

MEMPHIS ARCHEOLOGICAL AND GEOLOGICAL SOCIETY



Memphis Archaeological and Geological Society

Article Ideas!

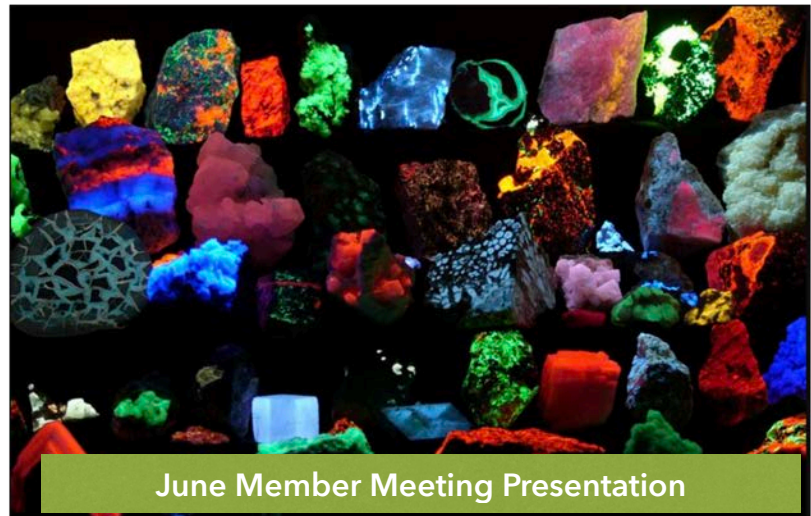
If you have an interesting idea for an article, let the editor know and we'll get it done!

Help Needed

We need your help! Please see article on Page 2 and Special Requests here.

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June Member Meeting Presentation

Picture: [AmazonAWS.com](https://aws.amazon.com/)

UV Light, the Long and Short of It!

J. Michael Howard

This presentation will explore the fascinating science behind ultraviolet (UV) light and its impact on minerals and gemstones. UV light is a form of electromagnetic radiation just beyond visible light. Among the best-known fluorescing minerals are fluorite, calcite, and many more. Certain gemstones, like rubies, opal, and emeralds also exhibit fluorescence. This presentation aims to reveal the hidden brilliance of seemingly ordinary stones, uncovering their secret luminescence.



For more information check out this link: uvminerals.org.



Help Needed

We need help with the following positions to either lead or be a collaborator with the area lead in making our society the best it can be for you. If you can spare some time each month, please volunteer in the area that you most connect with:

Director - Rock Swap
 Director - Assistant Field Trips
 Director - Assistant Adult Programs
 Directors - Librarian/Historian and Assistant Librarian
 Webmaster

To learn more, email [Christine Anderson](mailto:ChristineAnderson@magsofmemphis.org)

MAGS AND FEDERATION NOTES

Memphis Archaeological and Geological Society, Memphis, Tennessee

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

MAGS Membership Meetings are at 7:00 P. M. on the second Friday of each month May-October, and 10:00 Am on the 2nd Saturday of each month November-April. The meetings are held in the Fellowship Hall of Shady Grove Presbyterian Church, 5530 Shady Grove Road, Memphis, Tennessee.

MAGS Website: memphisgeology.com

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

Please contribute articles or pictures on any subject of interest to Rock Stars like you. Send me a note ([David Kitkowski](mailto:DavidKitkowski@magsofmemphis.org)) and let's collaborate!

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

Links to Federation News

AFMS: www.amfed.org

SFMS: <https://www.southeastfed.org/>

2025 MAGS Board



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Field Trips

Charles Hill
Field Trip Director



Dale Hollow Lake

Hi, again, MAGSters. Our field trip to Dale Hollow Lake was on Saturday, May 17. We had a small group, but everything went well. The weather was divine: not too hot, and not too cold, with clear, sunny skies. When we arrived, we gathered for a safety talk and a group picture; then the hunt began. The water level was high, so the crinoids were not as abundant as in the past. However, everybody found some. With most of the crinoids being underwater, we scoured the shoreline and the adjoining woods. Many of these crinoids are truly family treasures because of their color and hardness. Some hunts are harder than others: I would rank this one as mildly difficult. However, the best part about the people in this club is that all the members help each other. I witnessed great generosity that day!

