



Volume 61 ♦ Number 01 ♦ January 2015 ♦ A monthly newsletter for and by the members of MAGS

Collecting Pyrite at Navajun

A Spanish Adventure

Bill Gilbert



Collecting pyrite at the mine in Navajun is a dream come true for many collectors. This location is famous for the perfectly formed, shiny cubes, and spectacular groupings. The fun part is that they actually come out of the mine that way. Incredible! We have all

seen these perfect cubes for sale at mineral shows/swaps and can easily buy it on the Internet. I can certainly understand why these specimens aren't cheap. You might expect a large commercial operation at this location, but only pyrite specimens for *Continued, P. 8*

In this issue

Collecting Pyrite at Navajun	P. 1
Upcoming Adult Programs	P. 1
MAGS and Federation Notes	P. 2
Introducing Myself	P. 3
Upcoming Field Trips	P. 3
James Johnson's Dogtooth Bonanza	P. 4
January Field Trip	P. 4
Smaller Trips	P. 5
Jonesboro Field Trip Photos	P. 5
Just A Little 'bout Jonesboro	P. 6
What's Happening At Chucalissa?	P. 6
Tule Springs	P. 7
Texas Ammonite Trip	P. 7
January Birthdays	P. 9
Jewelry Bench Tips	P. 9
MAGS Holiday Party	P. 9
Nov. '14 Board Minutes	P. 10
Nov. '14 Meeting Minutes	P. 11
Formation of Pangea	P. 11
MAGS At A Glance	P. 12

UPCOMING ADULT PROGRAMS

The program schedule for the first part of 2015 is set, and the schedule of later programs is coming along. Here is a preview of programs for the first four months of 2015.

January: Bill Gilbert, Pyrite Hunting (see above article).

February: Beth Day, Stone Carving.



March: David Hanes, Fossil Hunting.

April: History of Our Mineral, Fossil, and Jewelry Show.

If there is any subject that you would like to hear about, let me know and I will try to get a speaker. Contact Carol Lybanon, Adult Programs Chair, at (901) 757-2144 or sgcarol@earthlink.net.

MEMPHIS ARCHAEOLOGICAL AND GEOLOGICAL SOCIETY

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

2015-2016 MAGS BOARD

President—W. C. McDaniel

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

1st VP (Field Trips)—Charles Hill

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

2nd VP (Adult Programs)—Carol Lybanon

2019 Littlemore Drive, Memphis, TN 38016 ♦ (901) 757-2144 ♦ sgcarol@earthlink.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) 377-0900 ♦ rocks4us@hotmail.com

Director (Asst. Field Trips)—Vacant

Director (Asst. Adult Programs)—Kim Hill

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

Director (Youth Programs)—James Butchko

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

Director (Asst. Youth Programs)—Chris Scott

4220 Dunn, Memphis, TN 38111 ♦ (901) 743-0058 ♦ scottchris4481@gmail.com

Director (Librarian)—Ron Brister

3059 Old Brownsville Road, Bartlett, TN 38134 ♦ (901) 388-1765 ♦ bristerr@bellsouth.net

Director (Membership Services)—Bob Cooper

8695 Baylor Road, Arlington, TN 38002 ♦ (901) 377-0900 ♦ rocks4us@hotmail.com

Director (Historian)—Nannett McDougal-Dykes

♦ 106 Maple Street, Stanton, TN 38069 ♦ (901) 634-9388 ♦ redchesty@yahoo.com

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

MAGS AND FEDERATION NOTES

President's Message

I copied this from an article several years ago: "If you were to write a history of the Earth's past, allowing just one page per year, your book would be 4,600,000,000 pages long. That's a very thick book—145 miles, to be exact. An average reader, reading about one page every two minutes, would need more than 17,503 years to finish it. That is a lot of reading, so when you take a break I would like to suggest/request that you do the following MAGS activities:

Continued, P. 3

The one-column text calendar you are used to seeing on the last page is replaced in this issue by **MAGS At A Glance**—a REAL calendar. Hope you like it.

