

Photo by Beverly Kraft



The Nugget

North Mississippi Gem & Mineral Society Newsletter



Fossil Diggin'

Notes from the President's Desk...Nov. 2016

Happy Thanksgiving! Every year, as my family gathers around the Thanksgiving table, we are asked to say what we are thankful for. I always mention that I am thankful to be a part of a great rock and mineral club, and to have such wonderful friends through it. I am thankful for all of the incredible things that I have learned over the last 15 years by participating in the club field trips, meetings, workshops and other events. NMGMS has an astounding array of very talented and knowledgeable members from many fields, and they are always so very willing to share their expertise.

November is also election time, and I, for one, am glad to have the 2016 presidential election finally over. But, now it is time for the North Mississippi Gem and Mineral Society to get its 2017 officers and committee chairpersons lined up. So, we will be taking nominations for those positions at our Nov. 19th meeting. NMGMS is always looking for new and fresh ideas. To continue to grow as an active organization, the club needs your input. We have lots of new members on the roster this year, so I am sure that there is a treasure trove of very capable and talented people just waiting to be tapped. If you are a new member, don't feel like you are not experienced enough to take on a position in NMGMS. None of the officers or chairpersons were "hired" because of their resume, or experience. We have all learned by doing and have helped each other along the way. This is a non-profit corporation; the officers and committee chairpersons are all volunteers who gladly give of their time and talents to make this the great organization that it is. So, if any member is interested and willing to serve in any capacity, please step up and pitch in. The club needs you! Remember, you'll get a lot more out of your organization, if you put some of yourself into it. The more you will learn too!

I encourage every member to come to the meetings and make your voice heard. If there is something that you think we should add, change or do differently, let the officers or chairpersons know. If you have suggestions for programs, projects, events, workshops, etc., we're all ears. Everyone's input is important. This is a phenomenal rock and mineral club and we hope to be able to continue to provide our membership with many great activities and opportunities, thereby advancing our knowledge and interests in the earth sciences and lapidary arts. In order to do this, we need everyone's help and participation. To those who are already serving as an officer or chairperson, NMGMS appreciates your hard work. All of you have been doing a great job.

Nancy Roberts

Mark Your Calendar! NMGMS November meeting

The November NMGMS meeting will be on Saturday, Nov. 19, 2016 from 1 to 3p.m. upstairs at the Tupelo library. The program that follows the business meeting will be, "Minerals We Use Every Day". This is a "hands on" program by NMGMS members Rebecca Vallarian and Konrad Armstrong. You won't want to miss participating in this fun mineral demonstration! For all ages!! Refreshments are courtesy of Belinda Loyd, Dana Armstrong and Nancy Roberts.

Other Upcoming NMGMS Events:

Dec. 10th: NMGMS annual Christmas party meeting and luncheon. 11:00am to 3pm at the Lee County Library. Details below.

Dec. 17th: Field trip for Devonian fossils at the Vulcan Quarry in Parsons, TN. Details on page 3

Jan. 21, 2017: Field trip to Alabama for Mississippian fossils. Details next month.

Jan. 28, 2017: NMGMS Jan. meeting, 1 to 3p.m. at the Tupelo library. Program TBA

Note: the Jan. meeting is the 4th Sat. due to scheduling conflicts at the library.



The Holidays are coming!

The NMGMS annual Christmas party and potluck luncheon will be on **Saturday Dec. 10, 2016 from 11 until 3p.m., upstairs at the Lee County Public Library in Tupelo, MS.**

The club will provide a ham for the party and members attending are asked to bring a potluck dish to share. We will have a gift exchange also. If you wish to participate, please bring a gift (\$10 max) and label it either as a man, woman, or child's gift. We are also asking members to please bring a few canned goods or other nonperishable food items for our club's contribution to a local food pantry. We will also participate in the "Toys for Tots" program, so please bring a new toy to donate. The toys will be dropped off at the Oren Dunn Museum after the party.

