



# ROCK-N-ROSE



NEWSLETTER OF THE EAST TEXAS GEM & MINERAL SOCIETY



## Coming Shows, 2011

Oct. 21 - 23  
AUSTIN, TX  
Austin G&MS  
Palmer Event Ctr.

Oct. 29 - 30  
GLEN ROSE, TX  
Paleo. Soc. of Austin  
Somervell Expo Ctr., Hwy 67

Nov. 05 - 06  
AMARILLO, TX  
Golden Spread G&MS  
Amarillo Civic Ctr.  
Exhibition Hall

Nov. 05 - 06  
MIDLAND, TX  
Midland G&MS  
Midland Ctr.

Nov. 11 - 13  
HUMBLE, TX  
Houston G&MS  
Humble Civic Ctr.  
8233 Will Clayton Pkway

Nov. 19 - 20  
MESQUITE, TX  
Dallas G&MS  
Resistol Arena

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## VICE-PRESIDENT'S MESSAGE

First, many thanks for the support and help of my fellow club members as I attempt to step in for our current president who has had major schedule changes at his job which prevented his attendance. We all missed Rip and if you did not make the October meeting, you all missed a fun and beneficial club auction, one of my favorite events of the club. I would like to encourage all members to make time to attend our monthly gatherings -- we welcome your input and ideas to improve our club, especially field trip ideas, and its always fun to visit with everyone.

As you will see in the minutes, our club will now be listed on the national website for National Fossil Day which was October 12th. Although we did not get our info submitted in time to get our club listed this year, next year we will be listed on the National Park Service site as an avocational partner for National Fossil Day. There are some great resources there (mostly free!) for use with kids when teaching about our hobby. Check it out!

Election of officers comes up soon and we have some vacancies. Please consider getting more involved -- you won't regret it! See you in November!

Becky Whisenant, VP



## NOTE FROM THE EDITOR

It is October, we make our first request for dues to be paid for the 2012 membership year this month. We appreciate when dues are paid early or on time. However, if we have not received your membership dues by February, you will not receive a March newsletter. If you are receiving the newsletter via E-mail, please do not forward it to non-members except as a one time courtesy. Our membership dues of \$10 per year for adults and \$2.50 for children are very reasonable. They are less than the membership dues for most other clubs in the state of Texas.

Thank you to all those who have been arranging field trips recently, however we still NEED a regular field trip chairman. Please, if you have any interest in serving the club in this way, volunteer today! In the mean time, if you have any ideas or details for a field trip, bring it up at the next meeting you attend. SB



## OCTOBER MEETING MINUTES

The meeting of the East Texas Gem & Mineral Society on October 3, 2011, was called to order at 7:00 p.m. by Vice President Becky Whisenant, filling in for Pres. Rip Criss. A motion was made by Sylvia Rainer, 2nd by Jeri Kitchens, to accept the minutes of the previous meeting. Passed. The treasury had no changes and a full report will be given next month. Under old business Laura Wilson reported that anyone interested in the Topaz trip coming up on the first Saturday in February should sign the sheet on the front table. Interested persons can contact Laura for more information. She reported that although topaz may be scarce, there should be plenty of beautiful scenery, tourmaline and various other minerals and possible artifacts.

Club member Bill McRoberts reported to the club on his and wife Sandy's attendance at the recent docent meeting at The Discovery Science Place. He urged everyone to consider becoming a docent and donating a few hours a month to this wonderful children's education facility where we meet. He explained what is involved and had brochures available to anyone interested.

Under Field Trip Reports, Don Campbell reported on the October 1st club trip to Midlothian, TX. Twelve people attended, found shark teeth, pyrite, concretions and a fossil fish, and all agreed it was a "cool" trip. There were photos available to look at.

Laura Wilson announced she is now a Texas Master Naturalist and is planning a possible joint trip with our club and the Master Naturalists to Lake Nacogdoches or the Caddo Mound area near Alto. Don & Laura will have details at the next meeting.

