

Volume 65 ◊ Number 07 ◊ July 2019 ◊ A monthly newsletter for and by the members of MAGS

Poverty Point Enigma

Dr. Ryan Parish, University of Memphis

July Program



Where did prehistoric people at the Poverty Point site get all that rock?

Dr. Ryan Parish will give a talk about the famous Poverty Point site in Louisiana. This site is an enigma to archaeologists in a lot of different ways, from the earthen rings and mounds constructed by hunter-gatherers to the Poverty Point Objects (PPOs) and clay balls. Among other things, he will talk about where the inhabitants of this area might have been getting the rock from to make their stone tools, this being still a mystery since no good rock is available nearby.

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BIG CHECK CEREMONY



Each year, when the books close on the latest Memphis Mineral, Fossil, and Jewelry Show, there is a small ceremony to celebrate a big deal. After retaining enough funds to start work on next year's Show, the Show Committee turns over the proceeds to MAGS. This money helps support our activities—and it helps to keep your dues low.

This year's ceremony took place at the June Membership Meeting. The photo shows Show Treasurer Matthew Lybanon presenting a big check to MAGS Treasurer Bonnie Cooper (she also got a big one she can deposit into the MAGS account), with MAGS President and Assistant Show Chair W. C. McDaniel looking on.

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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.

July DMC Field Trip

WHERE: Diamond Hill Quartz Mine, Abbeville, SC (fee site)

WHEN: Friday, July 19, 9:00 A. M.-6:00 P. M.

COLLECTING: Quartz crystals—amethyst & more

INFORMATION: Tim Barton, (828) 577-4505 or Bill Wetzel,

wwetz14@gmail.com or (864) 404-0025

Links to Federation News

AFMS: www.amfed.org/afms_news.htm

SFMS: www.amfed.org/sfms/

DMC: www.amfed.org/sfms/_dmc/dmc.htm

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You're invited to attend the dedication of the new Native American Pottery Display Case at the C. H. Nash Museum, Chucalissa Indian Village, in Memphis, Tennessee in memory of

Sherri Baldwin

2:00 pm Saturday, July 6, 2019 C. H. Nash Museum 1987 Indian Village Drive Memphis, Tennessee

Thank you to the members of the Memphis Archaeological and Geological Society and the staff at Chucalissa Indian Village for making this a reality. – Mike Baldwin

2020 AFMS Video/Slide PROGRAM CONTEST

Editor's Note: This article is reprinted (with permission) from AFMS News.

With all of us having cameras and cell phones that can make movies, I think that we should start filming field trips, shop techniques, and other items of interest concerning our hobby to share with our membership. The AFMS has a Programs competition every year that anyone can enter.

Here is what it is about:

The purpose of this competition is to recognize and reward authors of presentations about the Earth Sciences and Lapidary Arts and to make winning programs available to affiliated clubs across the country.

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A \$200 cash prize for the highest scoring program scoring 95 and above, and \$100 for a score of 94-90 points in Classes 1-4. In addition, winners receive national recognition. A copy of each winning program is given to each AFMS Regional Program Library; thus winning programs are available to clubs across the country. Each program is judged on its own merits. Entrants will receive a composite score sheet with comments/score. Winners may be asked to make some changes based on judges' comments before the final version is produced for duplication.

Here is what you need to know to enter:

All digital presentations or videos relating to the Earth Sciences and Lapidary Arts are eligible. Submit entries in one of the four amateur classes (See below).

WHO MAY ENTER: Any Club, Society, or members thereof, with 2019 dues paid to the AFMS may enter.

Judging Form and "Tips for Good Programs" are available on AFMS website (www.amfed.org), or from me.

CLASSES FOR ENTRIES:

Class I Educational—About geology, minerals, gems, fossils, etc.

Class II Field Collecting—Showing site(s), specimens, with some geology, collecting methods and other aspects of interest.

Class III "How To Do It"—Techniques/equipment for fossil preparation, jewelry, metal work, carving, faceting, other lapidary, etc.

Class IV Just for Juniors—Any of the above for/by youngsters.

"Excellence in Education" Class For "commercial" Presentations (entries are judged separately).

