



Volume 68 ♦ Number 04 ♦ April 2022 ♦ A monthly newsletter for and by the members of MAGS

# April Program

Get ready for the Show!



On April 23 (fingers crossed) we will open the doors to the first Show since 2019. The April program will give new Members—and remind long-time Members—the lowdown on what it takes to put on the biggest show of its kind in the area. Here’s information on the Show schedule from MAGS President W.C. McDaniel.

### Thursday, April 21

1. Table vendors move in—Help needed late morning.
2. MAGS moves from storage shed—Help needed late morning.
3. Grab Bag Packing Thursday evening around 5-6:00 pm—snacks and rock packing.

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### HAVE YOU VOLUNTEERED YET?

Our Show is right around the corner now. The Show Committee is busy with the final preparations. We need more volunteers, so please sign up on SignUpGenius. The button you see here will take you to the the signup sheet.

We need help in all areas. Check



### CAROL LYBANON

the signup sheet to see where we need the most help. One of the areas in need of help is the Ticket Booth. We really need this manned. We are looking forward to a great Show. Volunteers will again be entered into a prize drawing. You can see some of the prizes on P. 3.

# 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) 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 20th of the month is the deadline for next month's issue. Send material to [lybanon@earthlink.net](mailto:lybanon@earthlink.net).

### April DMC Field Trip

WHERE: Quarry, Bartow County, GA

WHEN: Saturday, April 30, 8:30 A.M.

COLLECTING: Granitic gneiss with blue quartz

CONTACT: Charles Carter, (770) 998-1127,  
[fieldtrips@southeastfed.org](mailto:fieldtrips@southeastfed.org)

### 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)

# MEMPHIS ARCHAEOLOGICAL AND GEOLOGICAL SOCIETY

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**Sign up on SignUpGenius to help at the Show to be entered in a drawing for volunteer prizes.**



*April Program  
Continued from P. 1*

## Friday, April 22

1. Vendors move in.
2. Rockzone/exhibition area organized.
3. **Note—No Show dinner on Friday night.**

## Saturday, April 23

1. Show opens to the public 9:00 am, closes at 6:00 pm.
2. Lots of volunteers needed so be sure to sign up.

## Sunday, April 24

1. Show opens to the public 10:00 am, closes at 5:00 pm.
2. Lots of volunteers needed so be sure to sign up.
3. Show breakdown and clean; need lots of help.

## Monday, April 25

1. Items back to the shed.

## **So, what can every MAGS Member do to help?**

### Promote the Show

1. Post it on all social media.
2. Email your friends.
3. Distribute postcards/Show announcements.

### Donations

1. Drinks and snacks. Please bring to the Show.

### Volunteer

1. Show depends on you helping by volunteering.
2. Volunteer schedule is available.

On the right is a picture of the Grand Prize. It's a beautiful pair of agate slice angel wings mounted on a stand. Show attendees are entered in a drawing for the Grand Prize when they purchase their admission tickets.

W. C.



**We need your donations of water, soft drinks, and snacks (preferably individually wrapped) for hospitality at the Show. Bring the goodies on Friday during setup, or when you come for your volunteer shift.**

# SPRING FAMILY FUN DAY AT CHUCALISSA APRIL 16TH 10AM - 3PM



Atlatl contest



Choctaw Beadweaving



Tour the archaeology trench

Birds of prey

Hike the nature trail



Pottery craft

Take home a seedling



1987 Indian Village Drive, Memphis, TN 38109 | 901-785-3160  
chucalissa@memphis.edu | facebook.com/chucalissa

Central Arkansas Gem, Mineral and Geology Society

Presents:

## CAGMAGS Annual Swap Meet!

WHEN? April 30, 2022, 9am until 4pm

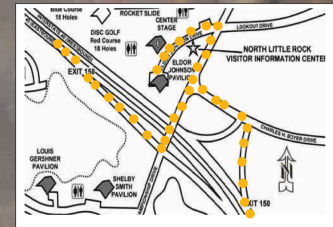
WHERE? Elder Johnson Pavilion, Burns Park,  
North Little Rock, AR

Up the hill behind the Visitor's Center

Take exit 150 off I-40 and follow the signs

WHAT? It's a swap meet! Anything could  
show up that's rock or mineral related.

