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METEORITES

MESSENGERS FROM SPACE AND THE PAST



METEORITE

Name: Sikhote-Alin

When: Witnessed fall on February 12, 1947

Where: Eastern Siberia town of Vladivostok, Russia

Content: Octahedrite, Coarsest iron

Weight: 222 grams

Photo by Mike Baldwin

WC McDANIEL: On February 12, 1947 a blazing fireball interrupted the clear and cold morning sky near the Eastern Siberia town of Vladivostok, Russia. The bold light streaked across the sky barreling toward and appearing to end in the area of the Sikhote-Alin Mountains. However, due to the snow cover the area was not visited until late spring.

Explorers entering the area located over 126 craters of varying sizes spread out over several square miles. From this site a substantial number of meteorites were recovered with the largest weighing over one ton. Some of the smaller meteorites have made their way out of those mountains and one will be given away as one of the grand door prizes at the conclusion of The Memphis Archaeological and Geological Society's show on April 24 and 25. Meteorites have moved from folklore and misunderstanding to a scientific body of evidence and standards. The following paragraphs were excerpted from the web pages of the National Museum of History at the Smithsonian Institute.

WHAT IS A METEORITE?

Meteorites are stony or metallic bodies that fall to the Earth from space. All meteorites show peculiarities not observed in known rocks of

see Meteorites on page four . . .

APRIL MAGS EVENTS

- 01 6:30p Board Meeting @ Blue Plate Café, 5469 Poplar Avenue
- 09 7:30p General Meeting @ Shady Grove Presbyterian Church, 5535 Shady Grove Road, Memphis [bring refreshments and a displays]
Program: "Crater of Diamonds State Park" presented by Mike Howard
- 15 7:00p M3 Micromounters Meeting at the home of Roger Van Cleef
- 17 9:00a DMC Field Trip to Corydon Quarry, Corydon, IN [see page 6 for details]
- 17 8:30a MAGS Field Trip to Crater of Diamonds [see page 3 for details]
- 24-25 25th Annual Mineral Fossil Jewelry Show @ the Mid-South Fairgrounds



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FROM THE PRESIDENT

This is the last newsletter before our annual show and the last chance to tell you we are going to have a super show. This is our 25th anniversary and we will kick off the weekend with dinner on Friday night at 6:30, look for special events that night so be sure to come. It's the last time to ask for your help. There are multiple ways to contribute your time and to the success of the show by:

- Volunteering. We need firm commitments for help before, during and immediately after the show. From moving items from storage, selling tickets, helping with the ROCKZONE, overnight security or returning items to storage. Sign up sheets will be available at the April meeting or call me at 274-7706
- The Friday show dinner serves as good transition from the preshow work to the opening of the doors to the public on Saturday morning. It's an enjoyable time and as we recognize the 25th anniversary of the show, a time to celebrate. Help by signing up to bring food for the event. Remember the show furnishes the barbecue (meat is already bought and cooked, just waiting for the final touches from Dean and Dana) and all the fixings. Sign up sheet will be available at the April meeting.
- Distribute promotional announcements and club tickets. This is a good way to advertise the show. Remember that as each club member distributes the club tickets they must be signed by you and be original (no copying). Ticket holders get in free and you pay the club \$1 for each ticket actually used. These tickets will be available at the April meeting.
- We have a continued need for gem dig and grab bag material.
- Club displays are in important part of the show and in the next few weeks we will ask you to show of some of your field trip finds. In addition we will feature petrified wood from the Midsouth, so you rockhounds that have some really large specimens will be ask to participate by exhibiting.

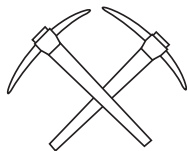
So see you in April.

WC McDaniel



DEADLINE FOR SUBMITTING
NEWS, ARTICLES, ANNOUNCEMENTS,
OR PICTURES FOR THE MAY ISSUE OF
MAGS ROCKHOUND NEWS IS
APRIL 18, 2004

APRIL 2004 MAGS FIELD TRIP



SATURDAY, APRIL 17 & 18 (Optional), 2004
CRATER OF DIAMONDS STATE PARK, AR • DIAMONDS
THIS FIELD TRIP IS OPEN TO MAGS MEMBERS AND THEIR GUESTS

Collecting site: Crater of Diamonds State Park
Located in Pike County near Murfreesboro, Arkansas
This is a fee pay sites. Adults: \$5.00, children (ages 6-12): \$2.50 and children under 6 years old: FREE.