JUDGING:

Judges look for:

- accuracy of information/educational value
- quality of photographs/visuals completeness of story, but not "too much" information
- narration that moves well from

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2020 AFMS Contest Continued from P. 3

one image to the next

- presentations that explore an area of interest or demonstrate ideas/techniques which viewers may try
- title, credits and "The End"slides for CD, DVD, or VIDEO entries

For CD, DVD or VIDEO amateur entries do not send in a DVD format for judging. Submit a copy preferably in PowerPoint or similar format on a flash drive instead of CD, without author's credits, for anonymity. Entries may be 'live action' or 'static slides'. Integrated audio is preferred but not required for judging (audio will be added for final version). Please include a typed script if there is no audio.

35mm SLIDE PRESENTA-TIONS can be considered (Please contact me before submission).

SUBMISSION DEADLINE: NOVEMBER 15, 2019 DIRECT QUESTIONS AND ENTRIES TO:

AFMS Programs Chairman, Darrell Watkins, (509) 673-0085, PO Box 635, Tieton, WA 98947

Volunteer Prize Drawing

Carol Lybanon

The drawing for Show volunteer prizes took place at the June MAGS meeting. The winners are: Theresa Childress, Dotty Coulson, Aaron Van Alstine, Hongbing Wang, Jon Stanford, Cornelia McDaniel, Cecilia Hemme, Beth Day, and Melissa Koontz. If you



would like to arrange to get your prize call Carol Lybanon [(901) 757-2144]. Thanks again for all your help at our 2019 Show.

An Extinction Without Warning—Why?

Matthew Lybanon, Editor

The most severe mass extinction in Earth's history occurred with almost no early warning signs. Geologically, it was almost instantaneous. A new study by a team of paleontologists from China and the United States may have found the cause.

There have been five mass extinctions in Earth's history. The most recent, the Cretaceous-Paleogene extinction event (also known as the K-T extinction; see "Finding the K-T Boundary" in the May issue for more information) is the best known, because it's the "sexiest"—it's the one that killed the dinosaurs.

But the mass extinction at the end of the Permian Period, almost 200 million years earlier, was bigger. The end-Permian mass extinction (also known as the Permian-Triassic extinction event, or the Great Dying), 251.9 million years ago, killed off more than 96% of the planet's marine species and 70% of its terrestrial life. A study published last year by scientists from MIT and elsewhere found

that in the approximately 30,000 years leading up to the end-Permian extinction, there is no geologic evidence of species starting to die out. The researchers also found no signs of any big swings in ocean temperature or dramatic fluxes of CO₂ in the atmosphere. When ocean and land species did die out, they did so en masse, over a geologically instantaneous period.

Something dramatic must have happened, and another recent study may have found the cause. An international team of paleontologists has found high levels of mercury in the end-Permian marine sediments at nearly a dozen sites around the world, which provides persuasive evidence that volcanic eruptions were to blame for the mass extinction at the end of the Permian period.

The main cause of the extinction is thought to be linked to severe environmental perturbations caused by eruptions in a volcanic system called the Siberian Traps. Such immense and sustained eruptions likely released huge amounts of SO2 and CO2 into the air, heating the atmosphere and acidifying the oceans. The eruptions ignited vast deposits of coal, releasing mercury vapor high into the atmosphere. Eventually, it rained down into the marine sediment around the planet (high levels of another element, iridium, are linked to the asteroid impact that caused the Cretaceous-Paleogene extinction event).

The researchers used the sharp fossilized teeth of lamprey-like creatures called conodonts to date the rock in which the mercury was deposited. Like

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An Extinction Without Warning Continued from P. 4

most other creatures on the planet, conodonts were decimated by the catastrophe. The eruptions propelled as much as 3 million km³ of ash high into the air. The researchers estimate that the Siberian Traps eruptions spewed so much material in the air, particularly greenhouse gases, that it warmed the planet by an average of about 10°C.

The atmosphere was thick with CO₂ from fires and decaying matter. Permian oceans also might have been poisoned with CO₂, according to Harvard paleobiologist Andrew Knoll. Several disasters happened at the same time. As volcanic gases poured into the skies, they would have generated acid rain. Eruption after eruption prevented the Earth's food chain from recovering.

