



Rocky Trails



September 2022

Volume 16 Issue 9

The Newsletter of the Columbia Gem and Mineral Society

EDITOR'S MESSAGE

Hi Folks,

Welcome to all members. It's great that summer is almost over and fall is right around the corner. This means a club picnic (info on page 9) is happening soon as well as our annual gem show. It's great to be getting out of the house!

Be sure to note upcoming events. The Dixie Mineral fieldtrips for September and October will be good ones. The September trip looks like a good fossil trip and Angela and I have collected the lace agate at the October location and it's good material. Check the pages within this newsletter for more details on these trips. Closer to home, we had a fieldtrip to the Broad River on **September 3rd** were a good turnout of folks collected moonstone and other materials in the large gravel bars below Parr Dam (see p. 8 for details). At our next general meeting Susan Richardson and Catherine Sawyer will give a presentation on dinosaur bone collecting in Wyoming (see p. 5 for details). This will be a must see presentation with inside information on actual digs, fossils collected and fossil prepping. Angela and I have been to the site and it is an amazing place! At the October meeting, I will follow up on the dino dig presentation with more information on fossil collecting at several locations in Wyoming. I hope you will make it for that presentation.

We are currently planning our 2022 annual show (see fliers on page 18 of this issue of the RT). Please consider volunteering for the show. Sue will be passing around a sign-up sheet at our September meeting. We will need all hands on deck for our clubs major fund raising event!

We are again at that point where we need to find officers for the club. A special thanks to Jim Cobb for throwing his name in for club president and for assisting in the officers nominating committee. Positions that will need to be filled for 2023 include vice-president, secretary, fieldtrip coordinator, show committee and potentially a few others. We are looking for some new folks to join us!

Stay in touch and don't take any risks.

Ron Ahle

NEXT MEETING

September 19, 2022

The September 2022 CGMS meeting will be held at **Hope Church** located at 2609 Seminole Road. It is off Broad River Rd. and is easily accessible from I-26 or I-20 (using a map or GPS is easier than giving directions since there are so many ways to get there).

Use the side door (close to the main part of the parking lot). We will meet in the Fellowship Hall.

PROGRAM:

Susan Richardson and Catherine Sawyer will talk about their Cretaceous dinosaur bone dig and collecting in Wyoming.

Door Prizes will be provided by Ron Ahle.

Refreshments will be provided by Angela Valvasori and Pat & Gary Hurt.

Executive Meeting

September 26, 2022

Dinner: 6 pm, Meeting: 7 pm

Grecian Gardens, 2312 Sunset Blvd., West Columbia.

Members are welcome to attend. Only executive members can vote.

54th Annual CGMS GEM AND MINERAL SHOW**November 18-20, 2022****Jamil Temple, Columbia, SC**

CGMS will hold our 54th annual Gem and Mineral Show the weekend prior to Thanksgiving: Nov. 18-20 at the Jamil Temple. The Show is well-attended and our customers look forward to it each year. It is a pleasure for our customers and club members, good business for our vendors, and educational for all. It is also the largest source of income for the club, and we hope to use this income to support a new lapidary workshop.

The Show is a success each year due to the efforts of so many of our members, both those who prepare for and organize the Show and those who help at the Show. The preparation involves printing flyers, advertising, signing up dealers, organizing the layout, communicating with Jamil Temple, organizing security, obtaining geodes, preparing grab bags and the salted mine and organizing the volunteers. Dee Iurcovich is the Show Chairperson for 2022. She has set up an Instagram page for the show: cgms_show. Show setup day is Thursday, with a club sponsored dealer dinner Thursday night. The Show runs Friday through Sunday and takedown is Sunday evening. My experience in helping with Show has been enjoyable. I share a sense of camaraderie with fellow club members, meet many vendors, use my skills and learn new ones and get to spend my weekend around lots of gems, minerals, fossils and jewelry. I plan to help again this year at the Front Desk and doing my Treasurer duties.

You too can join the fun and help the Club in as small or large a way that suits your time and interests. The following are some areas where we still need help. Please let Sue Shrader or Angela Valvasori know where you would like to help.

