



Meeting
Second Tuesday of each month
Van Matre Senior Citizens Center
1101 Spring Street
Mountain Home, AR

<http://www.ozarkearthscience.org/news.htm>
<http://www.ozarkearthscience.org>

February, 2012

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| President/Liaison | V. P/Programs | Secretary | Treasurer/Proof Reader |
| Sharon Waddell | Edward Hakesley | Brenda Johnson | Dorothy Hess |
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We are a member of the Midwest Federation of Mineralogy.

MWF Assistant Micromounter: Brenda Johnson

Historian: Sidney Johnson

Safety-chair: Aradasa Johnson

OBJECTS: To study and promote an interest in the earth sciences; Geology, paleontology, mineralogy, archaeology and the lapidary arts.

Meeting: On the second Tuesday of each month at 7:00 p.m. in the Van Matre Senior Citizens Center, 1101 Spring Street (Cooper Park), Mountain Home, Arkansas.

Dues: Active adults \$12.00 per year or family membership of \$20.00 per year. Junior membership is \$4.00 per year. Nonresident membership is \$8.00.

The President's Message

Greetings fellow rock hounds,

The New Year is now a month old and we have another month of not-meeting. I will be glad when it is March and we can get together again. It is time to go through our collections and upgrade. If you are like me, you have collected for years and have oodles of material. If you down size now, you will save your non-rock hound family and friends from throwing it out later. (Heaven forbid that this happens!) What better time to sort than the winter month? You might even ask others for help and reward them with treasures you no longer want. Also, The club can always use badge prizes, door prizes, spin and win specimens, and materials for grab

The President's Message continued -

bags. In addition, new members and budding rock hounds are also always looking for specimens they don't have. We could start a section on the show and tell table for you to bring in good specimens you no longer want to give away or sell. How about it?

I cannot deny that I am fascinated with this hobby. As I grow older, my focus is changing and I no longer hunt for "Sharon Rocks" (big ones) though I never refuse when given one. I no longer bring the car home completely full with my finds but now have it loaded with other people's finds as I am interested in having companions more than bringing quantity home. I have shifted my focus and no longer collect just minerals and enjoy an occasional trip to hunt fossils. I find myself socializing more and rock hunting less and less. I am also trying to weed down my collection and continue giving specimens away or selling them. Of course, as I sell, I keep finding myself acquiring more and more items and am always looking for something different. Who knows what Ernie and Madelyn will find in Tucson to tempt me or you? I find myself getting lost again in the quantity sitting in my garage. Someday I will be able to walk through it and not trip over rocks or rock related materials. Whether it will be this year or next, time will tell. I can only attempt to get it under control now because who knows what collecting season will bring?

Happy sorting,
Sharon

There are no minutes, or treasury report, as we had no meeting in January.

Field trip information: There will be a field trip to Mt. Ida for collecting quartz, in conjunction with the Northern Mississippi club on March 10. That way the cost will be less for each to enter the collecting site. We will not have a meeting before then. If you are interested in going, please call **Sharon Waddell** at **417-274-8712**, after 6:00 P.M., and let her know.

Lapidary Tips

IDENTIFYING UNMARKED SOLDERS

There's plenty of ways to mark your sheet or wire solders, but suppose you forgot to mark them and have a couple that you can't identify. The answer is to compare the melting temperature of the unknowns with that of a known solder. What I do is take a thick scrap of copper or nickel and

Lapidary Tips continued -

arrange several solders on it. Ideally, I would have a sample of easy, medium and hard known solders surrounding the unknown solder. Then I heat the plate from the bottom and watch the order in which the solders melt.

INEXPENSIVE ELECTRIC WAX PEN

You can make your own wax pen from a small soldering iron plugged into a light dimmer switch for heat control. Both components are easily found at Radio Shack, a big hardware store or at Harbor Freight. Set the dimmer control just hot enough to melt the wax without producing any smoke.

