



Mid-TENN Gem'ers

Newsletter of
The Middle Tennessee Gem
and Mineral Society, Inc.
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Finally some minutes from a meeting

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Swap & Shop

and more...

The Prez Rambles On...

Well folks, it's only three months until our December Gem Show. The dates for this year are December 13 - 14. Dealers have started sending their contracts back in. Things are beginning to take shape. I hope everyone looks forward to our show as much as I do. The show is the reason I became a member of the club. I attended a couple of shows when we had it in Murfreesboro and started attending the shows when it was moved to Nashville. As best as I can remember, I joined the club at the 1992 show. I've been working the show ever since. I always enjoy it.

As show time approaches we need club members to think about helping with various jobs. It takes a lot of work to get everything setup, run the show, then take it all back down all within the space of two and a half days. I would appreciate it very much if everyone would volunteer sometime during the show, if only an hour or two. We need several people on Friday afternoon and evening to help unloading the show materials, setup the showcases, setup the entry tables, and assist dealers with getting unloaded.

If you are working on Friday you get the added benefit of getting to eat dinner with our dealers. Free food people! Do I hear any volunteers? During the show on Saturday and Sunday we need people to man the entrance table. We need a steady rotation of people to sell tickets, sign people up for the grand prize drawing, answer questions about the club, take membership dues and new applications for membership, and give away door prizes. After the show ends Sunday afternoon, we need a few good people (translated someone who hasn't spent the entire weekend working at the show) to take down the show cases, pack up our table covers and other supplies and load them into our trailer for storage. I'd really like to see some new blood this year for all these volunteer jobs. Can I sign you up? We'll have signup sheets at the November meeting for sure and possibly the October meeting also. Please decide to be a part of this. And thanks in advance for all your help. If you want to volunteer please see me, Will Smith our

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 for 2003:

September 18th

October 16th

November 20th

December 18th

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

Dues

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

~ cont'd on page 2

show chairman, or any of the other board members or show committee members. We'll be glad to point you in the right direction. Would someone make a note to get the show committee members names to Ingrid to publish in the next newsletter?

I mentioned setting up showcases at the show earlier. These showcases are for educational displays. Displays can cover any aspect of our hobby. If you have minerals, fossils, cut stones, jewelry, or maybe a how-to display on something related to our hobby, and would be willing to display them during the show, please let me know. I'd like to see several display cases used this year. Displays are a great way for the public to see our beautiful treasures and learn something about our hobby. I personally plan to have a display of Graves Mountain specimens that I collected last May. Come see the hematite rainbow!

If you have the chance, there is another field trip scheduled for Graves Mountain, Georgia the weekend following our meeting. See me at the meeting or call me at home (615 896-1472) if you would like more information or directions.

See you at the meeting.

Steve shenegar@net-serv.com



August 21st, 2003 Board Meeting:

President Steve Henegar called the meeting to order. He read a note that we had received from William Holland thanking the club for their support of the elevator project over the years. The elevator is now in operation. The total cost was approximately \$55,000.00 and \$41,000.00 has been donated.

Will Smith announced that a show meeting is planned for during the middle of September. Will will provide notification and details.

Will Smith gave a report on the Donelson Class at the Senior Citizens Center. The water and plumbing has been completed by going overhead and sprinklers are in place. Four faceting machines are installed and functioning. There is now a room for silver smithing classes. An unnamed party has promised to donate a casting machine. Now that more space is available there is a possibility of expanding and offering some classes on weekends.

Ken Swann gave a report on the workshops held at the Senior Citizens Center in Tullahoma. Now that the entire building has become available more funding from the club may be needed, especially for heating and air conditioning. Students have been cleaning out the building. Fortunately, several of the participants have skills in both design and construction. They also have ideas and experience in fund raising. The local jail provides some labor for the project.

Ken announced that the demand for classes is so great that the space currently usable is "bursting at the seams."

Will Smith announced that building our own machines has worked out well. The machines are remaining solid. A proposed 2004 budget for funding requests is in the neighborhood of \$6,000.00.

