



April Meeting
At the Museum of Arts and
Sciences on Monday,
April 04, 2016 at 7:30pm.

Tina Perkins will be our speaker for the April meeting. Tina will be speaking about her role as a high school teacher involved with NASA, Project Astro, Lunar Rocks, Meteorites and Tektites. You will find out what is actually taught and used in Georgia High Schools.

President's Message

We had a good meeting this month. Tuell gave a presentation on the history of the local stone we call *Georgia Queen Jasper* which is found at the Jones Pit Mine outside of Unidilla. We enjoyed the presentation and this history presented to us by Tuell.

We were just involved in the first Science Olympiad for 3rd and 4th graders. We presented the materials and the tests for the participating students to answer in a contest with each other. We had a

great turn out. We kidded Jay about his field promotion to Dr. Batcha by the coordinator of the event. We were even given a table in the cafeteria where we had a display set up of different mineral and rock specimens as well as club information. We look forward to future involvement with the program.

I want to remind people about the potential dangers of digging in places where you do not have permission to dig or collect at. If caught, you could be arrested and charged with criminal trespass. This goes for rock, minerals, fossils and even arrowheads. Make sure you have permission prior to going and if you are taking friends, make sure you have permission for them too. Just because they might allow you to go onto their property, does not mean they want anybody else on their property. So, do not take a group to these places with the permission of the land owners and always follow the rules of collecting;

- 1) If you open a gate, close the gate
- 2) Refill ALL holes you dig
- 3) Leave NO paper, plastic or metal, even if you didn't bring it
- 4) Make sure you have permission to be where you are.
- 5) Do not cross onto neighboring property
- 6) Wear proper safety equipment, goggles, gloves, boots, hard hats(in hard rock areas)
- 7) Have plenty of hydration and food
- 8) Do not hunt or dig alone; always make sure someone knows where you are.



Take only what you need

I know you probably get tired of me harping on these but they are essential to remember and safety can never be mentioned too much.

If anyone has any suggestions or ideas for bettering the club, please contact me.

Jim Souter
jgsouter@windstream.net
478.454.7273

Don't forget to check out the clubs website; <http://www.midgagms.org>

March Meeting Minutes

The meeting was called to order at 7:33 PM by Jim Souter with 16 members/guests present.

Old Business

The treasurers' report was read and approved. The club participated in A Science Olympiad held at Rutland elementary school on March 5th. We held proctor a quiz on rocks & minerals that they had prepared. We also supplied a display of various pieces from some of the club members.

New Business

This month's mineral was aquamarine and several members brought in numerous specimens to share and discuss.

Our own Mr. Tuell Walters, longtime member and one of our resident experts was our speaker for the evening. He gave a talk on collecting

specimens at Jones Pit. The talk primarily discussed some of the early history of our annual visits to the location. It included years when an air compressor was rented and some of the larger boulders were made into smaller ones as the members took their turns operating a jack hammer. Several nice photos captured some of the Kodak moments. A question and answer session was provided at the end of his talk.

Returning member Thomas Thurman gave a talk on a proposed Fossil show to be held in Perry next February. It included some of the many experts and professor that are interested in finding out more details and becoming a part of it.

We will be participating in a second Olympiad for the middle school as soon as a date is finalized. The meeting was adjourned at 8:24 PM.

Upcoming Digs

March 12 Clarkesville, Georgia near Helen for kyanite and graphite

April 16 Lagrange, Georgia Hogg mine for rose quartz, tourmaline, beryl and mica

April 23 Wilkes County, Georgia Jackson's Cross Roads for amethyst and quartz crystals

By: Richard Arnold

Our Club participation in the Science Olympiad

Our club was asked a couple of weeks ago to assist with the Elementary Science Olympiad at Rutland Middle School in Macon. We were asked to run the Rockhound part of the Olympiad. This entailed, providing 16 rock and mineral specimens and writing 2 to 3 questions for each specimen before the event. At the event we had to setup the rock and mineral stations and hand out the tests



and monitor and time the event than finally grade the test.

We also setup a mineral and fossil display table in the event meeting area. We handed out fliers about our club. We were surrounded by kids, teachers, and parents at the table.

We would like to thank Tina for writing up the questions and helping with the format of the event.

Also, Jay (tooting my own horn) for supplying the event rocks and minerals, the display table specimens were provided by Jim, Susan, and Jay. Susan, Richard and Allen Free run the testing event with the rocks and minerals while Jim and Jay run the display tables.

The Science Olympiad leader said we did a great job and was so thankful. He asked if we could run the Rockhound part for the Middle School Science Olympiad in the future.

