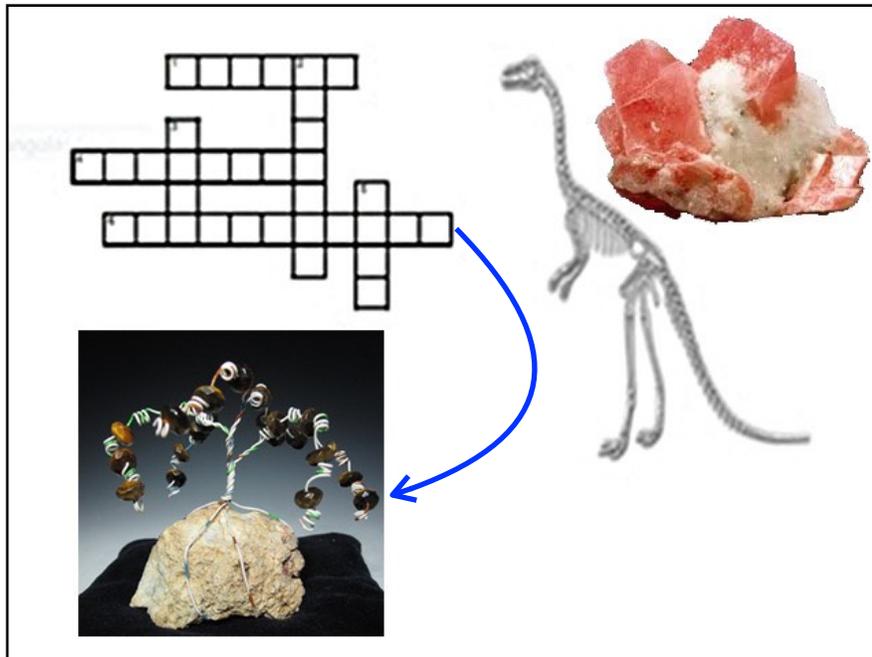




Volume 64 ◊ Number 05 ◊ May 2018 ◊ A monthly newsletter for and by the members of MAGS

May Program

The Amazing Crosswords to Gem Trees Race



RULES

- Each group tries to complete a fossil theme crossword puzzle
- Groups earn a rock and wire to make a gem tree
- Each group tries to complete a mineral theme crossword puzzle
- Groups earn beads to make a gem tree
- First group to successfully complete a gem tree earns first prize of an ammonite for each member

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THANK YOU, MEMBERS AND FRIENDS CAROL LYBANON

We hope that everyone took the opportunity to attend the 2018 Memphis Mineral, Fossil, and Jewelry Show. The 2018 Show was a splendid success. It would not have been as successful without the help of our Members.

Thanks to those who brought dishes to the Friday night dinner, and those who brought drinks and snacks for the vendors and volunteers. A special

“Thank you” goes to those who helped during the Show, and to the Show Committee. Without you we could not put on a show of this scale and quality.



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

MAGS Show Website: 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.

May DMC Field Trip

WHERE: 119 Railroad Avenue, Harleyville, SC

WHEN: Saturday, May 19, 10:00 A. M.-3:00 P. M.

COLLECTING: Fossil shark teeth, bones, brachiopods, more

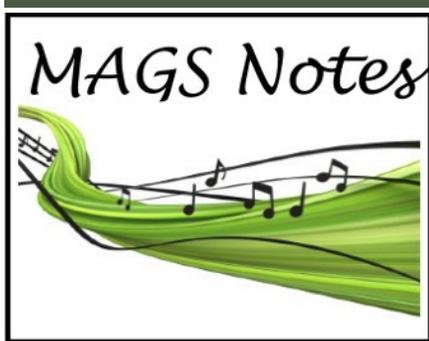
INFORMATION: Lawrence Moss, (843) 819-0726 or
jorel611@yahoo.com

