MEMPHIS ARCHAEOLOGICAL AND GEOLOGICAL SOCIETY

MAGS Rockhound News

Volume 67 ◊ Number 09 ◊ September 2021 ◊ A monthly newsletter for and by the members of MAGS

Rex Appeal

September Program

A brief history of the Sue Project at Chicago's Field Museum

Editor's note: *The September program (in-person meeting, Zoom presentation) will be presented by Paul Brinkman. Paul has a Ph.D. in history of science and specializes on the history of American vertebrate paleontology. He is the author of The Second Jurassic Dinosaur Rush (University of Chicago Press, 2010). He worked for almost three years as a member of the team of fossil preparators who cleaned Sue's bones, molded and casted them, and made them ready for display.*

Sue is the largest, most complete, and most celebrated *Tyrannosaurus rex* ever *Continued, P. 4*

In this issue

FIELD TRIPS

JIM BUTCHKO, FIELD CHAIR

Nine MAGS members made the trip to Union City to see Discovery Park of America on the last day of July. We all had a safe and wonderful time checking out mostly the indoor exhibits since it was a little humid outside. If you've never been there you should look at their web site (https://discoveryparkofamerica.com).

Many of our favorite quarries in Arkansas have imposed strict no visitor policies so we'll just have to wait and hope that someday things will loosen up a little. The Mississippi River is expected to be at a low point for the next couple of weeks, so let's go there. MAGS members will meet at the Millington Walmart behind Popeye's *Continued, P. 3*

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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

MAGS Show Website: www.theearthwideopen.com or https://earthwideopen.wixsite.com/rocks

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.

All 2021 DMC field trips have been cancelled and rescheduled to 2022. The next MAGS-sponsored trip is currently scheduled for October 2024.

Links to Federation News

- AFMS: www.amfed.org/afms_news.htm
- SFMS: www.amfed.org/sfms/
- DMC: www.amfed.org/sfms/_dmc/dmc.htm

President's Message

MAGS upcoming schedule of events

1. Rock swap—September 6 at Lou White's
2. Membership meeting—September 10 at the church
3. Field trip—September 11, Richardson Landing
4. Membership Meeting—October 8 at the church
5. Grab bag packing party—October 9 (tentative) at the club storage shed
6. Field trip—October 23/24, Potosi, Missouri.
7. Holiday Show—November 12/13 at the church
8. Field trip—November 20/21, Hot Springs, Arkansas
9. MAGS Holiday Party—December 10

All MAGS events are subject to current Covid guidelines and community status at the time of the event. Keep your Staurolites crossed.

Holiday Show update

1. Shady Grove Fellowship Hall,
- Club/Show tables—grab bags, Rocks Around the Clock.
- No exhibitors, demonstrators, displays.

2. Dates—Friday, November 12, and Saturday, November 13
3. November 12 plans
- Replace Membership Meeting with following.
- 3-5 pm set up and dealer move in
- 5-8 pm Show opens to public

4. November 13 plans
- 8-9 am vendor prep
- Open to public 9-4 pm
- 4-5 pm vendor breakdown building clean up

Volunteer needs will be distributed later. Mark your calendar and be ready to help.

The Show will have several tables/spaces available for Members to sell your stuff. Let me know if you are interested.

W. C.

Field Trips
Continued from P. 1

at 9:00 A.M. Saturday, September 11. We will caravan from there to Richardson's Landing. This trip is a little bit rough in hot weather since we have to walk about one half mile just to get to the "beach". Once there you can walk several miles along the gravel bars finding agates, chert, pet wood, coral, and fossils washed down from most of this continent. Some people bring metal detectors. If you find a washer or dryer I won't help you carry it out, but I will be carrying water, sunscreen, and band-aids. On October 23rd and 24th, we will go to Missouri to collect Druse Quartz and Barite. James Johnson is planning this trip for us and I will have more info in the next newsletter. Please contact me if you are interested in either of these trips. We

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Field Trips
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are still waiting on confirmation for a museum nearby and hope to have more information soon.

