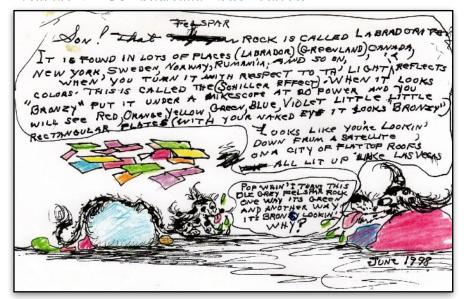


Volume 66 ◊ Number 05 ◊ May 2020 ◊ A monthly newsletter for and by the members of MAGS

The World According To Charley McPherson

From the MAGS Rockhound News Archives



In an earlier era, Charley McPherson's cartoons were a regular feature in the MAGS newsletter (which may have had a different name then). A cache of old newsletters was discovered on a shelf in the back of the MAGS trailer. Some of Charley McPherson's cartoons were rescued from

obscurity by scanning them into digital images. So now they are available to future generations of MAGSters. Occasionally, one will appear in an issue of MAGS Rockbound News. We hope you enjoy Charley's art, as MAGS Members did when they were first published.

In this issue The World According To Charley McPherson P. 1 In Defense Of Rocks MAGS And Federation Notes Board Announcement P. 3 The Birth of a Birthstone P. 3 Clement Show Date Change P. 4 Antarctic Rainforest P. 4 Rock Food Table is Sheltered in Place P. 5 Keeping Ourselves Busy P. 5 Fabulous Tennessee P. 6 Fossils New Mexico, Land of Enchantment and Rocks... P. 8 MAGS Notes P. 9 MAGS At A Glance P. 10

IN DEFENSE OF ROCKS

The use of the phrase "Dumb as a Rock" appears to be on the increase, especially by politicians, and it is time to stand up for rocks. I love and adore rocks, collect them, play with them, hoard and board them, display them, sell them, and put them to work. But I have never met a dumb

W. C. MCDANIEL

rock. Met a few that were hard and somewhat ugly and of little use, some made my back ache and few that tried to remove my big toe. But through it all, they were rocks, not dumb rocks.

The origin and use of the term are somewhat hazy and an online search will give you multiple Continued, P. 3

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MAGS AND FEDERATION NOTES

Memphis Archaeological and Geological Society, Memphis, Tennessee

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

MAGS General Membership Meetings and MAGS Youth Meetings are held at 7:00 P. M. on the second Friday of every month, year round. The meetings are held in the Fellowship Hall of Shady Grove Presbyterian Church, 5530 Shady Grove Road, Memphis, Tennessee.

MAGS Website: memphisgeology.org

MAGS Show Website: www.theearthwideopen.com or https://earthwideopen.com or https://earthwideopen.com or <a hre

We aren't kidding when we say this is a newsletter for and by the members of MAGS. An article with a byline was written by a MAGS Member, unless explicitly stated otherwise. If there is no byline, the article was written or compiled by the Editor. Please contribute articles or pictures on any subject of interest to rockhounds. If it interests you it probably interests others. The 15th of the month is the deadline for next month's issue. Send material to lybanon@earthlink.net.

May DMC Field Trip

WHERE: Hammett Gravel Pit, Redwood, MS

WHEN: Saturday, May 30, 7:45 A. M

COLLECTING: Agates, corals and other fossils, geodes, morel

CONTACT: Greg Britt, (601) 278-3997 or

fieldtrips@missgems.org (Registration required)

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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Memphis Archaeological and Geological Society

The MAGS Board has voted to cancel all scheduled MAGS events through June I, 2020. This includes meetings—Membership and Board—in April and May, field trips, and the 2020 Mineral, Fossil, and Jewelry Show. June scheduled events are subject to continued monitoring. We will issue further announcements in the event of any changes. Our first concern is the health and safety of our Members and friends.

In Defense Of Rocks answers and Continued from P. 1 opinions. So, stand up for rocks, collect them, appreciate them and keeping on rocking.

