



Whooo's coming to the Meeting?

Tuesday, September 2, 2025 at 7:00 PM.

Museum of Arts and Sciences

Come early to chat with the early birds. This month is about getting to know each other and showing off some of our finds. Bring the mineral of the month (Rutile) and anything related to Dinosaurs for the fossil of the month to the meeting. For the Maker's challenge bring something you made this summer. Charles Carter (from GMC) will be doing a zoom presentation on Gypsum for us. Special thanks to Jack at the Museum who will help set it up.

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Prez box September 2025

Welcome back everyone! Even though no meetings were held this summer our club kept moving along quite nicely. Al put on a very special rock day for the kids at St. Joseph school in Macon. It was well received by the kids and teachers alike. Our group of

volunteers did an extraordinary job and deserve a pat on the back for their efforts on a very hot day. Then follow that up with a bag stuffing party at Jays. 435 bags were stuffed and made ready for the fair bring our total to 504. Special thanks to Tina for doing the sewing. She has been doing this for quite some time now. We have a busy September meeting coming up with lots of important items to discuss. To begin with is the national fair volunteer schedules will be a large topic (fair schedule has been finalized, but we need help setting up), and our Christmas tree needs to be talked about (Are we going to do one this year and who is heading it up?). We have got club members doing two upcoming events. Tina and Katelyn will be doing Georgia Day at the Museum of Arts and Sciences on Sept. 6 with rocks, minerals, and gems from Georgia along with activities for the kids and some of our grab bags. Jason and Shawn will be doing Fossil Day at the Museum of Arts and Sciences on October 4 with Jason talking about Shark's teeth and selling a few fossils and Shawn selling some of his stuff along with grab bags and Mt. St. Helen's Ash. Not to mention our nominations of officers for 2026 is required to be fulfilled. (Still looking for a president.) Charles Carter will be talking on Gypsum at the meeting and I look forward to trying out the zoom. Come out to Jeannes for dinner prior to the meeting to enjoy the fellowship of other club members. Chow time is 5:30 pm. Looking forward to seeing everybody again and catching up on summer adventures.

Prez. Bill Mayer

June Meeting Minutes

Club President Bill Mayer called the June 2, 2025 meeting to order at 7:02 P.M. with 23 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 the bank account balances and reported the Picnic / Auction expenses and revenue.

Programs: Jay Batcha said tonight was bring your favorite rock, fossil, and mineral along with a Makers Challenge of members displays. Members gave information on their entries and a raffle followed with prizes awarded. Snacks and a field trip to the Museums gravel paths to find Fossils followed. Jay also said September and Pam Mayer in October.

Field Trips: Jay said there was a DMC fee dig on June 7, 2025 in Conover, North Carolina.

Newsletter: Tina Perkins said the deadline for anything to put in the Newsletter was August 12, 2025 and mentioned finishing 435 bags for the Fairs Grab Bags with a bag stuffing party scheduled at Jays on June 21, 2025. (cancelled due to Jay being sick and rescheduled for July 31- they are all done). She said Jay helped at the last Jr Rockhound meeting teaching Wire Wrapping. Shawn Ripley would be helping again on the June 14th Jr. meeting. Tina also had a sign-up sheet for anybody wanting to work the Club's display booth at the Georgia National Fair in October.

Webmaster: Pam Mayer said she is adding things and sorting dates on the Club's web page.

Education: George Ruff suggested the Museum have a "Walk Thru Time" display of Earth's Geologic make up and history, saying the Club could help set it up.

Sunshine: Andrew Warmock had a symphony card for the family of Betty Sue Smith for members to sign.

Meeting Adjourned at 9:26 P.M.

Respectively submitted by Al Steffanini

Grab bag contest:

How many will we sell this year?

During our grab bag stuffing party, the idea of guessing how many bags we will sell this year came up. We all were wondering and guessing the amount. So why not make a contest of it!

At our September meeting we will have a coffee can that you may put your name and number of bags to be sold at the National Fair/ Fall Events this year. Tina will have the paper to write your guess on. Closest to the number sold wins the prize. The number can be either high or low of the correct amount. Last year we sold 431 bags. The prize will be a full paid membership for 2026! That's something to cheer about for sure. And in the event of a tie, both winners will receive the prize. This is only open for our September meeting as the fair will already be started in October. We will talk further about this at the meeting.

