

Bill Alcott
Arkansas Rockhound News Editor
430 Stoney Point Church Rd
Beebe, AR 72012-9688



Arkansas Rockhound News

March 2011

Official Newsletter of the
Central Arkansas Gem, Mineral and Geology Society

CAGMAGS

The Arkansas Rockhound News is Published monthly by the **Central Arkansas Gem, Mineral, and Geology Society**

Colors: Blue and White

Website: www.centralarrockhound.org

Member of: American Federation of Mineralogical Societies
Midwest Federation of Mineralogical Societies

Next meeting is April 26, 2011 at 6:30pm at the Terry Library

Call James (501-568-0315), Dave (870-255-3679) or Obie (501-804-2331) to find out about the field trip plans.

2011 Officers:

President: Mike Austen

steelpony@aol.com

Phone 868-4553

Vice President: Tom Sharp

thom61847@yahoo.com

Past President: Jim Schenebeck

jsjimstone@yahoo.com

Secretary/Treasurer: Lenora Murray

218 Old Hwy 11 South
Hazen, AR 72064
(870) 255-3679

Committees / Chairs:

Programs: Pearl Roth

Library: Ann Austen

Membership: Mike Austen

Field Trips: James Burns

Show Chair: Dave Murray

Editor: Bill Alcott

Club Contact: Ann Austen

Sunshine Chairman: Angelee Peeler

Junior Programs: Obe Willix

Webmaster: Bill Alcott

Time and Location of Meetings:

4th Tuesday of the month (January-November)

6:30 PM Terry Library, 2015

Napa Valley Drive, Little Rock, AR 7221

(Non-smoking) Visitors are always Welcome

Membership Dues \$15 Individual \$25 Family (Yearly)

Mission Statement: The Central Arkansas Gem, Mineral and Geology Society is dedicated to promoting interest in mineralogy

and the related sciences, interest in lapidary and the related arts; to encourage field trips and the enjoyment of collecting and preserving minerals as they occur in nature, and the study of geological formations, especially those of our Natural State of Arkansas. We are a small group of people that enjoy getting together to share our common interests.

2011 Meeting Schedule

Jan 11	Feb 22	Mar 22	Apr 26
May 24	Jun 28	Jul 26	Aug 23
Sep 27	Oct 25	Nov 22	

There is no meeting in December

President's Message



We had a large turnout at our March meeting, and a great program on safety given by Mike Howard. He has also agreed to take people on tours at the State Geology offices in Little Rock. This will have to be done during regular working hours on week days. Anyone interested please let me know soon, we can only go in small groups so more than one trip may be planned.

Club dues are past due, and anyone not paying by next meeting will be dropped from the active email and newsletter list. We don't want anyone missing out on the fun so please get your money in now.

April 9th is the swap meet at Burns Park, do not forget. If you plan on needing a table let me know. If you know anyone outside the club that needs a table, tell them to contact me. Make sure you show up even if you have nothing to sell or trade, it will be fun to see what others have and just relax and visit with each other. This is one of those fun events that you joined the club for, so take advantage of it. Spread the word to any others that are interested in the hobby. We always welcome new faces and potential new club members.

Help is needed at the club table to welcome people, and also with the food and drinks. Let me know if you can help out a few hours. The club also needs donated material to sell at the swap meet and the club show in October. So when you are doing spring cleaning or just trying to make room for the car in the garage, please keep the club in mind. I know you all have stuff that you really do not need, I sure do. This is your club, so make it the best one you can! Things just don't get done without your help. See you at the swap meet.

MIKE

(Editor's note: Obviously, this newsletter didn't get out before the swap meet, Mike's comments were on time when they hit my desk, but my delay made them a bit out of date.)

MINUTES for the March Meeting of Central Ark. Gem, Mineral and Geology Society

The March meeting was called to order by President Mike Austen on Tuesday March 22 at the Terry Library. There were 25 members present.. We didn't have any birthday people present again. Mike announced al the upcoming events. Please check the list printed elsewhere in the newsletter. Be sure to reserve April 9 for our spring swap at Burns Park. Mike Austen and Bill Alcott made flyers for the swap and encouraged club members to post these or hand out to friends and neighbors. Members who wish to have one of the picnic tables at the swap are encouraged to call Mike ahead of time. We still need volunteers to be on the food committee for the swap. Our next regular club meeting will be April 26 at Terry Library. The Boy Scout merit badge committee will meet after the club meeting, and on April 5 at Pat Kissire's to plan the May 14 scout workshop. Pat, Ann ,Angelee and Sharon will need more volunteers to help May 14.