We will be doing the "Night before Christmas" ornament exchange. If you would like to participate in the game and ornament exchange, just bring an ornament. They can be handmade or store bought. Everyone that brings an ornament will go home with one. Hope to see everyone there to help NMGMS celebrate another great year. Remember, this is when NMGMS passes out badges, awards and certificates to members for their accomplishments.

Next NMGMS Field Trip: Parsons, TN Quarry, Dec. 17, 2016

NMGMS has a field trip scheduled for Saturday **Dec. 17, 2016** to the Vulcan quarry in Parsons, TN. We are allowed 25 members to attend and I have 19 on my list so far. If you want to be added to the list, send an email to therockhoundlady@yahoo.com. If you have already signed up for this field trip and find that you can't make it, please let Nancy Roberts know. The quarry only allows members 18 yrs or older.

Note: all members attending the Dec. 17th field trip are required to have **safety glasses**, so be sure you have yours!!

The Parsons facility is huge and we have a very large area in which to collect. Be prepared to do some clambering over the tailings piles; they can be a bit steep. There are plenty of easier collecting spots along the quarry roads where we will be. The Devonian fossils are very abundant here; you can't help but step on them! Large crinoid stems and some calyxes, many brachiopods, bryozoan, several types of coral and quite a few trilobites can be found. No one goes home empty handed!

We will meet at the quarry office (small stone building with the radio antennae on top and inside of the stone entrance) **at 7a.m. sharp**, to sign in, listen to a safety talk, and then be escorted back to the collecting area.

The quarry closes at noon, so we must be out before then. Quarry phone # 731-847-3211

Everyone has to sign the quarry waiver when you get there.

Meeting Program Review: October Rock Swap & Picnic

Many fantastic rocks, minerals, fossils and hand crafted lapidary items were cascaded around the picnic tables at the NMGMS October rock swap picnic and auction. So many choices, that it was hard to decide what to bid on! NMGMS couldn't have asked for better weather, not too hot, not too cold. A gorgeous day and great fun!