Call me, Jim Butchko, (901) 921-3096.

Rex Appeal
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found. This talk will explore the fascinating history of the Sue Project beginning with Sue's discovery near Faith, South Dakota, in August 1990 and ending with the unveiling of the Sue's iconic exhibit at the Field Museum in May 2000. This history was a surprisingly contentious one. In 1992, Sue was seized by the FBI, then held captive in a shipping container while litigation against her discoverers was underway. When ownership of Sue's skeleton reverted to Maurice Williams, the landowner, she was then auctioned off by Sotheby's. Chicago's Field Museum paid more than $8M for the skeleton—a record at that time—then prepared the bones and mounted them for display.

Evidence of Clovis Occupation in the Missouri Bootheel of the Mississippi Delta

Dr. Juliet E. Morrow
ASU Research Station-Jonesboro

This brief article documents a few early Paleoindian period Clovis points found in Southeast Missouri. The Paleoindian period in North America begins circa 15,000 years ago. Because buried, sealed camp sites of these earliest hunters are so rare in the Mississippi Delta, surface collected artifacts or even a fragment of a fluted point is a very important part of puzzle, if the location is known.

Other tools of Early Paleoindian hunters include end scrapers, blades, and gravers (Figure 1) are important clues to understanding past lifeways and these should be recorded wherever they co-occur with Paleoindian projectile point/knives. People who made Clovis and other fluted points forms frequented locations with springs and toolstone. We know from sites in Washington, Montana, Wyoming, and Florida, that Clovis people made projectiles and foreshafts from antler, bone, and ivory (Figure 2). So far, no osseous Clovis age tools or ornaments have been reported for the Central Mississippi River Valley. The known modified portable objects we know of that date to the Paleoindian period in this region are limited to stone.

Figure 1. Clovis tool kit a) Clovis point, ear missing, b) Clovis point, complete, non-resharpened, c) Limace, d) Precision cutting tool,e) Endscraper, f) Graver, g) Coronal graver, h) Blades, i) Blade, j) Crested blade, k) Beak, l) Beak, m) Beak (in Europe it's called a Bek).

The father of Missouri Archaeology Carl Chapman (1980:93, Figure 4-3) was aware of only two fluted points from the Missouri bootheel region. However, the proximity the toolstone source known as Crowley's Ridge makes it more likely that there are many fluted point sites in the region. Within Crowley's Ridge there are gravel deposits also known as the Citronelle gravel or Lafayette Formation, however, geologists have renamed this formation the Pliocene Upland Complex Gravels (PUCG).

Over 100 fluted points in Missouri *Continued, P. 7*

Fabulous Tennessee Fossils

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

FTF 80

Unsuccessful Predation in a *Macropleura* Brachiopod

One of the most commonly encountered biotic interactions that modern ecologists recognize, and that paleontologists search for in the fossil record, is predation. Referring back to our definitions of biotic interactions, predation is an interactive association that records an antagonisitic, deliberate, exploitative interaction of short duration in which one organism benefits from the association by deriving nutriment, resulting in the death of the other organism. Using the (cost,benefit) terminology introduced in FTF 78, (host, sclerobiont or organism 1, organism 2), predation is coded as a (+,-) because organism 1 benefits by obtaining food, but organism 2 loses as it dies as a result. What happens when the predation is unsuccessful (the prey gets injured in the interaction, but gets away) or only partial? How is it coded for BIA analysis? One example would be a shark that only tests, or "tastes", its prey, as are many shark attacks on humans. The shark injures the swimmer, but decides it is not food and moves on. The intent was predation, but the swimmer survived and usually is not eaten—only tasted. Is this predation? The degree of success or ultimate success of a biotic interaction is not usually considered as part of the classification of the interaction, but does need to be considered. What happens if the shark does remove a swimmer's leg or arm as food, but the swimmer manages to get to safety and lives through the attack? Predation did occur, to a point or at least "partially", but the prey did not die from the interaction. As much as we would like to have clear pigeonholes for classifying biotic interactions, there are complex interactions that do not easily fit those pigeonholes.

