



ROCK-N-ROSE



NEWSLETTER OF THE EAST TEXAS GEM & MINERAL SOCIETY

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TYLER, TEXAS ISSUE 8

AUGUST 2013

Coming Shows, 2013

August 24-25
Jasper, TX
Pine Country Gem & Mineral Soc.
Events Center

August 24-25
MOUNTAIN HOME, ARKANSAS
Annual show
Ozark Earth Science Gem, Min. &
Fossil Club
Cooper Park; Van Matre Senior Center,
1101 Spring St.;

September 14-15
Arlington, TX
Arlington Gem & Mineral Society
1010 Event Center

October 18-20
Austin, TX
Austin Gem & Mineral Society
Palmer Events Center
900 Barton Springs Rd.

November 8-10
Humble, TX
Houston Gem & Mineral Society
Humble Civic Center

The President's Message was not available at time of printing.

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THE LAPIDARY/JEWELRY SUBGROUP REPORT

The July 13 meeting the Lapidary/Jewelry Subgroup took place at the home of Terry Roberts with seven members attending. The members discussed an agenda for the August meeting and then talked about other lapidary issues. The August meeting will focus on cab making to give everyone an opportunity to become familiar with the process and then will move on to a demonstration/instruction of wire wrapping.

While Kinney Polve and Linda Moore worked on grinding and polishing cabs, Terry Roberts demonstrated the use of an 8-inch trim saw to cut cab blanks from a rock slab. The other members discussed their experiences with the hobby, including rock tumbling. Bill Faulkner announced to the group that Bruce Walker rewired the club's 18-inch rock saw that morning and it is running. The only problem encountered was the gear box that moves the feed table forward while cutting a rock. The gears appear to be frozen and may need to be replaced.

The August 10 meeting of the L/J subgroup was at the home of Bill Faulkner. Seven members and three visitors attended the meeting. Linda Moore completed her tiger iron cab and Terry started discussing the various tools needed for wire wrapping, as well as places to get them. This session was a beginning lesson in wire wrapping, so the group started with learning how to prepare and use binding wires to hold the wrapping wires together. Terry also showed the group how to measure the circumference of a cab using masking tape and how to mark the locations of the binding wires on the wrapping wires. Several of the members had prior experience with wire wrapping and offered tips that they use in their work. The meeting ended about 4:30 and the members talked about their collecting experiences and other rockhounding subjects.

New member, Elsa Jerger, volunteered her husband to work on the gear-box for the 18-inch rock saw. Bill disconnected the gear box and Elsa took it home with her for repairs. A heartfelt thanks to Elsa and her husband for helping the subgroup get the club rock saw working again.

The September 14 meeting will be at the home of Terry Roberts starting at 2:00 pm. We will continue the demonstration/instruction on wire wrapping and also demonstrate the use of a 14-inch rock saw. A cab machine will be available for anyone who wants to work on a cab.
Terry Roberts



AUGUST MEETING MINUTES



Meeting called to order at 6:55 p.m. by VP Terry Roberts.

New members, Brad Martin and his son Franklin were welcomed

Motion made to approve minutes as printed. Kinney Polve moved the minutes be accepted, Bill Faulkner, Penny Hawkins and Pete Keiser seconded.

Bill gave Treasurer's Report. A copy is available for membership to view during meeting.

Terry and several members reported on the field trip to the Perot Museum in Dallas. Approximately 20 members attended.

No new field trips are planned

Sub Groups

Mineral and Fossil group had no meeting in July. The next meeting will be the third Thursday in August.

The Lapidary and Jewelry group meets the 2nd Saturday. Next meeting will be August 10 at Bill Faulkner's home. The group will finish up the work on cabs and will start wire wrap.

Announcements

The South Central Federation show will be held this year on August 17 in conjunction with the Ark-La-Tex Gem and Mineral Society show in Shreveport. Don Campbell and Susan Burch will be delegates.

Volunteers are needed to present programs for future meetings.

The end of the fiscal year is approaching and elections will be held during the September meeting.

Following are people interested in serving.

President – Kinney Polve

VP – Terry Roberts

Treasurer – Bill is willing to serve but would prefer to hand the position off to another.

