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MD-TENN GENTERS

Newsletter of The

Middle Tennessee Gem and Mineral Society, Inc

P.O.Box 1256 Murfreesboro, Tennessee 37133-1256

Affiliated with:
SOUTHEAST FEDERATION OF MINERALOGICAL
SOCIETIES, INC.
AMERICAN FEDERATION OF MINERALOGICAL SOCIETIES, INC.

VOLUME 24 NUMBER 10 October 2002

MIDDLE TENNESSEE GEM AND MINERAL SOCIETY, INC.

SOCIETY DIRECTORY 2002

	OFFICERS	
President	Lewis Elrod	615 893-8270
1st Vice President	Bob King	615 754-0095
2nd Vice President/Editor	Steve Henegar	615 896-1472
Secretary	Paula Vance	931 393-2491
Treasurer	Will Smith	615 366-1022
	DIRECTORS	
Past President	Marty Hart	615 331-2690
One Year	Anna Elrod	615 893-8270
Two Year	Max Grimes	931 393-2491
Three Year		

COMMITTEE CHAIRPERSONS

Show	Will Smith	615 366-1022
Dealer	Steve Henegar	615 896-1472
	Alf Futtrell	615 333-6205
Club Booth	French Gothard	615 872-0476
Show Publicity	Will Smith	615 366-1022
	LaVelle Smith	615 597-4571
Educational Displays	Paula Vance	931 393-2491
Facilities	Max Grimes	615 393-2491
Silent Auction	Joe Powell	615 883-4260
Ticket Booth	Barbara Ellis	615 893-2061
Library	Steve Henegar	615 896-1472
Education	Tina King	615 754-0095
Hospitality	Ann Buckner	931 358-3970
	Ruth Gothard	615 872-0476

MEETINGS

Third Thursday of each month at 7:30 PM in the Farm Bureau Building at 818 S. Church St. in Murfreesboro, Tennessee, except for the June picnic. Meeting dates are on the inside back cover.

E-Mail Address: steve.henegar@nashville.com

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

MIDDLE TENNESSEE GEM AND MINERAL SOCIETY, INC.

REGULAR MEETING DATES 2001

January 17, 2002	July 18, 2002
February 21, 2002	August 15, 2002
March 21, 2002	September 19, 2002
April 18, 2002	October 17, 2002
May 16, 2002	November 21, 2002
June 20, 2002	December 19, 2002

SPECIAL EVENTS 2002

Annual Picnic	June 20, 2002
Annual Earth Treasures Show	December 14-15, 2002

Christmas Party December 19, 2002

FIELD TRIPS

Field trips will be scheduled and announced in the bulletin and at meetings. See or call a member for further information.

MEMBERSHIP

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 from members.

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.

Send dues to: Will H. Smith
5304 Bellcrest Drive
Antioch, TN 37013

SOCIETY MAILING ADDRESS

Middle Tennessee Gem and Mineral Society, Inc. P. O. Box 1256 Murfreesboro, Tennessee 37133-1256

A SOUTHEAST FEDERATION OF MINERALOGICAL SOCIETY INC. & AMERICAN FEDERATION OF MINERALOGICAL SOCIETIES Affiliate

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"AFMS Code of Ethics"

I will respect both private and public property and will do no collecting on privately owned land without permission from the owner.

I will keep informed on all laws, regulations or rules governing collecting on public lands and will observe them.

I will, to the best of my ability, ascertain the boundary lines of property on which I plan to collect.

I will use no firearms or blasting material in collecting areas.

I will cause no willful damage to property of any kind such as fences, signs, buildings, etc.

I will leave all gates as found.

I will build fires only in designated or safe places and will be certain they are completely extinguished before leaving the area.

I will discard no burning material - matches, cigarettes, etc.

I will fill all excavation holes which may be dangerous to live-stock.

I will not contaminate wells, creeks, or other water supplies.

I will cause no willful damage to collecting material and will take home only what I can reasonably use.

I will practice conservation and undertake to utilize fully and well the materials I have collected and will recycle my surplus for the pleasure and benefit of others.

I will support the rockhound project H.E.L.P. (Help Eliminate Litter Please) and will leave all collecting areas devoid of litter, regardless of how found.

I will cooperate with field-trip leaders and those in designated authority in all collecting areas.

I will report to my club or federation officers, Bureau of Land Management or other authorities, any deposit of petrified wood or other materials on public lands which should be protected for the enjoyment of future generations for public educational and scientific purposes.

