

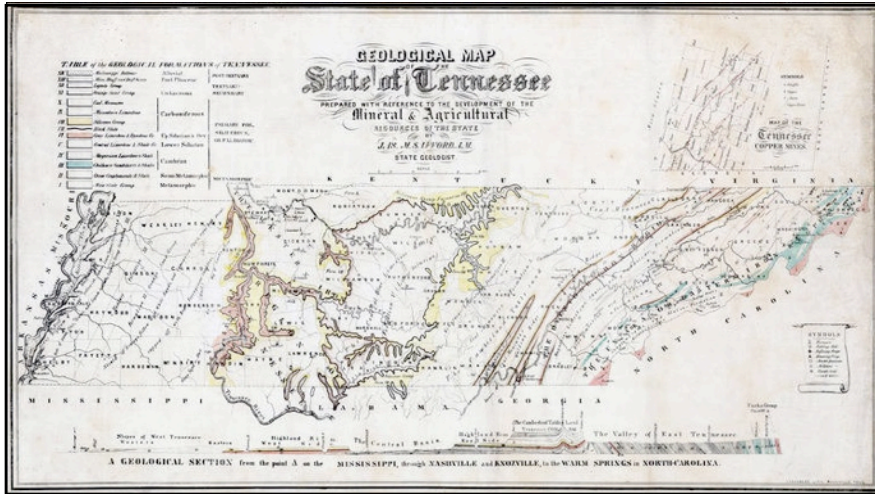


Volume 60 ♦ Number 09 ♦ September 2014 ♦ A monthly newsletter for and by the members of MAGS

# Geology of Eastern Tennessee

Herb Nicholson

September Presentation



**Editor's Note: Come to our September 12 meeting to learn about the geology of eastern Tennessee from one of our own Members. Herb will touch on the following points. Here is a chance for MAGS Members to enjoy a geological presentation about our state, learn some facts, and see some rock samples from the area along with a sample of crude oil.**

- ◆ Review of the three major rock types and how they are formed
- ◆ Rock Cycle
- ◆ Weathering/Erosion/Deposition
- ◆ Faulting
- ◆ General Geologic Setting of East Tennessee
- ◆ Blue Ridge Province (Unaka Mountains)

*Continued, P. 3*

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## MAGS INDOOR PICNIC AND ROCK SWAP

MAGS held its annual indoor picnic and rock swap on August 8. After a short business meeting the real fun began. We were treated to a fine buffet, and several Members set up tables for trading and selling. We sat and chatted with club members and guests.

Then Nannett took over for the most exciting part of the evening. She had collected many prizes, from grab bags to gift certificates to autographed

CAROL LYBANON

Grizzlies t-shirts. I think most everybody left with some sort of prize. Nannett, you outdid yourself. Then the drawing for the amethyst ring cathedral was held. Debbie Schaeffer was the lucky winner. If you missed this great indoor picnic, plan to join MAGS for an outdoor picnic in October. Nannett has again gathered some wonderful giveaways.

**See photos on P. 4**

# MEMPHIS ARCHAEOLOGICAL AND GEOLOGICAL SOCIETY

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

## 2013-2014 MAGS BOARD

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## MAGS AND FEDERATION NOTES

### MAGS Needs You

Fellow MAGSters, if you enjoy your club why not get involved in planning and decision making? Stepping up to the Board is the easiest way to do it. The election to choose a new Board will be at the November meeting. The Nominating Committee is working on a slate to present to the membership at the October meeting. So if they contact you about running for a position, give it some thought. It's more fun to be involved.

### Upcoming Programs

- *September:* Herb Nicholson, "Geology of East Tennessee"
- *October:* Alan Parks, "Memphis Stone and Gravel"
- *November:* Dr. Michael Gibson, "Trace Fossils"

MAGS General Membership Meetings and MAGS Youth Meetings are held at 7:30 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, TN.

