



September 5, 2023 at 7:00 PM.

Museum of Arts and Sciences

Come join the early birds to chat. Mallory Stone will be talking on Plate Tectonics. The Mineral of the Month is Talc and the Fossils of the Month are Gastropods from the Mollusks.

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Upcoming Events

Meeting	Sept. 5
Fair Setup	Sept. 30 or Oct. 1
Fair	Oct. 5-15

President's Message

Hopefully all of you had a great and safe summer. Although it doesn't feel like it with the heat index above 100 o F these days, fall is just around the corner and so is the Georgia National Fair. There will be a sign-up sheet for helping at the fair at the next meeting. If you want to sell items at the fair, you must demonstrate how they are made; if you make trees, cab, wire wrap, etc. We will be setting up our displays either the Saturday or Sunday before the fair. If you would like to help or

put specimens in the display, please let Jay know. George has already said he would help with setup. You were sent an e-mail about our sell of Tuell's collection. Not everything was sold so we will be having an auction in early November or December. There are still some beautiful rocks and other stuff to be sold. There will be more about the auction in the October Newsletter. I also want to thank all of those who came and spent hours cleaning and organizing the stuff for the sell and for all those people who help at the sell. Tuell also hopes that everyone that brought rocks and equipment enjoys and makes good use of it. The Grab Bag Stuffing Party that was planned for August 12th was moved to August 27th. If you can still help with the bags, we will be starting about 10:00 AM and work until we have the 300 bags completed. Please call Jay if you can come and help with the bags.

Shawn has made the tee-shirts that were ordered, and you will be able to pick up yours if you have not been given them already at the meeting September 5th. If you did not order a shirt and want one then there will be a signup sheet at the meeting or e-mail Tina and let her know your size. Additional shirts if you want them will be \$15.00 (your first shirt is on the club).

It is also time to nominate new officers. The positions of vice president and president are open with only one person showing interest thus far in being the vice president or president. The nominating committee if they are still in agreement to do so are Tina Perkins, Al Steffanini and Virginia Kring. Please let one of them know if you would like to fill one of the positions. Votes will be taken at the October Meeting and installations will be in November.

We need speakers for our meetings. If you would like to do a presentation for the club, let Tina know. There is lots to do so I hope to see you at them Meeting.

Jay Batcha (President)

June Meeting Minutes

Mid Georgia Gem and Mineral Society Club President Jay Batcha called the June 5 ,2023 meeting to order at 7:07 P.M. with 19 in attendance.



Adoption of the minutes: The reading of the minutes from the previous meeting to be taken from the newsletter. A motion was made, and the members approved.

Treasurer Report: Susan Hargrove gave bank C.D. and savings balances. She Mentioned 237.00 Dollars was raised from the silent auction at the Club Picnic and was waiting on the Museums rental bill.

Programs: Tonight's Speaker is Ryan Rooney Curator at the Tellus museum Cartersville, Georgia speaking on setting up a Triceratops Exhibit.



Field Trips: Jay mentioned a Doiser, South Carolina Dig on 6- 24-2023 collecting shark's teeth and whale vertebrae had sign-up sheet and the fee was 125.00 dollars. Also, there is a Museum of Natural History Field Trip in Winston-Salem, North Carolina on 7-22-2023 at 10 A.M.

Old Business: Jay said the Cabbing Class being held at his house on July 15 was full and there were 3 openings available for July 16. He also reminded everyone there would be no July or August Club Meeting saying the next meeting would be Tuesday September 5th. Jay also had two Unisex T-Shirts on display that Shawn Ripley made for the Clubs Logo T-Shirt. Members gave input saying the front and the back designs needed to be enlarged and

members also wanted to have a Women's style T-Shirt to choose from. Shawn said he would try to make that happen and the members voted and approved the Shirts. He also said he should be able to have the shirts made by the Fair for around 16 Dollars each. Jay said the Club would pay for the Members' first shirt and Members will pay for extra shirts. There was a sign-up sheet for shirt sizes and Names.