I will appreciate and protect our heritage of natural resources.

I will observe the "Golden Rule", will use Good Outdoor Manners and will at all times conduct myself in a manner which will add to the stature and Public Image of Rockhounds everywhere.

Revised July 7, 1999 at the AFMS Annual Meeting

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MTG&MS

NEXT MEETING: OCTOBER 17, 2002

PLACE: FARM BUREAU

818 SOUTH CHURCH STREET

MURFREESBORO, TN

TIME: 7:30 P.M.

PROGRAM: DR. WAYNE LEIMER

TENNESSEE TECH

GEOLOGY FIELD TRIP

BOARD MEETING: 6:30 P.M.

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PRESIDENTS MESSAGE

I hope you have all read about our plans to expand our workshops. Things seem to be moving along nicely. We hope to have final word of the expansion very soon. It is great for our group to have so many talented people who are willing to devote their time and energy to teaching and assisting so many others of our hobby.

Time for our annual show is growing near. We still need a lot of jobs to be filled. How about talking to Smitty and volunteering for some of the positions? There are many things you can do and I am certain that you will find it most enjoyable. None of them will take a great deal of time but are important to the success of the show. Please, think about it and then offer your services for our group.

It is also nearly time for our annual election of officers. Marty Hart is working on filling the posts that will be vacated. If approached then don't say no, think about this and then come on in. I promise you that you will have some good times as a result. There is much reward in doing a good job.

I have enjoyed all the different positions I have held since forming the club so many years ago. Now much of my time is taken up by running the Central Office for the American Federation. This is also rewarding. It seems not to be possible but merely maintaining the mailing list and printing over 2,000 labels per month takes a lot of time each month. Then there are the publications we produce. It is great to see all of the benefits that this group offers to our country and its members.

Lewis F. Elrod, CFE, President

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Swap and Shop

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: 6" Saws \$175-\$225, 8" Saw \$250.00 (like new w/vise), 18 lb Tumbler \$75, Cab makers. Cab Mate, Folsom & Dremel tools, sanding belts & disk, tumbling grit & polish, sphere machines, grinding wheels, welding torches, buffers, flat lap machines, 10" & 15" vibrating lap 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: New glass display case. 20.5" X 28.5" X 2.5". Never been used. \$25. 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 Club members and friends of the Club to advertise goods and services for sale or swap. Want ads are also accepted.

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Upcoming Events

October 18-20	Knoxville Gem & Mineral Society
	Kerbela Temple, Knoxville, TN
October 19-20	Nevada County Gem & Mineral Society
	Nevada County Fairgrounds, Grass Valley, CA
October 19-20	Ozark Mountain Gem & Mineral Society
	Springfield, MO
October 26-27	Tulsa Rock & Mineral Club
	Expo Square-Exchange Center, Tulsa, OK
November 1-3	Rockingham County Mineral Club
	Wentworth Recreational Center Reidsville, NC
November 2-3	Smokey Mountain Mineral Society
	Dandridge Rescue Squad Building, Dandridge, TN
November 8-10	St Louis Mineral & Gem Society
	Strattford Inn, Fenton, MO
November 9-10	DeRidder Gem & Mineral Society
	Beauregard Parish Fair Exhibit Hall, DeRidder, LA
November 9-10	Lake Havasu Gem & Mineral Society
	Lake Havasu City Community Center, Lake Havasu,
	AZ
November 16-1'	7 Dallas Gem & Mineral Society
	Bigtown Exhibition Hall, Mesquite, TX
November 15-1	7 Cobb County Gem & Mineral Society
	Cobb County Civic Center, Marietta, GA

December 14-15 Middle Tennessee Gem & Mine ral Society Tennessee State Fairgrounds, Nashville, TN October 2002 MID-TENN GEM'ERS Page 3

BOARD MEETING MTGMS 9/19/02

The monthly board meeting of MTGMS was opened at 6:35 by Lewis. Quorum was present. Lewis brought information regarding the Boys and Girls Club in Murfreesboro, which has definite possibilities for a summer show. He will scope out the situation and get back with us. AMFED has sent another request for nominations into the Hall of Fame. We will re-send Tina and Jack's information with some lobbying this time. Bill Buckner moved that we start our own Hall of Fame for members nominated to the national Hall. The motion was approved unanimously.

