



**April Meeting  
At the Museum of Arts and  
Sciences on Monday,  
April 03, 2017 at 7:30pm.**

The speaker for the April meeting will be Bill Montante. Bill will be speaking on the Anatomy of a Meteorite Impact - The Ries Impact Crater - its history and future warnings.

**President's Message**

It was good to see everybody at the meeting this past week. I hope to see you all again when we meet again. We had a good program by Hank Josey about the man made islands along the Savannah River and the fossils he's been finding on them. When they dredge the river down there to make it possible for larger ships to get in, they have to put the dirt somewhere and so they created a series of manmade islands. It is an interesting story and to see the evolution of the land from barren to becoming an ecosystem of grasses and related material.

I am continuing my study of the geological industries of Georgia. The next section is about the marble industry and how it came to be. It is of course, metamorphic limestone that has become a

strong material through intense pressure and heat. We will get into the specifics of it at a later date though.

In the mid-1830's, an Irish stone mason, Henry T. Fitzsimmons, traveling through Georgia saw an outcropping of marble in the Long Swamp Valley of what was then Cherokee County. He bought the land and created the Long Swamp Valley Marble Company. His methods were crude and his monuments were sold around the area. It wasn't until Samuel Tate bought land lottery tracts in 1830 in Georgia that had large deposits of marble on them. Samuel signed an agreement with James Ferrel, James C. Holmes, and Gideon Roberts, all from Alabama. That allowed for quarrying on his land. This agreement however was never acted on and in 1850, he became a partner in what is now the Georgia Marble Company near the town now known as Tate, Georgia.

By 1880, the marble industry in Georgia had floundered due to poor infrastructure. The railroads from Marietta and the North Georgia Railroad system made it possible for the transportation of the marble. This is what was needed to the marble industry to take off and thrive. By 1900, the marble industry was still struggling due to the lack of capital to make the needed investments in the finishing and mining facilities. The net profit for 1900 was only \$14,000 for the year. In 1905, Samuel Tate was made president of the Georgia Marble Company and with the help of friends, he acquired 6,791 shares of the stock. He immediately added equipment, changed procedures, cleared quarries, and built additional houses for the workers. By 1906 the company's profit had risen to more than \$120,000. During the marble boom of the 1930s, Georgia marble was utilized for the Longworth House Office Building in Washington, D.C., the Puerto Rican capitol, the New York Stock Exchange, and the Cleveland Federal Reserve Bank and Public Library in Ohio. The value of the Georgia Marble Company was reported to be more than \$3.7 million.

The statue of Abraham Lincoln in the Lincoln Memorial was made of Georgia marble weighs more than 170 tons, made up of 28 blocks of white Georgia marble and assembled there. Today, the Georgia marble has been used within the state



on such structures as the state capitol, Lenox Square Mall in Atlanta, and several buildings on the Emory University campus.

Today, the marble is mined and used not only for architectural purposes but also for pigments in paints and cosmetics, agricultural uses and for coatings on fine, glossy paper. It is the biggest rival to the kaolin industry for coating paper. Pharmaceutical companies use it in antacids and other compounds where calcium carbonate is needed. It is the active ingredient in cleaners like *Softscrub* because it is softer than most items in the bathroom.

I look forward to seeing you all at our next meeting. If you have any suggestions, questions, or thoughts as to what we can do to make the club more enjoyable for everyone, please feel free to contact me, or one of the officers in the club.

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## March Minutes

The meeting was called to order at 7:42 PM by Jim Souter with 32 members/guests present.

### Old Business

The treasurers' report was read and approved. We signed up two new members. We are still requesting that members collect extra material on digs for grab bags. The Science Olympiad is scheduled for March 18 at a location to be determined. Six members

volunteered to be available for the event.

### New Business

This month's mineral was lazulite and several members brought in specimens to share. We received tickets for raffles from the federation to sell.

PharmD RPH Hank Josey was our speaker for this month. He talked on the Paleontology of the lower Savannah River area. He provided a slide presentation that was an introduction to the river and its many available fossils present. The fossils are showing in great abundance due to the increased dredging of the river to accommodate the newer larger container ships. A number of man-made islands have popped up due to this activity. Some of the different fossils included but not limited to: many species of sharks teeth, clams, corals, sand dollars, sea urchin spines, whale parts, 3 toed horses, alligator teeth, false gharial teeth, soft shell turtle parts, dolphin and ray teeth, burrfish parts and Atlantic sturgeon. He also brought along a number of the fossils that he has collected in the area. The talk was quite informative and provided some insights into where to go on the various new islands. Sometime in the future he has agreed to lead a dig to this area of savannah. A question and answer session was provided at the end of his talk. The meeting was adjourned at 8:49 PM.

