



Meeting
September 1, 2020
at 7:30 at the
Museum of Arts
and Sciences

Come early and join the early birds to chat. As of this newsletter if things are okay, the meeting this month will be held in the pavilion at the opposite end of the museum from where we usually meet in order to meet CDC guidelines on safe distancing and wearing a mask. The speaker for the evening will be Kim Cochran. Kim will be speaking on the Southeastern Federation and what they have to offer clubs. Don't forget to bring a sample of the mineral of the month...it is the same as for the April meeting which we did not have...JASPER.

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Upcoming Events

August 24: Grab bag stuffing at Jay's House
September 1: Kim Cochran at the meeting
September 19: Graves Mountain for our club
October 31: Picnic and Fall Festival at the Museum of Arts and Sciences 11-2.

Prez. Box

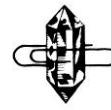
What a year that wasn't!! Time has a way of moving on regardless of ourselves or pandemics. It seems just yesterday we cancelled the meetings and now it is time again to focus on the coming ones. As of this moment we are still working on the logistics of the meeting. The feeling is to still have the meeting, but possibly have it outside under the pavilion. Another option is to have a virtual meeting where everyone watches the program on their computer. It will be the main topic of discussion of our board meeting. We all know it is a highly personal decision to go and do anything now a days.

By the time of this article is printed we will be having a board meeting. We do have events coming up that need attention and decisions acted upon. I'll be sending out an agenda to the board and in addition, there will be an optional face to face meeting at the museum. Weather permitting outdoors at the caboose picnic tables. We have lots to go over and also catch up on. The survey results are in and we will be looking closely at all of the ideas and suggestions. I will bring them up at our next meeting.

There are a lot of items and events to address soon.

Our Fall Festival and picnic is scheduled for Oct 31, it will be held at the museum under the pavilion. With it being Halloween, we can make it a spooky event. We should be all done by 2 o'clock and leave plenty of time to go home and do some trick or treating. More to follow on this.

The nominations committee has come up with a slate of new officers for the year 2021. Thanks to Jay and Tina for the effort of calling and



emailing people to get this put together. The officers will be announced at the meeting and there will be an opportunity for anyone else that would like to run to add his or her name. The application for the Christmas Tree at the museum is in and we can now build off the success of last years' tree. Be thinking of making decorations. Tina purchased for the club a white tree so that the ornaments would show up better.

The National Fair in Perry has been cancelled and yet we still need to get grab bags ready for any event where we might be able to sell them since that is how we get most of our funding. Tina told me that this is our club's 60th anniversary, so we need to do something special to mark the occasion. I am open to any ideas as to what we can do to celebrate, just let me or a board member know your thoughts. Pam and I will be making our annual pilgrimage to the Franklin Rock Shows. They were rescheduled to Aug 6 to 9. We camp with our RV nearby and almost all of the dealers are under big tents which makes it less risky to attend. There is an astounding array of gems, minerals, fossils and jewelry to look and gawk at. You know, if I had a lot of money, I would have the greatest collection imaginable, starting with the largest amethyst cathedrals. Let us know your thoughts on having the meeting or not.
Stay safe and healthy
President Bill

Coal fields of Pennsylvania Bill Mayer

I recently had the opportunity to explore my family roots and beginnings in this great country. It has always been on my bucket list to visit the town where my grandfather was a coal miner and my mother and uncles were all born. It is a small coal mining town in south western Pa called Windber.



My grandparents arrived in Windber around 1907 and were among the thousands of immigrants coming from Europe. There were 4 large ethnic communities in town compromising 69% of the population. The Hungarians, (Magyar) which we were, Poles, Slovaks, and the Italians. Most all were employed in the mines. Hard working immigrants also built the copper fields of Michigan too. They all were exploited with little pay and harsh working conditions and trapped into the company owned stores and housing. How many remember the Tennessee Ernie Ford song '16 tons'? "I owe my soul to the company store" The town was founded in 1897 as a company coal town. The mines, homes, and the company store were all owned and controlled by the owners, Berwind-White. Windber sits on one of the largest bituminous coal fields in western Pa.