Look for a soldering iron of around 25-30 watts. File the tip to the shape you prefer or even better get a soldering iron with replaceable tips. Then you can make several tip shapes for different tasks.

For an example of the dimmer and soldering iron, see www.harborfreight.com items # 43060 and # 47887

More BenchTips by Brad Smith are at:

groups.yahoo.com/group/BenchTips/ or facebook.com/BenchTips

Remember that you only have until March to get your membership paid up for 2012. If you haven't paid yet you need to send your check to:

Dorothy Hess

1177 CR 1084

Mountain Home, AR 72653 ---

or have your check ready to give to her, along with your email address, at the club meeting, or you will be taken off the mailing list. If you are getting your Newsletter by USPS, you will have to add money for the mailing and cost of publishing. The price of stamps is going up and we can't keep mailing Newsletters free. See **Dorothy** for the proper amount for postage.

Agate of the month: Mendoza Agate



(Photo courtesy **Doug Moore**)

This agate features bands of bright colors, including red and yellow. Mendoza is the capital city of Mendoza Province, in Argentina. It is located in the northern-central part of the province, in a region of foothills and high plains, on the eastern side of the Andes.

A Celebration of Agates News, January 2012 www.minnesotamineralclub.org.

Editor's Note: If you love agates, as I do, go to the preceding webpage and check out their Newsletter for January and read the article about **Dietrich Mayer**, agate collector, and retired federal judge at the Supreme Administrative Court in Leipzig, Germany. Thank you **Dorothy** for alerting me to this lovely Newsletter.

Once again, remember there will be no club meeting in the month of February. We will meet on March 13 for our first meeting of the year.

We need someone who will be our hospitality chair person and keep a listing of who brings refreshments each month. Would one of you please volunteer for this position? It will be deeply appreciated.

The following copy of a letter from the Baxter County Library was received in thanks of a donated book.

December 12, 2011

Ozark Earth Science Gem, Mineral & Fossil Club
c/o Brenda Johnson
1424 CR 18
Mountain Home, AR 72653

Dear Members:

Thank you for your donation of Agates: Treasures of the Earth in memory of Truman E. Lee. It will be added to our collection with a bookplate placed inside. The following wording will appear on the book plate:

Donated by Ozark Earth Science Gem, Mineral & Fossil Club
In Memory of Truman E. Lee
December 2011

A gift to the Library is a meaningful remembrance. Gifts like yours make it possible for the Library to affect the lives of so many in our community by providing resources that educate, inspire, and entertain. Thank you for your support.

Sincerely,

Gwen Khayat
Librarian

GK/ds

Via *On the Lighter Side* <http://www.ncfbmagazine.org/2011/07/on-the-lighter-side-13/>

An older man went to the doctor complaining of a terrible pain in his leg. "I am afraid it's just old age," replied the doctor. "There is nothing we can do about it." "That can't be," fumed the older man. You don't know what you are doing." "How can you possibly know I am wrong?" countered the doctor. "Well it's quite obvious," the older man replied. "My other leg is fine, and it's the exact same age!"

A man walked into a lawyer's office and asked about the fee. The lawyer responded, "It costs \$50 for three questions." The man then asked, "Isn't that a lot?" "Yes," responded the lawyer, "and what's your third question?" ~Via THE MOUNTAIN GEM, September, 2011

Micrite: I have heard this term used a bunch in recent times when talking about the geology of Middle TN. Now I know why. Micrite is a descriptive term used for the semi-opaque crystals of limestone less than 4 microns in diameter.

Quiz: *What is Mylonitization?* (answer in next month's news letter)

Last Month's Quiz:

What is **Mylonitization**?

Answer:

Deformation of a rock by extreme microbrecciation due by mechanical forces applied in a definite direction without noteworthy chemical reconstitution of granulated minerals.