Addendum. Rocks are a perfect companion and activity for social distancing.

The Birth of a Birthstone

Amber Dunn

Born May 2nd 1989 (a Taurus) I've grown up to be a creative, carefree, slightly strong willed adult. I basically had it all, all expect for one thing, love. I mean who needs marriage anyways?? Well 5 years ago—notably, while not looking—we crossed paths! I'll admit it's been an uphill battle ever since but neither of us have ever been ones for backing down from a good challenge, and any good



gemstones (like diamonds) always form under great pressures, right?

Speaking of diamonds, this past December he put one on my hand. Even De Beers themselves would be proud of, his great grandmother's to be exact. A breathtaking clustered basket design rumored to be close to 80 years old (btw if you or someone you know knows more about vintage rings call me!). Now excitedly I get the pleasure of wearing this beauty down the aisle myself but

unfortunately that day won't come until this time next year. Alas, Covid-19 has struck again, only this time its casualty was our May 30th wedding. After speaking with friends and family we've decided it was best to postpone. I was very upset. We were going to keep it fairly simple but I'd planned everything even down to the jewelry I wanted to wear with my gown: EMERALDS!

Being as the wedding is in May, Continued, P. 4

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The Birth of a Birthstone it being Continued from P.3 my birth month,

and the color theme to the wedding all being green I thought it only fitting. Surprisingly I don't even own any emerald. I always found the color weird on my skin and wasn't a big fan of the popular rectangular cut, but for this it just felt right. Now the hunt has begun for the perfect piece. I was hoping to find something to catch my eye at this year's rock and mineral show but Covid killed that too; next year it is! Until then I've decided to scour the internet for ideas, but this whole process got me thinking, how did birthstones come about in the first place and why? I decided to take a journey to find out and thought my fellow rock hounds might find this interesting as well.

The earliest known reference to twelve gemstones stones, believe it or not, was in the Bible. In Exodus 28:15 it speaks of Moses creating a breastplate for Aaron, high priest of the Hebrews, which represented the twelve tribes of Israel. Those first twelve stones were sardius, topaz, carbuncle, emerald, sapphire, diamond, ligure, agate, amethyst, beryl, onyx, and jasper. Later they were associated with Zodiac signs between the 1st and 5th centuries A.D. by Flavius Josephus and later by St. Jerome, who believed them to have special healing powers. Exactly which stones are hailed and to their meanings have varied depending on time and culture. They have been thought to bring many things including luck, love, the warding off of evil, safety, and purity among others. Even specifically where the stone are worn on the body conjures up superstitions.

Birthstones first became associated with specific months of the year in Poland around the 18th centuries when Jewish gem traders began to appear in the region. But our modern American perception of birthstones was developed in 1912 by "The Jewelers of America". They have been criticized by some for moving and dropping/adding stones throughout the years, but these twelve-give or take are the ones we still recognize today. Interestingly the last change to that list was in 2002 when tanzanite, discovered in 1967, was added as another stone for December (December now has three). Most birthstones are gifted as birthday and/or anniversary presents but when searching there tends to be three categories for each: ancient, traditional, and modern. Ancient stones consist of gems used for thousands of years while traditional only ranges from the last 500 and modern the last 100. Of course there are countless more articles and information on this subject and I think for the sake of being out of work at the moment I'm going to-excuse my pun-dig in a little deeper. But I hope you've learned a little something as I have and I hope you and your family continue to be safe during these uncertain times!

Thanks for reading, love you all!

Clement Show Date Change

Tina Walker, Director Ben E Clement Mineral Museum Due to Covid-19 the 15th Annual Ben E. Clement Gem, Mineral, Fossil, and Jewelry Show date has been changed to October 10th and 11th. This coincides with the Fluorescent Mineral Societies' Show on October 10th. Our show will be held at historic Fohs Hall in Marion, Kentucky. The FMS show will be across the street. Hope you will make plans to attend.

