologic tours for exploring the NCAR and Marshall Mesa areas, Old Kiln Trail, and Doudy Draw. Please note, collecting on Boulder County OSMP property is prohibited.

These trips will help you prepare for our FMC 2024 field trip season.

Brian Walko, FMC President

Club Meeting - Tuesday, March 12: Formation of the Grand Canyon

Our March 12 meeting is a 1-hour **History Channel video production** with brief stops and discussions about the current thoughts about how the Grand Canyon was formed. (Hint: The immense Grand Canyon we see today is less than 6 million years old.) Mark your calendars to attend this interesting program.



The meeting starts at 7:00 pm in Barker Hall at Mountain View United Methodist Church, 355 Ponca Place in Boulder.

Credit: Copyright © 2016 Mattia Pancioli, Creative Commons

Silent Auction – Wednesday, April 10

This year's silent auction will start at 6:45 pm in Room 215 at Mountain View United Methodist Church (355 Ponca Place in Boulder). This is on the second floor of the church; just follow the signs to the Silent Auction when you arrive. **Please note that the day, time, and location are different than our monthly club meetings.**

Over the past several years, the club has received several outstanding collections. Many of these items will be available at the auction, including fabulous minerals, fossils, and lapidary material. There will also be rockhounding books and tools to bid on.

Come to the auction and find those special specimens, books, or tools that you have been looking for. We can accept cash, check, and credit cards. If you like, please bring finger food to share.

Also, plan to bring something to put your purchases in and something to wrap and protect your purchases.

To help promote our Silent Auction, please print and distribute the flyer at the end of this newsletter.



Sellers: We welcome your rockhounding items to sell at the auction. You can designate 20%, 50%, or 100% of the sale to go to the club. Now is the time to go through your rocks, minerals, fossils, rockhounding books, and other equipment and set aside items you no longer want and would like to sell at the auction. You can e-mail Gerry Naugle at gnaugle@earthlink.net for a seller's number ahead of time, so you can fill out your bid slips before the meeting. Bid slips are at the end of this newsletter. Tables for Silent Auction items will be available for set up starting at 6:00 p.m.

Questions about selling items at the auction? Contact Gerry at gnaugle@earthlink.net.

April 19 Field Trip and FMC's 2024 Field Trip Calendar Update

Will Rehm

FMC's 2024 field trip season is rapidly taking shape with the help of last year's amazing field trip leaders. The 2024 FMC Field Trip Catalog - which will be released at our May 14 meeting - already features ten exciting trips, with a reserve for two additional "TBD" trips.

But first, to kick off the season, our first trip will be to the USGS Library in Golden on FRIDAY April 19th. Staff there will help us understand how to use USGS mapping tools, conduct research, find mines, bore log databases, and more. We'll also get a special briefing on strategic USGS initiatives and projects in our area (new buildings, new mapping efforts, geologic hydrogen exploration, etc). Please watch for updates announcing the release of the trip, and please know that the FRIDAY date was necessary because of USGS staffing standards. This promises to be a special trip.

Following the USGS trip, we'll formally release FMC's 2024 field trip catalog at the May 14th meeting, when we'll share more information about all the trips. Please mark the date on your calendar, as the May meeting should be lots of fun, and you'll be able to talk with many of the field trip leaders who will be running the trips.

So, in summary, the 2024 season is coming together very nicely, with our first trip of the season coming in April, our catalog being released in May, and some really excellent trips this year.

Lastly, kudos to all our field trip leaders who will be running the Flatirons Mineral Club's trips in 2024. Their contributions are epic.



USGS building in Golden. Credit: Billy Hathorn, licensed under the [Creative Commons Attribution-Share Alike 3.0 Unported](https://creativecommons.org/licenses/by-sa/3.0/)

Fossil of the Month: Prehistoric Sea Scorpions

Charlotte Small, age 16



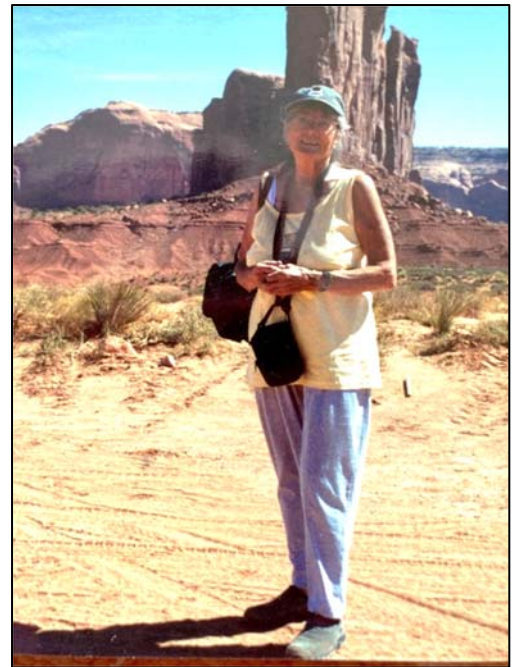
Each month Charlotte provides an excerpt from her new comic *Grey's Prehistoric World*. If you like, you can read more of her comic on Webtoon.com, https://www.webtoons.com/en/canvas/greys-prehistoric-world/list?title_no=847316&webtoon-platform-redirect=true&page=1.

Member Profile: Eleanor Peevler

Anita Colin

Unless you have been a member of Flatirons Mineral Club for a long time, you may not be familiar with Eleanor Peevler. She joined our club ages ago, went on innumerable field trips, and collected tons of rocks all over the West. Her active club days are now in the past, but I met her because she read in an FMC newsletter that I wanted fabric donations for grab bags. She always loved to sew and had some great remnants, so she called and asked if she could bring them to me.

That probably would have been the last I saw of Ellie, except for the baby kangaroo rat. I was rockhounding at Yellow Cat Flats, Utah and found a baby kangaroo rat on the road as I was heading home. I took him to the Greenwood Wildlife Rehabilitation Center in Lyons, and they were able to take care of him. I started reading about Greenwood online and found an interesting article by someone who had rescued a turtle. I was surprised that the author was Eleanor Peevler. I called Ellie and asked if that was her article (as if there were two Ellie Peevlers in the area). Of course it was. Since we had three interests in common (rocks, sewing, and animals), I figured we should be friends.