Lewis has bought the stones and findings for demonstrations by members. Diane A. Rogers of Hermitage, TN was approved for membership, as were Leslie Sanders and Matthew Ryan Osborne, both students at Tennessee Tech. A new tarp has been purchased for the show trailer. Lewis was able to obtain all of Ruben Conyers' books to sell, and Paula moved that the club buy the whole lot for our library. Motion carried unanimously and the books were purchased for \$90.00 total.

Will updated the Board on the Donelson and Coffee County Senior Center projects, and he and Joe will attend one of Coffee County's board meetings soon. Vandy has not cashed the scholarship check sent to them for this year nor have they replied to us. Lewis will check on this situation. Meeting adjourned at 7:25 pm.

Respectfully submitted, Paula Vance Secretary

GENERAL MEETING - Thursday 9/19/02

Lewis opened the meeting at 7:40 with introduction of visitors Dana Strong of Nashville, Brian Grizzard of Hendersonville, and Dave Freuhauf of Lynchburg via Buffalo NY. Dave brought a few goodies from the Buffalo area for show and tell. Lewis told us about the offer from Boys and Girls Club of Murfreesboro and promised to keep us updated.

Lewis brought the Lapidary Hall of Fame applications for this year, and we will re-nominate Tina King and Jack Fishburn along with a bit of lobbying on their behalf. He also informed the group of the Board's decision to begin a MTGMS Hall of Fame to honor those members nominated to the national Hall. He noted that MTGMS stands a good chance of making Club of the Year this round. Lewis then informed the group of the availability of supplies for demonstrations given by members.

Cameron announced an inspection of the trailer contents for the following weekend, requesting volunteers to assist. Lewis then subbed for Bob King by telling the bad jokes of the evening something about definitions of CEO, CFO, Bear Markets and embezzlements. He then announced the club's purchase of Ruben Conyers' books for our library. We were then given the bad news regarding Tom Malone, Jim Cole, and Ernest Hammons and their health conditions.

Joe Powell stated he is getting ready for the silent auction and requested donations to be brought in as soon as possible. Will Smith updated the membership on show plans.

Steve Henegar then had the honor of conducting the stamp fund drawing, with items donated this time by Joe Powell, Mary Clyde Sparks, Richard Gross, Cameron Byler, Johnny Hilliard, Bill Buckner, and Paula to the Max. Thank you all for your generosity and gorgeous contributions.

Richard Gross finally got to present a magnificent slide show with narrative on Nature's Art in 3D. He also gave us a pretty sneaky test with trick question at the end. A thoroughly enjoyable presentation, with absolutely beautiful specimens. Thank you VERY much, Richard.

Following the presentation the meeting was adjourned at 8:35 so everyone could socialize and admire Dave's pretties.

Respectfully, Paula Vance - Secretary

Tyrannosaurus Rex out in the grasslands or prairie.

If you're not into digging, hiking, etc. you can always see the results at the Museum of Geology on the South Dakota School of Mines and Technology campus in Rapid City or at the Black Hills Institute of Geological Research in Hill City. Although "Sue" is in the Field Museum in Chicago, "Stan", an equally outstanding T-Rex (also found by the Institute) is located here along with many other outstanding fossils and minerals.

So there's much to do, much to see and also much time to relax. Although we've vacationed here most summers for the last 40+ years this is the first full summer, the first of many I hope, that we will spend here.

See you sometime in the fall - October or November and then at the show in December. If the snow falls early we will be out of here.

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History of Rockhounding Jose Santamaria



From Rock Rattler 8/94 via Roadrunner 8/94 via The Burro Express 12/01 October 2002

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Why the South Dakota Hills? Al Johnson, CM

You're asking why would anyone want to spend over five months out here! A good question and one I've asked myself a time or two—especially after experiencing the 10 plagues of the 21st century. Moses had nothing on this day and age.

We arrived the end of April and had 8" of show May 1. By the 15th, 25" had fallen. I hadn't seen this much show in Nashville in the last ten or so years. June and the heat and drought arrived, the driest summer since the Dust Bowl of the 30's. Of course, then the fires. With 1.2 million acres of pine and aspen trees there's a lot of fuel. We had 157 forest fires here so far. The closest one and fortunately the smallest started from lightning about a half mile from us. Quickly put out by the very effective volunteer firefighters and water swirling drop pilots. Of course there's the Miller moths, flies and pine bark beetles. Now the West Nile virus has invaded the state and the grasshoppers are feasting on corn and wheat. Elsie's tomatoes got zapped in August with three nights of temperatures in the 20's, then got bombarded with golf ball size hail. As I write this we're looking to 100 degrees in Rapid City. Up here at 6200' we should see about 80 degrees.