Under new business, Becky announced that October 12th is National Fossil Day and that our club can be listed on the National Park Service website as a partner group. A motion was made by Jeri Kitchens, 2nd by Sylvia Rainer, to send in the club's info to have us listed on the national site. Becky further advised that the NPS provides free workbooks for children and they are great to use if you do classes with children on rocks and fossils. She had a sample to see.

Sherry Breedlove asked for volunteers to give a lesson on rocks, gems, minerals and our hobby at Chapel Hill School in November.

The club broke for refreshments, there being no door prize drawings, then reconvened for this month's program which was our annual auction. As usual, everyone had a very good time and most of us left with new treasures. Meeting adjourned.

Respectfully submitted by impromptu secretary Sandy McRoberts.



## NOVEMBER MEETING PROGRAM

At the November meeting, gemologist Richard Armstrong will make a presentation on the computer software program "Gem Tools Pro". This moderately priced software is an almost complete data base on gemstones. Richard is a contributor to the program. The program aids in identifying gemstones and has a number of tools useful for the lapidary, jeweler, gemologist and anyone serious about gemstones. The library of photographs is worth the price of the software. Richard will demonstrate what the software can do and how you can use it.



## ASH GROVE CEMENT QUARRY FIELD TRIP

By Susan Burch

A Dallas area Gem and Mineral Society along with the Dallas Paleontological Society joined with 12 members of the East Texas Gem and Mineral Society to participate in the Ash Grove Cement Quarry field trip. The October 1st day dawned crisp, the chill making me wish I had brought along a jacket at least. However, after joining with the rest of the group gathered, the anticipation out-weighed everything else. Including the wild critter who was visiting the main parking lot as the first collectors arrived.

The quarry generously allows collecting once or twice a year to a few select clubs, although my mother Mary Owens and I had not had a chance to go before. We were given the drill of where to collect and what to keep away from by Sean Harris the Quarry Supervisor, including the warning there may be rattlesnakes, releases were signed. Several examples of the specimens that could be found such as sharks teeth and pyrite clusters were shown.



A long trail of cars followed Mr. Harris down to the parking area near where we would be collecting. After parking, the large paradise of collecting was pointed out. A ridge of boulders, a huge hill of what looked to be debris scooped from the pit or down into the hollowed out basin were our main choices. It looked a little like a disturbed ant hill as we left our cars to find that perfect spot to collect. Some came across finds in the parking area, while others trekked to the far reaches of the basin to find the exposed Austin Chalk layer (Cretaceous). Becky Whisenant told me this layer yields shark and fish teeth, the occasional skeleton and small ammonites. Along with these you can find calcite concretions, pyrite clusters as well as reddish tinted pyrite nodules in the surrounding layers at the quarry. Continued on page 4.



Above: A pyrite cluster at the upper right, a shark's tooth and an ammonite imprint on a red rock found by Pete Keiser.

At left: Those attending the field trip are pictured from left to right: ETGMS member Jeri Kitchens, John Christian of the Dallas Paleontological Society, ETGMS members Mary Owens, Colleen Hayes, Susan Burch, Don Campbell, Jeri's friend Steve Payne, members Lester Langston, Becky Whisenant, Pete Keiser and Nicole Langston.



When walking toward the collecting area from the car, I found a large portion of an ammonite type shell. The big hill yielded a large selection of small pyrite clusters along with beautiful 'dogtooth' calcite concretions. On the other side of the basin Don Campbell showed me which layer to look in for shark and fish teeth. Loaning me his extra hammer, I added several small teeth to my collection.

The sun started getting quite warm as we made our way out of the basin around 11 a.m., but overall the weather was perfect. No one wished to leave the collection site as Mr. Harris blew his horn to let us know it was time to go.

After getting back to the cars, we all met at the main parking area to have show and tell.

Although many found great pieces including some unusual shark teeth and all in our club who attended added to their collections, the find of the day I think all agreed was made by Lester Langston. As he was making his way back up the steep incline, he stopped to rest and found an al



most perfectly formed fossilized fish. None were able to identify it on site, so pictures will be sent to other societies and universities hoping to find a proper name.