Links to Federation News

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

MEMPHIS ARCHAEOLOGICAL AND GEOLOGICAL SOCIETY

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



🎵 New Members

Michael Parry
Anthony Tribo and sons Dominic,
Lucian, and Elan
Nancy Schaefer

🎵 May Birthdays

3 Thomas Jones
5 Tony Menne
9 Carol Lybanon
10 Julie Lybanon
11 Theresa Childress
Mary Elliott
12 Pam Crumpton
Trace Hartman
13 James Butchko
14 Philip W. Eglsaer
19 Joanne Gilmore
J. R. Hill
Susan Jones
20 Michele Robbins
21 Mike Nagel
23 Zoe Sams
Ethan Mueller
25 Amber Shields
29 Aiden Davis
30 Barrett Smith
Herb Nicholson
31 Sherry Bright

🎵 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:

May 11: **Aaron** and **Sherri Jones**

June 8: **Mildred Schiff** and **Carol Lybanon**

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

🎵 Adult Programs

Here are the programs for the next three months:

May 11: The Amazing Crosswords to Gem Trees Race

June 8: "Mt Kilimanjaro" (Keith Riding)

July 13: "Minerals of South Africa" (Jimmy McNeil)

Get Ready For Summer

Carol Lybanon

This year we have three rock swaps planned, so save the dates. Our first rock swap of the year will take place on June 16 at the home of W. C. and Cornelia McDaniel.

In August we will have our annual rock swap and indoor picnic scheduled on our regular meeting date, August 10 this year. Our last rock swap event will be scheduled for October 20. We will again go to the Freeman Smith Park Pavilion in Bartlett.

We always have lots of fun

Harrison County
PRESENTS
39th Annual Gem & Jewelry Show
Saturday **May 19 & 20, 2018** Sunday
9-5pm Adults - \$5.00 / Kids age 10 & under - Free 9-4pm
*** *Don't Miss Keenly* ***
Joppa Shrine Temple
13280 Shriners Blvd. Biloxi, Ms.
North of I-10 / Woolmarket Exit # 41
Jewelry * Rocks * Gems * Beads * Fossils * Minerals
Displays Exhibits
Kids Corner Stump the Expert!
Demonstrations
"The Golden Ticket"
Harrison County Gem, Mineral, Fossil, and Jewelry Show
39th Annual Gem & Jewelry Show
\$1 off one admission with this Coupon
May 19 & 20, 2018
Joppa Shrine Temple Biloxi, Ms. Off I-10 Exit 41
Facebook: facebook.com/gulfportgems/ Website: gulfportgems.org
Email: gulfportgems.show@gmail.com

things planned for these events. What you need to bring to these events is a dish to share. We will send out more information as the event dates get closer.

See you there.

Carol

March Board Minutes

Mike Baldwin

Called to order at 6:35. Present: Matthew Lybanon, Carol Lybanon, W. C. McDaniel, Charles Hill, Kim Hill, Mike Baldwin, David Clarke.

Secretary: Minutes approved with corrections. March newsletter has been printed and mailed to members who do not have email.

Programs: March program will be Northern and Southern Hemisphere adventures with the Lybanons and the Schaeffers. April: a history of MAGS by Matthew and Carol Lybanon, and Show-related activities. May: The Amazing Crossword to Gem Trees Adventure. June: Mt Kilimanjaro. July: Minerals of S.

Continued, P. 6

Fabulous Tennessee Fossils

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

FTF 40
Exogyra



This is the first of several articles that will focus on one of the more easily recognized fossils from Tennessee. *Exogyra* is an extinct genus of oyster that ranged from the Jurassic through Cretaceous periods; in Tennessee this genus is entirely Late Cretaceous. Its closest surviving descendent is the modern “giant honeycomb oyster” in the Pacific Ocean. Oysters, as a group, were and still are, sessile (stationary), shallow marine, filter-feeders and were gregarious in occurrence—if you find one, there will be many more nearby. Today, oysterman often “fish” for oysters in what they call “oyster reefs”, which is a misnomer in that they are not “reefs” in the classic sense of wave-resistant coral reef. Rather, modern oysters occur in groups and clusters in such numbers that they can affect sedimentation around them and cause low buildups on the seafloor. The more apt term for such buildups is a “bioherm” or “biostrome”.

