

Volume 64 \quad Number 04 \quad April 2018 \quad A monthly newsletter for and by the members of MAGS

Past, Present, Future

April Program



Prize



At the April Membership Meeting (present), the program will concentrate both on the past and the future. A brief (less than five minutes) video that introduces a new book documenting some of the history of MAGS is the "past" portion of the program. The "future" section is a description of what to expect from the 2018 Memphis Mineral, Fossil, and Jewelry Show.

Historian Carol Lybanon has prepared a book primarily made up of pictures from MAGS activities. There are sections on field

MAGS History

Field Trips

Holiday Parties

Rock Swaps

Shows

Special Events

trips, rock swaps, holiday parties, the MAGS Show, and special events. The book, which will be available in the library for Members to view, is in loose leaf format so that more pages can be added. "MAGS History 1999-2017" is a video that gives a quick overview of what the book contains.

"15 Days to the Show" will be just what the name implies: information about our biggest activity (and biggest fundraiser, which keeps your dues low). MAGS puts on the biggest show of its kind in this area. Over Continued, P. 3

1 Tolliote 1 lie 5llow	1. 1
MAGS And Federation	
Notes	P. 2
President's Message	P. 3
Show Volunteers	P. 3
Help Wanted	P. 3
April Volunteer Day	
At Chucalissa	P. 3
Researchers Ponder	
Dinosaur Fossil	P. 4
MAGS Notes	P. 4
Save The Date	P. 5
MAGS Day At	
Chucalissa	P. 5
It's Show Time!	P. 5
Fabulous Tennessee	

In this issue

Р. 1

Past, Present, Future

Promote The Show

February Meeting Minutes Recipes Of The Month P. 10 Dig It! Jewelry Bench Tips March In Pictures

Oren Dunn Museum

February Board Minutes P. 9

Fossils

Show

P. 10 Р. 11 MAGS At A Glance P. 12

P. 6

P. 9

P. 9

P. 10

PROMOTE THE SHOW

Pick up a stack of these notecards at the April Membership Meeting. Give some to all your friends. Leave them (with permission) at public places. Do you know a school science teacher? Give some to him or her.

MAGS has put on this Show for



many years, yet not everybody who might be interested knows about it. One of these cards would be the perfect accompaniment to the Member Show Tickets you hand out. This is a volunteer activity that requires very little effort, but it's an effective tool to promote the Show.

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

2017-2018 MAGS BOARD

President-Charles Hill

1070 Park Swain Road, Grand Junction, TN 38039 ♦ (901) 626-4232 ♦ hunter3006@aol.com

1st VP (Field Trips)-James Butchko

4220 Dunn, Memphis, TN 38111 ◊ (901) 743-0058 ◊ butch513j@yahoo.com

2nd VP (Adult Programs)–W. C. McDaniel

2038 Central Avenue, Memphis, TN 38104 ◊ (901) 274-7706 ◊ w.c.mcd@att.net

Secretary-Mike Baldwin

367 North Main Street, Collierville, TN 38017 ♦ (901) 853-3603 ♦ mbaldwin05@gmail.com

Treasurer-Bonnie Cooper

8695 Baylor Road, Arlington, TN 38002 ◊ (901) 444-0967 ◊ rocks4us@hotmail.com

Director (Asst. Field Trips)- Kim Hill

4755 Royal Elm Cove, Memphis, TN 38128 ◊ (901) 388-7572 ◊ earthsis@aol.com

Director (Asst. Adult Programs)-Dave Clarke ◊

456 North White Station Road, Memphis TN 38117 ♦ (901) 308-0334 ♦ dclarke@fieldmuseum.org

Director (Youth Programs)-Open

Director (Asst. Youth Programs)-Open

Director (Librarian)-Leah Gloyd

2151 Dogwood Creek Court, Apartment 202, Collierville, TN 38017 \Diamond (270) 847-3170 \Diamond

leahgloyd@outlook.com

Director (Asst. Librarian) — Jane Brandon 4384 Castle Avenue, Memphis, TN 38122 ◊ (901) 374-0366 ◊ jibrandon@yahoo.com