MAGS Website: [memphisgeology.org](http://memphisgeology.org)

Please contribute articles or pictures (everybody likes 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](mailto:lybanon@earthlink.net).

### September DMC Field Trip

Participation limited to 37 people, so decide quickly.

WHERE: Sandersville, GA

WHEN: Saturday, September 20, 9:30 A. M.-3:30 P. M.

COLLECTING: Upper Eocene fossils and chert

INFORMATION: Toby Stewart,

[ccgms.fieldtrips@gmail.com](mailto:ccgms.fieldtrips@gmail.com)

### Links to Federation News

- ➔ AFMS: [www.amfed.org/afms\\_news.htm](http://www.amfed.org/afms_news.htm)
- ➔ SFMS: [www.amfed.org/sfms/](http://www.amfed.org/sfms/)
- ➔ DMC: [www.amfed.org/sfms/\\_dmc/dmc.htm](http://www.amfed.org/sfms/_dmc/dmc.htm)



# MEMPHIS ARCHAEOLOGICAL AND GEOLOGICAL SOCIETY

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

## *Geology of Eastern Tennessee* *Continued from P. 1*

- ◆ Valley and Ridge (Clinch Mountain and others)
- ◆ Cumberland Plateau
- ◆ Highland Rim
- ◆ Nashville Dome
- ◆ Mineral Resources (e.g. zinc, oil, coal, and natural gas)
- ◆ Questions

## **Digging the Past**

*Alan Goldstein*

Dear Geology Club Members:

The Falls of the Ohio State Park's Digging the Past is Saturday, September 13, from 10:00 A. M. to 4:00 P. M. It combines Archaeology Day and Earth Discovery Day into a single event that promotes interests in archaeology and earth science. Activities for visitors of all ages are located

around the parking lot behind the Interpretive Center.

You will enjoy learning about human history and the Earth's past with nearly 20 different activities.

- Archaeology—throw a dart with an atlatl and use primitive tools, make clay pottery, get dirty finding “artifacts” in a mock dig, play games, and more.
- Geology—Dig for fossils and minerals in our refreshed collecting piles\*, explore the fossil beds, examine micro-fossils with a microscope, make an egg carton geology collection, children's craft area to make gem trees, weather rocks, are some of the highlights.
- What do I have? Get your unknown artifacts and rocks identified by experts.

\* Collecting is prohibited at the Falls of the Ohio; however, local quarries donate 30 tons of fossil-bearing Silurian Waldron shale and Devonian limestone residuum. Dig for brachiopods, bryozoans, corals, crinoids, cystoids, snails, clams, and trilobites in our collecting piles. Search the mineral pile from Rosiclare, Illinois, for fluorite, sphalerite, barite and calcite. We can direct your club to other localities in the area to collect fossils. This would be an ideal weekend field trip. We hope members of your group will be able to attend!

*Alan Goldstein is an Interpretive Naturalist at Falls of the Ohio State Park, 201 West Riverside Drive, Clarksville, IN 47129-3135. You can reach him at (812) 280-9970 ext. 403,*

[www.falloftheohio.org](http://www.falloftheohio.org),

[www.facebook.com/falloftheohio](https://www.facebook.com/falloftheohio).

## **Rock Swap**

The October 25 rock swap will be at Shelter 2 at Shelby Farms. Parking and bathrooms are close, and there is a lake for fishing. MAGS will provide hamburgers, hot dogs, buns, plates, and utensils. Please bring a side dish to share.

There will also be a table with information about MAGS. The park and play area are very close and busy, so this is a great opportunity to let people know about MAGS and the Show. MAGSters can even set up tables to sell to the public.

Nannett has worked very hard to make this an outstanding event. So come out and have a great time.