Specimens: Diamonds of all shapes, sizes and colors of the rainbow. The three most common colors are white, brown and yellow. Along with diamonds, over 40 types of rocks and minerals can found here, too. These rocks and minerals include lamproite, amethyst, banded agate, jasper, peridot, garnet, quartz, calcite, barite and hematite.

Meeting Time/Place: 9:00 am, at Crater of Diamonds State Park Visitor's Center

Driving Directions: From Memphis take I-40 West towards Little Rock, and then take the I-440 South exit number 159, towards Arkadelphia/Texarkana. I-440 becomes I-30 South, then take exit #73 at Arkadelphia, then go south on AR-26 for approximately 34 miles to Murfreesboro. From downtown Murfreesboro, take Ark. 301 and go 2 1/2 miles southwest to the park.

Motel Accommodations:

Queen of Diamonds Inn, 318 North Washington Ave., Murfreesboro, AR 71958, (870) 285-3105
American Heritage Inn, 705 North Washington Ave., Murfreesboro, AR 71958, (870) 285-2131

Tools: Bring small wooden box screen (about 3/16" and/or 1/8" grid), small garden tools, shovels, leather gloves, 5 gallon bucket, etc. Small zip-lock sandwich bags to protect delicate specimens. Please bring plenty of cold water, soft drinks, Gatorade, etc. Rental equipment is available at the Crater of Diamonds Equipment Rental Shed. Please note that we cannot take credit cards at the Rental Shed. Personal checks are accepted.

Safety Note: While at these sites, all safety rules posted by the Crater of Diamonds State Park must be followed. All children/junior members must be supervised by an adult member at all times. Sorry, no pets please. Follow AFMS safety rules, code of ethics and collecting code.

Difficulty Level: 1 to 2 on a scale of 1 (easy) to 10 (hard).

Field Trip Agenda (Saturday):

9:00 am–Crater of Diamonds State Park Visitor's Center
12:00 noon–We'll break for lunch. Please bring a picnic or sack lunch if you're not leaving the park. There are restaurants available in Murfreesboro (approx. 2 miles away). 4:00 pm–We'll call it a day and head for home.

Field Trip Agenda (Sunday): (Optional)

Details will be available at the club general meeting on April 9th.

If you want to go, please sign the list. If you sign up and decide not to go, please contact David McIlwain ASAP.

David McIlwain, MAGS Field Trip Coordinator
305 Caitlin Drive • Oakland, Tennessee 38060-4259
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Office: (901) 867-4303
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Please Note: MAGS field trips are open only to MAGS members and their guests.

SFMS INSURANCE UPDATE

Greetings to all Members,

I am pleased to announce that SFMS has a new insurance policy effective with no lapse in coverage. The Snellings Walters Insurance Agency in Atlanta are our agents and the Cincinnati Insurance Company is the underwriter. The cost to the clubs is \$1.15 per member and \$175 per show.

Thank you all for your help and support during this latest scramble. Special thanks to the SFMS officers and committee members who took the time on very short notice to meet with Snellings Walters. Our optimism has won and we can continue providing a valued service to our members.

Best wishes,
William (Bill) G. Waggener
President, SFMS

2004 ROCK SHOW NEWS

Memphis Archaeological and Geological Society presents the
Mid-America
Mineral Fossil Jewelry Show
Saturday April 24 9-6 • Sunday April 25 10-5
Pipkin Building, Midsouth Fairgrounds Memphis

Admission- Adults \$3, 12 & under \$1, scouts and leaders in uniform free
Portion of admission benefits the Ronald McDonald House of Memphis