WHO? Anyone and  
everyone is invited.  
There's not even an  
admission charge! All you  
need is an interest in  
rocks and minerals!



For more information, contact Bill Alcott at 1-501 231-2030,  
or at MrBill@fidmail.com

## Getting Down To The Core

Matthew Lybanon, Editor

The title is not only good advice in fitness exercises and physical therapy. Research published this year in *Nature* (Ref. 1) gives us new information about something of interest to geologists, the Earth's core.

We don't know a lot about the makeup of our planet. Now researchers say the Earth's core isn't a solid compressed ball of iron alloy. But, it also isn't a completely liquid core either. Instead, the new study proposes that the Earth's inner core is a mushy mixture of elements such as silicon, carbon, oxygen, and hydrogen.

First, the researchers note that understanding the Earth's inner core is difficult for several reasons. Chief among these is the fact that seismological observations have shown a complicated structure that seems to make little sense.

One of the currently unresolved problems with understanding the Earth's core is that it features a low shear-wave velocity that is unmatched by the sound velocities found in iron and iron alloys. This has led the researchers to believe that the core also includes light elements that lend themselves to a superionic state (a framework of iron atoms around which the other elements, driven by powerful convection currents, are able to freely swim), rather

than a solid state. The researchers used computer simulations to try to understand what the core is made of.

Another study (Ref. 2) conducted in 2021 seems to suggest the same thing. In that study, researchers sent seismic waves through the core of the planet. Those waves, called shear waves, found that the Earth's inner core isn't completely solid iron. Instead, it's more of a mushy substance.

Of course, there's no real way to tell exactly what the Earth's inner core is without seeing it for ourselves. Jules Verne's *Journey to the Center of the Earth* (which has been brought to the screen at least four times; the 1959 version starred

*Continued, P. 5*

*Getting Down To The Core* James Mason, Pat

Boone, and Arlene Dahl) imagines just that. But sending a probe that deep into the Earth is currently impossible. That's why the researchers focused on computer simulations for their latest study.

The program was designed to recreate the effects of the core's extreme pressures and temperatures on several likely core elements such as iron, hydrogen, oxygen and carbon. In a regular solid, atoms are arranged in repeating grids, but the core simulations suggest instead that in Earth's core, atoms would be transformed into a superionic alloy.

The simulation showed that hydrogen, oxygen, and carbon in hexagonal close-packed iron transform to a superionic state under the inner core (IC) conditions, showing high diffusion coefficients like a liquid. This suggests that the IC can be in a superionic state rather than a normal solid state. The liquid-like light elements lead to a substantial reduction in the seismic velocities, which approach the seismological observations of the IC. The substantial decrease in shear-wave velocity provides an explanation for the soft IC. In addition, the light-element convection has a potential influence on the IC seismological structure and magnetic field.

In summary, the results from those simulations showed that the Earth's inner core may consist of hardened iron. This superionic alloy would then allow other elements to slosh around it. Essentially, the core would feature both

solid and liquid states, making it even more complicated than we previously imagined.

**References:**

1. He, Y., Sun, S., Kim, D.Y. et al. Superionic iron alloys and their seismic velocities in Earth's inner core. *Nature* 602, 258–262 (2022). <https://doi.org/10.1038/s41586-021-04361-x>  
2. Butler, R. and Tsuboi, S., Antipodal seismic reflections upon shear wave velocity structures within Earth's inner core, *Physics of the Earth and Planetary Interiors*, 321 (2021). <https://doi.org/10.1016/j.pepi.2021.106802>

**Cruisin'**

Sarah Siegel

**Editor's Note:** My inbox—and probably yours—is full of messages from cruise lines offering great deals, to get people back on board. Here's a report from someone who took advantage of one of these offers.



