

Education News

The following is a list of the materials needed for donations to the Science Olympiad Teams.



SPEAKERS BUREAU:

With school just getting back into the swing of things, the speakers have had an opportunity to take a long needed break. If you will be available to speak to groups in the upcoming school year, please contact me to add your name to the speakers list.

MINI GRANTS:

Each year GMS awards mini-grants to earth science teachers to fund the purchase of classroom supplies or computer models to assist in educating their students in any area of earth science. Please encourage the teachers you know to apply for these grants. Detailed instructions and application forms are available on the GMS website.

SCIENCE OLYMPIAD:

GMS will once again sponsor the Rocks and Minerals Event of the Science Olympiad this coming March at Emory University. In the meantime, coaches and teachers all over the southeast eagerly await your kind donations of rock and mineral specimens to use for instruction when coaching their kids in these events. Donations can be of any size, any quantity, and most importantly, any quality. It doesn't matter if they're banged up, broken up or just plain ugly. The students are going to scratch them, hammer them and pour acid on them anyway! I encourage you to take this opportunity to "high-grade" your specimens from attics, basements and back yards and give to this worthy cause. I will accept donations all through the year, but would like to get as much as I can by the end of August so I will have time to clean, label and distribute them to the teachers well in advance of their events. A list of the needed specimens is given at the right.

The Georgia Mineral Society is the most active, most generous and supportive society I've ever had the privilege of knowing. You are the real gems in our hobby!

Joan White for Anita Westlake, Education Chair

- | | | |
|-----------------|--------------------|--------------------|
| MINERALS | HEMATITE | IGNEOUS |
| ALBITE | HORNBLende | ANDESITE |
| [PLAGIOCLASE] | KAOLINITE | BASALT |
| ALMANDINE | LEPIDOLITE | DIORITE |
| [GARNET] | MAGNITITE | GABBRO |
| AMAZONITE | MALACHITE | GRANITE |
| [MICROCLINE] | MUSCOVITE [MICA] | OBSDIAN |
| APATITE | OLIVINE | PEGMATITE |
| ARAGONITE | OPAL | PUMICE |
| AUGITE | PYRITE | RHYOLITE |
| AZURITE | QUARTZ | SCORIA |
| BAUXITE | [AGATE/ONYX] | |
| BARITE | QUARTZ | |
| BERYL | [AMETHYST] | SEDIMENTARY |
| BIOTITE [MICA] | QUARTZ | ANTHRACITE |
| BORNITE | [CHALCEDONY] | COAL |
| CALCITE | QUARTZ | ARKOSE |
| CELESTITE | [CHERT/FLINT] | BITUMINOUS COAL |
| CHALCOPYRITE | QUARTZ [CITRINE] | BRECCIA |
| COPPER | QUARTZ | CONGLOMERATE |
| CORUNDUM | [CRYSTAL] | COQUINA |
| DIAMOND* | QUARTZ [JASPER] | DIATOMITE |
| DOLOMITE | QUARTZ [MILKY] | DOLOMITE ROCK |
| EPIDOTE | QUARTZ [ROSE] | LIGNITE |
| FELDSPAR | RHODONITE | LIMESTONE |
| [ORTHOCLASE] | SILVER* | [CHALK] |
| FLUORITE | SODALITE | LIMESTONE |
| GALENA | | [CRYSTALLINE] |
| GOETHITE | | LIMESTONE |
| GOLD* | ROCKS | [FOSSILIFEROUS] |
| GRAPHITE | METAMORPHIC | LIMESTONE |
| GYPNUM | GNEISS | [OOLITIC] |
| [ALABASTER] | MARBLE | LIMESTONE |
| GYPNUM | PHYLLITE | [TRAVERTINE] |
| [SATIN-SPAR] | QUARTZITE | SANDSTONE |
| GYPNUM | SCHIST [GARNET] | SHALE |
| [SELENITE] | SCHIST [MICA] | |
| HALITE | SLATE | |

Junior Section Field Trip to Helen, GA and Rafting on the Upper Chattahoochee

The group of intrepid explorers went several times down the Chattahoochee River in Helen, GA, at the last Junior's field trip on August 14, 2005. This guide managed the trip only once, the last time.

