



Volume 64 ♦ Number 07 ♦ July 2018 ♦ A monthly newsletter for and by the members of MAGS

# Mineral Safari

*Jimmy McNeil*

*July Program*



Hoba Meteorite, largest known

World's largest quartz cluster



In August and September of 2017 Hisami and Jimmy McNeil went to South Africa, Namibia, and Botswana to buy minerals. Traveling around 5,000 miles with a South African mineral dealer friend they visited local mineral collectors, dealers, and miners; they visited the locations of several world famous mines. Their talk will be about the country, the minerals, the mines, and the general details of traveling in these wonderful countries.

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## LET'S GO AGAIN, AND SOON!

Several MAGS Members were thrilled to squeeze onto the rapidly filling attendee list of the Nashville Rockhounds for the Coon Creek June 2018 DMC field trip in Adamsville, Tennessee. The site was close to Memphis, the field trip informative, and the fossils plentiful. Next week is not to soon to plan another trip,



## DOTTY COULSON

thanks to the Nashville sponsors, Shawn Seibold and Gerald Richmond.

Vicki, a Pink Palace staff member, greeted us at the Coon Creek Science Center. She explained that the site is in the Coon Creek Formation and Upper Cretaceous, which designates the 1000 types of marine fossils as being 70 million years

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# MEMPHIS ARCHAEOLOGICAL AND GEOLOGICAL SOCIETY

MAGS Rockhound News ♦ A monthly newsletter for and by the members of MAGS

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## MAGS AND FEDERATION NOTES

### Memphis Archaeological and Geological Society, Memphis, Tennessee

The objectives of this society shall be as set out in the Charter of Incorporation issued by the State of Tennessee on September 29, 1958, as follows: for the purpose of promoting an active interest in the geological finds and data by scientific methods; to offer possible assistance to any archaeologist or geologist in the general area covered by the work and purposes of this society; to discourage commercialization of archaeology and work to its elimination and to assist in the younger members of the society; to publicize and create further public interest in the archaeological and geological field in the general area of the Mid-South and conduct means of displaying, publishing and conducting public forums for scientific and educational purposes.

MAGS General Membership Meetings and MAGS Youth Meetings are held at 7:00 P. M. on the second Friday of every month, year round. The meetings are held in the Fellowship Hall of Shady Grove Presbyterian Church, 5530 Shady Grove Road, Memphis, Tennessee.

MAGS Website: [memphisgeology.org](http://memphisgeology.org)

MAGS Show Website: [www.theearthwideopen.com](http://www.theearthwideopen.com)

We aren't kidding when we say this is a newsletter for and by the members of MAGS. An article with a byline was written by a MAGS Member, unless explicitly stated otherwise. If there is no byline, the article was written or compiled by the Editor. Please contribute articles or pictures on any subject of interest to rockhounds. If it interests you it probably interests others. The 15th of the month is the deadline for next month's issue. Send material to [lybanon@earthlink.net](mailto:lybanon@earthlink.net).

### July DMC Field Trip

WHERE: Hogg Mine, Troup County, Georgia (fee site)

WHEN: Saturday, July 28, 9:00 A. M.-5:00 P. M.

COLLECTING: Beryl, Tose Quartz, Smoky Quartz, more

INFORMATION: Brian Burgess, (256) 479-2993 or  
[bburgess77r@gmail.com](mailto:bburgess77r@gmail.com)

### Links to Federation News

- AFMS: [www.amfed.org/afms\\_news.htm](http://www.amfed.org/afms_news.htm)
- SFMS: [www.amfed.org/sfms/](http://www.amfed.org/sfms/)
- DMC: [www.amfed.org/sfms/dmc/dmc.htm](http://www.amfed.org/sfms/dmc/dmc.htm)



**North Mississippi Gem  
and Mineral Society  
Members Contribute to  
the Study of Late  
Cretaceous Bony Fish  
Otoliths from the Blue  
Springs Site, Union  
County, Mississippi**