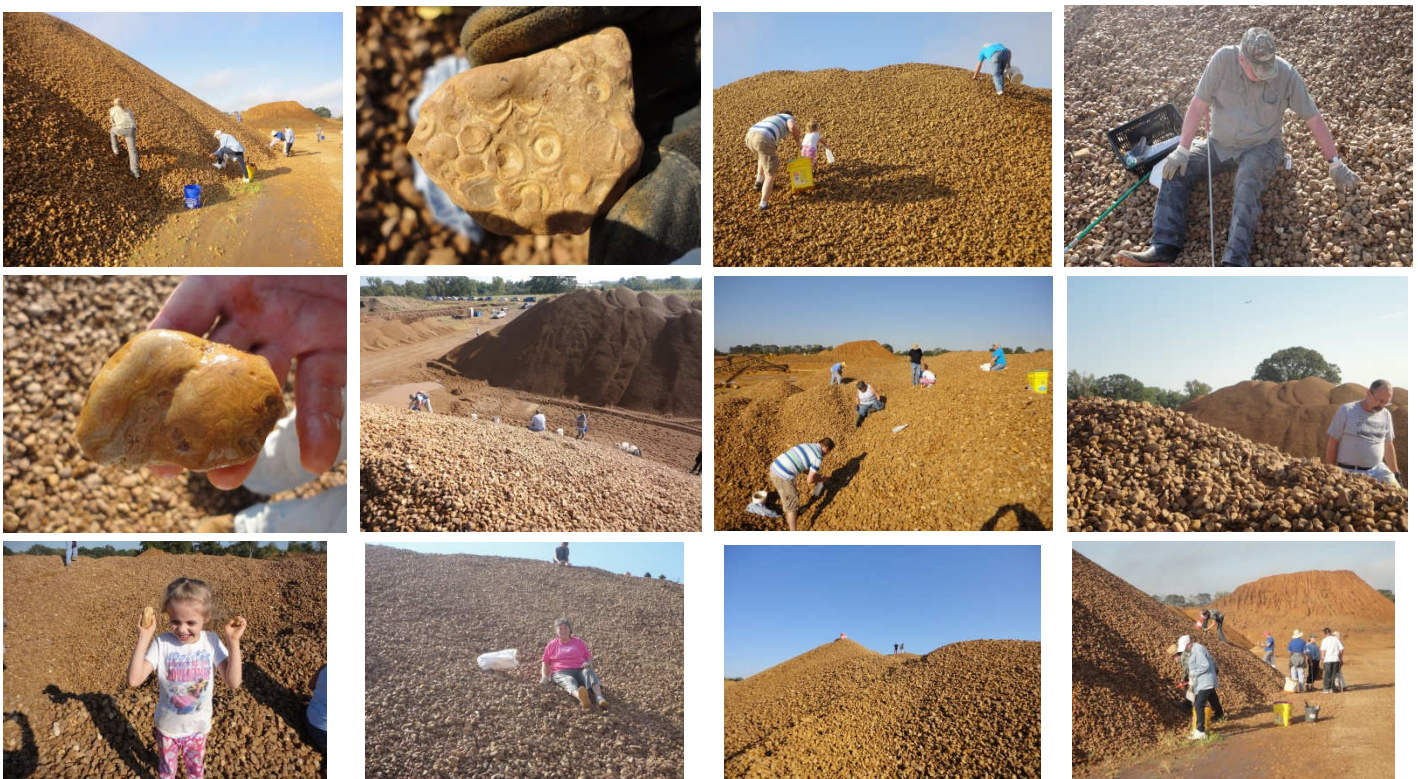
Photos by Nancy Roberts



Memphis Stone and Gravel Field Trip by Nancy Roberts

NMGMS, along with many other SFMS affiliate clubs, joined Memphis Archeological and Geological Society for their Dixie Mineral Council field trip on Oct. 15, 2016. Needless to say, MAGS members and Allen Parks of Memphis Stone and Gravel did a first rate job of keeping over 70 rockhounds safe and happy while they collected on the most glorious gravel piles you ever saw. It was like playing "King of the Mountain", as we climbed up, around, and over the top of a huge pile of washed and sorted gravel. The hunt was on for pieces of petrified wood, banded river agates, jaspers, quartzites and fossil imprints. My favorites are the fossilized corals and banded agates. Many of those were found too! It was hard to stop and come down for lunch, but once the smell of grilled hamburgers wafted through the air, the line at the lunch table grew rapidly. A big "THANK YOU" goes to MAGS and Memphis Stone and Gravel for a most delicious cookout. After lunch, the group caravanned over to another site that had previously been part of the gravel operation. More agates were found, and this time some nice pieces of petrified wood were collected, too. The day was a rather hot one for October, so by late afternoon, after slathering on much sun screen and drinking lots of water, it was time to head home. Some of the attendees at this DMC field trip came from as far away as Georgia and Florida. Several were even headed on other trips further out west, so I was glad to only have my two hour drive back to Pickwick. The truck's back end was a lot lower when we left for home, than when we had arrived! This was a most fantastic field trip all around! Thanks, MAGS!!

Photos by N Roberts





Fold Forming Copper: Get Fired up about Metal Craft Jewelry

Photo by Nancy Roberts

By Beverly Pettigrew Kraft

When I was a child, my job was to crank the bellows to heat Daddy's blacksmith forge. I vividly remember the day we wrestled the incredibly heavy setup into the back of a black 1951 Chevrolet pickup and hauled it home after Daddy bought it from a neighbor. Daddy set up the forge in what we called the Little Green Barn, a dark, low-ceilinged wood structure, ill-suited but serviceable, mostly because its double doors swung wide for ventilation and the dirt floor was fire-resistant.

Daddy never made anything more complex than plow parts, but he taught me heat, hammer, quench. Those basic principles apply whether the project is bending an iron brace for a middle buster or crafting a copper cuff bracelet. It's the fine-tuning of the technique that's the challenge.

"Metalsmith" will never be used as an adjective in the same sentence with my name. I fall into that category of people who enjoy watching back-to-back episodes of *Forged in Fire* on the History Channel. For me, when it comes to picking up a torch and making something, I'm working to overcome a deeply ingrained fear of fire. At the other end of the spectrum, my daughter, Mary Cochran, welds farm equipment, so scaling it down to copper was easy for her.