Mine 37 at Windber
Indiana University of Pennsylvania
<https://www.iup.edu/archives/coal/mines-and-company-towns/photographs-of-eureka-mine-no--37-at-windber,-pennsylvania/>



There are 4 types of coal, anthracite coal, it's very hard with its high carbon content (86-97%), brittle, and also very rare. Bituminous coal is much more common, it is in the middle with its softness and carbon content (45-86%). It is used for producing electricity and in steel production. This is the type of coal in the Windber field. Sub-bituminous coal, they are large deposits of this type in Wyoming, and lignite being the softest and lowest grade. Looking at a historical mining maps and seeing all of the mines that dotted the countryside and driving those old roads now, it is hard to see any sign of what has happened in the past. The land has healed and grown over the tailings, railroads, and buildings. Off the 11 mines operating at one time in Windber, there is only one left. It has just started back operating recently and is now shipping our 300 railroad cars a week to India. 300 cars a week to India !! our natural resource being sold overseas.



While in the area, I just had to look for some black gold. I did some research to locate an exposed tailing pile just out of town. It was mine #37, I walked several hundred yards down an old road to the site. The dirt bikers knew all about this place as the ruts and trails were all over the place. Pure coal was rather hard to find as almost all the rock was nondescript overburden and shale. I did manage to find a few plant fossils, but they were far and few between. After a few hours, I only could collect less than a half a bucket of coal and fossils. One thing I did collect and will never

forget is getting my hands black and dirty in the same soil my Grandfather did over 100 years ago.



Resources/ Projects/ Tips

TOOTHPICKS

The round, stronger toothpicks have a multitude of uses on the jewelry bench. I use them for mixing epoxy resin, for applying paste solder, with Zam for polishing in tight spots, and with a bit of beeswax for picking up and positioning small stones. They're particularly good for testing the fit of a small faceted stone in a prong or tube set finding.

PUMICE WHEELS

Pumice wheels are good for touching up a bezel after you've set the stone. The hardness is about 6 on the Mohs's scale, less hard than quartz, so it shouldn't scratch any of your jaspers. However, I'd avoid or be real careful of, using pumice near the softer stones like turquoise, amber, howlite, etc. If you're unsure that a wheel is pumice, test it with a piece of glass. Glass is about 5 1/2 on the Mohs scale. If it doesn't scratch glass, it shouldn't scratch quartz.

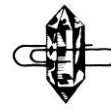
More Bench Tips by Brad Smith are at [groups.yahoo.com/group/Bench Tips/](http://groups.yahoo.com/group/Bench%20Tips/) or [facebook.com/Bench Tips](http://facebook.com/Bench%20Tips)



Mid Georgia Meeting Minutes March 2020 (reprint)

President Bill Mayer called the meeting to order at 7:29 PM with 22 members in attendance. He welcomed new and returning members and visitor Samantha Thurman (Thomas' daughter).

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.

Treasury: Susan Hargrove gave the bank checking and CD balances. She also said the rent for the museum was paid up for a year.

Programs: Jay Batcha said Hank Josey, a pharmacist from Dublin and President of the Paleontology Association of Georgia was our speaker tonight. He also said Thomas Thurman Vice President of the Paleontology Association of Georgia would be our April speaker.

Field Trips: Jay Batcha talked about the BAWF mine dig in Gordon, Ga. March 7, 2020 with 18 signed up to go. He talked about the Suwanee Music Park Roundup rock swap and sale coming up. Also, the Summerville, SC DMC dig on 3-29-20 and the Johnson Creek Farm DMC dig on 4-18-2020. Jay gave information on the Graves Mountain Annual Spring Dig April 24, 25, and 26- 2020 and mentioned trying to arrange a future dig at the Cummings, Ga. Quarry.

Publicity: Tina Perkins said the Science Olympiad was coming up on March 21, 2020 and needed volunteers. She also said the Peaches to Beaches yard sale fundraiser was March 13 and 14, 2020. She mentioned they needed help and donations.

Newsletter: Tina Perkins said the deadline for entries was 3-12-2020.

Old Business: Bill Mayer said the board met and discussed new ideas and there was a list available for members. Tina talked about the survey for the members to take for the club to gather personal opinions and suggestions on how to improve the club. She said 18 members had completed the survey and encouraged everyone to participate saying members could use their phones to take it.

New Business: Bill said the Peaches to beaches Yard Sale on March 13 and 14, 2020 needed MOHS Kits and donations. This event would bring income and club publicity with flyers being handed out. A sign-up sheet is available. Jay talked about the Science Olympiad at Rutland Middle School involving 33 schools. He was asking for volunteers to help grade and rank student testing of Rock Hounding from 7:45 AM to 1:00 PM on 3-21-2020. Bill was also asking members for suggestions on the club buying a banner to be used at events for club publicity. Many gave input on color, size, logo and price. Tina mentioned the club has been more involved with the Museum of Aviation and the Museum was lacking funds for camps and events.