After sharing a snack, some of the club members went on to another collecting site in Grand Prairie. Overall I had a great time and hope to be able to go back again the next time the privilege of this field trip is offered.

Photo, above: Lester Langston and daughter Nicole pose with their large fossilized fish find.  
At left: A close-up of the fish with a centimeter gauge.



#### NOVEMBER 19 FIELD TRIP

We have a field trip planned for Sat., Nov. 19th to Lake Nacogdoches to look for fossils. We will gather at 9:00 a.m. at the Dairy Queen in Alto and caravan to Lake Nacogdoches @ 9:15 a.m. It will be a half day field trip.



## Opal By John Zentz for Star-O-Lite

*October's child is born for woe, And life's vicissitudes must know, But lay an opal on her breast, And hope will lull those woes to rest.*  
[Author unknown]

The traditional birthstones for October are tourmaline and aquamarine. The modern birthstones are tourmaline and opal. Since our unknown author chose opal for October's child, I will start there. Technically, there are many forms or types of opal. Some categories are boulder, black, light, precious, common, patch, resin, synthetic, transparent, peacock, harlequin, flame, fire, and even opalized fossils. It is a usually transparent or translucent mineral consisting of hydrous silica. It can occur in almost any color but is most often pinkish white. While chemically similar to quartz, opal is softer and less dense and usually contains from 3% to 10% water. It forms at low temperatures from silica-bearing water in fissures and cavities of any rock type. Unlike many minerals, it is not found in dense concentrations, but instead is found in small quantities dispersed over large areas.

Sometimes an opal will have regularly packed tiny spheres of amorphous silica arranged in a way that causes light to reflect and refract into beautiful colors resulting in what we term —precious opal. These spheres are only a few tenths of a micron in diameter. For comparison, a human hair is about 100 microns wide, and a red blood cell is about eight microns in diameter. The tiny spheres are small enough to interfere with the wavelengths of light which is how they produce the remarkable play of colors we love so much.

While some types of opal are found in many places around the world, the vast majority of precious opal is found in only a few places, primarily the Coober Pedy and Andamooka fields in southern Australia. Australian opal did not reach the world's markets until the very late 1800's. Prior to that, precious opal was very rare indeed. Throughout history opal has been regarded as a lucky stone. Some believed it enhanced psychic abilities, held magical powers, improved eyesight, amplified desires, protected against disease, and even bestowed the gift of prophecy. But, everyone believed it was a lucky stone, at least until the late 18th and 19th centuries when it fell out of favor as it became associated with famine and disease. Walter Scott's novel *Ann of Geirstein* and a few other fiction works of the time caused some people to think of opal as an unlucky stone. Fortunately, this is no longer the case. Opal has regained its rightful place.

An opal requires special care by its owner. It should never be placed in an ultrasonic cleaner, or exposed to acids or solvents. Clean an opal with mild soapy lukewarm water and a very soft toothbrush. It should also never be exposed to very cold or dry conditions. Prolonged exposure to strong light can even cause the water to dry out and the stone to crack or craze. Craze is the formation of tiny surface cracks in a pattern similar to that seen in dried mud. Many people believe opals should be worn frequently so they can absorb moisture and oils from the body to help keep them hydrated and prevent crazing. However, wear them carefully. Most references classify opals with a hardness of 5 ½ to 6 ½ Mohs, but some can be as soft as 4 ½.

More so than most gemstones, precious opal is unforgiving of its cutter. To get the most intense fire the cutter must remove intervening translucent material without removing the source of the fire. Once cut, the fire is lost forever. Knowing when to stop comes only from experience for which the cutter must pay dearly. It takes a practiced, bold and steady hand to unveil one of nature's most beautiful displays so the world can appreciate it. October's child owes her wondrous treasure to both nature and a talented craftsman.

From Star-O-Lite 10/2010; via Stoney Statements 10/11.

From Star-O-Lite 10/2010; via Stoney Statements 10/11.

From Star-O-Lite 10/2010; via Stoney Statements 10/11.





## TID BIT

## BORNITE

Named for the Austrian mineralogist, Ignas Born. It is one of the most important ores of copper and certainly among the more colorful.