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

We aren't kidding when we say this is a newsletter for and by the members of MAGS. If an article has a byline the author is a MAGS Member, unless explicitly stated otherwise (we welcome articles by nonmembers). If there is no byline, the article was written or compiled by the Editor (a MAGS Member). 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.

January DMC Field Trip

No field trip in January. Trips resume in February.

Links to Federation News

- ➔ AFMS: www.amfed.org/afms_news.htm
- ➔ SFMS: www.amfed.org/sfms/
- ➔ DMC: www.amfed.org/sfms/dmc/dmc.htm

President's Message
Continued from P. 2

- Renew your 2015 membership dues. Dues are essential and necessary for the club to carry out and produce the programs that you enjoy, participate in learn from.
- Come to membership meetings. Bring a display, food, check out a library book, and help with meeting needs.
- Go on field trips. Field trips are great and you get to show off and brag about your finds
- Read the newsletter, check out the club and show web sites.

W. C. McDaniel

Introducing Myself

Hi, my name is Kim Hill. I am your new adult program assistant. I'm sure you have seen me around the meetings, herding a large group of juniors, stammering over my display...I swear it sounds better in my head. And who can miss that hat?

One of my duties is the monthly display. Lately, very few people have taken advantage of this time to show others what they have. You see me up there most every month. I am always SO excited over my finds. I love to share them—OK, show them off—but mostly I am trying to learn what I have, and by bringing them for display I can often learn what I have found.

I have no training in the world of rocks but have always loved picking them up or cracking them open to see what's inside. Even

now I pick up what attracts my eye by shape or color, not because I always know what I am picking up. By joining the club I hope to increase my knowledge. Another way to learn is to see what other Members have. Then we can see what to look for.

Believe me, there will be others there that want to see what you have in your collection—or if you have an interesting or unique way of displaying your finds. We are a club of people that spend our free time digging in mud, sifting in creeks, climbing up cliffs, walking banks, all the while at times baking, freezing, or soaking, to find that tooth, piece of bone, arrowhead, agate, fossil that the earth has hidden, and bring it home.

I would like to know from you what we can do to make displays more fun, and get more adults AND juniors to participate. Do you like having specific categories plus random, or do you like just keeping it random? You can talk to me at the meetings or email me at earthsis@aol.com.

With the last two field trips, especially the Jonesboro one, I have enough materials for displays I want to bring for the next several months—and there is still the printers tray I am working on putting my Blue Springs and 20 Mile Creek finds in .

So **please help** your Board work better for you and let me know how we can improve our monthly displays.

Thank you, *Kim Hill*



Upcoming Field Trips

Charles Hill

Trip 1) Where: Mt. Ida, Arkansas, Twin Creek Crystal Mine, Collier Springs Rd., Norman, AR 71960

When: Saturday, January 17, 2015, at 9:00 A. M.

Trip 2) Where: Memphis Tennessee, Nonconnah Creek, the Brooks Road site

When: Sunday, February 15, 2015, at 9:00 A. M. (due to Valentine Day falling on Saturday)

Trip 3) Where: Murfreesboro, Arkansas, Crater of Diamonds, 209 State Park Rd., Murfreesboro, AR 71958

When: Saturday, March 21, 2015, at 9:00 A. M.

Trip 1) This is a fairly new mine on the same crystal vein as Fiddler's Ridge Mine. At this mine you are allowed on the actual wall face. This will be hard, hammer and chisel mining. They also have tailings piles for those who prefer them. The Twin Creek Crystal Mine has an extensive Facebook page; take some time to look it up. (More field trip details on P. 4.)

Trip 2) Trip two will be to Nonconnah Creek by Brooks Road. It will be scheduled on Sunday, February 15, to avoid Valentine's Day. I believe we need a short, easy trip after Mt. Ida. Here you can find petrified wood, banded river agate, fossils, and river-tumbled glass.