Ellie in her rockhounding days

Growing up in New York City, Ellie had little chance to encounter rocks and if she saw any, they were grey. As an adult, though, she and her husband decided they might like the drier climate out West and made some trips to explore the area. She was amazed at the rock formations she saw and was enthralled by all the colors: Orange! Yellow! Red! Pink! They ended up moving to Colorado and Ellie started collecting beautifully colored rocks. They joined FMC and



A big chunk of fossilized wood in Ellie's yard (next to my foot)

Another long-time interest of hers is Native American culture. Watching westerns as a kid made her wonder if these beautiful people were really the "savages" they were depicted to be. Books from the library told a very different story. She continues her study to this day and is a member of the National Museum of the American Indian. She has been a pen pal for thirty years with a woman from the Pine Ridge Reservation in South Dakota and has visited her friend many times over the years (rock hounding along the way of course).

Getting to know Eleanor Peevler has been one of the best of the many things I love about being a member of Flatirons Mineral Club. I hope I can continue sharing interests with her for years to come!

the North Jeffco Gem and Mineral Club and began participating in their many field trips. Fossil wood was one of her favorites and other club members helped carry eighty-pound specimens to her car.

Rocks are just one of Ellie's many interests. Animals are another. She has volunteered at Greenwood Wildlife Rehabilitation Center, keeps the dozen bird feeders in her backyard filled, and feeds the feral cats near her home, getting them neutered and spayed. She is also a collector of cacti and succulent plants and still maintains hundreds of them in her home and adjacent mini greenhouse.



Ellie using the "Merlin" app on her phone to figure out what bird is calling nearby (a Steller's jay)



Credit: The COM Library,
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Write a Poem for the Next Club Newsletter

Did you know that April is National Poetry Month? In celebration, consider writing a poem about rockhounding. It could be about a favorite, rock, mineral, fossil, or perhaps a place you enjoy collecting. It could even be about what you enjoy about our hobby. Poems can be serious or humorous and written by all ages – adults and juniors.

We would like to include your poem in the next club newsletter. You could even send a picture or two to go along with your poem. Send your contributions to Dennis Gertenbach at gertenbach1@gmail.com.

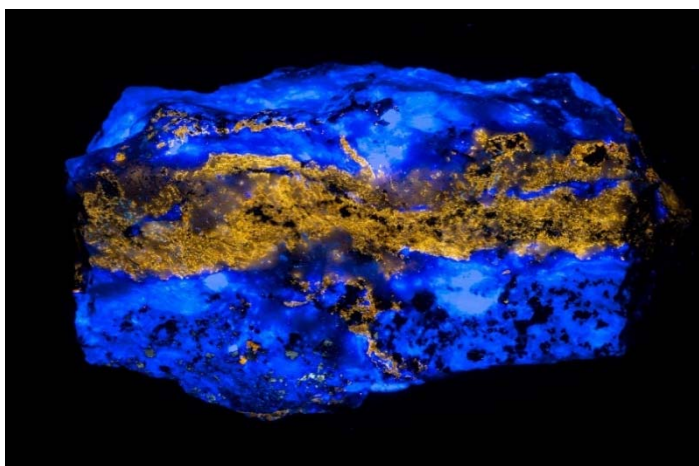
January Club Meeting Review: Jamestown Uranium

Brian Walko, club president, was our speaker at our January 9th club meeting, with an excellent presentation about **Jamestown Uranium**. Although Jamestown, Colorado, and its surrounding mining district are primarily known for fluorspar, gold, and silver ores, throughout the district there are primary uranium occurrences and secondary uranium minerals in hydrothermal veins and granite pegmatites.

Brian talked about radiation basics, types of uranium ores, occurrences, and how to safely prospect for uranium ores using Geiger counters, scintillators, and UV lights. After his presentation, he had a show-and-tell of different uranium ores found in the Jamestown area. Thanks, Brian, for a fun and informative meeting.



Brian Walko showing different Jamestown uranium minerals. Credit: Anita Colin



Fluorite and sphalerite under longwave UV from the Detroit City portal of the Sweet Home Mine. Credit: Brian Walko

February Meeting Review: Rhodochrosite from the Sweet Home Mine

Our February meeting was a two-part program about rhodochrosite at the Sweet Home Mine. The first part featured the video **Rhodochrosite: Red Treasure of the Rockies**. Mike Trafton, one of the creators of the video, provided commentary about the video. Afterwards, Brian Walko presented photos and information about the renovated Detroit City Mine Portal, a new entrance that hopes to discover additional veins of Colorado's state mineral.

Member Name Tags

Would you like a Flatirons Mineral Club name tag to wear at club events and field trips? The club places orders for name tags several times a year for members.

If you would like a name tag, please log onto our website and choose the "Request a Name Tag" link in the Members Area. Add your name to the list as you want it to appear on your name tag, and it will be ordered for you. Your first name tag is free!



Example of a club name tag

Jr. Geologists Activities

During January's meeting, we began learning how to identify minerals using mineral identification kits. The kits allow us to do simple tests, such as determining hardness and streak. Coupled with color and luster, we identified several different minerals to add to our collections as we earned the Rocks and Minerals Badge. The GeoExplorers were introduced to why we classify minerals as sulfides, sulfates, silicates, etc. The answer can be summarized in one word – chemistry. Also, at the meeting we began polishing a batch of rocks in the rock tumbler.



February's meeting was a fun one, where we learned about special mineral properties like triboluminescence, double refraction, chatoyancy, and others. The Jr. Geologists completed the requirements for the Special Effects Badge. We also saw what the rocks we are polishing looked like after the first step and began the second step. The GeoExplorers furthered their mineral identification knowledge by learning how to identify carbonates with dilute hydrochloric acid, distinguishing these minerals from sulfates, halides, and others.

Our next meeting is on Tuesday, March 19, starting at 6:30. Beginning this month, we will meet in Frasier Parlor at the south end of Mountain View United Methodist Church (355 Ponca Place in Boulder), the room where we had the holiday party in December.



The Jr. Geologists learn about polishing rocks in a rock tumbler. Credit: Charlotte Small



Karen Simmons demonstrating a mineral identification test. Credit: Anna Elek



Learning about different special effects minerals from Howard Gordon. Credit:

Two Jr. Geologists Earn their Rockhound Badge

Two of our Jr. Geologists have earned the Rockhound Badge for completing six of the badges. We congratulate **Ryan Wagner** and **Axel Gray** on their accomplishment.



Join the Jr. Geologists

The Jr. Geologists program is open to all Flatirons Mineral Club families. We meet monthly during the school year and have special field trips and other activities in the summer. For information about the Jr. Geologists program, please contact Dennis at gertenbach1@gmail.com or 303-709-8218.