Antarctic Rainforest

Matthew Lybanon, Editor

"The numerous plant remains indicate that the coast of West Antarctica was, back then, a dense temperate, swampy forest, similar to the forests found in New Zealand today" This is a quotation from Ulrich Salzmann, a paleoecologist at Northumbria University in England, concerning the remains of a 90 million-year-old rainforest discovered under Antarctic ice.

At that time West Antarctica was home to a thriving temperate rainforest, according to fossil roots, pollen, and spores recently discovered there, a new study published in *Nature* finds. During the middle of the Cretaceous period sea levels were 170 meters higher than they are today. Sea-surface temperatures in the tropics were as hot as 35°C. This scorching climate allowed a rainforest, similar to those seen in New Zealand today, to take root in Antarctica, the researchers said.

The rainforest's remains were discovered under the ice in a sediment core that a team of international researchers collected *Continued, P. 5*

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Antarctic Rainforest from a seabed continued from P. 4 near Pine Is-

land Glacier in West Antarctica in 2017. Back at the lab, the team put the core into a CT scanner. The resulting digital image showed a dense, 3m-long network of in situ fossil roots embedded in a mudstone matrix. The dirt also revealed ancient pollen, spores, and the remnants of flowering plants from the Cretaceous period.

The sediment core revealed that during the mid-Cretaceous, West Antarctica had a mild climate, with an annual mean air temperature of about 12°C, similar to that of Seattle. Summer temperatures were warmer, with an average of 19°C. In rivers and swamps, the water would have reached up to 20°C. In addition, the rainfall back then was comparable to the rainfall of Wales, England, today, the researchers found.

These temperatures are impressively warm, given that Antarctica had a four-month polar night, meaning that a third of every year had no sunlight. However, the world was warmer back then, in part because the carbon dioxide concentration in the atmosphere was high. Before this study the general assumption was that the global CO₂ concentration was about 1,000 ppm, but in the model-based experiments of this study it took concentration levels of 1,120-1,680 ppm to reach the average temperatures the study deduced.

These findings show how potent greenhouse gases like carbon dioxide can cause temperatures to skyrocket, so much so that today's freezing West Antarctica once

hosted a rainforest. Moreover, it shows how important the cooling effects of today's ice sheets are, the researchers said.

CT scan video: https://vimeo.com/ 402614855

Ref: Johann P. Klages et al, Temperate rainforests near the South Pole during peak Cretaceous warmth, published online 1 April 2020, https://doi.org/10.1038/s41586-020-2148-5

Rock Food Table is Sheltered in Place

W. C. McDaniel

The MAGS Rock Food Table joined all other local restaurants by not appearing at the Show and will shelter in place at the storage shed until 2021. This was going to be a big year for the table as we were going to have a "Name the Food Table" contest, seeking a more formal name for the table and nice prize(s) for the winner. The table is one of the Show's featured events since the 1980s and continues to be a big draw, definitely not suitable for social distancing. The history of the table is somewhat lost in time, but it is one of three rock food tables still actively displayed by Memphis, East Texas, and North Mississippi clubs. At one time a food table was displayed in Portland-not sure which Portland. Who had the first table remained a mystery until I ran across these two paragraphs in an article that gives a detailed chronological history of the Tucson Gem Shows, so this may be the earliest appearance of a rock food table.

"How the Tucson Shows Got Their Start" by Terri Haag "1957, the show highlight was a fascinating display of dinners instead of dinnerware. Mrs. Emma Clark, a 53-year-old widow from Redlands, California, brought her rock food. Everything on Mrs. Clark's plates looked not just edible but delicious—but everything on the menu was a natural rock or mineral that she had collected, cleaned, shaped, and polished. There were mouth-watering meats, a pot roast, bacon and eggs, loaves of crusty bread, peas, carrots, and mashed potatoes—even apple pie and chocolate cake!