Will Smith noted that we need to take action on the saws. Will and Lewis are to check with Lortone, Ebersole and Kingsley North to determine what is available and the cost. Reports are expected at the next Board meeting.

Bob King is working on getting the plastic boxes that are used to showcase the state minerals of Tennessee that are given to Tennessee teachers for use in their classes.

Club Meeting:

The meeting was called to order by President Steve Henegar. He announced that on September 20 & 21 there is a show and field trip at the Falls of Ohio, Indiana. There will be fossils, minerals, exhibits and rockswap. Interested members should contact Steve.

Lewis Elrod provided information for anyone wishing to receive the AFMS newsletter at an annual cost of \$3.50.

Lewis also gave a report on the current standing of the AFMS's former agent. He was sentenced to a year and a day in a Federal Institution for the theft of funds from the AFMS Scholarship Fund.

Steve gave a brief, and interesting, report on his visit, with his daughter, to the Smithsonian and Washington, DC.

The Man on the Rockpile was Mark Greenbaum. He relayed how his avocation became his vocation. He passed around photos of his work.

Bill Buckner volunteered to do the September program. He will tell us about his activities with children. The children enjoy hearing about rocks and making necklaces.

Bob King gave the program using slides and narrative of *Bob and Tina's Adventures*. The program was both educational and entertaining.

Respectfully submitted

Anna Elrod, Acting Secretary

NEPHRITE=JADE

by George Judd, G. G.

The gemstone that is commonly called Jade is actually two separate minerals, Jadeite and Nephrite. I will write an article first on Nephrite and then another one on Jadeite. Both Nephrite and Jadeite are the toughest minerals used as gemstones.

The toughness of Nephrite became well known to prehistoric peoples at a very early time in history. Nephrite implements were highly esteemed by early humans in widely separate areas of the world. The use of articles made of Nephrite were used by the Egyptians between 4000 and 5000 B.C. Nephrite was used by prehistoric Europeans like the Swiss Lake Dwellers to make axe heads, and tools for hunting and war. Prehistoric people of China also used Nephrite for implements. Much later in time the Maori, of New Zealand had access to dark-green Nephrite that they made into articles of adornment that were sometimes buried with the dead. The Maori also made axes out of Nephrite. When the use of metals was perfected they replaced Nephrite

for everyday implements. Some peoples abandoned Nephrite completely, others still used Nephrite for esthetic things like jewelry, religion or purely symbolic items.

Nephrite is a hydrous silicate of calcium and magnesium. It is a member of the tremoliteactinolite series of the amphibole group of rock forming minerals. Tremolite tends to be white or grayish and actinolite encompasses the darker green colors, due to varying amounts of ferrous oxide. Nephrite is found as nearly homogeneous opaque to translucent appearance which is very strong but not a lively green. The color can be dark green to blackish, gray or bluish gray. Gray white is also a common color. The colors of Nephrite do not match either the variety of intensity of the colors of Jadeite.

Nephrite is found throughout the world. For centuries the Chinese relied on the Sinkiang Province for Nephrite Jade that was transformed into Bas-relief, statues and other ornamental objects. Its toughness allowed them to carve objects to a very thin finish. The Lake Baikal region in Siberia, Russia has been another important source of Nephrite. Since 1965 Taiwan has been a steady producer of Nephrite when it was discovered near the town of Hua-Lien on the island. Nephrite is also found in New Zealand where it comes in the form of pebbles and boulders from glacial debris. In Canada Nephrite is found along the Fraser River in British Columbia. There is a 100 mile stretch of the river set aside by the British Columbian government Government for use by the public as a collecting area for Nephrite Jade. Several other areas in British Columbia have since produced Nephrite from

alluvial deposits. Since 1940 the most important source of Nephrite to the United States is the area around Lander, Wyoming. It is found in all qualities, though mostly in shades of green. Some often contain zoisite and pink thulite that are mistakenly called pink jade. Much of the Nephrite from Wyoming has been made into inexpensive jewelry. In Monterey County, California boulders and pebbles are picked up on the beaches. Also Tulare County, California has yielded small amounts that are good for cutting purposes. In Alaska boulders from the Kobuk River have produced some fine cutting material but because of the remote location it has had little exploitation.