Making Stone Jewelry

Ellen Carmona Smith, age 9

I took a class in making jewelry with stone and glass beads. Then I started making necklaces and bracelets at home. I figured out new techniques to make different kinds of jewelry with natural stones and wire.

These are just a few of the pieces I have made so far.



I wondered, how do they make little stone beads with holes in them? We looked it up on Google and found this video.

<https://www.youtube.com/watch?v=WpluDuphhQA>.

I thought of some ways that people have careers and jobs making stone jewelry. Here are several of them, but there might be others.

1. Prospecting for jewelry stones around the world
2. Mining the stones from the ground
3. Processing the stones into beads with machines
4. Selling the beads to jewelry makers
5. Designing & making the jewelry in workshops
6. Selling the jewelry to customers

Jr. Geologists Program is 20 Years Old!

Dennis Gertenbach

Editor's Note: This article is adapted from an article in the March 2017 issue of the Flatirons Facets.

April 2004 was the first meeting of the Jr. Geologists, a program for Flatirons Mineral Club kids and their parents. The program was conceived by Dennis Gertenbach and Charlotte Morrison to teach children about the joys of rockhounding and the earth sciences. At the first meeting, four Jr. Geologists – Addison Starn, Stefan Codrescu, Joel Hyde, and Andrew Hyde – learned how crystals formed and how to use crystals to identify minerals from Charlotte Morrison and Dennis Gertenbach. Each participant took home three different solutions to grow crystals during the next couple of weeks, as well as several crystal mineral specimens to add to their collections. Reports several days afterwards were that the copper sulfate and alum crystals were growing great.



Addison Starn, Joel Hyde, and Carol and Stefan Codrescu learn about crystal minerals from Charlotte Morrison at the first Jr. Geologists meeting

In the fall of 2004, the American Federation of Mineralogical Societies introduced the Future Rockhounds of America program to encourage and cultivate kids' interest in the earth sciences and lapidary



arts. The program initially featured nine badges on different subjects and has grown to the 20 badges shown in the picture to the left. Also included in the program is a membership patch when a child joins the program, the Rockhound Badge for earning six badges, and the Rock Star Pin for earning all 20 badges.

Since the badge program began, there have been 41 kids from our club that earned the Rockhound Badge. Below is a list of the recipients of this award. And last year, we had our first Rock Star – Charlotte Small – who earned all 20 badges.

Joel Hyde, 10/29/06	Josiah Horning, 2/9/14	Henry Poe, 9/16/19
Stephan Codrescu, 6/23/08	Riley Petrone, 2/9/14	Koji Yamaguchi, 9/16/19
Lucas Simon, 6/23/08	Quinn Cormier, 2/9/14	Seiji Yamaguchi, 9/16/19
Katherine Codrescu, 1/27/09	Egan Rausch, 12/5/14	Connel Casson, 12/9/20
Charles Mock, 1/27/09	Piper Rausch, 12/5/14	Kemper Fitzgerald, 12/9/20
Nico Caballero, 11/25/09	Kevin Barz, 11/29/15	Charlotte Small, 3/9/21
Perry Cheseboro, 11/25/09	Aden Bicknell, 11/29/15	Aubrianna Wike, 4/14/21
Preston Daley, 11/25/09	Michael Johnston, 12/6/15	Adam Small, 12/28/22
Gavin Morrison, 4/16/12	Ava Ream, 11/29/15	Hawkins Stone, 3/5/23
Ian Crittenden, 5/20/12	Aden Wyckoff, 11/29/15	Ella Poe, 5/11/23
Nicolas Erickson, 5/20/12	Karina Minson, 12/16/18	Coral Stone, 5/11/23
Cassidy Crittenden, 5/20/12	Max Minson, 12/16/18	Ryan Wagner, 1/19/24
Miu Iwabuchi, 1/29/13	Annika Jacobson, 1/22/19	Axel Gray, 1/19/24
Andrew Caballero, 1/29/13	Braden Derouin, 9/16/19	

In addition to working on the different badges, the Jr. Geologists also go on field trips in the summer to learn more about the geology of the Boulder area and to collect rocks, minerals, and fossils for their collections. Many Jr. Geologists have put together display cases at our club's annual show to display their favorite specimens in their collections.

Here are a few pictures of Jr. Geologists activities from the last 20 years.



Ed Raines teaching Charles Mock, Perry Chesebro, Ricki Runions, and Billie Anna Runions about how sedimentary rocks are formed



Todd Shannon works with Billie Anna Runions and Lucas Simons on their Collecting badge



The Jr. Geologists showing off their volcanoes they made for the Earth Processes badge



Preston Daley with several crinoid stems he found



Katie Runions collecting mica in the pegmatites west of Boulder



Jr. Geologists collecting fossils at Crinoid City in the McCoy area



Learning How to tumble-polish stones



Miu Iwabuchi examines a fossil log from Snowmass at the Denver Museum of Nature and Science



Kevin Barz making bismuth crystals from melting bismuth metal



Searching for micrometeorites



Malakai Pinson and Andrew Caballero making fossils



Charlotte Small with her newsletter article awards

Tucson '24: Shows, Prospecting & More

Brian Walko

Photographs by Brian Walko unless otherwise noted

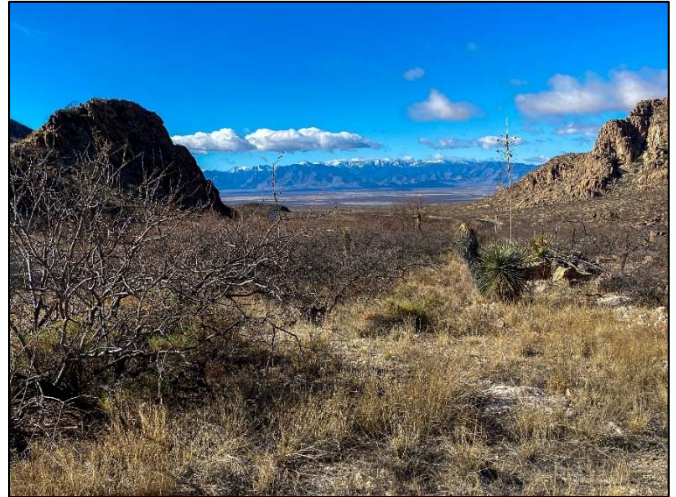
I attend the Tucson Gem and Mineral shows every other year. This year I was not displaying, so I decided to fly down to Tucson. Southwest had \$125 one-way trip tickets. My truck would have burned \$125 worth of gas by the time I reached Albuquerque. There would be the additional costs of overnight lodgings. So, I packed two suitcases. The suitcase with all my prospecting equipment weighed in at 47 pounds, just under the 50-pound limit. The clothing bag was well under the limit.