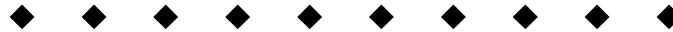


Its colorful nickname, “peacock ore”, is a reference to the intense multicolored (but primarily purple) iridescence that is developed on fracture

surfaces on exposure. Less tarnished specimens are bronze-colored with metallic luster.

Bornite is a copper iron sulfide with a hardness of 3.

This from the encyclopedia of Gemstones & Minerals by Martin Holden, from the Northeast LA Gem & Min. Soc.; Via SCFMS Sept./Oct. issue.



**Great for your pebble pup now or to prepare for the “Wheel of Fortune” for the show!**

## How to Make Rock Bugs and Spiders

**Supplies:** tumbled stones, pipe cleaners, glue (a multipurpose cement such as Bond 527), white and black acrylic paint, and toothpicks.

Using the white acrylic paint and a toothpick, paint the white of the eyes on the stones. Use the black paint to paint the pupil of the eye. If you prefer, those cute wiggly eyes may be used. The legs for the spider will number eight so use two of the chenille stems, cut them in half. Gather up these four pieces and twist the wire in the center about three twists. The bugs will end up with four legs (although real bugs have six legs, duh) so use only one stem and cut it in half and then twist the two pieces in the center at least three times.

Bend the ends of the stems to simulate feet. The gluing is the last step. Place the tumbled stone on the center of the stems where the twist is located and estimate where the glue needs to be applied so that the stems and stone will be glued together, without having glue exposed. Apply the glue to this area and center the stone and set upright so that the weight of the stone will help the glue adhere to the stone and the stem legs. Complete drying takes 2-4 hours. Have fun!

From: the RockCollector 6/09; Stoney Statements 07/10.



## FOSSILS

By Alice Copeland

Fossils are the remains, prints, or other indications of former plant or animal life found naturally buried in rock. Fossils show that many thousands of kinds of plants and animals, common in the past, no longer exist, and that most of those living today resemble strongly the fossil forms found in relatively recent rocks. In addition to telling the details of life in the past and the story of such unique animals as giant dinosaurs and titanotheres. Fossils also tell of past climates. Colonial corals in Greenland rocks attest to warmer conditions in the past than today, and imprints of fir and spruce in unconsolidated clays near the surface record the penetration of glacial cold far to the south. Fossils are also used to determine the marine or fresh-water origin of rocks.

The occurrence of fossils is both rare and common. Only a tiny fraction of the total number of living things has ever been preserved as fossils, and yet certain layers of rock or strata are made almost entirely of shells, teeth, plant remains and even of bone.

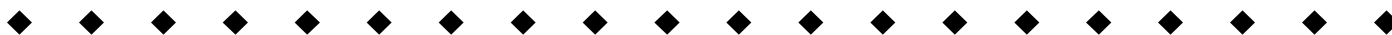
Fossils are preserved in many ways. The simplest is the intact preservation of the hard parts of a plant or an animal. Wood, bone, teeth, and other hard parts are preserved intact for relatively short periods.

In another type of fossilization, buried plants or animal materials decompose, leaving a residual film of carbon behind. This may mark the form of a leaf or of some simple animal.

On a larger scale this process is responsible for our great deposits of coal. Sometimes buried material is gradually replaced by silica and other material like calcite, dolomite, or pyrite from solutions which permeate the rock in a process called petrification.

These replacements form another very common type of fossil. Probably the most spectacular of all replacements is that of wood by agate or opal as a result of the action of hot, silica-bearing waters. This forms petrified wood. The replacement may be so minute and complete that even the details of cellular structure are preserved. The best-known examples are preserved in the Petrified Forest National Park in Arizona.

Source: Rocks & Minerals, by Herbert S. Zim & Paul R. Sheffer; via SCFMS Sept./Oct. issue.



### BENCH TIPS By Brad Smith

#### HOMEMADE WAX TOOLS

Save your used X-Acto or scalpel blades for utility work on the bench. They're wonderful for delicate wax work. Use a cutoff blade or a grinding wheel to shape the blades to what you need. For instance, you can carve away excess metal on the spine to make yourself some narrow carving knives that do a great job of detailing small areas of your waxes.