Director (Membership Services)-Bob Cooper

8695 Baylor Road, Arlington, TN 38002 ♦ (901) 444-0967 ♦ rocks4us@hotmail.com

Director (Historian)-Carol Lybanon

2019 Littlemore Drive. Memphis, TN 38016 ◊ (901) 757-2144 ◊ sgcarol@earthlink.net

Newsletter Editor-Matthew Lybanon

2019 Littlemore Drive. Memphis, TN 38016 ◊ (901) 757-2144 ◊ lybanon@earthlink.net

Webmaster-Mike Baldwin

367 North Main Street, Collierville, TN 38017 ◊ (901) 853-3603 ◊ mbaldwin05@gmail.com

Show Chairman-James Butchko

4220 Dunn, Memphis, TN 38111 \((901) 743-0058 \(\) butch513j@yahoo.com

Past President-W. C. McDaniel

2038 Central Avenue, Memphis, TN 38104 ◊ (901) 274-7706 ◊ w.c.mcd@att.net

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.

April DMC Field Trip

WHERE: Graves Mountain, Lincolnton, Georgia (\$15 fee)

WHEN: Friday, April 27, 8:00 A. M.-2:00 P. M.

COLLECTING: Rutile, lazulite, pyrophylite, kyanite, iridescent hematite, pyrite, muscovite, fuchsite, barite, quartz, and a variety of micro minerals

INFORMATION: John Kolmar, (803) 642-3767

Links to Federation News

- → AFMS: www.amfed.org/afms news.htm
- SFMS: www.amfed.org/sfms/
- → DMC: www.amfed.org/sfms/ dmc/dmc.htm

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

Past, Present, Future 2,000 people Continued from P. 1 see 30 dealers, demonstrators,

children's activities, and more. 901 Rocks will be there. There are hourly (or more frequent) prizes and a grand prize. All of this is put together by MAGS volunteers.

President's Message

Hello again, MAGSters. IT IS SHOWTIME! The 2018 Memphis Mineral, Fossil, & Jewelry Show is finally here!! I hope everyone is excited. This is our time, this is what we do, and we do it better than most other shows. We have been through all of this before: we know what it takes to get the job done. This year we have a new T-shirt design and I, for one, really like it. I know most of you will, too. I can't wait to get one!

This year we only have one day to get things set up. We generally have Thursday and Friday to get everything the way we want it, but this year we don't have that luxury. As a courtesy, the Agricenter usually lets us move in a day early, but this year they cannot. Even with two set-up days, we never have enough time or enough volunteers. This year it is so important for all of us to get there as early as we can and stay as long as we can. MAGS is asking a lot this year, I know; but we have the greatest people and I know we can do it. Let's roll up our sleeves, take a deep breath, and get it done. Thanks to everyone who makes this happen year after year. We are humbly grateful.

Charles

Show Volunteers

Carol Lybanon



We need every Member to help with the MAGS Show. There are many ways to help: donate bottled water, soda, snacks, and—most importantly—volunteer to help during the Show. I hope everyone has gotten a couple of invitations to sign up on SignUp Genius.

This year we have some special gifts (see picture above). Every volunteer has a chance to win. You have to be present to win; we

will let you know when. The easiest way to make sure your name is in the "hat" is to sign up on SignUp Genius.



Help Wanted

Debbie Schaeffer

HOSPITALITY HELP
NEEDED for the MAGS Show.
Thanks to those who volunteered
to help with the Show Dinner.
However, we are still in need of a
couple of people to help with hospitality during the Show weekend.
Volunteers are responsible for
making sure there are plenty of
drinks in the cooler, making coffee, putting out snacks, and making
sure the area stays tidy. If you
would like to help, please contact

Debbie Schaeffer for more specific details and information: (901) 212-4439 or dayday91@aol.com.

The **Show Dinner** is Friday night before the Show and will start around 6:00. Come help set up for the Show and stay for dinner. All MAGS members are invited to attend. Barbecue, slaw, beans, spaghetti, and rolls provided by the Show. All Members are asked to bring a side dish or dessert to contribute **AND** a 12 pack of soda or case of water. Be on the lookout for a sign-up email for the Show Dinner.

We also need donations of individually packaged snacks for the **vendor bags**. Every year we make approximately 40 hospitality bags to give to our vendors. Please help fill these bags. Bring your contributions to the April MAGS meeting.