"Several years later, Mrs. Clark and a friend camped out in a travel trailer at my folks' house, and I got to see the rock foods again. Up close, they looked just as yummy, except for the rhodochrosite "ham," which as far as I was concerned looked just like a slice of rhodochrosite on a plate. Nevertheless, I was and still am powerfully impressed by Mrs. Clark's petro-culinary accomplishments."

Keeping Ourselves Busy

Susan "DeeDee" Goossens

Keeping ourselves busy in this challenging time of pandemic is a must in my book. My favorite life's hobby is Earth Bound Energy. It helps to keep me grounded, relaxed, and keeps my mind totally off of our planet's fears, warning stress, and loss. Which is collecting and enjoying our earth's bounty of available rocks, what kind are they, how old are they, where did they come from? To research and be creative with each one's beauty. I never tire going out to the many rock gardens I have created in my front and back yard. I always look forward to adding or rearranging them. It's an ongoing creative Continued, P. 7

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Fabulous Tennessee Fossils

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

FTF 64

Cinnamomum newberryi ellipticum

April flowers are blooming, pollen is thick in the air, Covid-19 has forced us all into not just socially isolating, but being confined with the Governor's Stay Home order. I have been doing a lot of yard work these past couple of weeks—cutting grass, pruning bushes, washing pollen off of everything, and watching the green come alive as Spring unfolds. With plants on my mind lately, especially angiosperms, I decided it was time to focus another FTF on plant fossils from our plant fossil riches of West Ten-

This essay's fossil specimen is from the UT Martin Vanderbilt Collection and is a member of the Laurel Family of trees. The specimen (Figure 1) is labeled *Cinnamo*mum newberryi ellipticum and was collected from the Cooper Pit near Hollow Rock—Bruceton, Tennessee. The label does not indicate who collected our specimen, but it does list that it is a Cretaceous age deposit and assigns this specimen to the Ripley Formation (what we today call the Coon Creek Formation in Tennessee). The host species, C. newberryi, was erected in 1911 by Edward Wilber Berry of the U. S. Geological Survey as a new species based upon specimens collected from the Cretaceous Raritan Fm. of New Jersey. Later, as part of U.

Kingdom Plantae
Subkingdom Viridiplantae (green plants)
Infrakingdom Streptophyta (land plants)
Phylum Angiospermophyta
Division Tracheophyta (vascular plants)
Class Monocotyledonae or Magnoliopsida
Order Laurales
Family Lauraceae
Form group Cinnamomophylls Crabtree, 1987
Genus Cinnamomum Schaeff
Species C. newberryi Berry, 1911
Subspecies C. newberryi ellipticum Berry, 1925

S. Geological Survey Professional Paper 136: The Flora of the Ripley Formation, Berry erected several new species and subspecies of Cinnamomum. The specimens Berry used for the 1925 paper were initially collected by that author sometime between 1909 and 1911 as part of a general reworking of a series of earlier field studies that occurred from 1983–1894 by E. A. Smith (1841-1927; State Geologist of Alabama), and Lawrence C. Johnson, D. W. Langdon, Jr., W. M. Fontaine, and L. F. Ward, all working with the U.S. Geological Survey on a large study of resources across the southeastern U. S. Berry erected a several new subspecies of C. newberryi in that 1924 publication. Although Cinnamomum newberyi was first described by E. W. Berry in 1911, and he added several new species and subspecies to the genus in 1925, it turns out that at the same time Berry was publishing his 1925 pa-



per, A. C. Seward published a revision of the genus to *Cinnamomoides* in a study published in Belgium.