*Dr. Gary L. Stringer*

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*The Nugget*, North Mississippi  
Gem & Mineral Society  
Newsletter

For several years, Dr. Gary L. Stringer (Professor Emeritus of Geology, University of Louisiana at Monroe), George Phillips (Curator of Paleontology, Mississippi Museum of Natural Science), and Roger Lambert (North Mississippi Gem and Mineral Society) have been studying the paleontology of the Blue Springs Site in Union County, Mississippi. Dr. Stringer's research specialty is the ear stones or otoliths of bony fishes. Obviously, the study of fossil fish otoliths is not common, and many people have never even heard of otoliths. However, numerous scientific studies have demonstrated the value and usefulness of otoliths in interpreting and determining fossil bony fish assemblages.

The Blue Springs Site is very unique in its excellent preservation of otoliths in the 71.5–72.0 million-year-old Coon Creek Member of the Ripley Formation. Fish otoliths are not always preserved, especially if there is extensive leaching or lithification (e.g., formation of limestone). However, several of the aragonitic layers

in the Coon Creek Member at Blue Springs have well-preserved otoliths. The otoliths can be collected by the naked eye, but bulk sampling and microscopic examination are necessary to accurately determine the bony fish assemblage and interpret the paleoenvironment. Many of the otoliths are too small to be seen on the outcrop. Although the study, entitled "Diverse and Abundant Late Cretaceous (Maastrichtian) Fish Otoliths from northeast Mississippi and their Relationship to other North American Cretaceous Otolith Assemblages," is not complete, Dr. Stringer has examined over 3,300 otoliths from the Blue Springs Site. The otolith specimens have indicated the presence of 39 different taxa of bony fishes representing at least 22 families. The ear stones supplied essential information regarding the presence of bony fishes not available solely on the basis of osteological remains, and the Late Cretaceous bony fish assemblage at the site would be grossly underestimated and misinterpreted without the otoliths.

The incredible information provided by the fish otoliths would not have been possible without the assistance and contributions of several members of the North Mississippi Gem and Mineral Society. Roger Lambert independently conducted exhaustive, systematic surface collecting at the Blue Springs Site for over six years. It should be noted that Matthew Lambert, Roger's son, assisted him during this time interval. Roger and Matthew were meticulous and collected thousands of otoliths from the surface, which they have

graciously shared with Dr. Stringer. Matthew became so interested that he did his high school science fair project on otoliths and placed at the Mississippi State Science Fair.

Another member of the North Mississippi Gem and Mineral Society has also made major contributions to the study. Robert Langford collected and processed the largest bulk sample (approximately 296 kg or 650 lb) from the Blue Springs Site. Robert's bulk samples were from the aragonitic clay *Corbula* beds at the site. From these bulk samples, he obtained 236 otoliths. Robert allowed Dr. Stringer to examine all of his specimens and retain several to be photographed and included in the study. North Mississippi Gem and Mineral Society President Nancy Roberts also provided Dr. Stringer access to her surface collection of otoliths from the site. Like Robert, she allowed Dr. Stringer to retain several specimens to be photographed for the plates for the study. All of the photographed specimens for the study will be permanently repositied in the Mississippi Museum of Natural Science in Jackson.

The otoliths from the Blue Springs Site have also garnered international interest. Dr. Stringer shared some of his findings from the site with Dr. Werner W. Schwarzhans of the Natural History Museum of Denmark in Copenhagen. Dr. Schwarzhans is one of the most renowned experts on fossil otoliths in the world and has published almost 100 scientific articles and books on Recent and fossil otoliths. Dr.

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# MEMPHIS ARCHAEOLOGICAL AND GEOLOGICAL SOCIETY

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## NMGMS–Blue Springs Continued from P. 3

Schwarzhan was very impressed with the diversity and preservation of the otoliths and has become part of the study, which is anticipated to be completed this year. The Blue Springs study will be a major contribution to the study of Mesozoic bony fish based on otoliths in North America, and the North Mississippi Gem and Mineral Society members played a pivotal role in the research.