In the past, we have coupled our crinoid hunt with a trip to the Ledbetter farm, where we have previously hunted and found many geodes. That property is within ten miles of Dale Hollow Lake. I had not been able to contact Norman Ledbetter for four years, so after the crinoid hunt, I decided to try to locate him. We drove to his address, knocked on the door, and a gracious lady answered. I introduced myself and explained that we were with MAGS and that the club used to hunt geodes on the property. She remembered us and responded, "Oh, from Memphis." When I asked about Norman, she told me that he had passed away last year, but that we were more than welcome to hunt. That night I called all trip participants who were staying on Saturday night and asked if they wanted to go hunt geodes. The Davises, the Hills, and the McManuses subsequently arranged to meet at 9:00 on Sunday morning.



The McManuses arrived first and were escorted to the field gate by Doug Ledbetter, who gave Laura McManus a ride there in his four-wheeler. When we all had gathered, he explained that we could drive across the field to the place where most of the geodes had been found. After a short search, we located the motherlode of geodes. I returned home with two buckets and one geode the size of a basketball. Since the Davises left early, I'm not sure what they found. However, the McManuses stayed after we did. I talked with them later and learned that they found as many geodes as we did, including another basketball-sized one. I wish everyone could have been on this trip!



For me, what made this trip special was the fact that Emily and I could make it together, as it has been years since we have been able to go rockhounding. Happiness is one of life's greatest rewards, and we found happiness during this trip.

From Bill McManus:

On Saturday our group, led by Charles Hill, went to Cove creek Recreation Area, near Byrdstown, Tn to collect Crinoids. And collect them we did! The high water level prevented us from getting to the easy pickings (even I, with waders was relatively unsuccessful because of dirt stirred up by boat traffic). We picked up "tons" (probably a few hundred pounds collectively, consisting of plates as well as individual specimens) along the shore, then moved up the hillside. Many were blue and can be seen by zooming in on the first 2 pictures:



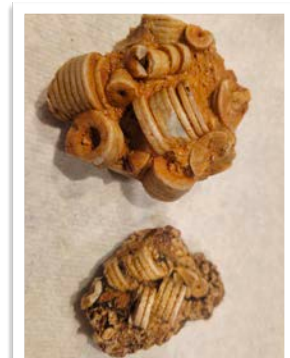
I'm going to gently tumble some of these and will report on my progress in later newsletters.

If you're planning on going, I'd really recommend a chest wader, or at least being willing to get wet. Perhaps conditions are better in the fall when water is lower, or a weekday, to avoid boat traffic.

On Sunday we went to the property of Mr Ledbetter (now-deceased). The property is vast but Charles located a sweet-spot where we found the specimens on the blue tarp (except for the pink and white beauty, which I picked up more than 50 years ago):



Here's a close-up of the best specimens, the largest of which is 10" across:



Source: Bob Cooper

We would've had more - I had to tell Laura I almost had heat stroke in order to get her to stop! This was as enjoyable as any other hunt we've been on, certainly our most productive. Altogether, we rated this the best hunt we've ever gone on! Thanks Charles and Emily! I think this may be a good site for a future MAGS hunt, but if you go, I'd recommend chaps (lots of pricklers) and tough boots.

Crow Creek Chronicles: A Rockhound's Spring Day Adventure

Josh Anderson

This spring, the Memphis Archaeological & Geological Society hit the road for a club field trip to Crow Creek, Arkansas. Among the crew was Bill McManus, his dutiful sidekick (yours truly), and a team of eager rockhounds ready for adventure. We were led by none other than Charles Hill, our newly minted Vice President and field trip leader, whose organizational prowess and enthusiasm kept our expedition on the right track. A big thank you to Charles for stepping up and rocking this role like a pro (pun intended, naturally)!

As any rockhound knows, the thrill of discovery can't be beat—and Crow Creek delivered big time! My personal treasure trove included gorgeous, banded agates, radiant red jasper, ancient oysters, and what might just be a source rock – “core” used by Native Americans for flint knapping. To add to the excitement, Bill McManus struck gold—or rather, petrified wood!