REPORTS: The secretary-treasurer report for February and the February auction report were approved as printed. Our librarian gave out the Silversmithing DVD's for the 2nd consecutive month, and the Mineralogical Records. IF you want some book s or magazines please call Ann Austin

before the meeting so she can bring what you want. Our field trip chair was absent, but Mike Austin mentioned that a few members arranged a trip to Leslie in February once the weather cleared. Due to the swap in March, no trip is planned for that date, but James Burns is trying to arrange a trip to the Jones farm in Magnet Cove for rutile. Let James know if you are interested, and the dates you could attend. Mike mentioned a possible joint trip to Mt Ida for quartz with the Tyler, Texas club, but didn't have a date yet. It would be to a mine that's been closed to collectors for a few years. Let Mike know if you're interested.

Program: Our April program will be by crystallographer Gerald Roth on Micromounts, with a slide presentation of the crystal structures of these interesting collectibles.

Old business: Dues are now due. Cutoff for the newsletter will be April. Please mail dues if you have not yet paid for 2011. (Dues paid at the show last fall count as paid for 2011). Club Show flyers should be out for distribution soon. No new business.

Show and tell: John Peeler showed off his newest wrapped bracelet creations. Pearl Roth was wearing a beautiful ring and necklace that she made completely: all the silversmithing, beads and cabochons. Great job Pearl. Mike Austin had three different unusual rocks from of all places – garage sales! And he mentioned a trip he took with the Tyler cub to Oklahoma for included quartz, but didn't have any available to show off. We then had the raffle. Best of show went to Andy Hendrix, a superb trilobite fossil and Suzanne Roberts, an big clear quartz cluster !

The program on Potential Hazards of a Lapidary was given by our resident geologist Mike Howard. His slide presentation was very informative and entertaining. My summary can't do it justice, but here's what I noted: He reviewed what a lapidary is, then discussed lapidary equipment. The equipment safety reminders that were emphasized included -- ALWAYS wear eye protection, ALWAYS keep material wet, use ear plugs, and a protective apron . Cover your hair, and keep

exposed skin to a minimum. Good ventilation is important, as dust and fumes can be dangerous. IF you need a mask, be sure it's a chemical or particle cartridge type, not just a paper painter's mask. Mike then mentioned all kinds of materials that can give off dangerous fumes and dust: copper bearing minerals including turquoise, malachite and chrysocolla have toxic fumes. Silicates including quartz, amethyst and citrine need to be kept wet. Same for agates and petrified wood. Fibrous silicates such as tigereye are particularly dangerous as they have asbestos. But all silicates can cause silicosis if you breathe the dust ! So ventilate well, keep things wet, and wear a mask .Shells, including mother-of-pearl and puka shells can give off a toxic gas wet or dry , so be sure to ventilate. Cinnabar contains mercury, and marcasite reacting with water gives off sulfuric acid, so both definitely need a mask or super ventilation. Last reminder: leave the dirty lab coat in the rock shop, and NEVER , NEVER, pour the slurry down the drain! I can't possibly cover all the neat tips and anecdotes Mike added. But he reminded us how dangerous our hobby can be if we don't use caution and common sense. Thanks, Mike for a great program !

Respectfully Submitted,
Lenora Murray,
Secretary-Treasurer

Members' Birthdays coming up

MARCH

Jim Schenebeck
James Burns
Mike Harrison
Edward Steele

APRIL

Jerry Moore

Happy Birthday!

Upcoming Events:

Apr 23-24 Memphis, Tn
(See the flyer in this newsletter!)

May 21-22 Crater Of Diamonds, Ar

June 10-12 Park Hills, Mo

**Oct 1-2 Jacksonville Ark
CAGMAGS Annual Rock and Gem
show**

Cabbing Tip

In the winter I am one of those guys who always has splits at the top of my finger tips. Some days when I want to cab, the thought of my fingers brushing against the diamond wheels prevents me from cabbing. I also do not use dop sticks, I prefer to work the stone with my fingers, it is more comfortable and gives me a sense of the stone. So I decided to try those rubber finger tip things people use when filing or perhaps sewing. The ones I found in a stationary store are called Machine Quilting Finger Grips; they sell for about 25 cents each...and a pack of a dozen for less than \$3.00. They take a little getting used to, but they do work, and they allow me to work on days when I might not have taken a chance. They may also help if you have just had your nails done, (I assume this would apply to the women?) and want to keep from scratching your nails. One thing, as the stone is almost done and the polish is getting close to a finish, the stone definitely slips out more often, so be careful towards the end. Hope this helps, give it a try.