Trip 3) Trip three will be to Crater of Diamonds State Park in Murfreesboro, Arkansas. If you have not been there, please look at their web site. I have spoken to the good people, *Continued, P. 4*

James Johnson's Dogtooth Bonanza



MAGS Member James Johnson sent us some beautiful pictures that show dogtooth calcite he found in his "secret spot." Come on, James, don't keep it a secret!



Upcoming Field Trips and a geologist *Continued from P. 3* will give a 20-minute class on site about what to look for and what to do. She will also give a brief geological talk about the volcanic vent on which the site is located for those interested.



January Field Trip

Charles Hill

Welcome to the first MAGS field trip of 2015. We will be going to a new quartz crystal mine near Mt. Ida, Arkansas. This mine opened up in September of 2013. The mine owners say that the crystal vein we will be working is the same vein as in the now-closed Fiddler's Ridge mine. If that is true, we should find a lot of clusters. What is most attractive about this mine is that visitors

have access to the work face of the mine. This means you will have the option to do actual hammer and chisel mining if you wish. Of course, as in all Arkansas crystal mines, there will be tailings piles.

Tools: Eye protection, sledge hammers, cold chisels, rock hammers, pry bars, medal wedges, spray bottles, shovels, hand trowels, storage containers, newspaper for wrapping, and whatever else you can think of. You won't need all of these for digging through the

tailings piles, so only bring what you need.

Facilities: Port-a-potty and picnic tables. There is no electricity or running water available.

Fee: \$25.00 a day per adult and \$12.00 for children 12 years of age or younger. The owners will give us a group rate (\$5 off per person) if we have 15 or more people.

Directions: Take I-40 W to Little Rock, Arkansas, a distance of 123 miles. Just

Continued, P. 5

MEMPHIS ARCHAEOLOGICAL AND GEOLOGICAL SOCIETY

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

January Field Trip before Little
Continued from P. 4 Rock, take I-
440 S around
the city for five miles to I-30. Take
I-30 W 27 miles to Exit 111, High-
way 70 W for 29 miles to Hot
Springs. Turn left onto US 270 W
and go 26.6 miles. This will bring
you to Logan Gap Road. There is
a large rock shop called Crystals
and Things on the left. I will be
parked on 270 across from the
rock shop and will meet you there
at 9:00 A. M. Latecomers should
turn left on Logan Gap Road,
which becomes Collier Springs
Road. From the meeting point to
the mine is 3.4 miles. From Mem-
phis, the total distance for this
trip is 225 miles, with an approxi-
mate driving time of four hours.



Smaller Trips

Charles Hill

One of the new things I plan is a series of smaller trips to locations that are too small for a regular field trip. I will bring sign-up sheets to the Membership Meetings and will take on these trips the first set of people to sign up. The first trip will be to Pickwick State Park. The Lake will be at winter pool, which means low, and we should be able to get to a shelf that has great trilobite fossils. I have found many other fossils there also: corals and crinoids, just to mention two. Sometimes some prying is necessary. I bring a screwdriver and a pocketknife. You need something to put the fossils in and newspaper to wrap them, because they are delicate. I will be taking five people on this

trip. The date for it is now January 10 at 9:00 A. M. We will meet at the Post Office parking lot inside the State Park.

We will also have one short trip on March 7 to Shelby Forest. This is a different type of gravel formation than we usually see. I have been there, and the rock is the same as you always find here; but the colors are a little different. For those of you who like agate, this is a good site. I will give more details later. There should be room for 5 on this trip, as well.

The third hunt will be at a small creek in Southaven in northern Mississippi. At this site I have found garnets! Not many and not big, but garnets nonetheless. There is only room for six.

More on these trips later.

Jonesboro Field Trip Photos

Editor's Note: Photos from December 13 trip to Hedger Aggregate in Jonesboro, Arkansas. Photo credits: Kim Hill, Steve McMann, Marc Mueller, Susan Thomas Pere. See P. 6 for Kim Hill's article about this trip.