When cutting and polishing Nephrite a number of problems become apparent mainly because of the random orientation of the minute crystals found in Nephrite. Undercutting sometimes occurs during the sanding operation, this gives a grainy appearance on the surface. Good results can be obtained by using a well-worn sanding wheel at slower speed than that used with most other materials or the use of a wet sanding wheel with a constant water flow. When polishing many cutters prefer a leather wheel or buff. Chrome oxide is often used on these leather buffs however chrome oxide is very messy and stains. Many cutters, myself included, prefer Linde A on leather. To get the best results with Linde A run your wheel until the Linde A is almost dry and keep a steady pressure on the Jade until it almost starts to melt the dopping wax, let it cool then keep doing it again until the desired polish is obtained.

*The Rockpile via The Pterodactyl,
September, 2003*

Visit to William Holland School of Lapidary Arts, Tuesday Sept. 5, 2003

by Bill Jackson

My wife Dorothy and I drove over to the Holland School on Tuesday after the Labor Day holiday. We got to Hiwassee around noon, had lunch, checked in to our motel and then drove a few miles down the road to Young Harris. The Holland School is a few miles north of downtown on a wooded hillside at the end of Lapidary Lane. We checked in with Suzanne and asked her about visiting the PMC (precious metal clay) classroom to meet the instructor and see what the students were doing. Also mentioned our club and that we had donated funds to help get an elevator installed in the dormitory building. The dining room, school office and several classrooms are located on the ground floor. Student housing is located on the second floor. The elevator is located adjacent to the dining room in the center of the building, making it convenient for students to enter the building on the upper level and take the elevator down for meals and other activities taking place in the dining hall area.

Suzanne explained they wanted an elevator big enough to accommodate someone in a wheel chair but had to go with a larger unit with a higher than expected price tag. She said several students have been able to use it this year and it is greatly appreciated. We observed students in the faceting class taught by John Eberle, and talked briefly with Dick Helsley, who was teaching a class on how to use a slab saw to cut rough rocks. Dick was getting ready to take the group over to his place, Gloria's Rock Shop, to

show them the big saw used to cut real large rocks.

We crossed the driveway and looked in on a group working with dichroic glass to make some beautiful jewelry items. A few doors down the driveway we found Mary Ann Devos with 12 students using PMC to make all kinds of fine sliver jewelry. The group was hard at work with numerous pieces at different stages of completion. Since it was only the second day of the class, most of their work was still in the pre-firing stage. The instructor had some of her work on display for students to look at and get ideas for their own projects. This afternoon they were putting silver paste on organic objects such as a small leaf, or found items with interesting shapes and textures. Several layers of paste are required to build up the thickness, then a bail or other decorative items can be added with the syringe or bits of clay, even a stone or some gold accents. The PMC must be dry before it can be fired in the kiln and they didn't have much finished work to show. It was an enthusiastic group and we really enjoyed talking to them about PMC.

By this time I was downright envious of the class and began talking to Mary Ann about wanting to get in her class sometime in the future. She indicated she would be teaching a class next May at the Holland School and to sign up early. Since I had just purchased a kiln along with a supply of PMC the past week, I was very anxious to get started making some things. I bought a copy of her book and began to ask her spe-

cific questions about sources, products and techniques.

It was late afternoon when we drove away, but we promised to come back for the auction at 7 pm that evening. It is a tradition at the school to collect items for an auction on Tuesday evenings. The money is used buy additional equipment or items needed at the school. One instructor auctioneer was pushing for people to buy items to help pay for an air conditioner for her classroom. Must admit the classrooms were hot by mid-afternoon.

We spent the night in Hiwassee, then drove up to Franklin, N.C. on our way back to Tennessee. Stopped at Ruby City on Main Street to see the museum and the gem shop. The museum is free and open to the public. They had an interesting collection of fossils, gemstones minerals and other items. The gem shop had all kinds of lapidary equipment, gemstones and jewelry for sale. We didn't stop at any of the Ruby or emerald mines in Franklin but headed for the hills of Tennessee and the road home.