Nancy Roberts and Nikki Kenney applied equal parts of safety consciousness, encouragement, instruction and creative inspiration during an Oct. 29th copper fold forming class in West Point. The basics were fold, hammer, anneal, and repeat. Folding and hammering a strip of copper was easy; it was the annealing that made me nervous. The most difficult part was lighting the torch.

Nancy and Nikki demonstrated correct torch handling. They started by making sure there was nothing flammable on the table, not even a wet paper towel! How to safely hold the torch is as important as how to heat the metal. Holding tweezers in the dominant hand is the preferred way to protect against absent-mindedly reaching bare-handed for hot metal, Nancy instructed. Another hot tip: when done with the torch, place it out of arm's reach to avoid accidentally bumping the hot tip. Voice of experience, Nancy said.

Correctly annealing copper includes distance of the torch from the metal, the sound of the flame and the color of the copper. "If you hear the ocean, you are too close," Nancy said. I didn't hear anything. I wasn't sure whether I was at the correct distance or slightly deaf. "See those rainbow colors? That's not annealing," Nancy said as one of the participants moved the torch down the copper. The metal glowed orange as the temperature increased. "Now, walk that glow down," she said, indicating a smooth motion.

The sound of hammering soon filled the classroom. "All this hammering makes me want to sing," Nancy exclaimed, and broke into a verse of "If I had a hammer." Others joined in.

We finished the afternoon with a copper earring tutorial, folding, cutting and tapping. What a relief that there was no need to anneal copper foil. But a light touch with the torch blended copper, orange and gold hues with a pallet of blues and greens; a patina that would make a peacock want to learn. Pass the torch!



Photos by Mary Cochran and Nancy Roberts



Rockheads:

Mascot by Remy Collins

Rockhead Officers:

President,

Konrad Armstrong

Vice President, James Carr

Secretary, Marion Carr

Nov. 2016



www.amfed.org/fra/fra_badge.htm

Adult Youth Advisor: Jim Roberts

latergator2003@yahoo.com

November Rockhead Meeting:

The next Rockhead meeting will be on Nov. 19, 2016, 1pm. at the library in Tupelo. Plan to finish up the Gemstone Lore and Legend badge and then you will be making crystal structures out of some really "sweet" materials, i.e.: marshmallows and gumdrops!! You won't want to miss this one!

NMGMS Junior Rockhound of the Year Award

If you have been working toward earning the "Junior Rockhound of the Year" award, but still need to get an article or review published in the newsletter, please send it to therockhoundlady@yahoo.com for the Dec. Nugget. It doesn't need to be long or complicated! If you need to do a display, bring one along to the Nov. 19th meeting.

Attention Rockheads!

Mr. Jim Roberts will have the FRA badge sheets at the Nov. meeting, so please plan to attend, and be ready to sign off on any of the badges that you have completed. He would like to be able to make all of the badge presentations at the Dec. 10th Christmas party meeting.

Rockheads help out with the Fishing Game!

Photos by Nancy Roberts





Photo of Nikki by Beverly Kraft

Bead Soup: A place to talk “shop”! By Nikki Kenney

When I was sifting enamel powder onto a piece of metal, the powder filled the hole that I had punched for a jump ring, in order to make the piece into an earring. I had to remove the enamel powder before firing, in order to prevent the hole from closing; knowing that the enamel could crack, if I tried to open the hole after the piece was fired, then my piece would be destroyed. For the next piece, I remembered to break off a piece of a toothpick and stick it into the hole before I sifted the enamel powder. I then removed the toothpick, thereby keeping my hole clear and my enamel undisturbed.

Show Dates:

Mississippi Gulf Coast Gem and Mineral Society:

November 11, 12, & 13 2016 Magnolia State Gem, Mineral, & Jewelry Show [Pascagoula Fairground Civic Center](#) **Friday and Saturday 10:00am - 6:00pm Sunday 10:00am - 5:00pm**

The 22nd Annual Mobile Rock & Gem Society Show will be November 25-27th at the Abba Shrine Temple, 7701 Hitt Road Mobile, AL.

