



Rocky Trails



July 2019

Volume 13 Issue 7



The Newsletter of the Columbia Gem and Mineral Society

EDITOR'S MESSAGE

Greetings,

Even though this hasn't been a terribly hot summer, the mountains still beckon. Last year Angela and I, along with Terri Tokaz made it up to Franklin for the excellent gem and mineral shows during the last week in July. If not for the heat, yes, even in the mountains, we probably would have stayed until the last dealer closed their both. There is also the annual Western Rockhound Roundup happening during the same week which provides many opportunities to add to your collections. The Hendersonville show at the end of August might be a good show to plan a trip around. My hope is that you folks are making time to get up to the mountains.

The club has moved our workshop to a storage building in West Columbia (Ample Storage). This is a temporary location and may still need some preparations to make it ready for use. Please inquire with Gary Hert. If you know of any potential locations for a more permanent shop, please inform one of the club's officer! It means a lot to the membership to have a fully functional shop.

Welcome to all the new members to our club. We look forward to sharing our club activities with all of you! For some of you who would like to volunteer, we invite you to become officers in the club. We have many positions that will be available in the coming year. If you have friends who would like to join the club, there is an application form on our website.

Ron Ahle, editor

NEXT MEETING

July 15, 2019

PROGRAM:

Ron Clamp---Stone Carving

Ron Clamp is a third-generation stone carver and a native of Elberton, Georgia, the Granite Capitol of the World. In 2003 the company moved from Georgia to Lexington, SC. Our studio is in West Columbia, SC and our corporate offices and retail monument store are in Lexington, SC. Ron Clamp is a master stone carver and sculptor. He specializes in granite memorials, statuary, dimensional stone and architectural carving. His carvings can be found all over the United States and nine other countries. If you can imagine it, then Ron Clamp can create it. Ron is a professional member of the Stone Carver's Guild and the Monument Builders of North America. He and his wife co-wrote the book [Carved in Stone](#).

REFRESHMENTS

Tom Daniel & Eliza Allen

DOOR PRIZES

The Columbia Gem & Mineral Society

Club meetings are at The McKissick Museum at USC. Parking is available beside the museum where Bull St. runs into Pendleton St. See map on page 4. If you are unable to use the front steps of the McKissick Museum, there is an elevator on the ground floor down the hall from the parking lot. If you need to use the elevator call 803-261-9317 to have the door on the street level by the parking lot opened.



How Do Scientists Date Fossils?

Geologists Erin DiMaggio and Alka Tripathy-Lang explain techniques for targeting the age of a fossil find

This is the fourth in a five-part series written by experts featured in the Smithsonian's new Hall of Fossils—Deep Time exhibition, now on view at the National Museum of Natural History. The full series can be found by visiting our [Deep Time Special Report](#)

“No fossil is buried with its birth certificate,” wrote the renowned science editor Henry Gee in his 2000 treatise, [In Search of Deep Time](#). While true, fossils are buried with plenty of clues that allow us to reconstruct their history. An array of absolute dating techniques has made it possible to establish the timescale of Earth’s history, including the age and origin of life, the timing of mass extinctions and the record of human evolution.

In 2013, in Ethiopia's Afar region, our [research team](#) discovered a rare fossil jawbone belonging to our genus, *Homo*. To solve the mystery of when this human ancestor lived on Earth, we looked to nearby volcanic ash layers for answers. Using a geologist’s magnifying glass, we can carefully scan the ash in search of tiny minerals that are smaller than a single sprinkle on a sugar cookie and that hold the key to determining the age of a fossil.

Working in this part of Ethiopia is quite the adventure. It is a region where 90 degrees Fahrenheit seems cool, dust is a given, water is not, and a normal daily commute includes racing ostriches and braking for camels as we forge paths through the desert. But, this barren and hostile landscape is one of the most important locations in the world for studying *when* and *how* early humans began walking upright, using tools and adapting to their changing environments.