So you ask "Why Stay?" Because we love it!. Within this 50 miles by 25 miles there's 1.2 million acres of Black Hills National Forrest to play in. There's 11 reservoirs to fish and boat in, over 30 campgrounds, 1,300 miles of streams (with trout), 10,000 acres of wilderness, over 350 miles of trails and over 140 minerals to hunt for. The Black Hills are the oldest mountain range in the country. Rising on the edge of the Rocky Mountain range, the Hills are among the top five locations in the states (USA) for mineral varieties. There's rose quartz, the states official mineral, the Fairborn agate, the state gem stone and of course gold. When Custer came through here in 1874, the big Black Hills gold rush started on French Creek near Custer, South Dakota. Of course if you're into fossils you can always try to find another "Sue"

The Making of Gold Leaf

From the Rear Trunk

The Ring of Truth, companion book to the PBS TV series, by Philip and Phylis Morrison, had a very interesting section about making gold leaf. Because of copyright laws the "Rear Trunk" cannot quote more than a few words from the article, but we will try to give you the highlights.

An intriguing example of how thin gold leaf is was given by the authors. If a complete Bible could be printed on the thinnest gold-leaf pages, it would be no thicker than one single leaf of ordinary Bible paper. How can a metal be worked to such fineness? Would you believe the best is done by hand?

Goldbeating is a very ancient and honorable craft. It is a long and highly skilled method of turning pure gold into extremely thin, nearly flawless sheets called gold leaf. Machines can produce gold leaf but it will contain more flaws than hand-made leaf because a machine cannot correct small imperfections left from preceding steps.

To start, a small ingot of gold is rolled out between steel rollers. This is done over and over again until the gold is transformed into a long ribbon fifty feet long and an inch wide. The sound of this process changes, as the metal becomes thinner. At first it will "thud" when falling into a bin from the rollers. As it gets thinner it will have the crisp sound of paper, and finally, it will crinkle like foil. The process is done without annealing. No other cold metal can be thinned so much without tearing or cracking.

At this point a craftsman takes over to produce the finest leaf. The foil is cut into small pieces and each piece is sandwiched between leaves of a parchment "book." The book is pounded by hand with a wooden mallet for twenty minutes until the gold has stretched to the size of the parchment pages. Each gold piece is

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two hours.

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cut into four, each section being placed between the parchment pages of a second book. The hammering is repeated, this time for

After another repetition, each gold sheet is cut into four pieces and placed between the leaves of a book whose pages of made of goldbeater's skin, a particular part of the intestinal lining of cattle, which is resistant to pounding and yet gives, so the thin metal will not tear. "Here the echo of antiquity is strong and clear," according to the authors. The goldbeating continues for four more hours, the book being turned often to insure evenness.

This final book produces the finished leaf, too fragile to handle at all except with breath and a soft brush, the metal is perfectly golden, though translucent and blue-green when light comes from behind it.

All substances have their own technologies for being worked, most being improved upon through the ages, but gold-beating has been remarkably mature for a long time. "Artisans everywhere came to understand that the noble material itself was the basis of their skills, that it would respond reliably to careful treatment if it were pure."

Arkansas Rockhound News via Ozark Earth Science News

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My Day

By Pat Wong, Historian

I have so very much to do (What's in that rock that looks so blue?) I guess I'll get the dishes done (It had more blue than the other one) Bed isn't made-I must get busy (Where is that rock? Looked 'till I'm dizzy) Furniture's dusty-windows drab (Guess I'll cut just one little slab) Have to vacuum up the floor (Sure is pretty-I'll cut one more) Get dinner started-that's my duty (A cab from this would be a beauty) Lawn needs watering and raking (This is a pretty cab I'm making) I must hurry-it's time to eat (A little polish will make it complete) I don't know where this day has gone (But haven't I got a beautiful stone?)

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October Program

Dr. Wayne Leimer club member and professor at Tennessee Tech will present our program for the October meeting. His program will be a slide show of the Annual Spring Field trip taken with 7 of the geology students to locations in Louisiana and Alabama during March 2002. Dr. Leimer usually brings several specimens that were collected on the field trip. If memory serves me correctly, the student that receives the Dave Shepard Scholarship is usually on this field trip. Maybe that will include the LaVelle Smith scholarship winner also. Anyway it's a great opportunity to see our scholarship money in action. Thanks Dr. Leimer