Matthew Lambert's science fair project displayed at 2015 MAGS Show



## ♪ Field Trips

*July 21*—We will go to the Matilda & Karl Pfeiffer Museum located at 1071 Heritage Park Drive, Piggott, Arkansas. Meet time is 11:00.

*August 18*—We will go to Discovery Park in Union City, Tennessee. Meet time is 10:00.

*September 22*—We hope to go to Hedger's Mine in Jonesboro, Arkansas. The meet time is 10:00.

## ♪ Adult Programs

*July 13*—Jimmy McNeil, "Minerals of South Africa, Namibia, and Botswana"

*August 10*—Indoor Rock Swap and Picnic

## Save The Date

### Indoor Rock Swap and Picnic

August 10—regular meeting time

(1) Best Hawaiian Shirt contest—with prizes

(2) Petrified Wood Auction

(3) Show Volunteer prizes (must be present to win)

Look for full details in the August newsletter.



*September 14*—Dr. Nina Bahair-Riding, "Lonnie Looper Fossil Collection"

## ♪ Hospitality

Thanks to all who signed up to work hospitality at the Membership Meetings. You make that part of the meeting work better.

The duties are simple:

1. Before Meeting: Arrive around 6:30. Help set up and organize tables. All items are located in a rolling cabinet.
2. Monitor snacks, drinks, ice.
3. After Meeting: Clean up, put all items back in cabinet.
4. Two Members per meeting.

Here is the schedule for the next three months:

*July 13*: **Leo Koulogianos** and **Jan Harris**

*August 10*: **Rock Swap**

NOTE: We need hospitality volunteers for September.

## July Birthdays

- |    |                        |
|----|------------------------|
| 1  | Ashton Coulson         |
|    | Fred Solang            |
| 2  | Sierra Ledbetter       |
| 3  | Wayne Williams         |
| 5  | Susan Goossens         |
|    | Clay Crumpton          |
| 8  | Leanne Murray          |
|    | David Day              |
| 10 | Nannett McDougal-Dykes |
| 13 | Emma Gaur              |
|    | J. D. Little           |
| 14 | Sue Nicholson          |

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## *Sherri Baldwin*

August 25, 1955 - June 17, 2018

In admiration, appreciation, and thanks



With an enchanting, cheerful, and meandering swagger Sherri walked along a creek, gravel pile, mine floor, or any place where there were rocks and collected rocks, more rocks, and a few more rocks. Meanwhile, Mike would check the car and tell Sherri room for about another bucket. Sherri would collect about 10 more buckets and Mike would find the space. I first observed this friendly banter about 18 years ago and knew right away Sherri was the quintessential rockhound. The pure joy of collecting those rocks, taking them home, sorting and arranging them exemplified Sherri. She extended those attributes to her family—Mike, Jennifer, Kelly, and her parents—friends, work, and all those who came in contact with her.

Thanks Sherri, greatly admired, appreciated, and you will be missed.

*W. C. McDaniel*





# MEMPHIS ARCHAEOLOGICAL AND GEOLOGICAL SOCIETY

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*Let's Go Again, And Soon!* old. The  
*Continued from P. 1* Pink

Palace  
bought the property in 1988 from a gentleman who smashed the shells in "Shell Ditch" to feed his chickens and threw the gray matrix into the garden to nourish his plants! Now that the Pink Palace owns the property, they host group digs and give short field paleontology introduction programs explaining that oyster and clam shells, mollusk, crab claws, squid fossils, and burrows are some of the most abundant fossils, with the Tennessee State Fossil, *Pterotrionia thoracica* as one of the most interesting.