**Plan  
to  
attend**



**picnic  
October  
25**



## MAGS Indoor Picnic and Rock Swap—Photos



### Happy Hunting! *Charles Hill*



For two weeks in a row I have had the opportunity to go rock hunting. On Thursday, July 31, I had some time to burn. My work ended 2:00 P. M., and my board meeting wasn't until 6:30 P. M.; so I went down to Nonconnah

Creek. I hadn't been in the field since the Ron Coleman Crystal Mine trip. That is strange for me because I always find a way to hunt something somewhere. Due to that last big rain we had, I need to rebuild the retaining walls for the culvert under my driveway. I want some large and unusual stones for that so half the people seeing it will say, "Wow!" (The other half are likely to say, "That is the ugliest thing I have ever seen!") So I went to Nonconnah looking for big strange/ugly/colorful rocks, and I did have some luck. I also found some other stuff that I call keepers. Keepers are rocks and minerals that can have value or importance

to me. Agates, fossils, petrified wood, and so forth.



Then on Saturday the 2nd Emily and I attended a retirement ceremony in Millington. We took some old clothing and boots, with the plan to go to Sugar Creek afterwards. We attended the event, then had coffee and cake, said our

*Continued, P. 5*



*Happy Hunting!* goodbyes, and  
*Continued from P. 4* headed out to  
rock hunt. We  
needed to change, so I turned  
onto Richardson's Landing Road,  
where I parked in a secluded spot.  
As soon as we were done, almost  
on cue, I heard a vehicle ap-  
proaching: It was a van with two  
rockhounds from the north Mis-  
sissippi club. They told us Sugar  
Creek was packed, so we decided  
to stay at Richardson's Landing.  
We hunted where we could be-  
cause the river was up and the  
hunting area was limited. We  
found a lot of keepers, including a  
piece of Lake Superior agate that  
Emily is still grinning about. After  
a couple of hours, I had filled my  
bags with big strange/ugly/colorful  
stuff, and we headed home.

What I am saying is, whenever  
possible, get out there and find  
something. The fresh air and ex-  
ercise will relieve stress and do  
wonders for your well-being. Plus,  
you never know who you might  
meet.

Happy hunting!  
*Charles*

## July Board Minutes

*Minutes recorded by Mike Baldwin.*

In the absence of President Paul  
Sides, W. C. brought the meeting to  
order at 6:52P. M.

Members present: W. C. McDaniel,  
Bob Cooper, Bonnie Cooper, Bill Gil-  
bert, Charles Hill, Ron Brister, Mike  
Baldwin, James Butchko, and Nannett  
McDougal-Dykes.

[01] Secretary's Report [W. C.  
McDaniel]: minutes from June meet-  
ing were distributed, read and ap-  
proved.

[02] Treasurer's Report [Bill Gilbert]:

report distributed, read and approved.  
We have a \$30.00 bounced-check  
debit. We don't know why this debit  
occurred since we don't have the cor-  
rect names on the banking account  
and the statements do not arrive in a  
timely manner. A short discussion  
followed about the need to correct  
the banking situation as soon as pos-  
sible.

[03] Membership Report [Bob Co-  
oper]: This was Bob's first report as the  
new Membership Director. W. C. will  
send Bob the new member list from  
the show. Bob will send new member  
names, email addresses and physical  
addresses to Matthew and W. C. Bob  
has reviewed all of the information in  
the current New Member Packet and  
informed the board that the packet is  
very out-of-date and needs to be re-  
freshed. He will redo the president's  
letter with current information. Bob  
will also change the format of the  
membership card and have new ones  
printed.

[04] Field Trip Report [W. C. McDan-  
iel]: July 12--Discovery Park of  
America--members will meet at the  
park entrance at 10:00--MAGS to pay  
half the admission fee; August 9?--  
Belz Museum in Memphis; September  
27--Vulcan Quarry in Parsons TN;  
October 11--Memphis Stone and  
Gravel; there will be 2 field trips in  
November. James mentioned that we  
needs more rocks for The Big Scoop.  
A short discussion follows concerning  
ways to collect the needed rocks.

