



# Flatirons Facets

Flatirons Mineral Club of Boulder County, Colorado

Volume 60, Number 4

July-August, 2017

**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.



## ANNUAL FMC PICNIC

This year's annual picnic is on **Saturday, August 19** at Harlow Platts Park, located just south of the South Boulder Recreation Center at 1360 Gillespie Drive, Boulder, 80305.

The picnic starts at 11:00 am. Folks with last names beginning with A-M are asked to bring a covered dish and folks with last names beginning with N-Z should bring a dessert. BBQ sandwiches and beverages will be provided by the club.



As in past years, we will start our get together by filling grab bags and then eat lunch. Afterwards, we will present several awards. One of the awards presented each year is the Rockhound of the Year. Please nominate someone in the club who you feel deserves this honor. A nomination form is found on page 11.

Flatirons Mineral Club Awards

## July Bagging Meeting – Help with the Grab Bags

The July bagging meeting is where we put specimens and labels in small plastic bags for filling grab bags at the club picnic. The meeting will be on **Thursday, July 13**, at the home of Karen Manley and Fred Hall, located at 4561 47th St., Boulder, 80301 (approximately one mile north of Jay Road on 47th Street). Fred and Kelly are dealers at our December show and FMC members. They have graciously volunteered their home for the bagging meeting. The bagging starts at 7:00 pm and the club will provide refreshments.

If you need directions, please call Gerry Naugle at 303-591-2830.

**Remember, when you are out collecting this summer, please bring back grab bag specimens from field trips. Grab bag specimens are generally thumb size or smaller, but larger specimens can be broken into smaller ones. Bring your specimens to the next club meeting or contact Anita at 720-556-9889 or [anitacolin@hotmail.com](mailto:anitacolin@hotmail.com).**

## President's Message



Happy Summer, FMC Members!

I hope you were able to attend our 60th Anniversary celebration meeting in June. It was a fun event with food, cake, awards, and gifts. Thank you so much to Dennis Gertenbach for presenting a wonderful talk about the club's highlights and famous members. We have a wonderful club and legacy.

Please join us for the July meeting to bag all the mineral specimens that will go into the 1,000 grab bags that we will assemble during our Annual Picnic. Find more information on page 1 of this newsletter regarding both of these events.

Are you going to join us on field trips this summer? Make sure to log into the club website to sign up. Contact me with website problems: [accatino@olorado.edu](mailto:accatino@olorado.edu)

We are having problems with claim jumpers at the club's claim, the Pixie's Sunset Lode, and have cancelled our field trip there this month. You can read more about this on page 8. Hopefully, the problem will be resolved soon, so we can return there to collect the peach-colored quartz crystals that are found there.

Please note that FMC is offering the Minerology class that our favorite, Ed Raines, teaches. Only 10 members (or couples) can attend. The fee is only \$75, because the club is subsidizing the class. More information about the class can be found on page 3.

Enjoy the summer!

Gabi

## Field Trips

Field trip season is in full swing, with many trips planned for the next two months. July and August trips are listed below. Family-friendly trips are indicated with a "\*". To learn more about these trips and to sign up, please go to our website at <https://flatironsmineralclub.org/>.

**FIELD TRIPS** – Here is a list of field trips in July and August.

- Saturday, July 15 Como Bluffs Dino Quarry - 10 members max to help excavate dinosaur bones. Collect agate and belemnites. This trip is filled. \*
- Saturday, July 22 Joe Dorris' Smoky Hawk Claim for amazonite. \*
- Saturday and Sunday, July 29-30 Mt. Antero with CMS, possible fee for aquamarine, fluorite, phenakite, feldspar, and quartz.
- Sunday and Monday, August 20-21 Como Bluffs Dino Quarry sleep-over to see the solar eclipse on Monday. \*
- Saturday, August 26 Gold panning at Brian's Riverside Claim for gold. \*
- Saturday-Monday, September 2-4 (Labor Day Weekend) Flat Tops for fossils and geothite pseudomorphs after pyrite. \*

Please note that the July 8th trip to Pixie's Sunset Load claim and the August 12th trip to Plumbago Canyon have been cancelled.

## Ed Raines' Mineralogy Class

How many times have you been on a field trip, picked up an interesting rock, and had to ask someone to identify your specimen? Ed Raines will be teaching a 10-week mineralogy course starting on Monday, September 11th. This course is designed to help the student to better understand the extraordinarily broad subject of mineralogy. Topics will include:

- Introduction to crystallography
- The physical properties of minerals and some basics of identification
- The chemical classification of minerals
- The three kinds of rocks, an introduction to what they are, what they are made of, and how they got there
- The basics of identification will be scattered throughout the class



This is a 10-week class and will start on Monday, September 11. The last class will be on Monday, November 13. The class will run from 6:00 to 9:00 pm. It will take place at Frasier Meadows.

The cost will be \$75 per student (or couple living at same address) and there is a limit of 10 students. Students will take home flats of minerals and a microscope to study. Ed asks that this equipment must be transported home using a car and not via a bicycle. The fee will be collected at the beginning of the first class.

You must be an FMC member to join this class.

You can contact Gabi Accatino ([accatino@olorado.edu](mailto:accatino@olorado.edu)) if you have questions about the course.

## Denver Gem and Mineral Show, September 15-17

The Denver show is the second largest gem and mineral show in the country. And, it is planned and run entirely by volunteers from the eight clubs along the Front Range. To make this year's show another success, volunteers are needed. So, mark your calendar and volunteer to help at the show. Volunteers are needed to help with the show and at the club's table. To find out more about what help is needed at the show, see the list on page 17. Please contact Anita ([anitacolin@hotmail.com](mailto:anitacolin@hotmail.com)) or Gerry ([gnaugle@earthlink.net](mailto:gnaugle@earthlink.net)) to volunteer.