Early on, before we had more precise means to date fossils, geologists and paleontologists relied on relative dating methods. They looked at the position of sedimentary rocks to determine order. Imagine your laundry basket—the dirty clothes you wore last weekend sit at the bottom, but today's rest on top of the pile. The concept for sedimentary rocks is the same. Older rocks are on the bottom, younger ones are on top. Researchers also used biostratigraphy, which is the study of how fossils appear, proliferate and disappear throughout the rock record, to establish relative ages. We still use these relative dating methods today as a first approach for dating fossils prior to assigning a numerical, or absolute, age.

Can we date actual fossils? Sometimes.

Scientists called geochronologists are experts in dating rocks and fossils, and can often date fossils younger than around 50,000 years old using radiocarbon dating. This method has been used to provide dates for all kinds of interesting material like [cave rock art](#) and [fossilized poop](#). Unfortunately, fossils like our jawbone, as well as the dinosaurs on view in the new "[Fossil Hall—Deep Time](#)" exhibition at the Smithsonian's [National Museum of Natural History](#), are just too old for radiocarbon dating. In these cases, we have to rely on the rocks themselves. We date the rocks and by inference, we can date the fossils.

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In Afar, Ethiopia, a rare fossil jawbone belonging to our genus, *Homo* was discovered by our research team in 2013. To solve the mystery of when this human ancestor lived on Earth, we looked to volcanic ash layers for the answers. (William H. Kimbel, Arizona State University)

The first big challenge is to find the right kind of rocks to collect for laboratory analysis. We are fortunate that the Afar region has volcanic ash horizons in the sedimentary rock layers. In fact, just below where the fossil jawbone was discovered, our team found a new volcanic ash layer that we named the Gurumaha Tuff. The word *gurumaha* in the local language means milkshake—a reflection of our mindset in the 90 degree afternoon heat. In a sense, we can think of volcanic ash layers as buried stopwatches. When the volcano erupts the timer starts, and we use absolute dating techniques to tell the elapsed time.

Volcanic rocks typically contain naturally radioactive minerals—our sugar cookie sprinkles. We can date these minerals using techniques based on the radioactive decay of isotopes, which occurs at known rates. Measuring isotopes typically involves [lasers and mass spectrometers](#) and sometimes even nuclear reactors. We calculate age using the decay rate and isotope measurements, which gives us the elapsed time on our stopwatch.

We successfully dated the Gurumaha Tuff to 2.82 million years old by dating the naturally radioactive mineral feldspar. Since the jawbone eroded from above the Gurumaha Tuff, it must be younger. We [calculated](#) the jawbone is between 2.80 and 2.75 million years old, making it the [oldest known fossil of our genus *Homo*](#).

Geochronologists have an abundance of tools at their disposal, but still, some rocks and fossils prove difficult to date. Innovations to existing dating methods are eliminating these barriers. For example, [revisions to a method](#) called [electron spin resonance](#) allow scientists to date rare fossils, like hominin teeth, because they can directly date the fossil without visibly damaging the specimen. In the Afar, scientists are attempting to date the actual layers from which the fossils erode, rather than relying on the presence of volcanic ash. This would more accurately tell us the age of fossil-bearing rocks, and open new field sites for exploration that lack such layers.

Fossils span geologic time from hundreds to even billions of years and are discovered in many rock types and settings. Selecting a suitable dating technique is a critical step to obtaining a meaningful and accurate age.

Scientists have dated fossils found in [South African caves to between 236,000 to 335,000 years old](#) using several different geochronometers, including [optically stimulated luminescence](#), a tool that allows us to calculate the last time cave sediments were exposed to light. Another common method, uranium-lead dating, relies on the radioactive decay of uranium and can be used to date rocks containing the oldest known fossils on Earth—older than [3.5 billion years old!](#) To put that in context, the age of the [Earth is 4.54 billion years](#), but our species has only been around for approximately [300,000 years](#).

