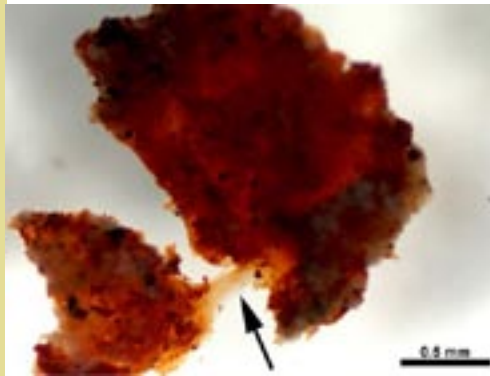


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Blood vessels recovered from *T.rex* bone

by Jeff Hecht, *NewScientist*



Palaeontologists have extracted soft, flexible structures that appear to be blood vessels from the bone of a Tyrannosaurus rex that died 68 million years ago. They also have found small red microstructures that resemble red blood cells.

The discovery suggests biological information can be

recovered from a wider range of fossil material than realised, which would greatly help the tracing of evolutionary relationships.

The preservation found by the researchers is extraordinary - far better than traditionally expected in dinosaur bone. But that may be because researchers have not been looking hard enough at their finds. Mary Schweitzer at North Carolina State University, US, has also extracted similar soft structures from a few other dinosaur bones.

The leg bone came from a skeleton called B-rex found in a remote canyon in South Dakota, in 2000 by a member of Jack Horner's research team at the Museum of the Rockies in Montana. The 107-centimetre-long femur

>>> continued on page eight

April MAGS events

- 31 6:30p MAGS Board Meeting • Blue Plate Café, 5469 Poplar Avenue
- 08 7:30p MAGS Membrship Meeting • Shady Grove Presbyterian Church
5535 Shady Grove Road • Bring refreshments and displays
- 09 TBA MAGS Field Trip to northern Mississippi to collect fossils [see page 3]
- 14 7:00p MAGS Fossil Section Meeting at the home of Roger Van Cleaf
- 23-24 Mid-America Mineral, Fossil, Jewelry Show [see page 5]
- 30 10:00a DMC Field Trip to Girard, Georgia [see page 6]

Our April program will be "History of the Memphis Pink Palace" and "Exploring Archaeological Sites in the Area", presented by Ron Brister. The MAGS Youth will be making rock sandwiches.

2005-2006

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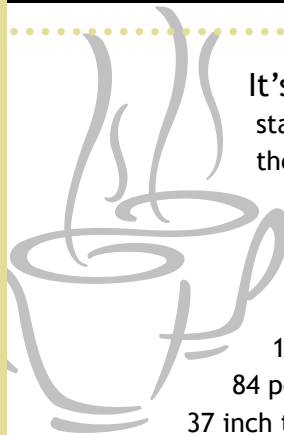
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MAGS Rockhound News is published monthly by and for the members of the Memphis Archaeological and Geological Society. Please send your comments and articles to Mike Baldwin, 367 North Main Street, Collierville, TN 38017 or email them to editor@memphisgeology.org . ©2005.

President's corner: WC McDANIEL



It's Show Time. 29 dealers from 15 states are loading up their vehicles for the trip to Memphis. 250 tables await to be covered and filled with marvelous treasures of the earth. 2,744 postcards have been printed and readied for mailing on April 8. 150 grab bags are packed and ready. 84 pounds of purple amethyst nestled in a 37 inch tall cathedral tower awaits a new home. 40 cotton boxes of rocks and fossils and 70 pounds of polished rocks and sharks teeth await the arrival of kids for the Gem Dig and "Rocks around the Clock". 40 pounds of barbeque has been ordered and awaits the show dinner on Friday night. The show is primed and ready. Are you?