The plan for this trip combined mineral shows, prospecting, and sightseeing. My friend Steve Woje, from the Fluorescent Mineral Society was my Airbnb roommate. Since our prospecting and sightseeing was going to be along the New Mexico – Arizona state line, we stayed 45 miles east of Tucson in the little town of Benson. The Airbnb was a fraction of the cost of a Tucson Airbnb. We would take my rental car that got 38 mpg into Tucson and use Steve's 4WD for the prospecting trips in the desert.

Flying into Tucson, I noticed the incredible growth north of the city. Some locals said it will be about 10 years until the gap between Tucson and Phoenix is filled in with houses, similar to our Denver to Ft. Collins stretch.

Our first adventure was prospecting at Granite Gap, NM. This required a drive 150 miles east to Lordsburg, NM to meet Steve the next morning. The motel clerk recommended a "good" Mexican restaurant. The food was a bit spicy but tasted good. Around 2:30 AM I got a case of food poisoning. I delayed meeting Steve for a few hours, and then we headed to Granite Gap.

The good collecting areas of Granite Gap were fenced off. We debated whether to hop the fence or to find a new place. We respected the fence and started to head south to find another place. Just as we were leaving, a pickup truck pulled up and unlocked the gate. We made a quick U-turn and met the cowboy who opened the fence. We asked permission to collect, and he said with a stern voice, "No". So off we went.



Granite Gap

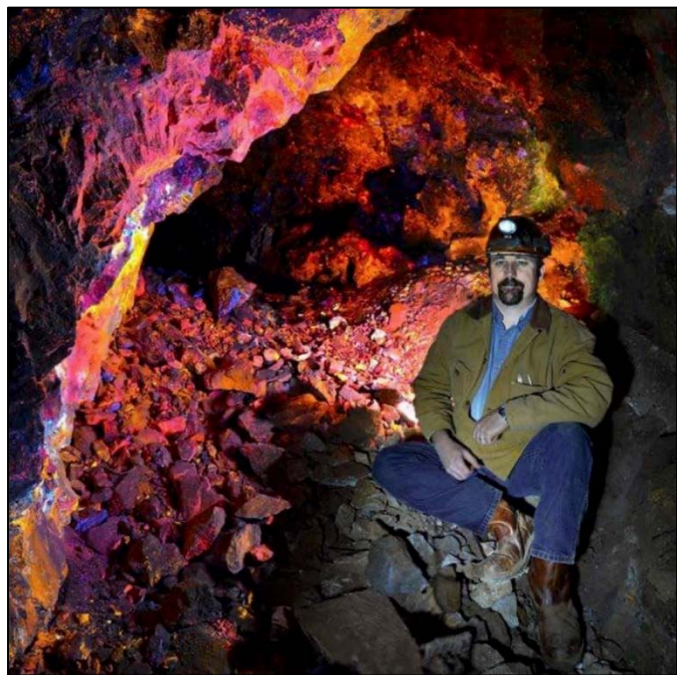
One misfortune turned into a unique find. The Chiricahua Desert Museum

(<https://www.chiricahuadesertmuseum.com/>) near Rodeo, NM was dedicated to the Chiricahua Desert's environment, creatures, the Apache Tribe, and Geronimo. They had an entire wing dedicated to Geronimo. Besides the pictures and artifacts, they had some of Geronimo's arrows and quiver. The arrows were the work of a master craftsman. Another room had a collection of live snakes from the Southwestern U.S. Most of the habitats were marked poisonous. I would not want to be the caretaker feeding them.

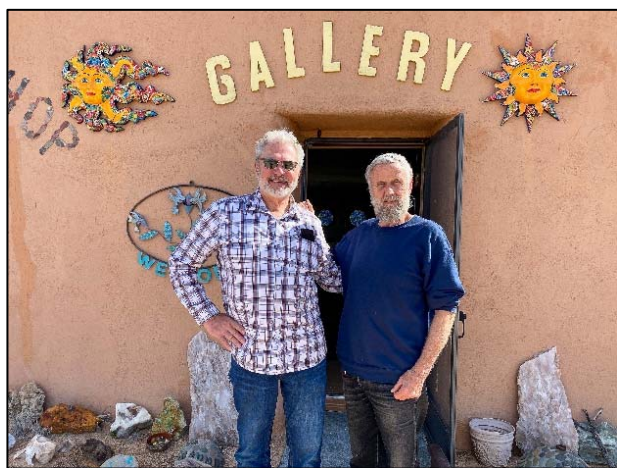


That day continued with a loop through Douglas, AZ, an old Phelps Dodge smelting town for the copper and silver mines around Bisbee, AZ.

Lavender Pit - Bisbee



Fluorescent Area of the Copper Queen Mine. Photo courtesy of the Graeme Family & Fluorescent Mineral Society



Steve Woje (L) & Rolf Luetcke (R)

We scouted the Tombstone Hills mining district in the daylight, marking roads to promising mine dumps. After dinner we returned at sunset to collect fluorescent minerals at night. Fortunately, it was cold enough so there were no snakes or scorpions out.

Tombstone, AZ

The next day we were off to Tucson for the Annual Fluorescent Mineral Society meeting. The guest speaker was Richard W. Graeme IV – “Fluorescent Minerals of Bisbee, AZ”.

Bisbee is world famous for the museum quality copper minerals and 325 other mineral species. The remainder of the day was spent scouting the Mineral City dealers.

The next day we visited Rolf Luetcke, owner of the Sunshine Gallery in nearby St. David, AZ. Rolf’s mentor was Richard Graeme, Sr. of Bisbee. Richard gave Rolf free rein of most of the Bisbee mines. Rolf is a walking encyclopedia of Bisbee minerals and mines. His Gallery is a world class Arizona mineral museum.



Sunshine Gallery

Rolf gave us directions to a collecting area near Tombstone, AZ. Tombstone was famous for silver mining, as well as being a notorious wild west mining town and the site of the famous 1881 Gunfight at the O.K. Corral. Today, it’s a big tourist destination.





Tombstone Hills Mining District



Sunset over Tombstone Hills



Tombstone fluorescent minerals

The fluorescent minerals we collected were: Red = Calcite; Orange = Caliche; Green = Aragonite; Blue-White = Scheelite. It was a lot easier collecting fluorescent minerals in the dark.