April Volunteer Day At Chucalissa

Rebecca Johnson C. H. Nash Museum at Chucalissa

Spring Family Fun Day is April 21, 10:00-3:00. This is a special day filled with activities for the entire family, including:

- Live bat exhibit
- Trench tours
- Guided tours of the nature trail and arboretum
- Crafts for the children
- Planting the Three Sisters' Garden
- Spear-throwing contests

Volunteer for all or part of the day. The museum will provide all tools and materials for the activities. We will also provide lunch for volunteers. If

Continued, P. 4

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

April Volunteer Day At Chucalissa Continued from P. 3

you are planning to volunteer, please contact us at least 48 hours in advance by emailing chucalissa@memphis.edu or calling (901) 785-3160, ext. 10.

Researchers Ponder Dinosaur Fossil

Matthew Lybanon, Editor

University of Kansas paleontologists have a puzzle to solve. They are studying a dinosaur fossil that was unearthed in Montana's Hell Creek Formation. One possibility is the specimen represents a carnivorous dinosaur dubbed a *Nanotyrannus* that likewise was discovered in the Hell Creek Formation and described by other scientists. The *Nanotyrannus* is a subject of controversy because it may represent a separate species, or it may be a juvenile *Tyrannosaurus rex*.



The fossil is a "fabulous" complete section of the upper jaw with all of its teeth intact, along with bits of the specimen's skull, foot, hips and backbones. Other young tyrannosaur specimens have been recovered over the years, but since animal skeletons change shape as they grow, some confusion as to their evolutionary relationships has ensued. Some paleontologists think the young ones may represent different species, while other workers have suggested they all represent different growth stages

of one species—Tyrannosaurus rex.

"The teeth suggest it's a Tyrannosaurus rex; however, there is still more work to be done," said David Burnham, preparator of vertebrate paleontology at the KU Biodiversity Institute. "Because a young T. rex is so rare, there are only a few that have been found over the years, so it's difficult to discern what are changes due to growth or if the differences in the bones reflect different species. Fortunately, KU has an older T. rex to compare with and another young T. rex on loan to help decipher this problem."

"Confusing the issue here is age," Burnham said. "Ontogeny, that's the process of growth—and during that process we change. Adult dinosaur bones, especially in the skull, don't look the same as their younger selves. So, if someone finds a baby or juvenile fossil they may think it's a new species, but we have to be careful since it may represent a younger growth stage of an existing species. It's reasonable to assume Nanotyrannus could be valid—but we must show it's not just a stage in the life history of T. rex."

For now, Burnham and his team are analyzing the bones they have back in the lab and planning a return to Hell Creek to conduct fieldwork and search for more of the fossil. "We're going to go back out this summer—we're going right to that spot," said the KU researcher. "We think and hope there's more there."

 baby-tyrannosaur-fossil-unearthedmontana.





April Birthdays



- Donna Neal
- 6 Kathy Nagel

3

- II Ryan Ledbetter Pam Papich
- 13 Ava Davis
- 17 Caleb Bearden
- 22 Jennifer Flores
- 23 Marilyn Shiffman
- 27 Lori Carter
 - Luken Ledbetter Kathy Bullard
- 28 Sonya Suarez
- 29 Luis Ortiz

Continued, P. 5

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

MAGS Notes Continued from P. 4

I Hospitality

Thanks to all who signed up to work hospitality at the Membership Meetings. You make that part of the meeting work better.

The duties are simple:

- Before Meeting: Arrive around 6:30. Help set up and organize tables. All items are located in a rolling cabinet.
- 2. Monitor snacks, drinks, ice
- 3. After Meeting: Clean up, put all items back in cabinet.
- 4. Two Members per meeting.

 Here is the schedule for the next three months:

April 13: Mary Kratz and Cornelia McDaniel

May 11: Aaron and Sherri Jones
June 8: Mildred Schiff and
Carol Lybanon

□ Show Meeting

The last Show Committee Meeting before the 2018 Show will be on April 2, 6:30 P. M., in the Agricenter board room.

∏ Adult Programs

Here are the programs for the next three months:

April 13: MAGS History and "15 Days to the Show"

May 11: The Amazing Crosswords to Gem Trees Race

June 8: "Mt Kilimanjaro" (Keith Riding)

Save the Date—The 13th Annual Clement Gem, Mineral, Fossil, and Jewelry Show is June 2nd and

MAGS Day At Chucalissa Photo Credits: Marc Mueller, C. H. Nash Museum

3rd in Marion, Kentucky.