I am sure you have been saving your money for the show and now we ask you to reserve some time to help out during the show. Volunteering by MAGS' members is a fundamental necessity for the show to succeed. Make a commitment and sign up to help. At press time about half of the time slots were filled. The Rockzone needs the most commitments. A complete listing and schedule of show needs is on page 5. The sign up sheet will also be available at the April membership meeting.

The March meeting, attended by seventy-four rockhounds, was very busy and active. The scheduled live auction was delayed to the April meeting. So you will get another opportunity to bid high and bid often. Gerald May won the adult display and Karen Schaeffer won the junior display. Thanks to all those who participated in the theme display of carvings and shapes.

April theme display will be invertebrate fossils. For example, all the fossils collected on our trip to northern Alabama are invertebrates. Bring your finds, collections and show off those fossils. The competitive displays also continue to need participants. In addition, George Everett will be demonstrating and exhibiting his fine wrapping skills.

WC

MAGS show dinner

WC McDANIEL: Bring your favorite entree, side dish or dessert and help kick off the 2005 Show, Friday night, April 22, 6:30 pm in the Pipkin Building. The Show will provide the barbeque, drinks, some side dishes and plates/cutlery. See you there.

April auctions and displays

April auctions

WC McDANIEL: The April membership meeting will feature a live auction and silent auction of materials donated to the club. Featured material will include: Popsaur dinosaur tooth (Triassic), "petrified" mollusk shells from Indiana, sapphires and rubies (rough), Jeffery quartz, oxalic acid and miscellaneous materials. Arrive early to check out the goods.

Display theme for April

The April membership meeting display theme is Invertebrate Fossils. Fossils collected during the March field trip are part of this category. So are Vulcan Quarry fossils from Parsons, TN. You don't have to bring your entire collection for a themed display. Just bring your favorite ones. Everyone's entry will be placed on the same table. Themed displays are not for competition. They are just for information and the enjoyment of everyone at the meeting.

Competitive displays

Bring your favorite collection in March for the display competition. A vote will be taken at the end of the membership meeting to determine who will be the adult winner and the youth winner. Winners receive special gifts at the end of the year.

2005 dates to remember

	Board Meeting	Membership Meeting	Due Date for Newsletter Articles
Apr	Mar 31	8	—
May	5	13	April 24
Jun	2	10	May 22
Jul	Jun 30	10	June 19
Aug	4	12	July 24
Sep	1	9	August 21
Oct	6	14	September 25
Nov	3	11	October 23
Dec	1	9	November 20

April MAGS Field Trip

WC McDANIEL: The MAGS field trip for April will be on Saturday, April 9. We will be traveling to northern Mississippi to collect fossils (exogyra shells, sharks' teeth and others). The site is about 85 miles from Memphis. Complete details will be available at the Membership Meeting on Friday night, April 8. You may call or email me for details as well.

A record number of new members in March

MELBA COLE, MAGS DIRECTOR—MEMBERSHIP Ten new membership applications were approved in March. Please join me in welcoming all our new members.

- [01] Robert, Anahita, Serena and Ariana Enzerink Enzerink • 1942 Brigance Cove • Germantown TN 38139 • renzerink@hotmail.com • 901.758.1948
- [02] David Dockery • PO Box 1304 • Clinton MS 39060 • David_Dockery@deq.state.ms.us
- [03] Ed Wagner • 9872 E 1950 North Road • Bloomington IL 61704 • ed.wagner@epa.state.il.us • 309.376.7781
- [04] David and Beth Day • 5974 Ivanhoe • Bartlett TN 38134 • stonechanter@yahoo.com • 901.387.2347
- [05] Joanne Olson • 2095 Exeter Rd Ste 80-349 • Germantown TN 38138 • jiolson@yahoo.com • 901.737.9901
- [06] Edward Rucks • 1204 Chamberlain Drive • Memphis TN 38119 • erucks@midsouth.rr.com • 901.682.9294
- [07] Robbie and Elissa Powell • 2115 Rose Garden Cove • Memphis TN 38133 • Ready2nap@yahoo.com • 901.380.4646
- [08] Marvin Nutt • 4501 Helene Road • Memphis TN 38117 • marvinlutt@earthlink.net • 901.818.0669
- [09] Al and Mary Klug • 2170 Woodcreek Dr. • Germantown TN 38017 • Gdaisy999@aol.com • 901.754.2052
- [10] Tomislav, Susan and Natalie Prodanovich • 8934 Green Leaves Drive • Germantown TN 38139 • TPROD@aol.com • 901.753.2069