❖❖❖❖ 25th Annual Show Features ❖❖❖❖

- 30 dealers (240 tables) from 15 states with expanded fossil section including a selection of amber
- Exhibitions include: [1] **Meteorites from the Smithsonian and the Geology of the Wells Creek Structure—A Tennessee Meteorite Impact Site.** Presented by the University of Tennessee at Martin [2] **The Looper Collection—Ice Age Fossils from Southeast Arkansas and Northwest Mississippi.** Presented by Delta State University. [3] **Magnet Cove Arkansas—100 minerals in five square miles.** Presented by the Arkansas Geological Commission. [4] **Petrified Wood and "Glacial Rocks" of the South.** Presented by Memphis Stone and Gravel Company. [5] **Food Table** (a rock banquet, home grown by club members). [6] Club Displays of "Field Trip Treasures" (rocks, fossils, minerals). [7] Petrified Wood of the Midsouth (large specimens collected by club members). [8] Native American Archaeological Exhibits from the Midsouth
- Demonstrations including lapidary, wire wrapping, flint knapping, Indian coil pottery and micromounting of fossils and minerals
- Wire wrapping classes—11:00 and 3:00 both days—\$15; advance registration advised; call 901.274.7706
- **ROCKZONE**—kids area with gem dig, dry sluice box, and displays

❖❖❖❖ Grand Door Prizes ❖❖❖❖

Piece of outer space—a meteorite (Sikhote-Alin) ❖ A piece of eight (silver) from the sunken treasure ship Atocha
Information: www.memphisgeology.org • 901.274.7706



APRIL BIRTHDAYS

Birthstone = Diamond

1 - Frank Walker	10 - Leah Novarese	22 - Ruth Rice
6 - Chris Whitley	11 - James Prather	23 - Helen Rodgers
7 - Michael Kingsley	12 - Shelby Swink	27 - Kathy Bullard
9 - Karen Ehrlich	20 - Tyler Murphree	
9 - Debbie Parker	22 - Carlene Bell	



SUNSHINE REPORT

Our condolences to **Pam Crumpton** after the loss of her father. In view of the season, here's hoping that hay fever hasn't triggered elevation of body temperatures into the high mercury.

METEORITES . . . continued from page one

Earth, and it is therefore possible to recognize them even if they have not been seen to fall.

Most meteorites come from asteroids, a rare few come from larger bodies such as the Moon and Mars, and many of the smallest meteorites, "micrometeorites", are dust from comets.

Many meteorites preserve chemical and physical properties that were established 4.5 billion years ago, during the earliest history of the solar system, and thus provide some of the best clues to the nature of the events that occurred in that remote time.

There are three major classes of meteorites; stony meteorites, iron meteorites, and stony-iron meteorites.

FROM OUTER SPACE TO EARTH

A small meteorite may fall without any sound or light effects. The fall of a larger meteorite can be accompanied by startling light and sound effects. A fiery mass suddenly appears in the sky travelling swiftly in an arc and leaving a luminous trail behind. It may then disintegrate with a loud explosion and its fragments fall to the ground. Most meteorites break into pieces during the luminous flight and produce multiple individual fragments.

Meteorites are heated by friction with the air as they pass through Earth's upper atmosphere. Their outer surface is melted and continually removed by airflow. Although the meteorite in flight appears incandescent, the heat generated in this process is mainly lost to the surrounding atmosphere, so little heat actually penetrates the cold meteorite. Sonic booms are frequently produced at this stage of flight. The energy resulting from the high velocity of entry into the atmosphere is dissipated within a few seconds while the meteorite is still at high altitude, and the body then falls freely and comparatively slowly to the ground. This long plunge through the cold atmosphere cools the meteorite considerably. Meteorites do not ignite grass or fall in flames.

METEORITE TYPES

Stony Meteorites: Chondrites and Achondrites

Stony meteorites are by far the most common. More than 95% of meteorites observed to fall to Earth are stony. They can be divided into chondrites and achondrites. Both types are composed mostly of silicate minerals, but the great majority also contain metallic iron in small-scattered grains.

Chondrites are named for their most prominent feature - millimeter-sized spherical bodies called chondrules. These chondrules (from the Greek for small sphere) formed 4.5 billion years ago in the Solar Nebula - the cloud of gas and dust from which the Sun, planets,

see Meteorites on page eight . . .

MAGS ROADCUT

Welcome to the MAGS ROADCUT. ROADCUT is designed to provide general information and news for rockhounds. .

. . . **river stages.** the web site <http://www.srh.noaa.gov/lmrfc/forecast/esp.shtml> projects river stages out for 28 days. The prediction is based on projected runoff observations and doesn't include any significant rain.

. . . **geode cracking.** one of the tips I have heard of, but never tried, is to soak a string in some type of accelerate, wrap it around the geode, light it and let it burn out, submerge in cold water and then lightly tap the geode at the burn mark.