All of these things led to rapid climate changes, which applied pressure on species that were well adapted to conditions as they had been. For example, elevated temperatures reduce oxygen saturation in sea water and cause the metabolic effects of low oxygen to be more severe. Lower temperatures lead to glaciation, reducing the volume of water in the oceans. Sea level would have dropped, killing marine life in the shallows and severely reducing diversity.

This study adds very much to the growing evidence that Earth's major extinction events occur on very short timescales, geologically speaking. It is even possible that the main pulse of Permian extinction occurred in just a few centuries.

Ref: Jun Shen et al. 2019. Evidence for a prolonged Permian-Triassic extinction interval from global marine mercury records. Nature Communications 10, article number: 1563; doi: 10.1038/s41467-019-09620-0

"I Found It"

W. C. McDaniel

New Membership Display

- Each month a specific rock/fossil or location will be featured.
- Bring in one item for display.
 You must have found it yourself.
- Members will vote on their favorite.
- Winner will receive a prize.

Display Schedule

- July—Druzy Quartz
- August—None, Rock Swap
- September—Crinoids
- October—Agate (unpolished)
- November—Quartz Crystal
- December—None, Holiday Party

Fabulous Tennessee Fossils

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

FTF 54

Dunbar's Zaphrentis parsonensis

I write this essay from the invertebrate paleontology collections room at the Yale University Peabody Museum. This is my third time to work in the collections, my first being in 1997. I am here conducting research on a variety of fossil interests including Devonian fossils from West Tennessee, the Cretaceous Coon Creek Formation, and more. So far I have spent time with Carl Dunbar's Silurian and Devonian collections from his dissertation field work in West Tennessee in

Kingdom Animalia Phylum Cnidaria Class Anthozoa Subclass Hexacorallia Order Rugosa Family Zaphrentidae Genus *Zaphrentis* Species *Parsonsensis* Dunbar, 1920

the summers of 1916-1918 and have just finished going through his type specimens for the new species he named—those that ultimately made it into *Tennessee Division of Geology Bulletin 21* pub-



lished in 1919—the centennial that we are celebrating. Figure 1 is my photo of the famous painting of Dunbar at the end of the cabinets where I am looking over some of his collected specimens. It was somewhat exhilarating and apropos that his image should be watching over me as I study his specimens 100 years after his work so that I could share his fossils with you. Tomorrow, I will delve into the vertebrate collections to try to confirm an identification of what I am confi-

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Fabulous Tennessee Fossils dent is a Continued from P. 5 squir-relfish

from the Coon Creek Formation, and look over the plesiosaur material collected from other Cretaceous units in North America and Europe. More on those fossils later.

Dunbar listed one more coral species listed in Tennessee Bulletin of Geology 21, Zaphrentis parsonensis Dunbar, noting that it occurs very rarely in the Harriman "novaculite" chert. He did not provide a photograph of the coral in that publication. His listing of Z. parsonensis in a table in the 1919 publication is truly interesting, because it is not until the following year, 1920, that Dunbar formally describes, names, and designates a holotype for his Zaphrentis specimen and publishes the new taxon in the Transactions of the Connecticut Academy of Arts and Science. Technically this means that the listing in his 1919 publication would have been considered invalid; however, due to the vagaries of publication schedules, it is easy to imagine how this timing error could have occurred. His new taxon is based upon a single specimen that is partially complete (Figure 2), completely silicified, and without the outer epitheca. Z. parsonensis is a very large rugosan "horn coral", larger than any other rugosan horn coral in the Devonian of West

Tennessee. His single specimen was collected on Harriman Creek, just outside of Parsons and downhill from the higher chert-capped hills that occur in the Parsons area. The species epithet was derived due to the fact the species was located near the town of Parsons and was not found in any other area that exposed the Harriman Chert. The only specimen of this species that exists at Yale is the type specimen itself in Figure 1. There are no other specimens in any of their collections, nor has anyone else ever reported finding this species. Interesting, very little of Dunbar's collected specimens, other than type material and brachiopods used by Charles Schuchert later, exist in their catalog or can be located in storage at Yale. Undoubtedly he collected hundreds, if not thousands, of fossils during his fieldwork years. This means that most of the specimens he used to compile his lists over a hundred years ago have vanished. I suspect that they ended up being used in teaching collections and have "left the system". As for subsequent Z. parsonensis reported occurrences, Ray Bassler of U.S. National Museum used Dunbar's 1919 publication of the coral and listed it by name only (no description) in his massive Geological Society of America Bulletin 44: Faunal Lists and Descriptions of Paleozoic Corals published in 1950.