And, remember, show volunteers get into the show for free!



## Rose Quartz Wanted

Do you have any rose quartz that you would be willing to donate for the kids' game prizes at the club show in December? Size does not matter, unless it's the size of a Volkswagen, then no. Chunks that can be broken up would be nice. Or, if they are already about the size of a quarter, we would be happy with these, too. Please contact Charlotte Bourg at [rckhd4252@gmail.com](mailto:rckhd4252@gmail.com) if you have any to donate.

## 60th Anniversary Celebration

June was the celebration of the 60th anniversary of the Flatirons Mineral Club. And, what a celebration it was. Dennis



Gertenbach gave an overview of some of the highlights from the past 60 years, including some of the club members who have contributed to the club and to science. The anniversary cake was great, and everyone received a special anniversary lunch bag and pin. Thank you to everyone who helped with the celebration.

Dennis Gertenbach highlighting some of the special FMC members from the past 60 years.

Photo by Trick Runions

## FMC Members Win Newsletter Awards

Each year the Rocky Mountain Federation of Mineralogical Societies presents awards for club bulletins, plus articles, photos, artwork, and poetry by club members that are published in the newsletters. We want to congratulate this year's winners.

- Andrew Caballero, first place, junior drawn feature category, for his water color of the Tepee Buttes.
- Dennis Gertenbach, second place, new newsletter editor
- Dennis Gertenbach, second place, adult advanced article category, for his Fossils in the News article
- Isaac Huang, honorable mention, adult article category, for his Summer Field Trip article.



First Place Winner: water color of the Tepee Buttes by Andrew Caballero, age 13

We would like to enter a number of articles, photos, artwork, and poetry in next year's contest. There are awards for both adults and juniors. Just send your contributions for an upcoming newsletter to Dennis Gertenbach at [gertenbach@comcast.net](mailto:gertenbach@comcast.net).

## Midnight Express Mine Field Trip

On June 17th, the club headed to Midnight Express Mine outside of Jamestown to collect fluorite, gold, and quartz. Here are a few pictures from the trip, provided by Brian Walko. Thanks to Brian for leading this trip.



Dani Chavez digging for specimens, along with other FMC members



Ryan Basil and Jennifer Robinson at the Midnight Express Mine



Herman Oehl digging out a specimen at the mine

### Would You Like a Club Name Tag?

If you would like a club name tag, we will be placing an order this spring. Just let Gabi Accatino know at the Silent Auction or contact her at [accatino@colorado.edu](mailto:accatino@colorado.edu). The cost of the name tags is \$5 each.

### Club Lapidary Equipment Available

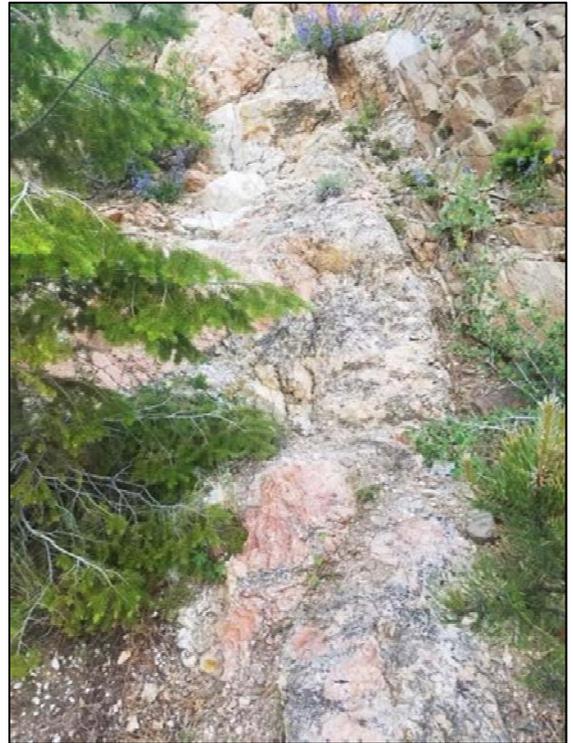
The club has three locations for our lapidary equipment that club members can use.

- To use a Genie, Pixie, water saw, and flat lap, please contact Melanie Seaman at 561-573-3942 or [mseaman136@gmail.com](mailto:mseaman136@gmail.com) to schedule when to come and use the equipment at her house.
- One of our big saws is at Markus Raschke's house. Call him at 303-499-9157 to arrange a time to use the saw.
- Another saw is at Terry O'Donnell's house. His email address is [whee0297@msn.com](mailto:whee0297@msn.com).

## Jr. Geologists Activities

The Jr. Geologists continued working on the Earth in Space badge at their May meeting. Micrometeorites rain down on the earth continuously, and these collect in the rain gutters of our homes. By running a magnet through the dirt collected in gutters, micrometeorites can be found. The Jr. Geologists examined some of these micrometeorites in a microscope. Also, the Jr. Geologists performed experiments on how craters are formed on planets by dropping marbles of different sizes from different heights and angles into sand to see how the resulting craters compared to photographs from extraterrestrial moons and planets. Nine juniors completed the requirements for the Earth in Space badge.

In June, we headed to the pegmatites in Golden Gate Canyon outside of Golden to collect muscovite mica, schorl (black tourmaline), quartz, and feldspar. The white quartz from this area is quite interesting in that it has piezoelectric properties and will glow internally when rubbed together. This phenomenon can be seen in a dark room with no windows. Photos by Dennis Gertenbach



A pegmatite dike in Golden Gate Canyon where the juniors collected mica, schorl, and other minerals



Eric and Noelle Bernhardt collecting mineral specimens



Jack with the schorl specimens he found

Two Jr. Geologists activities are planned for the rest of the summer. Jr. Geologists families should sign up with Dennis Gertenbach at [gertenbach@comcast.net](mailto:gertenbach@comcast.net) to come on these trips.

