FLATIRONS FACETS

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Beautiful crystal-lined vug containing calcite mounds surrounded by analcime crystals found at the North Table Mountain field trip last month.

Credit: Dennis Gertenbach

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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

Fall Highlights

It has been a busy fall! We wrapped up our field trip season with a visit to North Table Mountain and enjoyed an excellent presentation by Markus Rashke on "Rare Earth Micro-Minerals of the Lake George Ring Complex, Colorado."

Upcoming Events

- **Annual Towel Show** — November 12: Come share your mineral, rock, and fossil finds from the collecting season. It is always fun to see what everyone has collected.
- **Rocks & Rails Show** — December 11–13: This show is the highlight of my year and is run entirely by club volunteers.

Please read below for more details about these events and how you can help.

Best regards,
Brian Walko, FMC President

Come to the Towel Show on Thursday, November 12

If you're new to the club, you're probably asking, "What is a Towel Show?" Each year, members bring specimens they have collected this past year, as well as lapidary and jewelry they have made in the last year, to show to other club members. The specimens are displayed on a towel, hence the "Towel Show".

Prizes are awarded to both adults and juniors in the following categories: personal field trip, club field trip, lapidary/jewelry, best mineral, best fossil, best ugly rock,



From last year's Towel Show

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(**Towel Show** continued from page 2)



From last year's Towel Show

and even best towel. Participants vote for their favorites, and gift cards are presented to the first and second place winners in each category. So, pick out some of your best specimens in as many categories as you like, make labels for them, and bring them to display on your towel.

The Towel Show starts at 7:00 pm in the Mountain View United Methodist Church (355 Ponca Place in Boulder). We will meet in Barker Hall in the basement .

at the NORTH END of the church. When you enter the church through the main door from the west parking lot, just follow the signs to the meeting room. If you are bringing items to show, plan to arrive 15 minutes early to set up your display on your towel. Also, please bring snacks to share with everyone.

Come and join in the fun of displaying your special finds and creations and enjoying those of other members.

Please note that the Towel Show is on THURSDAY, not on Tuesday.

Rocks & Rails Show December 11-13

Rocks & Rails, the club's annual gem and mineral show, is on December 11 to 13 at the Boulder County Fairgrounds in Longmont, 10 am to 5 pm each day. Adult admission is $8, and children 12 and under are free with a paid adult. Our show is run in conjunction with the Boulder Model Railroad Club, so you can enjoy lots of rocks, minerals, fossils, and jewelry, plus model trains in the other half of the building. The show features gem and mineral dealers, exhibits, fluorescent minerals, and children's activities, including games, grab bags, and the Rocks R Magic Show.

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Last year's Rocks & Rails Show

(**Rocks & Rails** continued from page 3)

Club members can participate in many ways. The show is planned and run by club volunteers; see below to find out how you can help. There will be eight display cases to showcase your special specimens or lapidary work. Details on how to sign up for a display case are on page 6. Club members can also sell their own creations or rock collections at the Artisan Tables – see page 5. Also, specimens are needed for the Kids Corner; we have a home for those specimens you collected years ago but no longer want. More information on donating specimens can be found on page 6.



Volunteer for Our Annual Club Mineral Show

Every year, our club puts on the best gem and mineral show in Colorado. But to do this, we need volunteers. We need people who unselfishly donate their valuable time to help with the show. There are several areas of the show where we need those volunteers. I'm here to ask if you could volunteer some of your time for the show in one of the following areas.

The first area is **Set-up**. Set-up takes place on Wednesday, December 9, starting at 9:30 am and continuing until finished. Jobs include putting tables in their predesignated places and helping where needed. Lunch is provided.

During the show, volunteers are needed in 2 areas. The first area is **Security**. Each volunteer dons an orange vest and patrols the show floor, keeping an eye out for shoplifters. We also have 2 plain-clothed security guards who also patrol the show floor. It would be appreciated if security volunteers spend at least 1½ hours on patrol. **We particularly need people for Security on Sunday morning.**

The other area volunteers are needed is the **Kids' Area**. That's my area. In the kids' area, we have games for the kids to play for a quarter, and everyone wins. There are also colorful grab bags filled with specimens for $1.00. Volunteers interact with the kids and their parents at each game. All proceeds from the games and grab bags go to a scholarship fund - the club keeps no profit. I ask that volunteers spend at least 1½ hours in the kid's area, but I appreciate any time a volunteer can donate. The kids' area is open Friday, Saturday, and Sunday, from show opening at 10 am to the 5 pm closing (4 pm on Sunday). I will do my best to work with you to find a time and day that works best with your schedule.