The genus name essentially means “outside circle”, referring to the coiled shape of the large “bottom” valve and the coiled shape of the “top” valve. This bivalve mollusk is easily recognized by its curved, inflated, robust, very thick, lower (left) valve that is capped by the upper (right) valve that is curved and flattened. The inflated lower valve displays a counterclockwise spiral rotation;

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

whereas the flattened upper valve displays a clockwise rotation of growth and ornamentation. The exterior ornamentation can vary, which contributes to the more than forty species identified from throughout the world.

Who were the major players in *Exogyra* paleontology? *Exogyra* was first described by Thomas Say as *Exogyra costata* Say, 1820 for specimens collected in New Jersey (American Journal of Science, 1st ser., vol. li, p. 43). I first mentioned this great conchologist (shell biologist) in FTF 29. Say (1787–1834) was one of America’s great early naturalists, formally describing and naming over a thousand species, serving as professor of natural history at the University of Pennsylvania, serving as the librarian for the Academy of Natural Sciences of Philadelphia, and as curator for collections at the American Philosophical Society. Say died in New Harmony, Indiana, which was the utopian society begun by Robert Owen,

who was father to naturalist/geologist David Dale Owen. Although a self-trained naturalist, Say traveled and studied with many of America’s great early naturalists, including French naturalist Charles Alexandre Lesueur, William Maclure, and Gerard Troost (first State Geologist of Tennessee), all of whom traveled to Tennessee and studied fossils.

Before moving on to other *Exogyra* work done in Tennessee it is noteworthy that the earliest species of *Exogyra* is not *E. costata*, but *E. ponderosa*. Our old friend Ferdinand Roemer, who also named the sponge *Astreaospongia meniscus* (see FTF 2 for more on Roemer’s background) also described the earliest occurring *Exogyra* from Texas in 1852.

In 1991, the late Austin Peay paleontologist James X. Corgan and I published a history paper of Gerard Troost’s travels throughout middle and eastern-west Tennessee in 1833 (*West Tennessee Historical Society Papers*, vol. XLV, pp. 83–94). For several days on this trip, Troost collected “very large *Gryphaea*” from several localities in Hardin and McNairy counties. Although we did not extensively comment on it in that paper, we felt sure that Troost’s *Gryphaea* was actually *Exogyra* based upon the emphasis on large shell size and abundance of collecting localities he reported.

Continued, P. 5

Fabulous Tennessee Fossils *Gryphaea* is found in the Cretaceous deposits of West Tennessee, but its occurrence is much rarer than *Exogyra* and the shells much smaller. Unfortunately nearly all of Troost's original collections have been lost. It is also interesting to note that even though *Exogyra* was formally named in 1820, Troost did not use the name in 1833. Troost, a Dutchman, was known for misspellings and using his own nomenclature, especially in his informal writings and notes.

Exogyra is well-known among paleontologists because it is an excellent biostratigraphic index and guide fossil (see FTF 21 for a review of index and guide fossils). Lloyd W. Stephenson (1876 – 1962), paleontologist for the U.S. Geological Survey is the next major player in the *Exogyra* story. Stephenson received his PhD from Johns Hopkins University (JHU) in 1907 and began service with USGS as a stratigrapher. While at JHU, Stephenson learned field mapping skills from Benjamin Miller (Maryland Geological Survey) and William B. Clark of JHU by mapping areas of Maryland and North Carolina. He was a contemporary of Edward W. Berry (more on him later as he, too, was active in Tennessee). It was during this time that Stephenson became well-versed in Cretaceous stratigraphy of the southeast. In 1914, Stephenson formally described *E. cancellata* as a new variety of Say's *E. costata* and developed a new biostratigraphic framework for the Cretaceous of the southeast. He noted that *E. cancellata* was restricted the lower part of the *E.*