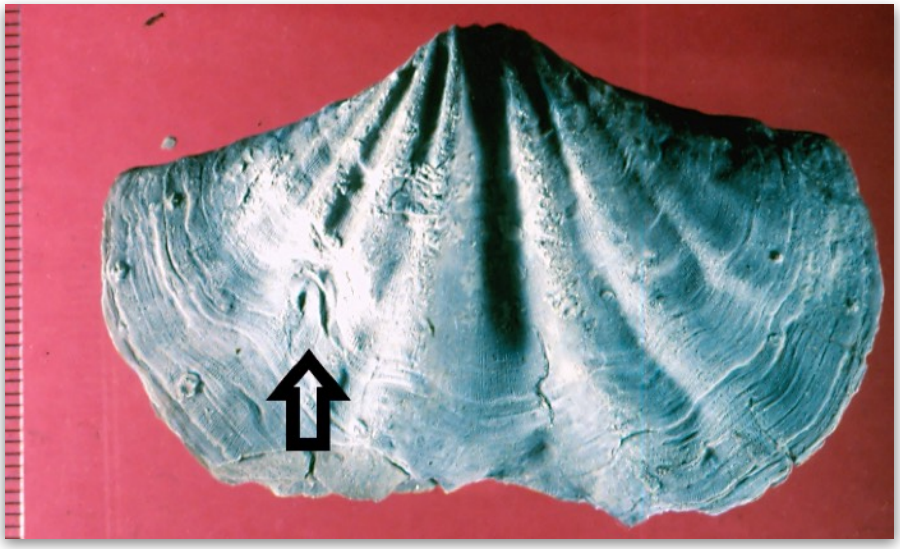

Figure 1. *Macropleura macropleura* brachiopod showing unsuccessful predation attempt by a cephalopod from the Birdsong Shale Member of the Ross Formation (Photo by MAG, scale in millimeters).

Figure 1 is a specimen of the brachiopod *Macropleura macropleura* collected from the Birdsong Shale Member of the Ross Formation (Lower Devonian) exposed in the Vulcan Materials Quarry in Parsons, Tennessee. There are several interesting biotic interaction features on the shell, some of which are sclerobionts. Notice the well-developed concentric growth lines of the shell, which indicated periods of growth of the shell. Some of the growth lines are more prominent than others, especially near the outer margin of the shell, but they all essentially are coincident with one another. This is called "holoperipheral growth" and is typical of brachiopods. It is how brachiopods grow larger and older. Usually the thinnest shell will be near the outer margin. The small, rounded, sclerobionts near the margins of the shell are worm tubes that have traditionally been assigned to the genus *Spirorbis*. *Spirorbis* is an enigmatic taxon that is now considered a microconchid (more on that in a later essay). There are a few small bryozoan colonies on the shell. Each of these sclerobionts has its own biotic interaction with the host

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Fabulous Tennessee Fossils Continued from P. 5

Macropleura, but the interaction that we will focus on is indicated by the black arrow.

Notice that there is an indentation in the growth lines of the *Macropleura* shell. This is not a sclerobiont. What we see is an apparent change in the growth line pattern due to some type of damage or injury. Did the damage occur post-mortem (taphonomic) or during the lifetime of the host *Macropleura* (biotic interaction)? In this case, it is clear that something happened that created an indentation into the shell, but later new shell was holoperipherally added to the margin of the shell and the indentation was eventually filled (healed). This tells us that the damage occurred during the lifetime of the *Macropleura* and was not a post-mortem damage to the shell. After a few growth periods, the regular coincident pattern of growth lines resumed to the margin of the brachiopod. The damage is an injury of some type sustained during life, thus it represents a true biotic interaction with something.