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(**Rocks & Rails** continued from page 4)

Take-down starts at the close of the show on December 13th at 4 pm. Volunteers do a reversal of set-up; take tables down and clean up. This can last several hours. Dinner is provided.

We could also use some help in the morning before the show opens for an hour or two on Friday, Saturday, and Sunday, helping direct people to parking places.

And your perk for volunteering at the show is free admission! This also presents a great opportunity to do some Christmas shopping!

If any of these areas are of interest to you, and you would like to volunteer, please contact me, Char Bourg, at showvol46@gmail.com.

Show Club Artisan Sale Table
This year, we are continuing the opportunity for club members who are not dealers to sell their own creations or rock collections at our December show in Longmont. These can include bulk rocks, slabs, jewelry, and other items that fit the following description from our dealer contract: Dealers will be permitted to display or sell only materials or equipment directly related to the Earth Sciences, Rocks, Minerals, Fossils, Lapidary, Gems, Jewelry, Indian Artifacts, or printed materials, film or video materials associated with any of these fields.

We will provide a set of tables at the show designated for this purpose, calling them the "Flatirons Mineral Club Artisan Tables."

A few ground rules for participation are:

- This is offered on a first-come, first-served basis.
- We limit each individual's space to 2, 3, 4, 5 or 6-foot increments. Please let us know the number of linear feet you are requesting, so we can make sure we have the room available. Individuals may combine for more space or to help with staffing.
- You must sign up and prepay for your space. The price for table space is $6 per foot.
- You may set up your space either on Thursday, December 10, between 7:30 am and 9 pm, or on Friday morning between 7:30 am and 10:00 am.
- All items must be clearly marked as to price, either individually or in groups, (which you can then negotiate as you wish).
- Your Artisan Table area must be staffed at all times to properly register sales and for security purposes. To this end, it is the obligation of all participants in this offering to register for one or more time slots to oversee this area. Once I have a list of the people who will be participating, I will then coordinate the staffing.

If you would like to join this endeavor, please contact Andrew MacGregor at andrew.d.macgregor@gmail.com to register. Once you register, he will send you confirmation.

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(**Rocks & Rails** continued from page 5)

Display Your Best
Once again, we will have display cases for our members to showcase their rocks, minerals, fossils, and lapidary work. The display cases are from the Denver Show and feature a glass front, overhead lighting, and are secured. The display cases will be set up for you. All you need to do is bring your specimens, labels, and liners on Thursday, December 10, and fill your case. Plan to take down your case on Sunday at 4 pm.

The display cases are always a great hit with the public and help to interest people in joining our club. To reserve a display case, please contact Dennis Gertenbach at gertenbach1@gmail.com. Preference for cases will be given to the juniors.

Specimens needed for the Rocks & Rails Show
It is time for you to go through your rock collections and donate to the KIDS' AREA for our rock and mineral show. We need donations for the WHEEL OF ROCKS, ELECTRIC MATCHING, and a new game, PIC-A-DINO.These all need SMALLER SPECIMENS, about the size of a quarter, for prizes. Some examples are small pieces of calcite, Apache tears, quartz crystals, fossils, wood, etc. We like to be able to fill a container with the same type of specimen for the kids to choose from.

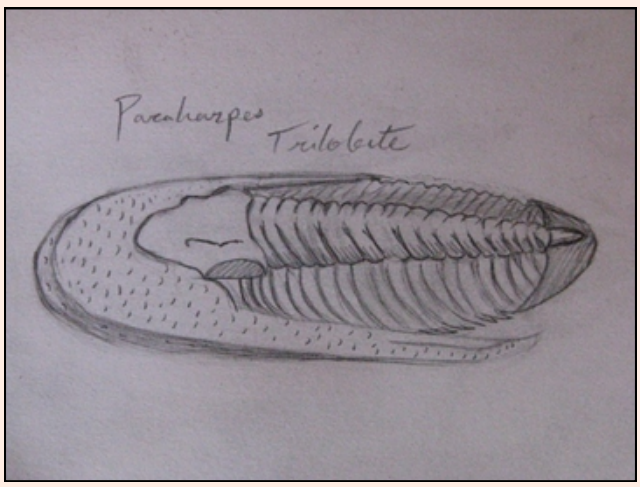
Of course, if you have rocks and minerals that you aren't sure of, bring them anyway. Some we can cut down and use while others may end up in a pothole. To donate your specimens, contact Char at rckhnd4252@gmail.com.