- **Saturday, July 22** to collect petrified wood outside of **Elizabeth**. Details will be emailed to the Jr. Geologists families.
- **Saturday and Sunday, September 9-10**, we will be digging dinosaur bones from a quarry outside of **Medicine Bow, Wyoming**. This will be a special trip, just for kids and their parents. Children must be 8 years or older to attend. You won't be able to keep any of the dinosaur fossils, but we will take a half mile hike to a location where you can collect belemnite and other fossils to add to your collection. The size of our group is limited, so sign up early.

The Jr. Geologists program is open to all Flatirons Mineral Club families. Each month we learn about different aspects of geology, minerals, and fossils, plus earn badges for different earth science activities. For information about the Jr. Geologists program, please contact Dennis Gertenbach at [gertenbach@comcast.net](mailto:gertenbach@comcast.net) or 303-709-8218.

## Boulder Creek Festival

The Flatirons Mineral Club booth at the Boulder Creek Festival was very popular this year. We gave away hundreds of polished rocks, sold over a hundred grab bags, and talked to countless people about our awesome club. We had hundreds of families, most with children, stop by the club booth. Many thanks to the volunteers who helped this year: Gerry Naugle, John Cuccaro, Jean Orr, Herman Oehl, Nadia Maxwell, Ellen Scheffler, and Don Mock. And a very special thank you to Anita Colin for coordinating our booth again this year. Photos by Don Mock



Jeanne Orr and Gerry Naugle at the club booth at the Boulder Creek Festival



Jeanne Orr talks to a family at the Boulder Creek Festival

## Update on the Club Claim

It is with great sadness that we cancelled the field trip to the Pixie's Sunset Lode claim this Saturday, July 8<sup>th</sup>.

I have found that there is on-going criminal activity on our claim itself, and the surrounding claims in Red Feathers Lakes. The claim jumpers have even been going so far as to show up with well-organized crews with rifles and dogs. They are trying to intimidate folks off their claims.

I have been told by neighboring claim owners that there are 16 active county and federal cases against this group of claim jumpers. The criminals still have not been caught in the act due to the time it takes for law enforcement to arrive at these remote locations.

While we are a fairly rugged group of folks, it would not be a safe activity to have club field trips to Red Feather Lakes for, at least, sometime into the future. The FMC board is very concerned about the safety of our club members. We do not want anyone to get into a confrontation with these dangerous criminals, ever.

Sorry again for the sad news. I was looking forward to starting this new tradition of having a club claim that members could enjoy at their leisure. Fortunately, we still have many fun field trips planned for the summer. The board will be looking into other, safer locations for other field trips and other club claims over the winter season.

Thanks for your understanding,  
Donald Layden

## 4th of July Field Trip for Agate Flats Agate



Tally O'Donnell and Kevin Notheis led this trip to Jeffery City, Wyoming, over the long Fourth of July weekend to collect Agate Flats agate and other minerals. The weather was wonderful and everyone found wonderful specimens, as you can tell from the photos. Thanks to Tally and Kevin for leading this trip.

Photos from Gabi Accatino.

Tally talking to Katrina and Jeff Kruse, Tim Ruscke, Terry O'Donnell, and Kevin Notheis on our way to gather agate



Impressive banded jasper that came home as a yard rock



Collecting schorl tourmaline

### Hartsel Barite Field Trip



June 24th saw the club collecting barite and pegmatite minerals in South Park, led by Damon Hauschultz. Thank you to Damon for leading the trip and to Gabi Accatino for providing the photos.

The rock pit in Fairplay



Examples of rocks from the stop at Fairplay

The Hartsel site

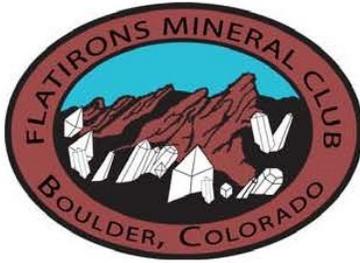
## Auction of the John Hurst Collection and Inventory of The Best Little Ore House

FMC member John Hurst and his wife Jeanne collected minerals for many years and sold rocks, minerals, and fossils through The Best Little Ore House. John's collection and the remaining inventory of their business will be auctioned on Saturday, August 26, starting at 9:30 am. The auction will be held in Scottsbluff, Nebraska, at Discount Fireworks, 2021 East Overland. John was an expert on agates and published the book *Dryhead Agate* in 2012. Agates will be prominently featured in the auction, along with minerals, UV specimens, jasper, jade, fossils, turquoise, opal, beads, equipment, furniture, and books.

For more information about the auction and some of the inventory to be sold, see [http://www.helbergnuusauction.com/selected\\_auction.php?Auction\\_ID=128](http://www.helbergnuusauction.com/selected_auction.php?Auction_ID=128).

Below are two examples of some of the fine specimens to be auctioned.





**Flatirons Mineral Club**  
P.O. Box 3331  
Boulder, CO 80307

## **2017 Ballot for FMC / RMFMS / AFMS 'Rockhound of the Year'**

The club membership each year honors an active member, or husband and wife team who have substantial accomplishment during the past year in promoting and furthering the FMC goals or "Mission Statement" as outlined in the Club By-laws.