The age of the Earth and origin of life is almost unfathomable, but the Smithsonian's new [Deep Time Hall](#) is designed to help us grasp the enormity of Earth's history in [light of our present-day impacts](#). The 18th-century geologist James Hutton recognized that geologic processes require long timescales, a concept central to what we mean by the term deep time. The purpose of geochronology—dating rocks and fossils—is to weave together the dates we obtain to tell the extraordinary story of Earth's deep time.

Social Media Helps our Club Stay Social!

Join us on Facebook, our social media outlet, to learn about activities of the club and to share your club-related experiences. From any Facebook page (not Google), you can search for "Columbia Gem and Mineral Society" to access the club page. Once you get there, you can click on "Like" this page and set your preferences for notifications under the "Following" button. Share the CGMS Events and Posts with your friends! Add photos of club-related topics! Use this page to share your rock and lapidary interests. Anyone can post on our page, just keep it gem and mineral relevant (no profanity or off-topic posts please). Enjoy, this is one way members of our club can stay connected. To access our web site, just 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

MEMBERSHIP

2019 dues are over-due. If you have not renewed please contact Sheila Frame immediately because she will be updating the Membership Roster with current members.

SUNSHINE

John Narung fell off a ladder and broke his leg in several places, requiring surgery.
Call or write him at 207 Weddell St.
2-A Columbia, SC 29223

CGMS Lapidary Workshop

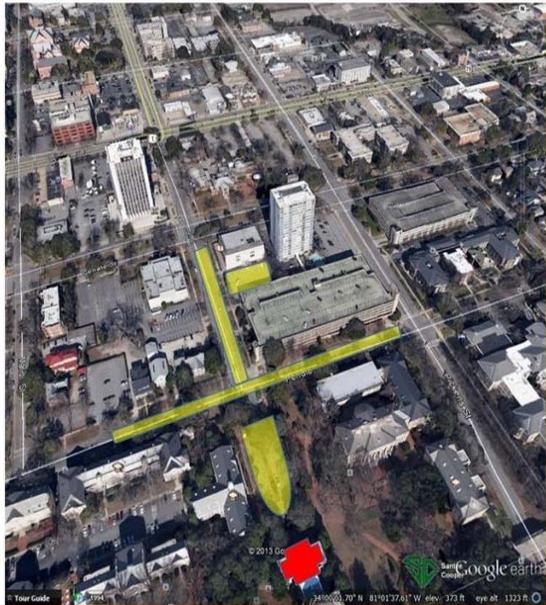
Call or email Gary Hert at 803-794-9362 or gchert@hotmail.com to use the rock saws and cabbing machines.

The Columbia Gem and Mineral Society Lapidary Workshop

The lease on the club's lapidary workshop expired at the end of May. May 18, the club lapidary workshop was packed up and the equipment moved to a storage building in West Columbia. The club has rented a large storage room and a small room as a temporary location. The storage unit has electricity and is climate controlled. It can be used both as storage and a temporary location for lapidary work until a permanent location is found.

New Location Needed

The club is seeking a new location for the workshop. A long term lease or purchase is desired. If you have any suggestions please contact one of the Executive Officers.



Yellow shaded areas =suggested parking **McKissick Museum (in Red)**

McKissick Museum**McKissick Museum:**

www.artsandsciences.sc.edu/mikissickmuseum; phone 803.777.7251; College of Arts and Sciences, University of South Carolina; 816 Bull Street, Columbia, SC 29208

Lunch & Learn: Historic Southern Naturalists

Wednesday, July 24, 2019, 12:00 PM This month's Lunch & Learn topic explores one of our biggest digitization projects, to date, here at McKissick museum. Join Curator Christian Cicimurri and project manager Linda Smith on July 24th from 12:00pm – 1:00pm to learn about the Historic Southern Naturalist project. This project, funded by the Institute for Museum and Library Services, is on course to digitize thousands of objects over the course of 3 years and Christian and Linda are excited to show you how. Lunch and Learn's are free and open to the public, but space is limited. Bring your lunch and learn with us!