[05] Adult Programs Report [Ron  
Brister]: July 11--Discovery Park pres-  
entation; August 8--Indoor Rock  
Swap/Picnic; September 12--Herb  
Nicholson; October 10--Alan Parks.

[06] Junior Programs Report [James  
Butchko/Bonnie Cooper]: July 11--  
Native American drums with Bonnie  
Cooper and Mike Baldwin; August 8--  
Indoor Rock Swap and Picnic; Sep-  
tember 12--Native American war  
shields and tomahawks with Bonnie

Cooper; October 10--Fossil dig with  
James Butchko; November 14--  
Mosaics or cave painting with Bonnie  
Cooper.

[07] Show Report [W. C. McDaniel]:  
Wrap-up of 2014 show will be done  
when Matthew returns. We are ready  
to begin planning for 2015.

[08] Library Report [Ron Brister]:  
Ron would love to have recommenda-  
tions for new or slightly used books to  
be added to the library. He asked the  
board members to make a note of any  
interesting or popular books we see  
that might be of interest to MAGS  
members, inform him and he will  
make the purchase.

[09] Newsletter Report [W. C.  
McDaniel: Send your articles for the  
August newsletter to Matthew early.  
If board members have recommenda-  
tions for new books, send those to  
Ron and Matthew. Matthew could put  
a note in the newsletter asking for  
book suggestions also.

[10] Web Report [Mike Baldwin]: The  
website has been updated with the  
July newsletter and lead article. Snail  
mail newsletters have been printed  
and mailed.

[11] Historian's Report [Nannett  
McDougal-Dykes]: The Indoor Rock  
Swap and Picnic is all set for August.  
Door prizes are set. Potluck will be by  
initials like last year. We will have  
Rocks Around the Clock and the Ge-  
ode Cracker. Board members remem-  
ber to bring drinks.

[12] Old Business: Reminder for  
treasurer to send a \$100.00 check to  
the Ben E. Clement Museum in Mar-  
ion, Kentucky, for their "Raise the  
Roof" fund. W.C. asked if the board  
members had read the proposed new  
Show Manual. He asked board mem-  
bers to re-read it and be ready to dis-  
cuss the manual at the next board  
meeting.

[13] New Business: W. C. stated that  
the Big Scoop is Sep-  
tember 27. We need to *Continued, P. 6*

# MEMPHIS ARCHAEOLOGICAL AND GEOLOGICAL SOCIETY

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*July Board Minutes* establish contact  
*Continued from P. 5* with Ronald  
McDonald

House Charities of Memphis and begin marketing the event in the newsletter. Nannett will contact St. Jude. She stated that Rocks Around the Clock will be there and we will have polished stones as give-aways. Mike suggested we also give the kids mineral/fossil specimen cards like we used to give to the Juniors. He will send an example to the board members for their consideration.

Meeting adjourned at 7:20P.M. August Board Meeting will be on July 31.

## 2014 AFMS Bulletin Editor's Contest Results

*MAGS Rockhound News* did pretty well in the 2014 AFMS Bulletin Editor's contest. Here are the results (drum roll!). These are nationwide results, in competition with every club newsletter in the American Federation of Mineralogical Societies.

★ **Original Adult Articles:**  
6th place (*Extinction Events, New Evidence*, by Matthew Lybanon, June 2013)

★ **Written Features:** Honorable Mention (*Discovery Park of America, a Major Attraction in Tennessee*, by Carol Lybanon, August 2013)

★ **Large Bulletins:** Honorable Mention (*MAGS Rockhound News*)

The full list of awards is in the September 2014 AFMS Newsletter, available by download from the AFMS website (link on P. 2). Thanks to all MAGSters who submitted articles and photos.