. . . **cleaning tip.** a weak, cold solution of oxalic acid/water will clean the brown/reddish surface stains of agates and the brownish/blackish surface stains of petrified wood. Usually a few hours will be sufficient.

. . . **cleaning tip.** hopefully MAGSters will find some good specimens of Brilliant wood on the March field trip. It is absolutely essential you do a lot of washing with water before using oxalic acid. Large specimens require multiple cycles of wash/dry/wash/dry. A hard of stream of water works best. Smaller specimens can be clean with the same method and an occasional toothbrush. Oxalic acid does not dissolved dirt so clean and clean some more and then start cleaning your specimens.

Send your MAGS Roadcut News to WC McDaniel at cfmcdaniel@worldnet.att.net

SOUTHEAST FEDERATION NEWS



DMC Program of the SFMS Field Trip Committee
An Official Field Trip of the KYANA Geological Society (Host)
9:00AM [EDT], Saturday, April 17, 2004
Corydon Quarry, Indiana and Sulphur Roadcut

Corydon Quarry Liability Release Forms Will Be Signed At The Quarry. We will meet at the quarry at 9:00 AM EDT to sign release form. Trip will start at 9:00 AM and continue until 12:00 and later if they allow. Minimum age is 13. Look for pink dolomite, calcite, fluorite, millerite, barite, quartz, chert nodules w/fossils. **What to Bring:** Hard hats, heavy shoes, long pants, eye protection, gloves, sledge and rock hammer, chisels, prybar, buckets and/or flats, and lots of wrapping material. Also bring lunch and a beverages. **Directions:** Corydon is located about 30 miles west of Louisville, Kentucky on I-64, exit 105. Go north one block, to the light. Turn left on Quarry Road and travel about a mile to a 4-way stop. Quarry entrance is just past the intersection. Turn right and immediately left to the office and sign in. **Afternoon Fossil Trip:** We will then caravan to the interchange of I-64 and Indiana highway 37. This

roadcut is about one mile long. Best fossil collecting is in an inner-bedded shale-limestone, and is Upper Mississippian age. Look for blastoids, crinoid heads, Archimedes bryozoans, brachiopods, Rare: trilobites, uncommon: sharks teeth and scales. Most of the collecting requires some climbing. Instructions to active beds will be given at the site. Please be fair to others; do not visit this site prior to Saturday field trip. **Motel Arrangements:** Arrangements are being made in Corydon for special group rates. Contact Alan deepskyspy@insightbb.com for more information. **Contacts:** David Horn, crystalman@earthlink.net or Alan Goldstein, Deepskyspy@insightbb.com

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!

Visit the Southeast Federation at <http://www.amfed.org/sfms> for federation news, Wild Acres and William Holland updates and [Lodestar](#) newsletter online.

SFMS & OTHER CLUB SHOWS AND EVENTS

April 24-25, Memphis, TN—Memphis Archaeological and Geological Society. 25th Annual Mid-America Mineral, Fossil, Jewelry Show, Pipkin Building, Midsouth Fairgrounds, Central and East Parkway. Hours: 24th, 9:00 A.M.-6:00 P.M.; 25th, 10:00 A.M.-5:00 P.M. Contact: W.C. McDaniel at 901.274.7706 or cfmcdaniel@worldnet.att.net. Web link at www.memphisgeology.org.

May 7-9, Marietta, GA—The Georgia Mineral Society. The 36th Annual Gem and Mineral Mother's Day Weekend Show. Cobb County Civic Center, 548 S. Marietta Parkway (at Fairgrounds Street), Marietta, GA 30339. Hours: 7th and 8th, 10:00 A.M.-6:00 P.M.; 9th, Noon-5:00 P.M. Door prizes and Free Admission/Parking. Auction open to public on 8th at 2:00 P.M. Contact: Jay Gorday at 770.986.0822 or gms@gaminer.org. Web link at <http://gaminer.org/mayshow.htm>.