Tina Walker, Director, Ben E. Clement Mineral Museum

It's Show Time!

W. C. McDaniel

ShowTime has arrived and here is what you are going to do.

Before the Show

- Volunteer—we need lots of help
- Market the Show via emails, social media, and hardcopy
- 3. Promote and represent the club and Show
- 4. Distribute Show tickets
- 5. Sign up to bring food/drinks to Show dinner
- Bring snacks and drinks for all days

Friday, April 27 schedule and how you will help

Table vendors will arrive between 8-9 am.

- 2. Jim will be at the shed around 8:00 am to start the move. Call him to help at 692-7518
- Will need your help around 11:00 am to help with the dealer and Rockzone table placement
- 4. Late morning until late at night
- Help with Show layout and prep
- Come prepared for Show dinner at 6:30 pm
- After dinner finalize Show layout
- Important parking note.
 Please do not park in the spaces close to the building.
 Leave those spaces for dealers.

Saturday and Sunday

- 1. Volunteer to work
- Need help at admission, Rockzone, and hospitality

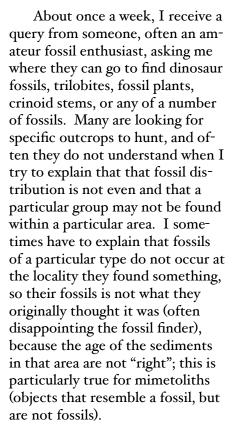
Continued, P. 9

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

Fabulous Tennessee Fossils

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

FTF 39 Distribution of Fossils in Tennessee



The distribution of fossils in Tennessee is controlled essentially by five factors. First, the occurrence of a fossil organism is tied to the evolutionary history of life in general, hence is related to the Sepkoski Evolutionary Faunas concept from the past two essays. If the organisms had not yet evolved, or had gone extinct, then they can't be found as fossils, regardless of where you are looking. So, dinosaurs cannot be found in Cambrian-age rocks, nor can they be found in Eocene-age sediments. We need to look in geologic materials from Late Triassic to Late Cretaceous age for dinosaurs. Second, the organisms must have made it into the fossil record once they died (or died going into the record in the case of being buried alive). The science of taphonomy tells us that not all organisms have an equal chance of becoming fossils. Many are lost to scavenging, decay, or are completely consumed during predation. Soft-bodied organisms, rare organisms, and vertebrates have less chance of being preserved than hard-shelled organisms and marine organisms. Third, the preserved fossils must survive the remaining history of the rocks in which they were entombed. An organism may be alive for a few years, but will spend millions of years in the ground after burial, yet geologic processes continue to act upon them (some helping to form the fossil, some trying to destroy to fossil). Mountain building processes, metamorphism, groundwater dissolution, and other processes acting on the entombed rocks for hundreds of millions of years can destroy fossils that have survived for millions

Fourth, the topography of Tennessee, and the erosive processes sculpting that topography, cannot be overlooked and influences the ages of rocks and sediments we get to see and scour for fossils. A basic tenet in geology is

of years.



the Principle of Superposition, which states that in a normal, undisturbed sequence of sedimentary strata, the oldest bests will be on the bottom and ages will progressively "young" upwards. Also important is the fact that erosion removes top layers of strata to expose what is beneath (thus erosion exposes progressively older rocks the deeper the erosion level, often the older the rocks). Of course this general trend is altered by mountain building events, like in the Smokies, but holds pretty true for the Valley and Ridge province westward across the rest of Tennessee. So erosion positively benefits fossil-finding by exposing successively lower strata. The fifth factor is related to erosion, because erosion can be detrimental as well, because fossils can be destroyed by erosion once exhumed (if not collected and protected. If someone, you and I, do not find and collect fossils, then they are lost to the destructive forces of weathering and erosion to once again be recycled elements. Fossil collecting is fossil conservation!