Since inception of this program in 2002, the annual FMC recipients have been: Charlotte Morrison (2002), Paul & Martha Ralston (2003), Ray & Dorothy Horton (2004), John & Jeanne Hurst (2005), Ray & Joyce Gilbert (2006), Chuck & Jan Buda (2007), Cory Olin co-tie with Hallie & Dot Cook (2008), Shaula Lee (2009), Anita Colin co-tie with Gabi Accatino (2010), Mel & Charlotte Bourg (2011), Deborah Knox (2012), Ed Raines & Silvia Pettem (2013), Mike Smith (2014), Tally O'Donnell (2015) and Dennis Gertenbach in 2016.

Please list your 2017 nominee below. You can also vote by electronic means. All voting information is confidential and is tallied and is then erased or shredded by Gerry Naugle. The FMC annual winners' names are sent to the RMFMS and AFMS offices for publication in their respective publications. Note: The annual FMC winner(s) are also inducted into the "FMC Hall of Fame" and their name(s) are placed on the HOF plaque.

Your 2017 nomination is: \_\_\_\_\_

The person (or) persons should be honored because:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Submitted by, please print \_\_\_\_\_

Please return this paper ballot to Gerry Naugle (use the letterhead address above) by July 10th **or** easier, you can vote by leaving a message or text to: 303-591-2830 **or** by sending an e-mail to: [gnaugle@earthlink.net](mailto:gnaugle@earthlink.net)

Voting results will be announced and the HOF Plaque at the 2017 annual club picnic to be held on **Saturday, August 19<sup>th</sup>** at the **Pavilion at Harlow Platts Park**, 1496 Gillespie Drive in 80305 (for Google maps, or a car GPS) The picnic starts at 11:00am with grab bags, and then lunch.

**Thanks for participating!**

## Dinosaur Asteroid Hit the Worst Possible Place

Most of us are aware that the demise of the dinosaurs, marine reptiles, ammonites, and many other terrestrial and ocean animals and plants was due to a large asteroid striking the ocean north of the Yucatan peninsula. Studies over the past several decades have shown that the following events happened when the asteroid struck the site.

- A 9 mile wide object dug a hole in Earth's crust 60 miles across and 18 miles deep.
- The impact hit with the energy equivalent to 10 billion Hiroshima bombs.
- The bowl formed by the impact then collapsed, leaving a crater 120 miles across and a miles deep.
- The crater's center rebounded and collapsed again, producing an inner ring.
- Today, much of the crater is buried offshore, under 2,000 feet of sediments.
- On land, it is covered by limestone, but its rim is traced by an arc of sinkholes.



Location of the outer rim (white arc) of the crater and the drill site  
(Credit: NASA)



The drill rig was in the Gulf of Mexico in April and May last year  
(Credit: Barcroft Productions/BBC)

To learn more about the impact of this asteroid strike, scientists drilled into the bottom of the Gulf of Mexico where the asteroid hit. This allowed them to learn more about the impact and to study the inner ring, which can only be accessed offshore. The rocks from under the Gulf of Mexico where the asteroid struck 66 million years ago record the details of the event.

The researchers have discovered that the 9 mile wide asteroid could not have hit a worse place on Earth. Had the asteroid struck a different location, the outcome might have been very different. The bedrock below the shallow ocean bottom where the asteroid struck is composed of gypsum, which vaporized to sulfuric acid. This

extended the resulting "global winter" period that followed the immediate firestorm. It was not the size of the asteroid, the scale of blast, or even its global reach that made dinosaurs extinct; it was where the impact happened. An impact in the nearby Atlantic or Pacific oceans would have meant much less vaporized rock and much less sulfuric acid in the air. The cloud would have been less dense and sunlight could still have reached the planet's surface, meaning what happened next might have been avoided. Instead this cold, dark world caused plants to die. Animals on both the land and sea ran out of food. With nothing to eat, they too died out.



Lead scientists Jo Morgan (Imperial College London) and Sean Gulick (University of Texas) examine rock cores extracted from the ocean floor. (Credit: Max Alexander/B612/Asteroid Day)

Rock cores from up to 3,000 feet beneath the Gulf were recovered. By analyzing these cores, the researchers hope to reconstruct how the impact proceeded and the environmental changes it brought about. By studying these rock cores and other sites in North America, researchers are also learning more about the return of life in the years after the impact.

Information for this article was provided by BBC at <http://www.bbc.com/news/science-environment-39922998>.

## Fossils in the News

Dennis Gertenbach

### Some Dinosaur Eggs Took Six Months or More to Hatch

Over the last decade, we've learned that dinosaurs live today as birds. Discoveries have shown how similar dinosaurs were to birds. They were warm blooded. They had feathers. And they're still around, because birds are actually dinosaurs. But what about non-avian dinosaurs? They were more closely related to living reptiles like crocodiles. And, a recent study has shown another difference between avian and non-avian dinosaurs, the length of time it took for their eggs to hatch.

Scientists used a new technique on rare dinosaur embryos that were ready to hatch, examining daily growth markers on their teeth. Embryos of *Protoceratops*, a sheep-sized dinosaur found in Mongolia, showed an incubation time of at least 83 days, or nearly three months. An embryo of a *Hypacrosaurus*, a duck-billed dinosaur that laid eggs the size of



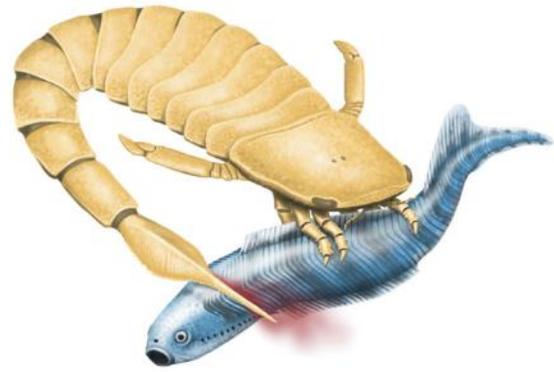
A hatchling *Protoceratops andrewsi* fossil from the Gobi Desert in Mongolia. (Credit: M. Ellison/American Museum of Natural History)

soccer ball, took at least 171 days, or almost six months, to hatch. The long incubation times have changed thinking about dinosaur behavior. While some kinds of dinosaurs with short incubation periods may have tended their eggs and young, others with long incubation times may not have hung around for a good portion of the year waiting for their eggs to hatch.