Pictures from the meeting!!!



Members looking at display boxes.



Brooklyn doing her rock presentation.



Some of the displays above.



Jewelry and more!



More displays!



Trying to find fossils in gravel at the picnic area in front of the museum.

Pictures by Al Steffanini

Maker's Challenge for September

If you are like some of us, we have been so busy we have not been making anything so to give you a head start, the Maker's Challenge for September is to bring in something you made this summer. You have until September 2, 2025 to complete the task.

Mineral of the Month

Rutile

Rutile is a source for the metal titanium. It is often found in metamorphic rocks containing Kyanite.

Classification: Oxide

Chemical formula: TiO_2

Streak: yellowish brown

Mohs: 6.0-6.5

Specific gravity: 4.2-4.3

Colors: brownish red, red, yellowish, iron black

Luster: metallic like, adamantine

Transparent to Opaque

Tenacity: Brittle

Complete cleavage

Conchoidal fractures

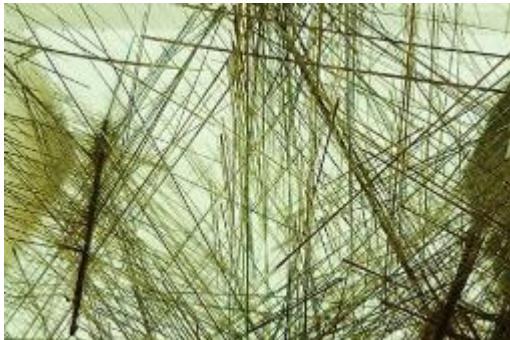
Tetragonal crystals

Crystals can be prismatic, dipyramidal, dendritic, and thick columnar. It can also be within other crystals (rutilated quartz) and it grows on the surfaces of other minerals.



Mindat.org (Uploaded by: Gianfranco Ciccolini)
Champion Mine, White Mountain Peak, White Mountains, Mono County, California, USA

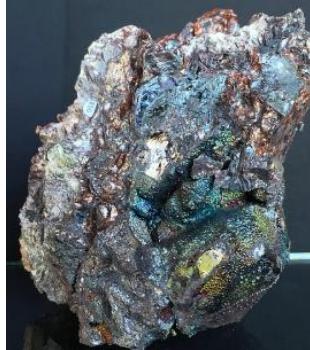
It is usually found in the presence of hematite, apatite, brookite, anatase, and titanite. It is found in many countries. Some areas where it is found include Austria, Italy, Switzerland, Norway, China, Russia, Mexico, Brazil, and Namibia. Major reserves are located in South Africa, Australia, and India. In the United States it is found in Virginia, Georgia, Alaska, Alabama, Arizona, Arkansas, California, Colorado, Idaho, Florida, Kansas, and Maine to name a few.



Rutile Quartz Microscope view from private collection

In Georgia, it can be found in these counties: Camden (Cumberland Island), Cherokee (Cochran Mine and Sharp Mountain Church), Lincoln (Graves Mountain and Dry Fork Creek), and Troup (Foley Mine and Hogg Mine Estate) to name a few.

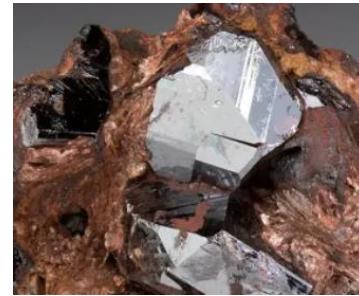
Rutile can contain trace to considerable amounts of various metals: Niobium, Tungsten, Iron, Chromium, Vanadium, and Calcium. The name Rutile was introduced by German geologist Abraham Gottlob Werner in 1800.



