# NEWSLETTER OF THE EAST TEXAS GEM & MINERAL SOCIETY



PAGE 1

**VOLUME 39** 

TYLER, TEXAS ISSUE 3

**MARCH 2013** 



# Coming Shows, 2013

APRIL 13 — NORTH LITTLE ROCK, ARKANSAS: Annual Swap Meet; Central Arkansas Gem Mineral & Geology Society; Burns Park; Elder Johnson Pavilion, Military Dr.;

APRIL 13-14—ABILENE, TEXAS: Annual show; Central Texas Gem & Mineral Society; Abilene Civic Center; N. 6th and Pine St

APRIL 13-14—SILOAM SPRINGS, ARKANSAS: Annual show; Northwest Arkansas Gem & Mineral Society; Siloam Springs Community Bldg.; 110 N. Mt. Olive St

APRIL 20-21—LUBBOCK, TEXAS: 55th annual show; Lubbock Gem & Mineral Society; Lubbock Memorial Civic Center; 1501 Mac Davis Ln.

# **INSIDE THIS ISSUE**

- 2. Meeting Minutes/Program
- 3. Subgroup Meeting/Show Flier
- 4. Basalt
- 5. Basalt Continued
- 6. Ask the X'spert
- 7. Bench Tips/Wire Class Photos
- 8. Officers and Directions

# PRESIDENT'S MESSAGE

I think most club members have heard by now that long term club member Charlotte Harmon passed away on February 26. Charlotte fought a brave battle against the cancer in her body over the past six months. We will all miss Charlotte greatly. I was thrilled to see the numerous club members from our club, from other clubs, the South Central Federation of Mineral Societies, and gem & mineral show dealers who came to support Keith and honor Charlotte at the visitation and funeral service. We rock hounds do develop strong bonds between one another. Thank you all who have taken time to call, write, send cards, and share your love to Keith and Charlotte as they passed through this difficult journey. And please do remember to keep Keith in your thoughts and prayers. He needs or love and support.

Also, I'm sad to report that Al Davis passed away at the end of January. Al suffered a stroke back in October the day after or club meeting and annual auction. Al was in Dallas going through rehabilitation and making some progress, but other medical issues combined with the effects of the stroke were too much for him to overcome. I've talked to Carolyn off and on for the past few months checking on Al, and she said he was hoping to regain the use of his hands so he could do lapidary work. She also said Al was excited to hear that we were forming our lapidary Arts/Jewelry subgroup and really wanted to participate in the group. Al would have been a wonderful source of information and expertise in the group. He too will be missed. So please keep Carolyn Davis in your thoughts and prayers as she passes through this difficult time.

All of these sad events remind me of how fragile we humans are both physically and emotionally, and its our family and closest and dearest friends who help carry us through these troubled waters. I don't know who said it but any man who has friends is a rich man.

I look forward to seeing everyone at the April 1st club meeting. Don Campbell

# MARCH MEETING MINUTES

- \* President Don Campbell called the meeting to order @ 6:57pm welcoming two guests Raton LeDaux and Stephen Beasley, also present was 2 grandkids of Kenny Povey.
- \* A lively discussion on members present, even Charles Creekmur whom was slightly late!
- \* The minutes to the January & February as posted in the newsletter were accepted by Susan Burch and seconded by Penny Hawkins. Balance in the checking account and money market was discussed and figures with the spreadsheet were offered to members.
- \* Discussion on the field trip February 23 by their trip leader (Don Campbell). 8 people went to the Naranjo Museum of Natural History in Lufkin. Those that rode with Don Campbell had a picnic lunch and stopped at Lake Nacogdoches to collect fossils. Sounded like a great trip as the museum not only houses prehistoric dinosaurs but artifacts from Civil war to Egyptian and Roman coins.
- \* Susan Burch discussed the wire wrapping class held March 9. It was a great class, with five students attending. She passed a couple of pendants around made by Becky McRoberts. There was a discussion on having another class according to interest. Please call Susan Burch. (936) 615-5397. Terry Roberts talked about his Lapidary Arts class that was postponed, but want to keep folks posted on TBD on an upcoming class. Don Campbell talked about a mineral/fossil group which will start up in April. Mineral/fossil group will probably meet on a weeknight to get acquainted and help each other with the hobby.
- \* 2 announcements were made:

PAGE 2

Our long time and beloved Charlotte Harmon passing away. Don thanked members for deferring the monthly meeting so that those wishing to attend the visitation could. A solemn discussion on Keith Harmon's request that in lieu of flowers a donation be made to the American Federation scholarship fund. After explaining to our new members what the federations were all about a motion was made to make a \$1000 donation in memory of Charlotte Harmon to the American Federation Scholarship fund. Jack Shull seconded, it passed unanimously.

- \* Another member Al Davis, another member passed away in January, his wife Carolyn Davis was present and discussion to do an solarium for \$200 to the AFMS fund for Al Davis. Laura Wilson made the motion and was seconded by Sylvia Rainer. Voting it passed unanimously.
- \* No further announcements.
- \* Old business, Don reported to the club the financial results of the clubs 2013 Gem & Mineral show which was held in January. The show realized a profit, but was down from last year due to higher expenses for the building rent and building six new show cases. The board is looking at raising the dealer table fee and adult admission to the show to cover the higher expenses.
- \* No new Business
- \* A large amount of tickets for door prizes were sold throughout the meeting and the drawing was held, with the 3 junior guests being given a specimen.