One night in mid-March my wife Pat & I returned from a cruise to Nassau, The Bahamas; Cartagena, Colombia; Aruba; Bonaire; and Curaçao. It was my first time leaving the state of Tennessee since we moved here from New Jersey in July, 2020. In

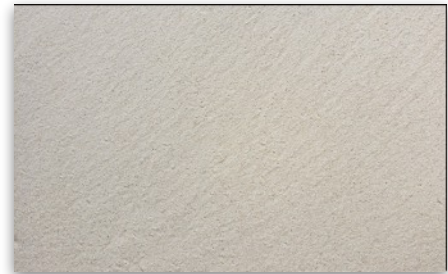
Colombia, Pat suggested I buy a raw Colombian emerald to add to my rock collection. We asked to see a small specimen and were told, "That's 720."

"What is it in US dollars?", I asked.

"That is the price in US dollars," the woman replied, and then, "How much were you looking to spend?"

"About \$20." Which was true.

"This one's \$30," she said, and I bought it. It fits in half the palm of my hand.



In Bonaire, a guide took us to a "secret beach." He said that typically, the beaches there are made up of old corals, rather than traditional sand. The sand at this beach was so fine and so pure, the consistency reminded me of almond flour.



At our final stop in Curaçao, I had a thrilling surprise: As we walked *Continued, P. 6*

*Cruisin'* along the sidewalk of the cruise port, I saw that it was lined with what looked like coral  
*Continued from P. 5* boulders. One of them included tiny white and tan quartz crystals. I wished I could have found a portable-sized version of it to bring home!

## Fabulous Tennessee Fossils

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

### FTF 86

Ella's Nautiloid Cephalopod



I received another prize to investigate last week that I am sharing with you this month from Ella Mash, who is a student in my Geoscience 120: Earth Materials and Processes course. Ella found this particular gem (Figure 1) last June while out hiking along Cedar Creek, near her home on Upper Creek Road in Vanleer, Dickson County. The slab was eroded out of the Mississippian age Warsaw limestone, which was mapped in this region by Melvin Marcher of the U.S. Geological Survey and C. Pratt Finlayson of the Tennessee Division of Geology in 1964. According to their mapping, this weathered chert residuum occurs in the upper Warsaw and is associated with locally abundant oolitic limestone beds along Cedar and Bear creeks. Fossils indicated a marine paleoenvironment.

Ella's rock is a weathered chert (residuum replacement of the marine limestone) measuring eight to eleven centimeters thick. Unlike most chert, which is usually relatively solid and dense with well-developed conchoidal fracture, this slab is light weight, granular, and displays none of the usual features of bedded chert that replaces limestone due to the highly weathered nature of the beds. There are lots of cavities, or vugs,



Figure 1. Photograph of a chert residuum slab from the Warsaw Limestone near Vanleer, Tennessee, and collected by UT Martin student Ella Marsh. Notice several *Buxtonia* productid brachiopods (both pedicle and brachial valves) and a prominent short orthocone nautiloid cephalopod in the center (Photo by MAG, scale in cm).

in the rock, mostly associated with some of the fossils. Extensive weathering has exposed the fossils and differential weathering has preserved them in relief and resulted in hollowed-out fossil centers. The most common fossils within the block are nearly ten articulated productid brachiopods (see FTF 84 for a discussion of productid brachiopods) belonging to the genus *Buxtonia* (recognized by its nicely oval-shaped outline

and pustules (bumpy) surface with no spines). Several of the oval-shaped brachial valves displaying the small pustules and a slightly straightened hingeline are visible in Figure 1, along with a couple of curved brachial valve surfaces. There is also a single rugosan coral.