Information from <http://news.fsu.edu/news/science-technology/2017/01/02/long-take-hatch-dinosaur-egg-fsu-research-says-3-6-months/>

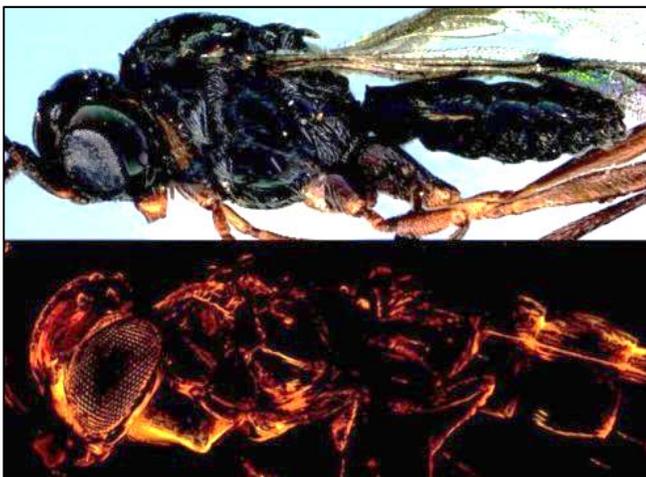
### Sea Scorpions Slashed Their Prey with Tails

During the Silurian Period, sea scorpions were among the top predators in the world's oceans. These animals had pinchers to grasp their prey and a long tail for swimming. However, a 430 million year old fossil found in Scotland has led scientists to propose another use for their tails. *Slimonia acuminata* may have had the range of motion to strike large predators and prey, researchers report in *American Naturalist*. The tails of some of these creatures had a thin, serrated spine on the tip of their tail. The serrated spine, along with the flexibility of the tail, suggests that the tails were used for more than propulsion. The tail could have twisted around horizontally to strike a victim or stabbed their prey with the pointy end. The serrated edge would have even been used to cut up their prey, as they held down their victim with their claws.



Sea scorpion using its tail to slice its prey. (Credit: Nathan Roger)

Information from [https://www.sciencenews.org/article/sea-scorpions-slashed-victims-swordlike-tails?utm\\_source=editorspicks060417&utm\\_medium=email&utm\\_campaign=Editors\\_Picks](https://www.sciencenews.org/article/sea-scorpions-slashed-victims-swordlike-tails?utm_source=editorspicks060417&utm_medium=email&utm_campaign=Editors_Picks)



*Archaeoteleia* wasps, top is modern species and bottom is the fossil *Archaeoteleia astropulvis*.  
(Credit: Dr. Elijah J. Talamas)

### New Extinct Wasp Named after David Bowie

Student Longfeng Li from the Capitol Normal University in China visited the Smithsonian National Museum of Natural History in Washington to compare two wasp specimens with those at the Smithsonian's collection. The two specimens she brought were exceptionally well-preserved in Burmese amber. The discoverers named the new species *Archaeoteleia astropulvis*. The species name, *astropulvis*, translates from Latin to stardust to commemorate the late David Bowie's alter ego - Ziggy Stardust. Unlike the Stardust wasp, the second new species belongs to a genus (*Proteroscelio*) known exclusively from Cretaceous fossils.

Information provided by Pensoft Publishers through <https://www.sciencedaily.com/releases/2017/06/170622104005.htm>

### Volcanic Eruptions Triggered Dawn of the Dinosaurs

The mass extinction at the end of the Triassic Period approximately 200 million years ago was responsible for dinosaurs ruling the earth. One of the largest mass extinctions of animal life on record, the casualty list includes large crocodile-like reptiles and several marine invertebrates. With many of the competitors gone, dinosaurs evolved to fill many of the vacancies left by these now-extinct animals. This mass extinction has long been linked to a large and abrupt release of carbon dioxide into the atmosphere, but the exact source of this emission has been unknown. A new study has shown that huge pulses of volcanic activity are likely to have played a key role in triggering the end Triassic mass extinction. Researchers from the Oxford University Department of Earth Science worked in collaboration with the Universities of Exeter and Southampton to investigate mercury concentrations in sediment deposits from this period from the UK, Austria, Argentina, Greenland, Canada and Morocco. Volcanic activity is the source of the mercury and the elevated mercury emissions coincided with previously established increases in atmospheric carbon dioxide concentrations. This indicated that the carbon dioxide was released from volcanic degassing. The correlation



demonstrated that large-scale volcanic activity caused the Triassic mass extinction, leading to dinosaurs flourishing on earth.

Information from provided by University of Oxford through

<https://www.sciencedaily.com/releases/2017/06/170619151530.htm>

*Huge pulses of volcanic activity are likely to have played a key role in triggering the rise of dinosaurs.*

(Credit:

<https://commons.wikimedia.org/w/index.php?curid=6556961>)

## Other Rockhounding Events and Activities in the Area

Here is a list of rockhounding-related activities in the area for both adults and juniors that you might be interested in. Thanks to Pete Modreski of the USGS for providing many of these notices.

