



**March Meeting**  
**At the Museum of Arts and**  
**Sciences on Monday,**  
**April 07, 2014 at 7:30pm.**

I did get a speaker at the last minute last month. We will be watching a tape on Oregon Rockhounding this time - No speaker for this meeting. Bring any Oregon rocks, minerals, and fossils. So we can see what Oregon has to offer.



### **Annual Picnic coming soon, DATE CHANGED!**

The club annual picnic will be on **May 03, 2014**. We decided and voted at the March meeting to move it this year to the first of May to see if it would work better. It has been so hot the past couple of years during the picnic. Also, we are hoping the cooler weather would mean more members would

attend the picnic. It will be starting at 11:00 am at the Ocmulgee Indian Mounds. It will be held at the picnic tables by the museum parking lot. We will be having a silent auction during the picnic. We had a lot of fun with the silent auction in the past years

The club will furnish the barbeque and paper products. Everyone should bring a covered dish, your drinks, and a couple of items (more if you want to) to put in the silent auction, it can be rock related or not. So everyone come and have a good time. See you there and may the high bidder win!

### **President's Message**

Please take note of the change in the date of the annual picnic. Maybe, this time of the year it will be cooler! Bring a friend with you to this awesome event.

We had a good turnout at our last meeting. The museum thanks everyone how donated fossils for the sandbox screening they are starting up for the children.

Let's all be safe. I don't think I can or ever will stop emphasizing that and remind people to be careful.

Bring a friend with you to the next meeting and let's all have fun.

*By: Jim Souter*



## March Meeting Minutes

The meeting was called to order at 7:32 PM by our president Jim Souter with 19 members/guests present.

### Old Business

The treasurers' report was read and approved.

### New Business

Our own club sponsored dig is coming up on March 8th weather permitting at the Clinchfield mine near Perry. We will be gathering at one of the North side parking lots at the Perry national fairgrounds and leave promptly at 9:30. Hard hats and sturdy shoes are required for this dig. Examples of the types of fossils were available to view from the upcoming dig site.

The mineral of the month is Smithsonite. The members presented some nice specimens that were displayed and discussed.

It was brought up and voted upon to change the date of the annual picnic which is now scheduled on Saturday May 3rd.

Carl Joyce was our visiting speaker. He is a Land Management Senior Geologist with the KaMin Company which bought out the JM Huber operations. He gave a talk on the Kaolin clay mining processes accompanied by a nice slide presentation. It showed the locations and interests around the world. It turns out that Kaolin clay is only found in quantity in a handful of locations worldwide with the one of the largest located in Georgia. The talk was quite informative and provided some interesting insights into how important the mineral is in a lot of ordinary products primarily in the paper industry. A question and answer session was provided at the end of his talk. A great thanks once again goes out to Mr. Joyce.

The meeting was adjourned at 8:47 PM.

**By: Richard Arnold**



## A Repeat Request for Fossil Material

The Museum of Arts and Sciences has asked if anyone has any kind of fossil material that they may be able to donate to the museum. They have an area where children can dig and screen for fossils. The children get to keep what they find. The Museum needs the fossil material to replenish the hunting grounds. They do not care what type of fossil material it is any kind will do.



Sulfur, Yellowstone National Park, Wyoming.

## Mineral of the Month Sulfur

Sulfur (spelled sulphur in some countries) can make a very beautiful mineral specimen, and fine quality examples are much sought after. The unmistakable deep yellow color is not matched by any



other mineral and the nicely shaped crystal forms of sulfur add to its attractiveness.

Many people don't like the smell of sulfur, which is not quite accurate, as sulfur itself has essentially no scent. As for the odor we detect, this occurs when water (including humidity in the air) mixes with the sulfur and a small amount of hydrogen sulfide (H<sub>2</sub>S) gas is produced. Although only small amounts of H<sub>2</sub>S form this way, it is a powerful odor producer and is the dominating contributor to the odor of rotten eggs. Rest assured, though, that most specimens of sulfur, when kept dry, do not emit a strong odor and this is not difficult for collectors of fine sulfur specimens to insure.

Sulfur easily burns in air with a blue flame, releasing the oxide which not only has a strong, distinctive odor (associated with brimstone, an ancient name for sulfur), but the sulfur dioxide gas reacts with moisture in the lungs and nasal passages, turning into toxic sulfuric acid.