The most interesting and conspicuous fossil within the slab is the large chambered nautiloid

*Continued, P. 7*

*Fabulous Tennessee Fossils* cephalopod in the center of

Figure 1. Note the straight cone shape (“orthocone”) of the shell and the interior curved “concave-shaped” septa that divide the shell into chambered segments, called camerae. This specimen is special for several reasons. First, the largest, and the last chamber in the shell, called the body chamber, or “living chamber”, is still preserved complete and intact. The body chamber is the chamber that the living animal would have inhabited; the living animal resembling an octopus or squid. Each cameral chamber would have been an earlier body chamber from more juvenile stages in the animal’s life. In Figure 1, this is the widest part of the specimen in which you can see no additional internal curved septa partitions, only cherty matrix infill with at least one *Buxtonia* within it. While it is not unusual to find orthocone cephalopods with the living chamber at least partially intact, usually this chamber will have been crushed or collapsed due to compaction of overlying sediments. The remainder of the cone, the part behind the body chamber and with numerous septa, is called the phragmocone.

Another interesting feature of this nautiloid fossil is that it still retains the juvenile portion of the phragmocone (to the far right). Most adult nautiloids will lose this early growth stage when they become adults. Notice in Figure 1 that there is a slight change in the size, septa spacing, and width of the narrow end of the overall phragmocone where the segments

are smaller. There is a slight flaring of the outside of the phragmocone at the 9th septa, along with an enlargement of the chambers separated by septa at this point. Visible inside the juvenile phragmocone is a wide internal tube, called a siphon, that has been reinforced with skeletal growth swellings around the siphon and the septa, called cameral deposits. The siphon was used by the living animal to regulate fluid/gas content within the shell for buoyancy control and the deposits added weight to aid this process. These deposits are useful in identifying the taxon.

Sandwiched in between the living chamber and the juvenile phragmocone is a short middle section. It begins at the 9th septum with the slight increase in shell width and girth and ends with the last septum before body chamber. Within this middle phragmocone, the number of septa are fewer (only 4) and the cameral chambers are wider. Internally, these camerae lack well-developed siphon, nor siphonal deposits, and are infilled with sediment.

The final interesting feature to point out is that this orthocone nautiloid is less “orthocone” than most I have seen. Notice that the shell is relatively short, ~12 cm long, but rapidly expands to 6 cm with at the aperture (open end), giving a length:width ratio of only 2:1. This animal was not very long at all for an orthocone cephalopod. The aperture flared widely and there are few adult segments.

Even though this specimen has some well-developed and somewhat unusual features, I have not

been able to identify this taxon to genus level, much less to species level. Rapidly flaring nautiloids are not common and this one appears to be complete. It may even be a “young adult”, based on the few middle septa. The literature trail on Mississippian-age nautiloid cephalopods in the southeast is slim. So far, I have not located another specimen like it in the usual literature, but then again, I like a challenge. Who knows? Maybe this one will be new to science! More specimens are needed for sure, so I see a field trip to Cedar Creek in my future!



**Adult Programs**

- April 8: MAGS Show
- May 13: Lionel Crews, Meteorites
- June 10: Jerry Potter, Civil War Sultana Disaster

**Junior Programs**

Juniors will join adults until Juniors attendance picks up.

**Field Trips**

- April 9: Nonconnah Creek day trip
- May 21: Frankstown day trip
- June 18-19: Hot Springs overnight

*Continued, P. 8*

**March Meeting**



Special thanks go to the young people and adults who addressed and stamped over 500 Show postcards during the meeting. Thanks also go to Dr Roy Van Arsdale, who gave an outstanding program on Groundwater in Southwestern Tennessee. And thanks to all the MAGS Members and guests who braved the winter weather to come to the meeting.

*MAGS Notes*  
*Continued from P. 7*

**🎵 New Members**

- Ruth Barnes
- James & Robin Brown and children Jacob & Justin
- Kelly Buckholdt & Joe Spruill and child Juliet
- Sarah Duhé
- Janine Lambert
- Donna & Eric Leppanen and children Chris & Matthew

**🎵 April Birthdays**

- 3 Donna Neal
- 11 Pam Papich  
Ryan Ledbetter
- 15 Renee Lefler
- 21 Ian Ashurst
- 27 Luken Ledbetter  
Lori Carter  
Kathy Bullard
- 28 Anna Kate Childers
- 29 Jacob Brown  
Justin Brown
- 30 David Waddell

**🎵 Want to Be a Member?**

To become a MAGS Member, just go to our website at [www.memphisgeology.org](http://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 *Continued, P. 9*





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*MAGS Notes*  
*Continued from P. 8*

our Member-ship 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.