costata range zone, thus allowing paleontologists to recognize that stratigraphic interval much easier over the geographic range of San Luis Potosi, Mexico up to New Jersey. In 1918, he proposed a new stratigraphic term, the “tongue”, to represent extensions in geographic occurrence of important fossils beyond their typical distribution; this term is still used by stratigraphers. It should be noted that our Coon Creek Formation was originally called the “Coon Creek Tongue” of the Ripley Formation based upon Stephenson's work. In 1923, he published a paper in which he identified *E. ponderosa* as the ancestral species to the *Exogyra* lineage. Stephenson continued to publish extensively and contributed greatly to Texas paleontology later in his career. His final paper in 1956 brought him back to the Mississippi Embayment where he described a new bivalve from the Ripley Formation of Mississippi.

In 1926, Trenton native Bruce Wade (1889 – 1973) published his iconic *Fauna of the Ripley Formation on Coon Creek, Tennessee* (USGS Professional Paper 137), which was the result of his JHU doctoral dissertation studies on the Coon Creek “tongue”. This volume has remained the “bible” for all things Coon Creek for many years. Wade quoted Stephenson's works extensively and noted that *E. costata* and *E. cancellata* both occurred within the Coon Creek. MAGS member Ron Brister has published an excellent biography of Wade that provides the history of Wade's USGS Coon Creek volume (1994, *Earth Sciences History*, 13(1): 47-51).

With the geographic and stratigraphic ranges of *Exogyra* well established, Harvard-trained geochemist Abraham Lerman was in the position to unravel the evolutionary history of *Exogyra* by conducting a biometric study of all species and locations. In 1965, while at JHU, Lehman published his doctoral dissertation in the *Journal of Paleontology* (only his fourth paper published and the last paleontology paper he would publish) in which he concluded that rate of *Exogyra* species origination for the southeast was one new species each three-four million years. Shortly after this paper, Lehman changed career directions to become a nutrient cycling geochemist; he is now professor emeritus at Northwestern University.

With the basics of *Exogyra* paleontology well established, more recent studies by numerous workers have focused on the paleoecology of *Exogyra*, specifically how it sat on the substrate (organism-substrate relationships) and what other organisms interacted with *Exogyra* (predation, symbiosis, etc.).

As an aside, I first arrived at UT Martin in 1988 after completing my PhD at UT Knoxville. Universities often send out press-releases announcing new faculty hires and the *Jackson Sun* interviewed me as a result of that release. I shared with writer Mary Reed my research studies and she expanded that story to be a full two-page in-depth summary of geology of West Tennessee. I was of course honored that my work on fossils from the Devonian was featured. As often

Continued, P. 6

Fabulous Tennessee Fossils happens in the newspaper business, one story sparks other stories and local newspapers add content to what is reported "on the wire". A few weeks after these articles were published, I was mortified to get a newspaper clipping in the mail from my UTK advisor Tom Broadhead in which a local reporter in Lexington had decided to enhance the *Sun's* story of my work by adding a picture of a fossil along with the caption that identified the fossil in the picture that I was supposedly pointing to as one of my Devonian brachiopods from that area. Why was I embarrassed? The writer had used a picture of *Exogyra* that I was supposedly pointing to for my fossil. I had never met the reporter and the finger was wearing a woman's diamond ring! I took a lot of ribbing about my abilities from my colleagues! In the next article, I will delve deeper into the various species of *Exogyra*, especially their taxonomy, followed by an article focusing on *Exogyra* paleoecology.