New Business: Jay wanted to have another Grab Bag stuffing party before the Fair on August 12th at 10 A.M. and had a sign-up sheet for volunteers. Vice President Bill Mayer reminded everyone that the Clubs Elections for Officers was coming up in the Fall and encouraged Members to consider running for Office if they wanted too.

Mineral of the Month: Halite is the M.O.M and George Ruff said it's Sodium Chloride or common rock salt. It's colorless or white with a specific gravity of 2.1 and a MOHs Hardness of 2.5. It occurs in Sedimentary rock where it forms from the evaporation of sea water. It's found in Germany, Dead Sea, North Africa and in the USA in Kansas, Michigan, Ohio, and Alabama from the Cretaceous Period. Louisiana and Texas have many underground Salt Domes that are a result of the salt being squeezed up from pressures below. Members had specimens on display with their stories. A raffle was drawn, and prizes were awarded.

Respectfully Submitted, Al Steffanini



About our speaker

Mallory Stone is the Curator of Earth Sciences at the Museum of Arts and Sciences in Macon, Georgia. She has a Bachelor's of Science in Environmental Science from Berry College where she discovered her passion for Geology and Earth Science. Mallory spent most of her time at Berry College as the Geology Teaching Assistant on campus and even had the chance to study abroad in Iceland one summer. During



college she also interned at the Tellus Science Museum in Cartersville, Georgia in the Curatorial Department, and later became a part of the Education Department. After her time at Tellus, Mallory lived in Durham, North Caroline with her husband, Payton, while he was in a Master's of Divinity program at Duke University. During those three years Mallory taught 6th grade Earth Science at a private school. Payton's job brought them to Macon, Georgia in June of 2022. Mallory found her way to the Museum of Arts and Sciences in October of 2022 where she now spends her days leading field trips, working on programming for the Science on a Sphere and Sweetgum Nature Trail, helping with collection management, and more! One of Mallory's favorite topics to teach on is Plate Tectonics which is the talk she will give using the Science on a Sphere at our meeting.

Editor's Note

I have been asked if I could put a list of the mineral of the month, fossil of the month and/or rock of the month for the year so that people can find specimens. Jay and I usually discuss it two-weeks before I write the newsletter, but since I have had some down time recovering from surgery, I have made a list although changes may occur.

MONTH	MINERAL	FOSSIL/ ROCK
SEPTEMBER	TALC	GASTROPODS- MOLLUSKS
OCTOBER	ALUNITE	SKARN
NOVEMBER	ARGONITE	CRINOIDS
FEBRUARY	SILVER	GARNET SCHIST
MARCH	DIOPTASE	SEA URCHINS/ SAND DOLLARS
APRIL	PHENAKITE	GRANODIORITE
MAY	CORUNDUM	BIVALVES- MOLLUSKS

Speakers are needed for October and November if anyone wants to volunteer, please talk to Jay or Tina.



Lets Go Diggin'

Remember that times are still strange and field trips can be canceled.

**An Official Field Trip of the Gem and Mineral Society of Lynchburg,
VA (HOST)**

An Official Field Trip of the Mid Georgia Gem and Mineral Society

Saturday, September 23, 2023

9:00 AM to 1:00 PM Eastern Time

Willis Mountain Kyanite Mine

Dillwyn, Virginia

Limit: 75 People

Registration Required

(Link is below)

Fee: None

COLLECTING: Willis Mountain is what's known as a monadnock. The kyanite exposure resisted weathering and, as the surrounding area was eroded and weathered away, the mountain outcrop was left standing. The center of the mountain has been mostly mined away. We should be able to find plenty of white kyanite blades in the massive kyanite quartzite; pyrite; quartz; hematite with some iridescence, red mica, green mica, apatite, and possibly some blue kyanite and pale green trolleite.