Now focus on Figure 1. The top of Figure 1 shows a line drawing perspective view of Tennessee drawn by Vanderbilt geologist emeritus Dr. Richard Stearns in 1962 for an article in the Tennessee Conservationist. This diagram is one of my "go to" images to use; it is basic,

Continued, P. 7

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

Fabulous Tennessee Fossils Continued from P. 6 simple, and highly informative, although not very colorful (sometimes the old is the better). Note that the diagram depicts the generalized stratigraphy and structural geology of rocks and sediment lavers below the land surface in Tennessee and the topographic expression of the various regions of Tennessee (our three grand divisions). In general, the higher the topography, the shallower the erosion level, which means younger strata and fossils;

the deeper the erosion level, the older the strata and fossils. West Tennessee appears to violate this pattern, but actually it doesn't West Tennessee sediments were deposited in a large crustal sagging of crust called the Mississippi Synclinorum. So the younger sediments have been "lowered" in the west due to the Reelfoot Rift faulting system.

In 2002, I decided to characterize the types of fossils (major group, such as vertebrate, invertebrate, plant) and ages of fossils exposed at the surface for collecting in a single diagram that I could use to explain fossil distribution in Tennessee to collectors and stu-

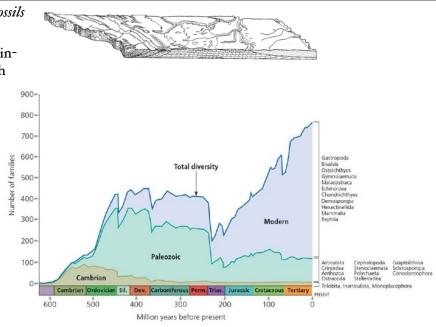


Figure 1. Relationship of Sepkoski Evolutionary Faunas to Tennessee's three grand divisions and geology. The Tennessee map is reversed from regular view with East Tennessee to the left and West Tennessee to the right (map made by Richard Stearns). Relative ages of both the map and the diagram increase from left to right (compare with Figure 2). Note that fossil occurrence in Tennessee thus parallels the pattern represented by Sepkoski's EF diagram shown below the map.

dents. One of my UT Martin geology majors, Elizabeth Rhenberg from Union City (now Dr. Rhenberg and also a paleontologist), and I devised the chart in Figure 2 as part of the paleontology course I was teaching at the time. I offer this to you as a way to relate the exposed geology in Tennessee to the likelihood of locating fossils of a particular type within specific regions of the state. We chose not to include trace fossils on the diagram because trace fossils are ubiquitous in both time and space.

In general, note that the occurrence pattern of fossils closely follows both the age of the strata and Sepkoski's EF distribution discussed earlier with the youngest

fossils groups (Mesozoic and Cenozoic) in the west where the youngest strata are exposed, and the oldest fossils (Paleozoic) in middle and east Tennessee where erosion has worked on uplifted strata to expose lower layers. In the case of the Great Smoky Mountains....not many fossils (although rare trilobites and trace fossils like Skolithos burrows do occur locally near the most eastern parts of the mountains; see FTF 15). Additionally, while the diagram in

Figure 2 is subdivided by physiographic province, the occurrence of fossils is also related to the three grand divisions of Tennessee, because the grand divisions themselves are a manifestation of the provinces within the divisions.

Editor's Note: Dr. Gibson suggests that Figure 2 (next page) could be laminated to use for field collecting or to display with a collection.

Continued, P. 8

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

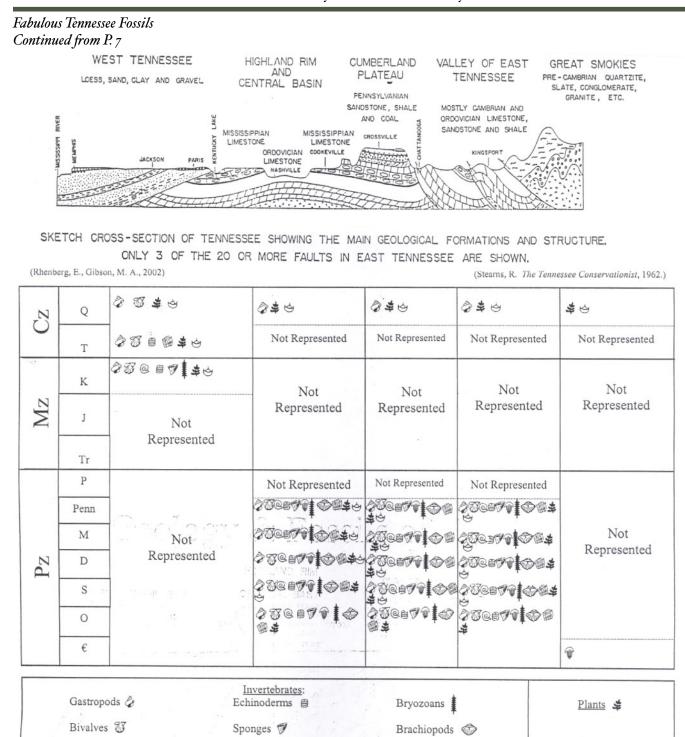


Figure 2. Chart depicting the distribution of fossils in Tennessee as a function of evolutionary history (EF), age of strata, depth of erosion into strata, and grand division with individual physiographic provinces (diagram by Rhenberg and Gibson, 2002).