We all considered, then took in stride the downpour with warnings of flash floods, put on our rain gear and rushed out into the torrent to find that exquisite fossil we

imagined finding. We slid down the muddy banks of the creek, tromped through ankle deep water, and as kids hunted and played, rockhounds scattered this way and that, finding awesome marine fossils as we surface collected and dug into the creek bed. We had been instructed to absolutely NOT dig too close to the fossilized specimen, leave plenty of the matrix, wrap in the provided aluminum foil, then return with our finds to inspect and learn the process of cleaning delicate fossils.

Since "Oops, I broke my fossil" are the five most repeated words from visitors to Coon Creek, Pat, also a staff member of the Pink Palace, felt compelled to demonstrate how to successfully clean your fragile fossil. The steps are:

1. Carve a base.
2. Clean off gray matrix with biology pick or sharp tool, keeping specimen and clay damp with water from a spray bottle.
3. Let dry-at least 2 days, much more for thick bases.
4. Paint with floor wax or clear acrylic (mix half and half with water) to preserve.

Being experienced fossil collectors gave us the privilege of hunting in the creek bed, but we were also given the pleasure of looking through the pile collected by a back hoe and deposited on the bank. Easy, but pleasurable hunting here and we found some additional specimens to add to our collections. This was a fun and profitable trip for the children and all adults on the trip.



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21 Susan Vaughn	27	Konrad Armstrong		
Angelina Wang	29	Lawrence Nuelle		
22 Dotty Coulson	30	Leslie Davis		
James Johnson		Misty Morphis		

## 🎵 New Members

Andros Morton and children Jada, Kaidence, Aiden, Nikkos, Jericho, and Novak

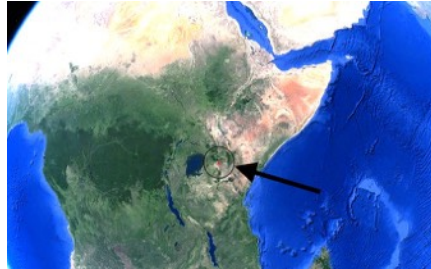
## Two Africas?

Matthew Lybanon, Editor

Geologists now have evidence Africa is physically splitting into two continents. A large crack, stretching several km, made a sudden appearance recently in southwestern Kenya. The tear, which continues to grow, caused part of the Nairobi-Narok highway to collapse and was accompanied by seismic activity in the area.

Tectonic plates move over a viscous asthenosphere (the upper layer of the earth's mantle). The forces involved do not simply move the plates around, they can also cause plates to rupture, forming a rift and potentially leading to the creation of new plate boundaries. The East African Rift system is an example of where this is currently happening. Activity along the eastern branch of the rift valley, running along Ethiopia, Kenya, and Tanzania, became evident when the crack suddenly appeared in southwestern Kenya.

Continental rifting requires the existence of extensional forces great enough to break the lithosphere (the crust and upper part of the mantle). The East African Rift is described as an active rift, in which the source of these stresses lies in the circulation of the underlying mantle. Beneath this rift, the rise of a large mantle



plume is doming the lithosphere upwards, causing it to weaken as a result of the increase in temperature, and undergo stretching and breaking by faulting.

Evidence for the existence of this hotter-than-normal mantle plume has been found in geophysical data and is often referred to as the "African Superswell". This superplume is not only a widely-accepted source of the forces that are resulting in the formation of the rift valley but has also been used to explain the anomalously high topography of the Southern and Eastern African Plateaus.

Rifts exhibit a very distinctive topography, characterized by a series of fault-bounded depressions surrounded by higher terrain. In the East African system, a series of aligned rift valleys separated from each other by large bounding faults can be clearly seen from space. The East African Rift is unique in that it allows us to observe different stages of rifting along its length. To the south, where the rift is young, extension rates are low and faulting occurs

over a wide area. Volcanism and seismicity are limited.

Towards the Afar region, however, the entire rift valley floor is covered with volcanic rocks, suggesting that, in this area, the lithosphere has thinned almost to the point of complete breakup. When this happens, a new ocean will begin forming by the solidification of magma in the space created by the broken-up plates. Eventually, over a period of tens of millions of years, seafloor spreading will progress along the entire length of the rift. The ocean will flood in and, as a result, the African continent will become smaller and there will be a large island in the Indian Ocean composed of parts of Ethiopia and Somalia, including the Horn of Africa.