Contributed by **Tom Kurras**, via Music City Rockette, September, 2011\

**Does Your Society (or Club) Exist?
Embracing the Online World
By Jim Brace-Thompson**

From **CFMS** Newsletter, 5/11 Reprinted from the **AFMS** Newsletter 6/11

Editor's Note: an interesting commentary about rock society/clubs having an online presence to communicate to not only the local membership, but regional as well, as more and more virtual communities become important networks.

While aimed at regional societies, this has relevance to local clubs too. I've read some depressing articles lately. One set was best summed up in an article entitled "Out of the Wilderness." It was about a decline in outdoor activities. Did you know that compared to 1987, Americans spend one-fourth less time engaged in outdoor pursuits such as hunting, fishing, camping, and visiting parks? The National Academy of Science has called this a "fundamental and pervasive shift." The second depressing set of articles revolves around another documented decline: Americans are less likely to be involved in civic and community organizations than at any time in our history. Some folks have lamented our "disintegrating collective bonds," with people less likely to participate in organized groups, such as the PTA or Kiwanis, or even in Friday night poker or bridge games, bowling, or community picnics. One study has pegged both declines directly to the emergence in the 1980s of widespread use of desktop computers and the rise of the Internet. Declines in outdoor activities, for instance, have averaged one percent a year in per capita participation, a decline that mirrors the rise in Internet

Does Your Society (or Club) Exist? Embracing the Online World - continued

usage, videogames, online movie viewing, etc. (And gas prices haven't helped much, either!) We increasingly live in a world where people are insulated and seek entertainment and connections sitting in front of a machine, "friending" people they may never meet via online "virtual" communities. I don't believe we can fight these trends, but it's worth a try, and one way is by embracing rather than fighting that third trend. My own son is a perfect example of our new generation: born in the 1980s and having lived his entire life in an "Internet world," if he can't find it online, it doesn't exist.

By this standard, does your society (or club) exist? I'm always surprised when I turn to club directories of regional federations. Time and again, I find undeliverable outdated email addresses—or I find no email address at all. I find local society web addresses that are inactive. And some active ones aren't much help—some haven't been updated in years, some contain inactive links or incorrect contact info, or no contact info. And a really big thing: some lack photos showing real people having real fun. We can't turn back the clock. With increasing numbers of folks turning to computers and "virtual communities" of interest, what has your society done to build up its electronic profile that would make it vibrant and attractive and filled with info about this great hobby of ours? Is your society's web site easy to find? Is it a "destination" site that's chock full of info and fun images that invite a viewer in? If not, a place to begin is by examining the rules of the CFMS and AFMS web site contest to see the sorts of features that make for an excellent site. Connect your society webmaster to those webmasters who have competed in the contest and connect them to your regional federation contest chair for advice and suggestions. (If you don't have a society webmaster, appoint one—now!) In today's world, the image you project on a computer screen is as important as the atmosphere you provide at your monthly meeting, workshops, field trips, and other events. It's the first step—the doorway in—for so many of today's prospective members. Can we reverse those "fundamental and pervasive" shifts away from outdoor activities and civic engagement? I don't know. But the first step is clear: make sure they know we exist!

Editor's Note - our club has a website, but it needs an update, and we need a Facebook presence- if you are interested in helping out in this area please contact Regina Kaptana at cigmc@comcast.net. CentrIll Gems, September, 2011

I would like to thank everyone for their prayers, calls, e-mails and concerns while I have been convalescing from my total knee replacement. Friends make life worth the living. Knowing you were rooting for me made the pain worthwhile.

Brenda Johnson

**Huge New Dinosaur Trackway Found in U.S.
Dinosaurs "stomping in the mud" left prints pointing to pigeon-toed hunter.**



The newfound tracks suggest *A. atokensis*' feet weren't webbed after all. (Photograph courtesy **Russell Cothren**, University of Arkansas_ **Christine Dell'Amore**, for National Geographic News)

Published October 7, 2011

Fossilized tracks of dinosaurs "stomping in the mud" have been discovered in southwestern Arkansas, scientists say.

Spanning the length of two football fields, the footprints hint that a giant predator was a bit pigeon-toed.