"Field Trip!"

The Southeast Federation of Mineralogical Societies, Inc
*The Friendly Federation -
 Founded in 1976 to serve*

SFMS Field Trip Committee
 DMC Field Trip Sharing Program

An Official Field Trip of the Columbia Gem & Mineral Society (Host)
An Official Field Trip of the Middle Tennessee Gem & Mineral Society

7:30 am EST

Saturday

October 18, 2003

**Graves Mountain
 Lincoln County, Georgia
 (FEE AREA)**

What: Fossil Collecting Trip

Where: LaFarge Cement Quarry (formerly Blue Circle Cement Quarry) in the Harleyville/Holly Hill area, South Carolina

When: Saturday, October 18, 2003

Collecting Hours: Participants should start arriving at 7:30 AM to check-in, sign a release form, and receive a brief safety briefing. The dig will be from 8 AM to 1 PM.

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, but I will endeavor to find out). 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, marine mammals, 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 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).

TRIP CONDITIONS: We found out recently from LaFarge that we will be limited to the first 40 for this field trip. Because of this condition, club field-trip chairman Ron Ahle will be the point of contact for both the mine and the DMC participants. Ron's email address and phone are as follows:

Email: RonA@scdnr.state.sc.us

Phone: (803) 419-2923

If you would like to attend this trip, please contact Ron by no later than October 14. If you send an email, please put "DMC October Trip" in the subject line, so he can expedite completion of the list of participants. 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. We will have a registration area set up to check in everyone who signed up. The first 40 responders will be included on the sign-up list for the trip.

WHERE TO STAY: There is one motel in Harleyville, SC - Ashley Lodge at 188 Judge St. in Harleyville, SC. Phone number is (843) 462-7800 and Fax number is (843) 462-7134. They have 42 rooms with queen-size beds and 11 RV campsites with full hookups. Most of the "chain" motels can be found in nearby St. George, Santee and Charleston (all within 35

miles). Here is a short list of hotels in St. George with last years prices.

ECONO LODGE ST GEORGE
 Rate: USD 43.00 -- USD 47.00*
 5971 WEST JIM BILTON BLVD, St George, SC 29477

QUALITY INN ST GEORGE
 Rate: USD 49.00 -- USD 59.00*
 6014 JIM BILTON ROAD, St George, SC 29477

COMFORT INN ST GEORGE
 Rate: USD 57.90 -- USD 60.95*
 139 MOTEL DR, St George, SC 29477 0654

BEST WESTERN ST GEORGE
 Rate: USD 45.00 -- USD 59.00*
 I-95 AND US 78, St George, SC 29477

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 motel is around the curve 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 left at the first intersection. Follow that road and the trailer is down there near the end.

My Trip to Yosemite

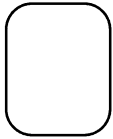
by Ingrid L. Regen

Some special filler for this month... pictures from my hiking trip on the High Sierra loop trail in Yosemite (don't worry, no gory blister pictures)! My brother, sister-in-law, and I hiked over 50 miles in a 7 day period, with one rest day. Our lowest camp was at 7,000 ft above sea level and our highest climb took us well over 11,000 ft. The two pictures on the next page show the alpine meadows and the glacier carved granite mountains that the Yosemite High Country is famous for. It was spectacular!

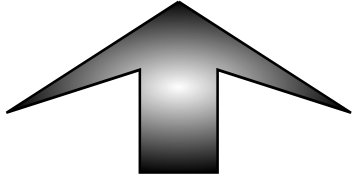
To:

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First Class
Postage



September 18th
Next Meeting:
Crystals
by Bill Buckner



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



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: Cab makers. Cab Mate, sanding belts & disk, tumbling grit & polish, sphere machines, grinding wheels, flat lap machines, and a whole lot more at low prices. Call for info. George Jones (615) 333-3781) 5025 Franklin Rd, email georgejones@comcast.net

For Sale: Rock for sale - Outside rock except petrified wood and quartz \$.50/lb. Petrified wood and quartz-\$1/lb. Call Frances Mangrum to set up a time to visit. (615) 228-8577.

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