**Editor's note:** The first article on this phenomenon was published online, <https://theconversation.com/africa-is-splitting-in-two-here-is-why-94056>. You can see a video with more information on YouTube, [https://www.youtube.com/watch?v=eJ\\_qbDoTuwk](https://www.youtube.com/watch?v=eJ_qbDoTuwk).





**Fabulous Tennessee Fossils**

*Dr. Michael A. Gibson,  
University of Tennessee at Martin*

**FTF 42*****Exogyra costata***

I am writing this third installment about the Late Cretaceous oyster *Exogyra costata* from the Dauphin Island Sea Lab on the Gulf of Mexico, just south of Mobile, Alabama. It is fitting that I write about this iconic oyster from this setting. I can honestly say I have eaten a lot of oysters this month: fried, raw (or “nude” as they say here), on crackers, on the half-shell (with and without cocktail sauce), Rockefeller, Bienville, and on po-boy sandwiches. The oysters I have consumed all belong to the modern edible oyster common to the southeast, *Crassostrea virginica*. I have taken my marine geology students at the sea lab on several research cruises in Mobile Bay and out into the Gulf of Mexico (or the “GOM” as we call it here) and we have dredged and grabbed *Crassostrea* oyster shells and shell hash sediment from a variety of places (Figure 1). It has made me think a lot about what it would have been like to have been along the Tennessee Cretaceous coast 72 million years ago. Would I have been eating *Exogyra* oyster po-boy sandwiches?

Our last *Exogyra* species to cover that occurs in Tennessee was described by Thomas Say as *Exogyra costata* in 1820 (Figure 2). As I mentioned earlier, Thomas Say’s specimens were collected from the Navesink Formation (a unit not unlike our own Coon Creek Formation) exposed in New Jersey

Kingdom Animalia  
Phylum Mollusca  
Class Mollusca  
Order Ostreoida  
Family Gryphaeidae  
Subfamily Exogyrinae  
Genus *Exogyra* (Say), 1820  
Subgenus *E.* (*Exogyra*)  
Species *E. costata* Say, 1820

and was the first species of *Exogyra* ever described. *E. costata* derives its species name from its most obvious morphological feature, which is its costate surfaces. Again, costae (or sometimes ribs) refer to a surface ornamentation found in many shells in which raised ridges are oriented vertical to the edge of the shell and radiate from the hinge area. In *E. costata*, the costae can even have small spines that protrude up from the shell, affording it additional protection. Note: There is one other *Exogyra* species we could discuss, *E. cancellata*, but I do not want to overdo these essays.

All of the *Exogyra* oysters exhibit a morphology that consists of an inflated lower valve, flattened upper valve, and “gyred” or twisted, growth shape. Nearly all species have thickened lower valves, some to the point that they are a couple of inches thick. What prompted this genus of oyster to secrete such a thick lower shell? Surely this required an ex-

treme expenditure of energy and resource, both of which could be used for growth and reproduction. There must have been some advantage to having the thickened valve, but what? The famous U.S. Geological Survey mollusk paleontologist Julia Ann Gardner (1882-1960), for whom Maryland’s State Fossil *Ecpchora gardnerae* is the namesake, wrote in 1914 that she thought the costate nature, and presumably the thickness as well, was because *Exogyra* was adapting to the roughness and high energy of the sea floor at that time. In 1961, Paul S. Galtsoff, in his classic paper on the modern *Crassostrea* oyster, noted that these oysters were, indeed, growing on firmer substrates and thus needed stronger shells.