Show preparation:

- Bring crystals, fossils, tumbled stones, and small rocks to the general meetings for the Show grab bags and salted mine.
- *Publicity:* Sue Shrader is doing some but needs help with posting on websites, advertising in community event notices and with other organizations.
- *Refurbish Display Cases:* the Display Cases are used by members to show material from their collection to educate and inspire our customers. The Show Cases need the wood shored up at the screw holes, new light bulbs and new cloth liners. The Club will cover the material expenses.
- *Volunteer Coordinator:* Keep track of the volunteers who sign up to help at the Show, coordinate what location and times they will work according to need and preference, and call or email to remind them prior to the Show.

Show setup and dealer dinner (Thursday):

For these, you can pick an area or just volunteer to set up and help where needed.

- *Unload the trailer:* The geode equipment, front desk materials, display cases and video equipment is in a trailer which needs to be unloaded and moved into place. Help is also needed moving the geodes and grab bags.
- *Geode booth:* Help Gary set up the geode cutting and cleaning equipment and tables.
- *Display cases:* Put together the display cases.
- *Video monitoring:* Help Wavne set up this equipment.

54th Annual CGMS GEM AND MINERAL SHOW
(Continued)

Show setup and dealer dinner (Thursday (continued)):

- *Display Cases:* People show material from their collection to educate and inspire our attendees. We have 2 so far that will have display cases and we are looking for 2 to 3 more. Please sign up for this so we know how many cases to set up.
- *Dealer dinner:* This is being coordinated by Mandie Wenzel and Susan Bloodworth. Members are asked to provide salad and dessert. Please tell Mandie and Susan what you will bring.

Show (Friday, Saturday, and Sunday):

- *Demonstrations:* Members who do lapidary work that can be done on a desktop demonstrate their work during the show. The table will be provided.
- *Door prizes:* Collect door prizes from vendors for hourly door prize drawing. Assist Sue and Jim Cobb with drawing the name and announcing the winners on the microphone. Draw for the grand prize at the end of the Show and contact the winner.
- *Front Desk:* Need 2 people Admissions – to collect money, hand out tickets and door prize forms and 1 person to provide CGMS information and answer questions.
- *Geode Booth:* Need 2 people to weigh and sell geodes, 2 to cut (training provided by Gary Hert), and 1 to wash & wrap after cutting.
- *Salted Mine and Grab Bags:* Need 1 to 2 people to sell grab bags and collect money, and 1 person to operate the salted mine by helping children sift, replenish material and collect money.

Show takedown (Sunday evening):

- Show takedown begins as soon as the Show closes, at 5 pm. Assistance is needed with packing up display cases, Show materials and the geode equipment and loading it into the trailer.

Respectfully submitted by Angela Valvasori

GENERAL MEETING MINUTES

August 15, 2022 Monthly Meeting of Columbia Gem and Mineral Society

Since many club officers were not in attendance for various reasons, Jim Cobb called the meeting to order. No minutes were taken at the meeting.

EXECUTIVE MEETING MINUTES

July 25, 2022 Board Meeting of Columbia Gem and Mineral Society

The Columbia Gem and Mineral Society held its executive board meeting on August 29, 2022 at Grecian Gardens Restaurant. Vice-President Tom Daniels called the meeting to order at 7:20 PM. In attendance were Vice President Tom Daniels, Sharon Sterrett (Show Committee), Sheila Frame (Membership Chair), Ron Ahle (Secretary), Jim Cobb (Liaison), Gary Hert (Workshop Chair), Sue Shrader (Program Chair), and Mandie Wenzel (Show (children's education), John Narang (SC Federation Coordinator) and Angela Valvasori (Treasurer) The Board thanks Dee Iurcovich for setting up an Instagram site for our club.

Show: The board discussed the need for volunteers for the club show starting with a show volunteer coordinator. Sue said that she would pass around a sign-up sheet at the September general meeting. Sharon announced that she had received checks from 12 dealers and that she had numerous dealers on the waiting list. Sharon said that dealers on list who have not paid would be contacted by phone. Grab bags and salted mine were discussed with recognition being given to contributors. A grab bag day is being planned at the workshop. The board confirmed that the club would purchase pizza for the dealer dinner and left open the option for club members to donate side dishes. Mandie opened discussions in reference to the home school kid's special education programs that are presented at the show. A motion was made to provide handpicked grab bags with labeled items for the kids. The motion passed. Wayne Sessions was mentioned for his continuing assistance with the show. Sue opened discussions on show advertisement and said she would contact Gardiner Guides and the State. She also mentioned that we need somebody to contact TV stations and was looking for a volunteer. Gary proposed an increase for the selling price of geodes from \$0.75 p/oz. to \$0.90 p/oz. A motion was made and approved to raise the price. For show info: cgmsrOcks@gmail.com.