Chris CiCiMurri Curator of Natural Science. 803-777-2823; cicimurri@sc.edu

South Carolina State Museum<http://scmuseum.org/events/upcoming-events/>301 Gervais Street
Columbia, SC 29201
803-898-4921**Second Shift Twosdays:** Every Tuesday from 5 – 10 p.m., General admission is 2 for \$10

The museum is open late every Tuesday. Explore four floors of permanent and changing exhibits, planetarium shows, 4D Theater films, night-sky viewing in the Observatory and more.

Boeing Observatory Public Solar Observing Times:

Mon. to Fri: 10 a.m. to 5 p.m.

Saturday: 11 a.m. to 6 p.m.

Sunday: 1 to 5 p.m.

Night Observing: until 10 p.m. during Second Shift Tuesday each week.**Meteorite Showers**<https://www.amsmeteors.org>**Southern Delta Aquariids****Active from July 21st to August 23rd , 2019 Peak Night July 29 & 30**

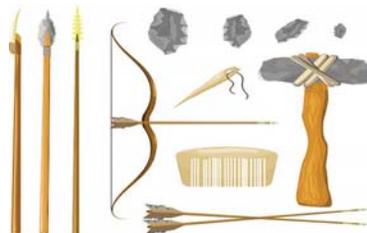
The Delta Aquariids are another strong shower best seen from the southern tropics. North of the equator the radiant is located lower in the southern sky and therefore rates are less than seen from further south. These meteors produce good rates for a week centered on the night of maximum. These are usually faint meteors that lack both persistent trains and fireballs.

Alpha Capricornids**Active from July 11th to August 10th , 2019 Peak Night July 26 & 27**

The Alpha Capricornids are active from July 11 through August with a "plateau-like" maximum centered on July 29. This shower is not very strong and rarely produces in excess of five shower members per hour. What is notable about this shower is the number of bright fireballs produced during its activity period. This shower is seen equally well on either side of the equator.

Perseids**Active from July 13th to August 26th , 2019 Peak Night August 11 & 12**

The Perseids are the most popular meteor shower as they peak on warm August nights as seen from the northern hemisphere. The Perseids are active from July 13 to August 26. They reach a strong maximum on August 12 or 13, depending on the year. Normal rates seen from rural locations range from 50-75 shower members per hour at maximum. The Perseids are particles released from comet 109P/Swift-Tuttle during its numerous returns to the inner solar system. They are called Perseids since the radiant (the area of the sky where the meteors seem to originate) is located near the prominent constellation of Perseus the hero when at maximum activity.



GENERAL MEETING MINUTES

June 17, 2019 General Meeting of Columbia Gem and Mineral Society, Inc.

The Columbia Gem and Mineral Society, Inc. held the monthly club meeting on the 3rd Monday, May 23, 2019, at the McKissick Museum at 816 Bull Street, Columbia, SC 29208 on the USC campus.

7:30 **President:** Jimmy Armstrong called the meeting to order. Jimmy thanked all for coming and greeted visitors. Jimmy welcomed Aiken members. Then Jimmy thanked Sue Shrader and Susan Bloodworth for the refreshments and thanked Fred Meetze for providing the door prizes. Jimmy extended his gratitude for all who helped with moving tools, furnishings, books, rocks and supplies from the workshop to the new storage unit which, temporarily, will serve as a workshop. Then Jimmy talked about our club's participation in the Natural History Day at the South Carolina State Museum and noted that the day had been fun and successful.

Show Committee: Sue said that we were now beginning to promote the CG&MS Show which will be in November. Members passed out flyers at the State Museum Event.

Programs: Sue said that Ron Clamp, a tombstone carver, will be the upcoming speaker in July. Sue passed around sign-up sheets for refreshments and door prizes.