Another day was spent with friends from the Socorro, NM trip I led a few years ago. We visited the 22nd Street Show. This show consisted of multiple tents with vendors that had reasonably priced mineral specimens. I found a vendor from Mozambique that had a baseball size piece of fluorescent corundum (ruby). It was priced on the high side. I tried to barter the price down with little success. Steve and I walked away and discussed a plan. Steve's advice to me was "You are dealing with people from another culture where bartering is a way of life." We came back and

Steve asked if there were any more specimens. The vendor had a large container of corundum. Steve asked, "Are you shipping all that back?" The vendor's answer was "Yes". I said, how about shipping one less piece back and I'll pay cash. Then I opened my wallet and started pulling out \$20 bills. We finally settled on a price. The experience was like buying a used car.

Next, we went to a high-end show at the exclusive Westward Look Wyndham Grand Resort and Spa in North Tucson. The specimens were spectacular, and none had prices. I guess if you have to ask, you can't afford it. We settled for a nice lunch on the patio.



22nd Street Show



Westward Look Wyndham Grand Resort and Spa

The rainy weather was a perfect time to visit the Alfie Norville Gem & Mineral Museum on the University of Arizona campus. The museum was amazing. It contained world class specimens from Arizona and around the world.



Whetstone Mountains



Alfie Norville Museum Building



Minerals from the Alfie Norville Museum. Clockwise from the left: wire silver, azurite, gold on quartz

With over 2,700+ mineral and fossil dealers located in 50+ venues, it was impossible to see them all. After seeing a few dozen, all the minerals start looking alike. My favorite venues were Mineral City, 22nd Street, Mineral Co-Op, Miners Co-Op, Fossil Co-Op and the Tucson Gem and Mineral Show® (The Main Show).

Strolling through the Fossil Co-Op, I found the perfect background for my goldfish tank: fossilized fish from the Wyoming Green River Formation, Eocene Epoch, which is 50 million years old. Unfortunately, it was listed at \$340,000 for both slabs. My fish can wait.

Then I located a dealer specializing in large, petrified wood slabs cut into tables. Beautiful works of art starting at \$3,000 for a small table all the way to \$40,000 to replace my dining room table.



Fossilized fish. Photo Credit: Steve Woje



Petrified wood tables

Mineral City had some nice specimens. I dropped into a dealer's room and overheard two men trying to negotiate a \$40,000 piece of some exotic mineral down to \$30,000. The dealer would not budge on the price. Here is a typical Mineral City display case and exotic mineral.

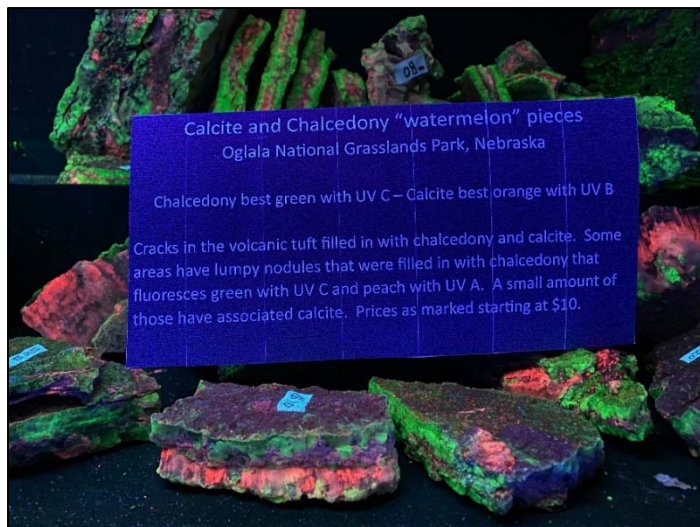


Mineral City display case



Example of a Mineral City exotic specimen

I visited Bill Gardner, of Way Too Cool fluorescent lamps and minerals. After the Crawford club field trip, I sold some of my watermelon chalcedony pieces to him. They were for sale for a hefty markup from my wholesale price. They were slowly selling because mid wave UV flashlights are just starting to hit the market. Bill has an \$140 mid wave LED flashlight that will be available in a few months.



Retail watermelon chalcedony

Another non mineral trip was to Kartchner Caverns State Park in nearby Sierra Vista, AZ. The cave was discovered in 1974 and opened to the public in 2003. Access to the cave is controlled by airlocks and a vapor room to prevent lint from falling off our clothes. Unfortunately, no photographs were allowed. Kartchner Caverns ranks in the top 5 caves I've been in. After the cave tour we visited a local Rock Shop in Sierra Vista. We asked the owner for a good Mexican Restaurant in the area. That happened to be La Casita, just down the street from the Rock Shop. At 4:00 PM we were dining with the senior set. I was the youngest person in there besides the wait staff. The chili rellenos with machaca beef was incredible.

Learning that we were burned out on fossils and minerals, our Airbnb host suggested we visit the original Arizona snowbirds, Sandhill Cranes. They were spending the winter about two hours southeast of Benson. The cranes winter in the southern U.S. and Mexico. In the early spring, they begin the migration to their breeding grounds in the northern U.S. and into Canada. These magnificent birds have a height of three to four feet and a wingspan that can be five to six feet in length. We were able to visit a State of New Mexico wildlife sanctuary to view these birds. At this wildlife sanctuary, I saw an estimated 3,000 cranes.



Sandhill cranes



Sierrita Mine truck

Another rainy day spoiled my visit to the ASARCO Mineral Discovery Center & Sierrita Mine Tour. The Discovery Center was open, but the mine tour was closed due to muddy roads. There was a nice exhibit of open pit mining equipment, vintage 1970's. Today these trucks are three times as large.

A day after the weather system passed, we headed back to the Granite Pass, NM area. Rolf told us of a BLM collecting area just north of the Granite Gap private land. Steve drove, and I navigated through the desert terrain to the mine dump. This was a daytime fluorescent collecting trip. We each had black Weber grill covers to block the sun. The only problem was the steady 20 to 30 mph winds. Every time I set up my cover, the wind lifts one side of it, allowing light to come in. Every piece of vegetation had thorns. Our covers were shredded at the end of the day.