Membership: Sheila announced that the club currently has 113 members, including 96 adults and 17 juniors. **Program coordinator:** Sue announced that a dino dig presentation would be presented at September meeting by Catherine Sawyer and Susan Richardson. Ron will be giving the presentation on the paleontology of Wyoming at the October meeting. Sue mentioned that Ron would be providing door prizes and, Angela and Gary would be providing refreshments for the September meeting. **Rocky Trails:** Ron asked and reminded the board members to send information to him during the first week of each month to be published in the Rocky Trails.

Field Trips: Ron gave an update on fieldtrips. Ron volunteered to lead a trip to a location on the Broad River to collect moonstone. Ron also reminded the board that the club has an obligation to set up a Dixie Mineral fieldtrip for December and reminded the board members that Carl had talked to the folks at Martin-Marietta (Cross Mine). Ron also mentioned a Coastal Explorations trip to Morris Island as a possible Dixie Mineral trip.

Workshop: A possible workshop location was located, evaluated and passed on. **Treasury:** Angela said that the clubs cd's were rolled over. **New Business:** A letter of thanks came from the Evergreen Crisis Center for club contributions made in memory of Carl Sorenson.

A motion was made to adjourn the meeting and Tom adjourned the meeting at 8:47 PM.

Respectfully submitted by Ron Ahle

About the Program, “Cretaceous Dinosaur Bone Collecting”
Program by Susan Richardson and Catherine Sawyer



Rib bone being excavated (photo by Ron Ahle).

The September program will be about collecting dinosaur bones on the “Dino Hunters” Ranch in Wyoming. In 2020, Susan and Catherine went with a group of other dinosaur aficionados to the Harris Ranch featured in the Discovery Channel show “Dino Hunters” to dig for dinosaur fossils. They dug for four days on the ranch and will show you what they found. Susan returned in 2021 and 2022. The fossils are found in the Lance (Creek) formation which is a division of rocks in the western United States dating to the end of the Cretaceous Period 65.5 million years ago and named for exposures studied near Lance Creek, Niobrara County, Wyoming. This formation is well known for its Late Cretaceous fossils, which include plants, dinosaurs, and mammals. The duck-billed dinosaur *Trachodon*, the great carnivore *Tyrannosaurus*, the herbivores *Triceratops* and *Ankylosaurs*, pterosaurs, birds, and mammals (including marsupials) have been found in the Lance. The majority of the dinosaur fossils found on the Harris Ranch are from *Triceratops* and other ceratopsids with some T-Rex and other theropods. Reptile fossils include crocodile, alligator and turtle. Come to the September meeting to hear a first-hand account of their experiences and see what they found.

South Carolina State Museum
<http://scmuseum.org/events/upcoming-events/>
301 Gervais Street
Columbia, SC 29201
803-898-4921

Advance online ticket purchases are encouraged, especially if you wish to see planetarium and/or 4D shows.

Hours of Operation:

Mon: CLOSED.
Tue – Sat: 10 a.m. to 5 p.m.
Sunday: 12 to 5 p.m.

Planetarium Theater Shows

NOTE: The planetarium will be CLOSED from Tues. Sept. 13 through Sun. Sept. 18 for maintenance.

Habitat Earth

This full dome planetarium show features stunning visualizations of the natural world, as it takes you below the ocean's surface to explore the dynamic relationships found in kelp forest ecosystems, travel beneath the forest floor to see how Earth's tallest trees rely on tiny fungi to survive, and journey to new heights to witness the intricate intersection between human and ecological networks. 25 mins. Sat-Sun: 4:00 pm.

Black Holes

Unimaginably powerful, relentless, and invisible, black holes are some of the most fascinating and extreme objects in the universe. They warp space and time, swallow up stars, and can grow to monstrous sizes. How do they form? Where are they found? What would happen to you if you fell into one? Go on a mind-bending journey that brings you face to face with these strange and enigmatic denizens of the cosmos. 35 mins. Tues. – Fri: 3:30 p.m., Sat: 11:30 a.m.

