



Mid-TENN Gem'ers

Newsletter of
The Middle Tennessee Gem
and Mineral Society, Inc.
P.O. Box 1256
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The Prez Rambles On...

It looks like it might really be a ramble this month. Spring is the busiest time of year for my work so my mind has been somewhat out of gear as far as what to write this month. You might say it's been a long year this month.

Anyway back to our regularly scheduled article. One thing that comes to mind is we need another volunteer for the Murfreesboro Cubscout Daycamp. We need someone who can be available on June 7, from around 12:00 to 3:00 p.m. We are working with the scouts to assist them in earning a geology badge. There are required to complete 5 of 7 activities. Four people have already volunteered. We need just one more. Although I'm not sure what the other volunteers have decided to do, you will still have a choice of one of at least 3 activities.

Last year I arranged for the scouts to mine for 5 specimens. I won't be able to be there this year. If someone would like to do that this year, I have sand and screens that can be used. I'll even help come up with the specimens if needed. Please call (615-896-1472), email fortyish47@yahoo.com, or see me at the meeting. The scouts were very interested last year - I expect the same this year. They and their leaders were very appreciative of us being there and helping with the badge. If you would like more information about the scout camp, please call Dan Onkst at 615-907-8604.

Last weekend (April 3), Lewis Elrod and I setup at the Nashville Zoo to participate in the Zoo's Earth Day activities. We had a great display of Tennessee rocks and minerals as well as several geodes, petrified wood, paint rock and other specimens that visitors could touch and examine. We also allowed all kids (young and old) to select a tumble polished stone of their very own. This was very popular with the younger children. Some of the older children were thrilled to pick out a stone too, some of them as much as 70 or 80 years young. We were also able to hand our cards with our club address, website, and dates for the December show. Who knows maybe some of them will come to the show this fall.

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The MTG&MS, Inc. is a non-profit educational society dedicated to the study and enjoyment of the earth sciences. We are open to the public for the education of all who wish to attend. Society membership is open to persons interested in the earth sciences. Applications are available on request.

Meeting Dates 2004:

March 18th

April 15th

May 20th

June 17th

July 15th

August 19th

September 16th

October 21st

November 18th

December 16th

Inside this issue:

Presidents Letter

Lot's o' Minutes

2 Field Trips

A Gem of a Star?

Shop Tips

Swap & Shop

and more...

Dues are Due!!!

Dues are \$12.00 for the first person of each household and \$2.00 for each additional family member. Dues are payable January 1st and are prorated in April, July and October. Check the upper right hand corner of your address label for the year you are paid through.

Send dues to:

Will H. Smith
5304 Bellcrest Dr
Antioch, TN 37013

We are scheduled to do this again on April 17, the Saturday after this month's meeting. While I plan to be there and maybe Lewis too, we'd like to have some help so we won't have to man the table all day by ourselves. Passes will be available at the willcall window. All you have to do is come join us at our table and interact with our visitors. You even get to give them a polished rock and tell about our Tennessee rocks and minerals. If you have some interesting Tennessee rocks, fossils or minerals bring some to show. We'll have a couple of display cases if you wish to protect your specimens or if possible bring something people can touch. Please call me, email me or see me at the meeting if you can help with this activity. It's a good promotion for our club and a good way to maybe spur someone's interest in our hobby.

Enough rambling! I'll see you at one of the meetings.

Steve
shenegar@
net-serv.com



*The Southeast Federation of
Mineralogical Societies, Inc
The Friendly Federation -
Founded in 1976 to serve.
SFMS Field Trip Committee*

Field Trip #1 Graves Mountain "Rock Swap and Dig"

8 am to 6 pm, Friday, May 14
8 am to 6 pm, Saturday, May 15
(HOT FOOD/drinks, Saturday)
8 am to 6 pm, Sunday, May 16

"Your society is invited to field collect minerals at Georgia's premiere mineral location!"

The SFMS Field Trip Committee has been in contact with the caretaker in charge of Graves Mountain, Junior Norman, in regard to his plans to hold a three day dig and rock swap on the Mountain during May 14-15-16, 2004. He will have the mountain open to collecting from 8 am to 6 pm each day. All participants must stop at the gate 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 carts available to transport those participants who have trouble walking long distances. The dig will cease and everyone is expected to be off the mountain by around 6 pm each day. Participants will be allowed to park in a designated area on the mountain.