Just A Little 'bout Jonesboro

Kim Hill

Woke up to a bit of gray day the morning of the Jonesboro field trip, but that was OK. At least it wasn't going to rain and was supposed to warm up.

I had pre-packed the truck with buckets and rakes and such the night before, also had my lunch and snacks, water ready to just grab and go, never did eat any of it. I also didn't bring any kids with me this time. I admit it, I was selfish and thinking just about me. Last time it rained and was a little cold, and there were no bathrooms, and the kids got cranky, so I ended up leaving way earlier than I wanted to. This time I was going to stay all day if I wanted; hubby was out of town. I didn't have to answer to anyone today.

The drive was nice and as always directions were easy to follow. Somehow I was even the first person there. That rarely happens to me. Everyone else arrived and we made the drive to, as Nannett called it...THE CANDY SHOP... and it was. Just yummy stuff everywhere for the picking. Not just small pieces, not even just fist sized, but BIG ole honkers!!!

It never got as warm as I thought it was supposed to, but it was still a pleasant day crawling on mountains of giant "gravel," spraying here and there with our water bottles, hearing others whooping and getting excited when they found something nice, walking around showing each other what we had found. Before we knew it, it was getting later in the after-

noon and with reluctance we packed up to leave.

Some wanted to go eat and I thought I would tag along, too. It was on the drive there I remembered I did have someone to answer to: a puppy I had rescued that week from the shelter. She had been in the crate since 7:00 that morning, so I had to say my goodbyes and get home. Oh and the smells coming from the restaurant were so delicious!

It was a really good thing my husband was out of town. He might have objected to all the rocks soaking in the bathtub and then scattered about the living room as I went through them. I cannot wait to bring them in for display. The only question I have now is, **WHEN ARE WE GOING BACK!???**

What's Happening At Chucalissa?

Robert Connolly

If you have not been out to the C. H. Nash Museum at Chucalissa in a while, now is the perfect time to plan a visit. The MAGS Archaeology Interest Group meets at Chucalissa on the third Saturday of every month to work on a host of projects, including exhibits to display on tables at MAGS events throughout the Memphis area. MAGS Members will be particularly interested in our upgrade of the Hands-on Archaeology lab into the Brister Archaeology Discover Lab (or BADLab). Named in honor of the current MAGS Member Ron Brister, who began his career at Chucalissa in 1966, the BADLab will feature the very best in an engaging hands-on archaeological experience for visitors. The River Two AmeriCorps NCCC Team began the refurbishment process by removing all of the old cabinets and plumbing, laying a new tile floor, and painting one of the lab walls to represent the excavation trench

Continued, P. 7



In process upgrade of Chucalissa lab into the BADLab, in honor of MAGS member, Ron Brister.

*What's Happening At Chucalissa?
Continued from P. 6*

at Chucalissa. Ron has been experimenting with sediment peels from the actual excavation trench to mount on the wall. And there is much more to come.

I also want to thank MAGS for their continued economic support along with the time, energy, and expertise of its members who make projects like the BADLab possible. For example, MAGS's recent donation of \$1650.00 was used toward the purchase of the two artifact cabinets visible on the left side of the photo. In the cabinets, the MAGS Archaeology Interest Group will assemble type collections of both prehistoric and historic artifacts curated at Chucalissa from the Memphis area that the public will be able to access for researching their own surface collected materials. We look forward to your next visit!

Tule Springs



Gambling. Spectacular shows. Huge, luxurious hotels. Fossils. What do these words make you think of?

The first three phrases may evoke Las Vegas, but fossils? Yes, fossils. President Obama recently signed legislation that established the Tule Springs Fossil Beds National Monument. The 22,650-

acre tract just half an hour from the neon strobe lights and jangling slot machines of Las Vegas now falls under the government's preservation umbrella as a unit of the national park system.