Advertise our Show
At the end of this newsletter is a flyer advertising our show. Please print and distribute to your friends, neighbors, and people at work and invite them to the show.

Trilobite of the Month: *Paraharpes*

Charlotte Small

Paraharpes is a genus of trilobite known for itsx oversized headshield. They are a mostly flat, with a very small pygidium, and a saucer-like cephalon piece, almost resembling a horseshoe crab in silhouette. This cephalon is filled with many small divots and grooves. This genus belongs to the family Harpetidae, which are thought to have evolved in the Cambrian, and succumbed in the Devonian.



Holiday Party and Gift Exchange on Thursday, December 17

To finish the year, come and join the fun at the annual Holiday Party on THURSDAY, December 17. It is a time to exchange gifts and share snacks and stories with one another. So, bring a gift and some snacks to share with others.

One of the highlights of the evening is the annual gift exchange. Bring a wrapped $5 to $10 rock-related gift. The gift exchange is great fun, with gifts exchanging hands throughout the evening. Members young and old will have a great time, and you never know what gift will go home with you.

The party starts at 7:00 pm at Mountain View United Methodist Church (355 Ponca Place in Boulder) in Frasier Parlor at the south end of the church. Come in the south entrance and follow the signs to Fraiser Parlor. We hope you can join us!



A great gift at last year's holiday party

Red Feather Lakes September Field Trip

By popular request, the club went on a second field trip to Red Feather Lakes on September 12 to collect amethyst and other minerals. Please enjoy these photos from Barbara Holland and Jasper Seldin of some of the special finds from this day. A special thanks to Nora Fawal for leading the trip.





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(**Red Feather Lake** continued from page 7)







Photos by Barbara Holland and Jasper Seldin

Sue, the *T. rex*, Had a Shark Buddy

Trick Runions

A new shark, *Galagadon nordquistae*, that lived in the vicinity of the famous *T. rex* named Sue, was described by a team from the Field Museum and North Carolina State University. The matrix they removed from the skull was saved for 20 years and Karen Nordquist volunteered to dig through and sift the leftover matrix. She had also prepped Madagascar dinosaurs at the Field Museum, as well, when I was living in Chicagoland as a member of ESCONI (Earth Science Club of Northern Illinois).

The tooth is barely a millimeter big - the size of the head of a pin. She spotted the rounded little thing in the pile, flipped it over, and there it was. "It was so tiny, you could miss it if you weren't looking really carefully," Nordquist said. "To the naked eye, it just looks like a little bump, you have to have a microscope to get a good view of it." She found about 20 small teeth.

The news of this shark living close to where Sue lived, changed a lot about what paleontologists thought the area was like where Sue lived. It showed that there was a river in South Dakota that was connected to the sea that covered Nebraska at the time, and was perhaps brackish water composed of seawater and fresh water.

These sharks were very small, about a foot long, and were bottom feeders called carpet sharks. There are currently species like it living in Southeast Asia and Australia. The tooth reminded Nordquist of the video game, Galaga, and so it was named for her and that spaceship in the game.



Illustration of the shark *Galagadon nordquistae* (©Velizar Simeonovski, Field Museum), shark tooth found with Sue, the Galaga video game spaceship. Used by permission from Karen Nordquist.







Trilobites in the Mountains?!

By Quin Armstrong, age 11

Where did trilobites live? In oceans, that's where. So, it's kind of surprising that trilobite fossils can be found at around 7,000 feet in the mountains of Colorado, near Deckers.

In July, my parents and I went on a field trip to look for these sky-high trilobites, brachiopods, and other early Ordovician marine life. Dennis Gertenbach led the trip.

Getting up there, we encountered a lot of ATVers, who were loud and dusty. Some left trash in the beautiful forest. On the hike up to the first site, we saw a lot of poison ivy, which Dennis warned us to avoid.

At the first site, an old stone quarry, I found a ton of fossil shells and a piece of a trilobite. We also found a really cool rock that had layers with brachiopod impressions and layers with calcite crystals together in the same specimen. It was really cool to see fossil shells and calcite crystals together in the same rock.

After our lunch break and a short drive, we hiked to the second old quarry site. The hike was pretty long and strenuous, with our tool bucket banging against our legs.

At first, I wasn't having very much luck. And just as I was about to give up, I flipped over a rock and found a big trilobite. I was so excited!

Later, while I was sitting under a juniper tree for shade and eating a snack, I looked at the ground to my left, and there was a trilobite staring back at me. When I saw the trilobite, I thought to myself, "Well, this is my lucky day!"