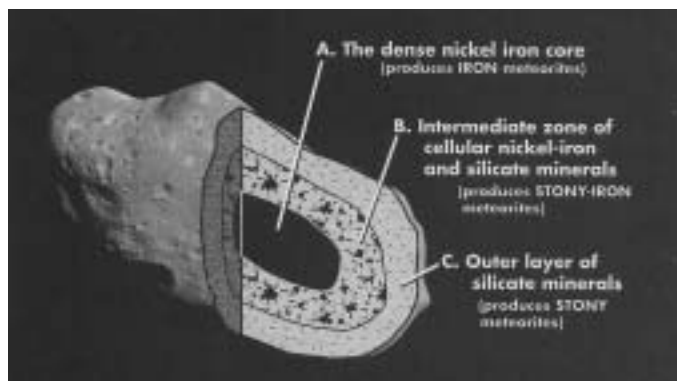
MAGS REVIEW

FEBRUARY 5, 2004 BOARD MEETING NOTES

RAYNEE RANDOLPH: The MAGS board of directors met February 5, 2004 at The Blue Plate Café, 5469 Poplar Avenue. The following were present: Mike Baldwin, Nancy Folden, Idajeon Jordan, Cornelia and W.C. McDaniel, David McIlwain, Park Noyes, Kim Prudhomme, Raynee Randolph, Dennis Sanders, Bill Scheffer, Paul Sides, Roger Van Cleef, and Lou White. The following reports were given: (1) 1st VP: Field trip February 21 to Harrisburg AR. March 20 to N. Alabama, and April 17th to the Crater of Diamonds AR. No field trip planned for May as yet, and in June to Mt Ida. (2) Program: February–tumbling demonstration by David McAlister. March–Richard Carol on "Alabama Petrified Wood". April–Mike Howard on "The Crater of Diamonds". (3) Editor/Web: Please stick to the deadlines set for articles, etc. (4) Juniors: will attend the general meeting with the adults to participate in the tumbling demonstration. March–Roger will have a program for them on fossils. (5) Membership/Sunshine: Local calls have been made to delinquent members for membership dues to be paid. All those members outside of town will receive written notification. Condolences were sent to the family of Charley McPherson, Nancy Boucher, and Bill Scheffer. John Jones seems to be feeling better. (6) Show: The next committee meeting will be Monday, Feb. 9th. All dealer space is now sold out. (7) Old Business: A cart is still needed for our new TV. (8) New Business: Minor changes in our meeting facility. Juniors will now be in the room next door to their old meeting place. (2) The library carts may stay where they are. Lapidary Journals are taking up a lot of space. What should we do with them? (3) Science fair judges are needed for the upcoming science fair in March. If you are interested please see W.C. (4) There was discussion that future income from auctions be divided equally into certain funds. (5) There was a proposal for the establishment of a MAGS Memorial Collection. Meeting Adjourned @ 7:45pm.

FEBRUARY 13 GENERAL MEETING NOTES

RAYNEE RANDOLPH: MAGS February General Membership meeting was held at Shady Grove Presbyterian Church on February 13, presided by President W.C. McDaniel. There were 64 members and 7 visitors present. They were: Aubrey Lipford, Jeff Smith, Susan and Charlie Thomas, Joyce Woodford, Carroll Sequi, and Margaret Nickle. Starting next month the juniors will be meeting in a room one door down from where they meet now. This month their program will be with the adults. (1) Field trips: February will be our first trip of 2004. We will be going to Razorback Quarry with the Arkansas club in Harrisburg AR on the 21st. Please sign the signup sheet if you intend to go. There is additional information and directions on the handout, so please take one of these if you plan on going. We will meet on McDonald's at 8:30am and leave SHARPLY at 9:00am for the quarry. On the 27th of March we will be going to N. Alabama for petrified wood. April 17th will take us to The Crater of Diamonds, AR. Leave the weekend of the 23-25 open for the show at the fair grounds. There may be an optional field trip to Jet, OK for selenite clusters. There will be more info coming about a field trip on the 22nd. (2) Programs: March's program will be given by Richard Carroll on the Petrified Wood of Northern Arkansas. Mike Howard will give the April program from the Arkansas State Geology Department on the Crater of Diamonds State Park. This will correspond with our field trip to the State Park in April. The program this evening will be by David McAlister on; The Inexpensive Ways to Tumble. (3) Displays: #1 Junior: Rhena South – science fair project – cleaning crystal. Display Winner: Rhena South. Three door prizes were awarded and the meeting adjourned @ 8:30 for refreshments. There was a mini board meeting to approve motions for the Marsh family membership, and to reimburse the Baldwin family for traveling to the SFS board meeting in Jackson. Both motions were seconded and the vote carried the motion.