## Wonderful Way to Spend a Hot Summer Afternoon

*Field Trip Report, Belz Museum*

A dozen or so MAGS Members got together to visit the Belz Museum of Asian and Judaic Art on August 9. Mr. Jack Belz, chairman and CEO of Belz Enterprises, and his wife Marilyn, began collecting Asian art in 1968 when the couple wandered into an Asian art gallery in Los Angeles. After several years, their collection had grown significantly. The museum they established has some of Jack and Marilyn's favorite examples of Chinese artistry, along with other artistic treasures including Judaica, Russian lacquer boxes, contemporary glass, Italian mosaics, mineral specimens, and scholar 's rocks. You might expect to see a museum like this in New York, not Memphis. It is definitely worth a visit.



# MEMPHIS ARCHAEOLOGICAL AND GEOLOGICAL SOCIETY

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

## MAGS2014—Upcoming Field Trips

Dates	Location	Trip status
<b>September 27</b>	<b>Vulcan Quarry, Parsons, Tennessee</b> Limited number of spots Need to register with W. C. as soon as possible No one under 18 permitted	<b>trip bulletin to be published</b>
<b>October 11</b>	<b>Memphis Stone and Gravel Mine</b>	<b>trip bulletin to be published</b>
<b>November 8</b>	<b>Vulcan Quarry, Black Rock, Arkansas</b> Planning date, will need to confirm This is iffy	<b>trip bulletin to be published</b>
<b>November 29</b> (Thanksgiving weekend)	<b>Richardson Landing</b> Subject to river level (5 feet or below at Memphis)	<b>trip bulletin to be published</b>
<b>December 13</b>	<b>Hedger Aggregate</b> <b>Jonesboro, Arkansas</b> Planning date will need to confirm	<b>trip bulletin to be published</b>

### New Program

**A new benefit of your membership in MAGS. MAGS will pay 50% of the cost of an admission to a museum or event for each member attending an official published trip of the club. Collecting trips are not included in this program**

### Reminder—MAGS field trip rules:

1. Field trips are open only to current MAGS members. Exception: if MAGS participates in any field trip sharing program with other clubs their members may participate if it is a shared trip.
2. MAGS members will not contact private landowners to obtain permission to collect on sites where the owner has granted the club permission to collect. A member who is unsure of the location will seek a decision by the Board of Directors.
3. MAGS members will not visit (prior to) a collecting site once it is scheduled and published as a club field trip. Exceptions are to public and/or fee places or locations with multiple collecting sites. A member who is unsure of the location will seek a decision by the Board of Directors.

### **CAGMAGS Show**

The Central Arkansas Gem, Mineral & Geology Society (CAGMAGS) will present its 42nd Annual Central Arkansas Gem, Jewelry & Mineral Show on October 4 and 5. The show will take place at the Jacksonville Community Center, 5 Municipal Drive, Jacksonville, Arkansas (Hwy. 67/167 exit 9, Main Street). The hours are 9:00 A. M. to 5:00 P. M. each day, and admission is free.

The show will feature minerals, fossils, beads, lapidary material, jewelry, a kids dig, and door

prizes. For information contact Tom Sharp at (501) 379-8653 or [thom618474@yahoo.com](mailto:thom618474@yahoo.com). You can also check the CAGMAGS website, [www.centralarrockhound.org](http://www.centralarrockhound.org).

### **Hiddenite Show**

The Hiddenite Gem, Mineral and Fossil Show (and Mine Dig), hosted by the Mountain Area Gem and Mineral Association (M. A. G. M. A.), will be on September 25-27. The show will be at the Hiddenite Center in downtown Hiddenite, North Carolina. Show

hours are noon to 6:00 P. M. on Thursday and 9:00 A. M. to 6:00 P. M. on Friday and Saturday. Admission is free. The show will coincide with the annual Hiddenite Craft Fair.

Associated with the show is a one-day dig at the Sharpes Emerald Prospect Mine in Hiddenite. The dig will be on Saturday, September 2, 8:00 A. M. to 5:00 P. M. The fee is \$25 for adults; children 12 and under are free. Specimens found at the last dig included gem grade muscovite mica, green and blue beryl, and other minerals.