She has a list of items for donations (recyclables) and members can help by bringing them to the next meeting.

Mineral of the Month: Rutile was the mineral of the month with many specimens on display with members giving information about each.

Other notes: Eddie Williams had some geological articles and maps for members to take home.

Speaker: Our speaker tonight was Hank Josey, President of the Georgia Paleontology Association. He talked about the March 7, 2020 Kaolin Mine Dig (moved to March 28, 2020) using a slide show. He showed the late Eocene Period Geography and Stratigraphy of Central Georgia, saying three fauna zone flows from the Gulf, the Atlantic and Florida came together during the warm ocean level rising here. In the sediment and marine life deposits left behind, many vertebrate and invertebrate fossils were buried in different layers exposed in some Kaolin and Limestone mines. Examples shown were shark's teeth, whale bones, stingray mantles, and various species of shells. He also gave many tips and techniques along with a list of mining tools for the upcoming club dig. Many members had questions resulting in more information and personal stories of past digs.

Next meeting will be April 6, 2020 and the Mineral of the Month is Jasper. Meeting adjourned at 9:02 PM.

Respectively submitted
Al Steffanini



JASPER

Mineral of the Month

Jasper is actually not a mineral, but a rock, a chemical sedimentary rock comprised primarily of silica. Accessory minerals which can create the wonderful colors found in Jasper include chalcedony, quartz, hematite, pyrolusite, clay and calcite, to name a few. The rock is comprised of crypto(micro) crystalline (Chalcedony) varieties of quartz and various impurities that add the colors to the rock. They can be formed by direct silica deposition from water, possibly by volcanic solutions at great depth in mid-ocean, or from diagenesis at the expense of organogenetic siliceous sediments. In other words, they can probably be



found in association with sedimentary, igneous, or metamorphic rocks, since all of these eventually contribute to sediments. In the US, the main concentration of Jasper is in Lake Superior iron ore deposits, Mesabi Range (Minnesota) iron ore deposits, The Jurassic sediments of California, from Novaculite in Arkansas and from volcanism in England and Michigan (Porcellanite). However, Jasper can be found in locations throughout the US and world.

Jasper can be compact, micro-fibrous, splintery, and stratified (with folds and constricted areas) in texture and generally has a conchoidal fracture. Because it is an impure quartz, the hardness is 6.5-7 with a specific gravity of 2.4-2.7. The streak is generally white, however if the streak is obtained from an accessory mineral in the Jasper, the color of the streak may vary. The rock is not generally soluble in water, however has a water content of 0.1-4%. Non silicon dioxide impurities can range from 1-20%.

The primary uses for Jasper are as finished gemstones, hones, and whetstones. It was carved to make seals at the palace of Knossos in 1800 BC and the term "Jasper" is referenced in Arabic, Persian, Hebrew, Assyrian, Greek, and Latin writings.

Ocean Jasper



<https://www.gemrockauctions.com/auctions/33mm-oval-ocean-jasper-cabochon-378861>

Common types include African, Biggs, Brazilian, Ocean, Carrasite, Imperial, Bumblebee, Red, Dalmatian, Mookaite, Kabamba, Zebra, Picture, Polychrome, and Yellow. In Georgia, we have what is known as Ga. Queen Picture Jasper, which could be found at Jones Pit, near Unadilla.

Eddie Williams

Islands of the Savannah River

Taken from Georgiafossils.com

<https://www.georgiafossils.com/updated-islands-of-the-savannah-river.html>

Web master: Thomas Thurman

Field Report on the Paleontology
of the Lower Savannah River

By: Henry N. Josey, PharmD.

Filed on 27/Sept/2016

Revised 8/Aug/2017

South of Savannah there lies a string of several small island which offer some unique opportunities to the field researcher. These islands, named Barnwell, Hog, Jones, and Cockspur, are not natural islands, but are manmade. They consist entirely of material dredged from the Savannah River, known as spoil. The Savannah River provides easy ship access from the Port of Savannah to the Atlantic Ocean. In order to allow container ships to safely travel the shallow waterway, the river is periodically dredged of sand and silt, which is piled on these islands. Currently, the river is being dredged from a natural depth of around 20 feet to a depth of 47 feet. During this dredging process, numerous fossils are pulled from the riverbed. Since May 2016, the author made multiple trips to Hog Island, Barnwell, and Jones Island to collect fossils. Transportation to the islands is only possible by boat.