## Federation News

### William Holland Workshops

The SFMS William Holland Workshop is online. We have 14 Instructors just waiting to teach you something new. This is our best year yet and we hope you join us to welcome back the In-Person classes. Please go to <https://www.sfmsworkshops.org/> for class descriptions and instructor bios. Below is a list of classes.

June 5-10, 2022

Cindy Moore—Metal Mania  
Morning Sherrod—Chasing & Repoussé  
Gene Sheridan—Wire Wrap II  
Debora Mauser—Low Tech Casting  
Chuck Bruce—Silver II - Loop n' Loop Chain  
Jerri Heer—Seed Beaded Cabs  
Tom Slavicek—Leather  
Valerie LaMotte—Silver I  
Paul Roberts—Cabs II

Bill Boggs—Intarsia II  
Guy Meador—Flint Knapping  
Samantha Lazzaro—Enameling I  
Becky Patellis—Soft Solder  
Bob Hohn—Flame Painting

### Wildacres

We are very fortunate to have another fabulous Speaker-in-Residence for the Spring 2022 session of the EFMLS Wildacres Workshop, Dr. Nathalie Brandes, a geologist, author, and distinguished college professor and researcher. The Wildacres workshop will take place May 16 to 22, 2022.

Nathalie Brandes grew up studying geology from a very early age traveling around the world with her geologist father. She earned her BS and MS in geology at the New Mexico Institute of Mining and Technology (New Mexico Tech). While in New Mexico, her research focused on the Rio Grande Rift. After working at the New Mexico Bureau of Geology and Mineral Resources, she continued her doctoral studies at Michigan Technological University.

Nathalie is Professor of Geosciences at LoneStar College—Montgomery, in Conroe, Texas, north of Houston, teaching for the past seventeen years. In 2019, she was presented the Faculty Excellence Award in recognition of outstanding teaching methods and dedication to student success in the classroom and beyond.

Her teaching career began at Michigan Tech, where she taught various geology courses, including the Teachers' Earth Science Institute, which was a special teacher

education program funded by the National Science Foundation that utilized mineral science and mineral processing to enhance the teaching of science in middle and high schools. For her efforts in making this program a success, Nathalie was presented a Distinguished Service Award.

Nathalie's current research focuses on ancient mining techniques as well as the history and geology of classic mineral localities. She frequently presents the results of this research at the New Mexico Mineral Symposium in Socorro, New Mexico and occasionally writes short articles, and has published several books. She has won writing awards from the American Federation of Mineral Societies and South Central Federation of Mineral Societies for her articles. Nathalie is a member of the Management Team for Mindat.org, as well as on the Board of Directors for the Hudson Institute of Mineralogy. She is an active member of the Geological Society of America, the Geological Association of Canada, the British Micromount Society, the New Mexico Geological Society, The Russell Society, and the Society for Mining, Metallurgy, and Exploration.

Nathalie's hobbies include travel, photography, reading and writing; her latest book, *New Mexico Rocks, A Guide to Geologic Sites in The Land of Enchantment*, was published in October 2021.

Nathalie plans to give these six presentations at Wildacres:

**Goldfield, Nevada —Short but Sweet**, a look at the last major gold *Continued, P. 10*

## *Wildacres*

*Continued from P. 9*

rush in the United States.

**Michigan's Copper Country**, an overview of the geology and beautiful minerals of the world's largest native copper deposit.

**The Fabulous Silver Mines of Kongsberg, Norway**, the history, geology, and spectacular silvers from this legendary location.