Could another organism have been responsible for the divot-shaped injury and if so, how would it be classified in BIA? Close-up viewing of that area shows that the growth lines of the shell are truncated in the divot-shaped injury area. The injury is triangular in shape. This breakage shape does not match any known pre-existing lines or planes of weakness in a living *Macropleura* shell, so was not a structural failure in the brachiopod shell. The damage cuts across all of the shell structure (internal and external). We only have one valve preserved, so we do not know if it is mirrored on the other valve. The divot is located along the then living margin of the shell, called the commissure. The commissure is where the brachiopod opens and closes its shell during feeding, respiration, and reproduction, and thus exposes it's delicate internal soft-part anatomy. This type of shell damage is well-documented on shelly invertebrates in modern oceans and is produced by cephalopods (octopi, nautiloids, squid, etc.) feeding on shelly prey. It is thus reasonable for us to interpret that our *Macropleura* was attached by a cephalopod in the Birdsong Shale sea in an attempt to eat it—predation. Orthocone (straight-shelled) nautiloid cephalopods are relatively common fossils from the Birdsong Shale, so we know these predators did exist there. Interesting, there are no fossil fish fossils from the Birdsong Shale, so we can exclude them as possible predators for now.

Now comes the fly in the ointment—the *Macropleura* lived to repair! The predation was not successful; it was incomplete. Is it predation if it is not successful? Remember that the definition of predation includes the final death of the prey. Modern ecologists would basically ignore this; however, paleontologists need this information to add detail and clarity to ancient ecosystems that we do not get to directly observe. We cannot ignore it.

There are a couple of ways to handle the BIA classification conundrum that this specimen creates. We could call this an "attempted predation", "unsuccessful predation", or "aborted predation". "Partial predation" is a possibility, but that phrase suggests that something can live as "partially dead" or "partially alive", so this phrase probably should be avoided. There is a term for organisms that may take a "piece" of another organism for food, but the prey does not necessarily die in the process, at least not all of the prey. When parrotfish bite-off chunks of coral, this is called "cropping". The same is true of deer that nip-off leaves to eat. The leaf dies, but the rest of the plant still lives and recovers. When a parrotfish crops a coral, the coral colony survives, but the individual corallite members of the colony that were copped die (although new coral polyps may grow in the space). Is this attempted predation, unsuccessful predation, or aborted predation? From the deer or parrotfish's perspective, the predatory act was successful in that it did obtain the food it wanted. In the prey's perspective, the predatory act was not successful and was only an attempt because the prey survived. In our shark example, was the swimmer that was attacked a victim of incomplete predation, aborted predation, unsuccessful predation, or was the swimmer only "tasted" by the shark to see if it would be good food? If the later, is tasting a behavior that is equated with predation? Or is it a form of exploration? In my research, I try to separate these types of cases from clear-cut examples of completed predation. To me,

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Fabulous Tennessee Fossils
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they represent their own category of interaction that spans the traditional categories of documented by ecologists and paleontologists. I recorded our *Macropleura*'s traumatic event (assuming it felt the trauma, if I can be allowed to be anthropogenic with my brachiopod) as an "unsuccessful or aborted predation attempt". This is significant, as it could provide new information about interactions, or why there are not interactions, between some organisms. In this case, I now know that the Ross Formation nautiloids found the *Macropleura* either (1) as food, but perhaps too thick-shelled to eat completely, (2) not suitable prey after an exploratory tasting, or (3) that the cephalopod was not hungry enough to finish its meal. Biotic interactions can change over the time of the interaction. They can be complex indeed and very interesting! Each has a unique interpretation that adds insight to the daily lives of these organisms.

Evidence Of Clovis Occupation
Continued from P. 4

Figure 2. Elk antler foreshafts from the Anzick Clovis site (photo by J E Morrow)

were known from counties where chert-bearing limestone of the Burlington and Jefferson City Formations outcrop. Carl Chapman (1980:67-68) wisely noted that it was "premature to interpret the continuous, widespread occurrence of fluted points as a single complex". He recognized that manufacturing techniques could provide important clues to distinguish among the various fluted point forms. Chapman also recognized points in Missouri as resembling Clovis, Folsom, and Bull Brook-like (now known as Gainey) fluted forms (see Morrow 2015; Figure 3).