If anyone would like to help with the Science Olympiad in the future please contact me at my cell 478-957-5002

BY: Jay Batcha



At 545.67 carats, The **Golden Jubilee Diamond** is currently the largest faceted diamond in the world. The gem was discovered in 1985 in the Premier mine in South Africa and it was cut by Gabriel Tolkowsky. The value of the Golden Jubilee diamond is estimated between \$4 – \$12 million

Mineral of the Month Diamond

Birthstone for April

Chemical composition: C

Mohs hardness: 10

Crystal: Isometric-Hex octahedral (cubic)

Diamonds are the hardest natural forming mineral.

Diamonds come in many colors but the most common has always been the white or colorless. Depending on where the diamond comes from, depends on its color.

South Africa is where most people think of diamonds coming from. The most famous mine is the Premier mine that was purchased by Petra Diamonds and changed its name to the Cullinan mine after one of the most famous diamonds in the world. It is a source for oversize white diamonds as well as the highest quality blue diamonds.

Sierra Leone produces the famous Zimmi Yellow Diamonds. The yellow is so vivid that it does not resemble any other yellow diamond. Other yellow diamonds in the world seem to pale next to the Zimmi Yellow diamonds.

India is known as a leader in the world of diamonds. It has produced the Hope Diamond and the Wittelsbach-Graff Diamond.



Democratic Republic of Congo

produces most of the low grade industrial diamonds but the colored diamonds found are yellow, orange and cognac browns.

Central Africa has black diamonds and yellow diamonds. Occasionally they will find pinks, blue and/or green diamonds.

Brazil produces mostly yellow and brown diamonds. They have a strong fluorescence which gives them a green appeal. These diamonds are usually low cost diamonds. But likewise, Brazil also produces ultra-rare red diamonds and green diamonds.

Borneo produces brown and yellow diamonds with the occasional pink, blue or green diamonds.

Australia is home of the world famous *Argyle Diamond mine*. This mine is responsible for 90% of the world's supply of pink diamonds. While most of the diamonds are pink in color, it still produces a notable portion of the world's champagne brown diamonds.

Angola is famed for low grade white diamonds. Yellow diamonds (aka Canary diamonds) and brown diamonds can also be found.

Arkansas, United States is known for canary yellow diamonds, purple, blue, and browns. This is the only diamond

mine opened to the public.

The orange and yellow diamonds get their colors from Nitrogen atoms within the atomic lattice of the diamond. The blue light is absorbed and the yellowish hues are reflected.

The purple colored diamonds are produced by the presence of hydrogen in the atomic structure of the lattice of the diamond.

The blue diamond's get their color from the element boron being present in the lattice of the diamond.

The red, pink and brown diamonds owe their color to a combination of intense pressure and heat. While still buried deep within the earth, these factors cause distortions in the crystal lattice that absorb green light, thus reflecting a pink hue. The ultra-rare red diamond is just a deeply colored pink.

The green diamonds don't get their color until the last leg of their journey to the earth's surface that diamonds get their green color. Just as they are about to leave the uppermost layer of the crust, these stones absorb naturally occurring radiation, which causes them to reflect a green hue by absorbing red and yellow light.

Diamonds are also color artificially. The idea is to take diamonds with colors that



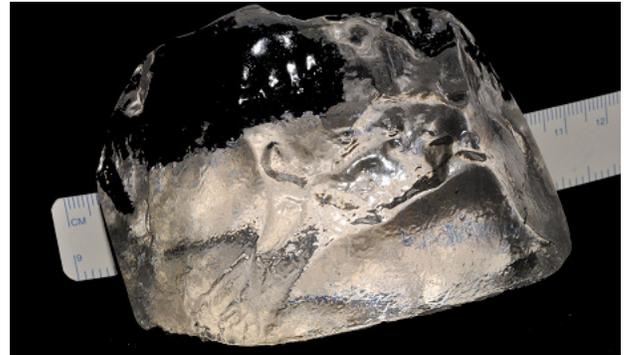
are not desired - like pale yellows - and to enhance it dramatically (pale yellow to vivid yellow) or even to change it altogether to blue, purple and red.

The main methodology is called HPHT - High Pressure High Temperature. Interestingly, this same procedure that is used to enhance to strong colored diamonds can be also used to "paint" colorless diamonds. Taking cheap very light brown diamonds and turn them into D colorless diamonds.

In recent years, the *chocolate diamonds* have hit the market. Thirty years ago, these diamonds would have been used as cheap diamonds in industrial equipment because they didn't have the "shiny sparkle" people were accustomed to. Now, they are being marketed as an acceptable sparkler piece of jewelry.

In 1888, Cecil Rhodes found De Beers Consolidated Mines which made De Beers the sole owner of the all the diamond mining operations in South Africa. The name came from the original owners of the farm that the mines were located. Rhodes made a strategic agreement with the London based Diamond Syndicate to provide a fixed quantity and quality of diamonds each year for a given price. This gave him a monopoly on the diamond industry. By buying up all the individual mines in process as they became known, he was able to maintain that monopoly. To this

day, De Beers has maintained that monopoly through controlling how many diamonds they release to the market.