Sulfur melts easily at a temperature only slightly above the boiling point of water. The color of molten sulfur is yellow at relatively cool temperatures (116 degrees Celsius or 240 degrees Fahrenheit), but gradually turns blood-red as it is heated to 200 degrees C / 400 degrees F, by which point the initially runny liquid has thickened due to polymerization.

Note that sulfur is quite brittle, and handling should be minimized. Rapid temperature changes can cause

cracking - even holding a cool specimen in a warm hand may break it.

### **History:**

Sulfur was known in ancient times, and was identified by the Chinese as early as the sixth century BC, and extracted from pyrite ore by them in the third century BC. It was used by the Egyptians as a cosmetic agent. Within the Bible, in the Book of Genesis, the text terms burning sulfur as brimstone. Pliny notes the place of most abundant ancient occurrence as the [Aegean](#) island of Milos.

In 1777, Lavoisier in 1777 established that sulfur is an element rather than a compound. Major deposits of sulfur were found in Texas and Louisiana in the latter nineteenth century, and the Frasch process was subsequently developed to extract sulfur from these ores.

### **PHYSICAL CHARACTERISTICS:**

**Color** is a strong yellow color in thick crystals and duller yellow in small crystals to pale yellow in massive or powdery forms. Can also be reddish or greenish yellow with impurities.

**Luster** is vitreous to more often resinous or earthy in massive forms.



**Transparency** is transparent to translucent.

**Crystal System** is orthorhombic;  
2/m 2/m 2/m

**Crystal Habits** include mostly massive or powdery forms but well shaped blocky crystals are common. Crystals can be made up of two dipyrramids, one with steeper faces than the other, prisms and/or pinacoids in various combinations.

**Cleavage** is very poor in two directions.

**Fracture** is conchoidal.

**Streak** is yellow.

**Hardness** is 2.

**Specific Gravity** is 2.0 - 2.1 (well below average)

**Other Characteristics:** odor (see above), poor heat conductivity makes it brittle when heated and can actually crack if held tightly in a person's hand.

**Notable Occurrences** include Michigan and Ohio, USA; Sicily; Poland and Chile.

**Best Field indicators** are color, odor, heat sensitivity, lack of good cleavage and crystal habit.

BY: [www.galleries.com](http://www.galleries.com) Amethyst Galleries, Inc. Also by: <http://www.eoearth.org/>



*NATIVE SULFUR, Girgenti (Agrigento), Sicily, Italy*



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

**An Official Field Trip of the Memphis Archaeological and Geological Society (HOST)**

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

**9:00 AM TO 3:00PM(CST)**

**Saturday, March 29 , 2014**

**Sugar Creek near Millington, TN**

**Where:** Sugar Creek near Millington, TN

**Assembly Time:** 9:00 am (CST) Popeye's is located in front of Walmart at 8845 U.S. 51, Millington, TN.

**Corner street is Wilkersville Blvd.**

**Sugar Creek** is located about 20 miles north of Memphis, TN and 10 miles north of Millington. We will assemble and depart Popeye's parking lot at 9 am Central Standard Time. We will caravan to the collecting site. There are multiple motels located on



Highway 51 in Millington. Majority within one mile of meeting place.

**Collecting:** This will be the DMC first trip to Sugar Creek. The creek begins at the Mississippi River and meanders around 5-6 miles through West Tennessee loess hills. Along the creek are multiple gravel bars. Primary collecting will be at these gravel bars. Material will be agate, jasper, chert in multiple colors and banding, fossil chert and petrified wood. Rare finds include Lake Superior Agates, Ice Age fossils such as horse and bison, and mastodon has also been found in area. Material is excellent for tumbling and lapidary work,

**Collecting Conditions/ Tools:** Creek collecting. You must wade (get wet) in order to access many of the gravel bars. Recommend boots or water proof shoes or a change of shoes/socks. No digging required. Recommend walking stick. Stick with a metal point is good for checking for petrified wood as it will sound like glass when poked. Also recommend backpack, fanny packs and/or plastic buckets although five gallon buckets can be cumbersome in creek collecting. Children are ok. However, they must be supervised and in direct contact/site of an adult at all times.