Mindat.org (Uploaded by Randy Harris
Graves Mountain, Lincoln County, Georgia)

Rutile was originally known as "Red Schorl." Rutile is one of five forms of titanium oxide. Rutile is valuable in industry and decorative applications. It has a high refractive index and birefringence (double refraction) which can be used in optical devices. It has a strong resistance to heat and chemical corrosion. Titanium metal is used in aerospace, automotive, electronics, and medical devices. Rutile is the primary source of titanium dioxide which is the key ingredient in paint, coatings, paper, and plastic (bright white and opaque=good coverage).

According to the Geological Survey Bulletin # 68, entitled the Geology and Mineralogy of Graves Mountain by Vernon J. Hurst (1959), some of the best crystals of Rutile (Museum Quality) have come from Graves Mountain. Crystals up to 5" long and weighing as much as a pound have been collected. The best place to collect according to the bulletin is the saddle area.



Article by Tina Perkins

Fossil of the Month

Anything Dinosaur

Since this is such a broad topic, I decided to center it on what has been found in the USA and picked a couple of fun ones. Most of the specimens have been found in areas like Montana, North Dakota, South Dakota, Utah, Colorado, New Mexico, Texas and Arizona, but others might surprise you.

You can visit several sites from Wikipedia to [Dinosaurs found in the USA](#) to find a complete list of the 1500 that are found. Bring any fossil you have that is dinosaur related to the meeting. I think it will be a lively discussion. First on my list is "Sue." On a trip to the Dakotas, I was able to stop at the Dakota Discovery Museum dedicated to the discovery of one of the largest, most extensive, and best-preserved *Tyrannosaurus rex* fossil ever found (over 90% recovered) and so much more. "Sue" was found near the city of Faith. Sue is named after Sue Hendrickson who discovered her. "Sue" is over 67 million years old and was discovered August 12, 1990.



She was sold in October 1997 to the Field Museum of Natural History in Chicago, Illinois for \$ 8.3 million. Her whole story both alive and as a fossil is interesting.



Field Museum of Natural History
Chicago, Illinois

In Georgia we have our own version of T-rex with Appalachiosaurus. First discovered in Alabama in 2005 it was confirmed in Georgia (Blufftown Formation (Chattahoochee valley)/Hannahatchee Creek) by Carr, Williams, and Schwimmer. In the late cretaceous around 77 million years ago, an ancestor of the T-Rex roamed the hills of Georgia. The specimen (Alabama) was a juvenile only 6.5 meters long. The remains included a skull, lower jaw, vertebrae, parts of the pelvis, and most of both legs. If you want to see it up close go to the Tellus Museum.

Another dino find in Georgia near Lumpkin in the Ripley Formation was a bone from a Hadrosaur. It was very fragile, but donated to the Tellus from the collector. It was roughly 67-70 million years old and was reported at a Paleontology meeting by David Schwimmer. Other specimens of hadrosaur's have come from the Blufftown formation in Western Georgia and Eastern Alabama. ([7G: Dinosaurs in Georgia - Exploring Georgia's Natural History](#))

The earliest record of dinosaurs in the US comes from footprints in the middle to late Triassic Pekin Formation in North Carolina. These were found in the Pomona Terra-cotta and adjacent quarries of the Pekin Formation in the Deep River Basin. Tetrapod prints have been subject to continuous research since Edward Hitchcock first described them in

1836. Tracks include Apatopus lineatus (named based on footprints), Brachytherium, and others. Many tracks have been destroyed by collectors, mining, and the weather.

[OLDEST LATE TRIASSIC FOOTPRINT ASSEMBLAGE FROM NORTH AMERICA](#)

Another dino of interest is the Brachiosaurus found in Colorado in 1903 in a formation thought to be from 155-143 million years ago. It was described by E.S. Riggs (a plaque stands at the site today) as between 59-72 feet in length and was taken to the what is now the Field Museum in Chicago by train.

Edmontosaurus has been found in Wyoming, Nebraska, Utah, Colorado, and Tennessee. It was up to 40 feet in length and could weigh up to 15.9 metric tons. It is a hadrosaurid. It is listed as one of the last non-avian dinosaurs and lived alongside T-rex and Triceratops.