The fossil oysters we found falling out of the outcrops added an extra layer of intrigue. Based on the geologic context, they were most likely *Crassostrea gigantissima*, a marine oyster species living around 37 to 33.9 million years ago. *Crassostrea gigantissima* is notable for its exceptionally large size compared to modern oysters. Some specimens from the Jackson Formation have shells exceeding a foot in length! These oysters thrived in what was likely a brackish, nearshore habitat—possibly a lagoon, estuary, or tidal flat—where nutrient-rich waters supported their growth. The fossil beds near Forrest City, Arkansas, are particularly famous, with estimates suggesting a deposit of around 7 million cubic yards of shells!

Beyond the finds, the scenery was nothing short of breathtaking. Wandering the creekside in perfect weather felt like a love letter to spring itself. But the best part? It wasn't just about the rocks, fossils, or sediments. It was about building memories with my father-in-law, meeting new friends, and soaking in the beauty of a spring day that felt plucked from a postcard.

Thanks again to Charles Hill for his leadership and to everyone who joined in for making this trip one for the books. Crow Creek isn't just a place for rockhounds—it's a place for bonding, learning, and appreciating nature's



artistry. And yes, the agates, petrified wood, and fossil oysters were a gem in every sense of the word.

Until the next adventure, keep on "rocking" (pun intended again—this time with extra enthusiasm)!



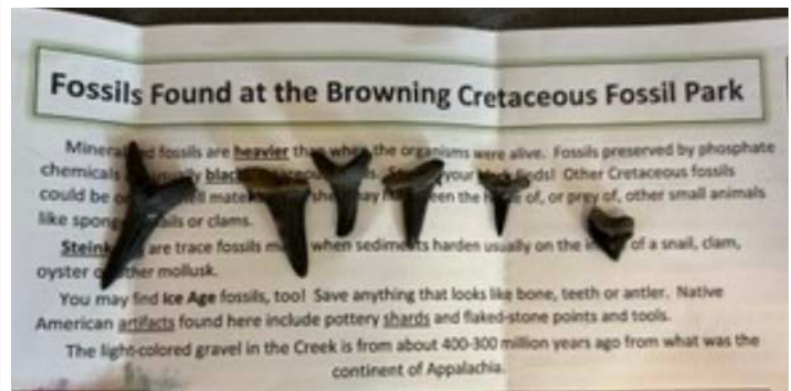
Shark Teeth Near Memphis!

Bill McManus

I'd heard of the W M Browning Cretaceous Fossil Park before but didn't make it till this year, in large part because we felt we needed to go with a more knowledgeable people before trying it ourselves (more on that later). In the meantime, I'd built a large sieve. Last month we finally gave it a try. Really exciting and successful - the first picture is our first outing, where we concentrated on teeth. We got these in 2 hours:

Before the 2nd outing, we'd read up on what was there and so came back with more shell and other fossils but were less successful as far as shark teeth (see upper left - 3 of the 4 are definite, the other might be wood). There's more coral than I've seen outside of Florida!

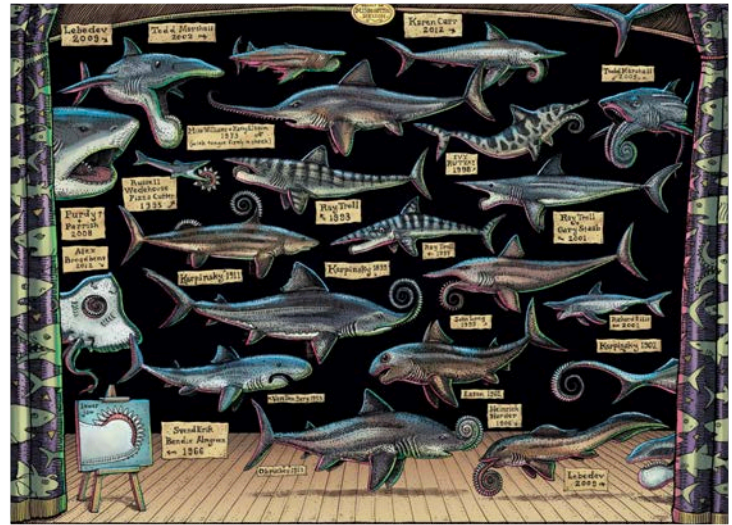
Tips for you: I'd recommend you invest in a pair of chest waders (Most to the time, the deep holes aren't more than hip high, but you can always slip and fall!). if you don't have those, at least one of you're group should be prepared to get wet. If your group is 2 (or more) people, 1 can do the digging, and 1 can stay on land and sift. The digging is tough though, so you should consider switching roles at some point).



