



Volume 70 ♦ Number 08 ♦ August 2024 ♦ A monthly newsletter for and by the members of MAGS

August Meeting

Mid-Summer Indoor Rock Swap and Picnic



Our August indoor picnic and rock swap is back! Bring those rocks, minerals, fossils, and artifacts to swap or sell. Shoppers—even window-shoppers—are welcome. And bring your friends who have been thinking of joining MAGS.

Members and non-members welcome! If you know someone who is a "closet" rockhound, bring them along. This event is free and a great opportunity to show everyone what we do. Dinner is potluck. See P. 4 for details on our 2024 schedule.

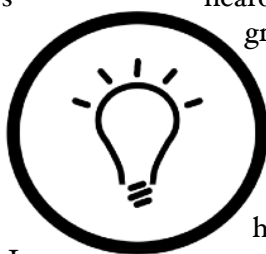
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SUGGESTIONS

The call for submissions to this month's issue asked for suggestions for MAGS activities. So far we've received two, both suggestions for field trip sites.

- How about a field trip to the diamond state park in Arkansas?
- Horse Mountain, Tennessee. Google showed beautiful agates. Either that or I



heard the Arkansas diamond mine opened new ground.

So that's two votes (or is it 1½?) for Crater of Diamonds State Park.

We're still open to other suggestions, for field trips or other MAGS activities. Let us hear from you.

MEMPHIS ARCHAEOLOGICAL AND GEOLOGICAL SOCIETY

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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 Membership Meetings are at 7:00 P. M. on the second Friday of each month May-October, and 10:00 A.M. on Saturday after the second Friday November-April. The meetings are held in the Fellowship Hall of Shady Grove Presbyterian Church, 5530 Shady Grove Road, Memphis, Tennessee.

MAGS Website: memphisgeology.com

MAGS Show Website: <https://earthwideopen.wixsite.com/rocks>



Please contribute articles or pictures on any subject of interest to rockhounds. The 20th of the month is the deadline for next month's issue. Send material to mlybanon@yahoo.com.

Go to <https://www.southeastfed.org/sfms-field-trips/dmc-field-trip-program> for the DMC field trip schedule and other information.

Links to Federation News

- ➔ AFMS: www.amfed.org/afms_news.htm
- ➔ SFMS: <https://www.southeastfed.org/>

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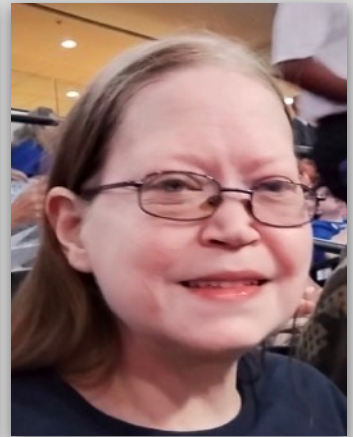
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Leigh Anne Butchko

February 2, 1979-July 23, 2024

Leigh Butchko, daughter of Jim Butchko, aunt of Hunter Hill, and sister of Amber Shields, all MAGS Members, died July 23, 2024. Leigh was a valuable and dependable Member of MAGS, especially with the Show. At the conclusion of each Show, Leigh would start working on the next year's Show by deciphering (trying to figure is that an "a" or "o") and recording the information from Grand Door Prize registration entries into an Excel database. That Excel email database serves as our primary marketing tool, getting people to the Show and into the door. Once they made it to the Show, many went directly to the Rockzone and there was Leigh. From selling tickets and grab bags to keeping up with the money and tickets, she was organized and dependable and did it with an enjoyable wry sense of humor. Thanks, Leigh. All of us will miss you.



President's Message

Announcements:

Mike Baldwin will be the Youth Coordinator for the remainder of the year.

Following are a few pictures. The croissant was under consideration for the MAGS Rock Food Table but disappeared during lunch. MAGS Member Karmen Vance found the Rockhound rock on Percy Priest Lake in Nashville. Elmwood Cemetery has some fascinating and historical tomb-

stones. Recently I discovered this very large marble sphere atop of one those tombstones (see P. 4).