The Tule Springs area is prized by scientists for its wealth of fossils from a vast cross-section of time, which allows researchers to study climate change and its impact on ice age animals through the past quarter million years or so. Already the chalky hills along the upper Las Vegas wash have yielded evidence of extinct mammoths, horses, camels, bison, llamas, lions, and ground sloths the size of grizzly bears.

Thousands of years ago, Columbian mammoths walked here and devoured up to 600 pounds of leafy greens daily, American lions stalked their prey, camelops (a larger version of a camel) wandered the open wetlands, and huge sloths lumbered across the expanse. Fossilized remains in the area date back across a span of 7,000 to 250,000 years, producing a record of at least two Ice Ages and multiple periods of global warming and cooling.

In 1962, six decades after the first fossils were discovered here, Tule Spring became the site of a "Big Dig," hosting a team of scientists funded by the National Science Foundation and chronicled by National Geographic. So extensive were their findings that in 1979, about 1,000 acres of this site were listed on the National Register of Historic Places.

One of the main things scientists were looking for was evidence of humans living at the same time

as the extinct creatures. They didn't find that evidence, and the scientists moved on. As Las Vegas exploded, development kept expanding out far from the famous Strip, and the BLM put Tule Springs under "disposal consideration," which meant that the agency could sell the land.

In 2007, the Protectors of Tule Springs was established. Due largely to their efforts, four local government entities unanimously passed a resolution in November 2009 asking Congress to make Tule Springs a part of the National Park System. The legislation (introduced by Senator Harry Reid) had bipartisan backing from Nevada's congressional delegation and enthusiastic support from a broad coalition of state and local government entities, conservationists, and business leaders.

In 2012, paleontologist Eric Scott from the San Bernardino County Museum in Redlands, California, and colleagues found a fossil from a saber-tooth cat while researchers from UNLV collected a bone from a dire wolf, the first discovery of its kind in Nevada. Scott said more fossils are eroding out of the hills every day and likely will be for generations to come. Designating the area as a national monument helps ensure future discoveries by scientists who haven't been born yet.

Texas Ammonite Trip

Anyone interested in joining the March 20-23 ammonite-hunting field trip to Texas should contact Matthew or Carol Lybanon at (901) 757-2144 or lybanon@earthlink.net.

MEMPHIS ARCHAEOLOGICAL AND GEOLOGICAL SOCIETY

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

Collecting Pyrite at Navajun collectors are
Continued from P. 1

mined at Navajun. This is a fee-for-digging location and it was not cheap; we made sure we got our money's worth. In my case, I did drive there and collect these beautiful cubic pyrite specimens. At the time, I was living in northern Spain working on a project for my employer. My Moscona fluorite friend from Oviedo is friends with the owner of the Navajun Mine. He arranged for our stay and asked him to make sure we collected some good specimens, and we did.



The area where I lived was very green for it rained a lot. In the Rioja region, where the little town (and I mean little) of Navajun resides, it is very dry. It sort of reminded me of Arizona. It took about 7 hours to drive to Navajun from Gijon. The drive was very enjoyable. In Rioja, we passed many acres of vineyards. For some reason the people there spoke Spanish. We managed very well and had no problems with the language.

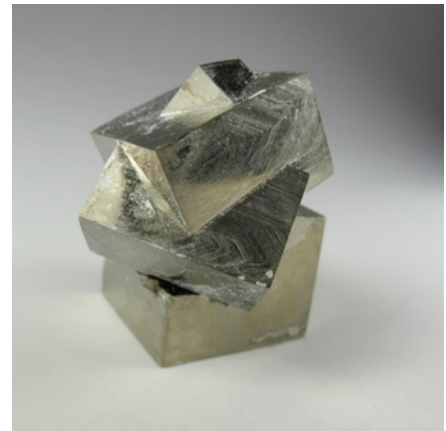
Navajun isn't located near a busy city where there is a lot of commercialization. It actually was out in the middle of nowhere. The town of Navajun had about 200 residents, consisting of two

horses, three dogs, 12 cats, 25 people, and the rest sheep. The hills around this little village were terraced so that the sheep would have places to graze. Flat stones from the area hills were used on the outside of the buildings instead of brick, very picturesque.