I'm so glad that I made a new friend, another kid on the hike. We also learned some lessons, like that the bucket we used to transport our tools was too hard to carry. So, when we got home, we bought canvas tool bags to use instead on future field trips. Another thing I learned is that it's easy to give up, but if you keep persevering, you might just find something awesome.

This article first appeared in the October 2026 edition of Crack the News*, the juniors newsletter of the American Federation of Mineralogical Societies.*

Jr. Geologists Activities

The **Wonderful World of Quartz** was featured at September's Jr. Geologists meeting. Our meeting was about quartz in all its forms - crystalline quartz like smoky quartz and amethyst, and microcrystalline quartz like agate and chalcedony. Jr. Geologists brought quartz specimens from their collections for a quartz show-and-tell. And they took home several different types of quartz to add to their collections.



In October, the Jr. Geologists worked on the Collecting Badge. They brought 10 of their best specimens with proper labels to show everyone. Several GeoExplorers (middle and high schoolers) brought examples of how they catalog and store their collections. For homework, the Jr. Geologists went home and began cataloging their specimens and properly storing them to complete the requirements for this badge.

Geodes is the theme for November's meeting on the 17th. Howard Gordon will talk about the different types of geodes and how they formed. The Jr. Geologists will examine geodes and thunder eggs to learn more about them. Also, during the meeting the GeoExplorers will help prepare us for the Rock & Rails Show in December. They will talk about how to put together a display case for the show and demonstrate the Rocks R Magic show that the Jr. Geologists will run throughout the Rocks & Rails weekend.

The Jr. Geologists program is open to all Flatirons Mineral Club families. We meet monthly on the third Tuesdays 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 Gertenbach at gertenbach1@gmail.com or 303-709-8218.







Left and center: Jr. Geologists examine different forms of quartz. Right: GeoExplorers show labeling and storage of specimens. Photos by Dennis Gertenbach and Jennifer Armstrong

Crawford, Nebraska Field Trip: Fairburn Agates and Fluorescent Chalcedony

September 26 – 27, 2026

Brian Walko



Toadstool Park at sunrise. Photo: Randy Russell

We enjoyed ideal weather on northwestern Nebraska's high plains, unlike last year's rained-out fluorescent hunt and the 100-degree heat two years ago. About 40 members from the Flatirons Mineral Club, Colorado Mineral Society, and Littleton Gem & Mineral Club took part.



Brian Walko leads the orientation. Photo: Brad Willkomm

Our first stop was Toadstool Geologic Park, known for fossils in the Brule and Chadron formations of the Oligocene White River Group. Following an orientation and a clear reminder that the law prohibits fossil collecting, we searched the Brule Formation for mammal and turtle fossils and photographed them.



Sugarloaf Butte. Photo: Brian Walko

Next, we explored the Chadron Formation's Chalcedony Beds, with views of Sugarloaf Butte.

For the rest of the day, we searched several beds for elusive Fairburn agates and found eight. Morgan of the Littleton Gem & Mineral Club discovered three! Other finds included several

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The search for agates. Photo: Brian Walko



Brian Walko looks over Haley Burris' agate finds. Photo: Sharon Dooley



Prairie Agate Rock Shop. Photo: Brian Walko

(**Crawford** continued from page 11)

brachiopod casts and molds, and everyone gathered plenty of prairie agate, petrified wood, jasper, and chert.

There are two ways to hunt for agates: scan the ground as you walk slowly, or sit among the rocks and turn them over to check for banding underneath.

After dinner, Brian took the group to a site with watermelon chalcedony and calcite. The chalcedony lines cracks in the Chadron Formation's silica-rich volcanic ash, with calcite deposited in any remaining central gap. It fluoresces only under mid-wave ultraviolet light. Collectors showed Brian their finds for an assessment of specimen quality.

On day two, we visited Agate Reservoir. Mud prevented us from parking along the road at its base, so we collected in the agate beds above the reservoir instead. Heading home, some members visited Prairie Agate Rock Shop on Crawford's outskirts to see its fossil museum and agate collection.

This enjoyable outing is an annual FMC trip.

To join a high plains adventure, look for the September 2027 trip announcement.

Dean Lomax Shares Paleontology with Denver Audience

Quin Armstrong, age 11

British paleontologist Dean Lomax visited the Denver Museum of Nature & Science on September 29 and 30 to talk about his new book, The Secret Lives of Dinosaurs (which I reviewed in another article), and to participate in a Q&A following a screening of the film Why Dinosaurs?, in which he was featured. I attended both events with my family.