**July 14-16** (Friday-Sunday) from 9 am to 6 pm daily, there will be a “**Home Rock Show (Sale)**” by John Haney, 4242 Thompson Court, Denver CO. 80216 (south of I-70, east of York St. & west of Steele St.). “Rough rock, slabs, cabs, enhydros, fossils, amber, minerals, crystals, gemstone bowls & boxes, lapidary equipment & supplies; discounts for lapidary students.” Contact, [Rocksisme@comcast.net](mailto:Rocksisme@comcast.net), 303-296-8268.

**July 20-24** (Thursday-Monday) is the **Gold and Silver Deposits in Colorado**, a symposium cosponsored by the Friends of the Colorado School of Mines Geology Museum, the CSM Museum, DREGS (Denver Region Exploration Geologists Society), and Friends of Mineralogy, Colorado Chapter. The event will include a welcoming reception at the CSM Museum (Thursday evening), two days of talks (Sat.-Sun., July 22 - 23), a Saturday evening banquet with a speaker, and two days of field trips (Fri. July 21 and Mon. July 24) to historic Colorado gold and silver mining areas, focusing on the Front Range and the northern half of the Colorado Mineral Belt. Full information about the symposium is at: <https://tinyurl.com/goldsymposium>. Registration cost will be \$100; students, \$50; banquet, \$40; each field trip, \$40. The registration form, including the list of field trips, is now available on the Friends of Mineralogy-Colorado Chapter website, at the link given above.

**July 21-22** (Friday and Saturday) is the **Huge Gem-Amethyst-Rock-Fossil Sale** in Denver. Details are in the flyer to the right. Contact David at [rocktrading@aol.com](mailto:rocktrading@aol.com) for more information.

**Huge Gem-Amethyst-Rock-Fossil Sale**  
July 21<sup>st</sup> and 22<sup>nd</sup> (Denver, CO)  
David  
[rocktrading@aol.com](mailto:rocktrading@aol.com)

Friday July 21<sup>st</sup> - 9am - 5pm  
Saturday July 22<sup>nd</sup> - 9am - 5pm

Holiday Inn Denver East - Stapleton  
3333 East Quebec Street. Denver, Colorado. 80207

Admission = Free  
Parking = Free

Free garnet \$8 value for the first 1000 visitors  
Rock collecting bag with purchase  
(while supplies last)  
Larimar cabs \$5 each / limit 5  
Amethyst Cathedrals up to 65% off  
Specials  
Retail and Wholesale

Directions:  
From Downtown: From I-70 go east, exit 278 to  
Quebec St. Go about one mile.  
Holiday Inn on the right or west side.

(Walk through hotel entry. Turn left go down  
stairs. Walk directly to the Show Room)

Gems and faceting rough  
Minerals - 1000(s) of exquisite minerals  
Fossils - Beautiful specimens

**WANTED**  
**Rock Hounds**  
**Creede Rock & Mineral Show**  
**August 4, 5 & 6, 2017**  
 10 a.m. to 5 p.m.  
**FREE ADMISSION**  
 Geology Programs – Friday & Saturday @ 7 p.m.  
 Underground Mining Museum • Creede, Colorado  
 719-658-2376 • www.creederocks.com • Sponsored by Rare Things Gallery

August 4-6 (Friday-Sunday) is the **Creede Rock & Mineral Show**, at the Creede Underground Mining Museum and Community Center, Creede, Mineral County, CO. 10 a.m. – 5 p.m. daily; see <http://creederocks.com/>.

**Buena Vista**  
**CONTIN-TAIL**  
 Colorado's Largest Outdoor Gem & Mineral Show!  
 Spessartine Garnet  
 Nani, Lolondo,  
 Arusha, Tanzania  
**August 10th - 13th, 2017**  
 Buena Vista, CO Rodeo Grounds

Aug. 10-13, **Contin-Tail rock & mineral show**, Buena Vista Rodeo Grounds, Buena Vista, CO; see [www.facebook.com/ContinTail](http://www.facebook.com/ContinTail)

Aug. 17-20, **Woodland Park Rock, Gem, & Jewelry Show**, Woodland Park, CO; see <https://www.facebook.com/woodlandparkrockandgemshow/>

**WOODLAND PARK, COLORADO**  
**ROCK, GEM AND JEWELRY SHOW**  
 THURSDAY - SUNDAY  
 AUG. 17th-20st, 2017  
 9:00am-5:00pm  
 free auction-open to the public both Fri. and Sat nights starting at 6:00pm  
 The Rock Gypsies present the 8th annual Woodland Park Rock, Gem and Jewelry show.  
 www.woodlandparkrockandgemshow.com

Aug. 18-20, **Lake George Gem & Mineral Show**, sponsored by the Lake George Gem and Mineral Club, Lake George, CO. See <http://www.lggmclub.org/>

**Denver Gem & Mineral Show Mini Report July 2017**  
**50th Anniversary Show**

The Denver Gem & Mineral Show is only a few short months from now. The dates are September 15 - 17, 2017. The location is the usual Denver Mart, 451 E. 58th Avenue (exit 215 on I-25). The Show Chair is Lesley Sebol, 720-999-1372 or lesleysebol@gmail.com.

**18th Annual Lake George Gem & Mineral SHOW!**  
**AUG. 18-19-20, 2017**  
**FREE Admission! FREE Parking!!**  
 Located in beautiful Lake George, Colorado on Hwy 24  
*Local Specimens, Rocks, Minerals, Fossils, Gems, Beads, Jewelry, Lapidary & More!*  
 LAKE GEORGE GEM & MINERAL CLUB  
 www.LGGMclub.org  
 Scan to view our Website!