From the treasurer

CORNELIA McDANIEL, MAGS TREASURER:
 Following completion of dues collection for 2005, 83% of our membership have renewed. With our current membership list finalized, we can proceed with the publication of this years' Membership Directory. Unpaid members may restore their good standing and reinstate their membership to full privileges by paying dues within this year. Those members will be credited with the full calendar year for this year and that will count toward Lifetime status. We hope many of our former members will renew their membership and continue to participate in club events.

Last year, our club expenses exceeded our annual income by more than \$638. We are always looking for ways to reduce our expenses. In addition to the annual dues, income is generated from the auction of specimens that the club receives by donation and contribution. THANKS to the folks who continue to supply these materials and THANKS to all those who participate in these periodic club auctions. The March auction raised a total of \$133.00.

We have accumulated some new member information packets. If you are unable to attend the Mineral, Fossil and Jewelry Show or a monthly Membership meeting to collect your packet, please contact me so we can complete pickup or delivery arrangements for you. We have new member packets from February for: the Britt Family, Dr. Don & Gwen Lum and Steve Webb. From March for: David Dockery, Al & Mary Klug, Joanne Olson, the Prodanovich family, Edward Rucks and Ed Wagner.

Sunshine

MELBA COLE, MAGS MEMBERSHIP DIRECTOR:
 I am happy to report that Roger Van Cleef is feeling better these days. Our condolences go out to the family of Carolyn Hays.

MEMORIAL TO CAROLYN HAYS:
 Long-time MAGS member, Carolyn Cox Hays, passed away on Friday, March 4, 2005 at her home in Collierville. Carolyn had been a MAGS member since 1989. Many of us share fond memories of those annual springtime rock swaps in Carolyn's backyard. She loved to host those swaps every year. Her daughter, Beverly Houston, is planning a rock swap this spring at Carolyn's house, in memory of her mother.

During her years as school librarian at Collierville Elementary School, she was affectionately known as Mother Hays. The school kids loved her as much as she loved them.

Carolyn was a very sweet and kind lady and she will be greatly missed by all her MAGS friends.

If you have news about MAGS members, please send them to me at JMelCole@aol.com or give me a call at 382-0344.

Fossil group meeting

ROGER VAN CLEEF—DIRECTOR, ASSISTANT PROGRAMS: The first MAGS Fossil Group meeting will be at 7:00pm, Thursday, April 14 at my home. Email Fossilorb@aol.com or call 794-1641 for more information.

April Birthdays

MELBA COLE: Birthstone for April is Diamond.

- 1- Steven Hajdu
- 1 - Frank Walker
- 7 - Michael Kingsley
- 9 - Karen Ehrlich
- 9 - Debbie Parker
- 10 - Leah Novarese
- 11 - Dr. James Prather
- 12 - Shelby Swink
- 20 - Tyler Murphrbee
- 20 - Jim Parsons
- 22 - Carlene Bell
- 22 - Ruth Rice
- 23 - Elissa Powell
- 23 - Helen Rodgers
- 27 - Kathy Bullard

April program

IDAJEAN JORDAN, VP-PROGRAMS: At the April membership meeting, Ron Brister will present a "History of the Memphis Pink Palace Museum".