I asked Lomax three questions over the two nights. First, I asked, "If you could watch one extinct animal for 24 hours, what animal would you choose, and what would you hope to learn?" He answered *Ichthyotitan*, the largest ichthyosaur found so far, because he would like to learn how it lived, how it ate, how big it was, and whether it was an apex predator.

Next, I asked, "Have you ever found a fossil and immediately thought what on Earth happened here?" Lomax said he found a headless, tailless ichthyosaur with a zig-zag spine. Normally ichthyosaur spines are pretty straight. He still has no idea what happened to it.

Finally, I asked, "Which story in the book was the hardest to prove scientifically?" He answered the mating millipedes in the first chapter and the amputation of a sauropod tail in the tenth chapter. The millipede story is based on a trace fossil, and researchers compared it to modern millipede mating behavior. Regarding the tail, scientists believe the tail was not merely washed away because the vertebrae at the end of the tail stump were mutilated, similar to modern crocodiles that have lost their tails.

I also enjoyed talking with the creators of "Why Dinosaurs?," James Pinto, now a graduate student, and his father, Tony. It was a phenomenal film about James's passion for dinosaurs and why people, including kids, love dinosaurs so much. In making the film, the Pintos got to meet a lot of scientists, including the guy from Dinosaur Train, Scott Sampson.

After the film, the Pintos, joined by Lomax and paleobotanist Gussie Maccracken, took questions from the audience. I thought Maccracken gave the most interesting answer when a girl asked what might be the best job in paleontology for an autistic girl. Maccracken said she could be whatever she wanted to be. Maccracken also shared that she has ADHD.

My dad asked what kids should do to prepare for a career in paleontology, especially given how small the field is. James Pinto and Lomax said hard work and volunteer opportunities can help.

I also found Lomax's backstory interesting. Despite being very interested in science, and especially paleontology, he

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Quin with Dean Lomax, Gussie Maccracken, Tony and James Pinto.



Quin and Dean Lomax talking about The Secret Lives of Dinosaurs.

(**Dean Lomax** continued from page 13)

failed science in high school, but he didn't give up. Instead, he set off on an adventure to Wyoming to learn from scientists in the field. To help pay for the trip he even sold his Star Wars and Transformers collections! He never did get his undergraduate degree but later earned his PhD.

I enjoyed meeting these scientists and talking about paleontology with them. I was inspired to keep learning.

North Table Mountain Field Trip Report

Dennis Gertenbach

Sixteen club members enjoyed this year's annual trip to North Table Mountain to collect zeolites and other minerals on October 24. With cooler weather, everyone had a pleasant day collecting and went home with nice specimens.









Clockwise from the left: Club members at the South Quarry, searching for specimens, a nice specimen with chabazite and thomsonite, thomsonite specimen, vug lined with chabazite crystals.

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(**North Table Mountain** continued from page 14





Left: If you want the big specimens, use a big hammer.
Right: Large calcite crystal surrounded by analcime.

If you would like to see some of the different zeolite minerals found on North Table Mountain, visit the exhibit in the Mines Museum of Earth Science (1310 Maple Street in Golden).



Lomax's New Book Explores Prehistoric Animal Behavior

Quin Armstrong, age 11

The Secret Lives of Dinosaurs: Unearthing the Real Behaviors of Prehistoric Animals
Dean R. Lomax
Columbia University Press, 2025



Quin got to meet Dean Lomax and get his book signed recently.

A tacosaur? That sounds like something made up for a cartoon or a comic book, not something I'd expect to read about in a dinosaur book.

One of the things I enjoyed about The Secret Lives of Dinosaurs by Dean Lomax was discovering the story of the "tacosaur." A *Psittacosaurus*, aka the tacosaur, was under attack by a *Repenomamus*, a Cretaceous mammal, when they were buried under a volcanic mudslide. This fossil showed me that the real world of dinosaur behavior can be more exciting than I ever imagined.

Even giant millipede tracks can tell a story. Trace fossils shown in the book from a Carboniferous floodplain reveal clues about millipede courtship and mating. Scientists base this idea on the position of the tracks. It's a great example of how fossils can preserve evidence of animal behavior, not just what an animal looked like. Millipedes usually leave two rows of leg tracks. This trackway had three, so scientists believe the millipedes were mating with one partly on top of the other.

One discovery that really surprised me was a crocodilian footprint preserved in a crocodilian coprolite, which is the technical name for fossilized poop. As gross as it sounds, it shows that paleontologists can learn from some very unexpected fossils. Talk about leaving your mark on history!