Since 1997 I've recorded several surface-collected Clovis points from Dunklin County located in the Bootheel of Missouri. These include Clovis points found at sites 23DU55, 386, 454, 465, and 476; and two from undocumented locations (Figure 4). The Smithsonian trinomial system (23=Missouri, DU=Dunklin County and a unique site number) is used to keep track of locations. Locational data can then be used with other information such as known lithic sources, campsites, springs, etc. to theorize about Native American mobility and trade patterns. Archaeologists rely heavily on volunteers to help record sites. The reason why we record sites is because you never know when they'll be destroyed by vandalism or construction. These points were all documented because of avocational archaeologist Ralph Wayne. During the day he was a postal worker. Ralph found a few Clovis points and one Pelican Point himself from this region. He also learned about several unrecorded Paleo points in private collections and brought them to the research station where I photographed and measured them before he returned them to their owners. All these points are made of high-quality chert that Clovis people could have found in the Pliocene gravels on Crowley's Ridge or in southern Illinois where it's often called

Continued, P. 8

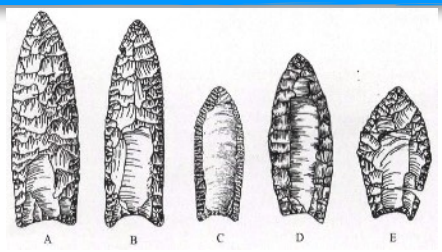

Figure 3. Early fluted point types A-Clovis, B Gainey, C Folsom, D Barnes, E Crowfield (Barnes and Crowfield are common north of the Mississippi Delta).

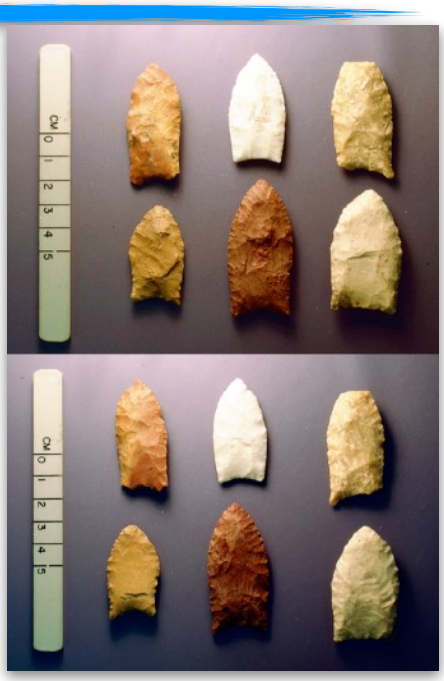

Figure 4. Clovis points from the Missouri Bootheel (photo by J E Morrow).

Evidence Of Clovis Occupation Continued from P. 7

Mounds gravel by old timers or in northwest Mississippi. Because some modern farming practices such as land leveling and chisel plowing continue to destroy archaeological sites in the Mississippi Delta, it's important to document these clues about ancient Native American lifeways.

If you've found points or tools like the ones in this article you can contact me to have them documented, jemorro@uark.edu.

She Sells Seashells?

Matthew Lybanon, Editor

"Victorian fossil hunter Mary Anning was the inspiration for the tongue twister 'She Sells Sea Shells.' It was originally a song, with words by Terry Sullivan and music by Harry Gifford, written in 1908, inspired by Mary Anning's life:

She sells sea-shells on the sea-shore.
The shells she sells are sea-shells, I'm sure.
For if she sells sea-shells on the sea-shore
Then I'm sure she sells sea-shore shells."

You may have heard this claim, or one like it. There's just one problem—there's absolutely no evidence for it. Instead, this is another example of how misinformation gets spread via the internet.