We observed first-hand metamorphic rocks in situ and wet and shiny. The group also felt them in the rafts as we floated down-river. (They are harder than the human derriere.) All in all, the trip was small and successful.

Please join us for the next Junior Section Field Trip.

Bill Waggener, Field Trip Guide

An unidentified visitor, Bill Waggener, Alex Lopez and Chris Lopez at the rafting headquarters in Helen, GA.
(photo courtesy of Roxanne Lopez)



THE MICROMOUNT CORNER

Magnificent Mimetite

In the micromount world there are some mineral species that provide endless variety. The mineral mimetite is one of those mineral species. Chemically mimetite is a lead chloro arsenate - $Pb_5(AsO_4)_3Cl$. It is in a solid solution series with the mineral Pyromorphite which is a lead chloro phosphate - $Pb_5(PO_4)_3Cl$. In fact many mimetite specimens are actually intermediate between mimetite and pyromorphite.

The name mimetite is from the Greek "Mimethes" which means "imitato" in allusion to the similarity between mimetite and pyromorphite. Mimetite typically occurs in the oxidized zone of primary lead minerals as a secondary alteration product.

A challenge to the micromount collector is to collect this mineral in all its forms. The crystal system of formation for mimetite is listed as hexagonal-dipyramidal and in fact the typical physical manifestation is as simple hexagonal prisms. However, mimetite can occur as globular or spherical masses, tabular crystals, and reniform or kidney shaped forms. One of the more typical mimetite habits is slender prisms which fan out to knobby ends. These look rather like wheat sheaves. In some cases you can find mimetite as hexagonal prisms with pyramidal terminations. In terms of color, mimetite typically occurs in some shade of yellow to yellow green but has been known to appear as white, orange and red. The photograph shown below left is of mimetite as tiny yellow gemmy crystals with pyramidal terminations from Level 13, El Potosi Mine, Santa Eulalia, Chihuahua, Mexico. (Photomicrograph at 70X taken with Fuji Color film with a 4 second exposure. Light source was a white LED.)



Mimetite

Some other interesting examples of mimetite are the light green globular forms found at the type locality, the Treue Freundschaft Mine, Johanngeorgenstadt, Erzgebirge, Germany. These specimens are hard to find and command a high price from dealers. However, Mimetite from localities in the United States are more readily available. Another example is Mimetite as slender yellow prisms from God's Claim, Silver bell District, Pima County, Arizona. (Photomicrograph at 25X, taken with Fuji Color film with an exposure of 4 seconds. Light source was a white LED)



Of interest in this specimen of Mimetite is the spreading of the crystals at the termination to form what looks like knobby wheat sheaves. As was mentioned earlier, Mimetite can occur in a number of colors. Shown below is an example of Mimetite as orange feathery spays of very tiny prisms. This specimen is from the Rowley Mine near Theba, Painted Rock District, painted Rock Mountains, Maricopa County, Arizona. (Photomicrograph at 25X with Fuji Color film with a four second exposure. Light source was a white LED)

Let me stress again, this auction is for those who help out with the sheds, with lunch and the preparation for the auction. Do not just show up to bid. This should be a fun day. Let me now if you plan to attend.

*Kim Cochran,
Property owner of the sheds*

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Sunshine News
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Happy Birthday to the following GMS members:

OCTOBER BIRTHDAYS

- 10/3 Christine Sharpton
- 10/3 Erik Swanson
- 10/7 Jackie Istvan
- 10/8 Carolyn Madden
- 10/9 Olin Banks
- 10/9 Melissa Calderon
- 10/9 Winston Elston
- 10/19 Lara Rogers
- 10/21 Tony Madden
- 10/21 Margaret Ronan
- 10/21 Kim Cochran
- 10/26 Chip Miller
- 10/28 Dot Hunt



Jay Gorday spent several days in Mississippi assisting friends in recovering their home from the devastation of Hurricane Katrina.

Please send your news you would like to share with the club to the soon to be announced Sunshine Chair.