The largest diamond ever discovered is the **Cullinan diamond**, which weighed in at 3106 carats before cutting and polishing.



Field trips coming up, lets go digging!!!

DMC Program of the SFMS Field Trip Committee

**DMC Program of the SFMS
Field Trip Committee**

**An Official Field Trip of the Huntsville
Gem & Mineral Society (Huntsville,
AL)**

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



Saturday, April 16, 2016
Hogg Mine
Troup County, GA
9:00 AM - 5:00 PM

FEE SITE

TRIP: The Hogg Mine started out as the Oxford Mine in 1942 to mine beryl to produce beryllium. Commercial operations shut down in 1960. The site has been opened off and on since then for specimen mining and is currently managed by Chris Painter. It is a surface mine approximately 650 feet long with an east – west orientation.

COLLECTING: The parking area is at the east end of the pit. As you enter the pit from the parking area there is a trench approximately 150 feet long and to your right. Here have been pockets of green Aquamarine beryl with some large single specimens. As you enter the main pit area, there is a tailing or spoils pile to your left that came out of the pit in front of you. There has been several large nice gemmy Aquamarine beryl specimens come from this area. The main pit in front of you has a plethora of treasures - Rose Quartz, Smoky Quartz, banded Quartz, Beryl in matrix with the quartz, Tourmaline in matrix with the quartz, etc. The last area of note is at the western end at the back of the pit. There has been a new smaller pit dug in the last year and some very nice Blue Aquamarine Beryl has been found. The new pit was dug because an old drilling report had indicated that Amethyst was found. There are pieces of Amethyst coming from the new pit. There is a small Tourmaline pit to the north east of the Parking Area.

Note: An aerial map will be available for those that would like to have the above description annotated on the map. (A picture is worth a thousand words.)

FEE: 17 years old and up is **\$35 per person**, 16 years old and younger dig for free. The mine

also cooks hamburgers and hot dogs and has drinks. Lunch plate is \$8.00

BRING: Bring all the tools you have: pick, shovel, screen, rock hammer, hand sledge, rock chisel, bucket, hand cart, etc. The Hogg does sell some tools in limited quantities. It would be a good idea to bring an extra change of clothes. The pit can be muddy and wet.

DIRECTIONS AND WHERE TO MEET:

Where we will meet: Meet at McDonald's at 2408 Whitesville St, LaGrange, GA 30240. This is at Exit 13 on Interstate 85 in LaGrange.

When: I would suggest arriving at McDonalds as early as 8:00 am, although you can arrive earlier. This will give you time to pay and fill out the required paper work. At 8:15 am the first caravan will be going to the mine. The first to arrive and sign in will be in the first caravan. The mine is approximately 3 miles from McDonalds. If you do arrive late and no one from the mine is at McDonalds, text or call the number I have provided below.

Directions and Drive Time: The best way to determine driving directions and time is to enter the McDonalds address above into the directions destination block in Google Maps and enter your home address in the starting point block. For hotel information please contact me.

CONTACT: Brian Burgess Cell#: (256) 479-2993 Email: bburgess771@gmail.com

Graves Mountain, Lincolnton, GA

8 am to 6 pm, Friday, April 22, 2016

8 am to 6 pm, Saturday, April 23, 2016

8 am to 6 pm, Sunday, April 24, 2016

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.

Minerals to be found: Collecting Rutile, Kyanite, Lazulite, Iridescent Hematite, Pyrophyllite, Pyrite, Ilmenite, Fuchsite, Barite, Sulfur, and rarely: variscite, woodhouseite, crandallite, strengite, phosphosiderite, cacoxenite, blue quartz, quartz crystals, etc.

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 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.

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!

In order to gain access, (except for the two yearly "Rock Swaps and Digs") you will need to contact the caretaker, Clarence Norman, Jr (Junior) at 706-401-3173 (his business) or 706-401-3173 (his cell). Give him a call and he can reserve the mountain exclusively for your group. All of the mineral societies that come here to collect, offer the caretaker a donation for his trouble and effort in keeping the mountain open and assessable to them. Please consider what it is worth to your mineral society to be able to field collect minerals at Georgia's premiere mineral location!

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 CHILDREN WILL BE ALLOWED DURING



THE "Rock Swap and Digs" IF EACH CHILD IS UNDER STRICT ADULT SUPERVISION!

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 REPELLING 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.)

SPECIAL CONDITIONS: SAFETY

CONSIDERATIONS—WEATHER: This location can become an unbearably hot place during summer months in Georgia. Most local mineral societies restrict their collecting trips here to September through May. If you decide to venture here during the hotter months, take precautions to avoid heat stroke. Enough said!

QUARRY SAFETY: 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 pit 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 are not allowed.