Website statistics

MIKE BALDWIN, MAGS WEB COORDINATOR:
 Here's a brief look at our website [www.memphisgeology.org] from 01.21.02 through 03.30.05:

Visits	112,872
Hits	504,924
Avg visits/day past month	332
Top pages in the past 30 days:	
Explorer0203.pdf	786 hits
Home page.....	682 hits
argon2003.pdf.....	665 hits
rocknews0305.pdf	535 hits
rocknews1002.pdf	377 hits
Explorer0903.pdf	358 hits

A visit is every time someone comes to our website. A hit is every page viewed once a user enters our website.



WC McDANIEL: This month, MAGS Roadcut takes a look at one day in the life of the Rock, Fossils and Minerals section of eBay. Information presented was as of Sunday, March 27.

- 25,208 total items listed
- 4,158 Fossils listed
- 11,751 Minerals listed
- 1,001 Meteorites listed
- Fossilized Horse Tooth from Florida, 2 1/2" = \$10.50
- "Strange fossil rock of unknown origin" = \$0.01
- Ceratosaurus skull / jaw with tooth, Jurassic period, San Juan County, Utah = \$ 219.00 reserve not met
- Keokuk geode light- smokey crystal cut specimen = no bids
- Museum 5.2" rhodochrosite stalactite slice-Argentina- minimum bid \$199 = no bid
- Blue Lace Agate Rough 5 Pieces 3 pounds = \$18.50
- Highland Park 10" lapidary Slab/Trim Saw Model E-5- minimum bid \$299 = no bids

Membership directory

MIKE BALDWIN, MAGS EDITOR: The annual MAGS Membership Directory should be ready for distribution at the April membership meeting. Plan now to attend the April 8th meeting and receive your copy of the directory. This edition has been expanded to include a copy of the MAGS by-laws, standing rules and an application (in case you know someone who would like to become a member).

Memphis Archaeological and Geological Society
 26th annual Mid-America
 Mineral, Fossil, Jewelry Show
 Saturday, April 23, 9-6 and Sunday, April 24, 10-5
 Pipkin Building—Midsouth Fairgrounds, Memphis

Portion of admission benefits the Ronald McDonald House of Memphis

- 30 dealers (250 tables)—Rocks, Fossils, Minerals, Gems, Jewelry, Beads, Supplies
- Geology, Lapidary and Archaeology Exhibits and Demonstrations
- Kids area with Gem Dig, "Rocks Around the Clock" and Exhibits
- Workshops/Classes—wire wrapping, bola tie and other jewelry

GRAND DOOR PRIZE—GIANT AMETHYST CATHEDRAL
 (84 pounds, 37 inches tall)

MAGS MEMBERS, THE SHOW BELONGS TO AND IS YOU, SO HELP BY :

- Distributing show announcements everywhere that is permissible
- Distributing club tickets
- Sending emails announcing the show to all your friends, family, coworkers
- Placing large posters in community areas
- Placing announcements /news article in your work/club newsletter, scout troops
- Volunteering to help work during the show
- Donating material for the gem dig and grab bags

Annual Show Dinner • Friday night, April 22 at 6:30

1. YOU can help by committing to bring a dish or two
2. Arrive early to help set up and stay late to cleanup and convert the dinner area to the ROCKZONE

The show needs YOUR help!

- Thursday, April 21 - Building setup
- Friday, April 22 - Building setup for dealers and dinner
- Saturday, April 23 and/or Sunday, April 24 - Volunteer to help with the ROCKZONE, front ticket desk/information, hospitality
- Sunday, April 24 - show breakdown and clean up

SIGN UP TODAY!



DMC program of the SFMS field trip committee An official field trip of the Cotton Indian Gem and Mineral Society April 30, 2005 • 10:00am-5:00pm • Girard, Georgia

Girard (Burke County), Georgia • Savannah River Agate • Free site

CHILDREN/PETS: Children are welcome but need to be supervised as we will be hunting on a dirt road and there is always a possibility for vehicles driving along the road. Supervised pets welcome.