Secretary – open

Service will start with the October meeting

Due to the holiday, the September meeting will be held on 9/9

Dues are due and elections will be held at this meeting.



BACKYARD ROCK AND EQUIPMENT SALE

September 21, 2013

**Where: Home of Keith Harmon
9116 US HWY 84 West
Rusk, Texas 75785**

**What: About 40 tons of rough, saws, grinders, tumblers, vibratory laps
and more including about 10 tons of new rough material**



FIELD TRIP TO THE PEROT MUSEUM

By Susan Burch

The field trip to the Perot Museum of Nature and Science Saturday July 27, was attended by 18 members and guests. After meeting in front of the museum, most of the group gathered for a picture inside the main lobby which houses a 35-foot *Malawisaurus* fossil.

The group split up to enjoy different aspects of the museum. However, most convened in the T. Boone Pickens Life Then and Now Hall which contains prehistoric fossils, many found in Texas. This includes a collection of various species of mosasaur, found primarily in the area east and south of Dallas. The hall also showcases an alamosaurus replica skeleton. The original specimen was 85 feet long and out of necessity the 300 bone replica need be made a bit smaller. There is also a 23 foot section of the actual fossil nearby for comparison. Spending an hour in this 14,000 square foot hall did not allow all 144 exhibits their due. But time and energy encourage the move to the main draw of our field trip, the Lyda Hill Gems and Minerals Hall.

As you enter the gem and mineral hall, the walls give you a slight hint of what is to come, architecturally shaped like various mineral structures. The real treasures lie within. One of the first such was the 2,700 pound geode on display. This geode has been split and mounted so that even a small child can have the pleasure of turning a wheel to open and close this magnificent beauty. The other specimens are displayed and lighted in such a way as to accent their natural glory. Each has an interactive touch screen display that not only gives the name of each specimen shown, but also its location found and properties. Although the Lyda Hill Gems and Minerals Hall does not actually contain any gems at this time, it's mineral collection will not leave you wanting for earth's riches. Many of the examples on display are a foot or larger, more spectacular than most of us will see in our lifetime elsewhere. From several examples of different colorations of tourmaline to the diverse crystalline forms of malachite/azurite, visitors were awed and amazed. But not more so than by the World's third largest gold nugget weighing about 62.33 pounds, which was found in Australia. Most of the specimens on display are on loan from private collections and other museums. Meaning the collection seen during this visit will most probably be distinctly altered before future trips.

With a short side foray through the Tom Hunt Energy Hall, my next visit will include the exploration of a drilling rig from the inside out, as I take a virtual trip underground. My mother and I enjoyed lunch in the café with several other ETGMS members and decided to explore more of this fascinating museum another day.

<http://www.perotmuseum.org/explore-the-museum/exhibit-halls/index.html>



Becky Whizenant showing off the 2,700 pound geode at the Perot Museum. Photos courtesy of Kenny and Vicki Polve



THE GEODE

What Are They and How Are They Formed? If you ever took any kind of natural science at school you will probably have seen a geode. However, what are they and how are they formed?

Geodes are a kind of geological rock formation that can naturally occur in sedimentary and certain volcanic rocks. Most geodes look like normal rocks on the outside and have internal crystalline structures or banded interiors. The crystals are normally either quartz or chalcedony. Also the structure can vary from being hollow even with crystals on the inside or having a completely crystalline core. The most common type of stone that geodes are made of is limestone. As for the formation of geodes they happen in two different ways. In the sedimentary rock scenario the rock forms as sediment surrounds a round cavity in the rock formation. Due to the porous nature of sedimentary rock groundwater carrying dissolved silicates seep into the cavity through the sedimentary rock. When it enters into the cavity the water evaporates leaving silicon to form natural quartz crystals. In the case that the crystals only line the inside of the cavity of the geode the normal term is geode. If the cavity is filled with crystals completely it is called a nodule.