But herein lies a problem. Modern oysters are “gregarious, sessile attached, epifaunal, xenomorphs”, which means that they live in clumps with others (gregarious), do not move (sessile), are cemented to a hard substrate (attached), live on the surface (epifaunal), and the shell shape can take on the shape of whatever they attach to (xenomorphs). *Exogyra*, is solitary, sessile, non-attached, and shows little xenomorphism. *Exogyra* are thought to have been only slightly gregarious (meaning they lived where other *Exogyra* lived, but not necessarily in close touching contact) and did not cement *Continued, P. 9*



*Fabulous Tennessee Fossils* to other substrates as a rule. *Continued from P. 8*

Rather, *Exogyra* was “semi-epifaunal” or partially buried as an adult (although it was epifaunal as a juvenile). The early coils of *Exogyra* often show the impression of the small hard substrate onto which the larval spat begin their initial epifaunal growth, but *Exogyra* quickly outgrew the size of that initial substrate to become free-living and semi-epifaunal. Sometimes this initial substrate was another shell on the seafloor, other times it was on a soft-bodied object, such as a piece of wood. The imprint of this substrate is visible in the earliest coils of the shell. This type of preservation of another organism without hard parts (as an impression in a shell) is called “bioimmuration” and it is a common *Exogyra* occurrence.

So why was the shell so thick? The clue to that question is in the sediments in which *Exogyra* is

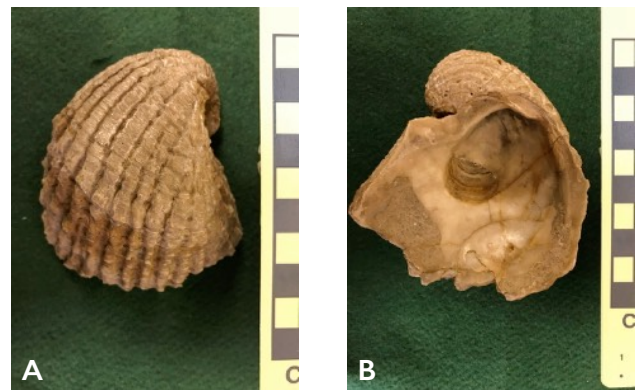
found. The sedimentary features of *Exogyra* deposits suggest that the seafloor would have been an unconsolidated (loose) muddy-sand. A thickened shell may seem like a detriment at this point due to its greater weight and the possibility of sinking, but keep in mind that the substrate was muddy-sand, not mostly mud with a little sand. Compaction in muddy-sand and mud are not the same; the sand in muddy-sand limits the total amount of compaction, causing the substrate to “firm” as it dewatered, limited the depth of sinking. So, it has been suggested that the convex thickened lower valve in *Exogyra* produced an “iceberg effect”, with part of the shell buried, allowing the shell to become sessile and stable by partially sinking into the substrate, but not so deep as to cover the commissure. The extra weight of the lower valve would keep the shell righted in more turbulent conditions (which would also remove

some of the mud to keep the substrate more sand than mud). Not being forced into tight xenomorphic gregarious clumps like modern *Crassostrea* would also allow the individual *Exogyra* to grow much larger as space would not be limiting. Another factor obviously was that calcium carbonate to build the shell was plentiful in the Late Cretaceous ocean waters.

So I sit here at Dauphin Island with my dozen modern *Crassostrea virginica* oysters, each oyster “bite size”. I am thinking how wonderful it would have been living on the Late Cretaceous coast eating a dozen oysters. Imagine a dozen *Exogyra* oysters to eat...meat as big as a small steak! Imagine that! Then again, oyster fishing in the Late Cretaceous with meat-eating dinosaurs patrolling the shoreline and mosasaurs, plesiosaurs, and sharks lurking in the depths might have been a pretty good challenge! Pass the cocktail sauce, please.



**Figure 1.** Modern *Crassostrea virginica* oyster shell hash from Mobile Bay (Photo by MAG). The largest oyster is two inches long.



**Figure 2.** *Exogyra costata* from the UTM Vanderbilt Collection (Photo by MAG; Scale in cm). **A.** Left valve showing external surface of concentric growth increments and prominent costae. **B.** Internal surface of same specimen showing curved shell form from which the genus gets its name and a prominent single muscle scar (referred to as being monomyrian).