Sunshine: One of the original Charter Members, Dot Harmon, passed away.

Vice President: Ron Ahle said that our participation at the Natural History Event at the SC State Museum was great because our club members were able to reunite with people at the museum. Ron also said that he was working on a study which would help date whales based on ear fossils. Jimmy Armstrong said he would provide some whale ear bone fossils for this study.

Membership: Sheila Frame said we now had 115 members: 97 adults and 18 children.

Field Trips: Some wonderful upcoming field trips were posted in the Rocky Trails Newsletter.

Liaison: Jim Cobb said we have always enjoy good participations with Aiken Members. Since there was no further old or new business, members vote to adjourn for door prizes and the presentation on Antarctica by Kim Cochran.

Respectfully submitted by
Susan Bloodworth

EXECUTIVE MEETING MINUTES

June 24, 2019 Board Meeting of Columbia Gem and Mineral Society, Inc.

The Columbia Gem and Mineral Society met on the 4th Monday, May 23, 2019, at Grecian Gardens at 2312 Sunset Blvd., West Columbia, SC 29169. Attending: Ron Ahle, Angela Valvasori, Sheila Frame, Jimmy Armstrong, Jim Cobb, Dan Elswick, Sue Shrader, Susan Bloodworth, and Benira Sutphin. At 7:00 **President:** Jimmy Armstrong called the meeting to order and thanked all for coming.

Vice President: Ron Ahle noted that it was a valuable opportunity to reconnect with Chris Cicimurri at the Natural History Event at the South Carolina State Museum. **Treasurer:** Angela Valvasori gave the treasurer's report and noted that the auctions for the Max Smith Collection had been a great benefit for our club.

Historian: Angela and Ron talked about documents that were discovered during the move, and Ron said he would discuss with Chris Cicimurri, curator at the McKissick Geology Museum, about our club donating some of these documents to the museum to be protected and saved for posterity. **Membership:** Sheila Frame noted the club now has 117 members: 99 adults and 18 children. Sheila also said the workshop's move to the storage unit worked fabulously. **Programs and Classes:** Sue Shrader said in July that Ron Clamp, the last Stone Cutter Specialist in SC would talk. Ron's trade was passed down from father to son, and grandfather to father. Sue is hoping to get C.C. Murray to do a presentation in September. In November, the club will have a "Show and Tell."

Show Committee: Sue said Sharon Sterrett had sent out contracts for the vendors for the Show. Mike Montebello was to be checking on Billboards. **Workshop:** Board Members discussed options based on Gary Hert's offer to set up tools in his workshop. Board members agreed that it would be wise to see if the Storage Unit would prove to be a good setting for the workshop.

Sunshine: Benira Sutphin recently had toe surgery and was getting ready for major dental surgery. Dave Dunlap and Sharon Sterrett returned from a wonderful trip to Alaska with Bronchitis. **Rocky Trails:** Ron Ahle was commended for his excellent efforts with The Rocky Trails. Ron asked if members were enjoying the articles he had included in each publication. Members indicated that they enjoyed all the articles, especially the article about opalized bone fossils. **Liaison:** Jim Cobb said he would try to attend meetings with the Augusta Gem and Mineral Club. **Field Trips:** Ron reminded all that Dixie Mineral would be having a field trip to Diamond Hill.

New Business: Based on a discussion concerning expenses a speaker may have to do a presentation for our club meetings, the board members discussed the need to pay for a speaker's room and board if he/she travels a great distance. The board members voted to approve the following: If our club invites a speaker from out-of-town to do a presentation for our meetings, our club may choose to provide room and board.

Additional New Business: Based on a dialogue Sheila Frame had with members of the Low Country Gem and Mineral Club, Sheila said that this club may donate some tools. Sheila also asked if this were to take place, would our club consider a free membership for their club members for a year. Board members liked the idea of expanding interest in our club and the possible donations of tools. Sheila said she would continue a dialogue with the members of this club.