Friday Nov. 25th 1 to 6p.m.

Sat. Nov. 26th, 9 to 6p.m., Sun. Nov. 27th 10 to 5p.m. Adm. \$4

The 46th Annual Montgomery Gem, Mineral & Jewelry Show December 2-4, 2016

Garrett Coliseum 1555 Federal Drive Montgomery, Alabama

12/02/16 - Friday 9:00 a.m. to 6:00 p.m. 12/03/16 - Saturday 10:00 a.m. to 6:00 p.m.

12/04/16 - Sunday 11:00 a.m. to 5:00 p.m. Adults \$2.00 daily or \$3.00 for a weekend pass

Mid-Tennessee Gem & Mineral Society

36th Annual Earth Treasures Show Gem, Jewelry, Mineral, & Fossil Show & Sale

December 10-11, 2016 Sat 9:00 AM - 6:00PM Sun 10:00 AM - 5:00PM

Williamson County Ag Expo Park 4215 Long Lane Franklin, Tennessee 37064

Safety: Work safely so you can do it again

Torch Safety Guidelines By Nancy Roberts

Accidents can happen and some people find working with a jeweler's torch a bit intimidating, but if you use good common sense, take your time, and follow some basic torch safety guidelines, you can have an enjoyable and successful metalsmithing experience.

1. Have a fire extinguisher close at hand. Be sure that it is in good working order, and know how to use it.
2. Work in a well ventilated area. If you don't have an exhaust vent, have a window open or some circulation going, like a ceiling or floor fan. Note: some metals give off toxic fumes when heated, like nickel or zinc.
3. Wear clothing made of natural fibers with no loose or flowing sleeves.
4. Keep long hair tied back and out of the way.
5. Have your torch station set up on a heat resistant surface, like a metal tray or ceramic tiles.
6. Keep flammable materials away from your torch station. I.e. paper towels, notebooks, fuel canisters, etc.
7. Have a quench bowl with water close to your torch station. Be sure that it is placed so that you do not have to reach over your torch to quench your work.
8. Wear safety glasses when using the torch. Even if you are wearing regular or reading glasses, have a pair of safety glasses that will fit over those. Sparks can happen when heating metal. A piece of steel wool left from your cleaning efforts, or a piece of coating or other impurity left from stripping recycled copper wire, can ignite. (Caveat here is, always be sure your metal is clean!)
9. Use cross lock tweezers or a pair of pliers with heat resistant grips when holding metal in the flame of the torch.
10. Always keep one hand on the torch when in use, even if it has a flat base that it sits on.
11. Learn to use the torch in your non dominant hand and hold a pair of tweezers or a solder pick in your dominant hand while using the torch. The job of the torch is just to heat. You are best doing all of the other necessary actions like, placing solder, moving the metal pieces around, etc. with your dominant hand. Also, it is just natural for you to want to reach out with your dominant hand, so if you have a pick or tweezers in that hand while using the torch, you won't accidentally reach out to grab a piece of hot metal.
12. When finished using the torch, turn it off, then place it away and off to the side from your work. Even though the torch is turned off, the tip is still hot. You don't want to be reaching over a torch with a hot tip. Learn from my experience! Also, micro torches that don't have a wide base or a stand to rest in can be top heavy; you don't want them falling over in your work area!
13. Be sure that you are using the proper sized torch for the job at hand and are familiar with how it works. Perhaps this one should be guideline #1!



Micro Torch Soldering Station

Photo by Nancy Roberts (Fire extinguisher is on the floor!)

New book takes comprehensive look at *The Geology of Mississippi*

By Beverly Pettigrew Kraft

It's been 101 years since the last publication of a comprehensive book about the state's geology. *The Geology of Mississippi*, by David T. Dockery III and David E. Thompson, was published earlier this year.

The authors in their introduction say that the book is a resource for laymen and professionals regarding the state's geology, geography, stratigraphy, paleontology, physiography, ecology and mineral resources.