**Weather** - Weather in late March is unpredictable and may vary. Be prepared. If there is adverse conditions. The host club will make every effort to inform attendees. Check club site [www.memphisgeology.org](http://www.memphisgeology.org) for updates. **IMPORTANT NOTE.** If heavy rains make the creek inaccessible or unsafe for collecting we will move the collecting trip to the Memphis Stone and Gravel pit which is near Millington. It will not change or alter the meeting time or location

**Special note:** The host club, The Memphis Archaeological and Geological Society, will

provide drinks, snacks, dry socks and special awards/prizes for your creek finds.

**Directions:**

**Traveling west 1-40 from Nashville**

- Take TN-385/TN-205 exit, EXIT 24-25, toward Millington/Arlington/Collierville
- Take Exit 24 toward Millington 17 miles to Highway 51

- Merge -51 N/US-51 N/TN-3 N toward Millington
- Travel 3.6 miles to Popeye's is on the left

**Traveling north I-55 from Mississippi**

- Travel north on 1-55
- Follow directions to 240 north
- Take exit 2A on the left toward US-51/Millington.
- Travel 15 miles to Popeye's is on left

**Field trip leaders Charles Hill [901-626 4232](tel:901-626-4232), WC McDaniel [901 490-3575](tel:901-490-3575). [w.c.mcd@att.net](mailto:w.c.mcd@att.net).**



Sugar Creek Agate



Reel Amethyst Mine, Lincoln County, NC



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

**An Official Field Trip of the Charlotte  
Gem & Mineral Club (Charlotte, NC)  
(HOST)**

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

**8:00 AM**

**Saturday, April 19, 2014  
Iron City, North Carolina  
Reel "Amethyst" Mine**

**- FEE Site -**

**DIRECTIONS:** Ninety minute drive from downtown Charlotte, NC. From I-485 find Exit 16 West, from Charlotte. Proceed on Hwy 16 Brookshire Turnpike, west to Hwy 73. Take a left on Hwy 73 and travel to Timber Road. Take a left on Timber Rd. and proceed on the asphalt until it becomes a dirt road. Travel on the dirt road until you reach the mine entrance. If the weather is bad, you can stop at Mr. Sulphin's house and park, and walk a half mile to the mine. GPS coordinates are: Longitude -81.124309, Latitude 35.456221

**HISTORY:** Specimen types usually found here, include amethyst, beryl, ironized quartz, smokey quartz, and associated gems and minerals. This mine has been intermittently opened and closed for many years. Mr. Sulphin has recently reached an agreement with the County on how field trips will be

scheduled and conducted. Since the reopening at least one dig has been conducted a month. The Charlotte Gem and Mineral Club (CGMC) has scheduled its planned dig for the Southeast Federation for Saturday, April 19, 2014. To comply with the County conditional use permit, all diggers must be current paid members of an SFMS club which has current liability insurance coverage. Note: All DMC member clubs are required to maintain field trip liability insurance!

**ASSEMBLY:** CGMC officials will be at the mine entrance beginning at 8:00 AM, Saturday, April 19, 2014, to collect the fees and to provide water and instructions for the dig. You will be responsible for bringing any food, digging tools or collection containers for you and/or your party. There will be two porta-potties provided and space is available for camping depending on the weather. If you plan to try and camp, please indicate when you make your reservation!

**COST:** \$25.00 for each digger (children under 13 free when accompanied by a paid digger). This fee will be collected at the entrance in the form of cash or personal check by the CGMC official.

**RESERVATIONS: REQUIRE!!!**

Contact Neil Hohmann at [gisusainc@aol.com](mailto:gisusainc@aol.com) or Chuck Borawa at [chuckborawa@gmail.com](mailto:chuckborawa@gmail.com). Phone contact for Neil Hohmann (704) 752-



2889 or Chuck Borawa at (704) 545-6126

**EQUIPMENT: Hand digging tools (shovels, spades, picks, post holes diggers, forks, rakes, and other similar digging utensils and equipment are to be used. No large electrical drill hammers, backhoe, ditch digger, or motorized digging or drilling equipment will be allowed.**

**Reel Mine is located on the premises of: Mr. Francis Sulphin, 375 Timber Road, Iron Station, NC (704) 736-0506**

**NEW WEBSITE ADDRESS:**

<http://www.amfed.org/sfms/dmc/dmc.htm>

**NEW DMC EMAIL ADDRESS - [sfms-dmc@amfed.org](mailto:sfms-dmc@amfed.org)**

**DMC is a program of the Field Trip Committee of the Southeast Federation of Mineralogical Societies, Inc.**

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**"Earth first...we'll collect on the other planets later."**