Tools you'll need: a sieve (maybe 1-2 feet square, a thin spade or similar digging tool, and a bucket or 2 to wash the gravel in the sieve (as well as 1 to keep your finds in). While some free sieves are usually present, you can't count on them being unused at your visit.

Where to dig? Find a gravel bed (usually near a boulder). Use your spade to dig down into the bottom. If you hear/feel gravel, try there. If it's only sand, you'll be wasting your time. The shark teeth, coral and other remains are in the gravel layer.

When to Go: It's open every day, and is free. However, I'd recommend the day after a freeze/storm (when the water is lower*) which washes fresh gravel out, and on a weekday (weekends tend to be busy). By this time of the year, the water is relatively comfortable on your feet/legs. * - there is a water gauge: [Water data link](#). This doesn't measure the Park portion of the creek directly, but it seems to be related. When the gauge is normal (less than 11', the creek in the Park seems to be ankle-to-thigh level. If over 11', the level as well as the current may be uncomfortable.



Source: [blogspot.com](#)

June Trip Announcement

There will be no field trip in June unless we get a volunteer to coordinate as Charles will be unavailable. The July trip will be to a crystal mine in Arkansas. If you want to volunteer to either lead a June field trip or work as an Assistant Field Trip Director with Charles, please reach out to him [here](#).

Crystal Corner

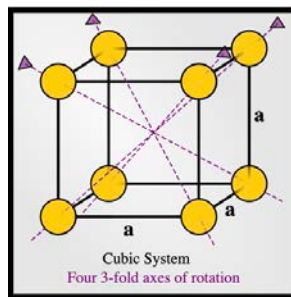
David Kitkowski

This month we're looking at the structures of crystals and a good place to start is to understand the difference between rocks, minerals and crystals. Minerals are the basic building blocks of our planet. There are thousands of mineral species of which 100 or so comprise the major mineral components of rocks (a naturally occurring aggregate of minerals). Minerals also provide the colors in fireworks so instead of yelling out 'OOO' or 'AHH', you could yell titanium, zirconium or strontium! Nah, that would get you some stares! But. When they call you rock nerd, you can share the cool fact that water is considered a mineral when it is a solid if formed naturally. That may get you a longer stare!



Anyway, onward to crystals. Crystals are minerals which are arranged in a precise, repeating pattern for a crystal lattice. When we look at all the ways a mineral object can be rotated by a certain angle and still appear unchanged, we end up with 7 crystal systems in 3D. They are: Cubic, Hexagonal, Tetragonal, Trigonal, Orthorhombic, Monoclinic and Triclinic. Here's a quick look at the different systems, lattices, the potential metaphysical influence, and an example crystal. I've included an extra category called Amorphous which has no lattice.

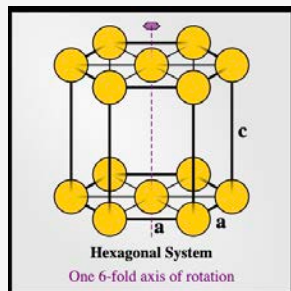
Cubic - squares with axes at right angles to each other. Example: Garnet



Stabilizes, grounds, cleanses, release his tension, and encourages creativity.

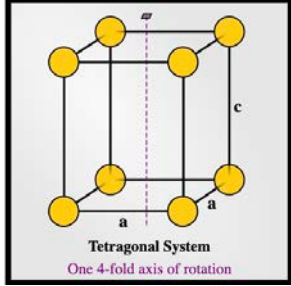

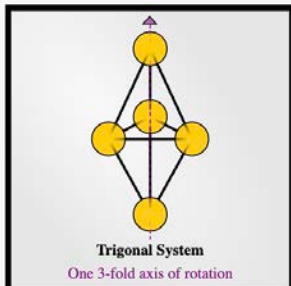

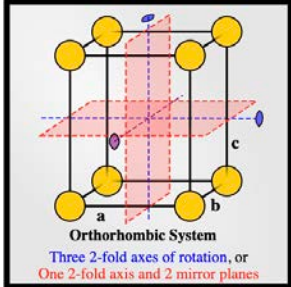

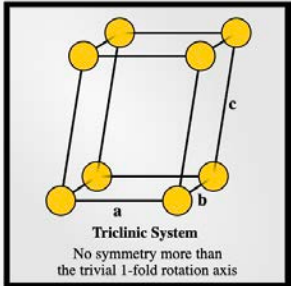



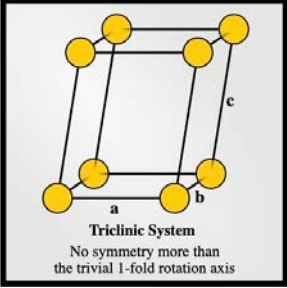


Hexagonal - three dimensional holograms. Example: Emerald



Organizes and balances energy and provide support; useful for exploring specific issues.