METEORITES . . . continued from page fiveGRAPHIC CREDIT: David Frantz, *Falling Stars: A Guide to Meteors and Meteorites*.

asteroids, and comets formed. Chondrules are not found in terrestrial rocks. These chondrules, along with small mineral grains, accreted to form asteroids during the birth of the Solar System. Chondrites are, by far, the most abundant type of stony meteorite.

Less common, comprising only a few percent of all meteorites, are achondrites. These are also stony meteorites composed primarily of silicates, but these meteorites have experienced familiar geologic processes of melting and differentiation - although these happened long ago. Most achondrites formed on asteroids during the birth of the Solar System, but a small number formed on Mars and the Moon.

Stony-Iron Meteorites

Stony-iron meteorites, contain about equal proportions of metal and silicate material, and are rare (less than 2% of all known meteorites). Stony-iron meteorites form in places where metal and silicate are mixed. One type of stony-iron are pallasites - rocks composed of a network of iron-nickel metal surrounding a greenish, silicate mineral called olivine. Pallasites probably form when the olivine-rich mantle of an asteroid mixes with the metallic core. Mesosiderites are mixtures of iron-nickel metal and basalt and probably formed by the collision of two asteroids.

Iron Meteorites

Iron meteorites are really composed of iron and nickel and are extremely dense. They are pieces of the cores of asteroids. Early in Solar System history, asteroids melted and the dense iron-nickel metal sank to the center to form a core - much like the Earth has a core. Iron meteorites are the samples of the cores of ancient worlds. While they are rare among meteorites seen to fall to Earth

(only a few percent), they are among the most common type of meteorites in our collections, because they can be recognized long after their fall, are very different from Earth rocks, and are resistant to weathering. One of the most distinguishing features of meteorites is the presence of the Widmanstätten pattern - the distinctive series of bands in geometric patterns. This pattern is created by the intergrowth of two different iron-nickel minerals formed during very slow cooling (a few degrees every million years) in the core of the asteroid. The presence of nickel is a universal feature of iron meteorites.

TESTING FOR SUSPECTED METEORITES

If you think you have a meteorite, the following simple tests will tell if your sample is a candidate for further examination.

1. Does the sample have a dark-colored (typically black) thin exterior coating that shows evidence of melting and is clearly different from the interior (typically light colored)? It is important that you compare the outer surface and interior and this may require removing a small piece of the rock by breaking or sawing with a diamond-impregnated sawblade.
2. Is the sample round?
3. Is the sample very spongy (contain numerous holes)?
4. Is the sample unusually heavy?
5. Does it differ from the rocks typically found in that area?
6. Does the sample attract a magnet?

These simple tests can be helpful in determining if a rock might be a meteorite. Meteorites have exterior surfaces that have been melted during passage through the atmosphere (the fusion crust); they only very rarely contain holes; they are usually solid objects with irregular, but not spherical, shapes; they will be obviously different than the local rocks; they are unusually heavy; and they will attract a magnet.

Some rocks are often confused with meteorites. Industrial slags, commonly used in railroad beds, typically contain numerous holes (vesicles) and the exterior surface, while showing evidence of melting, does not differ from the interior. Iron sulfide and iron oxide concretions are sometimes rounded and can be easily broken. In contrast, it is virtually impossible to break an iron meteorite - they must be cut.

see Meteorite History and Tidbits on page nine . . .

MINI-MAGS NEWS [WHAT'S HAPPENING WITH THE KIDS]

OH JOY! BALDWIN GIRLS RECEIVE AWARDS



Jennifer and Kelly Baldwin

Jennifer and Kelly Baldwin (and their parents, Sherri and Mike) attended the SFMS Board Meeting on February 28, 2004 in Jackson, MS. During the meeting, a special ceremony was held to present the first, second, and third place awards and gifts for the 2003 SFMS Junior of the Year. The first place award was presented to Jennifer Baldwin. In the March issue of the SFMS *Lodestar* newsletter, Hugh and Leona Sheffield (SFMS Youth Resources Chairmen) wrote, "Jennifer, we were so pleased to receive your application and read about all the things you do with and for your club and then that you took the time to tell us about it. You well deserve the title 'Junior of the Year'."