TRIP: Savannah River Agate has been collected at this site for many years. Clubs from Georgia and South Carolina have been collecting for decades. I have been told that there is as much material there today as there ever has been, however, the purple and red material is not as easy to find as it once was.

COLLECTING: We will be collecting Savannah River Agate which is actually a combination of agate, jasper, chert and opalite. The agate is great for cabbing and tumbling. The agate sometimes has vugs in them which other minerals can be found such as druse quartz, wavellite, variscite, selenite, etc...

The agate comes in many colors; mottled brown to greenish reds and purples. Occasionally you may find Indian artifacts as well.

SPECIAL CONDITIONS: We will be hunting in the roadway and road cuts only. No one will be allowed to hunt off of the roadway and road cuts!

BRING: You can pick up agate off the road but you should at least bring scratching tools. You may also want to bring digging tools, buckets, wrapping paper or aluminum foil to wrap your specimens in. Bring plenty of water and food as there are no stores nearby.

DIRECTIONS AND WHERE TO MEET: We will meet at the Girard city Post Office (on hwy. 23) at 10 am, Saturday, April 30, 2005. From I-20 take Hwy. 520 west of Augusta south to Hwy. 56 south. Go through McBean and stay on Hwy. 56; do not take Hwy. 56 Spur! Turn left on Hwy. 23; meet at the Post Office in Girard. From the Atlanta area it is a 3 to 3 1/2 hour drive.

Contact: Harry Hyaduck, Cotton Indian Field Trip Chair at hyaduckh@yahoo.com or 770-471-2354

Field trips are open to all members of associated clubs of the DMC program of the SFMS Field Trip Committee and to all members of SFMS member clubs who have provided their membership with SFMS liability insurance. Because of insurance requirements, members of the GENERAL PUBLIC are NOT invited on this or any DMC program field trips!

April SFMS shows and other events

APRIL 15-17, 2005 • Poplar Bluff, MO • Rock, Gem and Mineral Show • Bess Activity Center, Three Rivers Community College • Vendor information: 573-840-9637. jtiner@trcc.edu.

APRIL 23-24, 2005 • Memphis, TN • Memphis Archaeological and Geological Society; 26th Annual Mid-America Mineral, Fossil, Jewelry Show • Pipkin Building, Midsouth Fairgrounds (corner of East Parkway and Central Avenue) • Hours: 23rd, 9:00 A.M.-6:00 P.M.; 24th, 10:00 A.M.-5:00 P.M. • Contact: W.C. McDaniel, 901.274.7706 or cfmcdaniel@worldnet.att.net . • All members of a SFMS club will be admitted free to show with proof of club membership.

MAY 6-8, 2005 • Mareitta, GA • The Georgia Mineral Society • 37th Annual Gem and Mineral Mother's Day Weekend Show • Cobb County Civic Center, 548 S. Mareitta Pkwy. (at Fairgournd St.) • Hours: 6th and 7th, 10:00 A.M.-6:00 P.M.; 8th, Noon-5:00 P.M. • Contact: Jay Gorday, 1690 Granger Ct., Chamblee, GA 30341; 770.986.0822 or mayshow@gaminal.org; website <http://gaminal.org>.

June 4-5, 2005 • Birmingham, AL • Alabama Mineral & Lapidary Society • 32nd Tannehill Gem, Mineral, Fossil and Jewelry Show • From Birmingham, I-20/59S to Exit 100 or I-459 to Exit 1 • Follow signs.

February 2005 board meeting notes

Susan Thom, MAGS Secretary

The MAGS board of directors met January 03 at The Blue Plate Café, 5469 Poplar Avenue. The following were present: Mike and Sherri Baldwin, James Butchko, Melba Cole, Nancy Folden, Sherida Helms, Idajean Jordan, Cornelia and WC McDaniel, David McIlwain, Raynee Randolph, Susan Thom, and Lou White.