My good friend Collections Manager Tim White, whom I had lunch with during this visit, also listed it from the original 1919 and 1920 reportings in the Peabody publication Postilla in 2000 as part of A Type Catalog of Fossil Invertebrates (Cnidaria: Anthozoa) In the Yale Peabody Museum. No one has ever found another single specimen of Z. parsonsensis, not even me! Might be time to find that locality and look!

It is interesting to note that the genus Zaphrentis has a checkered history and has been used to identify many Paleozoic corals, hence the genus has become somewhat of a "garbage can". It was originally named in 1820 by C. S. Rafinesque (while at the University of Kentucky) and J. D Clifford (a research associate), with five new species, for specimens collected from Devonian exposures at the Falls of the Ohio River. The 1820 taxonomic description was poorly done, woefully incomplete, not illustrated, and with no type specimen preserved. Later in 1912, the genus was revamped and split, then in the 1940s the original collecting beds were re-located. In 1965 a neotype ("new type") was designated. By the 1980s, the genus was adequately illustrated and described. It is a common genus identification for many Devonian horn corals.

See P. 7 for this article's Figures 1 and 2.

Twenty Mile Creek Rededication

There will be a rededication ceremony for the W. M. Browning Cretaceous Fossil Park, which we know as Twenty Mile Creek, next May. Here are some key dates:

- Saturday, April 18, 2020
 First Annual Easter Shark
 Tooth Hunt at Browning Cretaceous Fossil Park
- Saturday, May 2, 2020—

25th Anniversary & Rededication of Browning Cretaceous Fossil Park

Setup will be between 8:00 and 10:00 A. M., visitors between 10:00 A. M. and 1:00 P. M., 1:00 P. M. activities/ceremony.

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Fabulous Tennessee Fossils, Figures 1 and 2, continued from P. 6



Figure I. Portrait of Carl O. Dunbar painted by the very famous natural history painter Rudolph Zallinger. The painting used to hang in one of the Peabody Museum hallways, but was removed into the Invertebrate Paleontology collections a number of years ago. Dunbar appears to be watching over me as I peruse his West Tennessee collections for this article (*Photo by Michael Gibson*).



Figure 2. Photograph of the type specimen of *Zaphrentis parsonensis* from Carl Dunbar's type specimens reposited in the Peabody Museum at Yale University. The red dot and the green diamond on another card indicate that this is a holotype specimen from which the original description is based. None of these labels appear to be Dunbar's original labels. Note that the label on the bottom left indicates that this specimen was used in some type of exhibition at some point. (*Photo by Michael Gibson*).

Clement Museum Fundraising Campaign

Tina Walker, Museum Director

The Ben E. Clement Mineral Museum has started a fundraising campaign to renovate a couple of rooms in the museum. As you know, the museum received a grant to fix our leaky roof, make our restrooms handicap accessible, and other updates. However, the grant did not cover the damage to the interior of the building.

We are planning to repair and update a couple of rooms in the museum.

In Room 106, we need to re-

place the carpet, paint the walls, and improve the lighting. In Room 107, we need to replace the carpet, improve the overhead lighting, add a drop ceiling, and buy lighting and glass for the new cases which were built by the Amish. The estimated cost for the project is \$10,000.

Any donations your readers could make would be greatly appreciated. We are a non-profit organization and donations are tax deductible to the extent the law allows. You can mail your donation to the Ben E. Clement Mineral Museum, P. O. Box 391, Marion, KY 42064. Please mark your donation as "renovation project".

Federation Tidbits

- The June issue of *Lodestar*, the SFMS newsletter (link on P. 2), has a timely article on heat-related illnesses.
- The Dixie Mineral Council (DMC) has a new member: the Catawba Valley Gem and Mineral Club, Hickory, North Carolina. They will host their first DMC field trip in April 2022.