I like that the book explores unusual discoveries, including a fossil of *Hyphalosaurus*, a Cretaceous reptile with two necks and two heads. This condition is called bicephaly. What makes this fossil so extraordinary is that it's the only known fossil example of bicephaly. It gives us a rare glimpse at how unusual prehistoric life could be and shows how much there is still to learn from the fossil record.

Lomax's book contains eleven chapters and discussions of 49 different fossils. He covers topics including reproduction, eggs and babies, social life, movement, homes, food and digestion, fighting, health, and more.

Although he's based in England, Lomax has close ties to the American West. Early in his career, he volunteered at the Wyoming Dinosaur Center in Thermopolis, Wyoming. His book includes a

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(**Book Review** continued from page 16)

discussion of "Big Al," the *Allosaurus* discovered in Wyoming. During his recent visit to Denver, I got to meet him and get my books signed. But that's another story.

I suggest that anyone who loves fossils should read this book, although it is a little advanced for younger kids. I'll never look at fossils the same way again!

This article first appeared in the November 2026 Trilobite Tales, the newsletter of the Western Interior Paleontological Society.

Pipestone National Monument: A Geology Road Trip Recommendation

Brian Stevenson

During a family summer road trip around the Great Lakes, we stopped at Pipestone National Monument in southwestern Minnesota. We expected interesting geology. What we found was a place where geology, history, and living cultural traditions are so closely connected that it is hard to talk about one without the others.

The landscape looks unimpressive on first glance. Looking to the west we see the beginnings of the plains, and as you approach the visitors center, it is at first hard to recognize what you're there for. Once inside and after walking the grounds, it became abundantly clear why this place is so special.

Three things make this a great stop: The rocks, the history, and the living culture on display.

The stone itself is the star of the show. Pipestone, also called catlinite by geologists, is a soft red claystone layer tucked beneath much harder Sioux Quartzite. To reach it, quarriers must remove thick layers of quartzite by hand using wedges, sledgehammers, pry bars, and other hand tools. Machines are not used because they can damage or shatter the pipestone, as well as to honor traditions. As time has gone on, there are no longer any easy areas for collecting either. The layer of pipestone descends underground diagonally so the further in you quarry, the more quartzite you have to remove.

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(**Pipestone** continued from page 17)

The pipestone is a very fine-grained claystone, or argillite, made mostly of microscopic crystals of pyrophyllite, along with diaspore, muscovite, kaolinite, and traces of hematite, which gives the stone its rich red color. The surrounding Sioux Quartzite is extremely hard at about 7.5 on the Mohs hardness scale. Pipestone is much softer, around 2.5. That makes it just slightly harder than a fingernail and soft enough to cut and shape with hand tools. The pipestone layer is usually only about 11 to 18 inches thick, so every piece needs to be extracted with planning and care.

Walking near the quarries made that process feel very real. There is a trail that runs through the landscape and goes by a number of active and historic quarry sites. Indigenous peoples can apply for a permit each mining season. Some locations have been mined for generations by the same families.

Inside the visitors center, among the normal displays and videos of people quarrying and working the land, was something that I did not expect. I've been to many National Park sites in my life, but what we saw there was one of the most meaningful displays of what makes this place truly special.

There are dedicated spaces for local artisans to make their pipes, jewelry, and art with the pipestone. You can watch live as people work the stone from a chunk of rock into something much more. You get to talk to them, ask questions, and experience the process beyond just seeing the finished product in a gift shop.





One complicated topic discussed during the visit was future access to quarrying. We were told that to apply for quarry rights, people must meet specific requirements connected to membership in federally recognized tribes. Because tribal communities have intermingled over generations, younger people are no longer eligible to apply here, and because many people who currently qualify are older, there is concern that future generations may have a harder time accessing and quarrying the stone. That added a sobering aspect to the visit. The issue is not just preserving a place, but preserving the ability of people to continue traditions tied to that place.

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(**Pipestone** continued from page 18)

The monument also raises important questions about the language of “discovery.” George Catlin visited the quarries in the 1830s, and the geological name catlinite comes from him. But he did not discover the stone. Indigenous people had known, quarried, named, traded, and honored it for years before European explorers or geologists arrived.

For a rockhound and geology nerd, Pipestone National Monument is a fascinating stop because the rock layers are so visible and so central to the story. The hard Sioux Quartzite, the thin red pipestone seam, and the glacially shaped prairie landscape all help explain why this place is unique.