Some of the white kyanite and quartz here have a beautiful light blue fluorescence and the apatite is yellow so bring your shortwave lamp and blackout cloth.

BRING: Standard quarry safety gear is required: hardhat with a manufacturing date of 5 years or less (everyone must have an approved hard hat....no bicycle helmets; small heads can wear a ball cap under the hardhat), safety glasses, respiratory protection from rock dust you may encounter, and a pair of wheel chocks either purchased, homemade or even a rock is acceptable. Every time you leave the car, turn off the engine, put in park and apply the hand brake and wheel chocks. **ONLY STEEL TOED OR REINFORCED COMPOSITE TOED FOOTWEAR WILL BE ALLOWED THIS YEAR.** THERE WILL BE NO EXCEPTIONS!!! If you do not have all the required minimum safety equipment, hard hat, safety shoes, and safety glasses, you will not be allowed to enter the quarry. Also required are long pants, gloves, hammer, and chisels, wrapping paper, buckets, and water because it is very important to stay hydrated as it may be very hot. If you have any medical condition that would put you in any danger, do not attempt this trip. For your own safety, let your field trip leader or collecting buddy know if you have any medical condition that could be a problem for you. Be prepared for windy, hot, or wet weather. We will be on the mountain top and it's always windy. We can drive to the designated collecting area, so hand trucks should not be needed. Bring a camera, as the view is awesome.

SAFETY REQUIREMENTS: Everyone must plan to arrive at the office parking lot between 7:30 AM and no later than 8:30 AM to read and sign the updated Liability Form, Hazard Training & Recognition Check List Form, and to hear the mandatory safety briefing before entering the mine at 9AM. Each Club field trip leader, or their appointed replacement, will act as a safety official while in the mine. Every person is expected to be on the lookout for and

call immediate attention to any safety infractions from any collector from any club. Keep in mind that this site is one of the very few that are still open for collecting. Not obeying ALL the safety rules will cause this site to be closed to all future collecting.

FEE: There is no fee.

CHILDREN (Yes): There is no age limit, but no toddlers please. All children must be signed for, closely supervised by an adult, and never left unattended. They must also have all the required safety equipment. No Exceptions!!!

PETS (No): No pets allowed; this is an active working quarry.

WEATHER: The trip will be canceled due to safety concerns in case of hard rain or a thunderstorm. Call to confirm if there is any question.

AFTER THE DIG SOCIAL: This year, the pavilion beside the office will be available immediately after the dig ends at 1PM to relax, cool off, and eat your lunch. This will also be a social get together so that we can have a chance to become better acquainted with the members of our rock club neighbors and to provide some time to relax before their long ride home. There may also be other groups there as invited guests of Kyanite Mining.

REGISTRATION: Click [here](#) to fill out a registration form. If you register and are unable to attend the trip, please let us know so we can update the registration list.

DIRECTIONS AND WHERE TO MEET: Registered participants will be sent a confirmation email with directions and meeting place details.

CONTACTS: James Tomlin, GMSL Club President. Email at tomlin.jamesm@yahoo.com or call him at 434-258-2886.

SHOW

Alabama Mineral and Lapidary Society Gem and Mineral Show
9/01-9/03/23
Irondale Civic Center



3521 Ratliff Rd.
Irondale, Alabama 35210

Henderson County Gem and Mineral Society
Gem and Mineral Spectacular Sale

9/01-9/04/23

Whitmire Activity Building
301 Lily Pond Road
Hendersonville, North Carolina 28739

Treasures of the Earth Gem, Mineral, and
Jewelry Show

9/01-9/04/23

North Carolina State Fair Grounds
4285 Trinity Road
Raleigh, North Carolina 27607

Forsyth Gem and Mineral Club
Jewelry, Gem, Mineral, and Fossil Show

9/08-9/10/23

Winston-Salem fairgrounds (Gate9)
Enter Gate 9 from 27th Street
Winston-Salem, North Carolina 27105