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June Field Trip

Kim Hill

A good sized group showed up for the June field trip to Crow Creek over in Arkansas. The day was hot as the weatherman said but the cool creek helped you forget just how hot. For awhile.

Everyone quickly scattered to hunt, most of us going upstream. As much as I hate to admit to myself I have limits these days. I told myself I would only walk a bit upstream then come back down by the bridge and use my sieve. Still went a bit further than should have, but finally found my 'ok I can go back' piece, a really nice red agate.

Found several more nice agates, couple corals, and petrified

wood. Using the sieve I found some nice baby agates, ones you would never see if you didn't sift. I have this fear I am not recognizing Indian points in the gravel so my hope was to find one. Didn't ... this time.

One of the fun things about Crow Creek is the iron concretions that come in all kinds of weird shapes, and I know some us brought some home. I saw some of the other finds and there were some really nice agates.

Finally the heat got to us and we packed up our buckets, packs, and walking sticks and headed back home. You guys know it had to be hot to get me out of the creek before sunset.

One of the things I noticed about the creek was how clean it

was. I'm not saying there wasn't stuff in it, everything ends up in a creek, but it was noticeably free of trash.

Hope those of you who came on the trip bring your finds for display at the July meeting.

Speaking of July, the field trip is to Turkey Creek over in Mississippi, to hunt for marcasite. It's not the only thing in the creek but is the most fun. More info will be given out at the Membership Meeting, or give me holler.

Keep the end of September in mind. That will be when the geode festival is. Will have more information at the next two Membership Meetings, or give me a holler.

Get up, get out, hunt rocks!









Book Review

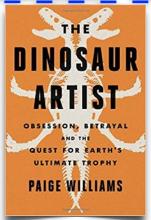
Jane Coop

The Dinosaur Artist

Obsession, Betrayal, and the Quest for Earth's Ultimate Trophy By Paige Williams (a native Mississippian)

This is the true story of Eric Prokopi. As a kid growing up in Florida, he was forever outdoors on an adventure. Fossils were everywhere and you could easily get addicted. The gateway fossil in Florida is the shark's tooth and he found his first at age 5. In high school, he made A's in all the advanced placement courses and was a competitive swimmer. He was always looking down for evidence of the past. His family became members of the

Bone Valley Fossil Continued, P. 9



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Book Review Society and the Continued from P. 8 Tampa Bay Fossil Club. He

kept every newsletter. His book collection included Roy Chapman Andrews's *All about Dinosaurs* and *In the Day of the Dinosaurs*. His fossil collection was in cigar boxes.

Then he developed a passion for mammalian fossils of the Pleistocene Epoch. "Birds with twelvefoot wingspans! Armadillos the size of a Volkswagen Beetle! Horses, saber-toothed cats!" His collection filled the house and spilled over into the garage until there was no more space. He got a booth at a fossil fair and sold them! His family started driving to trade shows all over and was making thousands.

He went to the University of Florida swimming for the Gators and fulfilling his work-study obligations at the Florida Museum of Natural History. No way he wanted to be stuck in a museum doing paperwork and fighting bureaucracy. Even a high-paying career in

his major, coastal and oceanographic engineering, was worth the price of sitting in an office. He loved to hunt, prepare and study his find. Others in the West had made a living at it.

But in 1990, the ownership of the most complete *T. rex* ever found had been to court. The South Dakotan team that had spent years-worth of digging and preparing the skeleton got nothing of the tax-free \$7.6 million profit at auction.

Eric Prokopi's singular obsession with fossils fueled a thriving business hunting, preparing, and selling specimens. He traveled the world supporting his family with sales to clients ranging from natural history museums to avid private collectors like actor Leonardo DiCaprio and Nicolas Cage. He became soured of academia when the Florida Museum of Natural History started publishing academic papers of his finds and donations without any accreditation to Prokopi.

In 2012, a New York auction catalogue boasted an unusual offering: "a superb Tyrannosaurus skeleton." In fact, Lot 49135 consisted of a nearly complete *T. bataar*, a close cousin of the *T. Rex*. At eight feet high and 24 feet long, the specimen was spectacular, and when the gavel sounded the winning bid was over \$1 million.