Several species, including the eight-ton *Acrocanthosaurus atokensis*—one of the largest predators ever to walk Earth—and sauropods, or long-necked plant-eaters, left their footprints in the 120-million-year-old Cretaceous limestone.

At the time, Arkansas was a broad mud flat, similar to the hot, dry, and salty shores of the modern-day Persian Gulf—not a particularly "pleasant place," said team leader Stephen Boss, a geoscientist at the University of Arkansas in Fayetteville.

Predators like *Acrocanthosaurus* were likely attracted to the site by sauropods and other prey species, but "what the sauropods are doing out there, who knows?" Boss said.

Though found elsewhere in North America, dinosaur trackways are rare in the southern U.S., he said. Indeed, most people tend to think of dinosaurs dwelling in the "classic" western lands of Colorado and Utah.

Huge New Dinosaur Trackway Found in U.S. – continued

“They don’t think this is a place that dinosaurs once roamed, but it is—and here’s the proof.”

Dinosaur Tracks Reveal Pigeon-Toed Predator?

A private citizen recently found the tracks, which were possibly exposed after a rainstorm scoured away a thin layer of shale. The shape of the footprints and the age of the limestone leaves “no doubt” that they were left by dinosaurs, said Boss, whose new research has not yet been published.

“The photographs seem to make it clear that they are indeed theropod dinosaur tracks,” vertebrate paleontologist Thomas R. Holtz, Jr. said via email. Theropods, which included *T. Rex*, were two-legged predators.

“*Acrocanthosaurus* tracks are already well known from Texas, and we have fossils of *Acrocanthosaurus* and closely related forms from Texas, Oklahoma, and Maryland, so almost certainly it lived in Arkansas, too,” added Holtz, of the University of Maryland.

The tracks were likely left by multiple dinosaurs and must have been filled in fairly quickly—if they’d been exposed for long, the prints would have eroded beyond recognition, team member Boss said.

Set Lasers to “Discover”

Boss and colleagues scanned the trackway with a laser at a high resolution. The scan digitally preserved the tracks so that the scientists could analyze them and “walk across that surface in cyberspace,” he said.

For example, looking more closely at *Acrocanthosaurus*’s 2-foot-long (0.6-meter-long) footprint will help answer key questions such as “What did this thing look like when it had meat on it?” Boss said.

Already, the scans have revealed that the three-toed *Acrocanthosaurus* didn’t have webbed feet—a discovery that wouldn’t have been possible with just bones for evidence.

Researching the tracks digitally may also show scientists precisely how the dinosaur walked. “One of the things that surprised me [from early analyses],” Boss said, “Is the feet turned inward—sort of pigeon-toed.”

Via <http://news.nationalgeographic.com/news/2011/10/111006-new-dinosaur-tracks-arkansas-paleontology-science>

Mineral/Gemstone Translator

By **Andrew Alden**, About.com Guide January 13, 2012



Just as beef and cattle both refer to the same thing but for different purposes, we have minerals that take on different names when they're extra-pretty gemstones. Gemstone users and students of minerals speak different languages! So this freshly updated list of gemstone vs. mineral names is here to serve as an interpreter. The most notable change is that I've linked many of the gemstone names to examples of jewelry that use them.

A few mineral/gemstones are no problem. Diamond is the same thing to the geologist and gemologist. So are apatite, malachite, opal, topaz, turquoise and zircon. (OK, that's not very many.) The reason is that the gemstones got their names first, usually in antiquity, while the minerals were named mostly in the last few centuries. That's when we established, for instance, that sapphire and ruby are both mineralogically corundum.

<http://geology.about.com/b/2012/01/13/mineralgemstone-translator.htm>

New Earth Science System

Many scientists are now starting to use an approach known as Earth system science which treats the entire Earth as a system in its own right, which evolves as a result of positive and negative feedback between constituent systems.