Mineral of the Month
Talc

Talc is an important industrial mineral. Its resistance to heat, electricity and acids making it an ideal surface for lab counter tops and electrical switchboards. It is also an important filler material for paints, rubber, and insecticides. Even with all these uses, most people only know talc as the primary ingredient in talcum powder. Mineral specimens are not very common as it does not form very large crystals. However, it often replaces other minerals on an atom-by-atom basis and forms what are called pseudomorphs (false shape). The talc takes the form of the mineral it

replaces. A specimen of what looks like milky quartz is quite a surprise when it not only has a soapy feel but can be scratched by a fingernail.

- **Color** is green, gray and white to almost silver.
- **Luster** is dull to pearly or greasy.
- **Transparency** crystals are translucent and masses are opaque.
- **Crystal System** is monoclinic; 2/m
- **Cleavage** is perfect in one direction, basal.
- **Fracture** is uneven to lamellar.
- **Hardness** is 1 (can leave mark on paper)
- **Specific Gravity** is 2.7 - 2.8 (average)
- **Streak** is white.
- **Other Characteristics:** cleavage flakes are slightly flexible but not elastic and talc has a soapy feel to the touch.

Substitutes and Alternative Sources: Clays and pyrophyllite can be used in place of talc in the manufacture of ceramics. Kaolin (a clay mineral) and mica can be substituted for talc in the production of rubber, paint, and plastics. Kaolin can be used in place of talc in paper production. The available reserves of talc are sufficient for many decades to come so such substitutions are not necessary, though they may be cost-effective depending on the relative costs of talc, mica, pyrophyllite and kaolin.

Background: Two different minerals with similar physical properties are talc and pyrophyllite. Their physical properties are nearly identical. Both are very soft: talc is the softest mineral on the Mohs' hardness scale at 1, and pyrophyllite is 1 to 2. Because they are so soft, they can be easily cut and crushed. Archaeological discoveries have shown that talc was carved in ancient Babylonia to make signature seals. Chinese "soapstone" carvings are carved from fine-grained pyrophyllite. Both talc and pyrophyllite have perfect cleavage in one direction. This means that these



minerals break into thin sheets. As a result, both feel greasy to the touch (which is why talc is used as a lubricant). They are both formed in metamorphic environments as the result of changes in silica-rich dolomite.



Talc from Holly Springs, Ga

Steatite and soapstone are impure, massive forms of talc that lack the distinctive cleavage mentioned above.

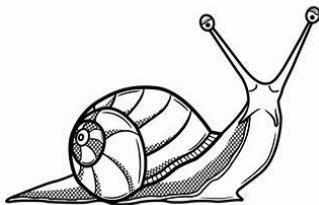
From: *Amethyst Galleries* -
URL <http://www.galleries.com/>

Also From: *MEC* – URL
<http://www.mineralseducationcoalition.org/minerals/talc>



Fossil of the Month *Gastropods- mollusks*

Some of the most familiar extant species are garden snails and slugs, fresh water snails and a variety of marine forms such as conchs, whelks, abalones, winkles. They are characterized by a twisted (torsion) body inside a helical shell.



“Just passing by to say hello.”

Gastropod means stomach foot. This group first appeared at the end of the Cambrian more than 500 mya in the primitive seas. From this point they spread to freshwater and terrestrial

environments. Although their shells are not tough, they began leaving large numbers of fossils from about 65 mya to present. The shell of the animal is what is preserved. Shells are constructed mainly from a calcareous mineral called aragonite. Aragonite is unstable in geological time and is replaced by calcite or dissolved away leaving a void in which a mold is created.



thefossilforum.com

Examples include Athleta, Potamaclis, Paludina, Neptunes, Vermetus, Lymnaea, and Planorbis among others.

If you have picked up a shell on the beach to hear the ocean, then you have seen a member of the genus *Neptunea*.