March Board Minutes Africa. W. C. will send program schedule and the Riding article electronically. **Show:** Show Meeting was last Monday. March 17 meeting will be 10:00am at the storage shed. Debbie will not be able to be in charge of hospitality but she will help coordinate before the Show. Carol will have a printout of SignUp Genius at the Friday night meeting. Charles will not be an exhibitor this year. Carol will ask Nannett if she will help at the 901 Rocks booth. Charles suggested that

13th ANNUAL BEN E. CLEMENT Gem, Mineral, Fossil & Jewelry Show
 SPONSORED BY: FARMER'S BANK AND TRUST CO.
June 2nd & 3rd
 At the Historic Fohs Hall
 201 N. Walker St., Marion, Ky
Come and Enjoy All the Fun Activities!

Hourly Door Prizes
 Silent Auction
 Vendor Tables
 Museum Tours*

Ky. Geological Survey Booth
 Indian Artifact Display
 Free Children's Activities (sponsored by Roger's Group)

Donations Accepted
 Show Hours: Sat. 9:00-5:00 & Sun. 9:00-4:00
 Jewelry Beading Class* at 2PM on Saturday & Sunday
 *There is a charge for these activities.

Children's activities are sponsored by Roger's Group

For more information visit us at www.ClementMineralMuseum.org
 or email: beclement@att.net
 Call: 270-965-4263

we ask Nannett to emcee the Show. SFMS still has not posted the fees for insurance. That should be available in the next few days. **Historian:** Carol will finish the MAGS history for a presentation at the April meeting. She needs rock swap hosts for May and October, and asked if Charles would host the first one. **Field Trips:** Mar 24-25 to Missouri; surface collection of druzy quartz will be at the top of the hill due to eroded roadway. W. C. will send Mike a copy of the field trip details and a sign up

Jewelry Bench Tips by Brad Smith

POLISHING WHEELS

In the finishing sequence there's a step called pre-polishing, between sanding and buffing, and one of the most effective tools I've found to help here is the little silicone wheels used in a Freedom or Dremel. They come in several different abrasive levels and several different shapes. The wheels are color coded to denote their abrasive level. Different shapes (coin, knife, cylinder, point, etc.) are available to match the geometry of the area being cleaned up.

For a starter, I'd suggest a medium, a fine, and an extra fine wheel in both the coin shape and the knife-edge shape. Be sure to get a few extra mandrels so you'll have one of each wheel shape mounted and ready to go.

The thicker coin shapes are particularly handy. Cylinder shapes are nice for doing the inside of rings, and knife-edge shapes quickly clean up the solder joint around the

Continued, P. 8

sheet to make copies for the Friday meeting.

Old Business:

- T-shirt details: Hanes Tagless shirts are \$5.25 each with oversizes being \$3 more per shirt. Ask for samples of Sand and Grey and Light Steel. Sell shirts for \$10 each regardless of size. Sizes to order are 18 small, 18 medium, 48 large, 24 3x, and 36 xl.
- History: Carol will provide the MAGS history for posting on website.
- David is out of post-cards. W. C. gave

Continued, P. 7

March Board Minutes him more.

Continued from P. 6 Putting stacks of postcards at Starbucks and other places. Whole Foods might be willing to organize a staff event visit to the Show. Science teachers are good contacts at the schools.

- Leo has the youth program for March. Discussion followed about how to get the youth programs scheduled for the remainder of the year.
- Michael Montgomery is officially the new librarian.

Adjourned at 7:48.

March Meeting Minutes

Mike Baldwin

Called to order at 7:07.

Debbie Schaeffer reported on hospitality for the Show; Friday night dinner for all vendors and Members; bring side dish or dessert and drinks or water. Need volunteers for hospitality since Debbie will not be at the Show this year. There is a sign-up sheet in the back or talk to Debbie. Throughout the weekend we need volunteers (teens) to help keep sacks and coffee supplied. Contribute to snacks for the vendors and volunteers at the next meeting.