The following reports were given: **[01] Membership**—Most members have renewed. Three new membership applications were accepted: Greg and Jen Britt, Kelsey Lyons, and Steve Webb; **[02] Treasurer**—Everything has been supplied to the bank to transfer funds; **[03] 1st VP**—February 19 Looper Ice Age fossil collection and Indian artifacts at Delta State; March fossil collecting in Alabama; April or June join Mountain Home club for Black Rock collecting and rock swap/picnic; April possible trip to Vulcan plus MAGS Show; May and June 20-Mile Creek or Sugar Creek (one in May and the other in June); **[04] 2nd VP**—February-State geologist for Mississippi, Dr. David Dockery; March and April-Dr. David Dye of the University of Memphis or David Prior from Arkansas to discuss recent finds; **[05] Youth**—February-minerals in the home (coal, selenite, and cat litter); make fossils and dinosaur magnets; **[06] Show**—Need gem dig materials and minerals for permanent display in the Rock Zone; **[07] Web/Editor**—Stationery designed by Mike Baldwin and we like it! Directories-editor formatting text now; booklet will include by-laws, standing rules and constitution, plus any other general information about the club; Newsletter-sending newsletters by email when possible; rejected email addresses are being verified; postal addresses used if necessary; new membership application being designed. Adjourned at 8:12pm.

February 2005 membership meeting notes

Susan Thom

The MAGS February membership meeting was held at Shady Grove Presbyterian Church on February 10, 2005, presided by President WC McDaniel. There were 50 members and 15 visitors present. The visitors were Gwen, Karen, Jaden, Elilana and Patrick Lingerfelt, Marion Nutt, Helen Brady, Joanne Okon, Aan Adams, Robert and Serina Enzirk, Bryan Burns, Edward Rucks, Sharon Gordon and Ian Hanken. **New members:** Greg and Jen Britt, Kelsey Lyons and Steve Webb; **Upcoming Events:** Field trips—February 19 Cleveland Mississippi to see Looper Ice Age fossils and Indian artifact collection; March 19 to northern Alabama to collect blastoid and archimedes fossils; May to Sugar Creek in Tipton County for petrified wood and agates; June 20 to 20-Mile Creek near Booneville, Mississippi for sharks teeth; July to Magnet Cove or creek in Mississippi for petrified wood in stream (depends on water level); we're still working on a joint field trip with Mountain Home, Arkansas club to explore Black Rock; **Membership meeting on March 11:** will include (01) auction of some fossils; (02) theme display of shapes and carvings, (03) activity workshop area on bola ties and other jewelry forms by Allen Helt; **Youth:** Future Rockhound of America membership patches were presented to Alan Adams, Zachary and Taylor Faddis, Rachael Griffin, Lauren and Danielle Schaeffer and Charlie Thomas; **Southeast Federation News:** Lapidary workshops at William Holland and Wildacrew are offered again this year. Submit your application soon with \$30 down payment; **Display winners:** Youth—Serina Enzirk; Adult—none, although there were some great petrified wood pieces brought in for the theme display; Meeting adjourned to refreshments at 8:45.

MAGS Summer Rock Tour kicks off in May

SHERRI BALDWIN, MAGS DIRECTOR—HISTORIAN: The first MAGS Rock Swap of the year will be next month at the home of Lou White, 3805 Melanie June Drive, Bartlett, TN. I just have a couple more confirmations to make and we will be set for the 2005 MAGS Summer Rock Tour, coming to a backyard near you. A map and details of the May Rock Swap and Picnic will be in the May issue of Rockhound News.

New MAGS library book in memory of Carolyn Hays

NANCY FOLDEN, DIRECTOR—LIBRARIAN: Rena and George Everett recently presented this new book to the MAGS library in memory of long-time friend and MAGS member, Carolyn Hays.