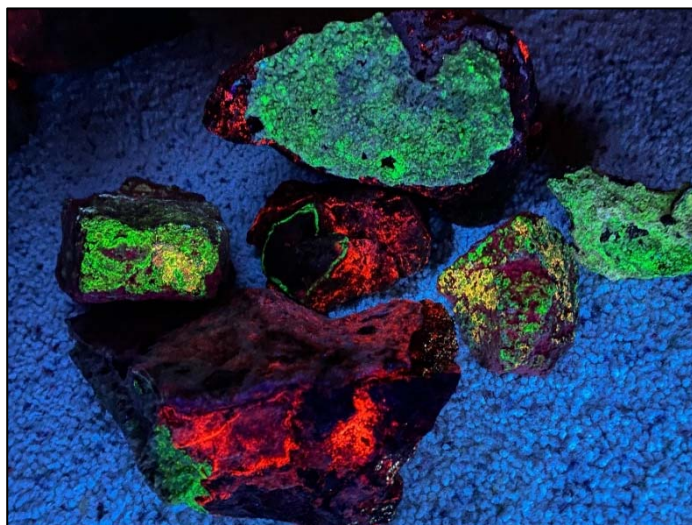
Navigating the desert roads



Steve hiking to the mine dump



Weber Grill sunblock cover



Fluorescent mineral finds

Not a bad haul for daylight prospecting. The fluorescent minerals we collected were: Red = Calcite; Orange = Caliche; Green = Aragonite.

One day before the Tucson Gem & Mineral Show® opened, it was time to view and purchase cactus. Bach's Cactus Nursery in North Tucson is my favorite place for purchasing baby cacti. Out of the dozen cacti I brought home two years ago, 10 are still thriving on my window ledge. I needed to replace two of them and add a couple more. Bach's has cacti from all over the world. The staff helped me select only southwestern cacti. I was fortunate to find a baby ocotillo to add to my collection. Ocotillos are common to the colder and drier Chihuahuan Desert of New Mexico. Plus, I purchased a baby saguaro cactus that populates the Sonoran Desert of Arizona.



Bach's Cactus Nursery

Tucson Botanical Gardens was our next stop. Nestled in the heart of Tucson, this botanical garden was a walk-through paradise. In the cactus section all the paths were lined with high grade copper ores such as azurite, chrysocolla, and malachite.



Botanical Gardens

My final day in Tucson was spent at the Tucson Gem & Mineral Show® (TGMS®), sponsored by the Tucson Gem and Mineral Society, and held in the Tucson Convention Center. This year's theme was "Pegmatites – Crystals Big and Beautiful!" In my opinion, there were more jewelry dealers than mineral dealers. The best part of the show was the display cases. Museums, universities, mineral clubs, and individual collectors brought their best pegmatite crystals. Unfortunately, I missed the lectures & seminars about pegmatites.



TGMS main exhibit floor



Mineral dealers



Display cases

Finishing off the day was dinner at my favorite Tucson Mexican Restaurant, Mariscos Chihuahua.



Mariscos Chihuahua

BTW, Steve sent this photo of the Airbnb yard the day after I left.

Snow falling and sticking.
Photo credit: Steve Woje

On behalf of the Fluorescent Mineral Society and the TGMS®, Steve and I were asked to be judges of the Junior Fluorescent Mineral case. TGMS® had a three-page checklist to evaluate the case. I'm not sure how this Junior Geologist did.



Fluorescent case judging. Photo credit: Steve Woje

It was a good trip. I wish the weather would have been better. I did not wear my shorts or t-shirt once. I understand how important water is to this region. The main objectives of the trip were fulfilled: friendship, adventure, sightseeing, networking, and viewing spectacular minerals and fossils.



For Sale

Display Cases

Five regulation display cases with exact dimensions required for the Denver Gem & Mineral show. Made with special marine-plywood and special tempered glass. \$110 each. All in good shape and in original wooden storage cases. These were stock purchased a decade ago from the Denver Show Council. Buy 1 or more. Contact cindysmithrocks@me.com or 303-818-3084.



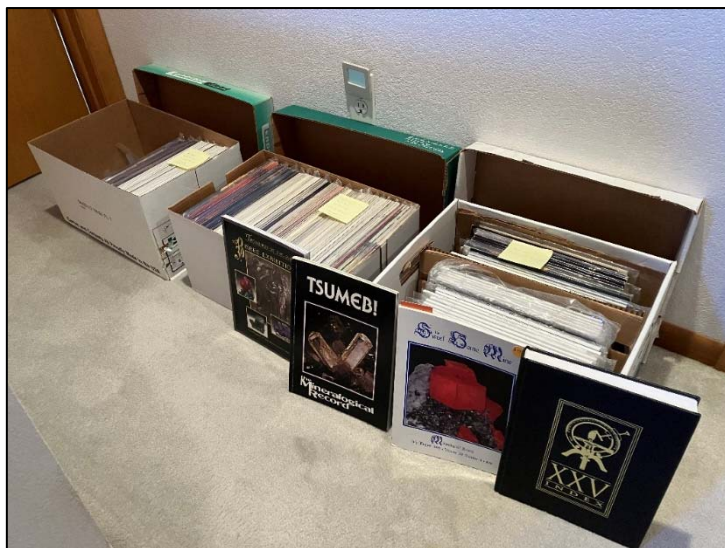
Mineralogical Record Magazines

This full set of the first 43 years of Mineralogical Record (Vol 1, No 1, Spring 1970 – Vol 42, No 2, Mar-Apr 2013) includes all Supplementary Issues ("Sweet Home Mine", "Tsumeb", plus many others), plus the hardbound Index to Vols 1 – 25.

Many of these early and Supplementary Issues are now very difficult to find, and very expensive if they ever appear.

All issues are in fine to mint condition and in plastic protective envelopes. This is a perfect way for the serious collector to back-fill and build their complete set of this premiere mineralogical magazine!

\$1,750 obo



Please contact Mike Smith at 303-810-5292 or m_l_smith@earthlink.net

Field Trip Safety

U.S. National Forest Service

With field trip season just around the corner, it's good to review how to enjoy collecting rocks, minerals, and fossils in a safe manner. The U.S. Forest Service provides these safety tips for rockhounding field trips:

- Stay out and stay alive; abandoned mines are potential killers. Rotten timbers, open shafts, toxic gases, and a lack of oxygen can be deadly.
- Rockhounding is mostly a rugged and dirty pastime. Clothing, especially footwear, should be serviceable and adequate for hiking in rugged terrain, digging, and weather conditions. Boots are recommended.