Who was Mary Anning? A British feature film, *Mary Anning and the Dinosaur Hunters,* a two-part independent film exploring Mary's life and work, is scheduled for release on September 7. Here's some information about her life. ***Editor's note:*** *Interested readers can find more information about Mary Anning in the July 2012 and November 2016 issues of MAGS Rockhound News.*

Mary Anning was born in 1799 in Lyme Regis, a town on the southern coast of England, and her passion for fossil collecting began early. Her father, Richard (who was mentioned by Jane Austen in her "Letters"), collected fossils on the Dorset coast to sell to supplement his income as a cabinet maker and help support the financially struggling family. Growing up, Anning accompanied her father on his quests. After he died unexpectedly in 1810, she continued to collect fossils to help pay off the family's debts.

Soon after, Anning's brother uncovered what he believed to be a crocodile skull. The 12-year-old Mary Anning found the rest of the skeleton, which turned out to be not a crocodile but an Ichthyosaurus, a "fish-lizard." "Eventually news spread far and wide that a young girl from Lyme Regis had made an incredible find: an entire connected skeleton of a creature never before seen" (from a biography of Mary Anning).

In 1823, Anning uncovered the first intact skeleton of a Plesiosaur, ushering in so much attention from geologists that it was widely discussed at the Geological Society of London the following year.

Anning gave the scientific community reason to think that species didn't live forever, and that they evolved over time. She is even credited with influencing Charles Darwin's theory of evolution—he cited her fossils in his book *On the Origin of Species*.

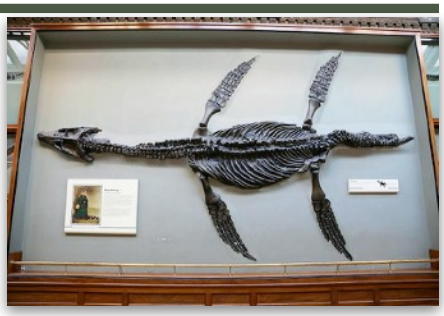

Figure 1. Mary Anning's Plesiosaur skeleton, displayed in London's Natural History Museum

Even though Anning's impact on paleontology was significant, she wasn't recognized for her contributions in the way that her male counterparts were at the time. Many of those came to Anning for guidance, and published their own papers rooted in her work. But she was never able to publish her own paper because of her gender. The Geological Society of London, founded in 1807, refused to let Anning—or any woman—become a member or attend their lectures. The Society referenced her discoveries in their meetings, but it wasn't until decades after her death that they began admitting women as members.

An article (https://blogs.loc.gov/folklife/2017/07/she-sells-seashells-and-mary-anning-metafolklore-with-a-twist/) by Stephen Winick on the Library of Congress website checks into the claim that Mary Anning was the inspiration for the "See Sells Seashells" tongue twister. His whole article is well worth reading. Here is a summary (QI is one of the bloggers whose claims Winick analyzes):

Each of the blogs celebrating Mary Anning tells a version of the same basic story. Though they make the claim

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She Sells Seashells?
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forcefully, they provide the weakest evidence for a connection between Anning and the tongue twister: none at all, not even a link to another version of the claim.

Despite occasional hedging by individual bloggers, it looks like the internet origin story for "she sells seashells on the seashore" (or "by" or "from" the seashore) is pretty clear and consistent: it was created in 1908 by Terry Sullivan, and was originally part of a song, which was "about," "inspired by," or "a tribute to" Mary Anning.

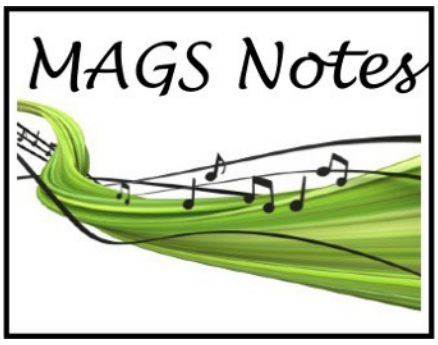
Was the tongue twister that begins "she sells sea shells" "originally a song, with words by Terry Sullivan and music by Harry Gifford, written in 1908," as QI claimed? No, it wasn't. The phrase is a piece of folklore, which existed in many versions and variants before Sullivan got his hands on it. He transformed it into a song, but it was already a well known folk saying by 1908.