Since there was no further new or old business, board members voted to adjourn.

Respectfully submitted by
Susan Bloodworth



Dixie Mineral Council Field Trips

The Southeast Federation of Mineralogical Societies, Inc



The Friendly Federation - Founded in 1976 to serve
DMC Program of the SFMS Field Trip Committee
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An Official Field Trip of the Western South Carolina Gem and Mineral Society (Greenville, SC)
(HOST)

An Official Field Trip of the Columbia Gem and Mineral Society

Friday, July 19, 2019
9:00 AM to 6:00 PM Eastern Time
Diamond Hill Quartz Mine
Abbeville, SC
Fee Site

TRIP: The mine is an open pit mine with many spoil piles to dig through. Our club has been coming to the mine for over 30 years

COLLECTING: The main mineral is quartz crystals in the form of amethyst, smoky, skeletal, clear, and milky. More rare minerals include beryl and cacoxenite.

BRING: Your choice of hammers, digging tools, screens, and gloves. Bring sunscreen, picnic lunch, snacks, and plenty to drink.

TERRAIN: Disturbed earth with some pits. Use reasonable precautions

FEE: \$15 group rate if you state that you are with the Dixie Mineral Council group. \$10 for those 65 or over or between 13 to 17 years of age. \$5 for 12 years and under.

CHILDREN (MAYBE): Allowed with adult supervision.

PETS (NO): Allowed on leashes

FACILITIES: Porta-potties and picnic tables. No running water other than the creek.

ADDITIONAL INFORMATION: Check the website at diamondhillmine.com.

DIRECTIONS AND WHERE TO MEET:

Address: 50-99 Diamond Mine Rd., Abbeville, SC
34°16'13.5"N 82°34'28.8"W

From Interstate 85 travel south on SC 28 through Anderson, SC and follow it to SC 284. Turn right on SC 284. Drive to Diamond Mine Road. Turn onto Diamond Mine Road and look for a very dug up area with a lot of cars.

CONTACT: Tim Barton at (828)577-4505 or Bill Wetzel at wwetz14@gmail.com or (864)404-0025



Amethyst plate

**16th Annual Western North Carolina
Rockhound Roundup
July 21st - 28th, 2019**

The largest annual Rockhound gathering in North Carolina!

Hosted by: M.A.G.M.A., the Mountain Area Gem and Mineral Association

This event will be based at Camp Stephens. This property is located just outside the city of Asheville off of Interstate 26. The camp is just 3.5 miles from the Interstate but located in a secluded wooded area on the French Broad River. There is room for many RV's and tent campers. There is a large indoor pavilion with two bathrooms, two showers (note that the showers and bathrooms have been renovated and are in excellent working condition now) a kitchen, electricity and water for the outside campers and inside the pavilion. There are large campfire pits for use by campers. I will also have two porta potties' on site for extra bathrooms. There will be a dumpster on site for all garbage (be sure to bag your garbage before putting it in the dumpster). Campers will be able to swim, fish, canoe, snorkel, etc. in the river. The camp area is completely wooded so there is plenty of shade. We will be allowed to use the numerous tables provided in the pavilion to set up and swap/sale our rocks and minerals. Three miles from the camp are numerous gas stations, a mall, restaurants, motels/hotels and more. Campers can arrive anytime Sunday the 21st to set up camp and get ready for the week's events. Camping on the Camp Stephens property is included in the cost.

Agenda: We have coordinated this event to coincide with the numerous gem and mineral shows that are taking place in Franklin, North Carolina the same week. We will visit a variety of mines for collecting. There will be directions to the mines given to all attendees, campers and participants can visit any of the mines listed here, any day of the roundup as many times as they like. I will have release forms and take payment for some mines at the camp and will provide instructions as to where to pay for some mines.