The Complete Mineral Encyclopedia by Petr Korbek and Milan Novák: Minerals arise out of the earth in a vast array of shapes, colors, and sizes--some glittering and elegant, others rough and sturdy. The Complete Mineral Encyclopedia is a user-friendly

guide to this dazzling world, with comprehensive information on over 600 minerals from all around the globe. Arranged according to the mineralogical system, this volume also includes symbols to help you find the information you need quickly, such as chemical formulas and properties, and rate and location of occurrence in nature. Fully illustrated with hundreds of exquisite photographs, this is an invaluable reference tool.

Blood vessels recovered from *T.rex* bone

<<< continued from page one

- small for a *T. rex* - was intact when found, and its hollow interior had not been filled with minerals. That is unusual for a long-buried bone.

However, with a protective plaster jacket built around it, the bone was too heavy for a helicopter to retrieve it from the remote site and it had to be broken in half. When Horner's group split the bone, they carefully took samples for Schweitzer, then working at the Museum of the Rockies.

"Elasticity and resilience"

Bones are built by cells called osteocytes which are nourished by a rich fabric of blood vessels. The osteocytes secrete proteins which collect the calcium compounds that give bones their strength.

To see what remained of this internal structure, Schweitzer soaked samples of the core of the bone in a solution that dissolved the calcium compounds. This left what she describes as "a flexible vascular tissue that demonstrates great elasticity and resilience".

For comparison, she then examined ostrich bones, as these birds are the largest and closest living relatives of *T. rex*. She found similar structures when she removed the calcium from the ostrich bones and treated the mixture with enzymes to break down collagen fibre in the bony matrix.

Protein sequencing

Other researchers have previously recovered traces of protein from dinosaur bones, and indeed just two weeks ago Schweitzer reported traces of protein in 70 million year old dinosaur eggs.

"[The *T. rex* paper] suggests that biological and biochemical information might be recoverable from a wide range of fossil material," says Angela Milner of the Natural History Museum, in London, UK, who has detected proteins in Iguanodon bone. "There certainly seem to be blood vessels," she told New Scientist.

The next step will be to isolate proteins and try to sequence them. Comparing protein sequences could help trace relationships with other prehistoric beasts and with animals alive today. Schweitzer decline to discuss DNA because she does not work with it, but DNA is far less stable than proteins so is usually broken into fragments, even in tissue that has been frozen since the ice age.

Journal reference: Science (vol 307, p 1952)

Reference: Jeff Hecht; [Blood vessels recovered from T. rex bone](http://www.newscientist.com/article.ns?id=dn7195); NewScientist.com news service; 24 March 2005; <http://www.newscientist.com/article.ns?id=dn7195>; photo credit on page one to NewScientist.com.

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Enjoy rock sandwiches

by Raynee Randolph and Sherida Helms

We are going to be making rock sandwiches during the April youth meeting. Kids, you don't want to miss this!

In March we made fossils from salt-flour dough. We learned about the Tennessee State Fossil-Pterotrionia Thoracica and the kids got to take home a replica of a T-Rex tooth, a shark's tooth and an arrowhead. Sharon Muir won the door prize for March.

Three more MAGS youth members received their Future Rockhounds of America (FRA) membership badges at the March meeting. Congratulations to Allie Van Cleef, Danielle Schaeffer and Serena Enzerick.

In May the kids will be working on their FRA Communications Merit Badge.



Peridot crystal

Olivine (The Industrial Name) or Peridot (The Gemstone Name)

BY KRISTOPHER J. HELMS, MAGS YOUTH MEMBER

Olivine is not recognized as a mineral because it is actually two different minerals. It is combination of fayalite and forsterite. When used as a gemstone is it called Peridot. It is the August birthstone. Olivine has industrial uses as sands and abrasives.