By: Richard Arnold



Sodalite

## Mineral of the Month Sodalite

- Formula:  $\text{Na}_8(\text{Al}_6\text{Si}_6\text{O}_{24})\text{Cl}_2$
- Group: Tectosilicates without zeolitic  $\text{H}_2\text{O}$ .  
Classed as Sodalite Group but also classed as being in the feldspathoid group.
- Hardness: 5.5-6.0 mohs
- Crystal: Cubic, rare in crystal form but common in massive forms.
- Color: Rich royal blue, green, yellow, violet, white veining common
- Streak: White
- Fracture: Conchoidal to uneven
- Density:  $2.73\text{g}/\text{cm}^3$  (measured)  $2.31\text{g}/\text{cm}^3$  (calculated)

Although somewhat similar to lazurite and lapis lauzuli, sodalite rarely contains pyrite (a common inclusion in lapis) and its blue color is more like traditional royal blue rather than ultramarine. It is further distinguished from similar minerals by its white (rather than blue) streak. Sodalite's six directions of poor cleavage may be seen as incipient cracks running through the stone. It is sometimes referred to as "poor man's lapis" due to its similar color and the fact that is much less expensive. Its name comes from its high sodium content. Most sodalite

will fluoresce orange under ultraviolet light.

Sodalite occurs in igneous rocks that crystallized from sodium-rich magmas. This is the origin of the name "sodalite." These magmas also contained so little silicon and aluminum that quartz and feldspar minerals are often absent. Sodalite-bearing rocks include: nepheline syenite, trachyte, and phonolite. These types of rocks are so rare that most geologists never see them in the field.

Hackmanite is an important variety of sodalite exhibiting tenebrescence. When hackmanite from Mont Saint-Hilaire (Quebec) or Ilímaussaq (Greenland) is freshly quarried, it is generally pale to deep violet but the color fades quickly to greyish or greenish white. Conversely, hackmanite from Afghanistan and the Myanmar Republic (Burma) starts off creamy white but develops a violet to pink-red color in sunlight. If left in a dark environment for some time, the violet will fade again.

Tenebrescence is the ability of minerals to change colour when exposed to sunlight. The effect can be repeated indefinitely, but is destroyed by heating.



*Field trips coming up, time to do  
some digging!!!*

An Official Field Trip of the Charlotte Gem &



**Mineral Club (Charlotte, NC) (HOST)**  
**An Official Field Trip of the Mid-Ga Gem and**  
**Mineral Society**

**Saturday, April 15, 2017**  
**8:00 AM – 4:00 PM Eastern Time**  
**Sharpes Emerald Prospect**  
**Alexander County, NC**  
**Release Form Required**  
**Fee Site (Details Below)**

**TRIP:** Sharpes Emerald Prospect is operated in association with the Mountain Area Gem and Mineral Association (MAGMA). The club has been generous enough to allow CG&MC to host a field trip at their site. The mine is located in what is considered the most productive emerald mining district in North America. Emeralds are yet to be found, but there are current mineral finds of glass-clear tressin, smoky quartz, tourmaline, muscovite mica, beryl, and other minerals are in abundance. The mine is geared with rockhounds and collectors in mind, and is not salted with material from offsite.

**COLLECTING:** Mining and gathering can suit a variety of styles. Hard rock digging is available in pits and trenches throughout the site. Less rigorous collecting can be found by sifting and gathering in dump piles on the property. All areas of the mine are open to collectors and new areas are opened regularly.

**BRING:** Only hand tools are allowed on

site – shovel, pick, hammer, chisel, etc. No power equipment or heavy machinery. Buckets, sifting screens, etc are also useful. Spring weather is unpredictable, so come prepared with season appropriate clothes, sensible footwear, protective eyewear, and raingear if the forecast indicates poor weather. No alcohol is allowed on site, and mine owners request that no garbage is left on the premises.