Carol Lybanon's job for the Show is to get people to volunteer. She printed out the SignUp Genius page to show what the schedule for the Show looks like. If you sign up tonight, Carol will put your name into SignUp Genius and you will get confirmation. We need volunteers at the information booth to take the entry tickets and money.

David Clarke reported that 44 Members are here tonight. David has given out a lot of Show information cards. Please stop by the membership table and pick up a stack of cards to pass out in your neighborhood and at businesses.

James Butchko reported there is an information sheet and a signup sheet for the March 24-25 trip to Potosi. James announced that he has retired and is moving to Ohio some time this year. He has cleaned all the grab bag rocks for the show, and needs help cleaning all the rocks in his yard. Meet 9:00 next Saturday to stuff grab bags at the Cooper storage unit. We also need tables to spread the rocks out.

Show tickets are available for you to pick up and distribute. For each one that gets used for admission into the Show, the holder of the ticket gets in free, and the distributor of the ticket owes the Show \$2.

Displays by David Clarke, Clarke children, Sherri Baldwin, Jan Harris and Leo Koulogianos

Show Volunteers



The drawing for volunteer prizes will be held at our Indoor Picnic and Rock Swap in August. Volunteers must be present to win. So plan to attend our August meeting.

Elephant, Mastodon, Mammoth

What's in a name?

Mike Baldwin

While browsing through the campus bookstore at the University of Memphis a few weeks ago, I came across a book with a bright red cover, featuring a bright yellow

mastodon fossil as its centerpiece. That alone caught my attention, but when I read the title of the book, I had to have it! *The Sixth Extinction: An Unnatural History*, by Elizabeth Kolbert, is a fascinating journey into the root cause of a cataclysmic extinction event that is currently underway on our big, blue planet. That's my tease for today. If you are interested in learning more about this event, I encourage you to pick up a copy of *The Sixth Extinction*.

One of those "hum, I never thought about that" moments came to me as I was reading *The Sixth Extinction*. The first collective finding of mastodon bones in North America took place in the mid-1700s. The finders had no idea what they had found. They assumed the bones belonged to a North American kind of elephant, that was probably still roaming the continent. Those bones were shipped to France where they confounded and confused all viewers. Here's where the "hum, I never thought about that" moment happened. Fossils, as we know them, were not a thing in the mid-1700s. The word "fossil" referred to "anything" dug out of the ground. In those days, the popular belief was that there were no extinct animals. There were animals that weren't living where they used to, but no animals just simply disappeared. Before the mid-1700s, people had not yet figured out paleontology and extinction. "Fossil" took on a whole new meaning with the understanding of extinction. Human beings have played a major role in the extinction process of many species. Mammoths, mastodons, *Continued, P. 8*

MEMPHIS ARCHAEOLOGICAL AND GEOLOGICAL SOCIETY

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

Elephant, Mastodon, Mammoth *Continued from P. 7*

and almost elephants are all on that list. Ironically, intervention by humans has also helped stop the extinction of modern elephants [at least for the time being].

Although mastodons were on the earth 6 million years ago, at the end of the Ice Age mastodons, mammoths and modern elephants each claimed their own territories around the globe. Elephants roamed the savannahs of Africa and Asia. Woolly mammoths inhabited parts of the Arctic, while the Columbian mammoth occupied parts of the grasslands of North America. Mastodons claimed the forest and brush lands