<p>Tetragonal - rectangles with long and short axes at right angles to each other. Example: Apophyllite</p>	 <p>Tetragonal System One 4-fold axis of rotation</p>	<p>Transforms, opens, harmonizes, and balances energy flow; brings resolution.</p>	
<p>Trigonal - triangles. Example: Tourmaline.</p>	 <p>Trigonal System One 3-fold axis of rotation</p>	<p>Focuses and anchors energy; invigorates and protects the aura.</p>	
<p>Orthorhombic - rhomboids. Example: Danburite</p>	 <p>Orthorhombic System Three 2-fold axes of rotation, or One 2-fold axis and 2 mirror planes</p>	<p>Useful cleanser and clearer: Increases the flow of information.</p>	
<p>Monoclinic - parallelograms. Example: Selenite</p>	 <p>Triclinic System No symmetry more than the trivial 1-fold rotation axis</p>	<p>Increases perception and balances the body systems; excellent for purification.</p>	

<p>Triclinic - trapeziums. Example: Labradorite</p>		<p>Protects and opens perception, facilitating exploration of other dimensions.</p>	
<p>Amorphous - Example: Obsidian</p>	<p>No lattice</p>	<p>Energy flows and ax rapidly; can be a catalyst for growth or catharsis.</p>	

* Pictures by Heidi Kitkowski, except Danburite source: commons.wikimedia.org

Knowing about the crystal systems can aid in understanding the different reflective properties, hardness ratings, and other characteristics based on the lattice type. Also, as you grow your collection, it may be interesting to have a piece that represents each of the crystal systems as contrast for decorative impact and the potential energy resonance effect each possesses. So happy hunting!

June Birthstone - Pearl/Alexandrite

June is one of five months where the traditional (1912) and the modern birthstone charts differ. Cultural changes including the concept of Mother's rings create a desire to change birthstones to a more transparent variety (because they likely sell better). Pearls have at least two interesting characteristics. First, the Pearl is the only gem found in living creatures. And second, while the Pearl is a gem, it is not a crystal. It's formed layer on layer versus having a lattice structure. Pearls culturally represent honest, purity and wisdom. They are used to calm the Moon in birth charts and is said to promote emotional stability, peace and love.

Alexandrite (aluminum beryllium oxide) is very special and is known as, "emerald by day, ruby by night." Normally green in the sun, it displays a dramatic color shift to red under incandescent light which makes it a very desirable jewelry piece. This stone is said to assist in realigning with the body and helping to find your true purpose on Earth.



Photos: Heidi Kitkowski

Fabulous Tennessee Fossils

Dr. Michael A. Gibson

University of Tennessee at Martin

FTF 123 – Charles H. Gordon (1857-1934) - Pt. 1



The geosciences program at The University of Tennessee, Knoxville has been around for a very long time, back to the 1800s, but surprisingly, there is no written history of the program that chronicles the people or events. It would be a monumental undertaking to write that history. Hopefully it will be done someday. One of the early UT geology professors that would figure prominently in such a history would be Charles Henry Gordon. Gordon was born on May 10, 1857, in New York State. While still young, his family moved to Michigan and when Gordon was of age, he attended Albion College. In 1886, he received his B.S. and then a M.S. in 1890, probably in education (the only published memorial to him does not specify his degree subjects). He worked as a high school teacher, and then principal, in Keokuk, Iowa (1890-1893) followed by an instructorship in Natural History at the Academy of Northwestern University (Evanston, IL). It was during his time in Evanston that Gordon underwent training in geology at the University of Chicago in 1895 that would lead to his Ph.D. Subsequently, Gordon traveled for a couple of years and worked under the renowned Norwegian crystallographer Victor Goldschmidt (1888-1947) and became smitten by all things mineralogical. Gordon's career would predominantly be devoted to minerals from this point forward; however, Gordon did make a foray into the biological realm of paleontology prior to his influential trip to Goldschmidt's lab.