**REQUIREMENTS:** All visitors must pay fee and sign release form before digging. Disclosure forms and payment can be brought on day of field trip or sent in advance to:

Hiddenite Gems Investment Group  
PO Box 542  
Leicester, NC 28748

Release forms are available here:  
<http://www.wncrocks.com/resources/Sharpes%20Emerald%20Prospect%20Release.pdf>

**SPECIAL CONDITIONS:** Protective equipment such as goggles/eyewear, boots, and gloves are recommended.

**FEE:** \$25/day for adults, \$20 per day for MAGMA paid members. Children 12 years of age or younger are free but must be accompanied by guardian

**REGISTRATION:** Advance registration is not required, but release form must be



completed.

**CHILDREN:** Yes, children are allowed, but anyone 12 years of age or under must be accompanied by adult.

**PETS:** No

**FACILITIES:** None - There is a gas station a mile down the road with bathrooms, drinks and snacks.

#### **DIRECTIONS AND WHERE TO MEET:**

From I-40, take exit 132 toward NC-16. Follow NC-16 North to Hwy-64 East. Turn left on Prichard Lane. Look for sign saying "SHARPES" on right side of road by entrance to mine.

#### **CONTACT:**

Prior to event, Sam Baker (704) 516-9649.

On day of event: Murray Simon (704) 543-6651



Sharpes Emerald Prospect



Rutile (twinned crystals) from Graves Mountain, Lincoln County, Georgia



Smoky Quartz

## **Graves Mountain Rock Swap and Dig April 2017**

8 am to 6 pm, Friday, April 28, 2017

8 am to 6 pm, Saturday, April 29, 2017

8 am to 6 pm, Sunday, April 30, 2017

"You are invited to field collect minerals at Georgia's premiere mineral location!"



The caretaker in charge of Graves Mountain, Clarence Norman Jr., has announced plans to hold a three day dig and rock swap on the Mountain during April and October. He will have the mountain open to collecting from 8 am to 6 pm each day. All participants must stop at the welcome table in the Hospitality tent to sign a liability release and make a small contribution to defray the cost of opening the mountain and providing port-o-lets. There will be several golf cart type, four wheeled vehicles available to transport those participants who have trouble walking long distances. The dig will cease and everyone is expected to be off the mountain by around 6 pm each day. Participants will be allowed to park in a designated area on the mountain.

**Rock Swap and Hot Food/Drinks:**  
Junior will set aside an area in the upper parking lot for tables to be setup for daily rock swaps. Anyone who would like to setup a table(s), please contact Junior at the phone numbers listed below. Hot food cooked on the grill, cold drinks and chips will be available for purchase on the mountain during all three days of these events.

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

**THESE DIGS ARE OPEN TO ALL  
NO NEED TO SIGN-UP, JUST SHOW UP FOR  
ALL "ROCK SWAP AND DIGS"!  
Mark your calendar and tell all your friends  
about these two great events!**

**DIRECTIONS:** From Atlanta's I-285, take I-20 east to the exit for Washington, GA SR 78 (SR 10, SR 17) and turn left.

Travel north to Washington, turn right onto SR 378 and drive 11 miles to the Graves Mountain area. The entrance to Graves Mountain is on your right about 8/10 mile past the Lincoln county line sign.

**-OR-**

Just after you exit onto SR 78, turn right onto GA 43 and drive towards Lincolnton about 13 miles. Take a left onto GA 220 going Northwest for about 3 miles to SR 378. Take a left on SR 378 and go about 2 miles. The entrance will be on your left.

The entrance is a paved road that goes through a gate and up a hill. Please park along the access road and then proceed to the "Welcome Tent" at the end of the pavement to obtain a liability release form and to make a donation for the portable bathrooms, etc.

Graves mountain is accessible and open for mineral collecting by colleges, universities, and gem and mineral societies. Groups as small as two INDIVIDUAL mineral collectors can now reserve the mountain!

**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 12 miles). The entrance to Graves Mountain is on your right about 8/10 mile past the Lincoln county line sign.



Iridescent Goethite/Hematite, Graves Mountain



Check website

<http://www.amfed.org/sfms/>  
for more shows coming up in the  
Southeast and other great information!

**April 2-3, 2016**  
**Lexington Rock Gem & Jewelry Show**  
**(Annual Show)**

**Lexington, KY**

Clarion Hotel, 1950 Newtown Pike, Lexington,  
KY. Near Exit 115 off I-75/I-64.

Hours: Sat April 2, 9AM-6PM, Sun April 3,  
11AM-5PM.

Show includes minerals, jewelry, equipment  
dealers, exhibits, KY Agate, fluorescent

displays, hourly prizes.