As I mentioned earlier, this is in a remote area. No 7-11's. The nearest store was 15 kilometers away. Pedro Ansorena owned the Navajun Mine and the only hostel in Navajun. This hostel, which is the equivalent of our bed and breakfast lodges, provided us our meals and a place to stay. He prepared gourmet dinners for his guests. His hobby was gourmet cooking. We did eat very well and the Rioja wine was also very good. The accommodations and the food were great. The first night we had dinner with five men from France and two men from Austria. What a mix of languages in the middle of Spain.

The Navajun Mine was located near the town. The drive to collecting site was about three to four miles back in the hills. The mine was accessible by only one road. One thing to note: the Rioja region in Spain is noted for dinosaur fossils and we saw footprints, a fossilized egg, and petrified wood at this location.



Finally to the collecting! Please take a look at the pictures included in this article. I wish I could show you all the pictures that we took at Navajun. Collecting was amazing! Also, it was so very easy. The hard part was we had to stop and wrap up the specimens. I just wanted to break away more chunks of matrix and expose more cubes. You could literally just pull the cubes out of their positions in the wall. When breaking off a new section of matrix, you had to be careful because cubes would fall down as you pull the matrix section from the wall. The matrix material is mostly a very fine-grained sedimentary marlstone (clay and calcite). The matrix was sort of damp, which made it easier to chisel sections off the wall. Since we were paying a hefty fee for digging, our task was to pack up the best specimens. However, I didn't want to pass anything up. Remarkably, some of the cubes might have a place where it was touching another cube on the corner, resulting in a broken corner. Those just went over your shoulder. I would estimate for every one cube that we kept, we put aside ten. The specimen quality

Continued, P. 9

MEMPHIS ARCHAEOLOGICAL AND GEOLOGICAL SOCIETY

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

Collecting Pyrite at Navajun ranged from perfect, shiny cubes to those of a duller shine. Some of the cubes appeared to be somewhat compressed.

We collected there for two days. We collected individual cubes, cubes in matrix, groupings, and also specimens suitable for micro-mounting. The first day we were there with the five Frenchmen and the two Austrians. On the second day we had the place to ourselves. The weather was perfect. We were there in early April, just before the killer hot weather. We ended up filling up the little car that we had, barely leaving room for our suitcases.

As I reflect on my collecting adventures, collecting pyrite at

Navajun, Spain, has to be at the very top. I would highly recommend collecting there if you ever have the opportunity.

January Birthdays

- 3 Linda Waddell
- 7 Rosie Crawford
- 9 Tallalah Barnett
- 10 Noa Parks
- 13 Rud Moe
- 16 Mitch Brem
- 21 Richard Gunter
- 31 Teresa Noyes
Abigail Loyd

Jewelry Bench Tips by Brad Smith

MAKE A TEXTURE HAMMER

An inexpensive hammer can be easily turned into a great texture

tool by grinding a pattern of narrow lines into its face.



The tool I like to use to grind the pattern is a thin cutoff disc in a Foredom or Dremel. Be sure to hold the hammer and cutoff disc steady as you carve, and wear those safety glasses to protect your eyes.

For the pattern to work well, a major part of the face needs to be ground away leaving only small areas of high

Continued, P. 10

MAGS Holiday Party

The 2014 edition of the MAGS Holiday Party was a big success, with around 100 partiers showing up. Here are a few pictures of the goings-on.



Jewelry Bench Tips points. That *Continued from P. 9* way the high points will have enough force to emboss the pattern into your sheet metal.