Rock Swap and Hot Food/Drinks:

Junior will set aside an area in the parking lot for tables to be setup for a daily rock swap. Anyone who would like to setup a table(s), please contact Junior at the phone numbers listed below. Hamburgers and hot dogs cooked on the grill or BBQ will be available for purchase on the mountain during Saturday, May 15, 2004. Cold drinks will also be available for purchase.

THIS DIG IS OPEN TO ALL SFMS CLUBS.

Mark your May calendars and tell all your members about this great 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@gamineral.org

Jim Flora - SFMS Field Trip Committee Chair

Graves Mountain code of conduct!

- Park your vehicle in the designated area(s) only.
- NO child under the age of 12 years old is to be allowed on the mountain because of all the dangers involved.
- 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

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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.

Field Trip #2 CORYDON, INDIANA CORYDON QUARRY and SULPHUR ROAD-CUT

DMC Program of the SFMS Field Trip Committee

An Official Field Trip of the KYANA Geological Society (Louisville, KY) Host

An Official Field Trip of the Middle Tennessee Gem & Mineral Society

9:00 AM EDT, Saturday, April 17

<http://amfed.org/sfms/dmc-update.html> for two pictures from the quarry...

***CORYDON QUARRY LIABILITY RELEASE FORMS WILL BE SIGNED AT THE QUARRY**

FIELD TRIP DETAILS*: We will meet at the quarry at 9:00 AM EDT to sign release form. Trip will start at 9:00 AM and continue until 12:00 and later if they allow. Minimum age is 13. Depending on the

number of participants, the group will be broken down into 2 or 3 smaller groups to collect in different parts of the quarry. Groups will then rotate to visit all areas of the quarry. **LOOK FOR:** pink dolomite, calcite (crystals from ¼" to 7"), occasional: fluorite, millerite, barite, quartz, etc. Many of the chert nodules contain fossils.

WHAT TO BRING: Hard hats, heavy shoes, long pants, eye protection, gloves, sledge and rock hammer, chisels, prybar, buckets and/or flats, and lots of wrapping material. Also bring lunch and a beverages.

DIRECTIONS: Corydon is located about 30 miles west of Louisville, Kentucky on I-64, exit 105. From the interchange, head north one block, to the light. Turn left on Quarry Road and travel about a mile to a 4-way stop. Quarry entrance is just past the intersection. Turn right and immediately left to the office and sign in.

AFTERNOON FOSSIL TRIP: We will then caravan to the interchange of I-64 and Indiana highway 37. This roadcut is about one mile long. Best fossil collecting is in an inner-bedded shale-limestone, and is Upper Mississippian age. Look for blastoids, crinoid heads, Archimedes bryozoans, brachiopods, Rare: trilobites, uncommon: sharks teeth and scales. Most of the collecting requires some climbing. Instructions to active beds will be given at the site. It will be essential that all cars are off the right-a-way. Please be fair to others; do not visit this site prior to Saturday field trip.

FRIDAY AFTERNOON OPTION: For those arriving early, you are invited to visit "THE FALLS OF THE OHIO STATE PARK" just north of Louisville at exit 0 on I-65

in Indiana. Follow the signs. Interpretive Naturalist, Alan Goldstein, will be available from 3 to 5 PM EDT. The interpretive Center highlights geology and cultural history of the falls area, especially the Devonian fossil beds (which will probably be underwater at that time of year). Look for the special exhibit "Dinosaurs and More" at the Center.

MOTEL ARRANGEMENTS: Arrangements are being made in Corydon for special group rates.

Contact Alan:

deepskyspy@insightbb.com for more information. 10 rooms need to be filled to get the special discounts. Note: Corydon area has many restaurants to suit many different tastes.

CONTACTS:

Trip Leaders...David Horn, Kentucky Director for SFMS
crystalman@earthlink.net

Alan Goldstein

Deepskyspy@insightbb.com

Minutes of the March 18, 2004 Board Meeting

The meeting was called to order by President Henegar at 6:00 pm.

A motion to pay for hosting our web site was made by Lewis Elrod and seconded by Bill Buckner. The motion carried.

A number of new members were approved. A listing of these new will be found under the heading "New Members."

In 2003 we participated in a field day for Cub Scouts at the Barfield Park. This will be held again this year and we will again take part in the program. To volunteer for this please see President Henegar.

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A decision to collect donations to the William Holland Elevator, in honor of Max Grimes, was made at the meeting. Please send donations to: Suzanne Wagner, William Holland Retreat, Inc., P O Box 980, And Young Harris GA 30582.

We have been invited to participate in an Earth Day activity at the Nashville Zoo on April 3rd and 17th. Steve Henegar and Lewis Elrod will host the first day and volunteers are needed for the 17th.