Edward Wilber Berry was born in 1875 in Newark New Jersey, to Abijah Conger Berry and Anna Wilber. His interest in plants began early in his "at home, self-taught" education. Berry was destined to career in the sciences as he finished his three-year high school sciences in two years and had

actually finished his formal education by the age of 13. Over his lifetime, Berry worked for a cotton good company, as a business manager for several news agencies, eventually becoming the president of News Publishing Company in 1905. He always had an interest in plants, especially fossil plants, which fueled his study in natural history and caught the attention of science faculty at Johns Hopkins University. While pursuing his news career, Berry received the Walker Prize from the Boston Society of Natural History in 1901 for his self-motivated interests. Eventually, at the age of 30, he turned his career towards academia and research by joining the faculty at Johns Hopkins University where he remained until his death in 1945. In 1917, while at JHU, Berry becomes a senior geologist with the U.S. Geological Survey, which leads

Continued,P. 7

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Fabulous Tennessee Fossils to his ex-Continued from P. 6 tensive work in

the southeast. Berry's paleobotany research also took him to the Andes. Venezuela, Ecuador, and Peru in addition to his work in the southeastern U.S. He served as the president of the Paleontological Society in 1924. Even though Berry did not have regular college degrees, he did have honorary doctorate degrees, including from Lehigh. By 1929, Berry had become a dean and in 1935 provost at JHU. Berry retired from JHU in 1942. In retirement he served as the president of the Geological Society of America in 1945, which became his last professional position as he passed away in September of 1945.

Berry's paleobotany work in our area began with the studies he conducted with the U. S. G. S. and he laid the primary groundwork for most of our understanding of Cretaceous and Eocene fossil plants in the region that lasts to this day. According to one of his

professional memorials, Berry was an "independent thinker, always a nonconformist and somewhat of a rebel" with respect to his research. With respect to his paleobotany taxonomy research, Berry was what is sometimes called "a splitter", as opposed to "a lumper", when it comes to identifying and erecting taxa. This means that he emphasized small-scale differences in fossil plant morphology as being sufficient criteria to split taxa into many subgroups. Berry named many taxa and used the subspecies concept extensively (see FTF 57 for a discussion of subspecies) and produced numerous volumes of new species descriptions. In the years since his death, many of these taxa have been revised and synonymized into much fewer taxa. This is a common phenomenon in taxonomy, and has commonly occurred a lot with Berry's works. Having said that, some of his taxa remain untouched by later literature. The status of Cinnamomum newberryi ellipticum remains unrevised. This

species is extinct and populated West Tennessee during a different climate regime, primarily the Late Cretaceous greenhouse world. Today, the genus *Cinnamomum* is mostly found in and in tropical to subtropical mountain rainforests of China, India, and Southeast Asia.

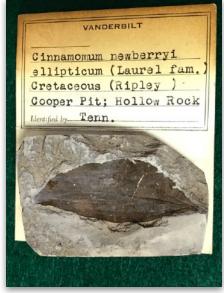


Figure 1. Cinnamomum newberryi ellipticum from the UT Martin Vanderbilt Collection (Photo by MAG)

Keeping Ourselves Busy process that Continued from P. 5 just makes me feel

good, feel happy, and I'm especially grateful to have this hobby with our Memphis Archaeological and Geological Society at this time on our planet. People often slow down their cars to see my front yard angel called Unity surrounded by quartz crystals, some of many I have collected on our many digs. The grandchildren love to play in the three rock gardens in the back yard and always want to see "What's new, grandma?".



Thanks, VeeVee, for a nice article on keeping busy during this shelter-in-place time.





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

New Mexico, Land of Enchantment and Rocks...

James Johnson

Adapted with permission from an article on <u>jwjrocks.com</u>.



About six weeks after my fall trip to Arkansas, I had an email from my buddy John Oostenryk: "... hey how would you like to drive down to New Mexico in the spring of 2020 and collect some of that material and do you think your group would like to go as well?" I wasn't sure if I could go, but I was sure others would jump at the chance, so I emailed the group and pitched the idea to them.