Pipestone is worth visiting not because you can collect something, but because you can better understand something. The monument asks visitors to slow down, listen, and recognize that the stone has meaning far beyond its mineral makeup. That is a pretty good reminder for any rockhound: sometimes the most important thing you take home from a place is not a rock at all.

Official National Park site: https://www.nps.gov/pipe/index.htm
Minnesota Historical Society Information about the history of the park:
https://www.mnhs.org/mnopedia/search/index/place/pipestone-quarry

New Exhibits at the Mines Museum of Earth Science

There are new exhibits popping up all over the museum. Check out the "face agate” exhibit, a display of rainbow-colored tourmaline gems donated by Mines alum, Don Neuschwander, the fully refreshed gemstone safe, and a red, white and blue exhibit of Colorado minerals celebrating the sesquicentennial of our state. The Martin Zinn quartz collection absolutely stunning. Come to the Museum and get up close with some beautiful specimens.



The Museum is located at 1310 Maple Street in Golden and is open from 10 am to 4 pm daily. There is no admission fee, and parking is free on weekends. While you're there, enjoy two floors of other minerals, rocks, fossils, and meteorites.





Lapidary Safety

When the weather is too cold outside to go collecting, many of us continue to enjoy our hobby with indoor lapidary projects. Lapidary safety focuses on preventing injury from flying debris, inhaling fine dust (especially silica, which causes silicosis), and machine hazards by using essential protection (PPE) like safety glasses, respirator, hearing protection, and gloves, working with proper ventilation (wet methods are best), keeping the workspace clean (wet mop/vacuum, not dry sweep), securing stones, wearing appropriate attire (no loose clothing/jewelry), and understanding specific mineral risks.

Here are some safety tips for cutting, forming, and finishing stones, minerals, and gemstones.

Essential Personal Protective Equipment (PPE)

- Eye Protection: Safety goggles or glasses are a must to shield from flying grit and shards.
- Respiratory Protection: A P100 respirator or dust mask is crucial to prevent inhaling fine silica dust; paper masks are not enough.
- Hearing Protection: Earplugs or earmuffs for loud equipment.
- Hand Protection: Gloves for handling sharp stones and chemicals, but take them off when using polishing wheels to avoid entanglement.

Workshop and Equipment Safety

- Ventilation: Work in a well-ventilated area, ideally with dust collection, or use a glovebox for maximum protection.
- Cleanliness: Dry sweep. Better yet, use a wet mop or HEPA vacuum to clean dust, especially silica, to prevent ingestion.
- Secure Work: Secure stones in vices or use dop sticks; do not hold small pieces directly on spinning wheels.
- Water Use: Keep stones wet with water to minimize dust and cool the stone.
- Electrical Safety: Inspect cords, use GFCIs, and keep water away from electrical components.

Safe Practices

- Attire: Tie back long hair, secure loose sleeves, and avoid loose jewelry.
- Machinery: Do not wear gloves when polishing; use ring clamps. Do not wear rings and never polish chains on wheels.
- Chemicals: Rinse skin immediately with plenty of water if splashed with acids. Neutralize spills with baking soda.
- Minerals: Be extra cautious with hard stones (agate) that create sharp shards and softer stones (turquoise) that can crack.

Be safe this winter, so you can enjoy collecting again as the weather warms up.



Credit: Thomas Farley, public domain

Crack the News: The Newsletter by Juniors for Juniors



The latest edition of Crack the News, the AFMS newsletter written by kids and teens for kids and teens is now available at https://www.juniors.amfed.org/juniors-newsletter. In this edition, read about the rockhounding interests of juniors across the country, including anyolite, Mazon Creek fossils, yooperlite, trilobites (**written by Quin Armstrong**, one of our Jr. Geologists), Petoskey stones, agates, Roman artifact, Arecaceae, candy rhyolite, the Art Gallery, the Poetry Corner, and a book review (**also written by Quin**). You will be amazed at the Kansas geology quilt and the step-by-step beginning wire wrapping articles. And check out the juniors' favorite websites and the video about the types of rocks and rock cycle (**produced by Charlotte Small**).

Every junior who contributes to Crack the News receives a patch featuring George the Geode, the mascot of the newsletter. Jr. Geologists, if you would like to contribute an article, poem, artwork, or photos for the next edition, contact Dennis at gertenbach1@gmail.com.

Our club is a member of the Rocky Mountain Federation of Mineralogical Societies, one of the seven federations that make up the American Federation of Mineralogical Societies. This allows our club to participate in the annual conventions of both organizations, including their field trips. We also obtain our insurance through the RMFMS and participate in the annual newsletter contests of both the RMFMS and AFMS. The badge program the Jr. Geologists use is also available free of charge to our club through the AFMS.