My preference is to use small ball peen or cross peen hammers. They are quite inexpensive from tool dealers at swap meets and rock & mineral shows. There is no reason to buy an expensive hammer to experiment with creating your own textures.

And BTW, if you don't like the first pattern you create, simply file or grind it off and try again.

HALLMARKS

When trying to identify an object that might be precious metal, jewelers always look first for a hallmark stamp. Any item made from silver or gold should be marked as such, and each country has its own rules as to how that should be done. We are familiar with common marks like "14K" or "925", but on some items there are several different types of stamped marks. What are these, and how can you find out what they mean?

The mark for purity of metal is called a Hallmark, but there are other types of marks as well. The next most common is a Maker's mark identifying who fabricated

the object and certifies that the purity is marked correctly. Finally, on some items there are other marks that identify where or when the object was created.

A good reference for identifying these marks is the Online Encyclopedia of Silver Marks, Hallmarks, and Maker's Marks at www.925-1000.com/index.html.

And now a question—Are you stamping the pieces you make? If you are selling them, then of course you are, but many beginning jewelers think it is unnecessary. While they will probably remember what metal the piece was made from, they often give the piece away to a friend or family member, and the information about the metals used is quickly lost. One of the basic lessons in jewelry is the importance of stamping your work, not only with a Hallmark but also with a Maker's mark to identify you as the artist. There are many sources that can create a custom Maker's stamp for you with your name, initials or logo. Isn't it about time you start taking credit for your jewelry work?

Get all 101 of Brad's bench tips in "Bench Tips for Jewelry Making" on Amazon.

November 2014 Board Minutes

Carol Lybanon

The MAGS Board of Directors met November 6 at St. Francis Hospital, 5959 Park Avenue. The meeting was called to order at 6:40 P. M. Present were: Mike Baldwin, James Butchko, Bob Cooper, Bonnie Cooper, Carol Lybanon, Matthew Lybanon, W. C.

McDaniel, Nannett McDougal-Dykes, Paul Sides, and Marc Mueller.

Secretary: The minutes were approved as submitted.

Treasurer: The Treasurer's Report was approved as submitted, subject to audit. Matthew said that Regions Bank still does not have all the correct information for the club account.

Membership: Bob has new membership cards. There have already been some 2015 renewals. The Board thanks Bob and Bonnie for getting the membership list up to date.

Field Trips: W. C. reported that on November 22 the field trip will be to Hedger Brothers in Jonesboro, and on December 6 we will go to Blue Springs. He also said that it was time for MAGS to renew its membership in the DMC. He will renew and schedule October 2016 for our next DMC trip. Matthew told the Board about the prospective Dallas field trip. He will announce it at the Membership Meeting.

Adult Programs: Dr. Gibson will give the November program, on trace fossils.

Junior Programs: November program—cave painting. Mike recommended that more Members be asked to give Junior programs.

Show: We are getting dealer contracts. Everything is on schedule.

Library: No report.

Newsletter: Same as usual.

Webmaster: Mike reported that the newsletter is on the web and the snail mail copies have been mailed. He is working on updating the site. The front page has been revamped. There is a new photo gallery, so send Mike images. He can link to PDF pages.

Historian/Rock Swap: Nannett reported that the picnic at Shelby Farms was fun, and we will do it again next year. She is planning the holiday party. The club will again provide the turkey and ham. The

Continued, P. 11

November 2014 Board Minutes Junior
Continued from P. 10

are ready. W. C. will get the round red and green tablecloths.

Old Business:

- ▶ Carol reported that the MAGS pins are in. W. C. moved that we sell the pins for \$2 each. Motion carried.
- ▶ Nannett reported on the Nominating Committee.

New Business:

- ▶ W. C. will pick up material to auction at our Membership Meeting. Meeting adjourned at 7:45 P. M.

November 2014 Meeting Minutes

Carol Lybanon

The MAGS Membership Meeting was held at Shady Grove Presbyterian Church on November 14. Meeting called to order at 7:40 P. M. 32 Members and 2 visitors were present.

