



May Meeting  
 At the Museum of Arts and  
 Sciences on Monday,  
 June 06, 2016 at 7:30pm.

Jim Souter will be our speaker this month. Jim will be talking on mineral identification. He will cover the basic things to do to help you identify your newly found unknowns!



**Our next meeting after the June meeting will be**

**Tuesday, September 5<sup>st</sup>, 2016**

Summer break for July and August, also the next newsletter will also be the September newsletter, but I will email you any field trips and important news that comes up.

By: Jay Batcha

## President's Message

I would say we had a good picnic even if we were short a few people. They were missed. But we did have a good turnout though and a good auction. It was good seeing members we don't usually get to see though. Congratulations to Michael Runzi and Phil Hargrove on winning the two surplus scholarships to either William Holland or Wildacres. We had a good turnout last meeting. Jose Santamaria gave a good program about the development of the latest *Minerals of Georgia* and the history of it. I would encourage everybody to obtain a copy of the book for their own library.

With the warmer seasons moving quickly in on us, I would like to remind everybody to watch out for the common dangers and hazards out there. The obvious is the presence of snakes. Be careful of where you reach or step. Georgia is has a nice collection of rattlers, moccasins, copperheads and a few other snakes.



Eastern Diamondback Rattlesnake



Timber Rattlesnake



Cottonmouth (Water Moccasin)



Corral Snake



Copperhead Snake



Pinyon Rattlesnake

Besides the snakes, you have to watch out for the following plants;



Poisonous Sumac



Poison Ivy



Poison Oak

Please be careful when out in the woods and be careful of what you touch and where you step. With all the places we go and dig, any of the mentioned items could be found. Make sure you take your bug spray with you so as to keep the mosquitos at bay.

Also, make sure you take plenty of sunscreen. Have fun and be careful when out there. Be aware of your surroundings and be safe please.

Jim  
 jgsouter@windstream.net  
 478.454.7273



## Winners of the Very Big News

The Mid-Ga Gem and Mineral Society received 2 free scholarships for lapidary classes at Wildacres or William Holland School of Lapidary Arts.

These scholarships were given to us by Southeast Federation through the Stamp Program. The Stamp Program is being discontinued and they giving out the remaining money in the account and our club received 2 of the scholarships.

The drawing for the 2 free scholarships was at our annual picnic and the winners are;

*Drum roll please!!!!!!!*

**Phil Hargrove and Michael Runzi**



## Annual Picnic has come and gone!

The club annual picnic was on **May 07, 2016**. We had 19 people at the picnic and profusion of good food! After stuffing our stomachs with the many tasty morsels, the silent auction bidding heated up.

Ray Hill owner of the Great South Gems and Mineral Company and a member of our club, donated a lot of minerals, fossils, and meteorites to our club. Many of these items were put into the silent auction. The bidding was intense and when the dust cleared and the money counted. We raised \$460.00 dollars for Mid-Ga GMS. This is the best ever for the picnic silent auction! Thank you, Ray Hill and everyone else for your donations to the silent auction.

*By: Jay Batcha*



## May Meeting Minutes

The meeting was called to order by Jim Souter our president at 7:33 pm. There were 23 members/guests present. The mineral of the month was emerald and several nice specimens were brought in and discussed by the members. The treasurer's report was read and approved.

### Old business

Our prayers go out to Ron Davis who recently underwent open heart surgery.

### New business

The Rock Swap at the Tellus museum will be held June 11th and 12th.

We will be setting up a display at museum of science on June 18th and July 30th. Volunteers have been acquired for this endeavor.

The speaker for the evening was Jose Santamaria, the director of the Tellus museum. He gave a talk on the history and development of the museum from the early times until the current new building. The museum has quite a diversity of subject matter including rocks, minerals and even early automobiles. It also includes some exhibits from space capsules and a moon rock. The museum is affiliated with the Smithsonian Institute and also NASA. He provided two of the recent books for sale: 50 Coolest Things at Tellus and Minerals of Georgia, their properties and occurrences. The talk was quite informative and included a slide presentation.

The meeting was adjourned at 8:26pm.

By: Richard Arnold



## Need Help for an Event

The Museum of Arts and Sciences would like our club to setup a table or two on two different **Saturdays, June 18<sup>th</sup> and July 30<sup>th</sup>**. It is sort of open ended what we can do. The museum would like us to be there for at least 5 hours each time and do some type of hands on thing. Some possible things are Rock and Mineral ID, a show and tell, how to make things with rock like gem trees or cabochons, looking at micro-minerals with a microscope just to name a few things. We need 4 people at least to work each day. We will not be doing a presentation as such; people will just be stopping at our tables throughout the day. So, mark your calendar and help out. Please call Jay at 478-957-5002 if you can help.