**Follow up on the Cemex Quarry field trip on 3-8-14** By: Jay Batcha

We had 42 people on the field trip, 25 from Georgia Mineral Society and 17 from Mid-Ga Gem and Mineral Society. I had invited GMS to join us on this field trip. Calvin talked about safety once we arrived at the quarry shop and warned us that it was very muddy and only trucks and SUV's could make it to the pit. Oh, was it muddy, it took 20 minutes just to get to the pit. Once we arrived at the pit it was not that bad, everyone found some good specimens. We were in the pit a little over 2 hours. After returning to the mining shop most people got to hose off their trucks.



**Fossil Sand Dollar in Martix from Cemex Quarry**



**Richard looking at a specimen in the Cemex pit**



**Tom Batcha's truck afterwards**



## Southeastern Gem & Mineral Shows

**April 26-27, 2014**

**Memphis, TN.**

**Memphis Mineral, Fossil, Jewelry Show**

**Memphis Archaeological and Geological Society**

*"The Earth Wide Open"*

**Memphis International Agricenter, 7777**

**Walnut Grove Rd. Memphis, TN**

**Saturday, April 26, 9-6:00 and Sunday, April 27 10-5**

**Dealers, Exhibits, Demonstrations, Kids Area with Rockzone featuring Gem Dig, Geode Bowling, Rocks Around the Clock. Adults \$5.00, 2-day pass**

**\$8.00, Children 12 and under \$2.00.**

**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**

**[kyanite325@gmail.com](mailto:kyanite325@gmail.com)**

**April 26-27, 2014, Dothan, AL**

**Dothan Gem and Mineral Club 6th**

**Annual Show and Sale.**

**James Grant Recreation Center at Westgate Park, 501 Recreation Road, Dothan, AL.**

**Hours: Sat. 9-5 and Sun. 10-4.**

**Free admission, exhibits, demonstrations, hourly door prizes, silent auction, kids' activities, etc.**

**Contact Arnie Lambert 334-792-7116 or e-mail [alambert@comcast.net](mailto:alambert@comcast.net).**

**See [www.wiregrassrockhounds.com](http://www.wiregrassrockhounds.com)**

## Tidbits

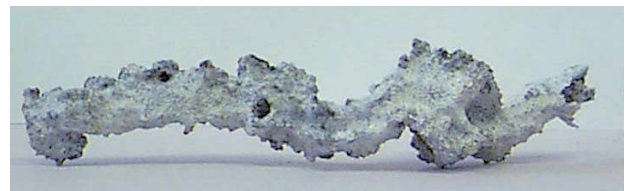
### Fulgurite - Petrified Lightning

Along the ocean beaches, sandy hills or dunes, people sometimes come across a strange hollow tube of cemented sand, sometimes in the shape of a tree branch, sometimes like a small straight rod. This is a piece of "petrified lightning" - created in a fraction of a second when lightning struck the earth and fused the sand particles into silica glass. Scientists call these fragile objects "fulgurites" from the Latin word "FULGUR" meaning lightning.

When a bolt of lightning strikes an area of dry sand, the intense heat, with temperatures as high as 3,272 degrees C, melts the sand surrounding the stroke into a rough glass tube. In as short a time as 100-millionths of a second, a stroke of lightning pierces the earth and leaves this fused record of its searing path. With diameters from 1/2 to 2 inches, some fulgurites are 10 or more feet long, although most are less than a foot.

They are nearly always found in pieces, for the brittle cast breaks easily if jarred, dropped or stepped upon. The inside walls of the tube are glassy and lustrous, while the outside is rough with sand particles adhering to it. They are usually tan or black, but almost transparent fulgurite has been found in Florida. They have been found in almost all parts of the U.S. - anywhere people happen to recognize what they are.

From Cabber Grabber via ESCOMO, Science News, Hy-Grader and Rockwood Rockhound News 9/94



**A Fulgurite**





**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:** Jim Souter, ph. 478-454-7273,  
[jgsouter@windstream.net](mailto:jgsouter@windstream.net)

**Vice President:** Phil Hargrove, 86 Clear Branch Rd, Butler Ga. 31006, ph. 478-862-5327  
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**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  
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Save Commemorative Stamps