Rock Food Table Candidate.



Rockhound (back away and use your imagination).

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President's Message
Continued from P. 3



Nonconnah Creek

Part 1, Bill McManus

My wife Laura and a friend Joe and I recently visited the Nonconnah Greenbelt to do some rock hunting. This section is on Forest Hill Irene, about 100 yards north of TN 385 (Bill Morris Parkway). There is a small parking lot and a couple of ponds. A paved

Date	Membership Meetings	Field Trips
August 9	<ul style="list-style-type: none"> Friday night Rock swap/sale/picnic—indoors. 	None.
September 13	<ul style="list-style-type: none"> Friday night Adult and Junior programs. Display theme: petrified wood. 	Labor Day trip to Nonconnah Creek—location to be announced.
October 11	<ul style="list-style-type: none"> Friday night Adult and Junior programs. Display theme: fossils 	DMC field trip, location and time to be announced.
November 9	<ul style="list-style-type: none"> Saturday day MAGS Theobald Collection gets a review. 	November 11: Arkansas quartz dig, location to be announced.
December 14	<ul style="list-style-type: none"> Saturday day Holiday party. 	December 1: Creek collecting, location to be announced.

W. C.

path leads from the parking lot to a bridge over a small creek. After the bridge, we take the



level of the creek, a broad gravel bed awaits you. Most of the year you can easily wade to the opposite bank and find some concen-

trated gravel. There are numerous other beds downstream. We've had a fair amount of success here in the past, though as usual with such, some visits we've come up with nothing and sometimes—like the latest—we've found a nice quantity and quality of fossils. Referring to photo 1 (above), from left are my best finds: A couple of not-very-impressive agates and crinoid, but of more interest is

Our trail heads—generally—north and then west upon reaching the edge of the creek. The banks are quite high and there are few areas which allow safe access. Fortunately one of these is located just a few minutes walk once the path turns west. Once you find the entrance and make your way down to the

more interest is *Continued, P. 5*

Nonconnah Creek, Part 1 the seem-
Continued from P. 4 ing impres-
 sion of a

snail and a possible burrow. In the middle are Laura's: A number of crinoids (including one masquerading as a snail shell), coral, and I believe some other marine fossil. On the far right are Joe's prizes: A large marine fossil, another 'burrow' cemented to a large rock, and a crinoid. Each had sev-



eral pieces not shown, mostly coral. Note—this site has some shade, but you'd be advised to go in the morning or early evening at this time of the year!

Part 2, Laura McManus

My husband Bill, our friend Joe, and I went out to search for a bit at the Nonconnah Greenbelt recently. A few finds.



Second Best Known Arkansas Mineral

Matthew Lybanon, Editor

When you think of Arkansas minerals, quartz comes to mind immediately. Several mines in the Hot Springs-Mount Ida area draw fair-sized crowds digging through tailings piles, looking for that perfect crystal.

Quartz is one of the most common minerals on Earth. MAGS Members know about a less common Arkansas mineral: Wavellite. Wavellite was named by William Babington in 1805 in honor of Dr. William Wavell, a physician, botanist, historian, and naturalist who discovered the mineral. Or if he didn't discover it, at least he was the first to send material to London for documentation.

So the mineral's name is **Wavell-ite**. It is a classic radiating mineral, forming spectacular pinwheel aggregates emanating from a central core in spherulitic balls. Wavellite's chemical formula is $\text{Al}_3(\text{PO}_4)_2(\text{OH})_3 \cdot 5(\text{H}_2\text{O})$. Its color is light to dark green, yellow-

ish-green, yellow, brown, gray. Rarely white or colorless. It may exhibit concentric multicolored zoning in radial cross-sections. Hardness 3.5-4. Single crystals, which are long prismatic, and usually striated, are rare. It's most often in radial and radiating aggregates, and in rounded, ball-shaped clusters of spherulitic masses. Also botryoidal, stalactitic, and acicular.