Corals @

Trilobites @

Cephalopods @

Vertebrates &

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

It's Show Time! Continued from P. 5

3. At end of day help break down and prepare for move back to shed

February Board Minutes Mike Baldwin

Called to order 6:35. Present: Charles Hill, Kim Hill, Mike Baldwin, Bob Cooper, Bonnie Cooper, Carol Lybanon, Matthew Lybanon, James Butchko, and David Clarke

Secretary: Electronic copies of the January minutes were distributed earlier this week. Hard copies were distributed to those present. Motion to approve the minutes carried.

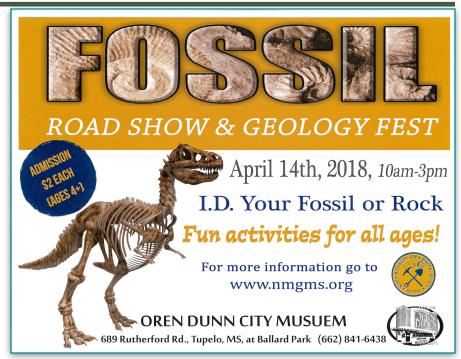
Membership: Renewals are at a trickle. Several will renew at the Membership Meeting. The drawing is still on. The revised membership application is on the website; several have used it. The Coopers will not be at the next two Board Meetings. David Clarke will take Membership responsibilities for those meetings.

Treasurer: SFMS fees have been paid. The SFMS directory update has been sent in with small changes,. No information available yet for liability insurance for the Show. Carol and Matthew will be the insurance contacts. Club income taxes need to be done soon. Motion carried to accept the report.

Historian: Carol is working on the MAGS history. Leah has a lot of historical information, including some scans. Carol needs to get that information. Charles will follow up.

Adult Programs: David asked if we need anything for Friday night. Lou White will present the program on Treasure Hunting.

Junior Programs: Mike volunteered to do a school rocks program if we don't have one scheduled. Carol has a number of CDs containing TV programs about geology and earth sci-



ence. We talked about outside speakers from The University of Memphis, Chucalissa, and others. In years past there were field trips just for the kids, outside activities that were designed just for them. We need a youth director to schedule speakers, but not have to be at every meeting.

Web: USPS copies of the newsletter have been printed and mailed. The website has been updated for February, including the home page, calendar page, and newsletter pages. Mike will post the Nina Riding article when it is available.

Field Trips: The February 3 field trip will be to Vulcan Quarry in Parsons. February 17 will be Chucalissa Volunteer Day. March 17 field trip will be to Discovery Park.

Show: The next Show Committee meeting will be on February 26. We will not give t-shirts to volunteers. Agricenter rent is paid. James is working on the postcards. All dealers are set. March 24 or 31 (rain day) will be a work day to fill grab bags at W. C.'s. We have a lot of dogtooth calcite.

Old Business: Mike presented two t-shirt designs to the Board. The

Board unanimously selected design I. Discussion on color followed. We decided to wait until we find a vendor. Mike will get a quote from Signet

New Business:

- Mike distributed an information sheet containing club information to pass out at the Show. He will send to Board Members for proofing and review. Mike will take care of printing.
- Membership will be the caretaker for business card design with MAGS logo and club information, Mike to check into printing. Motion passed to approve printing. Once the Board agrees on the design, we will order 500 with a maximum expense of \$25.
- We still have a supply of the pretty, colorful business cards that Carol designed a few years ago.

Adjourned 7:47.

February Meeting Minutes *Mike Baldwin*

Called to order 7:05.

James Butchko reminded the membership of the field trip to Parsons and Volunteer Day at *Continued, P. 10*

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

February Meeting Minutes Chucalis-Continued from P. 9 sa. The March

field trip will be to Potosi, Missouri. It is now countdown to show time. We will be gathering at the Mc-Daniels home in March to fill grab bags. Be sure and sign up to volunteer for the Show.