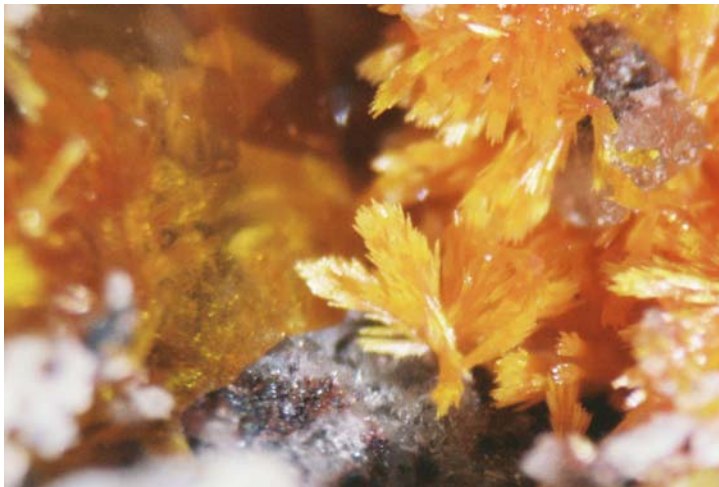
*Joan White,
Temporary Sunshine Chair*

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Planning for Disaster?
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Most of us, especially here in the Atlanta metro area, do not consider planning for natural disasters. In the past weeks, we have given a great deal of thought to our neighbors (and some of our members) in Florida, Alabama, Mississippi and Louisiana. What could have been done to make evacuation and relocation a little easier for everyone? When faced with imminent danger, our logic sometimes takes a hike. We think everyone should have a plan should relocation in a hurry become a necessity.

Keep a current state map in your vehicle. Look at highways out of metro areas aside from the interstate systems. Do you have friends or family that live in an area out of harms way? The best would be a rural location on a well and septic system. Is there somewhere you wanted to visit and just didn't take the time? If so, and funds are available, combine your long awaited trip with the need to leave home. In case of a National disaster, do you know a location with natural potable water? As rockhounds, we are usually very resourceful. If we take time to make a plan, we should be able to survive most anything. Our thoughts and prayers are with our friends affected by this terrible hurricane season.

Bill Waggener and Joan White



One of the more fun aspects of mimetite micromounts is the appearance of several crystal habits within one specimen. This one mineral species can provide many hours of collecting enjoyment. Well it is time for me to mount some more specimens, so until next month, may all your skies be blue and all your vugs are crystal filled.

*David Babulski,
Micromount Section Chair*

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Paint Day/Auction
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On Sunday, October 30th, 2005 at 9:30 AM we will be painting our sheds. Shed one was painted but needs a new coat. Sheds two and three have never been painted.

As an incentive, after the painting, and after lunch, we will have a one hundred lot auction. This auction is not for the general membership. I expect you to help out somehow before hand. There will be no high end items. There will be no junior lots. There will be little jewelry. The bulk of the lots will be specimens and material to cut and polish.

What do we need? Jay Gorday will be getting paint brushes and other items. We will need ladders. I have one step ladder and one extension ladder. We need tables for the auction items, since it will be held in my back yard. Everyone needs to bring chairs. We need lunch type covered dish items. GMS will supply drinks and paper products.

It should not take long to paint the sheds if we have a good membership turn out.

**Graves Mountain "Rock Swap and Dig"
October 7th – 9th, 2005 from 8 AM to 6 PM**

We have been invited to collect at this premier mineral location in Georgia. Clarence Norman Junior, caretaker of the property, will have the mine open from 8 AM to 6 PM for collecting.

All participants must stop at the welcome table to sign a liability release each day, as well as make a small contribution to defray the cost of opening the mountain and providing port-o-lets. There will be several golf cart type vehicles available to transport those participants who have difficulty walking long distances.

The dig will cease and everyone is expected to be off the mountain by 6PM each day. Participants will only be allowed to park in a designated area of the mountain.

Rock Swap and Hot Food and Drinks:

Junior will set aside an area in the upper parking lot for trading each day. Anyone who would like to set up a table please contact Junior at the phone numbers listed below. Hot food cooked on the grill, cold drinks and chips will be available for purchase all three days of this event. Don't forget to bring some extra money to buy a special "Graves Mountain Rock Swap and Dig" t-shirt. This dig is open to all SFMS affiliated clubs and members in good standing. The general public and guests may not attend this event.