**Mining in the Ancient World**, an overview of mining techniques from the Stone Age to Roman Times (one of her most popular talks).

**History of Mineralogy**, looking at how people have studied minerals from Ancient times to today.

**Geology of Birthstones**, a look at how the twelve birthstones are formed (a new talk specifically for Wildacres).

Nathalie, or Nat, will be accompanied by her husband, Paul Brandes, also a geologist and photographer and an expert on Michigan's Copper Country. She will be a terrific new Speaker-in-Residence and we are thrilled that she is able to come to Wildacres. We welcome her in our Wildacres community!

Information on Wildacres classes can be found at <https://efmls.org/wildacres/wildacres-classes/>.

## **February Board Minutes**

*Mike Coulson*

Zoom meeting called 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.

**New Business:** None.

**Show:** Dates for show are April 23-24 with move-in April 22. Jim Butchko is the Show Chairman. Received a quote from Event Rentals By Hicks for tables, chairs, and curtains. Kathy Baker has designed a show postcard.

Dealers :6 new dealers, 28 signed contracts, 1 in the mail. Will offer another space to waiting list dealer.

Exhibitors (all commitments): Delta (4), Ole Miss (3), North Mississippi (2), Nonconah Conservancy (1), Memphis Stone & Gravel (1), Pinson Mounds (New 1).

Demonstrators/Displays (all commitments): 901Rocks, Richard Gunter (2)—will also have two additional flint knappers, Reyna Lee (1), Food table(round).

Bonnie has divided mailing master into two lists. Email only 2000+, will use service and/or some volunteers. Three emails -mid-March heads up announcement, chance to weed out any non-delivery emails, 2 weeks out, week of Show. Hard copy 600 +. Target sending out late March early/April. One printing of postcard/note card 2000. Print labels, purchase stamps. Request members to donate stamps or money to buy stamps. March assembly at Membership Meeting. Changes will reduce cost. Text commitment sponsorship from Memphis Stone & Gravel. Carol will coordinate volunteers for the Show. Can move on Thursday.

Matthew will be back to Memphis (weather permitting) before the end of February, so he should be able to handle Show Treasurer duties from then through the Show itself and after.

**Secretary:** Minutes were distributed via email and summarized to the Board. Minutes approved.

**Treasurer:** Treasurer's report sub-

mitted and approved. 2021 taxes submitted to IRS and accepted. Church rent for Jan-Feb-Mar paid. Total was \$772.50, including small credit from payments made in 2021. SFMS 2022 renewal fee mailed. Our fee was \$343.50. Information for 2022 SFMS Directory emailed to Jason Hamilton. Advised David Liles that we would get club liability insurance and, unless our show gets cancelled, we would get show insurance. The SFMS is negotiating a new 3-year contract so it will be a while before we know the rates and the form becomes available.

**Membership:** 1 new membership since last Board Meeting. Have received a few more renewals. 49 single/family memberships haven't renewed. Many of those are people who usually worked at the Show.

**Field Trips:** February 19: DMC is hosting a trip to Lost Creek, Gruetil-Laager, TN, for Fern Fossils. March 19: Blue Springs Day trip for fossils. April 9: Nonconah Creek day trip. June 18-19: Hot Springs overnight trip for crystals. July 16: Hampson Archeological Museum State Park, Wilson, Ark., Day trip—archaeology. August 20-21: Blanchard Springs, Arkansas, cave tour, overnight trip.

**Adult Programs:** Presentations will continue to be in person for 2022, possibly Zoom in addition. February 11: Jason Schein, Zoom presentation, Dinosaur Paleontology in the Bighorn Basin. March 11: Dr. Roy Van Arsdale, Groundwater in Southwestern Tennessee. April 15: Show. May: Lionel Crews, U.T. Martin, meteorites. June: Jerry Potter, Civil War.