In 1890, while still in Keokuk, Iowa working toward his Ph.D., Gordon published an abstract of a talk given at the Iowa Academy of

Sciences entitled "Observations on the Keokuk species of *Agaricocrinus*", the "mushroom crinoid" (Figure 1). Later that same year, he



Figure 1

Source: [wikimedia.org](https://www.wikimedia.org/).

published two more abstracts of talks focused on more fossils and biostratigraphy of the Keokuk Limestone, again in the Iowa Academy of Sciences. For a time, he moved around a bit spending time at numerous schools (e.g., University of Nebraska, New Mexico School of Mines) and the U.S.G.S. until he landed a teaching post as Professor of Geology and Mineralogy at UT Knoxville in 1907. Gordon is the UTK Founding Father of Geosciences as he started the program in 1907. UTK would be his home for the next quarter of a century until his retirement as professor emeritus in 1931, forced on by ailing health. He retired to Florida and remained active in Phi Kappa Phi

Honor Society until his passing in 1937. While at UTK, Gordon published a paper with paleontology luminaries George H. Girty (invertebrates) and David White (plants) of the U.S. Geological Survey on fossils from the Late Paleozoic of Northern Texas, which he had worked on prior to coming to Tennessee.

It is his 1890 abstract on *Agaricocrinus* that I want to elaborate on, even though this paper had nothing to do with any specific fossils collected in Tennessee by Gordon and was published before Gordon moved to UTK. However, *Agaricocrinus* is a Mississippian Period crinoid and it had been found in Tennessee prior to 1890 and has become well-known more recently, so there is a connection. Recall that Gordon was working on the Keokuk limestone and its fossils in Iowa. His talk and abstract very briefly described six species in the genus, one of which was *Agaricocrinus americanus*. Gordon's primary conclusion was that there was enough variation in specimens assigned to these species that the species was very much in need of a scrutiny and a formal revision. Gordon's observation was prophetic because *Agaricocrinus* turns out to be a crinoid with great morphological plasticity that would lead to many twists and turns in later paleontologist's naming of many new species (lumping and splitting). Why is this relevant to Tennessee, beyond the fact that Gordon would ultimately end up at UTK?

First, we have to go backwards in time to middle 1800s, before Gordon is born. Tennessee's first state geologis, Gerard Troost (1776-1850), had collected and named numerous new crinoid species, one of which he identified as *Agaricocrinus americanus*, from White's Creek Springs in Davidson County, Tennessee. Troost had amassed an extensive crinoid collection and prepared a manuscript of his collection which unfortunately he finished just four weeks before his death in 1850. He

never saw his manuscript published. Troost's manuscript, and much of his original collection, went to the famous James Hall of New York for evaluation, but Troost died before Hall could do much with it. Controversially, for some time to come, Hall proceeded to publish much of Troost's materials under his own name during the late 1800s. Once realized, this, of course necessitated a separate paper, to be written by Elvira Wood (Columbia University) in 1901, to clear-up any controversy and get Troost his due. Troost's *Agaricocrinus* collections, and Wood's study, both referred to the Keokuk "horizon" species in Tennessee that were the equivalent strata to what Gordon had also studied (but Gordon was unaware of in 1890). [Side Note: This Troost manuscript debacle is an interesting story, in its own right, and it will get its own essay from me later.] Gordon's 1890 abstract is cited in Wood's 1901 published version of Troost's 1850 manuscript for *Agaricocrinus americanus* (including a figure reference), but only in the synonymy (a synonymy is a listing of all of the previously described taxa and figures that a researcher studied when writing a taxonomic description of a fossil), and it was cited by Wood, not by Troost. Peculiarly, Gordon's citation does not occur in the references cited at the end of Wood's paper (presumably an oversight). Wood does not refer to Gordon's work in the discussion of *A. americanus*, but we do know that Wood considered Gordon's observations from the Iowa Keokuk specimens in her 1901 revisions.

Mississippian age crinoids are now well-known from exposures within both the Eastern, Western, and Southern Highland Rims of Middle Tennessee, especially near Cumberland and Dale Hollow lakes. *A. americanus* from these locations were part of large scale crinoid studies in 1943 (Ray Bassler and M.W. Moody, Tennessee specimens) and then in 1963 (by G.M. Ehlers and R.V. Kesling, Kentucky

specimens). Many new species of *Agaricocrinus* were erected at this time (splitting). The taxon has become a popular fossil to crinoid collectors.