Admission: \$2 Adults, \$1 Children, \$5 Max  
Family. Scouts in uniform free.

Info Jane Volk - [lexgemshow@outlook.com](mailto:lexgemshow@outlook.com),  
Allen Ferrell -  
[kyrock2010kentucky@yahoo.com](mailto:kyrock2010kentucky@yahoo.com),  
or [www.bggamc.homestead.com](http://www.bggamc.homestead.com).

**April 22-23, 2017**  
**Memphis, TN.**  
**Memphis Mineral, Fossil, Jewelry**  
**Show**

**“The Earth Wide Open”**

Memphis Archaeological and Geological  
Society  
Memphis International Agricenter, 7777 Walnut  
Grove Rd. Memphis, TN  
Saturday, April 22 9-6:00 and Sunday, April 23  
10-5,

Adults \$5.00, 2 day pass \$8.00, Children 12  
and under \$2.00. Scouts in uniform free

Dealers, Exhibits, Demonstrations, Grand and  
Hourly door prizes. Kids Area with Rockzone  
featuring Gem and Fossil Dig, Geode Bowling,  
and Rocks Around the Clock. Includes “The  
MAGS Rock Banquet” a table full of rocks that  
look like real food. Developed and maintained  
by the club since 1980

web: [www.TheEarthWideOpen.com](http://www.TheEarthWideOpen.com), email  
[info@theearthwideopen.com](mailto:info@theearthwideopen.com).

Show Chair James Butchko 901 743-0058  
Dealer Chair WC McDaniel 901-274-7706,  
901-490-3575



# Tidbits

## Hints for Surface Collecting

When searching for translucent material, like agate, walk towards the sun, you will see the sun shine through the stone. When looking for reflective material like crystals, have the sun behind you and the material will shine or sparkle in the sun. If you walk sideways to the sun, look side to side for both translucent and reflective material. If you find something good or unusual, stop and mark the spot, look up the slope and down the slope to find the source of the material. I like to pile rocks every time I find something unusual, that way I can see the fall-line of the material.

Via July 2012 Quarry Quips

How to cut iridescent obsidian It depends upon which of the two types you have. One type is banded and the color lies in bands of several shades of colors. The other type is not banded, and the surface chipping may be needed to find the one color. Cut the banded type parallel to the bands for an "eye" effect. For a rainbow effect, cut across the bands at about 15 degrees. Unbanded should be cut parallel to the observed color.

Reclaiming saw oil is easiest by putting the oily sludge in a bucket and adding water. After it settles for a few hours the water will join the sludge at the bottom and the clean oil can be dipped out for reuse.

If you have any Chrysocolla and would like to bring out the blue and the green, also any copper material, put it in some full strength Purex for as long as it takes. This really works and you will get a good color. Remember the hazard of mixing bleach as with any acid. It releases a poisonous gas. Do this outside with the wind blowing away from you.

To improve your tumber polishing, use small pieces of styrofoam plastic instead of those hard little round plastic pellets. Your polishing agent will do a better and quicker job. These hundreds of polish impregnated little pieces will really put a shine on everything in the tumbler.

Source of the above hints: Leaverite News—4/2012

## World's Largest & Oldest Meteorite

The world's largest and oldest meteorite was discovered in China near the northeast city of Shenyang. The meteorite, locally called Haushita Hill, is estimated to be 4.5 to 4.6 billion years old and fell to earth 1.9 billion years ago. The meteorite mound is 600 feet long, 250 feet wide and about 300 feet deep. It weighs about 2 million tons and is covered with granite. The meteorite is older than any natural earth rock. The site is planned to be a state-protected nature reserve.

Source: Cutting Remarks—5/2012



Paleontologist pranks



**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:**

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Club year begins November 1<sup>st</sup>, a grace period of three months will be given before membership lapses.

**Mid-Georgia Gem & Mineral Society**  
**Application for Membership**

Name(s) \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_

State \_\_\_\_\_ Zip Code \_\_\_\_\_

Phone \_\_\_\_\_

Adult(18+) \$10.00 Junior \$2.50 New \_\_\_\_\_

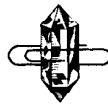
Renewal \_\_\_\_\_

E-mail \_\_\_\_\_

Address \_\_\_\_\_

List your interests and reasons for joining \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Make checks payable to:  
Mid-Georgia Gem & Mineral Society  
Mail to the Treasurer (listed on this page) or bring to a meeting.



## 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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