The first version Winick could find of the phrase "she sells sea shells" comes from 1855, in the book *Letters and Sounds: An Introduction to English Reading*. By the mid-1870s, versions of the phrase became common in elocution manuals, teaching manuals, newspapers, and magazines. "... at the seashore" seems not to have been added until 1898.

What about the claims that the song was "inspired by Mary Anning's life," or that it might be "about Anning's life?" They don't stand up either. There's no trace of Mary Anning, Lyme Regis, or plesiosaurs in the song. Also, Mary Anning didn't sell seashells, she sold fossils. (Because she was collecting fossils for money, the people she sold her work to simply viewed her as doing her job. This is part of the reason for the Geological Society of London's snub.)

So, if he wasn't inspired by Mary Anning, why would Terry Sullivan write a song based on this kind of phrase? The answer is simple. On the English music-hall and American vaudeville circuits, songs based on folk sayings such as proverbs, nursery rhymes, and tongue twisters were a popular subgenre. Given all this, there's no reason to suppose that Terry Sullivan was inspired by Mary Anning. There's no evidence he knew about Anning, nothing in the song's verses resembles her life, and the "she" of the chorus has only a very slight resemblance to her. The evidence simply shows that Terry Sullivan used an already-popular tongue twister to create a humorous song.

Mary Anning was an important scientist who made real contributions to paleontology despite her working class origins and lack of formal training. But she deserves no credit for the tongue twister. It's just one of those stories.



🎵 Adult Programs

September 10: Dr. Paul Brinkman, "A brief history of the Sue Project at Chicago's Field Museum"

October 8: TBD

November 12: Show prep

🎵 Junior Programs

All programs presented by Mike Baldwin.

September 10: "Native American Arrowheads and Points

October 8: "Fluorescent Minerals and How They Work"

November 12: Join adults in Show prep

🎵 Field Trips

September 4: Richardson's Landing

October 23 & 24: Potosi, Missouri, Druse Quartz & Barite

November 20 & 21: Hot Springs

🎵 Rock Swap

September 6: Lou White's house, 10:00 A.M.-2:00 P.M.

🎵 September Birthdays

1	Frank Pinner
2	Eric Marbury
5	Leo Koulogianes
	Emily Fox-Hill
	Richard Hill
10	Alishia Parks
13	Sarah Taylor Stout
14	Jane Coop
15	David Bruce
17	Jeremy Bowen
19	Shirley Hawkins
22	Michael Luman
23	Park Noyes
	Mildred Schiff

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Bonnie Cooper

🎵Want to Be a Member?

To become a MAGS Member, just go to our website at www.memphisgeology.org and print out an application form. There is a prorated fee schedule for new Members only. Mail the completed application along with the dues payment to the Membership Director shown on the form. If you are unable to print the application, you can pick one up at the sign-in desk at any of our Friday night Membership Meetings, or simply join at the meeting. Visitors are always welcome at our Membership Meetings but membership is required to attend our field trips.

The most important benefit of being a MAGS Member is getting to know and make friends with other members who have similar interest in rocks, minerals, fossils, and archaeology. All new Members will receive a New Member Packet, a MAGS ID card, and a monthly newsletter via email. Members are entitled to go on our monthly field trips and get free admission to our annual Show.

Jewelry Bench Tips by *Brad Smith*

JUST A DROP

Hobby shops and model airplane stores carry small plastic dispenser bottles that are handy for putting a drop of flux, oil, or glue just where you want it. They have a length of small metal tubing coming out the top that lets you squeeze out very small drops.

I use one with a short length of tubing for oil when I'm sawing or when drilling harder metals like steel. Another bottle I found in a plastics store has a longer length of metal tubing on it. Plastics people use them for dispensing fast drying glues to join pieces of acrylic. The long metal tube lets you reach into tight places. Either of these is handy for flux at the soldering station.

FOREDOM MAINTENANCE

If you have a Foredom flexshaft, it makes sense to check it over every so often to be sure it's running properly. But how to do that? You've probably lost the little booklet that came with the unit. Well, being the good company it is, Foredom has put together an extensive set of videos on how to everything.