Because of the significant mixing of spoil material, exact dating of these materials is nearly impossible. Fossils from the Miocene, Pliocene, and Pleistocene epochs are all found together, representing some 19 million years of evolution. However, it is difficult to find another site in Georgia which offers the quantity and diversity of fossils as these two. This author has identified at least 27 genera of vertebrates, 12 of invertebrates, and 1 of plants over the course of three field trips. This incredible diversity is a direct consequence of the numerous sea level changes seen by this area.

Fossil collection on these islands is relatively easy, requiring few if any tools. Simply walking the beaches of these islands was sufficient to yield an abundance of specimens (the author has on one occasion found over 60 sharks' teeth in a two-hour period). These beaches are constantly eroding under the wake of passing container ships. Digging



and/or sifting of the spoil from the island bluff face also yielded numerous fossils.



Snaggletooth, Great White, Sand Tiger, Mako, and Bull sharks; age uncertain. Shark's Tooth (Jones) Island created by dredging operations, Coastal Georgia. Collected by Hank Josey

Special note: Members of the Society went to Jones Island during the last year and had a wonderful time collecting lots of material.



Shows

Shows may be canceled due to the Covid-19 pandemic.

Bellpoint Gem Show 9/18-9/20/ 20
 Cobb County Civic Center
 548 S Marietta Parkway
 Marietta, Ga. 30060

This was the only show listed and it is not a definite. If I get any information, I will let you know by e-mail. Editor.

DIG

Mid-Ga. Gem and Mineral Society Dig

Graves Mountain

10 am to 4 pm, Saturday, September 19, 2020
Covid-19 rules for Graves Mountain at this time.

No more than 25 people on the mountain at a time. When in close proximity of other people, you must wear a mask.

Due to at Max of 25 people I need everyone that wants to go on this field trip to RSVP to me: Jay Batcha 478-957-5002 or batcha.jay@gmail.com. First 25 to sign up goes, the rest will be on a waiting list. Also, Junior said the trip could be

cancelled due to Covid-19 Georgia state rules being followed at dig time. So, I will need to know who is attending just in case it is cancelled.

You should not miss any opportunity to collect here because the rutile, lazulite, and pyrophyllite are said to be some of the finest in the world. The collecting area at Graves is huge! There are three main rock types here: quartz-sericite schist, sericite-kyanite-quartz rock (quartzite) and quartz conglomerate. You may still be able to find rutile, kyanite, lazulite, iridescent hematite, pyrophyllite, pyrite, ilmenite, muscovite, fuchsite, barite, sulfur, blue quartz and quartz crystals with a hematite coating.

SAFETY CONSIDERATIONS:

Children younger than 12 are not allowed to attend because of the dangers involved!

This quarry contains very high and unstable walls. Loose rocks can and will be dislodged by someone from above or even by the wind. It is suggested that you wear a hard hat and that you stay away from the high walls. Proper footwear with good ankle support is a must when climbing around the rock piles. Always examine the area above you for loose rocks and boulders. Move the small stuff and avoid the larger ones. Check for anyone working below you and be careful not to dislodge any loose rock. Warn people below by yelling "ROCK", if anything starts going their way. Ladders or power tools of any kind will not be allowed.

Graves Mountain code of conduct!

Park your vehicle in the designated area (at the end of the paved access road but not much beyond the woods to the right of this road).

NO child under the age of 12 years old is to be allowed on the mountain because of all the dangers involved.

ALL pets must be kept under control and on a leash.

The caretaker, Junior 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 RAPELLING 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 DUSK. (Absolutely no one is allowed on Graves Mountain after dark.)

Please protect our ability to field collect at Graves Mountain!

Report violations to: Clarence Norman, Jr., Norman C E Wrecking Co., 3333 C E Norman Rd, Lincolnton, GA 30817-3110

706-359-1544 (business) or 706-401-3173 (his cell)

All reported violations will be held in strict confidence.

BRING: Hard rock tools, hard hats, buckets, and a handcart (a good hike to pits). Also bring water, food, warm clothes, gloves, and safety glasses.

Cost: \$10.00 donation to collect.