Olivine is an igneous rock. It is formed from oxygen, magnesium, silicon and iron. It crystallizes quickly from dark colored magma. The chemical formula is $(Mg, Fe) 2SiO_4$, Magnesium Iron Silicate. Olivine can be a clear light green to a yellowish green. Sometimes it can even be a dark greenish brown or black. On the Mohs hardness scale it is 6.5-7 and it has a white streak. It has been mined by

man for 4,000 years. It is found many places on the Earth such as Arizona, Mexico, Russia, Ethiopia and Brazil. It has even been found in meteorites and on the planet, Mars.

Olivine or peridot has been confused with many other minerals such as apatite, green garnets, green tourmaline, and green zircon. Jewelry merchants sometimes called Peridot, "Evening Emerald," to make it sound more expensive. Another name used for Olivine or Peridot is Chrysolite.

Sources: [01] <http://www.aolsvc.worldbook.aol.com/wb/Article?id=ar402350&sc=-1>; [02] <http://mineral.galleries.com/minerals/silicate/olivine/olivine.htm>

Evening Emerald or Peridot

BY RHENA SOUTH, MAGS YOUTH MEMBER: Peridot is the gem quality version of Olivine. There are many legends and myths surrounding Peridot. Peridot was suppose to be a favorite stone of Cleopatra. The ancient Egyptians used Peridot in jewelry as early as 1500BC. The Egyptians called it, "The Gem of the Sun." The Egyptians would only mine it at night, because it did not darken at night and could still be seen using a lamp. The ancient Egyptian mine was on an island called Zeberget. The Romans called Peridot Evening Emerald. Ancient man believed that Peridot had mystical powers. They believe that it would make people happy, make the body and mind strong, stop you from worrying and make you talk well. It was suppose to help married people be happy.

It has been found in castles and churches of the Middle Ages. In the Middle Ages, people believed that if you put a Peridot under your tongue you could bring down a fever. I think I will take Tylenol. If you wore it, Peridot was suppose to cure asthma and insomnia. Hawaiian legend believes that Peridot is the tears of the Goddess Pele. Pele is the goddess of the volcano.

Peridot is the birthstone of August.

Source: http://www.echinastone.com/gemstones/learn/articles/peridot_story_known_facts.html
<http://www.findyourfate.com/gemology/gemstones/Peridot.html>
http://www.silvershake.com/store/gemstone_library.asp

AFMS news: honor someone

CATHY GABER, AFMS CLUB ROCKHOUND CHAIR: When you look at certain club members, do you ever have the feeling that those people really do a lot for the club? Those people are winners, but others who don't know them have no idea. You can be a winner too by proposing a club member as the AFMS Club Rockhound of the Year. Every club can propose one member or a couple for this honor every year. All that is needed is: [01] club member's name; [02] your name and office if any; [03] your club name and

state; [04] 50 words about why the club member deserves to be honored. Please send in an email message, not as an attachment.

Send this information to: Billie Wright, SFMS Rockhound of the Year Regional Chair, 3304 Nottingham Rd., Ocala Springs, MS 39564, asjw@datasync.com .

Think how special your club member will feel to get this recognition. Don't let your club and your special club members go unrecognized.

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The main purpose of Memphis Archaeological and Geological Society is to promote and advance the knowledge of the Lapidary Sciences in the mining, collecting, and identification of minerals and gemstones.



AFMS NEWSLETTER AWARDS: New Editor 7th-95 • Small Bulletin Honorable Mention-04
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SFMS NEWSLETTER AWARDS: New Editor 1st-86; 2nd-88, 97 • New Editor (Explorer) 4th-03
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Adult Article 2nd- 89, 90, 04; 3rd-92; 4th-85, 04; 5th-91, 03; 6th-87; 8th-04; Honorable Mention-03, 04

MAGS Rockhound News
367 North Main Street
Collierville, TN 38017

MARK YOUR CALENDAR

Board Meeting
March 31

Membership Meeting
April 8

MAGS Field Trip
April 9

Fossil Group Meeting
April 14

MAGS Rock Show
April 23-24

DMC Field Trip
April 30