**MOST IMPORTANTLY - DON'T FORGET IT IS OUR 50TH ANNIVERSARY SHOW! AND THE THEME IS GOLD AND SILVER.** Gold and silver are both native elements and belong to the isometric crystal system. As crystals, they are usually small but develop in beautiful fanciful shapes such as cubes, octahedrons, and dodecahedrons, sometimes forming clusters of such crystals. They also form wire-like forms, sometime in masses like nests. For pictures of some of these, check out the publicity posters and postcards for the show. The exhibits and offerings of the dealers should be spectacular this year. Be sure to use the posters and postcards to publicize the show. Show them to your friends and where ever you go. Keep a supply in your car. The clerk at my bank was very impressed and said he would be sure to attend the show. Don't forget an engaging 50 year history has been written by Mark Jacobson and will be available at the show. It is complete with numerous pictures.

**HERE'S ANOTHER MOST IMPORTANTLY - REMEMBER IT TAKES 400 PLUS VOLUNTEERS TO PUT ON THE SHOW.** Have you volunteered yet to help with the show? There are many easy jobs available. These are Security; Admissions; Hospitality; Grab Bags, Pins & Poster Sales; Volunteer Check In; Show Set Up, Show Take Down, Exhibits, Clerks to Assist Judging, Dealer Check In, and Schools. In addition, there are a couple important positions on the Show Committee that are currently vacant. These are Signs and Take Down. The Signs Chair orders new dealer and other signs for this year's show and puts them up on Thursday before the show. Of course, there is quite an inventory of signs from prior shows and a helpful job description for this task. The Take Down Chair organizes disassembling the show cases and the case liners. Both of these jobs could be taken on by a pair of chairs. If you have a buddy with whom you work well, the pair could take on the responsibility of either of these jobs. That would make it much easier. There are also Show Committee members willing to assist new people with their responsibilities. So think about it. We really need help!

**NOW FOR THE FUN PART - YOU MAY HAVE HEARD RUMORS THAT THE GOLD PANNING WILL BE SALTED WITH GENUINE GOLD NUGGETS.** That is correct! In honor of the 50th Anniversary, \$5,000 of gold nuggets will be purchased and used to salt the gold panning. Anyone is eligible to pan for them. Actually, you will pan for gold colored washers, which will be exchanged for gold nuggets. Of course, there is a limit of one gold nugget per person. So try your luck! You may be a winner!

Respectfully submitted, Judy Knoshaug, Show Committee Secretary

### **Denver Gem and Mineral Show Jobs**

We need help!! The following is a list of jobs that need volunteers. Read them over and sign up for the job(s) that you would like to do. This show is all volunteers. No one is paid. Please come by and join us. You can meet new people and receive free admission by volunteering. Sign up sheets will be available at your club meetings. The chairperson for each committee is listed. Call or email if you have questions about the job.

**WORK ANYWHERE:** Check this box if you want to volunteer but are not sure what you want to do. The different committee chairpersons will contact you to talk about how you can help.

**CLUB BOOTH:** Your own club will have a booth and will need to have someone demonstrating or answering questions. You can recruit new members this way. See your club chairman for details of what your club is planning.

**SECURITY:** Chair Bruce Sales 303-775-2808 or oscar51686@yahoo.com. The main job is to patrol the show floor and the parking lots. Orange security vests and walkie-talkies are provided. Security volunteers do not attempt to apprehend suspected shoplifters, but radio back to the security head. Volunteers are asked for 4-hour shifts at a time. Other security at the show is provided by the Mart and contracted by the Show Committee.

**CLERKS TO ASSIST JUDGING:** Chair Larry Havens 303-757-6577 or lghavens4@gmail.net. Clerks are needed to assist with judging during the show. These individuals must be willing to work with a team of judges throughout Friday and be able to neatly and accurately record judge's comments. This is a good place to learn firsthand the rules and protocol of judging.

**HOSPITALITY:** Chairs Kevin and KC Larsen 303-429-6976 or mail@klarsens.net. Need volunteers every day to serve coffee and tea, donuts and snacks to the volunteers and dealers.

**GRAB BAGS, PINS, POSTERS SALES AREA:** Chair George Daggett, geoddaggett@hotmail.com. This job is sales of grab bags, posters, and pins and is fun because you work mostly with kids. Many volunteers are needed on Friday morning when the school children are at the show.

**ADMISSIONS:** Chair Kathy Honda 303-556-4498 or email kathine.honda@ucdenver.edu. These are sitting jobs for hand-stampers, ticket-takers and ticket-sellers (need cash handling experience making change and working fast when the crowds arrive).

**EXHIBITS :** Chair Larry Havens 303-757-6577 or lghavens4@gmail.net. Volunteers are needed Thursday to assist the exhibitors as they register and set up their cases. Help is needed in cleaning the glass window in cases each day for fingerprints, etc.

**DEALER CHECK IN:** Regina Aumente 505-867-0423 or raumente@aol.com Workers needed Thursday through Sunday. Minimal Typing required.

**VOLUNTEER CHECK IN:** Chair Sharon Hannu 303-429-2519 or sahannu@centurylink.net Job is Wednesday through Sunday, keeping track of the volunteers and giving out badges. This is a sitting job.

**SHOW SET UP:** Chair Lee Brown 303-280-2544 or email lwbrkn2@comcast.net. Volunteers are needed to set up Wednesday from about 9:00 a.m. until the setup is finished. We will be cutting plastic, skirting tables, assembling exhibit cases, etc.

**SHOW TAKE DOWN:** Chair Martin Hannu, 303-550-4936 or icd55mph@centurylink.net . Volunteers are needed Sunday after 5 p.m. Strip tables, take down cases, pack away risers, cases, etc.