**Jewelry Bench Tips** by  
*Brad Smith*

**SILVER SOLDER  
FROM SCRAP**

Sometimes you need a lot of silver solder to complete a piece the way you want it to be. For me it was when I was trying to join several castings. But silver solder is expensive, so I found a way to make my own from scrap with a little help from a penny.

First step is finding out what's in a solder. A search through the reference books (Tim McCreight or Erhard Brepohl) or a Google search will turn up recipes like:

- \* Hard      AG 80%, CU 13%,  
              ZN 7%
- \* Medium   AG 70%, CU 20%,  
              ZN 5%
- \* Easy      AG 63%, CU 30%,  
              ZN 7%

The silver (AG) and the copper (CU) are easy to come by, but finding some zinc (ZN) has always been my problem until I found out that our pennies are almost all zinc. According to Wikipedia a US penny minted after 1982 weighs 2.5 grams and is 97.5% ZN and 2.5% CU. So all I had to do is add a penny to some copper and a pile of silver scrap.

I chose to use Sterling scrap so I adjusted for the amount of copper in it as well as the amount of copper from the penny. Here's what I used for components of Medium solder:

- \* Sterling   36.90 grams
- \* Copper     9.35 grams
- \* Penny      2.50 grams

Melt the silver and copper first in a melting dish, mix well with a

carbon rod or titanium solder pick, add the zinc (penny) last, mix again, and pour into a small mold. The zinc is added last because melting it causes some to vaporize, and the fumes are a safety problem (They're a gray-green color). Be sure to have good ventilation.

To check the solder's melting temperature was correct (medium), I put a sample of the homemade solder on a piece of copper sheet along with a known sample of hard, medium and easy solders. I then heated the plate from the bottom and watched as the easy first melted, the medium melted, the homemade melted, and finally the hard.

Additional notes on converting the ingot to sheet, strip or wire form—If you have access to a rolling mill, that will be the fastest way to proceed. Either roll out the ingot into a sheet and cut strips or roll it out as wire if your mill has the grooves. If you don't have a mill, all you have to do is forge out the ingot into a rough sheet of the gauge you'd like and then cut thin strips with bench shears. Be sure to anneal the sheet every so often as you forge it.

**SPOT SANDING BRUSH**

Sometimes you have a little discoloration or debris to clean from the bottom of a pocket, from an area of coarse textured surface, or from a small space between two soldered objects. Finding something to get into those close areas is always an effort in creativity.

One tool I have for these special occasions is a glass fiber spot sanding brush. It's great for cleaning a small area and doesn't leave

deep scratches, only a faint satin finish.



There's probably several manufacturers of these pens, but one is the PrepPen Adjustable Sanding Pen selling for US\$ 7.96 from Amazon. You can see it at <http://www.amazon.com/Prep-Pen-PrepPen-Adjustable-Sanding/dp/B000J18RT6/>

**FREE BENCHTIPS E-BOOK**

If you have a Kindle, there's two ways to get a copy of Brad's Bench Tips book for free. Amazon's new Unlimited program lets you download as many e-books as you want, and you can try out the program free for a month. Or if you are already in Amazon's Prime program to get free shipping or to download movies, Prime lets you borrow the book for a month at no cost.

Get all 101 of Brad's bench tips in "Bench Tips for Jewelry Making" on [Amazon](http://www.amazon.com).





## SFMS Annual Meeting and Show Website Update

*Teresa Polly*

The Southeast Federation of Mineralogical Societies, Inc. will have the 2014 annual meeting November 7, 8, and 9 in Pascagoula, Mississippi. The meeting will be hosted by the Mississippi Gulf Coast Gem and Mineral Society of Ocean Springs, Mississippi, and they will be providing more information on lodging, banquet menu, and their annual show also November 7, 8, and 9, 2014. As an added opportunity, for those of you who are gamers, they may be able to secure some special rates at one of the local casinos in Biloxi for anyone who wants to stay on the coast a while longer after our annual meeting.