We Are Stars

Go on an epic journey through time and space to explore our explosive origins and discover how we are connected to the cosmos. Watch the history of the universe unfold, from the big bang to the formation of the very first atoms to the very first stars. See how stars forged the elements that eventually came together to form planets and the complex molecules necessary for the evolution of life on Earth. 25 min. Tues-Fri 11:30 am.

Museum Special Exhibit:

Apollo 16 & Beyond: South Carolina in Space

This new exhibition explores the Apollo 16 lunar mission and the historic moonwalk of SC astronaut Charles Duke. In addition to featuring many Apollo 16 objects, the exhibition will also highlight South Carolina scientists and engineers who have contributed to the field of aerospace research and exploration.

Current Observatory Programs

PLEASE NOTE: All Observatory activities listed below are dependent on clear skies.

Solar Observing

Mon: Closed
Tues. – Fri: 12 to 4 p.m.
Sat: 12 to 5 p.m.
Sun: 1 to 5 p.m.

Night Observing: Currently Closed Until Further Notice

First Sunday Sponsored by BlueCross BlueShield of South Carolina

Sun. Sept. 4 and Sun. Oct. 2 from 12 – 5 p.m. General admission is only \$1 for guests on the first Sunday of every month.

McKissick Museum

https://sc.edu/study/colleges_schools/artsandsciences/mckissick_museum/

Hours

McKissick Museum is free and open to the public Monday through Friday 8:30 am to 5:00 pm,
Saturday 11:00 am to 3:00 pm.

Tuesday, September 20, 2022 at 12 - 1 pm

The Nature of Fall with Rudy Mancke

It's time for our quarterly visit from the one and only Rudy Mancke, UofSC's Naturalist in Residence. We're back at McKissick Museum on Tuesday, September 20th to learn more about the seasonal changes that occur during the autumnal equinox. This event is free and open to the public. Please remember that it will be held outside, so come prepared. Feel free to bring items of interest for Rudy to examine, but no live critters please.

Exhibitions:***Catesby in the Carolinas, March 21 to October 1, 2022***

A two-part exhibition centering around Mark Catesby and his monumental work, *Natural History of Carolina, Florida and the Bahama Islands (1729-1747)*. "*Catesby in the Carolinas*" highlights artifacts from all five collections with exhibit spaces in McKissick Museum and the Irvin Department of Rare Books and Special Collections. It contextualizes Catesby's life and works within his own time, situates the importance of his publications in the history of the University of South Carolina Libraries, and considers Catesby's enduring importance for our own cultural and ecological moment.

Natural Curiosity: The University of South Carolina and the Evolution of Scientific Inquiry in the Natural World

Explore your own "natural curiosity" in this exhibit that highlights the treasures of nature, and the evolution of the field of natural history. Visitors can learn from authentic objects or use newly installed touchscreens to dive deeper into McKissick collections and explore the lives of Historic Southern Naturalists.

CGMS Name Tag

The *Trophy and Gift Shop* in Cayce has the template, shown below, for the CGMS name tags. If you would like one, please contact them by phone or via their website, tell them you would like a CGMS name tag and provide the name you want on it. The cost is around \$10.

Trophy and Gift Shop: 911 12th St., Cayce SC; 803-796-7710; trophyandgiftshop.com.

We also have patches for \$10. Contact Angela if you would like one.



Fieldtrip Report

On **September 3rd** about 30 members gathered at the Palmetto Trail parking area on Alston Road in Jenkinsville, SC to go to the Broad River below Parr dam to collect moon stone. The weather was very cooperative with a sunny day that made seeing the sheen on the moonstone easier. Everybody worked together to help each other follow the trail in and then go down a steep slope to get to the collecting area. It was definitely a group effort. The river conditions weren't perfect, but were doable as everyone waded into 1-3 foot deep water to access gravel bars. There was lots of vegetation and silt making it hard to see the moon stone under water, so, everyone was reaching in the water, grabbing gravel and bringing it up for examination. Ron Ahle gave advice to the collectors on what to look for and how to differentiate the moonstone from quartz and other rock materials. Dave Schuetrum took photos of the group and provided them for this report. Everyone went home with pieces of moonstone! This material makes beautiful cabochons when polished and hopefully some members will be able to show us their finished products.