**SCHOOLS:** Chair Judy Knoshaug 303-423-2923 or jrknoshaug@comcast.net. Help with the school kids, give them a brief talk about the show, and guide them into the show entrance. Friday morning from about 8:30 a.m. to noon.



### Get Your Very Own Flatirons Mineral Club Baseball Cap

The club now has baseball caps in a variety of colors for sale, sporting the new Flatirons Mineral Club logo. Buy them at any meeting. The member price is \$10 each, while the non-member price is \$15.

# Officers, Directors, and Other Volunteers

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## President

Gabi Accatino, 303-809-4666  
[accatino@colorado.edu](mailto:accatino@colorado.edu)

## 1<sup>st</sup> Vice president: Program

Tally O'Donnell, 303-494-6061  
[phantom@indra.com](mailto:phantom@indra.com)

## 2<sup>nd</sup> Vice President: Field Trip Chair

Anita Colin, 720-556-9889  
[anitacoln@hotmail.com](mailto:anitacoln@hotmail.com)

## 3<sup>rd</sup> Vice President: Annual Show Chair

Ray Gilbert 303-774-8468  
[Hoss@g.com](mailto:Hoss@g.com)

## Secretary

Eileen Fitzgerald, 303 666-1399  
[elfitz891@hotmail.com](mailto:elfitz891@hotmail.com)

## Treasurer

Gerry Naugle, 303-591-2830  
[gnaugle@earthlink.net](mailto:gnaugle@earthlink.net)

## Past President

Mike Smith, 303-530-2646  
[m\\_l\\_smith@earthlink.net](mailto:m_l_smith@earthlink.net)

## Board of Directors

### Term Expires 2016

Charlotte Bourg, 970-278-0975  
[rckhnd4252@gmail.com](mailto:rckhnd4252@gmail.com)

Kevin Notheis, 303-325-5666  
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### Term Expires 2017

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[bpwillkomm@yahoo.com](mailto:bpwillkomm@yahoo.com)

## Web Master

Gabi Accatino, 303-809-4666  
[accatino@colorado.edu](mailto:accatino@colorado.edu)

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Gerry Naugle, 303-591-2830  
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## Newsletter Editor

Dennis Gertenbach, 303-709-8218  
[gertenbach@comcast.net](mailto:gertenbach@comcast.net)

## Scholarship

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[donald@pmgresources.com](mailto:donald@pmgresources.com)

## Junior Geologists

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[gertenbach@comcast.net](mailto:gertenbach@comcast.net)

## Denver Show & Council Rep

Carl Bird, 303-665-9794  
[carlmbird@comcast.net](mailto:carlmbird@comcast.net)

## Field Trip Co-Chair

Gabi Accatino, 303-809-4666  
[accatino@colorado.edu](mailto:accatino@colorado.edu)

## Club Claims

Brian Walko, 303-931-4283  
[earthextractions@gmail.com](mailto:earthextractions@gmail.com)

## Club Hospitality Chair

Deborah Knox  
[clanfelidae@yahoo.com](mailto:clanfelidae@yahoo.com)

## Club Show Committee Members

### Show Chair

Ray Gilbert 303-774-8468  
[Hoss@g.com](mailto:Hoss@g.com)

### Volunteer Chair

open

### Programs and Dealer Chair

Tally O'Donnell, 303-494-6061  
[phantom@indra.com](mailto:phantom@indra.com)

### Show Advertising and Admissions

Gerry Naugle, 303-591-2830  
[gnaugle@earthlink.net](mailto:gnaugle@earthlink.net)

### Kid's Corner Chair

Charlotte Bourg, 970-278-0975  
[rckhnd4252@gmail.com](mailto:rckhnd4252@gmail.com)  
Eileen Fitzgerald, 303 666-1399  
[elfitz891@hotmail.com](mailto:elfitz891@hotmail.com)

### Other Show Committee Members

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[accatino@colorado.edu](mailto:accatino@colorado.edu)

### Grab Bags

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Charlotte Bourg, 970-278-0975  
[rckhnd4252@gmail.com](mailto:rckhnd4252@gmail.com)

### Meeting Door Prize Chair

Brad Willkomm, 303 249-8877  
[bpwillkomm@yahoo.com](mailto:bpwillkomm@yahoo.com)

### Denver Show Club Table

Dennis Gertenbach, 303-709-8218  
[gertenbach@comcast.net](mailto:gertenbach@comcast.net)

## A friendly reminder to pay your 2017 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 2017 dues must be received by January 20th, 2017 in order to stay current with the member benefits, which include electronic club newsletters containing the information about club activities, club field trips information, annual show opportunities, silent auction opportunities, and the annual club summer picnic. Your receipt is your new annual 2017 FMC membership card.





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

## First Class Mail

### *Upcoming Events*

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Thursday, July 13	July meeting to bag specimens for grab bags	4561 47th Street in Boulder
Saturday, July 15	Como Bluffs Dinosaur Quarry field trip	Rock River, WY
Saturday, July 22	Jr. Geologists field trip to collect petrified wood	Elizabeth, CO
Saturday, July 22	Joe Dorris' Smoky Hawk Claim field trip	Divide, CO
Saturday and Sunday, July 29-30	Mt. Antero field trip with CMS	Mt. Antero, CO
Saturday, August 19	Annual club picnic	Harlow Platts Park, south of the South Boulder Recreation Center
Sunday and Monday, August 20-21	Como Bluffs Dino Quarry sleep-over to see the solar eclipse on Monday	Rock River, Wyoming
Saturday, August 26	Gold panning at Brian's Riverside Claim	Riverside, CO
Saturday-Monday, September 2-4	Flat Tops field trip	Flat Tops, north of Glenwood Canyon, CO