**Junior Programs:** Due to low attendance the Junior Programs will merge with the adults.

**Library:** Four new children's books added. Eight books returned.

**Rock Swaps:** Will revisit opportunities in April or May.

**Editor:** January newsletter has been *Continued, P. 11*

February Board Minutes published and distributed. Continued from P. 10

Matthew would like information on programs, field trips, rock swaps, and any other MAGS activities, at least a 3-month schedule. Please send anything extra that is Show-related. Any other articles and pictures will be gratefully accepted.

Web: Website has been updated. Some difficulties have arisen due to upgrades at ATT making uploading difficult.

Adjourned 7:30.

February Meeting Minutes

Mike Coulson

Jason Schein, Zoom presentation on Dinosaur Paleontology in the Bighorn Basin.

Jewelry Bench Tips by Brad Smith

COLORING EPOXY

There are two ways to add color when you are using epoxies. The first is to add a powdered material like colored chalk, charcoal, or powdered colors from an art supply store. One that I particularly like is a set of pastel glitter powders. A second way is to add a liquid pigment like nail polish, model airplane paint, or tinting pigments from a marine supplies store.

In preparing epoxy for use, the important things are to use exactly equal parts of the two components and to thoroughly mix them together. Coloring material can be added at any time. If I'm making just a small amount, I squeeze out equal sized droplets onto a piece of scrap paper or aluminum foil and mix thoroughly with a tooth-

pick.

To mix larger amounts of epoxy, I use a gram scale to weigh the first component. Then I zero the scale and weigh out the same amount of the second component, add coloring if needed, and mix.

If you are using 5-minute epoxy, the mixing needs to move quickly. But I like to work carefully when adding color. So I squeeze out equal sized droplets side by side on the scrap paper. Then I work with just one of the droplets to add the colors. The 5-minute clock only starts when you mix in the second droplet.



More smart solutions for your jewelry making problems can be found in my metal arts books on Amazon at <http://amazon.com/author/bradfordsmith>.

And if you enjoy these tips on jewelry making, take a look at the sample chapters from:

> Bench Tips 1—<http://amzn.to/1Z6hQ06>

> Bench Tips 2—<http://amzn.to/2KCygh4>

TRY A TOOTHPICK

The round, stronger toothpicks have a multitude of uses on the jewelry bench. I use them for mixing epoxy resin, for applying paste solder, and with Zam for polishing in tight spots.

Toothpicks are also handy for holding a small faceted stone while setting it. Just break off the sharp tip, mold a little beeswax over it, and press it onto the table of your stone.

The First MAGS Show

In honor of our first Show since 2019, coming up in a few weeks, MAGS Rockhound News is reprinting the President's Message from our issue in July, 1974.

Memphis Archaeological and Geological Society is embarked on its first "Rock Swap and Show", to be held at the Pipkin Building, Fairgrounds, Memphis, Tennessee, on July 20 and July 21, 1974.

We have accepted a challenge to represent our club, our city, and our hobby, to the best of our ability.

Acting as hosts and hostesses to many persons from many states gives us the opportunity to make new friends and acquaint those attending with the beauty and wonder of God's Universe.

Frank Theobald

The first show was small. Continuing,

Our president requests each member to bring one or more specimens, fossils, cabachons, jewelry etc. to be auctioned at the show. These should be brought to the Pipkin Building Friday evening or Saturday. If you can not attend the show, please bring whatever you have to the regular meeting Friday, July 12.

**MEMPHIS ARCHAEOLOGICAL AND GEOLOGICAL SOCIETY**

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

# MAGS At A Glance

## April 2022

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
27	28	29	30	31 April Board Meeting, 6:30 pm, Agricenter/ Zoom	1	2
3	4	5	6	7	8 Membership Meeting, 7:00 pm, MAGS Show	9 Field Trip, Nonconnah Creek
10	11	12	13	14	15	16
17	18	19	20	21	22 	23 MAGS Show, 9:00 am-6:00 pm, Agricenter
24 MAGS Show, 10:00 am-5:00 pm, Agricenter	25	26	27	28	29	30 DMC Field Trip, Bartow County, GA

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