CLUB PICNIC

Come join us at the club picnic which will be held at Sesquicentennial State Park at Picnic Shelter No. 1 (location shown below) on **Sunday October 30th**

1:00 to 5:00. The club will provide charcoal for the grill, some drinks, and ice. Bring your own meat/vegetables to grill and/or your own food. If you want to share any food, package it in individual servings. The activity for the picnic will be a game of stump the experts whereby a panel will be appointed to identify items collected by members. Please bring one or two items that you would like identified (be nice). Ron & Angela will be providing door prizes for the event. Because of COVID-19 we ask that each member who comes to the picnic abide by CDC guidelines for social distancing. We want this event to be safe for everyone. While at the park, there are opportunities for outdoor recreation such as walking trails, hiking, and bird observation, kayaking and fishing if you would like to extend your day and take advantage of the park. For those who need to unload a large amount or have difficulty walking, you can drive to the shelter to unload but cannot park there.

Picnic Shelter No 1 at Sesquicentennial Park



News Worth Digging Up

New Mineral Described from Uranium Mine in Utah

Author: not stated

Source: Geology In

Date: Jan. 26, 2022

A new mineral named oldsite has been verified and accepted by the International Mineralogical Association.

Carnegie Museum of Natural History announces the naming of the new mineral Oldsite after Dr. Travis Olds, the museum's Assistant Curator of Minerals. The International Mineralogical Association (IMA) verified the mineral, which was accepted in October 2021 by an international team of scientists. Oldsite is named in recognition of Olds' contributions to uranium minerology.

Collected at Utah's North Mesa mines near Temple Mountain, Oldsite forms from the interaction of air and water with uranium and iron-sulfide ores in the humid underground environment, leading to crystalline deposits on the surfaces of mine walls. Oldsite occurs as tiny yellow, rectangular blades measuring up to 0.3 millimeters in length. The crystals are thin and brittle and dissolve in water.

The holotype specimen of Oldsite, or original specimen to be named, is held in the collections of the Natural History Museum of Los Angeles County. Its chemical formula is $\text{K}_2\text{Fe}^{2+}[(\text{UO}_2)(\text{SO}_4)_2]_2(\text{H}_2\text{O})_8$

Oldsite is unique because it helps us fill in some puzzle pieces about how uranium behaves in the environment. The way its atoms connect to each other in the crystal structure tells us about the conditions that led to its formation. This information can be useful to help keep uranium out of drinking water, or to clean up nuclear waste."

To learn more [New Mineral Described From Uranium Mine In Utah \(geologyin.com\)](https://www.geologyin.com)

[New Mineral Named For Carnegie Museum of Natural History Scientist - Carnegie Museum of Natural History \(carnegiemnh.org\)](https://www.carnegiemnh.org)



Yellow oldsite blades with blue stanleyite and white szomolnokite on asphaltum. Horizontal field of view is 0.7 millimeters. Photo by Dr. Anthony Kampf.

News Worth Digging Up

Sawfish fossils suggest teeth likely evolved from body scales in ancient fish

Author: Sara LaJeunesse, Materials provided by Penn State

Source: ScienceDaily

Date: Aug. 24, 2022

Scientists have long debated the origins of teeth. Did they evolve from body scales that migrated into the mouths of ancient vertebrates and became adapted for eating -- an idea known as the 'outside-in' hypothesis? Or did they evolve independent of scales, originating deep within the oral cavity and ultimately mounting onto the jaws -- known as the 'inside-out' hypothesis? A new study provides evidence for the 'outside-in' hypothesis.

According to vertebrate paleontologist Todd Cook, associate professor of biology, Penn State Behrend, the team did not set out to contribute to the debate about the origins of teeth. Instead, he and his colleagues were studying the tissue structure of rostral denticles, which are the jagged spikes that run along the elongated snouts of sawsharks and sawfishes and are used in foraging and self-defense.

The team examined the fossilized rostral denticles of *Ischyrhiza mira*, a species belonging to an extinct group of sawfishes that lived in North American waters during the late Cretaceous period, around 100 to 65 million years ago. The samples had previously been recovered from a rock formation in New Jersey.

"Rostral denticles are believed to be modified scales because of their location on the elongated snout and they have an external morphology and developmental pattern that's similar to scales," said Cook, explaining that, just like with scales found elsewhere on the body, for a new rostral denticle to form, an old one must first fall off and make a space available. "Surprisingly, *Ischyrhiza mira*'s rostral denticle enameloid was anything but simple; it was considerably more complex than the enameloid of body scales," said Cook. "In fact, the overall organization of the enameloid in this ancient sawfish resembled that of modern shark tooth enameloid, which has been well-characterized."