## Minerals of the Month (June Birthstones) Moonstone, Pearl, and Alexandrite



## Moonstone

Chemical formula:  $(\text{Na,K})\text{AlSi}_3\text{O}_8$

Hardness: 6.0 Mohs

Luster: Opalescent

Streak: White

Color: blue, grey, white, pink, peach, green, brown

Family: Feldspar variety

Moonstone was the original or traditional birthstone for June before it was changed in the early 1900's to Alexandrite.

Moonstones were named by the Roman historian Pliny who contended that the stone changed in appearance with the phases of the moon. While this is not precisely correct, like Alexandrite, moonstones do indeed change visual properties in different light. They create an optical phenomena called adularescence which is a scattering of light that typically displays as either a multi-rayed star or a cat's eye. This occurs because moonstones are formed from two varieties of feldspar that each react slightly differently to light. Moonstones come in a variety of colors including blue, green, peach, and champagne. They are said to possess special properties which grant the wearer good fortune and they are considered a sacred stone in India. Moonstones can be sourced in India, Myanmar, Australia, Madagascar, and the United States.

Moonstone is composed of two feldspar

species, orthoclase ( $\text{KAlSi}_3\text{O}_8$ ) and albite ( $\text{NaAlSi}_3\text{O}_8$ ). The two species are intermingled. Then, as the newly formed mineral cools, the intergrowth of orthoclase and albite separates into stacked, alternating layers. When light falls between these thin, flat layers, it scatters in many directions producing the phenomenon called adularescence (a milky, bluish luster or glow originating from below the surface of the gemstone).



Rough moonstone

## Pearl

Pearl is also a birthstone for June.

It is one of the few gemstones that has organic origins.

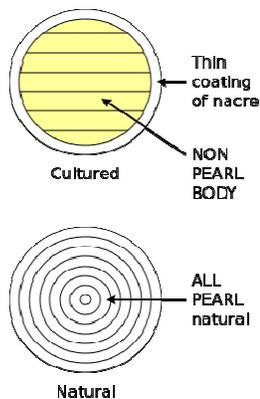
The pearl comes from the shelled mollusk. In nature, when a bivalvial creature, be it an oyster or a clam or some other mollusk gets an irritant in its shell, it begins to secrete a calcium carbonate solution to try to smooth the irritant. When you cut a pearl in half, you will find there are layers of the calcium carbonate and conchiolin.

Conchiolin is an organic macromolecule



that consists of proteins and polysaccharides that form the microenvironment where the crystals nucleate and grow. This compound also holds and binds the crystals of aragonite to give their shells their stiffness. Natural pearls are rare in nature. Hundreds of pearl oysters may have to be harvested and opened to find a single pearl.

Cultured pearls are formed when a selected irritant is placed inside the oyster or bivalve and returned to the water. After a given amount of time, usually 2-3 years, they are retrieved and opened to harvest the newly formed pearl.



By Dlhrohrer2003 (Own work) [CC0], via Wikimedia Commons

Chemical formula:  $\text{CaCO}_3$   
 Color: white, pink, silver, cream, brown, green, blue, black, yellow, and purple.  
 Mohs scale: 2.5- 4.5  
 Streak: White  
 Pearls are weighed by the Japanese standard of the momme. 1 momme = 3.75 grams or 3750 milligrams. Though millimeter size range is typically the first

factor in determining a cultured pearl necklace's value, the momme weight of pearl necklace will allow the buyer to quickly determine if the necklace is properly proportioned. This is especially true when comparing the larger south sea and Tahitian pearl necklaces.

The Hope Pearl: Most likely the largest and most famous natural saltwater pearl ever discovered, the Hope Pearl, is an astonishing gem. The pearl weighs 1,800 grains (450 carats), or approximately 4 ounces! The Hope is a white, drop-shaped blister pearl, measuring approximately 2 x 4 inches, and ranging in color from greenish-gold on one end to white on the other.



The Hope Pearl

## Alexandrite

Formula:  $\text{BeAl}_2\text{O}_4$   
 Member of the *Chrysoberyl* family.  
 Crystal system: *Orthorhombic*  
 Color: Shades of green, yellow, brown to



greenish black - may appear raspberry red under incandescent light, may appear shades of yellow, green or red in transmitted light.

Found in the Ural Mountains in Russia, Brazil, India, Madagascar, Tanzania and Sri Lanka. It can appear green in daylight and then red under incandescent light. Other varieties may appear yellowish or pink in daylight and

raspberry red in incandescent lights. The stronger the color change, the more popular or sought after the stone will be. Stones over 3 carats are very rare.