# MEMPHIS ARCHAEOLOGICAL AND GEOLOGICAL SOCIETY

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## Wildacres Workshops



**SFMS**  
Southeast Federation of  
Mineralogical Societies, Inc.

Wildacres Retreat is a privately owned conference center nestled in the North Carolina mountains near Little Switzerland. The Southeast Federation of Mineralogical Societies (SFMS) holds a number of workshops there. Following is a list of workshop topics for August and September. More details will follow in the newsletters for those months.

### August

Casting  
Beginning Chain-Maillé Jewelry  
Intermediate Chain-Maillé Jewelry  
Fused Chain-Maillé Jewelry  
Introduction to Gem ID  
Metal Clay  
Metalwork Special Projects  
Silver I  
Wire  
Gem Trees

### September

Beginning Chain-Maillé Jewelry  
Beginning Chain-Maillé Jewelry  
Fused Chain-Maillé Jewelry  
Cold Connections I  
Electro-Etching  
Enameling  
Intro to Inlay  
Seed Bead Weaving  
Silver I

For registration information, contact Wildacres Registrar Linda Matvy at (865) 357-7917 or [waregis-trar2017@gmail.com](mailto:waregis-trar2017@gmail.com), or check the SFMS Workshops website, <http://sfmsworkshops.com>.

## May Board Minutes

*Bonnie Cooper*

Called to order 6:30. Present: Charles Hill, Jim Butchko, Carol Lybanon, Matthew Lybanon, Kim Hill, Bob Cooper, Bonnie Cooper, W. C. McDaniel.

**Treasurer:** An old \$5.00 check was cashed so Bonnie corrected January and February reports. She also passed around March and April monthly checking and summary reports along with January-March bank statements. We got another interest payment on our CDs. Report accepted.

**Membership:** We got 12 renewals and picked up 17 new memberships during the Show. A new Member who works at the Humane Shelter would like to speak to the club to offer a special dog adoption rat of \$30 for the month of May; request approved. Also a discussion of what is too young to be considered a Member; no decision.

**Field Trips:** May 19, Crow Creek. June 9, Magnet Cove (jointly with Arkansas club).

**Adult Programs:** W. C. explained the May program, "Amazing Crossword Puzzles to Gem Tree." June: Keith Riding, Mt. Kilimanjaro. July, Jimmy McNeil, Minerals of South Africa. August, rock swap. September, Dr. Nina Baghai-Riding, Lonnie Cooper Collection. October program will be about amber. November TBD. December, Holiday Party.

**Rock Swaps:** Carol advises we will have three rock swaps this year. (1) Saturday, June 16, at W. C.'s house. (2) Regular Membership Meeting on Friday, August 10. (3) October, at Freeman Smith Park in Bartlett, date and time TBD.

**Show:** Matthew reported the Show profit so far. Thanks to Jan Harris we sold almost all of our 500 grab bags. Thanks given to the club's membership who were very generous with their donations of food and drinks for the vendors and volunteers, food for

the Friday night dinner, and all the hours working at the Show.

**Old Business:** None.

**New Business:** David Day made a good suggestion, to have a MAGS membership table in the Show demo area. Carol suggested getting a fitted tablecloth with our logo to use for that table.

Adjourned 7:30.

## May Meeting Minutes

*Mike Baldwin*

Called to order 7:10. 36 Members and 3 visitors attending.

Bob Cooper welcomed new Members and visitors. He reported that over 100 MAGS t-shirts have been sold. A Memphis Animal Services representative offered discounted rate for canine adoption this month. Jim Butchko reported that the field trip next Saturday will be to Crow Creek near Forrest City, Arkansas, to collect agates, petrified wood, shark teeth, and fossil oysters. The June field trip will be to Magnet Cove, Arkansas, to collect pyrite. James reported that we had a very successful Show this year. Thank you for your volunteering. Next year the Show will be on April 27 and 28.