Children younger than 12 are discouraged because of all the dangers involved at this quarry.

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

All reported violations will be held in strict confidence.



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



Iridescent hematite- Graves Mountain, Georgia



**An Official Field Trip of the
Jacksonville Gem & Mineral
Society (Jacksonville, FL) (HOST)
An Official Field Trip of Mid-Ga.
Gem and Mineral Society**

**Saturday, April 23, 2016
Jacksons Crossroads Amethyst
Mine
Wilkes County, GA
8:00 AM
Fee Site**

TRIP: The Jacksons Crossroads Amethyst Mine of Wilkes Co. Georgia is the premier Amethyst locality in the United States. It consistently produces world class specimens and crystals that are justifiably celebrated for its pure rich purple color reflecting red and blue flashes. In 2008 the Jacksons Crossroads Amethyst Mine was included in the American Mineral Treasures as one of the most important collecting sites in American mineral history. Many museum quality specimens have been produced by this mine which now reside in museums and prestigious private collections across the world.

COLLECTING: The North American Jacksons Crossroads JXR Georgia mine is known for producing high grade, dark purple with red flash collectible amethyst clusters, amethyst rough and amethyst mineral crystals. Other gemstone specimens such as clear quartz clusters form in our deposit as well.

FEES: \$20.00 per adult and children under 16 are \$10.00

TOOLS: Boots. Rock hammers, picks, bamboo sticks (chop sticks) and wedges are needed for digging in piles and breaking open granite to find specimens. First aid kit. Water to keep hydrated and snacks. Sunscreen. Bucket for collecting.

FACILITIES: There are Porta-potties available and those who wish to camp can camp at Calaway plantation or there are hotels accommodations in Washington or Elberton GA.

**DIRECTIONS AND WHERE TO
MEET:**

Where we will meet: we will meet at the mine at 8am where we will sign waivers upon arrival and the host director will review the rules then we will proceed to the dig site.

Directions: From Tignall, turn off of HWY 17 onto Independence Rd. Head west on Independence rd. (Co. Rd. 184) about 7.8 miles and turn right at the church onto Hollis Norman Rd. The mine is the 2nd entrance on the right.

CONTACT: James Webb 904-314-0303 jameswebb.jgms@gmail.com

Note: The Graves Mountain Rock Swap & Dig is the same weekend, so since you will be in the area, you may want to take time to do both -- DMC



**Amethyst on Quartz, Jackson Crossroads,
 Wilkes Co., Georgia**

Southeastern Gem & Mineral Shows

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 per
 Family, Scouts in uniform free.

Info Jane Volk - lexgemshow@outlook.com,

Allen Ferrell -

kyrock2010kentucky@yahoo.com,

or www.bggamc.homestead.com.

April 23-24, 2016

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 23 9-6:00 and Sunday, April 24
 10-5,

Dealers, Exhibits, Demonstrations, Grand and
 Hourly door prizes. Kids Area with Rockzone
 featuring Gem Dig, Geode Bowling, and Rocks
 Around the Clock. Adults \$5.00, 2 day pass
 \$8.00, Children 12 and under \$2.00.

Scouts in uniform Free

web: www.TheEarthWideOpen.com, email
info@theearthwideopen.com.

Show Chair James Butchko 901 743-0058

Dealer Chair WC McDaniel 901-274-7706,
 901-490-3575

TIDBITS

Common Myths about Diamonds

By: Fred Cuellar, author of the best-selling book
 "How to Buy a Diamond"

Diamonds are very rare - Nope! There is more of a
 manmade shortage than a natural shortage. The
 distribution of the number of diamonds put on the
 market each year is highly regulated. There are
 really enough diamonds to give each man, woman
 and child in the United States a whole cupful.

A Diamond is the Most Expensive Gemstone - The
 truth is there are quite a few more expensive
 gemstones on the market. For example, a top
 quality ruby can be worth over thirty thousand
 dollars a carat.



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

Vice President: Phillip Hargrove, 478-862-5327
 Cell 478-550-8199 susanbphilh@pstel.net

Secretary / Photographer, Richard Arnold,
 ph. 678-682-9860 rarnold216@charter.net

Treasurer: Susan Hargrove, 86 Clear Branch Rd,
 Butler Ga. 31006, ph. 478-862-5327,
susanbphilh@pstel.net

Editor / Programs: Jay Batcha,
 4220 Cyndy Jo Circle, Macon, Ga. 31216,
 ph. 478-784-1965, Cell 478-957-5002
rocky1s@cox.net

Education Chairperson: Tuell Walters,
 ph. 478-922-7200
supernova1346@gmail.com

Stamp Program: Ron Davis, ph. 478-788-2616

Club year begins November 1st, 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

Jay Batcha, Editor
4220 Cyndy Jo Circle
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Save Commemorative Stamps