Fast forward to the 1990s, when crinoid specialists Bill Ausich (The Ohio State University) and Dave Meyer (University of Cincinnati), and their students, focused on *A. americanus* in several studies that they undertook within the Fort Payne Formation (Mississippian). One offshoot of their extensive works was that they, too, had recognized what Gordon recognized in 1890; that there is a lot of morphological variation in what is called *A. americanus* – maybe too much. So, Ausich and Meyer turned their attention to the crinoid by conducting a detailed statistical (Principal Component Analysis) study using the most modern methodologies available (computers and high-resolution microscopy). Field work for these sites also included amateur collector Richard Keyes, who is an Alabama native from Huntsville who collected from many areas of Tennessee as well. In the culminating 1997 *Journal of Paleontology* paper, Ausich and Meyer concluded that there are basically two *Agaricocrinus* taxa with great internal morphological variability in many of the attributes that workers used to recognize and name species (hence so much species splitting); however, *A. americanus*, by far the most abundant of the two, could be distinguished by focusing on specific features of the anus and a couple other areas of the calyx. They synonymized several previously “split” taxa under two species. Perplexingly to me, Gordon’s 1890 abstract was overlooked is

not referenced in the Ausich and Meyer paper, even though it had been referenced by Wood in her paper previously.

Gordon is mostly known in Tennessee geologic history for his work on the Holston Marble (see FTF 91), including the stylolites that are common in that rock, and his work on the Barite deposits in the state. He also dabbled in a few other wide-ranging geologic topics. Gordon established a name for himself quickly upon his arrival at UTK in 1907. Gordon was the first president for the newly formed Tennessee Academy of Sciences in 1912 and had served as a vice president with the Knoxville Boy Scouts of America in 1911. Like most early geologists, he was somewhat of a “jack of all trades” in the geology field having experience with fossils, minerals, rocks, and structures, but clearly paleontology played an important role in C.H. Gordon’s geology training. Gordon prophetically predicted the wide morphological variability of *A. americanus* and the need for scrutiny nearly 90 years before it was achieved. His original work was published in an abstracted form, so mostly overlooked by later paleontologists, but nonetheless attests to his prowess at the study of fossils. I will delve deeper into “founding father” C.H. Gordon’s contributions to geology and paleontology in the next couple of essays. Next up, the Holston Marble, so you may want to read (or reread) FTF 91 before then.

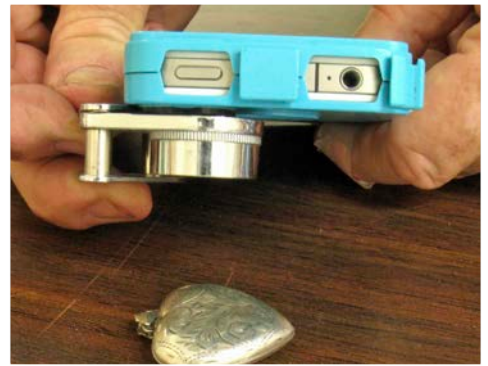
Bench Tips

Brad Smith

See More of Brad's Smart Solutions for Jewelry Making Series on Amazon [right here](#).

Quick Close-ups

Often when trying to get a close-up photo with your iPhone or Android, you can't magnify it enough or end up with a fuzzy, out-of-focus image. Next time try using your loupe over the camera lens. It works quickly and easily.



Little Balls

I often use little balls of silver and gold as accent pieces on my designs. They can be made as needed from pieces of scrap. Cut the scrap into little pieces, put them on a solder pad and melt them with a torch. Then throw the balls into a small cup of pickle.

If you need to make all the balls the same size, you need the same amount of metal to melt each time. The best way to do that is to clip equal lengths of wire.

But there's an easier way to get a good supply of balls. Some casting grain comes in near perfect ball form. Just grab your tweezers and pick out the ones you need. Or if you need larger quantities of balls, pour the casting grain out onto a baking pan, tilt the pan a bit, and let all the round ones roll to the bottom. Bag the good ones, and pour the rest back into your bag for casting. Balls can be sorted into different sizes using multiple screens.