Specifically, he noted that both *Ischyrhiza mira* rostral denticles and modern shark teeth have an enameloid covering that largely consists of fluorapatite microcrystals packed together into distinct bundles. Towards the outer region of the enameloid, these bundles run parallel to the surface of the tooth and are called the "parallel bundled enameloid." Deeper, the bundles become randomly arranged, a region known as the "tangled bundled enameloid." Finally, passing through these layers is the "radial bundled enameloid," which is composed of packed microcrystals oriented perpendicular to the tooth surface.

In terms of function, Cook explained that having bundles of microcrystals arranged in various orientations enables shark teeth to resist the mechanical stresses associated with feeding. Similarly, he noted, "It is likely that the bundled microcrystal arrangement of the enameloid of *Ischyrhiza mira*'s rostral denticles also served as a way to withstand mechanical forces."

However, the most surprising and consequential outcome of this study is that it makes an important contribution to the long-standing debate regarding the origin of teeth, said Cook. Specifically, he explained, "This finding provides direct evidence supporting the 'outside-in' hypothesis, as it shows that scales have the capacity to evolve a complex tooth-like enameloid outside of the mouth. It is more parsimonious to suggest that scales produced a similar bundled microstructure in teeth and rostral denticles than to conclude that both these structures evolved a similar enameloid independently."

To learn more [Sawfish fossils suggest teeth likely evolved from body scales in ancient fish -- ScienceDaily](#)



**Graves Mountain
Rock Swap and Dig
October 7 - 9, 2022
Lincolnton, Georgia**

No reservations needed. Current covid safety precautions must be observed. Masks must be worn when at food and vending booths. Social distancing must be adhered to.

The mountain will be open to collecting from 8 am to 6 pm each day. All attendees must stop at the welcome table to sign a liability release and make a contribution/donation to help with the cost of providing porta johns and golf carts. The dig will end and everyone must be off the mountain by 6:00 p.m. each day.

There will be an area in the parking lot for vendors to sell and trade minerals. If you would like to setup a booth, contact Jr. at the phone number listed below. Hot food and drinks will be available for purchase on the mountain all three days.

There will be an area in the parking lot for vendors to sell and trade minerals. If you would like to setup a booth, contact Jr. at the phone number listed below. Hot food and drinks will be available for purchase on the mountain all three days.

Clarence Norman Jr. (Junior) - 706-359-1544 (his business) or 706-401-3173 (his cell)

THIS DIG IS OPEN TO ALL CLUBS and ROCKHOUNDS!

GRAVES MOUNTAIN CODE OF CONDUCT!

Park your vehicle in the designated area at the end of the paved access road. All participants must stop at the welcome table in the Hospitality tent to sign a liability release and make a small contribution to defray the cost of opening the mountain and providing port-o-lets. There will be several golf cart type, four wheeled vehicles available to transport those participants who have trouble walking long distances. ALL pets must be kept under control and on a leash. The caretaker, Jr. Norman has final and absolute say as to where you may safely work. Ladders or power tools of any kind will not be allowed. **(HAND TOOLS ONLY!). STAY AWAY FROM ALL HIGH WALLS! NO RAPPELLING OFF OF ANYTHING! NO ONE IS ALLOWED TO DRIVE THEIR VEHICLE ON ANY PART OF GRAVES MOUNTAIN BEYOND THE PARKING AREA!** (The caretaker must accompany anyone driving beyond the parking area!) **EVERYONE NEEDS TO BE OFF THE MOUNTAIN BY 6:00 p.m.** (Absolutely no one is allowed on Graves Mountain after dark.)

DIRECTIONS: From Washington Georgia, drive east 11 miles on SR-378, look for mine entrance on right. From the Hardee's in Lincolnton, Georgia, drive approximately 5-1/2 miles west on SR-378. Look for the sign at the entrance to Graves Mountain on the left side of the road.

Motels and Camping:

Cullars Inn, Lincolnton, Georgia, 706-359-6161

Soap Creek Lodge, Clarks Hill Lake, Lincolnton, 706-359-4100

Elijah Clark State Park, 706-359-3458 / 800-864-7275

AREA SHOWS

To verify the accuracy of a show date, go to the show's website or contact them directly.