Article by Tina Perkins

Junior Rock Hounds

Our next meeting will be on September 13th from 10:00 to 12 noon. This is going to be a catchup meeting for those who have missed activities and new materials for you to work on. Andrew left drinks and I have some capri suns so a few snacks will be all we need. Would any one of you like to make some art for the newsletter opening (see owl on the first page). Bring it to the Meeting on the 2nd or 13th. Junior wrapped stones with and without holes. A special thanks to our instructors for all they do for the juniors.



They did these with instruction from Shawn.



They did these with instruction from Jay.



Let's Go
Digging

(This was sent out as a separate e-mail on August 2, 2025. Please see that e-mail for more information.)

An Official Field Trip of the Mid-Tennessee Gem & Mineral Society (Murfreesboro, TN) (HOST)

An Official Field Trip of the Mid Ga. Gem and Mineral Society

Saturday, September 27, 2025

10:00 a.m. to 2:00 p.m. Central Time

Cumberland Furnace

Cumberland Furnace, TN

Limit: 30 People

Registration Required (Link is below)

Fee: None



REGISTRATION: Click [here](#) to fill out a registration form. If you register and are unable to attend the trip, please be considerate to your fellow rockhounds and let us know as soon as possible so someone on a potential waiting list can take your slot(s).

CHILDREN (Yes): Children must be at least 10 years old. They will not be allowed to roam around unattended and must obey all safety requirements and have all safety equipment

Member News

Kim Cochran had surgery and at this writing is in rehab. Kim usually speaks at our September meeting. A get-well card has been sent.



PETS (Yes): All pets must be on a leash and always be under control.

FACILITIES: There are no facilities at this site. The nearest gas station is about 4 miles away.

CONTACT: For further information
contact: John Martin, at info@mtgms.org or call cell phone 615-210-5385.

(This was sent out August 12th by e-mail.)

Graves Mountain Open House
October 3-5, 2025 (Fri., Sat., and Sun)
8:00 AM to 6:00 PM
Graves Mountain
Lincolnton, Ga.



Iridescent Hematite
Photo by Lori Carter

Shows
Alabama Mineral and Lapidary Society
August 29 – 31, 2025
[Bessemer Civic Center 1130 9th Ave SW
Bessemer, AL 35022-7801](http://Bessemer Civic Center 1130 9th Ave SW Bessemer, AL 35022-7801)

This Labor Day Weekend, the AMLS annual gem show returns to the Bessemer Civic Center. Earth's treasures will be featured on rows and rows of tables. Shop for natural specimens, jewelry, and decorative items. You'll find fossils, petrified wood, and spectacular minerals. Lapidary artists will present their earrings, necklaces, gem trees, and

more. There also are cabs, slabs, and beads to create your own beauties. You might win a door prize, too! Our kids' section has fun activities for budding rockhounds. The AMLS geode cracker delights both kids and adults. Buy a geode from the club, and we will crack it open for you. The Bessemer Civic Center is wheelchair accessible and has free parking. Doors open at 9 am for extended shopping time. August 29, 30 & 31: Friday 9am until 6pm, Saturday 9am until 6pm, Sunday 9am until 4pm. Adults: \$5, Teens: \$3,12 & under: FREE. Link(s): www.lapidaryclub.com

Central Florida Mineral & Gem Society, Inc.
September 13 – 14, 2025
Florida National Guard Armory, 2809 S. Fern Creek Ave., Orlando, FL 32806

Central Florida Mineral & Gem Society, Inc., a non-profit 501(C)3 educational organization, is hosting a Rock, Mineral, Gem, Jewelry & Fossil Show on Saturday 9am to 5pm and Sunday 9am to 4pm. Vendors offering rocks, minerals, gemstones, fossils, beads, jewelry, artifacts, metaphysical stones, handcrafted cabochons, etc. Silent auction, door prizes, demonstrations, Kid's Corner, and family activities. Admission fee: Adults \$6, Kids \$3, and Scouts in uniform free. Contact: President Salvatore Sansone 321-278-9294 or e-mail: ssfossilhunter@aol.com. Link(s): www.cfmgs.org

Henderson County Gem and Mineral Society
September 26 – 28, 2025
[National Guard Armory \(Beside Ingle's\) - 2025
Spartanburg Hwy., East Flat Rock, North
Carolina 28726](http://National Guard Armory (Beside Ingle's) - 2025 Spartanburg Hwy., East Flat Rock, North Carolina 28726)

Dates: 9/26-9/28/2025
Times (Eastern Time): 9/26 (Fri) and 9/27 (Sat)
- 10:00 a.m. - 6:00 p.m.,
9/28 (Sun) 10:00 am - 5:00 p.m.