Gov. Phil Bryant in a foreword said, "This book will serve as the primary source of information about the geology of Mississippi for years to come."

The last comprehensive report was published in 1915 and revised in 1919 and 1925 by State Geologist E.N. Lowe and titled *Mississippi: Its Geology, Geography, Soils, and Mineral Resources*. Numerous reports and bulletins since that time have covered smaller slices of the state's past. Dockery combed all of that research and combined it with his vast knowledge to produce a meticulously detailed and documented volume.



"This is everything we know up until the day it was published," said geologist James Starnes. "David saw the need to put all of this stuff together. David worked diligently on going through the literature and putting everything into perspective."

Brief newsletter treatment can't do justice to the 751-page tome. Here is a glimpse:

During the plate collisions that formed super-continent Pangea during Pennsylvanian and Permian periods "...Mississippi was in the middle of Pangea with the Ouachita and Appalachian Mountains across its middle. The roots of these mountains are preserved today beneath a cover of Cretaceous and Tertiary strata along a structure known as the Central Mississippi Uplift..."

"Pangea was pulled apart into separate continents in the Triassic and Jurassic periods, forming new seaways. In the Late Jurassic, several thousand feet of salt were deposited in a shallow salty sea that covered southern Mississippi. Today Mississippi has fifty-three salt domes with crests at less than 6000 feet below the surface."

"During the Cretaceous period, volcanic islands came to life in the seaway that covered west-central Mississippi. Today, the throats of two Cretaceous volcanoes extend to within half a mile of the surface at Jackson and at Midnight, Mississippi."

Jackson had an active volcanic island about 75 million years ago. "First to colonize the new Jackson Dome islands would have been Pterosaurs...."

The book is an official publication of the Mississippi Department of Environmental Quality. Dockery is division director of Surface Geology and Thompson is a geologist there. *The Geology of Mississippi*, printed by University of Mississippi Press, is available from MDEQ or on Amazon.com. Price is \$80.

Article, reprinted with permission from the author, was first printed in the Mississippi Gem & Mineral Society, Florence, Mississippi Rocky Echoes Volume 57, Issue 9 September, 2016 Page 8

Photo of David Dockery by Beverly Kraft



Federation News:

The 2016 annual meeting of the Southeast Federation of Mineralogical Societies will be hosted by the Cobb County Gem and Mineral Society of Marietta, GA on November 18-20, 2016. Check out the SFMS website for more details.

Nominations for SFMS officers for 2017:

Here is the proposed slate of officers for the SFMS for the upcoming year proposed by the Nominating Committee. Voting will take place at the November Annual Meeting.

President: Teresa Polly Knoxville Gem & Mineral Society

1st Vice President: Craig Hamilton Jacksonville Gem & Mineral Society

2nd Vice President: Reggie Bolton Alabama Mineral & Lapidary Society

Secretary: Jerri Heer Tampa Bay Mineral & Science Club

Assistant Treasurer: Barbi Beatty Mississippi Gulf Coast Gem & Mineral Society

Editor: John Rasmussen Western South Carolina Gem & Mineral Society

AFMS 1st Vice President for 2018: David Wayment Canaveral Mineral & Gem Society

The SFMS Newsletter, the Lodestar, and the AFMS Newsletter are available for all members to read on line

For Federation news, please check out these websites:

<http://www.amfed.org/>

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



Our October meeting was the annual picnic and rock swap, so there are no meeting minutes to report this month.

NMGMS Members Take Note!

2017 is fast approaching and it is time to start thinking about renewing your NMGMS membership. Our club treasurer will be available to collect your dues at our meetings, or you can make checks payable to NMGMS (\$12 single, \$20 family) and mail them along with an application form to: NMGMS, P.O. Box 1445, Tupelo, MS 38802.

An application form is located on our club website: www.nmgms.org

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cherlang7@att.net



Diamond Pacific "Genie" cabochon machine, which was donated to NMGMS by Susan Savarin from the estate of past NMGMS member, Bob Marshall, is up and running!