September 16-18, 2022—ARDEN , NORTH CAROLINA: Annual show; MAGMA, Jacquot & Son Mining; Camp Stephens, 263 Clayton Road; Fri. 9-6, Sat. 9-6, Sun. 10-4; Free; Indoor and Outdoor Vendors offering: Gems, Minerals, Fossils, Artifacts, Rocks, Meteorites, Trinitite, Moldavite, Silver and Gold Jewelry, Crystals and other hobby related items. Food and Drink Available Daily. Rain or Shine. More outside vendors are welcome, contact Rick: 828-779-4501

September 16-18—FISHERSVILLE, VIRGINIA: Annual show; Shenandoah Valley Gem & Mineral Society; The Augusta Expo - Main Expo Hall, 277 Expo Road; Scott Gregory, (727) 542-9723; Email: showboss@shenandoahvalleyrockclub.org; Website: tinyurl.com/SVGMS-Show-2022

September 23-25—RICHMOND, VIRGINIA: Annual show; Treasures of the Earth, Inc.; Richmond Raceway Complex, 600 East Laburnum Ave; Ellen White, (804) 642-2011; Email: Ellen@TreasuresOfTheEarth.com; Website: www.TreasuresOfTheEarth.com

September 30 – October 2 - MAGMA/Land of the Sky Gem Show

Venue: Land of the Sky Shrine Club

Address: 39 Spring Cove Rd

Swannanoa, NC 28778

Website: <http://www.americanrockhound.com/>

FREE ADMISSION Food & Drink Available

Friday, Saturday & Sunday



SEP. 30th & OCT. 1st
9am - 6pm



OCT. 2nd
10am - 5pm

MAGMA Land of The Sky

GEM SHOW

Indoor and Outdoor Vendors

- Crystals
- Gemstones
- Moldavite
- Fossils
- Jewelry

- Minerals
- Meteorites
- Trinitite
- Artifacts
- Cabochons




Thousands of Crystals, Beads, Minerals and Other Hobby Related Items!

Land of The Sky Shrine Club



39 Spring Cove Road
Swannanoa, NC 28778
Interstate 40, off Exit 55



For Show Info and Vendor Spaces, Call: 828-779-4501

Sponsored by MAGMA and Jacquot & Son Mining

www.AmericanRockhound.com

October 7, 8, & 9, 2022 - LINCOLNTON, GA Graves Mountain Rock Swap and Dig

<https://www.gamineral.org/ft/commercial/ftgravesmain.html>

Friday October, 8am to 6pm

Saturday October 8, 8am to 6pm

Sunday October 9, 8am to 6pm

November 18-19 2022 - COLUMBIA, SC 54th Annual Gem, Mineral, & Jewelry Show

Columbia Gem and Mineral Society

Jamil Temple, 206 Jamil Rd., Columbia, SC 29210

www.cgms.rocks

December 2, 3 & 4 - MAGMA Land of the Sky Christmas Gem Show

Hours: Fri/Sat 9:00-5:00 Sun 10:00-4:00

Venue: Land of the Sky Shrine Club

Address: 39 Spring Cove Rd

Swannanoa, NC 28778

Website: <http://www.americanrockhound.com/>

Meteorites

<https://www.amsmeteors.org/category/meteor-showers/meteor-shower-calendar/>

Orionids

Next period of activity: September 26th, 2022 to November 22nd, 2022

The Orionids are a medium strength shower that sometimes reaches high strength activity. In a normal year the Orionids produce 10-20 shower members at maximum. In exceptional years, such as 2006-2009, the peak rates were on par with the Perseids (50-75 per hour). Recent displays have produced low to average displays of this shower.

Southern Taurids

Next period of activity: September 28th, 2022 to December 2nd, 2022

The Southern Taurids are a long-lasting shower that several peaks during its activity period. The shower is active for more than two months but rarely produces more than five shower members per hour, even at maximum activity. The Taurids (both branches) are rich in fireballs and are often responsible for increased number of fireball reports from September through November.