Scholarships for Tennessee Tech and Motlow were approved by the Board, upon a motion by Lewis Elrod and second by Ken Swann. Checks will be sent by Treasurer Will Smith.

Treasurer Will Smith presented items for approval for expenses for the Donelson and Tullahoma shops. Motion to approve by Lewis Elrod and second by Bill Buckner. Motion carried.

Ken Swann presented some additional expenses for Tullahoma. Motion to approve was made and seconded and motion carried.

Announcement of meeting dates and time for our branch meetings was made. Donelson will meet on Sunday, after the regular MTG&MS meetings, at 3:00 pm. The Tullahoma meetings will be on each second Monday each month at 7:00 pm.

After discussion, a motion to donate the society photocopier to Lewis Elrod for use with his federation duties was made. The copier is several years old and has made a lot of copies. It will still be available for use for society printing jobs as needed.

Upon no further business the

meeting was adjourned by President Henegar.

Respectfully submitted,
Lewis Elrod, acting secretary

Minutes of March 18, 2004 General Meeting

The general meeting of the MTG&MS was called to order by President Henegar at 7:30 pm.

General announcements of Board decisions was made. The members were told of the decision to make donations to William Holland in honor of Max Grimes. The Cub Scout day was announced and a scout leader announced the date as Monday June 7th. The activities will take place from 12:30 to 3:00 pm. Volunteers are needed and please see President Henegar for more information.

Visitor Wayne Moore was introduced.

Tina King's field day at her school was announced as being May 17th. See Tina to volunteer to assist her in the program. It is a very satisfying experience to be there and see the children as they go through each activity at the school. Be sure not to miss this experience.

Unpaid members will be dropped this month and will not receive a newsletter.

The members chose to have the summer picnic at the Barfield Park again this year. Remember to be there and bring your choice of foods along with plates and utensils. We will have plastic table covers for all tables again this year.

Our March program was presented by our President Steve Henegar. The title was "Rockhounding, 10 Easy Lessons in @ Easy Steps."

Steve presented the Basic Tools, Other Useful Tools, My Favorite Tool (Silver Pick), Safety Equipment and General Information in an interesting, and entertaining manner. Thanks Steve for a good program.

Respectfully submitted,
Lewis Elrod, acting secretary

New Members

The new members approved at the Board Meeting are:

Stephanie Stump, Angela Arnold, Peggie Sides, Mary Morgan, Gail Thomas, Don & Marty Bond, Earnest Lucas, Jack & Darlyn Folmar, Marianne Chamblee, Stewart & Mary White, Taran McCarthy, Richard & Faye Kulp and Ruth Brown. Lets all welcome these new members to our group.

Tullahoma Meeting Minutes

The first meeting of the MTG&MS Tullahoma was held on March 8th at the Senior Citizens Center in Tullahoma.

Ken Swann, VP; held the meeting and asked for volunteers for offices of 2nd VP and Secretary. Heloise said she would be secretary part time and Patty was asked to help, and said she would. Dick B. was nominated as 2nd VP.

Our club would be glad to help any teacher and class to show what "lapidary" is. Our yearly dues will be \$12.00 per person and \$2.00 for each additional family member.

Ken had a drawing for some gemstones and minerals for door prizes at 25 cents and raised \$16.00 for our club. In future anyone wanting to donate stones, finished or

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wrapped to help raise funds for the club will be appreciated.

Ken took us on a "rock" trip" and showed equipment and other needs for rock hunting. He also had a very nice display of his stones.

Angela showed a pendant and earring set she purchased at the "Pow Wow" in Murfreesboro and talked about wampum. Peggy showed some of the slabs she got from the stones she found on the rock hunt in Sewanee.

Linda said she would print a roster for everyone.

Dick Gross will have the Program in April. Next meeting April 12th 2004

Respectfully, *Patty Gadeken*

A Gem of a Star?...

by Doug Daniels, Georgia Mineral Society Member

I'm willing to bet that every rockhound desires a large diamond crystal for their collection. The largest documented rough diamond crystal found to date weighed about 3100 carats, and yielded the 530-carat Star-of-Africa gem, which is in the Crown Jewels of England. Want to top that? Astronomers believe they have found a much larger gem out amongst the stars.