DIRECTIONS: From Macon, Ga. Starting at I-75 and I-16, take I-16 east to Spring St. exit (less than 1 mile). Turn left on to Spring St. (Highway 129) towards Gray Ga., Stay on 129 until you get to Eatonton Ga. (around 40 miles). Once you get to the square turn right onto highway 16, turn left on to highway 44 (around 1 mile). Stay on highway 44 until you get to Washington Ga. (around 54 miles) turn right onto highway 78 business and go through town (highway 47 will merge in with 78 from the right, Don't turn here)(around 2 miles). Take highways 47 / 378 towards Lincolnton Ga. (about 11 miles). The entrance to Graves Mountain is on your right about 8/10 mile past the Lincoln county line sign. Travel time is 2 hrs 30 mins.

From Atlanta's I-285, take I-20 east to exit for Washington, GA/SR 78 (SR 10, SR 17) and turn left. Travel north to Washington and then right onto SR 378 to the Graves Mountain area. From the Athens area, take US 78 east to Washington and SR 378 to Graves Mountain. Drive time: From the junction of I-285 and I-20 east, the distance is 125 miles and a 2-hour drive time.

When coming from Washington, the entrance to Graves Mountain will be on your right about 8/10 of a mile past the Lincoln county line sign. All participants must sign a liability release and make a small contribution (\$10.00/pp suggested) to defray the cost of opening the mountain. The dig will cease and everyone is expected to be off the mountain by around 4 pm. Participants will be allowed to park in a designated area on the mountain during this field trip.

IF LATE, WHERE: At the gate to Graves Mountain (one mile on the right past the Lincoln County line road sign off of SR 378). Big boulder at driveway to turn on. Follow road to parking lot



Blast from the Past

First printed in May 2011



Tektite Hunting - Dry Creek Valley

By Kendra

Northwest of Healdsburg in Northern California are large numbers of black obsidian like objects have been collected in vineyards, creeks and even roadside. Tektites in general are widely distributed in strewn fields covering thousands of miles. With only six recognized strewn fields worldwide, we are very fortunate to have the only one in the western United States, located here, in Sonoma County. Tektites are small, glass bodies up to a few inches in diameter that are generated in large numbers in asteroid impacts. They tektites found in Sonoma County are believed to be formed 2.7 million years ago when an asteroid hit the earth. The impact vaporized the



surrounding area, pushing up clouds of gas. Zillions of small drops of gas then chill to glass creating the tektites when then reentered the earth's atmosphere. The heating and melting of their surfaces by the earth's atmosphere caused transformed the shape and scarring of each stone. Our local tektites are a dull, black glassy stones, ranging in size from an unshelled almond to a robin's egg, although normally the shape varies, the variety found in Dry Creek are uniformly oval (egg like). Their surfaces of local tektites are pitted and grooved, similar to a walnut shell, from partial melting when it reentering the atmosphere. A clue on how to determine if your glass rock is a tektite or obsidian, has to do with water. Obsidian contains water vapor, tektites do not. Carefully heat your glassy pebble until it begins to melt. If it contains water vapor, like obsidian, it will froth. A true tektite will simply melt. Tektites are most easily found in vineyards or road cuts where the soil has been deeply churned up. You can find the full article written by Rob Loughran at www.gather.com/viewArticle.jsp?articleId=281474976827781



At the Diamond Hill Mine, you can find your own crystals, but playing in the dirt is just as much fun for some.



Starting the day...





Junior Members: Rock Hound Trivia

1. Sedimentary rocks can be classified on the grain size of the constituent grains. Which of the following rocks is most likely to be categorized as rudaceous (something larger than sand grains)?
 - a. Sandstone
 - b. Conglomerate
 - c. Shale
 - d. Marble
2. A rock sample had crystals of the mineral corundum. If the color of the crystals was red, which precious gemstone has been found?
3. Rift valleys are long troughs enclosed by steep faults on both sides. Which of the following lakes is formed within a rift valley?
 - a. Lake Michigan
 - b. Lake Erie
 - c. Lake Titicaca
 - d. Lake Baikal

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.

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, ph. 678-621-3457,
orebilly@gmail.com

Vice Pres/ Editor/ Publicity: Tina Perkins, ph/ 478-542-0388, fossilhunterofgeorgia@gmail.com

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rocky1s@cox.net

Education Chairperson: Tuell Walters, ph. 478-922-7200, firecomet46@gmail.com

Web Master: Jim Souter, ph. 478-454-7273,
jgsouter@charter.net

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 _____
List your interests and reasons for joining

Make checks payable to:
Mid-Georgia Gem & Mineral Society
Mail to the Treasurer or bring to a meeting. If you want a card to show membership, please send Susan a note when you send in dues or a self-addressed stamped envelope.



Mid-Georgia Gem Clips

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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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