Mines we will have full access to during the week of the roundup:

Crabtree Emerald Mine in Mitchell County, NC. Fee: \$15 for those camping at the roundup, \$20 for all others. Release forms and payment will be collected at the camp prior to the dig. Directions will be provided at camp. **Sinkhole Mine** in Mitchell County, NC. No fee, directions will be provided at camp. **Little Pine Garnet Mine** in Madison County, NC. Fee: \$25 per person. Forms and payment are handled at the office of the Sandy Bottom Trail Rides before proceeding to the mine. Directions will be provided at camp. **Sharpes Emerald Prospect** in Hiddenite, NC. Fee \$20 for those camping at the roundup, \$25 for all others. Release forms and payment will be collected at the camp prior to the dig. Directions will be provided at camp.

We will be visiting the numerous gem and mineral shows in Franklin, NC daily. There will be demonstrations on wire wrap, flint knapping, cabochon making, etc. Display tables will be available to show off your favorite specimens. The members have a cookout in the evening and a big campfire. There will be tables setup throughout the week for people to sell and trade their rocks and minerals, gems and jewelry.

Saturday the 27th; THE FEAST! Everyone bring a dish or desert and something to drink. If you need to cook something for the meal, you should start cooking around 1:00 to be ready to eat around 3:00.

Fee for Roundup: \$40.00 per person. Vendors, \$60.00. This covers all 7 days of the Roundup. Kids 12 and under are free. If you plan to only attend a few of the days, the cost will be \$10.00 per day.

[Kyanite Field Trip Dig - June 15-16](#)

Come dig your own beautiful blue Kyanite blades right out of the ground just like the old time prospectors! Our Justice Kyanite deposit is located on over 100 acres of Fantasia's privately owned land. All mining at this dig will be done with hand tools only, and you will need to bring your own shovels, screens, or any other tools you would like to use. Enjoy the feeling of being the first person to

see these kyanite blades since Mother Nature formed them in the Earth. There is a small stream on the property with water you can use to rinse the stones you dig to help see the beautiful kyanite right in the matrix. Keep everything you dig!

This is going to be our ONLY public dig at this mine for all of 2019, so don't miss this amazing opportunity to dig your own spectacular blue kyanite blades!

Location: 599 Browntown Rd, Prospect VA 23960

Dates: June 15-16, 2019

Times: 10 AM until dark each day

Lodging: Hotels are available in Farmville, VA or in Appomattox, VA. In addition you may camp out on our 101+ acres of kyanite rich land at no extra charge during this dig (motor homes and tents welcome!) If you want to start a camp fire or bon fire on our property, cook hot dogs, marshmallows, or just relax at night you are welcome to do so but MUST have a working fire extinguisher for safety.

Amenities: The land is completely undeveloped and there is NO running water, NO bathrooms, or any other modern conveniences on site.

Free Tailgate Rock Swap: If you are looking to sell any stones feel free to bring them and you are welcome to set up shop out of your trunk or bring a table and set up anywhere you like. We don't charge for this and hope people will just enjoy seeing what other rockhounds have available. We will be bringing some stones from our other mines across the USA and Mexico which will also be for sale, and look forward to seeing all the specimens others bring from mines around the world.

Cost per rockhound:

Adults - Only \$10.00 per adult for both days

Tweens and Teens (Ages 10-17) - only \$5.00 for both days

Our younger rockhounds under 10 years old dig for free!

To help us get an advance head count please RSVP by email to digs@fantasiamining.com or by phone at 330-400-8741 if you know for certain you will be attending. The RSVP is NOT required and if you aren't sure you can make it until the day of the dig feel free to just show up! This RSVP request is just a courtesy to us so we know around how many people to expect.

We ask that everyone cleans up after themselves and that no litter is left on the property. As long as the land is respected, no one disturbs the neighbors, or causes any issues, we will be doing this every summer! While there is nothing unsafe we are aware of on the property, due to legal and insurance regulations everyone will be required to sign a liability waiver when first arriving.

We hope to see you there!