On the agenda for the meeting:

1. One will be cost of liability insurance since our contract will have to be renewed in 2015, also cost for show insurance will be renewed.

2. Waiver of liability forms for field trips will be examined and possibly amended for the benefit of both the members attending field trips and the sponsoring club. This will be discussed at the quarterly meeting.
3. Modification of terms of office for the top three (president, 1st VP, and 2nd VP) officers of the federation may be considered.
4. Vote on raising SFMS dues by \$0.50 to \$1.75 starting 2015.

I would also like to ask to send your updated club officer and show information to Jeff Ursillo at [BNMJJEFF@aol.com](mailto:BNMJJEFF@aol.com).

Thank you,  
*Teresa Polly*  
State Director for Tennessee

[www.mgcgms.org/annual\\_show.html](http://www.mgcgms.org/annual_show.html)

### *Cobra Rock Formation Topples* *Continued from P. 10*

appears as if the snake has been decapitated.

Bryant said officials still were unsure Monday exactly what led to the tower's downfall, but she suspected it had to do with lightning or high winds and rain.

Lisa Hathaway, a Moab climber who has ascended the Cobra multiple times, said it's lucky no one was climbing or hiking near the tower when it fell.

She said it's long been an April Fools' Day tradition in Moab to say that the tenuous formation had collapsed. So when news began to spread online that the tower really had fallen, some people were dubious.

"It was really a surprise to no one that that tower, at least the cap rock, was going to come off at some point in time," Hathaway said.

The Cobra had been a popular climbing spot, she said, because it was accessible and comparatively squat.



"There's just these stupendous, amazing towers looming all around it," Hathaway said, "and it was kind of this little hoodoo that stuck out."

She said most people with a reasonable amount of climbing experience could tackle the rock.

"It will be missed for its iconic photo ops," she said.

Joe Auer, a climber who lives in nearby Castle Valley, visited the

remains of the Cobra recently.

"Somebody said it had fallen over, and I thought they were just joking around," Auer said. So he took his dog out to the site and, "Lo and behold, it was done."

He said he had climbed the intact tower once.

He doesn't remember much about that climb except his excitement upon returning to the ground.

"It's a really precarious feature," Auer said, "and it's kind of surprising it lasted this long."

Bryant said formations such as the Cobra are carved through erosion. Wind and rain eat away at softer sandstone beneath a harder sandstone cap, creating a tower.

There were no witnesses (fortunately), so it is not certain what caused the fall. The overriding theory by climbers is that the structure was struck by lightning.

# Cobra Rock Formation Topples



The *Salt Lake Tribune* reported on August 6 that the Cobra, part of the Fisher Towers formation about 20 miles northeast of Moab, Utah (Moab is in Grand County, in Eastern Utah, just south of the Colorado River; Arches National Park is nearby), came crashing down, likely in severe weather. The following article is summa-

rized from that report.

Lisa Bryant, assistant field manager at the Bureau of Land Management Moab field office, said “We’re just extremely grateful no one was hurt.”

The Cobra is one of a type of tall spires known as “hoodoos,” and is estimated by the Utah Geological Survey to have been formed 245 million years ago. It only took a few moments to fall.

The hoodoo, which stood roughly 30 to 50 feet high, earned its name for its snakelike shape. It appeared as if a cobra were rising out of the redrock desert. Now, it ap- *Continued, P. 9*

## Calendar

### September 4, 2014

Board Meeting, St. Francis Hospital, 6:30 P.M.

### September 12, 2014

Membership Meeting, Shady Grove Presbyterian Church, 7:30 P.M.

### September 13, 2014

Digging the Past, Falls of the Ohio State Park, Clarksville, IN

### September 20, 2014

DMC Field Trip, Sandersville, GA

### September 27, 2014

MAGS Field Trip, Vulcan Quarry, Parsons, TN

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