The series covers set-up, lubrication, replacing a sheath, motor maintenance, and handpiece maintenance. Few if any special tools are needed. You can watch the videos at www.foredom.net/flexibleshaftmachinemaintenance.aspx particularly under "Foredom Basics" or the "Foredom Shafting..." categories.

Any repair parts needed are available on the Foredom site or from most jewelry supply catalogs. If you have any question about their products, a phone call or an email will get quick answers.

Smart Solutions for Your Jewelry Making Problems

amazon.com/author/bradfordsmith

July Board Minutes

Mike Coulson

Zoom meeting galled to order 6:30. Present: W.C. McDaniel, Mike Baldwin, Carol Lybanon, Matthew Lybanon, Bonnie Cooper, Bob Cooper, Dave Clarke, James Butchko, Nannett McDougal-Dykes, Mike Coulson, Melissa Koontz, Jane Coop.

Old Business: W.C. will visit Agricenter to get a feel for what's going on. Matthew will check to see if he has the contract on his computer.

New Business:

- W.C. sent out an email with plans for the December 2021 Holiday Show Friday, November 12, and Saturday, November 13.
- W.C. will go over to the church and discuss with Angela the costs for the Holiday Show.
- Work out a cleanup plan for the show.
- There are 20 8' tables at the church, would like to have up to 25.
- Dates for show are November 12-13.

Show: Plans underway for the 2022 MAGS big show.

Secretary: Copies of the June minutes were distributed via email to the Board and summarized at the meeting. Minutes approved.

Treasurer: Treasurer's report submitted and approved. Stamps pur-

chased. Fellowship Hall rent paid to the church. Letter came from church with hourly and day rates which may help with the cost of the Show.

Membership: No activity. July newsletter mailed out.

Field Trips: Club had a good trip to Blue Springs and Frankstown with about 15 people in attendance. No future outings scheduled. Crystal collecting in Hot Springs area—The club will go to Coleman's Mine on Saturday and Wegner's Mine on Sunday (trip postponed till fall). Trips to Memphis Stone & Gravel and Coon Creek also in the works.

Meeting adjourned.

July Meeting Minutes

Mike Coulson

Meeting began at 6:00 P.M.

Membership: Two new members added Ellison Ann Loftis-Jones and Chris Stahl. Picked up field trip option for later in the year.

Presentation: Bill Lawrence presentations, "Archaeology of the Reelfoot Basin"

Field Trip: Field trip to Discovery Park on July 31. Sign up with Jim Butchko so club can pay for ½ of the admission price.

Meeting adjourned.

Iowa Stone Masterpiece

James Johnson gets our thanks for his tip about what he calls "the unbelievably gorgeous specimens of southern Illinois Fluorites, Geodes, and Drusy Quartz" photographed at the Shrine of the Grotto of the Redemption in West Bend, Iowa (https://www.westbendgrotto.com). The Shrine claims to be "the largest man-made Grotto in the world and is home to one of the largest collection of precious stones and gems found anywhere in one location". What you see in the photos was built by Father Paul Matthias Dobberstein and his collaborator Matt Szerensce over a 52-year period. The grotto's rocks include Agate, Amethyst, Azurite & Malachite, Barite & Barite Rose, Drusy Quartz, Calcite, Fluorite, Geode, Jasper, Petrified Wood, and Quartz. You can see these and other pictures of the grotto on James's Facebook page.

MAGS At A Glance

September 2021

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
29	30	31	1	2 Zoom Board Meeting, 6:30 pm	3	4
5	6 Labor Day Rock Swap, Lou White's house, 10 am-2 pm. MAGS provides packaged snacks and drinks.	7	8	9	10 In-person Membership Meeting at church, Zoom presentation: "Sue Project at Field Museum"	11 Field Trip, Richardson Landing, 9:00 am
12	13	14	15	16	17	18
19	20	21	22 	23	24	25
26	27	28	29	30 Zoom Board Meeting (October), 6:30 pm	1	2

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