By mid February, I sent out another email with the trip finalized and the dates set for March 5-10, for southwest New Mexico. We decided to stay at Deming, since it has a multitude of hotels and restaurants. While I wasn't sure if I could even go, I researched the weather that time of the year down in southwest New Mexico as well as gas prices and lodging options. I read that the normal rainfall in that part of the country, is 0.2 inch per year, and the temps were averaging lows of 35° at night to highs of 60°-70°, so I figured we were gonna be okay on temps and there wouldn't be much rain. It looked like rattlesnakes wouldn't be

much of a problem, either.

Editor's Note: At this point, it's time to skip ahead to what the group found during the digs. Those interested in more details are encouraged to read James's article on <u>jwjrocks.com</u>.



Belen, New Mexico, is just south of Albuquerque and was the location given for multi-color jaspers in several website searches. The area is on both sides of the road for 5 miles west of the airport on Rock Quarry Road. It was all over the place; the further you get off the road the more there is to be found.



My buddy John Oostenryk, digging out agates and thunder eggs from this pile of dirt. This pile contained at least three varieties of thunder eggs—beautiful stuff.



Wonderstone (Editor: rhyolite "picture rock") is great lapidary cutting material. In many places north of Deming it was lying all over the place and could be found at many old fluorite mines, too.





A pile of agates and wonderstone at the first location we went to (near Deming), lying all over the place, prime for picking up. We paid the landowner \$50 a bucket for all we collected and many of us took several buckets full home with us. He could have easily charged us \$100 a bucket and been closer to the real value of what we collected.

We were finding more malachite coated rocks than azurite coated rocks, but when you were looking where the sun was shining the blue definitely stood out much more than the green did. We simply had to spread out more to find the blue coated rocks. They were there just waiting for us to show up and collect them.:)

Continued, P. 9

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New Mexico, Land ... Continued from P. 8



A pile of thunder eggs cut up by my buddy Mark Bishop when he returned to his home in the Dallas area—some beautiful stuff he collected.:)

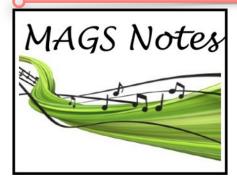


We were surface collecting at the base of Fluorite Ridge north of Deming on the one rainy day were encountered while there that week. The jasper found there is a dark red and much easier to spot on a rainy day than a sunny day. It looks really nice when it is wet. One other rock found out there a lot is called Puddingstone (Editor: Google says it's a conglomerate that consists of distinctly rounded pebbles whose colors contrast sharply with the color of the matrix surrounding them). Not sure why anyone would think it looked like pudding at all.

Photo Credits: James Johnson, Mark Bishop



David Hodge picking out fluorites in a huge tailing pile on the side of that steep hill behind him. Old fluorite mine at Fluorite Ridge; we hiked up there twice that day and took home some beautiful plates of fluorite in many colors that had been there undisturbed for some time.



Editor's Note: Since all scheduled MAGS events are cancelled through (at least) June 1, most of the sections in MAGS Notes will be resumed when the events are resumed.

May Birthdays

- 2 Amber Dunn Aniyah Thomas
- 4 Sunny Finch
- 9 Carol Lybanon
- Jack CollinsJulie Lybanon
- 11 Theresa Childress

- Mary Elliott
- Pam Crumpton Trace Hartman
- 13 James Butchko
- 16 Robert Duncan
- 17 Dave Kitkowski
- 20 Michele Robbins
- Zoe Sams

12

- Ethan Mueller
- 25 Amber Shields
- 27 Kelly Bowen
- 28 Colby Wrasse
- 30 Herb Nicholson

■ 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.

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MAGS At A Glance May 2020

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
26	27	28	29	30	1	:
ll sche	duled M	AGS act	ivities e	7	8	
			unies u	re cance	elled unt	il Tuna
10 M O M	11	12	13	14		" June.
17	18	19	20	21	22	2
24	25 MEMORIAL	26	27	28	29	DMC Field Trip, Hammett Gravel Pit, Redwood, MS, 7:45 am
31	1	2	3	4	5	

Memphis Archaeological and Geological Society
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Memphis, TN 38016