Kelly Baldwin, 2002 Junior of the Year, was presented with the 2003 second place SFMS Junior of the Year award at the Jackson meeting. Congratulations to both Jennifer and Kelly!

SCIENTISTS NEED YOUR HELP!

COMPARE YOUR ROCKS TO MARTIAN ROCKS

NASA: Mars scientists are asking students from around the world to help them understand the red planet. Send in a rock collected by you or your classroom from your region of the world, and we will use a special tool like the one on the rovers to tell you what it's made of. Then everyone can compare their rocks to the ones found on Mars. We'll post a picture of your rock on the web, and give you a report on what kind of rock it is. We'll also send you an official certificate and Mars sticker for your contribution. Your rock will be kept in a special collection where scientists from around the world can come to study them.

Here's how you can participate:

Minimum to send: A clean rock (wash with water if dirty) minimum of 2" / maximum 6" (preferred 4") • include your name, age, and address (name of city/village and country with zip code if U.S. *Note: address is used to send certificate and sticker—not released. Only first name, age and city will be listed on the web.* Optional: Latitude/longitude of sample site • name of geographic feature (if it has one) where rock was collected • copy of map with location where rock was collected • picture of rock in person's hand for scale • picture of location where rock was collected (with no people) • short paragraph describing area where rock was collected.

Send your rock to: Dr. Phil Christensen, Mars Space Flight Facility, Arizona State University, PO Box 876305, Moeur Building, Room 131, Tempe, AZ 852876305.

Information compliments of NASA: <http://marsrovers.jpl.nasa.gov/classroom/schoolhouse/>

METEORITE HISTORY AND TIDBITS

- Meteorites are named after area they were seen falling or were found.
- The National Museum of Britain began publishing the Catalogue of Meteorites in 1847 and listed 62 meteorites. The most recent edition, published in 1999, list over 22, 000 with 19,000 of those coming from Antarctic.
- The largest known meteorite weighs an estimated 60 tons and remains where it filled in Namibia.
- The term "meteorwrongs" has been coined to refer to rocks believed to be meteorites but upon testing were not.
- The earliest recorded meteorite was on November 7, 1492 in Ensisheim, Austria and remains there today.

Reference for Meteorite article on page one and this article: National Museum of Natural History, Smithsonian Institute www.nmnh.si.edu. Information gathered for educational purposes under the provisions of the "Fair Use Act of 1976."

APRIL PROGRAM NOTES

Our April program on the “Crater of Diamonds” will be presented by Mike Howard. An amazing fact about Crater of Diamonds, more diamonds have been found by individuals on or near the surface than at many of the world’s successful mines. The largest diamond, the Uncle

Sam, is 40.25 carats. Most of the top 30 have been found by casual diggers who only wanted to try their luck. The colors of the Arkansas diamonds are white, yellow, brown, and pale pink. Two of the finest Arkansas diamonds are in the Smithsonian collection.

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AFMS NEWSLETTER AWARDS:

New Editor 7th-95 • Junior Article 3rd-98; 8th-03 • Special Pub 4th-03

SFMS NEWSLETTER AWARDS:

New Editor 1st-86 • New Editor 2nd-88, 97 • New Editor (Explorer) 4th-03

Certificate of Excellence-89, 90, 91, 92, 93 • Large Bulletin 1st-87

Small Bulletin 4th-03 • Special Publication 2nd-03 • Art-77, 80, 81, 82, 86 • Junior Article 1st-03
Adult Article-(2th) 89, 90; (3rd) 92; (4th) 85; (5th) 91, 03; (6th) 87; (Hon. Men.) 03

DUES:

Family-\$20.00

Single-\$16.00

Junior-\$8.00

Associate: \$13.00

The Memphis Archaeological and Geological Society’s main purpose is to promote and advance the knowledge of the Lapidary Sciences in the mining, identification, cutting, polishing and mounting of gems, minerals and fossils to the utmost of our geological and lapidary capabilities.

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MAGS Rockhound News
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Collierville, TN 38017-2301

MARK YOUR CALENDAR

Board Meeting
April 1

General Meeting
April 9

M³ Meeting
April 15

DMC Field Trip
April 17

MAGS Field Trip
April 17

Rock Show
April 24-25