Rich Kelly – Owner of South Fork Mining, Contra Costa Mineral & Gem Society Member

Using the Flex-Shaft

by Pam Lombardi, Canaveral GMS

The flex-shaft is one of the most useful and versatile tools to have in your shop. It's essential for drilling, carving, sanding, polishing, and engraving stone, metal, glass and even wood. Since the hand piece is a safe distance from the motor it can be water cooled. Stones and metal can get hot! Holding your work under water protects your fingers and can keep your stones from over heating and shattering. The possibilities grow with optional attachments such as a drill press, milling table, hammer (a mini jack hammer!) for bending bezels, a mini wax lathe and many others. Just look in your jewelry supply catalog or website. The Allset Setting Guide System is a big help with cutting seats for pave', prong, cluster and channel settings. The most popular is made by Foredom. There are several motor choices available ranging from 1/10 hp to 1/3 hp, reversible or non. Reversible is preferred because it lets you back out of a hole and running in reverse tends to throw debris away from you rather than into your face, but keep in mind that most fluted burrs and drill bits can only be run in the forward direction. You will need a way to control the motor. A foot pedal frees your hands to hold the hand piece and your work while varying the speed with your foot. I also use a dial control when I need a steady consistent speed. The most common hand piece is the Jacob's chuck type just like your power drill has and uses a chuck key to open the jaws to accommodate drill bits and mandrels from 1/16 inch to 5/32 inch. Also available are quick-release, collet and others for special applications and dedicated usage. You can get started with a few drill bits, an assortment of burs, some polishing and cutoff wheels. Choosing the right bur for your project can be a daunting task. The book "Making the Most of Your Flex-shaft" by Karen Christians is a wealth of information. It explains the many types and shapes of burs as well as alloys they come in and how to get the "best bang/buck ratio. For an excerpt from this book see:

<http://www.ganoksin.com/borisat/enam/flexshaftintroduction.htm>. There are some excellent free online videos produced by Foredom Inc. at this website:

<http://www.blackstoneind.com/foundations/store/storepage.asp?page=Video>. Here you'll find: Introduction and Proper Set-up, Safety Guidelines, Handpieces and Accessories, Maintenance of Shafts & Sheaths, & Motor Maintenance.

--adapted from Canaveral Moonstone, 08/2007 via Hounds Howl, 6/08 via **ROCK COLLECTOR Oct 2008**

Boiling Water Makes Rocks

By Peter C. Keller

Water is a solvent if it is hot enough or acidic enough. In the acid scenario, rainwater meets carbon dioxide, seeps down, encounters sulfides and bingite, sulfuric acid. This liquid foams and dissolves minerals and puts in motion mineral substances to travel and interact with other substances. Malachite is formed this way. The bumps on turquoise indicate dissolved minerals flowing in cool water. In the hot water scenario, rainwater seeps into the ground and goes deep enough to be heated by magma or already boiling water. Now heated, this water moves back up by a process of steam and condensation – dissolving minerals and redepositing their constituents along the way. Cooled, the water sinks, encounters again the heat source, moves upward, (and) repeats the dissolving and depositing. This repetition gives agate its layered look. Amethyst crystals can form once the silica content of the water thins out sufficiently. Perhaps the oldest, certainly for jewelers the most fortuitous, case of raindrop to rock is the formation of opal, in yet another scenario. In a dry desert area, the rainwater goes down through permeable rocks rich in silica. The down going water carries silica to the underground water table, raising it. Being raised, it spreads out to fill fissures and such. The rain stops, the dry desert eventually drops the water table down by evaporation, but the ledges and fissures are richer by evaporation. When the silica-to-water ratio is just right, spheres form (bubbles). These spheres are what make opal (...) opal. With further evaporation, the spheres become gelatinous, eventually harden, and like adding ball bearings to a cup, they layer the cavity in an orderly fashion. Water is trapped between the spheres. The orderly arrangement of the spheres diffracts light (segments and moves it around). This light movement, in combination with the varying amount of water inclusions, gives the light play of precious opal. Water here acts as a sort of music to the spheres. Yes, water is a solvent. Find enough opal and many of your financial problems will be solved.

From The Opal Express, 2/00, via Blue Agate News, 10/08 via

FOR THE KIDS

Sandstone Formation

Sandstone is formed through the processes of weathering, transport, deposit, burial, and lithification. It is made up of small (between .0625 mm and 2 mm) particles of sediment that are bound together by a cement.

Materials:

- coarse sand
- two paper cups
- water
- Epsom salts

Procedure:

1. Pour about one inch of coarse sand into a paper cup.
2. Pour about one inch of water in a second paper cup and add Epsom salts slowly while stirring until no more will dissolve.

3. Pour the Epsom salts solution over the sand in the cup. Stir well to mix.

4. Place the mixture where it will be undisturbed for several days until it is dry.

When it is dry, carefully tear the paper cup away from the sand.

Use a magnifying lens to examine your "rock."