Rough, uncut Alexandrite



Left side is daylight  
 Right side is incandescent light



**Some field trips coming up, time to do some digging!!!**

**An Official Field Trip of the Columbia Gem and Mineral Society (Columbia, SC) (HOST)**  
**An Official Field Trip of the Mid-Ga Gem and Mineral Society**

**Thermal City Gold Mine**  
**Union Mills, NC**  
**Saturday, June 4, 2016**  
**8:30 AM EST**  
**Fee Site**

**TRIP:** Thermal City Gold Mine is a recreational gold and gem mining facility in Union Mills, NC. Thermal City Gold Mine offers a unique experience hosted by people who are real prospectors. They are dedicated to keeping the tradition and history of Gold Mining in North Carolina alive. Anyone who wants to pan or prospect for gold is welcome. They enjoy teaching and talking about mining.

**COLLECTING:** Gold collecting at Thermal City is done by panning in the flumes or river or by sorting a load of material using the trommel or hi-banker machines and then panning the effluent.



The flumes are covered so you can mine rain or shine. This activity is enjoyed by miners ages 3 to 93. Pans and screens are provided with the panning fee. You can also pan for gold in the river. In this case, bring your own pan and screen, although supplies are available for sale in the mining supplies store.

For the trommel and hi-banker runs, a one-ton load of material is provided. The material is run through the machines to separate the large rocks from the fine sandy material that contains the gold. With the trommel, the material is placed in the hopper and a water hose is used to push it through the machine. The larger rocks are moved aside and sand comes out of the end of the sluice which is collected in a wide-mouth bucket. This sand is then panned to sort out the gold. With the hi-banker, the material is delivered near the machine and is shoveled into the hopper which has water running through it. The rocks are held by the grates as the material moves down the sluice and the sand comes out the end, also into a wide-mouth bucket. This sand is then panned to sort out the gold.

Typically groups of 3 to 5 share the work and the gold resulting from a trammel or hi-banker run. One trommel and one hi-banker has been reserved for the morning of June 4, from 9:00 to 12:30 for the DMC field trip. Please email or call the contact below if you wish to sign up to share one of the runs. Afternoon runs, from 1:00 to 4:30 are also available. You may reserve these by calling the Thermal City Gold Mine.

Gem collecting is also offered by sorting through buckets of material. The gem stone material found here is representative of

minerals found in NC such as emerald, citrine, moonstone, rubies, aventurine, smoky quartz, rose quartz, and tourmaline. Stones can be inspected and identified free of charge. You

may have the stones cut and made into jewelry by their experienced gem cutter.

**FEES:**

Panning fees for using the flume are \$10.00 per person per day. The fee includes use of pans and screens.

Buckets of gem stone material range in price from \$5.00 to \$75.00.

Trommel and hi-banker runs are \$60.00. One of each of the machines has been reserved for the morning session for this field trip. They can be shared amongst 3 to 5 people. Please email or call the field trip contact below if you wish to reserve a place on the machine.

**Mining Supplies:** Thermal City Gold Mine offers recreational Gem Mining NC and Gold Panning NC equipment for sale. We are an authorized dealer for Keene engineering. We carry hi-banker/dredge combination, prospecting supplies, a wide variety of prospecting books, sluice boxes, gold pans, pumps, and tons more!

**BRING:** Lunch and fluids. Pans and screens are provided for gold panning at the sluice. If you are panning at the river, you may bring your own or purchase supplies at the Thermal City mining supplies store. If you are using the trommel or hi-banker you will need a wide-mouth bucket to collect the sand. You may bring your own or purchase one at Thermal City.



**DIRECTIONS AND WHERE TO MEET:**

The mine opens at 8:30. Meet at the mine at 8:30, tell them you are with the DMC field trip and you may begin when you arrive.

Thermal City Gold Mine  
 5240 US 221 North Hwy,  
 Union Mills, NC 28167

>From Columbia, SC:

Take I-26 north, take exit 1 for SC14 towards Landrum  
 Turn right onto Landum Rd., continue straight onto  
 Sandy Plains Rd. then continue onto Coxe Rd.  
 Turn left onto US-221 N/S Main St, continue to  
 follow US-221 N. The mine will be on the right.

From Atlanta, GA:

Follow I-85 N to Spartanburg County. Take exit 1  
 from I-26 W

Keep left at the fork to stay on I-85 N  
 Use the right 2 lanes to take exit 70 to merge onto  
 I-26 W toward Asheville

Take exit 1 for S Carolina 14 toward Landrum  
 Turn left onto US-221 N/S Main St, continue to  
 follow US-221 N. The mine will be on the right.

**ACCOMMODATIONS:**

Cabins and campsites are available at Thermal City  
 Gold Mine.