BUSINESS: Bob Cooper introduced the guests. Paul Sides informed us that he was asked to be Tennessee State Coordinator for the SFMS. W. C. McDaniel announced the field trips: On November 22 Charles Hill will lead the field trip to Blue Springs. On December 14 W. C. will lead the field trip to Jonesboro. Since the quarry is closed on that date, we will need to meet outside the gate and be escorted to the collecting site. The DMC trip for December is scheduled for December 6. Ron Brister announced that there are a few new books in the library and everybody should take the time to look at them. The Show is in its planning stage and moving along very well. December 1 is the date of the next Show Committee meeting. Bob said that he is ready to collect the 2015 dues. Matthew Lybanon said that the newsletter is out and he just emailed a request for articles. He also announced tentative plans for a Texas field trip to collect ammonites

and other fossils. Mike Baldwin is updating the website. If there is anyone who would like to take over the job, please let him know. Carol Lybanon read the nominations for the 2015-2016 Board. After she asked for nominations from the floor, there was a motion to accept the slate provided by the Nominating Committee (which was listed in the newsletter). The motion was carried.

DISPLAYS: There were three adult displays.

PROGRAM: The meeting was adjourned and turned over to the program at 8:00 P. M.

Formation Of Pangea

It is well understood that Pangea, the supercontinent that contained most of the Earth's landmass until about 180 million years ago, endured an apocalyptic undoing during the Jurassic period, when the Atlantic Ocean opened up. But it is less clear how Pangea came into being.

John Waldron of the University of Alberta's Faculty of Science, and colleagues, recently described a new model for the events that led to the closing of ancient oceans and the formation of Pangea. According to Waldron and his fellow authors, the answers may be found in the best known of the ancient oceans, Iapetus, which lay between the ancient core of North America and parts of what are now Europe, Africa and South America.

Using the modern Caribbean Sea as an analogy, Waldron and his co-authors observed that at its eastern edge, the Caribbean Plate is overriding the floor of the Atlantic Ocean in a process known as subduction, which produces a

zone of earthquakes and volcanoes extending from Barbados to Haiti. "It's much more likely that a small plate, like the modern Caribbean, came into the Iapetus from the east, bringing with it many small continental fragments.

A subduction zone along its edge advanced westward into the Iapetus Ocean, overriding its floor and producing earthquakes and chains of island volcanoes. Once "infected" with subduction, the floor of the Iapetus Ocean was progressively consumed, leading to collisions between the surrounding continents that built the Appalachians of North America and the Caledonide Mountains of Scotland and Norway—and the assembly of Pangea.

Fragments of these ancient island volcanoes are preserved in Atlantic Canada and the British Isles, with folded and faulted sedimentary rocks squeezed by the ensuing collisions, which Waldron has studied with a succession of graduate students since the 1990s. If subduction zones like those around the Caribbean Plate continue to consume the floor of the Atlantic Ocean, eventually the continents around the Atlantic may collide to form a mountain range and a new supercontinent.

Ref: John W. F. Waldron et al, How was the Iapetus Ocean infected with subduction? Geology, December 2014, v. 42, p. 1095-1098, first published on October 24, 2014, doi:10.1130/G36194.1



MAGS At A Glance

January 2015

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
28	29	30	31	1	2	3
4	5 Combined Board/ Show Meeting, 6:30 pm, Agricenter	6	7	8	9 Membership Meet- ing, 7:30 pm, "Pyrite Hunting"	10 Pickwick State Park Field Trip
11	12	13	14	15	16	17 Twin Creek Crystal Mine Field Trip, Archaeology Group
18	19	20	21	22	23 SFMS Quarterly Meeting, Panama City, FL	24 SFMS Quarterly Meeting, Panama City, FL
25	26	27	28	29	30	31

Memphis Archaeological and Geological Society
 2019 Littlemore Drive
 Memphis, TN 38016