June Rock Star Birthdays

1	Pat Judd
6	Amanda Nalley
8	Sharon Fewell
16	Ann Williams
18	Debbie Schaeffer
20	Roger Lambert
25	Doris Johnston
26	Kai Bollin
29	Cornelia McDaniel
30	Shane Ownby

2025 Meeting Dates

- June 13th—Friday at 7:00 P.M.
- July 11th—Friday at 7:00 P.M.
- August 8th—Friday at 7:00 P.M.
(Annual indoor rock swap/potluck dinner)
- September 12th—Friday at 7:00 P.M.
- October 10th—Friday at 7:00 P.M.
- November 8th—Saturday at 10:00 A.M.
- December 12th—Friday at 7:00 P.M.
(Annual holiday party)

Adult Programs

June 13: Mike Howard, "UV Minerals"
July 11: TBD

Field Trips

May - Dale Hollow Lake, TN
June - No trip
July - Crystal Mine in AK

March Board Minutes

Josh Anderson

Zoom meeting called to order 6:32 P.M. Present: Christine Anderson, Joshua Anderson, Bonnie and Bob Cooper, David Kitkowski.

Secretary: Presented March 2025 Board meeting minutes. Minutes approved.

President: Reviewed upcoming events and related newsletter requests.

Treasurer: Report approved.

Membership: One new member and seven renewals.

Adult Programs: Need presenters for July and November 2025 meetings. June: UV Minerals - Mike Howard.

Field Trips: No field trip scheduled for June. July will be the Arkansas crystal mine.

Youth Programs: Jane Coop will begin youth programs in September at Club Meetings.

Library: Researching options for WC book.

Editor: The last date to submit materials is the 20th of each month. Board Ok'd format changes.

Show 2025: Amended show dates: 12/4-12/8 2025. Continued contract work with Dealers. Advertising active on social media, need grab bag material and door prize options.

Old Business: Need to update Board Members on accounts for club. Raised election of officers for future agenda item.

New Business: None

Adjourned 7:34 P.M. by Christine Anderson



May Member Meeting Presentation

Christine Anderson

MAGS- Acting President & Director of Adult Programs

The Memphis Archaeological and Geological Society gathered for its latest meeting, where members were eager to explore waterfalls and geysers. However, due to unforeseen technological difficulties, the planned presentation had to be rescheduled. Rather than letting the setback dampen the evening, attendees took the opportunity to engage in lively discussions, sharing stories and ideas in a relaxed and social atmosphere. Everyone wished Carol a happy birthday and enjoyed some cake. The night proved to be a valuable chance for members to connect, fostering camaraderie and a shared passion for the sciences. And with the help of a generous member, a new projector has been donated! Thank you Ryan!

Special Requests!

We need your ideas, input and/or donations for:

[Respond Here!](#)

- **Adult program ideas** - what are topics would you like to really hear more about at our meetings? There's a good chance others want to hear about this too.
- **Christmas party ideas** - While it may seem far away, our party will be better with more fun ideas for activities, food, decorations, you name it. So please share yours now!
- **Rock Show Grab Bags** - These bags are always a big hit at the show for new Rockhounds as souvenirs and to hopefully spark an interest in earth sciences. If you've been cleaning up your collections, considering sharing your smaller rocks to stuff the bags. Your contribution could be that one point of inspiration for the next geologist or archeologist!

Geology - Ripped from Today's Headlines

Rewriting our understanding of Prehistoric Animals

Natural Trap Cave in Wyoming holds layer upon layer of animals and plants that simply fell in! Get an update on this amazing dig and what we are learning.

[Smithsonian Magazine Article](#) and for the cave enthusiasts, the [National Park Service Description](#).

North America's 'broken heart'

I hate scars and this one is a billion-year-old one! Learn about the Midcontinent Rift. [Live Science Article](#)

MAGS At A Glance

May 2025

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
1	2	3	4	5	6	7
National Dinosaur Day				Board Meeting		Greensboro Gem & Mineral Show
8	9	10	11	12	13	14
Congress passes the Antiquity Act (1906) - the start of National Monuments				Novarupta Volcano erupts in 1912	Member Meeting 7 p.m. UV Light: The Long and Short of It	
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	1	2	3	4	5
Mesa Verde designated as a National Park in 1906						
6	7	8	9	10	11	12