As the *T. bataar* went to auction, a network of paleontologists alerted the government of Mongolia (where the fossil had been unearthed) to the eye-catching lot. There was a problem, which led to an international custody battle.

The Dinosaur Artist illuminates the history of fossil collecting—a murky, sometimes risky business, populated by eccentrics and obsessives, where the lines between poacher and hunter, collector and smuggler, enthusiast and opportunist, can easily blur. It examines humans' relationship with natural history and a seemingly intractable conflict between science and commerce.



Library Donations

A Guide to the Elements
Applications and Investigations in
Earth Science
Earth Portrait of a Planet
All three donated by Nannett
McDougal-Dykes

Adult Programs

July: Dr. Ryan Parish, "Archaeology of Poverty Point, Louisiana

August: Indoor Rock Swap/Picnic September: Dr. Elizabeth Rhenberg, "Crinoids"

Junior Programs

July: Jane Coop, "Gemstones and Mohs Hardness Scale"

August: Indoor Picnic with the adults

September: Kim Hill, "Native American Lore and Artifacts"

Field Trips

July 20: Turkey Creek, Mississippi August 17: Parkin Museum, Arkansas

September 27-29: Geode Fest, Illinois

July Birthdays

- Marie BoltonAshton CoulsonFred Solang
- 2 Sierra Ledbetter
- 3 Adam Featherston Wayne Williams
- 5 Susan Goossens

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∏ Want to Be a Member?

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

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

Youth Program Report

Mike Baldwin

During the May MAGS Youth Meeting, we took a journey back in time to the last Ice Age. We talked about the animals [like the saber-toothed tiger, giant bear, woolly mammoths, and mastodons] and the people that inhabited the earth during that time. During the June meeting, the youth had an opportunity to look at the crystalline structure of a number of minerals under the lens of a binocular microscope and view some of those minerals on a big screen through a USB microscope. Future programs include "Gemstones" with Jane Coop in July (schedule change, formerly "Caves and How They Form"), "The Indoor Rock Swap" in August, "Native American Lore and Artifacts" with Kim Hill in September, "How Minerals Play a Part in Our Daily Lives" with W. C. McDaniel in October, "Who Are the Native Americans and Where Did They Come From?" in November, and the Holiday Party in December. We are also trying to decide on a name for the MAGS Youth Group. A couple of frontrunners are "MAGS Minor Miners [M³]" and "MAGS Explorers".

May Board Minutes

Mike Coulson

Called to order 6:36. Present: W. C. McDaniel, Charles Hill, Mike Bald-

win, Kim Hill, Carol & Matthew Lybanon, Bonnie & Bob Cooper, Dave Clarke, James Butchko, Nannett Mc-Dougal-Dykes, Mike Coulson, Jane Coop

Secretary: Distributed copies of April Minutes. Minutes approved.

Treasurer: Report reviewed and approved.

Membership: Nine new members, 5 or 6 renewals.

Field Trips: Upcoming field trips: May 4-5, Viburnum and Eminence, Missouri. May 18, 20 Mile Creek. June 22, Malvern, Ark. July 20, Turkey Creek. August 17, Parkin Museum. Sept 27,28,29: Geode Fest in Illinois.

Adult Programs: Upcoming adult programs: May 10, Randel Cox, Geology of the Mississippi River. June 14, Melissa Buchner, MAGS and Chucalissa. July 12, Ryan Parish, Poverty Point. August 9, Rock Swap. September 13: Elizabeth Rhenberg, Crinoids. October 11, Bill Prior. November 8: Michael Gibson, Vulcan quarry. December 13, Holiday Party.

Junior Programs: Working on digital newsletter for youth. Mike B. has had several upcoming promotional engagements. Upcoming youth programs: May: Last Ice Age. June: Micro Minerals. July: Caves and how they form.

Library: Three new books added to library, Mike B. donated *Roadside Geology in Tennessee*. Wheel on cart fixed.

Show: Overall show attendance was down about 10%. Plan to pass out volunteer awards at the June meeting. Winners don't have to be present to win. Fifteen MAGS Bucks \$5 Certificates were passed out.