Americas Best Value Inn, 4248 Us 221 S, Marion,  
 NC 28752

Hampton Inn Marion, 3560 U.S. 221 South, Marion,  
 NC 28752

Holiday Inn Express Forest City, 200 Holiday Inn Dr.,  
 Forest City, NC 28043

Comfort Inn, 178 Hwy 70 W, Marion, NC 28752

Travelers Inn and Suites Forest City, 2600 Hwy 74a,  
 Forest City, NC 28043

**CONTACT:** Angela Valvasori, President, Columbia Gem  
 and Mineral Society

Home: [803-419-2923](tel:803-419-2923) Cell: [803-960-6667](tel:803-960-6667)  
[thebears@earthlink.net](mailto:thebears@earthlink.net)



**Mark Your Calendar**

**Southeastern Gem &  
 Mineral Shows**

**June 4 & 5, 2016**

**Tannehill Historical Ironworks State  
 Park, Alabama**

**The 43rd Annual Tannehill Gem,  
 Mineral, Fossil, & Jewelry Show**  
 Alabama Mineral & Lapidary Society

Saturday June 4 and Sunday June 5,  
 9am to 5pm

12632 Confederate Pkwy, McCalla, AL  
 35111

The show is free with paid admission to the  
 park. We will have door prizes, children's  
 games and demonstration classes.

I-59/20 to exit #100 or I-459 to exit #1 and  
 follow the signs to Tannehill.

Showchairman: Cathy Kellogg  
[tannehillgemshow@gmail.com](mailto:tannehillgemshow@gmail.com)  
<http://www.lapidaryclub.com/>

**June 13 and 14, 2015**

**Cartersville, GA**

**Tellus Science Museum**

**Gem & Mineral Show and Sale**

Saturday 10 AM – 5 PM; Sunday 10 AM – 5 PM

Tellus Science Museum



I-75 at exit 293, directly behind the Clarion Inn  
Calling all rock hounds, jewelry collectors,  
families and everyone fascinated by the Earth's  
treasures! RockFest returns to Tellus for two  
full days that will delight the whole family.  
Mark this indoor/outdoor event as a summer  
"must-do" on your calendar.

Dealers from all over the country will bring  
their wares for you to browse. Some will  
feature rare and exotic jewelry, while others  
will showcase ancient fossils or colorful  
specimens. You will have an opportunity to  
purchase a one-of-a-kind find at this unique  
festival of merchants. And what's even better?  
Most dealers will also honor the Tellus  
member discount – that means members save  
10% off your purchase! Dealers will be set up  
outside on the back lawn and inside the  
Museum in the Banquet Rooms.

Hourly door prizes;

Free mineral specimens for the first 200 guests  
each day;

Bring your mystery mineral specimen for free  
mineral or fossil identification;

Kid's activities;

Show contact: Mary Vinson, Event  
Coordinator, (770) 606-5700 ext 402

Email contact: [maryv@tellusmuseum.org](mailto:maryv@tellusmuseum.org)

## **Tidbits**

### **NICE GNEISS**

by Ray Hill  
2014-03-26

Pronounced "nice", this is an excellent  
specimen of the process referred to as  
Gneiss. Many years ago at one of our local  
rock club meetings we had a professor  
from the University of Georgia speak to us  
about "Gneiss" rocks. He explained that as  
"birds of a feather flock together", the

process Gneiss is one in of which like  
minerals go through a metamorphic  
process and come together in layers or  
bands. I thought that was a pretty good  
explanation. Wikipedia states that Gneiss  
rocks are "common and widely distributed  
type of rock formed by high-grade regional  
metamorphic processes from pre-existing  
formations that were originally either  
igneous or sedimentary rocks." This  
process takes place deep within the earth  
where time, heat, and pressure caused  
minerals of a type to come together.  
Gneiss is coarser than schist and has  
distinct banding. This banding has  
alternating layers that are composed of  
different minerals. The minerals that  
compose gneiss are the same as granite.  
Feldspar is the most important mineral that  
makes up gneiss along with mica and  
quartz. Granite is commonly used by man  
as paving and building stone. Ray and his  
grand-son Spencer collected this material  
recently.



Gneiss



**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](mailto:jgsouter@windstream.net)

**Vice President:** Phillip Hargrove, 478-862-5327  
 Cell 478-550-8199 [susanbphilh@pstel.net](mailto:susanbphilh@pstel.net)

**Secretary / Photographer,** Richard Arnold,  
 ph. 678-682-9860 [rarnold216@charter.net](mailto:rarnold216@charter.net)

**Treasurer:** Susan Hargrove, 86 Clear Branch Rd,  
 Butler Ga. 31006, cell. 478-837-5327,  
[susanbphilh@pstel.net](mailto: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](mailto:rocky1s@cox.net)

**Education Chairperson:** Tuell Walters,  
 ph. 478-922-7200  
[supernova1346@gmail.com](mailto:supernova1346@gmail.com)

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

**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**

Jay Batcha, Editor  
4220 Cyndy Jo Circle  
Macon, Ga. 31216

Save Commemorative Stamps