The Wavellite specimen in the Smithsonian's Museum of Natural History is from Dug Hill, Arkansas, near the community of Avant on the northeast end of Lake Ouachita in Garland County. According to *Rockbounding Arkansas*, it's called Dug Hill because so many past collectors have pot-holed the hillside. A second location is the now abandoned Montgomery County quarry, some 2.5 miles northwest of Mount Ida. This location is also known as Mauldin Mountain.

Ref: Mike and Darcy Howard, *Rockbounding Arkansas: Wavellite in Arkansas*, <http://rockboundingar.com/wavellite.php>



Fabulous Tennessee Fossils

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

FTF 113

Lloyd W. Stephenson



Last essay I wrote about finding a signed copy of a U.S.G.S. publication that piqued my sense of history of paleontology, not just geohistory. The author of that publication was Lloyd William Stephenson (1876-1962) who was a U.S. Geological Survey stratigraphic paleontologist who left a lasting legacy in stratigraphy, especially in the Cretaceous of the southeast. My first introduction to him was as an undergraduate student at William and Mary. In my paleontology class, I perused his 1954 GSA paper where he extended the Yorktown Formation (then Miocene in age), which was the formation that I was studying, and from which I had been collecting fossils from since my pre-teen years, northward from Virginia into Maryland.

Little is known about how Stephenson first became interested in geology and paleontology. He spent his youth in Harrison County, Ohio, and Ohio was well-known for its fossil deposits. He graduated from Scio College (now called the University Mount Union), Ohio, in 1903 and began his graduate work at Johns Hopkins University in 1904 studying geology. JHU was already a powerhouse for producing geologists and paleontologists (see earlier FTF for numerous connections of Tennessee paleontology and JHU). He learned his field mapping skills under Benjamin Miller (Maryland

Geological Survey) and A.F. Crider (U.S. Geological Survey). In 1905, Stephenson was mapping Cretaceous deposits and collecting fossils in Maryland under the direction of C.K. Swartz (Maryland Geological Survey). By 1907, Stephenson was expanding his experience southward into North Carolina under the tutelage of William Bullock Clark (JHU) and E.W. Berry (JHU paleobotanist). Collecting plant fossils with Berry later expanded to Stephenson following the Cretaceous outcrop belt around the coastal plain of Georgia, Alabama, Mississippi, and into West Tennessee. Using these field experiences, Stephenson's JHU Ph.D. dissertation, "Mesozoic deposits of the coastal plain of North Carolina", was later expanded into a series of papers on Cretaceous fossils and stratigraphy in the Gulf Coast region. By 1922, he was working internationally with studies in Mexico and Venezuela. He was part of the U.S.G.S. war effort during WWII and finally retired in 1947. In retirement he continued his war effort U.S.G.S. work by teaching field mapping and then exploring for oil in Japan (1949).

One of his most important contributions to Tennessee paleontology occurred when he published his "The Zone of *Exogyra cancellata* Traced Twenty-five Hundred Miles" (AAPG Bulletin 17:1351-1361) in 1933. Recall from

FTF 40-42 that *E. cancellata* is one of the biostratigraphically important oysters used to correlate stratigraphic units in West Tennessee. Many of Stephenson's stratigraphic papers included West Tennessee and it is known that he visited the Coon Creek site at least once. While he was a frequent visitor to Cretaceous deposits in Alabama and Mississippi, publishing many papers on his findings in those states, Stephenson did not work in West Tennessee as extensively. In 1955, Stephenson wrote a paper for the Transactions of the Gulf Coast Association of Geological Societies meeting in Biloxi, Mississippi, and he reminisced about his Cretaceous field work in Mississippi. He noted visiting many areas in Northern Mississippi, some by train, looking at Cretaceous deposits near Iuka and Corinth, but evidently did not extend his trip into Tennessee. So why did Stephenson not visit the West Tennessee region as much as one would expect? Perhaps it was due to a mysterious "friction" that I found a cryptic reference to that began years earlier in his career?