1. What is holding your rock together? Where are the Epsom salts?
2. Compare your rock to other sandstone samples. Which is harder? Why?
3. Try making your sandstone in a mould. Use one that is flexible, or may be cut away

From ROCK VEIN, Apr 2008

Memphis Archaeological and Geological Society presents the 32nd Annual
Memphis Mineral, Fossil, & Jewelry Show

For one weekend a year we invite you to experience

THE EARTH WIDE OPEN

Agricenter International, 7777 Walnut Grove Road, Memphis

Sat. April 23, 9—6 Sun. April 24, 10—5

Adults \$5, 12 & under \$2, scouts in uniform free

Portion of admission benefits the Ronald McDonald House Charities® of Memphis

- 30 Dealers from Across the U.S.
- High Quality Minerals and Fossils, Lapidary Arts, Gems, Hand-crafted Jewelry, Beads, Petrified Wood, Geodes, Crystals, Rock Art, Carvings!
- Earth Science & Archaeology Educational Exhibits & Live How-to Demonstrations.
- Professional Speaker series featuring geological, archeological, and paleontological topics.
- A Grand Prize and Several Door Prize
- Featuring the RockZone Family Entertainment Area with Gem Dig, "Rocks Around the Clock", Panning for Gems, Paint a Pet-Rock by our partners at the Memphis Botanic Garden, Scouts' Geology Merit Badge info and More!

www.TheEarthWideOpen.com • 901-274-7706

*** AND THE WINNERS ARE: ***

Best of show went to Suzanne Roberts, a big clear quartz cluster and Andy Hendrix, a superb trilobite fossil!



2011 CAGMAGS ROCK SWAP



The Pink Palace And Fossils

Driving through Tennessee recently, Pat and I decided to visit the Pink Palace in Memphis. The Pink Palace is a museum. Hard to believe I didn't take a picture of the outside. Clarence Saunders, an entrepreneur and founder of the Piggly Wiggly supermarket chain, began building the house in the early 1920's as his dream home on a large estate. The name comes from the mansion's pink Georgian marble facade. Before Mr. Saunders lived in or furnished his mansion, he lost his fortune in a stock battle and declared bankruptcy. The mansion was later bought and donated to Memphis in 1930 and eventually converted to a museum. The current museum includes an IMAX theater and a planetarium. The permanent exhibits include fossils, a mineral collection, the hand-carved Clyde Park Miniature Circus, Civil War artifacts and history of the Memphis region exhibits including a full scale grocery store and a pharmacy from the turn of the century. We were not looking for anything specific but did find much of interest.

The mineral collection on display has some very nice specimens with several good pieces from the Illinois fluorspar district. However, it is aggravating to see a beautiful fluorite only labeled "Fluorite" and "Illinois". The collection appears to be representative of the world but with only a country or state given for the location. There was an excellent specimen of rutile in pyrophyllite matrix labeled "Rutile" and "North Carolina". Now, I love North Carolina and I know of some excellent rutile specimens found in that state. But this specimen cried Graves Mountain, Georgia. Maybe it is actually from Chubb Mountain, North Carolina, and if that was on the label I would say "this is interesting, I need to read more about that location." I dislike poor labeling. Now that I doubt the label, it could even be from Parsons Mountain, South Carolina or the Champion Mine in California for all I know. Of course you should see the mineral collection if you are there anyway. I am happy to say the Pink Palace fossil labels had state, county and rock formation at least. A quarry or site name on some fossils. The fossil collection is a good reason to visit the Pink Palace. There were some specific location exhibit groups such as Coon Creek, TN and Frankstown, MS. What got me interested in writing this

was the Frankstown exhibit. It brought back some old memories. When US Hwy 45 was being widened to a four-lane from Corinth to Tupelo, MS, they built a bypass around Frankstown that cut a sand layer packed with sharks teeth and vertebrate teeth and other bones from several vertebrates. The fossils were so abundant that people in Frankstown would go over after church, still in their good cloths and pick up sharks teeth. We were living in Tuscaloosa, Alabama at that time and of course went over with the kids to collect. So, if you find yourself in Memphis then stop for a break and visit the Pink Palace. It is definitely worth the time.

By Randall Mills / From ROCK LORE Feb 2006

(editor's note: Pictures and one paragraph describing them were omitted from this article, but if you want more information, go to <http://www.memphismuseums.org>)

AQUIFLUX Available

For any of you who are watching the silversmithing course that's in the club library, I have an offer:

Don Norris, the creator of that course, highly recommends a particular brand of flux – Aquiflux. I had some problems finding it in affordable quantity, and finally bought a gallon of it from a place in Utah. If any of you want some, but don't want to jump in on a whole gallon of it, bring an 8 oz bottle to the next meeting and I'll fill it for \$3.00. Let me know before the meeting if you're interested so I don't forget to bring it!

mister.bill@starband.net or (501)231-2030