Lou White spoke to the adults on Treasure Hunting. He brought a number of his treasures to show and tell about. Mike Baldwin spoke to the youth on a number of topics including: plate tectonics, earthquakes, volcanoes, meteorites, and fluorescence. He brought a number of mineral and fossils specimens to show, including a collection of fluorescent minerals.

Recipes Of The Month

Thanks to Emily Fox-Hill.

<u>Sweet Potato Casserole</u>

3 cups cooked, mashed sweet potatoes

ı cup sugar

6 eggs, beaten

I to I I/2 cups coconut

1 stick margarine

Combine above ingredients. Pour into 1 1/2 quart buttered casserole.

Mix by hand: 1/2 stick margarine 1/2 cup self-rising flour 1 cup chopped pecans 1 cup light brown sugar

Spread on sweet potato mixture. Bake in 350° oven for 20-30 minutes until the center is no longer liquid. (If you double the recipe like I do, it takes more like an hour.)

Sour Cream Apple Pie

I pastry shell (I tend to use deep dish.)

3 tbsp. flour 1/8 tsp. salt

34 cup sugar

ı egg

I cup sour cream

1 tsp vanilla

Enough apples to fill pie shell (Fuji, Gala, Winesap, any firm, tart apple. Can also add Granny Smith. Avoid Delicious.)

Sift together flour, salt, and sugar. Add slightly beaten egg, sour cream, and vanilla. Beat until smooth. Add apples to pie shell and pour liquid over top. Bake 15 minutes at 425° and then 30 minutes at 350°. Remove and add topping.

Topping:

½ cup sugar 1/3 cup flour

1 tsp. cinnamon

¹/₄ cup butter or margarine Blend and sprinkle over top of pie. Bake 10 minutes at 400°.

Dig It!

The Middle Tennessee Rockhounds will present their Fifth Annual "Dig It" Gem, Mineral, and Fossil Festival. It will take place on Saturday, April 7, 10:00 A. M.-4:00 P. M. The location is Amqui Station & Visitor Center, 303 Madison Street, Madison, Tennessee. Admission is free. For more information point your browser to http://www.rock-hound.org/swap, or email swap@rockhound.org.

Jewelry Bench Tips by

Brad Smith

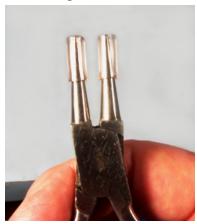
NO-MAR PLIERS

Pliers can often leave nicks and scratches on your work. If

this is giving you a problem, first take a close look at the plier jaws. New tools can be a little rough. I typically relieve any sharp edges, sand away any tool marks, and give working areas a quick polish.

If that doesn't solve the problem, you probably need to cover the jaws. Plastic electrical tape provides a quick fix but can leave messy adhesive on the jaws, and dips don't seem to last very long.

A quick and easy solution is to slip a length of 1/8 dia. vinyl tubing over each jaw. It works well and leaves no sticky residue. The tubing can be found in a store that sells aquarium supplies. Note that this will increase the size of the plier jaws a bit, but I haven't found that to be a problem.



For more tips or to learn new jewelry skills see amazon.com/author/bradfordsmith

Volunteer for the Show

on



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

March In Pictures

March Meeting







Grab Bag Packing





Photo Credits:

Aaron Jones

Matthew Lybanon

Marc Mueller

Missouri Field Trip

Viburnum







Eminence







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

MAGS At A Glance

April 2018

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
1	2 Show Committee Meeting, 6:30 pm, Agricenter	3	4	5 Board Meeting, 6:30 pm, St. Francis Hospital	6	7
8	9	10	11	12	Membership Meet- ing, 7:00 pm, "MAGS History" and "15 Days to the Show"	14
15	16	17	18	19	20	21
22	23	24	25	26	27 DMC Field Trip, Graves Mountain, Lincolnton, GA	28 MAGS Show, 9:00 am-6:00 pm, Agricenter
29 MAGS Show, 10:00 am-5:00 pm, Agricenter	30	1	2	3	4	5

Temphis Archaeological and Geological Society	У	
019 Littlemore Drive		
1emphis,TN 38016		
		\neg