Contact Information:

Clarence Norman Jr. - 706.359.3862 (his business) or 706.359.2381 (his home)

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. The entrance is a paved road that goes through a gate and up a hill. There will be some one at the gate to hand out a liability release form to sign and to take a donation for the portable bathrooms, etc.

SFMS Field Trip Committee:

Please reply by e-mail to: dmc@gaminereral.org
Jim Flora - SFMS Field Trip Committee Chair

Graves Mountain Code of Conduct

Park your vehicle in the designated area(s) only.

CHILDREN WILL BE ALLOWED DURING THE "Rock Swap and Dig" IF EACH CHILD IS UNDER ADULT SUPERVISION!

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

The Graves Mountain caretaker, Clarence Norman Jr., 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.)

Please protect our ability to field collect at Graves Mountain!

Report Violations to: Clarence Norman Jr. 706.359.3862 (his business) or 706.359.2381 (his home)
All reported violations will be held in strict confidence.

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**Open House
Standard Mineral Company,
Glendon, North Carolina
Saturday, October 8th, 2004,
8:00 AM-Noon**

The Georgia Mineral Society has been invited to attend the open house of one of the best collecting sites in the southeast.. This mine has produced many perfect pyrite crystals up to 4 inches on a side and 6 inches long!! Generally, you can find a crystal approaching 2 inches or so and a bunch of others in all shapes and sizes up to one inch or more. The pyrite cubes are located loose on the surface or in seams a foot or less deep in the bottom of the quarry floor. If it hasn't rained for some time, a light gray pyrophyllite dust seems to coat everything making it difficult to identify the pyrite crystals on the surface. Using a VERY GOOD metal detector makes the hunt almost a "no brainer"! A basic metal detector may offer some help in finding those cubes containing the most iron, but just digging anywhere in the quarry floor will probably yield much quicker results.

Directions: Take 1-85 North to Charlotte, North Carolina. On I-85 North of Charlotte, exit the interstate at Lexington onto US 64. Travel through Asheboro to SR 42. Turn right and follow SR 42 past Cheeks and Bennett and SSR 902. Then SR 42 makes a left towards Carbonton and Sanford. Before Carbonton there is a flashing yellow light @ SSR 1006. Turn right onto SSR 1006/Glendon-Carthage Road and go south to the mine which will be on your left. If you spend the night at Sanford you will be traveling West on SR 42 and have to make a left on SSR 1006. Sanford, which is 12 miles to the East of Glendon, is probably the best bet for finding a good motel room and nearby restaurants.

Travel Time: A little over six hours and 342 miles from the I-85/I-285 North interchange in Atlanta.

**George Libby,
GMS Field Trip Chair
Cell Telephone: 678.910.7476**



Gem Section News

Monday, October 31, 2005, 7:30 PM
Margaret Ronan's Home
1224 Beechhaven Road
Atlanta, GA 30324

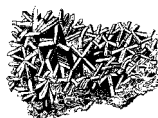
Last Month we had our annual quiz on topics covered during the past year. The quiz will appear in the November issue of **Tips and Trips**. See how you do.

This month we will discuss what is a gem. Each year we discuss this and each year the members here learn more than the previous year. In a few more years, the Gem Section participants will be teaching this lesson.

Hope to see you at the meeting. Please RSVP to Margaret at 404-636-0720.

Kim Cochran,
Gem Section Chair

Mineral Section News



Many thanks go to Anita Westlake for hosting the September Mineral Section Meeting. Anita also cooked a wonderful dinner and gave an excellent program on mineral uses.

There will be no meeting of the Mineral Section in October. The next meeting will be held on November 15th at Martha and Leroy Brown's home. The subject is Feldspar minerals. Further details of the November meeting in will be announced in upcoming Tips and Trips and on the GMS web page. If you would like to host a future meeting in your neck of the woods or give a presentation, please contact me!