Displays: (01) Missouri limonite, drusy quartz and petrified wood; (02) wavellite found at the Show (03) Nonconnah treasures, including a football and a metal sombrero, agates, and coral; (04) carved stones identified by David McAllister.

Tonight's Junior program is on crystals. Next month's program is open. The July program will be about shark teeth, presented by Mike Baldwin.

Tonight's adult program is mineral and fossil crossword puzzles. Cheating is permitted and encouraged. W. C. gave each table a crossword puzzle. Turn in completed puzzle. If you correctly identify all items, all Members at that table choose a wire. Fossil puzzle to be com-

*Continued, P. 11*



*May Meeting Minutes* pleted in the same manner to collect a mineral base for each Member to use in wire wrapping. The table that completes both puzzles first wins an ammonite for each participant.

**Jewelry Bench Tips** by Brad Smith

SAVE WHEN BUYING SILVER

Silver products like sheet, wire, and casting shot are sold by the Troy ounce at what is called the spot price. That's what companies pay for the pure metal on the commodities market, and the spot price changes daily.

But in addition to the spot price, there is also a cost to fabricate the metal into wire or sheet, so the price of the item you buy is the cost of the metal plus the cost to make it. Different products have different fabrication charges because each takes a different amount of labor. Also, different companies will have different fabrication charges because of local labor rates and their desired profit margin.

You can save money by finding a company with a lower fabrication charge. Also, note that the fabrication charge per ounce is less on larger orders, so you can save more by buying more. Find a friend to place a joint order and split the shipping charges.

But for casting purposes, there's an even better way to save. Buy your silver at a coin store. They sell bars and rounds in pure and Sterling for the spot price plus about a dollar per ounce.

The local coin shop adds only a small profit over the spot price. So I save about \$3 per ounce, pay no shipping charges, don't have to wait for mail order, and support a local business.



SAWING JUMP RINGS

The difficult part of making jump rings for me has always been holding the coil while cutting off the individual rings. I use a saw to get the best fit when closing the rings later. I've seen all sorts of suggestions for ways to hold the coil, but the one that works best for me is this little jig made from scrap wood.

It's about 2 inches wide and 4-5 inches long with a groove cut down its length to cradle the coil of wire and a thin stop attached to the front end.

To cut the rings, thread your saw blade through the coil, hold the coil down in the groove and against the front stop, and saw through the bottom of the coil at about a 40 degree angle.

Don't forget to use some wax or cutting lube. It really does make a difference. If you don't believe me, do an experiment while you're cutting a lot of rings. Count how many rings can be cut before the blade breaks. First, do the test without lube, and then do it again while adding some lube to

the blade after cutting every 8-10 rings.

It's the best way I've ever found to hold the coils easily and securely. If the coil doesn't move, you break fewer blades. And it is safer than some other techniques because you are cutting away from the fingers.



Pick Up a Few New Jewelry Skills With Brad's "How To Do It" Books, <http://amazon.com/author/bradfordsmith>

**Federation News**

*Editor's Note:* Links to Federation news are listed on P. 2 of this and every issue of MAGS Rockhound News.

The lead article in the latest issue of *A.F.M.S. Newsletter* has information on basic lapidary arts projects for juniors that don't require any machinery at all. It describes a wire wrap project that uses just two small pieces of wire and a tumble-polished stone to make a pendant.

# MAGS At A Glance

## July 2018

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
1	2	3	 4	5 Board Meeting, 6:30 pm, St. Francis Hospital	6	7
8	9	10	11	12	13 Membership Meeting, 7:00 pm, Jimmy McNeil, "Minerals of South Africa, Namibia, and Botswana"	14
15	16	17	18	19	20	21 MAGS Field Trip, Matilda & Karl Pfeiffer Museum, Piggott, Arkansas
22	23	24	25	26	27	28 DMC Field Trip, Hogg Mine, Troup County, Georgia
29	30	31	1	2	3	4

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