- Be prepared for extreme weather conditions including rain or snow at any time of the year. Temperatures in the winter can drop below 0 degrees and summertime temperatures can be over 100 degrees. Carry extra food, water, clothing, fuel and other supplies.
- Always tell someone where you are going and when you plan to be back.
- Always wear proper protective equipment (gloves, safety glasses, etc.) when striking or breaking rocks.
- Rockhounds may unknowingly create hazards through careless digging. Undermining the root of a tree is both destructive and dangerous, as it may cause the tree to fall. Tunneling through unsupported soil or under overhanging banks that may cave in on the digger are unsafe practices. Deep or steep-sided pits or trenches should be filled upon completion of digging, as they pose a hazard to both people and livestock.
- Be aware that the roads leading into the digging sites may be used by heavy trucks carrying logs, gravel, livestock or other products. Travel at your own risk. Unimproved roads can be dangerous to travel when wet, muddy or snowy. Rockhounds should inquire with the BLM or USFS about possible road closures and fire restrictions prior to visiting the rockhounding sites.
- Rattlesnakes may be found in certain areas during the warm months. Watch for them in rock slides, around damp areas, under old buildings, ledges, etc. Prompt medical treatment is always advisable if bitten.
- In the spring, wood ticks are found in sagebrush and timber fringe areas, where they can hang on the tips of bushy twigs and transfer to any person or animal that brushes past. Ticks can carry spotted fever and other infections. They should be removed promptly, and the bites should be treated.
- Protect your pets by keeping them under control at all times.



Credit: Matt Frederick, licensed under the [Creative Commons Attribution 2.0 Generic](#).

The Original Denver Gem and Mineral Show February 2024 Update

The 2024 Denver Gem & Mineral Show (DGMS) in conjunction with the Hardrock Summit will be held at a new location this year at the Westin Westminster Hotel from September 12-15, 2024. The address of the hotel is 10600 Westminster Blvd, Westminster, CO 80020.

The DGMS will have a separate area at the hotel that includes dealers, fluorescent room, special exhibits, education displays, gold planning, and grab bags. The theme of the 2024 DGMS is **Mineral Oddities**. Hours for the Show are Thursday through Saturday 10:00am to 6:00 pm and Sunday 10:00am to 3:00pm. Admission and parking for Hardrock Summit and DGMS will be **FREE**.

Volunteers Needed

The DGMS is put on by the area Denver gem, mineral, and fossil clubs. Your participation as a volunteer is the life blood of a successful show, and we need many volunteers. Volunteer duties can include Display Case Set-up and Tear Down on Wednesday 10am-4pm and Monday 3pm-7pm, Grab Bags and Pins sales, Club Tables, and Fluorescent Room. More information will be coming out for signup of volunteers. Additional information on volunteer sign-up will appear in the coming months.

Request for Club Members Display Exhibits and Competitive Exhibit Options

Another outlet for your support for the DGMS would be to enter an exhibit in the show for the enjoyment of our visitors. For over 50 years, these displays have set us apart as unique from the rest of the area shows. We encourage exhibits that feature the show theme of “Mineral Oddities”, but any display is appreciated like fossils, mining history, collections, and educational/hobby topics. Exhibited material need NOT be self-collected. Contact Larry Havens at lwrnchavens@comcast.net or 303-757-6577 if you are interested in putting together a display case in the DGMS. Setup for the display cases will be Wednesday, September 11th and tear down will be Sunday, September 15 after the show closes.

In addition, we are offering the following competitive exhibit options with awards:

- Both Adult and Junior (ages 6 through 14) Prospector Competitions - The collecting period for eligible personally-collected specimens is September 18, 2023 to August 26, 2024.
- The Species Competition – Entries are mineral specimens (one per category) in the following categories: thumbnail, toenail, miniature, cabinet, oversize cabinet, field collected, and best of Colorado. You may enter one, some, or all the categories.
- The Best Fossil Personally Collected in the Field Competition – Up to three specimens can be entered. The collecting period for eligible personally-collected specimens is September 18, 2023 to August 26, 2024.
- Club Prospector Trophy – We are bringing this club competition back this year. Any member club is eligible to enter up to three specimens collected after September 30, 2021 until August 19, 2024 on club-sponsored field trips. Specimens collected from fee sites will be allowed.
- Richard M. Pearl Trophy – We are bringing this award back as well this year. It is awarded to the exhibitor of the best crystallized mineral specimen entered in this competition. Entries may be any crystallized mineral, thumbnail or larger, from any locality; the exhibitor must own the specimen. Quality, on a worldwide basis, will be the only criterion by which each mineral specimen will be judged. The exhibitor will be limited to three entries for this trophy in a given year. A specimen is eligible to win this trophy only once.

For full information and entry forms contact Larry Havens at lwrnchavens@comcast.net or 303-757-6577. Deadline for the competitive entries is August 26, 2024. We will provide display cases and liners (if requested).

If you have any questions, please contact Amber Brenzikofer, 2024 DGMS Chairperson, at amberbrenzikofer@gmail.com or 720-480-5234.

Thanks, and let's have a successful show this year in our new location!









RMFMS News

Our club belongs to the Rocky Mountain Federation of Mineralogical Societies (RMFMS). This benefit for our club members of a reduced subscription rate to Rock & Gem is from the latest RMFMS newsletter. You can either print and mail this form or subscribe online at <https://www.rockngem.com/product/rock-gem-print-magazine-subscription-11/>.

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Order online at: www.rockngem.com/afms

AFMS News: New AFMS Website

New AFMS Website by Marty Hart & Lori Carter, AFMS Webmasters (Reprinted from the Rocky Mountain Federation News, March 2024)

The new AFMS website is now live at <https://www.amfed.org>.

The <https://amfed.org> links are not currently resolving, so be sure to include the www. There are DNS changes that may not have yet propagated, and could take a couple of days. We will be making more DNS changes in the coming days and weeks that might cause temporary interruptions while those settings are being updated.

The site scales for screen resolution. If you do not see a menu on the left side of the page, click the “3 horizontal lines” icon on the top left of the page.



All links to internal pages of the website are unfortunately broken on the new site. We spent a lot of time and effort trying to ease the pain, but our new host has very specific methods that must be used, and limits what can be done. The page below lists some of the common cross references from old URL to new URL:

<https://www.amfed.org/website/whats-new>

The good thing about not being bound to the old hierarchy of the old site is that we were able to start from scratch with a much simpler hierarchy and not be burdened with a lot of old baggage.

If you happen to find any issues, please email us with a detailed description of the problem at: webmaster@amfed.org; webmaster2@amfed.org.

If you have any suggestions, we would like to hear them and will take them into consideration.