If you have an idea for something you'd like to discuss or want to host a meeting, please let me know.

Julian C. Gray,
Mineral Section Chair

Membership News

I hope everyone will join me in welcoming the following new members to Georgia Mineral Society: Don and Jane Fagerstrom of McKinney, TX; Bob, Linda, and Robby Kay of Atlanta, GA; Jason McIntosh of Atlanta, GA; and David, Lisa, Niki, Kristen, John, and Taylor Parker of LaGrange, GA. I have already met some of these folks, and I know you will enjoy getting to know them too. I hope to see all our new members at a meeting or outing soon.



As our new year begins, I'd like to remind all our members to be sure to send in their renewals on time so that their receipt of the newsletter is not interrupted. We do allow a two-month grace period, but after that members must pay \$25.00 rather than \$20.00 in order to be reinstated. Most folks have been very prompt, I'm happy to report.

Any members who have not sent in birthday information with their renewals are asked to please do so. I am interested in month, day, and year for juniors; everyone else need only send in month and day if they prefer. You may drop me a note by email if you wish to mgm5258@netzero.net.

Happy Rockhounding!
Lizabeth McClain,
Executive VP/Membership

Micromount Section News



The September **Tips and Trips** had erroneously announced a meeting in October. There will be no meeting this month. The next meeting will be scheduled in November. Keep your eyes open for the announcements.

Dave Babulski,
Micromount Section Chair

Junior Section News

There will be no meeting in October.

Call me if you are interested taking over the Junior chair until June of next year, please let me know.

Roxanne Lopez,
Junior Section Chair
Home: 770-436-0387
Cell: 678-491-7175



If you have the opportunity to attend the Fossil Section meeting, please do so. Harry Yingst has an extensive fossil collection and he is interested in sharing some of his specimens. For the juniors interested in fossils, this would be an excellent opportunity to learn and to add to their collections.

Joan White, Editor

Fossil Section News



There will be a fossil section meeting at the home of Harry Yingst at 7:30 P. M., October 20th. Call for directions at 770-565-1630

Of special note: All beginning collectors, as well as experienced collectors, are urged to attend as I am thinning out my collection of duplicates. Everyone can take many fossils home. I have hundreds of duplicates of which most are mollusks of Pleistocene and Pliocene ages. I would rather find a "Home" for them before they are pitched out.

Also, I have received notice of our club date to collect at Lee Creek Mine in Aurora, North Carolina. The date is November 20. Please call ASAP to reserve a slot. We have the same number of slots as in previous years.

Friends, like fossils, are forever,
Harry Yingst, Fossil Section Chair

October 2005

The Georgia Mineral Society

DMC Program of the SFMS Field Trip Committee
An Official Field Trip of Lowcountry Gem & Mineral Society
(HOST)

An Official Field Trip of the **GEORGIA MINERAL SOCIETY**
7:00 AM to Noon, Saturday, October 15, 2005

LaFarge Cement Quarry
Harleyville, South Carolina



WHAT: Fossil Collecting Trip

WHERE: LaFarge Cement Quarry in the Harleyville/Holly Hill area, South Carolina

WHEN: October 15, 2005

COLLECTING HOURS: Participants should start arriving at **7:00 AM** to check-in, sign a release form, and receive a brief safety briefing. **The dig will be from 7 AM to 12 noon.** There is no fee for this dig. If children come to the dig, they **MUST** be in **CLOSE** proximity to their parent(s) at all times. The representative from the mine stated no young children are permitted in the mine (he did not elaborate on how young). All young people under 18 must be with an adult/parent at all times. This is a working mine. Nothing was said about pets; but I would advise against bringing them. This mine is primarily noted for its Eocene marine fossils including scallops, oysters, brachiopods, echinoids, shark teeth, ray teeth, etc.

SPECIAL CONDITIONS: Because this is a working mine, safety is most important. Hard hats and safety glasses are required and will be supplied by the LaFarge mine. It is also recommended that you wear safety shoes (sturdy shoes), gloves, and appropriate outer clothing. Everyone must sign a release form prior to going into the mine. We will probably meet at our LaFarge Cement Quarry hosts "work trailer" to sign release forms and get a safety briefing before entering the mine.