AREA SHOWS

July 19-21—VIRGINIA BEACH, VA: Annual show; Treasures of the Earth, Inc; Virginia Beach Convention Center, 1000 19th Street; (804) 642-2011; Ellen@treasuresoftheearth.com; Website: <http://www.TreasuresOfTheEarth.com>

July 24-28—FRANKLIN, NORTH CAROLINA: Annual show; Echo Valley Gem Show; Echo Valley Gem Show (across from GLW), 6456 Sylva Rd; contact Damian; Email: mbellpoint@gmail.com; Website: www.bellpointinc.com

[Franklin, NC July 27-28-29-30, 2017 - Gem & Lapidary Wholesalers](https://qlwshows.com/shows/072017-franklin-nc/) Wholesale only must have license

<https://qlwshows.com/shows/072017-franklin-nc/>

Location: 07/2017 *Franklin, NC*. Facility Name: Watauga Festival Center. Address: 6295 Sylva Road. Phone: (601) 879-8832. Show Hours: 10AM-6PM Daily;

July 26-28... Franklin, NC: Macon County Gemboree; Gem & Mineral Society of Franklin NC, Robert C. Carpenter Community Building; 1288 Georgia Road; contact Linda Harbuck(800)-336-7829; e-mail: lindah@franklin-chamber.com; www.visitfranklinnc.com

July 27-August 4, 2019: Spruce Pine, NC: 35th Annual Grassy Creek Gem & Mineral Show Organized by: Parkway Fire and Rescue Department Parkway Fire and Rescue (Parkway Fairgrounds 136 Majestic View, Spruce Pine, North Carolina 28777) Contact Us: grassycreekgemshow@gmail.com

August 1-4—SPRUCE PINE, NC: Annual show; Mitchell County Chamber of Commerce; NC Mineral & Gem Festival, 12121 Hwy 226 S; Patti Jensen, (828) 765-9033; Email: pjensen@mitchellcountychamber.org; www.ncgemfest.com

August 12, 2019: Greenville, SC 2nd Annual Gem and Mineral Silent Auction (Western Carolina Gem and Mineral Society). August 12, 2019 Viewing @ 7:00 pm, Auction @ 7:30 Northside United Methodist (435 Summit Dr., Greenville)

Launch of American Geode's gem, mineral, fossil show page!

American Geode's gem, mineral, and fossil show page will be #1 on Google, Yahoo, when people search for gem, mineral, fossil shows. No log-in, signing up, or passwords. American Geode wants EVERYBODY, from academics, to college students, to interior design professionals to come to your shows and to buy at your shows. American Geode works with more diverse crowd than just serious mineral collectors.

Even if your club does not host shows, please visit American Geode for shows to visit when you are traveling on vacation or traveling for business!

<http://www.americangeode.com/shows/>

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.

2019 OFFICERS and COMMITTEE CHAIRPERSONS

EXECUTIVE COMMITTEE

President.....Jimmie Armstrong...(803) 438-6000.....rvrdvr29078@gmail.com
 Vice President.....Ron Ahle.....419-2923.....the bears@earthlink.net
 Treasurer.....Angela Valvasori.....419-2923.....the bears@earthlink.net
 Secretary.....Susan Bloodworth.....604-1045.....susanbloodworth374@att.net

COMMITTEE

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CGMS Website

Please visit our Website:

<http://www.cgams.org>

Webmaster: Mike Montebello

Monthly Meeting

Except for January, the meetings are held the third Monday of each month at the McKissick Museum's Auditorium, on the USC campus. Socializing and refreshments at 7:00 pm; Meeting at 7:30 pm. Please enter from the Horseshoe entrance.

Executive Board Meetings:

Except for January, the meetings are held on the fourth Monday of each month at Grecian Gardens, 2312 Sunset Blvd., and West Columbia. Meal is at 6:30 pm. Meeting is at 7:00 pm.

**Rocky Trails
PO Box 6333
Columbia, SC 29260**