Credit for almost all of the content on the website goes to long and hard work that Lori Carter put into establishing and creating the new site. We also had a lot of other people who contributed to conception of the site. A special thank you to Charles Carter for special technical assistance.

[Editor's Note: You really need to take a look! Beautiful website and easy to navigate!]

The 2024 CFMS-AFMS Show

Please mark your calendar for May 24-26, 2024, for the nationwide **CFMS-AFMS Show and Convention**.

The VGMS (Ventura Gem & Mineral Society) is a member of the CFMS (California Federation of Mineralogical Societies), which in turn is one of 7 regions of the AFMS (American Federation of Mineralogical Societies). Each year the CFMS holds a Show and Convention somewhere in California, and likewise, each year the AFMS joins with one of the 7 regions for its annual show. Hence, every 7 years it lands in California. It's a special event to host the CFMS show, and it's even more special to host for the joint CFMS-AFMS show.

For more information about the show, see <https://2024cfms-afms.com/>.



THE VENTURA GEM AND MINERAL SOCIETY
PROUDLY PRESENTS

2024 CFMS-AFMS Gem Show & Convention
hosted by the Ventura Gem & Mineral Society

Seaside Gems at Ventura

Fri - Sun, May 24-26, 2024

Ventura County Fairgrounds • Ventura, CA

GEMS • MINERALS • FOSSILS • JEWELRY • DEALERS • EXHIBITS • SPEAKERS •
DEMONSTRATIONS • RAFFLE • SILENT AUCTION • KIDS ACTIVITIES & MORE!

Other Rockhounding Events and Activities in the Area

Here are other events and activities in the area that may be of interest. Thanks to Pete Modreski for providing information about several of these events.

- **March 22-24 (Friday-Sunday)** is the **Fort Collins Gem and Mineral Show**, 4-8 p.m. Fri., 9-6 Sat., 10-4 Sun., at The Ranch/Larimer County Fairgrounds, Thomas M. McKee 4-H Building; the Fort Collins Rockhounds Club 61st annual show. See the flyer for more information.

2024 Denver Museum of Nature and Science Earth Sciences Colloquium

Talks are in-person-only, from 2-3 pm in Ricketson Auditorium (not the VIP Room). Museum admission not required to attend. Enter through Staff/Volunteer entrance, east of main visitor entrance, and let

Security know you're attending the talk, they will direct you to walk through the Space Odyssey exhibit until you see the park and then turn right toward Ricketson Auditorium.

- **Mar 14 (Thursday)** *Our Earth was completely frozen? Twice?* (Carol Dehler, Utah State U.)
- **Apr 9 (Tuesday)** *Revisiting the mechanisms and thresholds of mass extinction.* (Cori Myers, U. of New Mexico)

Everything Dinosaurs on the Rocks with Erin LaCount

Thursday mornings from 10 - 11:30 a.m. **Dinosaur Ridge** Education Programs Director Erin LaCount presents a talk on a species of dinosaur from the Discovery Center. Attend in-person or join by Zoom. Every talk includes time for Q&A. So much knowledge for the low, low price of \$5 per session! <https://dinoridge.org/events/>

- March 14: Iguanodonts (Mostly)
- March 28: Hadrosaurs
- April 4: Pachycephalosaurs
- April 11: Ceratopsians



**61st Annual 2024 Fort Collins Rockhounds
Gem & Mineral Show**

Featuring Agate & Colorado Minerals

Friday March 22 4pm-8pm
Saturday March 23 9am-6pm
Sunday March 24 10am-4pm

Details at www.fortcollinsrockhounds.org
fcrockhounds@gmail.com • (No dealer space available)

Thomas M. McKee 4-H, Youth & Community Building,
Larimer County Fairgrounds

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Denver Show Club Table

open

A friendly reminder to pay your 2024 annual dues

Dues are still only \$18 per individual and their immediate family. You can pay in two ways:

PAY Gerry Naugle, Treasurer and Membership Chair, at any FMC monthly meeting. Gerry is at or near the sign-in table when you enter the room for the monthly meetings.

SEND a check made to "Flatirons Mineral Club" or "FMC" to P.O. Box 3331, Boulder, CO, 80307. Please do not send cash in the mail.



Your 2024 dues must be received by January 20th, 2024 in order to stay current with the member benefits, which include electronic club newsletters containing the information about club activities, club field trips, annual show opportunities, silent auction opportunities, the annual club summer picnic, and access to the club website. Your receipt is your new annual 2024 FMC membership card.



Flatirons Facets
P.O. Box 3331
Boulder, CO 80307-3331

First Class Mail

Upcoming Events

Date	Event	Location
Tuesday, March 12 at 7:00 pm	Club meeting about the Formation of the Grand Canyon. See page 2	Mountain View United Methodist Church, 355 Ponca Place in Boulder
Tuesday, March 19 at 6:30 pm	Jr. Geologists meeting. See page 7	Mountain View United Methodist Church, 355 Ponca Place in Boulder
Wednesday, April 10 at 6:45 pm	Club Silent Auction. See page 2	Mountain View United Methodist Church, 355 Ponca Place in Boulder
Tuesday, April 16 at 6:30 pm	Jr. Geologists meeting. See page 7	Mountain View United Methodist Church, 355 Ponca Place in Boulder
Friday, April 19	Field trip to the USGS Library. See page 3	USGS Building in Golden



Flatirons Mineral Club

**2024 Annual Silent Auction, starts at 6:45pm on
Wednesday, April 10th**

Seller's set-up starts at 5:45pm

Mountain View Church, 355 Ponca Place in east Boulder (80303) in the downstairs Barker Hall Room (*it is the huge A-Frame looking church with south facing solar-panels, and is located just west of Frasier Healthcare Facility on Ponca*)

Minerals, Crystals, Fossils and Lapidary

Bring items to sell.....or just come to browse!

Sellers: Suggest to e-mail or call Gerry Naugle ahead of time to get a seller-buyer number, *then you can pre-fill your seller slips.*

Gerry Naugle gnaugle@earthlink.net or 303-591-2830

See us on our website, at:

<https://flatironsmineralclub.org>

[illegible]

<i>Seller: Complete this section</i>		
1. Minimum Bid:	\$	
2. Seller's Number:		
3. Donation to club (Circle One)		
20%	50%	100%
4. <i>Description:</i>		

Silent Auction Buyer's Receipt	
<i>Item Description:</i>	
FINAL BID	\$

Thanks for your contribution. For more information about FMC visit:
www.flatironsmineralclub.org