National Guard Armory 2025 Spartanburg Hwy., East Flat Rock, North Carolina 28726. Free Parking. Admissions - \$5.00 for adults, 12 and under are free with a paying adult. Rocks, minerals, fossils, slabs, meteorites, gemstones, jewelry, handmade jewelry from Club artists, gem trees, wire wrapped jewelry, etc. Snacks, drinks, hot dogs. Demonstrations from Club members, Display items, Children's activities - coloring pages, puzzles, scavenger hunt, treasure chest, grab bags. Link(s):
<https://wp.hcgms.com/gem-show/>
<https://www.facebook.com/groups/136940423038426>

Mississippi Gulf Coast Gem and Mineral Society
 September 27: 10-6
 September 28: 10-5
 Central Time

[Ocean Springs Civic Center, 3730 Bienville Blvd. \(HWY 90\), Ocean Springs, MS 39564](#)
 Adult Admission \$ 5.00. Children under 12 free with paying Adult. 1 door prize ticket with each paid admission. The event will have 15 vendors or more, and educational opportunities, children's activities, and lapidary demonstrations. Link(s): www.mgcgms.org or [Facebook](#). For more information contact Barbie at mgcgms@bellsouth.net or 228-238-9900

Schedule for 2025-2026

Date	Mineral	Rock	Fossil
9/2	Rutile		Dinos
10/6	Sand	Obsidian	
11/3	Rhodochrosite		Crinoids
2/2*	Native element	Granite	
3/2	Chalcopyrite		Fish
4/6	Fluorite	Marble	
5/4	Opal		Shark

*Gold, Silver, Platinum, Copper, Bismuth, Antimony, Sulfur, Diamond, Graphite, etc.

Blast From the Past

September 1977; Carl and Leena Kimberly editors
 The Fall Line

Macon, Georgia is on the "Fall Line". A geological feature that makes the separation of the crystalline rocks of the Piedmont region to the north and the Coastal Plains sediments to the south. Just below/ on the Fall Line are the most productive Kaolin mines in the world. Above the Fall Line, the local granitoid gneiss, is quarried extensively as a construction material. Feldspar is mined from local pegmatites; limestone is also mined for the manufacture of cement. The limestone of Tertiary age that lie just below the Fall Line are a rich source of marine fossils both for collectors and scientific study. Fine calcite crystal and opalized marine shells with agate filled fracture seams occur. Zeolite, prehnite, and associated minerals occur in the local exposures of granitoid gneiss. Some pegmatites have produced microclines, stained a beautiful green by copper minerals, Muscovite, Apatite, crystalline Garnets, magnetite, rose Quartz, and Beryl including some of gem quality aquamarine. Quartz veins with clay pockets have produced fine amethyst in the piedmont. The middle Georgia area minerals produce a source of employment for hundreds and continue to supply specimens to collectors and scientists. Our club members come from all over this area, their interests cover the complete range of the hobby.

(As a side note to this, they taught classes and had an annual "All Georgia Swap and Show" where they invited collectors from other areas to participate. Jack and Betty Jones who have both passed in recent years headed up this endeavor.)



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

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 4220 Cyndy Jo Circle, Macon, Ga. 31216, ph. 478-957-5002 rocky1s@yahoo.com

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aswarnock@gmail.com

Field Trip Helper: Tim Brotzge. tim.brotzge@gmail.com 770-772-8644

Web Master/ Facebook: 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.



Don't forget Dues will be due in November!!!



Mid-Georgia Gem Clips

**Official Bulletin of Mid-Georgia Gem
and Mineral Society**
Macon, Georgia

**Member of Southeast Federation of
Mineralogical and Lapidary Societies**
**Member of American Federation of
Mineralogical Societies**



Mid-Georgia Gem Clips

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