The other way that a geode can form is in volcanic igneous rock. This kind of geode is formed when bubbles in lava appear then harden into hollow igneous rock. It is hypothesized that as the rock cools the solution of minerals in the hollow of the volcanic bubble rapidly evaporates and create crystals. However for both scenarios there is no concrete evidence to prove that these are the definite processes of formation. The only clues lie in the composition of the rock and the internal crystals. Traits such as color and composition can be determined by impurities and location.

Geodes can vary greatly in size. The largest known geode is a large cave located in Spain in 2000. Some have shapes other than the traditional spherical shape. They can be columns or just about every other kind of shape depending on the shape of the cavity. Geodes are common in the United States, Namibia, Mexico, and Brazil. However they can occur anywhere on the globe.

Found on line <www.universetoday.com>; also from the Rockytier, 6/13, via SCFMS Newsletter 7-8/13.



Geode halves from the collection of Susan Burch



**AUGUST
MEETING
PHOTOS
Program
presented by
Randy
Harmon,
photos by
Vicki Polve**





Gypsum and its 'Anhydrite'

**Bridget Joubert
CenLa Rockhounds**

When Jim and I started collecting minerals, some of the more common ones were those that belonged to the 'gypsum' group. What is 'Gypsum' you ask? Well, most people are familiar with gypsum as the wall board in their house. A basic American home contains up to 7 tons of gypsum and it will last a long time... until it gets wet... then it will dissolve away. It is used in agriculture and industry and is mined all over the world.

Chemically it is very simple, calcium sulfate- CaSO_4 - Mohs hardness 2, and is the result of the evaporation of ancient lakes and sea beds. Vast areas of the Western states contain valleys where the soil is saturated with gypsum. The Pecos River valley of New Mexico and Texas is a prime example! We mined large pieces of 'alabaster' which is a massive form of gypsum that artist use to carve figures (think Michelangelo!) . We had more than we needed so we made the mistake of putting several pieces into the rock garden.... Well, several rains later we had no more alabaster! In the flat desert areas of OK, NM, AZ and old Mexico, the gypsum often forms bladed gypsum/sand balls that are sold as 'desert roses' and these roses are repeatedly being formed whenever there is a rain to bring new gypsum down to the desert. If the gypsum 'bakes' in the sun long enough, it losses its water and becomes "Anhydrite" (without water), and is a much harder form of gypsum called "alabaster". This was prized by Italian artists and many fine life sized figures were carved from it. On the down side, it will still dissolve away slowly if left in the weather so if you have an alabaster figurine, keep it dry!

One of the wonders of the rockhound world are the huge crystals of gypsum called "selenite" that are found deep in a mine at Naica, Mexico. Selenite is the nearly clear form of gypsum that has a fine trapezoidal shape. These big crystals are over 30 feet long and up to 4 feet across ... as big as telephone poles! Many articles have been written about them so look them up on the web and be amazed. As with the desert roses, these crystals are constantly being formed but at much higher temperatures. It is over 140 degrees down there and not a friendly place to visit.

Another of the 'being formed' crystals of selenite are those seen in an old Polish coal mine. They form on wood and other items at the bottom of the mine in hot gypsum saturated water. We have several of these Polish bridges of Selenite and they still amaze us with the beauty and complexity of the specimens.

The "Ram's Horn" gypsum coming out of Chihuahua , Mexico is a 'must have' for any mineral aficionado so if you see one of these unique specimens at a dealer's table, try to get it for your collection. We do not recommend going to Mexico to dig your own!

When Jim was a kid growing up in Corpus Christi, he found many blades of selenite in the clay 'cliffs' bordering Corpus Christi bay. He thought he was finding arrowheads! He went back several years ago to find some more and the whole area is now houses and Condos...No Trespassing!....ah, progress is action!

So, if you are up to a 'mineral quest', try to collect the many varieties of gypsum that are available at rock shows and in the wilds of NM, AZ, OK, and CA. Drop by the house in Alexandria and look at what we have in our collection to give you some ideas of what can be found.



Peridot – symbolizes virtue



The Peridot is one of the few gemstones that come in only one color. The depth of green depends on how much iron is contained in the crystal structure. It is also often referred to as "poor man's emerald".