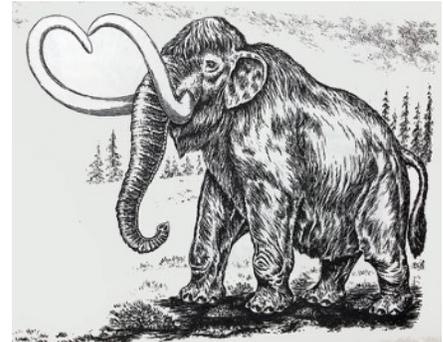
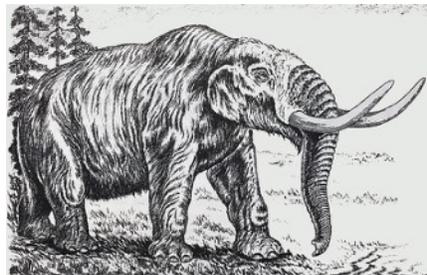
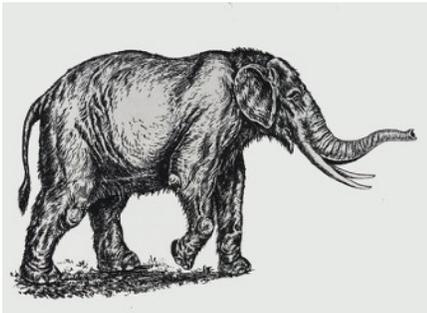
of North America as their home.

When we consider prehistoric elephants, it's easy to confuse the mammoth and the mastodon. Mammoths and mastodons both became extinct due [in part] to the hunting habits of early man. The Woolly Mammoth (*Mammuthus primigenius*) and the American Mastodon (*Mammuthus americanum*) both roamed the North American wilderness until roughly 10,000 years BC. A comparison of molars from mammoths and mastodons reveal the eating habits of both. Mammoths roamed the open plains, evidenced by their elephant-like molars, which were designed to grind up tough grasses. Mastodon molars, by comparison, were high-crowned teeth designed

for mashing leaves and twigs. Mastodon fossils are frequently found in forestland environments.

Sources: [01] Kolbert, Elizabeth. *The Sixth Extinction*. Henry Holt & Company. New York, New York. 2014. Print. [02] Rich, Patricia Vickers and others. *The Fossil Book: A Record of Prehistoric Life*. Dover Publications. Mineola, New York. 1996. Print.

Editor's Note: *A review of The Sixth Extinction (which is in the MAGS library) appeared in the May 2015 issue of MAGS Rockhound News. An article in the July 2015 issue described research at Stanford University that supports claims made in the book. It's an important book, and it's good to see it rediscovered by our Members.*



Jewelry Bench Tips outside base of *Continued from P. 6* your bezels.

Most jewelry catalogs carry these wheels, but often the color codes don't match between different manufacturers.



RESHAPING SILICONE WHEELS

Silicone polishing wheels in the Dremel or Foredom are a great time saver, but after using them a bit they often need to be reshaped. This is particularly true with the knife-edge wheels.

The natural thought is to grab one of your files and hold it up against the rotating wheel to reshape it. But this gives you a problem. The grinding grit in the silicone wheel is much harder than steel, meaning that you end up grinding down the teeth of your file.

The best way to reshape your polishing wheels is to use a diamond file or a separating disk. If you don't have one and must use a steel file, I sacrifice the area of the file that is closest to the handle. That's an area which is not used in normal bench work.



MEMPHIS ARCHAEOLOGICAL AND GEOLOGICAL SOCIETY

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

A Few Show Pictures



Friday Night Dinner



Grand Prize Winner



Rockzone Fun



MAGS
Collection



901 Rocks at The Earth Wide Open

We would like to have more Show pictures, so send them in.

MAGS At A Glance

May 2018

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
29	30	1	2	3 Board Meeting, 6:30 pm, St. Francis Hospital	4	5
6	7	8	9	10	11 Membership Meeting, 7:00 pm, "The Amazing Cross-words to Gem Trees Race"	12
13	14	15	16	17	18	19 DMC Field Trip, Harleyville, SC, 10:00 am-3:00 pm
20	21	22	23	24	25	26
27	28 	29	30	31 June Board Meeting, 6:30 pm, St. Francis Hospital	1	2

Memphis Archaeological and Geological Society
 2019 Littlemore Drive
 Memphis, TN 38016