A group at the Harvard-Smithsonian Center for Astrophysics has recently found evidence that a white dwarf star in the constellation Centaurus may have a core of crystallized carbon, or "diamond". A white dwarf is what is left after a star (similar in mass to our Sun) "burns out". The star of interest (technically known as BPM 37093) is about 2500 miles in diameter, and weighs about 5 million trillion trillion pounds. This star, nick-named

"Lucy in the Sky With Diamonds" (after the Beatles song), has been observed by several groups since the late 1990's, because of theories of how white dwarf stars evolve. The conclusion that this particular star has a crystallized carbon core was based on long-term observations of pulsations in the outer layers of the star. This process is similar to observing seismic measurements of the earth to determine the internal structure of our planet (albeit a bit more difficult). The analyses estimate that the core of the star contains a diamond of about 10 billion trillion trillion carats!!!! Now, that's big. And, before you load up the SUV for a field trip, note that the star is located 50 light-years (or about 300 trillion miles) away (guess you'd better get up early....).

And, there are a few other tidbits that should be posited before you book your trip. First, the scientists only reported that the data suggest a stellar body with a crystallized core. Models of the evolution of a star leading to such a white dwarf suggest the core is composed largely of carbon. Most people assume that crystallized carbon means diamond. Well, graphite is also crystallized carbon. Second, the chemical composition of the core of such a star is not definitely known; it likely contains other elements, and may contain up to 50 percent oxygen (OK, maybe it's a colored diamond?). Third and foremost, the physical conditions within a white dwarf star are much more intense than those found in the interior of the earth. We cannot generate, in our labs, the

temperatures and pressures present in the interior of a star. Thus, it may be that the crystalline carbon does not have the diamond structure. And, as one scientist suggested, even if you could go there and get a sample, it would likely explode because of pressure differences. (I forgot to mention there would be an atmosphere of hydrogen and helium surrounding that devilish gem.) Lastly, if meteorites give us any indication, the core would likely be a conglomeration of "diamond" crystals, not a single crystal.

Oh well. As rockhounds, we can always dream....

References:

www.iowastatedaily.com/vnews/display.v/ART/1998/05/26/3bf43e3e0d51a?in_archive=1

www.rednova.com/news/stories/1/2004/02/14/story001.html

from Tips and Trips (4/04)

Shop Tips

1) To clean and shine most drusy specimens, use Easy Off oven cleaner (fume free is OK). Spray the specimen and then leave it overnight in a closed container or bag before rinsing. This even works on iron stained quartz crystals. (From Breccia 02/98 via T-Town Rockhound 01/2004)

2) To store and organize sandpaper use an accordion folio, available at office supply stores. These folios, which are usually used to save receipts or other records, have lots of separate compartments, and even have tabs so you can write down what mesh is in each pocket. You can also use these folios to organize your silver stock (sheet, wire, etc.) and cut down on scratches. However, another way to organize your


Internet Web Page: <http://www.mtgms.org>

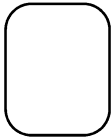
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To: _____

Forwarding and Address Correction Requested

Al Johnson
 7:30 pm
 Time:
 April 15th
 Next Murt Meeting:

First Class
 Postage



Middle Tennessee Gem and Mineral Society, Inc.
 c/o 2510 Essex Pl
 Nashville, Tennessee 37212

silver stock is to get sheet protectors that fit into a 3-ring binder. These are individual plastic pockets designed to protect a sheet of paper. You can put a single piece of silver stock in each sleeve and keep them all in a 3-ring binder.

When you need to browse through your silver stock you can flip from page to page and see exactly what you've got. Plus the plastic sheets keep the pieces of silver from scratching each other. (From Pegmatite, 03/2004)

Wanted!!

Stories for the newsletter EVERY month! Please email me anything that you think would be fun, useful, interesting, or whatever you think we'd want to see in the newsletter:

ingrid@dimp.com

Swap and Shop

For Sale: Now available for sale! Large garage stuffed full of 35 yrs of rock collecting. Rocks of all types from fossils, specimens, to slabs are priced individually. Large selection of yard rocks still available priced by the pound. Petrified wood and quartz \$1/lb, other rocks \$.50/lb. Call Francis Mangrum to setup a time to visit (615) 228-8577.

For Sale: Rough Rock \$1.00/lb - 100 lbs. for \$85.00. Your pick, Jasper, Agates, Tampa Bay Coral, etc. June Miller (931) 598-9740.

For Sale: Bargains Galore! Equipment & supplies at close-out prices. Come or call George Jones, 5025 Franklin Rd., Nashville, TN (615) 333-3781 email: georgejones@comcast.net

Wanted: Norman Kendrick 931-967-1305 from the Tullahoma club is interested in a used cab machine. Preferably a portable, but interested in all.

Swap and Shop is for members and friends to advertise goods and services for sale or swap & want ads.