Rock Swaps: June 1 rock swap at W. C.s home, 11-3. August 9, Membership Meeting is rock swap. October 13: Try setting one up in October, the Sunday after Membership Meeting.

Editor: Show photos need to be sent to Matthew by May

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

May Board Minutes 15 in order to be Continued from P. 10 included.

Web: Website

updated with May information on home page; newsletter added.

Old Business: Charles Hill donated purple calcite to club. Melissa will raffle off at next meeting. Memphis Stone and Gravel donated a lot of small to large pieces of petrified wood to the club.

New Business:

- Assemble committee of 3 or 4 people with social media experience to develop plans to advertise next Show.
- Need someone to redesign postcard for next year's Show.
- Rock tumbler, boxes, plexiglass case and other items need to be moved from storage shed. Could auction off either by piece at club meetings or have auction at storage unit. Decided to keep cotton boxes future use after discussion.

- Kim asked about field trip travel reimbursements. Standing rules state \$50 for trips over 100 miles out of Memphis.
- Discussion on whether we should pay speakers \$100 plus dinner. Decision was speaker fee only.
- Nina Riding approached Bonnie about buying a memory box for kids. Bob will look into cost, materials, and labor.
- Discussion around the MAGS collection or part of the collection touring to various locations year round.

Adjourned 7:40.

May Meeting Minutes

Mike Coulson

Called to order 7:08.

Volunteers needed at Show. Sign up for hospitality at Membership Meetings, helping get food and snacks setup. One new Member. Show attendance was down around 5%. No sig-

nificant issues came up. Please pay for Member Show Tickets. Dealer Comments about Show were positive, ease of getting into facility to set up, no steps, no stairs, all dealers did well, and they all liked it very much. 14 library books donated. June 1 Rock

swap at W. C.'s house. August 9 the rock swap will be at the regular meeting. October 12 at a park (to be determined). Missouri field trip went well. We went to three different locations Saturday and one place Sunday hunting for druzy and calcite. 20 Mile Creek trip is planned for May 18, hunting for fossilized sharks teeth. Signup sheet is at front desk. June trip is now scheduled for Crow Creek. 5 displays. June program will be given by Melissa Buchner on MAGS and Chucalissa.

May program: Professor of Geology at U of M, Randel Cox, spoke on the "Geologic History of the Mississippi River."

Adjourned 8:31.

MAGS UPCOMING EVENT SCHEDULE						
Month	Membership Meeting Programs	Hospitality & Featured Display	Field Trips	Other Events		
July	July 12 • Adult-Poverty Point, Ryan Parish • Youth-Gemstones, Jane Coop	Hospitality 1. Harry Armstrong 2. Jane Coop Featured Display Druzy Quartz	July 20 Turkey Creek	July 4 Nationwide mineral explosive with vivid colors and loud noises, frequently accompanied with music and cheers		
August	August 9 Rock Swap	Rock Swap	August 17 Parkin Museum	August 10 Metal Art Glass class at the Art Academy		
September	 September 13 Adult–Crinoids, Elizabeth Rhenberg Youth–Native American Lore and Artifacts, Kim Hill 	Hospitality 1. Dotty Coulson 2. Need one more Featured Display Crinoids	September 27-29 Geode Fest in Illinois	September 28 & 29 MAGS at the Zoo Harvest Festival		

Thanks to MAGS President W. C. McDaniel for the above table of events, and for providing information about a class of interest to MAGSters. Metal art glass "Torch Fired Enameling" with Bill Price will take place Saturday, August 10 at the Memphis College of Art. Contact W. C. for details if you are interested.

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

MAGS At A Glance July 2019

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
30	1	2	3	4	5	6 Sherri Baldwin Memorial Dedication, Chucalissa, 2:00 pm
7	8	9	10	11	Board Meeting, 6:30 pm/Membership Meeting, 7:00 pm, "Poverty Point"	13
14	15	16	17	18	DMC Field Trip, Diamond Hill Quartz Mine, Abbeville, SC	20 MAGS Field Trip, Turkey Creek, Starkville, MS
21	22	23	24	25	26	27
28	29	30	31	1	2	3

Memphis Archaeological and Geological Society	
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