Northern Taurids

Next period of activity: October 13th, 2022 to December 2nd, 2022

This shower is much like the Southern Taurids, just active a bit later in the year. When the two showers are active simultaneously in late October and early November, there is sometimes a notable increase in the fireball activity. There seems to be a seven year periodicity with these fireballs. 2008 and 2015 both produced remarkable fireball activity. 2022 may be the next opportunity.

Social Media Helps our Club Stay Social!

To access our web site, type “CGMS.ROCKS” in your internet browser or you can search for Columbia Gem and Mineral Society in Google.

The Club’s website is: www.cgms.rocks

To join the discussion with other CGMS members on [Facebook](#), look under the Community tab, where you will find the Columbia Gem and Mineral Society Member Group. When you ask to join the Group, please be sure to agree to follow the rules: Be Kind, No Hate Speech or Bullying; and No Promotions or Spam. Please feel free to add photos of your interesting finds, share your Jewelry making, or your field trip experiences.

We now have an Instagram page for the Show: [@cgms_show](#).

Columbia Gem & Mineral Society

2022

Please Copy

54th Annual

Gem Mineral & Jewelry Show

Nov. 18, 10 to 6

Nov. 19, 10 to 6

Nov. 20, 12 to 5

Jamil Temple
206 Jamil Rd.
Columbia, SC 29210



Adults \$5.... Children 16 & Under Free
All Military & Dependents Free



803-736-9317
www.cgms.rocks

\$1.00
Off

Columbia Gem & Mineral Society

2022

Please Copy

54th Annual

Gem Mineral & Jewelry Show

Nov. 18, 10 to 6

Nov. 19, 10 to 6

Nov. 20, 12 to 5

Jamil Temple
206 Jamil Rd.
Columbia, SC 29210



Adults \$5.... Children 16 & Under Free
All Military & Dependents Free



803-736-9317
www.cgms.rocks

\$1.00
Off

Columbia Gem & Mineral Society

2022

Please Copy

54th Annual

Gem Mineral & Jewelry Show

Nov. 18, 10 to 6

Nov. 19, 10 to 6

Nov. 20, 12 to 5

Jamil Temple
206 Jamil Rd.
Columbia, SC 29210



Adults \$5.... Children 16 & Under Free
All Military & Dependents Free



803-736-9317
www.cgms.rocks

\$1.00
Off

Columbia Gem & Mineral Society

2022

Please Copy

54th Annual

Gem Mineral & Jewelry Show

Nov. 18, 10 to 6

Nov. 19, 10 to 6

Nov. 20, 12 to 5

Jamil Temple
206 Jamil Rd.
Columbia, SC 29210



Adults \$5.... Children 16 & Under Free
All Military & Dependents Free



803-736-9317
www.cgms.rocks

\$1.00
Off

The Columbia Gem and Mineral Society is an organization of persons associated together to promote popular interest in and to provide means for the exchange of knowledge of the Earth Sciences – Geology, Mineralogy, and Paleontology – and of the related Arts – Lapidary and other. The Society is a member of the Southeast Federation Mineralogical Societies Inc. and affiliates of the American Federation of Mineralogical Society Inc.

2022 OFFICERS and COMMITTEE CHAIRPERSONS

EXECUTIVE COMMITTEE

President.....Open
 Vice President.....Tom Daniels.....
 Treasurer.....Angela Valvasori.....
 Secretary.....Ann Sorenson

COMMITTEE

MembershipSheila Frame.....
 Auctioneer.....Benira Sutphin.....
 Club Liaison.....Jim Cobb.....
 Faceting Guild.....Open
 Facebook.....Dan Elswick.....
 Field Trip.....Carl Sorenson.....
 Historian.....Gordon Murphy.....
 Librarian.....Sheila Frame.....
 Newsletter Editor.....Ron Ahle.....
 Program.....Sue Shrader.....
 Rookie RockhoundOpen
 Show.....Open
 SunshineAbbie Gates.....
 Website.....Steve Coker.....
 Workshop.....Gary Hert.....



CGMS Website

Please visit our Website:

<http://www.cgms.rocks>

Webmaster: Steve Coker

Monthly Meeting

Except for January, the meetings are held the third Monday of each month. Socializing and refreshments at 7:00 pm; Meeting at 7:30 pm.

Executive Board Meetings:

Except for January, the meetings are held on the fourth Monday of each month. Meal is at 6:00 pm. Meeting is at 7:00 pm.

Rocky Trails
PO Box 6333
Columbia, SC 29260