Stephenson had been contacted by E.W. Berry very early in Stephenson's career (c. late 1910s) to consider extensive study of the then Ripley (now Coon Creek Formation) in Tennessee. Unfortunately, this was due to some type of friction that

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Fabulous Tennessee Fossils had arisen
Continued from P. 6 between

the
U.S.G.S geologists and the Tennessee Division of Geology. It appears that U.S.G.S workers were prohibited from working in Tennessee directly. Instead, Berry influenced Stephenson to find a graduate student to take-on the project of describing the extensive Cretaceous outcrop belt in West Tennessee and the abundant fauna of the Ripley Formation exposed at Coon Creek as a dissertation topic. Guess who ended-up being that student? Yep, you guessed it. It was Trenton, Tennessee, native and Vanderbilt University graduate Bruce Wade. Wade began his studies in 1915 and published his iconic monograph, U.S.G.S. Professional Paper 137, *The Fauna of the Ripley Formation on Coon Creek, Tennessee*, in 1926. In his memoirs, the stratigrapher and frequent Coon Creek visitor Watson Monroe commented on wishing he had met Stephenson earlier in his career as Stephenson taught him some of his most important field mapping lessons, but too late in life. I do not have the particulars yet on the nature of the “friction” between the two agencies, but will keep looking for that as it was one of those turning points in the history of paleontology in Tennessee.

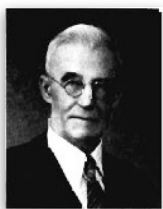


Figure 1. Lloyd W. Stephenson, U.S. Geological Survey paleontologist. (Photo Credit: Geoscience World).

Book Report

Nannett McDougal-Dykes
MAGS Librarian

GemStones, by Call Hall

Identification made easy, this is the book for you. For beginners and established enthusiasts alike. *GemStones* explains what a gemstone is, how and where gemstones occur. What natural properties they possess, and how they have been fashioned and imitated through the ages. To help you in the initial stages of identification, a visual color key illustrates the variety of colors found within gemstones. A concise glossary explains relevant scientific and technical terms.

This book is for everyone, with amazing photographs of uncut stones, color variations, and a range of popular cuts. Amazing quick reference and facts.

This book is a great addition to the MAGS Library.



Adult Programs

August 9: Indoor Rock Swap

September 13: Kent Moran, CERI

October 11: Dr. Ryan Parish, TBD



Junior Programs

August 9: Indoor Rock Swap

September 13: Mike Baldwin, Exploring

October 11: TBD

New Members

Lawrence and Sharon Leicham
Migliara

Field Trips

August: None

September: Labor Day trip to Nonconnah Creek

October: DMC field trip, details to be announced

August Birthdays

- | | |
|----|-------------------|
| 3 | Mike Coulson |
| | Ricky Davis |
| 6 | Marion Joni |
| 7 | Oakley Hall |
| 12 | David Murray |
| | Ron Brister |
| 13 | George Krasle |
| 16 | George Loud |
| | Letitia Brister |
| 19 | Heidi Kitkowski |
| 20 | Jan Shivley |
| 22 | Bishop Martin |
| 23 | Stephanie Blandin |
| 25 | Lenora Murray |
| 27 | Valencia Davis |
| 28 | Susan Cohn |
| | Beth Day |
| 30 | Laura Sanford |
| | Cyndi Bothwell |



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July Meeting Fun

Christine Anderson

Photos by Christine, and Nannett McDougal-Dykes

After an informative presentation by Ryan Pudwell on the Nonconnah Creek in our own city and some snacks we helped clean up and got to crack a geode as a reward. First we got it set up in the cracker, which looks like a water pump with a thick metal chain on the end and then we got to cracking. It made a loud noise and we knew we had a good one. We were excited to see what we got. It was gorgeous! It also reacts to UV light really well. What a fun treat!



Some nice projectile points



You can find fossils there



Ryan telling us about Nonconnah Creek



Nonconnah finds



Geode cracker

Mike Baldwin
presented the
Junior program



June Board Minutes

Josh Anderson

Zoom meeting called to order.

Secretary: Minutes sent to Board by email. Minutes approved.

Treasurer: Report approved. Two of our CDs got interest payments of 71¢ for each account. working on a breakdown of our expenses and hope to have it out soon.

Membership: No new members or renewals.