WHAT TO BRING: Bring something to collect into, picks, hammers, small shovels, a bag lunch, and plenty of drinking water. If the weather is nice, we may be able to drive into the mine, otherwise we walk (approximately a quarter mile or more). Also, bring a lunch since there are no restaurants close by.

TRIP CONDITIONS: We will be limited to the first 50 for this field trip and there will possibly be other organizations collecting with us bringing the total to around 100 or more. LaFarge only opens up the mine to collectors once per quarter. Because of this condition, club Field Trip Chairman Mark Easterbrook will be the point of contact for both the mine and the DMC participants. Mark's email address and phone are as follows:

CONTACT INFORMATION: Mark Easterbrook

Email: asgardsgc@earthlink.net or mark.easterbrook@erm.com

Home Phone: (843) 552-1049; Cell Phone: (843) 276-4016. If you would like to attend this trip, please contact Mark by no later than October 9. If you send an email, please put "DMC October Trip" in the subject line, so he can expedite completion of the list of participants to provide to LaFarge. If there is a change in the number allowed or additional information provided, we will pass along a message for posting as soon as possible. The first 50 responders will be included on the signup list for the trip.

DIRECTIONS: From Interstate 26 (either direction) take exit 177 (Hwy. 453 Holly Hill / Harleyville). When you reach the top of the ramp, turn towards Harleyville. There is a road sign pointing the direction. The mine is less than a mile on the right. If you go past the mine, the Ashley Lodge is not far on the left. When entering the plant off of Hwy. 453 (Judge St.) proceed past the scales and the Administration offices and parking lot. **Turn right at the stop sign at the first intersection.** Follow that road and the trailer is down there near the end.

DMC Field Trip Policies: (DMC Field Trip Sharing Program of the SFMS Field Trip Committee)

All societies which have agreed to host a field trip and join the DMC Field Trip Sharing Program of the SFMS Field Trip Committee will be called an "**associated**" club. Only associated clubs will be allowed to publish DMC program field trips as their official monthly field trip. (Benefit of membership!)

Field trips are open to all members of associated clubs of the DMC program of the SFMS Field Trip Committee and to all members of SFMS member clubs who have provided their membership with SFMS liability insurance.

For **insurance purposes**, all associated clubs **must** publish all DMC program field trips as "officially recognized" field trips of their society. It is required that all persons who attend a DMC program field trip be a member, in good standing, of an SFMS club. Since a family membership covers everyone in a family who can attend, your SFMS club will need all family member names on their membership roll.

All sites visited by the DMC field trip sharing program are **not to be revisited** unless they are on public domain property - road cuts, national forests, etc., or on privately owned land with the owner's permission. This is the quickest way to lose access to a host club's field trip location. Therefore, if an associated club or one of its members breaks this crucial DMC field trip policy, their future DMC program field trip information will be **forfeited!**

Please do not visit a site immediately before a DMC program field trip. Also, do not go to a site ahead of the group on the day of the field trip. Meet and convoy with the rest of the group so that everyone will have equal access to the site.

Do not park your vehicle where it is blocking the road, a gate, or another vehicle.

Always fill in all your holes.

Don't litter.

Never disturb buildings or other facilities at a collecting site.

Only take home what you can reasonably use!

PLEASE keep your vehicle locked at all times!

"Field trips are open to all members of associated clubs of the DMC program of the SFMS Field Trip Committee and to all members of SFMS member clubs who have provided their membership with SFMS liability insurance. Because of insurance requirements, members of the GENERAL PUBLIC are NOT invited on this or any DMC program field trips!"

DMC Program / SFMS Field Trip committee's purpose: To collect field trip information from it's member societies; schedule and coordinate field trip dates; disseminate field trip information to all member clubs so that each member society may publish this information as one of their "official" scheduled field trips.

Please reply by e-mail to: dmc@gamineral.org

World Wide Web site for the DMC is:

<http://www.gamineral.org/dmc.htm>

DMC is a program of the Field Trip Committee of the Southeast Federation of Mineralogical Societies, Inc. Copyright © All rights reserved.

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