The systems approach, enabled by the combined use of computer models as hypotheses tested by global satellite and ship-board data, is increasingly giving scientists the ability to explain the past and possible future behavior of the Earth system.

For more information about the topic **Earth science**, read the full article at Wikipedia.org.

http://www.sciencedaily.com/articles/e/earth_science.htm

Selected by Aradasa Johnson, Safety-chair

Equipment

RAH-RAH, THE COMPLEATE ROCKHOUND

By Mel Albright - RMFMS Safety Chairman

http://www.amfed.org/a_safetyRMFMS.htm#Equipment

Are you the type of rockhound that has everything you need for your hobby? Do you consider your equipment complete? Are you all decked out with all the gadgets you need? May I suggest another group you may not have? Safety equipment. It's all available at WalMart, at your local hardware store, at the pesticide store, at local stores specializing in safety. Most are inexpensive. All are inexpensive compared to the injuries, losses and deaths they may prevent. A few:

Hearing protectors. These vary from foam plugs for your ears to special plugs that allow you to hear speech to earmuff types like you've seen baggage handlers wear at the airport to super-duper ones that are electronic and cancel out undesirable sound waves.

Masks. There are a great variety of types. The simplest are simple dust masks - with or without eye covering. Then there are solvent masks for use when around solvents. And chemical masks for use when around undesirable chemicals and in spraying pesticides. And special masks for special things - asbestos, carbon monoxide, chlorine, etc. And the most sophisticated which either supply air with them or have tubes leading out of the dangerous zone to an air supply.

Shoes. There are safety shoes. They have a steel cap in the toe which protects your feet from heavy objects hitting them. There are rubber boots to protect you from water and dangerous sludges (or fresh cement). There are hiking boots especially designed to support your ankles in rough terrain.

Fire Extinguishers. There are three general types - no matter what chemicals are inside them. One (Class A) is for use only on fires such as paper and wood. One (Class B) is for use on electrical fires. One (Class C) is for use on solvent type fires. Some fillers are safe for use on more than one class of fire - and will be labeled for more than one class. Best of all is a Class A, B, C extinguisher which is good for any fire. They come in several sizes. Little ones are cheap, but often run out too soon. Get a larger one.

Gloves. Gloves do more than stop blisters. They also protect the hands. Best for hand labor are leather type ones such as the horsehide ones found in farm and garden stores. The other type is plastic or rubber which will protect the hands from solvents, acids and or hazardous materials.

Eye and Face shields. These come from the simple safety goggle (which will go over your glasses, if needed.), to safety glasses (NO, your "safety" glasses from the optometrist do NOT qualify - industrial standard safety glasses are needed.), to face shields which cover both the eyes and the whole face.

Aprons. Cloth aprons protect your clothing from messes. Rubber or plastic ones protect you from chemical burns and the like.

Hard Hat. Approved hard hats are readily available and work wonders when something falls on your head. Cold? Wool liners are available.

The complete rockhound probably has all of these - do you?

March

March 17-18—GLEN ELLYN, ILLINOIS: Show and sale; Earth Science Club of Northern Illinois; College of Dupage, K Bldg.; 425 Fawell Blvd.; Sat. 10-5, Sun. 10-4; free admission; dealers, demonstrators, fossils, gems, minerals, jewelry, rough materials, books, carvings, faceted stones, slabs, displays, live and silent auctions, door prizes; contact John Good, 1891 Windward Ln., Hanover Park, IL 60133; e-mail: esconi@hotmail.com; Web site: www.esconi.org

March 23-25—BRIDGETON (ST. LOUIS), MISSOURI: 52nd annual show; Rock Hobby Club; Machinists Hall Auditorium; 12365 St. Charles Rock Rd.; Fri. 4-9, Sat. 10-7, Sun. 10-5; adults \$3.50, juniors (under 18) \$2, children (under 12) \$1, Scouts in uniform free; contact Vickie Corley, (314) 439-5556; e-mail: sales@butterfliesbygod.com

Dorothy Hess
1177 CR 1084
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