Neptunea contraria from Belgium
Highlanderfossils.com



Vermetus sp. Fossil
Pinterest.it



Vermetus are gastropods with a misleading appearance as in they look like worms. Many specimens have been found on the Isle of Wight, Southern England. Some are flat and some form corkscrews.

Paludina has both fossil and extant species. They live in freshwater and have been found in limestone.



Extant species.

<https://en.wikipedia.org/wiki/Viviparus>

Gastropods are by far the most successful of all the mollusks with 75,000+ extant species and over 15,000 species in the fossil record.

Cabbing Class Photos



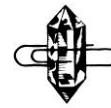
Jay did two classes back-to-back on a Saturday and Sunday. The pictures are from the Sunday Class. There are going to be more classes offered for members of the club and it is a neat experience to participate.



Hard at work on the cabbing machine.



Participants are sporting the new club shirts designed by our own club member and artist-Shawn Ripley. It is not to late to place and order.



Al's Cabs
Rhodochrosite had a beautiful pattern.

Tuell's Estate Sale

As you know our friend and resident rock, gem, mineral and fossil extraordinaire has been in a rehab facility for over a year. We (Jay, George, Bill, Susan, Sylvia, Shawn, Tim (his daughters), Al, and Tina) worked to put together the sale. It was a laborious task taking several weeks to organize and clean rocks and so much more. Here are some pics of us working and of the materials that were up for sale.



Helping a rockhound



Washing rocks and organizing tables



One of the displays with jars and bags of rocks



Beautiful examples of Georgia Queen Picture Jasper on a tarp to be sold.



Slabs covered racks and tables. So many beautiful rocks and minerals.



In the very near future if you did not get to purchase some of the amazing rocks, mineral and other stuff that was available, you will be able to see the lots and come for a covered dish luncheon. When you spend your life collecting, you have an amazing collection. More about the auction in the October Newsletter.

Time for Jokes and Puns

What do you call a book about rocks?

A pebble-cation

If Star Wars was made using rockhounds, what would be the best one liner?

May the Quartz be with you.

Be patient with geologist. Why?

They all have their faults.

You know the old saying. What saying?

Igneous is BLISS!

Why could the tectonic plates not maintain a healthy relationship?

There was too much friction between them.

Mid-Georgia Gem Clips
Official Bulletin of Mid-Georgia
Gem and Mineral Society

Macon, Georgia

The Club meets on the First Monday of each Month, at The Museum of Arts and Sciences, in Macon, Georgia at 7:00 PM.

Except: No meeting January, July, and August. The annual Christmas Party is the first Monday in December. September the first Tuesday of the Month

Purpose: To promote the earth sciences, the lapidary arts, and the collection, study and display of rocks, minerals, and fossils; to promote the public awareness of these efforts in educational and recreational activities.

Club Officers:

President/ Field Trips: Jay Batcha, 4220 Cyndy Jo Circle, Macon, Ga. 31216, ph. 478-957-5002

rocky1s@cox.net

Vice President: Bill Mayer, ph. 678-621-3457, orebilly@gmail.com

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Web Master: Pam Mayer, pam5mayer@gmail.com

Mid Ga. Gem and Mineral Society
Application for Membership

Name(s) _____

Address _____

City _____

State _____ Zip _____

Phone _____

Adult (18-64) \$15.00 Junior \$ 5.00

Family (2 adults and 2 children under 18) \$25.00

Additional children \$5.00

Seniors (65+) \$10.00 Newsletter mailed \$5.00

New _____ Renewal _____

E-mail _____

Address _____

How did you hear about us?

Circle your interest(s):

Gems and Minerals Lapidary Fossils

Education Rocks

Make checks payable to:

Mid-Georgia Gem & Mineral Society

Mail to the Treasurer (listed on this page) or bring to a meeting.



Mid-Georgia Gem Clips

**Official Bulletin of Mid-Georgia Gem
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Macon, Georgia

**Member of Southeast Federation of
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Mid-Georgia Gem Clips

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