Field Trips: None scheduled for June and July.

Adult Programs: Have listed the remaining programs for 2024 and the start of 2025. Only 3 slots left to fill for next year! Also, we can coordinate a field trip with the October '25 Egyptology program. 2024 schedule: July, Ryan Pudwell. August, Rock Swap. September, Kent Moran with CERI (Center for Earthquake Research & Information). October, Ryan Parish. November, WC program. December-Holiday Party. 2025 schedule: January 1/11, Saturday @ 10, TBD. February, 2/8, Saturday @ 10, Jeremy Veldman (Eclipse). March, 3/8, Saturday @ 10, Keith Riding (Mt. Everest). April, 4/12 Saturday @ 10, Grab bag packing/Rock Show. May, 5/9, Friday @ 7, Alan/Debbie Schaeffer (Israel trip). June, 6/13, Friday @ 7, Mike Howard (UV Minerals). July- 7/11, Friday @ 7, TBD. August, 8/8, Friday @ 7, Rock Swap. September, 9/12, Friday @ 7, Nina Riding (TBD). October, 10/10, Friday @ 7, Darcy Hackley (Egyptology @ U of M). November, 11/8, Saturday @ 10, TBD. December, 12/13, Saturday @ 10, Holiday Party.

Junior Programs: Working with Mike, awaiting details.

Library: No new books.

Editor: Information for the next three months (at least) of MAGS activities goes into the newsletter: programs, field trips, rock swaps, and anything else having to do with ar-

chaeology, minerals, fossils, and other topics of interest. The 20th of the month is the normal deadline for newsletter input. Something I receive later might make it, but obviously it won't work if everybody sends their submissions late. Aside from articles and photos of all kinds, I'm open to suggestions for new topics and features. The primary purpose of the newsletter is to get club information to Members, but anything else that might interest MAGS Members is welcome.

Show: Reported account balance. \$88 of show tickets to deposit.

Other Business: Will send info about an incentive program for Members

Meeting adjourned.

Jewelry Bench Tips by *Brad Smith*



SANDING DISKS

One of the flexshaft tools that saves so much time is the snap-on sanding disk. I mainly use the medium and fine grits but sometimes like the very fine ones that are sold for working with platinum.

Ordinarily, you'd think of placing the disk on the mandrel with the grit side facing away from your hand, but notice that you end up with your elbow up in the air. Instead, try flipping the disk so that the grit side is towards your hand. It's a much more comfortable position because the elbow is down near your side, and it lets

me hold the work up close where I have a better view of what I'm sanding.

I use these snap-on disks so frequently that I keep multiple mandrels with different grits already mounted in the bur stand. Some mandrels have the grit facing out and some facing in.

EASIER PRONG SETTING

When setting stones in a prong mount, the tool is less likely to slip off the prong if you grind a shallow groove into its face or rough up the face a bit with sandpaper. Some folks prefer a prong pusher for doing this, and others like a set of pliers with a slight groove on one jaw.

The easiest way to create a slot on the pusher is with a file, and the quickest way to create a slot on one jaw of your pliers is with a separating disc. Then do a rough polish on the slot with a medium grit, knife-edge silicone wheel.

See Other Tips in my Smart Solutions for Jewelry Making Series
<http://amazon.com/dp/B0BQ8YVLTJ>

DMC—What Is It?

Matthew Lybanon, Editor

Every month the calendar on the last page of this newsletter lists something called a DMC Field Trip. New Members may not have any idea what that is.

MAGS is a member club in the Southeast Federation of Mineralogical Societies, an umbrella organization of rockhound clubs in the southeast. DMC is an association of field trip leaders within the SFMS who have agreed to join together to take turns sharing field trips with other DMC clubs.

MAGS will host the October DMC Field Trip. We'll have lots of visitors. See you there!

MAGS At A Glance

August 2024

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
28	29	30	31	1 Zoom Board Meeting, 6:30 P.M.	2	3
4 DMC Field Trip	5	6	7	8	9 Membership Meeting, Indoor Rock Swap & Picnic, 7:00 P.M.	10
11	August			15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

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