#### RING SIZE VARIATIONS

The numerical sizes marked on ring gauges and ring mandrels are often not the same across different manufacturers. If you're using a ring gauge to measure a customer, be sure to compare the markings on the gauge with the markings on the mandrel you use to make the ring. They may not be the same.

Also, you may have to adjust a little for the width of the ring shank. If you're making a wide shank ring, the ring generally has to be a little bit larger in diameter than the ring gauge size in order to get a comfortable fit.

More BenchTips by Brad Smith are at [groups.yahoo.com/group/BenchTips/](http://groups.yahoo.com/group/BenchTips/) or [facebook.com/BenchTips](https://facebook.com/BenchTips)

**CLUB OFFICERS**

**PRESIDENT:** Robert (Rip) Criss 903-922-2856  
P.O. Box 340  
Oakwood, TX 75855

**VICE PRESIDENT** Becky Whisenant 903-795-3652  
3786 CR. 2107  
Rusk, Texas 75785

**TREASURER:** Jeri Kitchens 903-245-8822  
2533 Chelsea Dr.  
Tyler, TX 75701

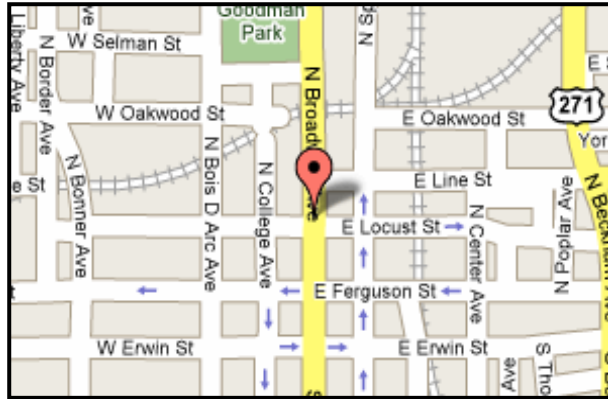
**SECRETARY:** Penny Hawkins 903-586-4463  
134 CR 3151  
Jacksonville, Texas 75766

**MEETING PROGRAM CHAIRMAN:** Don Campbell 903-566-6061  
3319 Omega Dr.  
Tyler, TX, 75701

**FIELD TRIP CHAIRMAN:** **Your name could be HERE!!!  
Volunteer Today!**

**SHOW CHAIRMAN:** Keith Harmon 903-581-4068  
8316 Oxford ST.  
Tyler, TX 75703

**CLUB ADDRESS:** East Texas Gem & Mineral Society  
P. O. BOX 132532  
Tyler, TX 75713-2532



**THE EAST TEXAS GEM AND MINERAL SOCIETY MEETS ON THE FIRST MONDAY OF EACH MONTH, UNLESS THAT DAY IS A HOLIDAY, THEN THE MEETING IS MOVED TO THE SECOND MONDAY. WE MEET AT THE DISCOVERY SCIENCE PLACE, 308 NORTH BROADWAY, JUST NORTH OF DOWNTOWN TYLER, TEXAS. MEETINGS BEGIN AT 6:45 P.M.**

**NOTE TO EDITORS**

Feel free to use contents and graphics for non-profit newsletters. Give credit when and where due.

**Purpose of the East Texas Gem & Mineral Society**

Is to promote the study of geology, mineralogy, fossils and the lapidary arts.

The public is always invited to attend all club meetings.

Annual dues are \$10.00 for adults and \$2.50 for juniors. Our newsletter print is slightly larger than normal by request of our members.

Please send any info or articles to be included in the newsletter to the Editor by the 15th of the month. Please keep your address, phone and email information up-to-date, so that we can get the newsletter to you in a timely manner. Out-of-date information costs the club time and money in returned newsletters.

Thank you... SB



**EDITOR:** Susan Burch  
20427 US. Hwy 69 S.  
Alto, TX 75925

**E-Mail:** rockroseeditor@hotmail.com  
**Phone:** 936-615-5397