The Colors of Peridot

Peridot come in a wide range of natural green colors and shades. The favored color is sparkling pale green color but it also occurs in lime, yellowish green, olive green or medium dark green. Color is mainly caused by the gemstones' selective absorption of certain wavelengths of light called the body color. In gemstones, color consists of three components:

Hue, saturation and tone.

Symbolism, Significance and Properties of Peridot

The properties with which the Peridot, the birthstone of the Zodiac sign of Leo, is associated are as follows:

Love, truth, faithfulness, loyalty, fame, dignity and protection

The Peridot is also used to enhance prosperity, growth and openness.

Healing Properties of the Peridot

The healing properties of the Leo birthstone are reputed to be effective for health problems relating to:

*Lungs
lymph
Breast
and sinuses*

<http://www.youtube.com/watch?v=8uRrJp762zI>

Information from: <http://www.birthdaygems.org/jewels-gemstones/peridots.htm>

Via Stoney Statement 8/13



QUARTZ INCLUSIONS

By Paul E. Desautels

When the seven dwarfs place Snow White in a crystal casket to preserve her, they were duplicating a long established natural process. Almost every time nature grows a crystal, she encases it in a variety of objects called inclusions. They are scientifically important because they are evidence of the temperatures, pressures, composition and other characteristics of the environment in which the mineral is found.



Not only solids, but liquids and gases are often trapped during crystal growth. The difference between the white, opaque variety of quartz called "milky quartz" and the clear glassy variety called "rock crystal" is caused by multitudes of tiny bubbles of liquid trapped in milky quartz. Frequently the inclusion will be more than one kind, each called a "phase".

One of the most amazing sights to see under a microscope is the two-phase inclusion of a tiny bit of carbon in [Herkimer "diamonds" from] Herkimer County, New York. The carbon can be seen jittering around in an erratic dance, bombarded by the ever moving liquid molecules. This is called the Brownian Motion, after Robert Brown, the botanist, who first reported it in 1827.

Article from Agatizer, 8/89 via The Rockytier, 10/99 via SCFMS Newsletter, 7-8/13



BENCH TIPS

By Brad Smith

FOREDOM MAINTENANCE

If you have a Foredom flexshaft, it makes sense to check it over every so often to be sure it's running properly. But how to do that? You've probably lost the little booklet that came with the unit. Well, being the good company it is, Foredom has put together an extensive set of videos on how to do it.

The series covers set-up, lubrication, replacing a sheath, motor maintenance, and hand piece maintenance. Few if any special tools are needed. You can watch the videos at www.foredom.net/videolibrary.aspx and repair parts are available from most jewelry supply catalogs.

JUST A DROP

Hobby shops and model airplane stores carry small plastic dispenser bottles that are handy bench items for putting a drop of oil or glue just where you want it.

The small metal tubing lets you squeeze out very small drops and reach into tight places.

I use the small one on the left for oil when I'm sawing or drilling harder metals like steel. And I use the bottle on the right from a plastics store for the fast drying glues used to join pieces of acrylic.

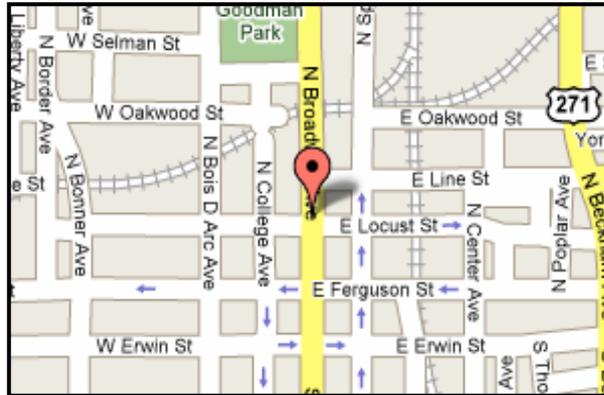
Attribution requested with each publication:



More Bench Tips by Brad Smith are at facebook.com/BenchTips/ or see the book "Bench Tips for Jewelry Making" on Amazon

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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.

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. If you need an issue dealt with quickly, don't hesitate to call me and I will direct you to the right party.

Thank you... SB

NOTE TO EDITORS

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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.



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