Other Rockhounding Events and Activities in the Area

Here are other events and activities in the area you may be interested in attending.

- **November 20-22** (Friday through Sunday) is the annual **Jeffco Mineral Show** at the **Jefferson County Fairgrounds** (15200 W 6th Ave, Golden). Discover something fascinating at the show, featuring 20+ vendors with an incredible variety of minerals, fossils, gemstones, crystals, and more. Whether you're a longtime collector, a rock enthusiast, or just looking for a fun family activity, you'll find plenty to explore. Browse unique specimens, discover beautiful gemstones, and experience the fun of geode cracking—crack open a geode and see what treasures are hiding inside! Show hours: Friday and Saturday from 10 am to 5 pm, Sunday from 10 am to 4 pm. FREE ADMISSION — Everyone is Welcome! http://www.Jeffcomineralshow.com

(continued on page 22)

(**Events** continued from page 21)



- **November 29** (Sunday) Come to **Museum Store Sunday** at the **Mines Museum of Earth Science** (1310 Maple Street, Golden) from 10 am to 4 pm. Everything in the store will be 20% off. Do some holiday shopping for those rockhounds in your family!

- **December 28-31, January 4-5** is the **Dinosaur Ridge Winter Break Camp**. Looking for something fun and educational to keep your young explorers busy over the upcoming Winter Break? Dinosaur Ridge Winter Break Camp is back! Join them for a winter break filled with fossils, rocks, gems and minerals, nature, art, and plenty of hands-on discovery! The best part? Families can register for one day, several days, or all six. Each day features a different theme and new adventures, making it easy to build a camp schedule that works around your family's schedule. See the camp schedule and register at https://dinoridge.org/programs-and-events/camps/.



Everything Dinosaurs on the Rocks at Dinosaur Ridge

Dinosaur Ridge is excited to announce that they will once again be offering the Everything Dinosaurs on the Rocks, a lecture series filled with basic and local Colorado foothills geology and a ton of dinosaur knowledge all in one place! Join in person OR online via Zoom for the entire series. The lectures will take place every Thursday from 10-11:30 am.

Can't attend during the morning? Not an issue! They record the sessions and will send you a link to the recording so you can watch on your own time.

Education Programs Director Erin LaCount will lead the paleontology-themed lectures, Dr. Donna Anderson, geologist and volunteer with our Board of Directors, will lead the geology-themed lecture, and Dr. Libby Prueher, education staff, a geologist, and climate scientist, will lead the climate-themed lecture. Each lecture is 1.5 hours long.

- Registration Bundle: $75 (includes all 13 lectures; schedule/links provided via email after registration).
- Individual Sessions: $7/lecture. Pick and choose the information you wish to glean (links for online sessions provided after registration).

To view the topics for each weeks sessions and to get tickets, go to https://dinoridge.app.neoncrm.com/nx/portal/neonevents/events?path=%2Fportal%2Fevents%2F62330.

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Officers, directors, and chairs are volunteers who donate their time to our club. Would you like to volunteer to help with our club's activities? Contact Brian Walko at bwalko@earthextractions.com to find out where you can help.

ROCKS & RAILS

December 11th 10am – 5pm
December 12th 9am – 5pm
December 13th 9am – 4pm

Adults $8 ::: Children 12 & Under Free with paid Adult

Seniors Over 60 $5 ::: Discount Multi-day Passes Available

Flatirons Mineral Club
2026 Annual
Rock & Mineral Show

Gem and mineral dealers, Exhibit displays, grab bags, children's activities including games, dig site, spin the wheel, fossils, meteorites, lapidary tools, jewelry, fluorescent mineral display, and more!
Bring your mineral treasures In for mineral identification.

FREE PARKIN

DOOR PRIZES!



flatironsmineralclub.org

Boulder Model Railroad Club
49th Annual
Model Railroad Exposition

Come one, come all, and enjoy the Boulder Model Railroad Club (BMRC) Exposition where you can see different Model Train Layouts for the young and old alike. The show will also have many displays of Model Train related items to both teach and entertain everyone. This includes many vendor tables where you can purchase railroad-related items just in time for the Holidays.



bouldermodelrailroadclub.org

ATM & Food Service Available at the Show

BOULDER COUNTY FAIRGROUNDS LONGMONT

MAIN EXHIBIT BUILDING 9595 Nelson Road Longmont, CO, 80521

Bad Weather? Call 303-591-2830 to see if we're open

Find us on Facebook