Break for refreshments @ 7:50pm.

- \* Tonight's presentation was by Don Campbell "2013 Arizona Mineral & Fossil Show, Tucson, Arizona" A photography tour of photos collected by Don Campbell and Jack Shull.
- \* The silent auction item (a flint knapped knife by Bud Trammel) was auctioned off.
- \* Meeting adjourned around 9:30 pm

Respectfully submitted:

Laura Wilson

Standing in for Suzan Chapman



# APRIL MEETING PROGRAM

"Internet access to Geological and Earth Science Information, its never been this good before"



# FIRST MEETING OF THE LAPIDARY/JEWELRY GROUP

Due to family conflicts, the exact date of this meeting was unclear at time of printing, please contact Terry Roberts for more details on when and where the first meeting will take place. His number is (903) 881-5108.

Also, Terry had this to say, "I have been busy cutting some of the rocks that I collected at the Big Diggings near Deming, NM and hope to work on some I collected at the Baker Ranch before our meeting. I hope that I find some good agate in the collection to show you all."

2013 ANNUAL CENTRAL ARKANSAS ROCK, GEM AND MINERAL SWAP APRIL 13, 2013 9 AM – 4 PM

Buy – Sell - Trade

Free Admission, No Setup Charge
Limited tables available bring your own or tailgate
Open to all area rock clubs and general public
BURNS PARK

(I-40 EXIT 150 – MILITARY DRIVE) ELDER JOHNSON PAVILION (NEXT TO THE VISITOR CENTER) NORTH LITTLE ROCK, ARKANSAS SPONSORED BY

CENTRAL ARKANSAS GEM, MINERAL AND GEOLOGY SOCIETY

www.centralarrockhound.org FOR INFORMATION CONTACT Mike Austen (501) 868-4553 or <a href="mailto:steelpony@aol.com">steelpony@aol.com</a>



# **BASALT**

If you look at basalt, you won't find much. It's black with no real crystalline structures and hardly any sparkle, dazzle or sheen (unless polished of course). Yet, for all of its boring attributes, the story of basalt is one of fire, floods and excitement...okay, if you like volcanoes like I do, then it's exciting!









Top photo: Polished basalt cabochons and rough lava beads.

**Bottom photo: Glowing molten basalt** 

#### How Basalt is Formed

Basalt is the most common rock in the Earth's crust, and the sea floor is mostly made of basalt. It is classified as igneous extruded volcanic rock with aphanitic to porphyritic texture composed mostly of plagioclase and pyroxene minerals and has very little silica giving it a low viscosity.

So, in plain English: Basalt is very liquid lava, rich in magnesium and iron with a low silica content that cools with barely any discernible crystal structure within the rock. Basalt originates at the Mid-Atlantic Ridge, hotspots, shield volcanoes and other volcanic regions. We've even found basalt on the moon and on Mars.

Because basalt is the most common rock on our planet, let's take a little time to explore where it's found. One of the ways that basalt forms is through divergent plate boundaries like the Mid-Atlantic Ridge which splits the North-American and Eurasian plates. Iceland, the Azores and the Canary Islands are along this ridge. Newer rock is closest to the plate boundary and the spreading causes ridges to form as the lava cools and spreads. An interesting factoid; our Earth changes polarity every now and then which we have been able to measure by studying the sea floor spreading along ridges. Magnetite is a common component in basalt and will line itself up with magnetic north allowing us to measure the frequency of polar reversals.

Basalt also forms as a result of hotspots, or magma plumes, just below the ocean crust which then forms shield volcanoes like the Hawaiian Islands and the Galapagos Islands. Basalt also forms the largest volcano in our solar system, Olympus Mons on Mars, and it makes up the floor of the lunar seas on the moon.

# It might be under your feet!

Magma plumes are also responsible for the many basalt flood plains on the continents throughout the earth as well. On the continents we also have a hotspot underneath Yellowstone National Park that has erupted with large basalt flows in the past. We can even trace tectonic plate movement by looking at the Snake River plain in South-

ern Idaho; you can trace the path the land took across the Yellowstone hotspot by the "smile" in Idaho. This same magma plume was also responsible for the large basalt flood plains throughout the region including the Columbia River Basalt Plains in Washington and Oregon. These were caused by huge fissures opening up on the surface of the Earth and allowing the hot lava to flow.

Because basalt has low silica content, the lava can flow up to 15 mph and cover a large area. The basalt flow on the Columbia River plain is nearly 6,000 feet deep in places and covers over 100,000 square miles.

This, however, is dwarfed by the Siberian Traps which are estimated to have erupted enough lava to cover nearly 37





million square miles of land and is being put forward as the main cause of the demise of the dinosaurs. These types of flood plains are found all over the world, though in smaller quantities.

Basalt also forms in dikes, sills, and columns that have proven to be quite a puzzle to early geologists. In Ireland lies a formation called the "Giant's Causeway" that is made of basalt columns that have cooled and begun to shrink, forming long columns of rock that look like different geometric shapes from the top.

In the United States, the Devil's Tower in Wyoming is a great example of this same columnar jointing; this was formed when a basalt volcano cooled and fractured into columns. Over the years, the outside of the volcano was eroded away, leaving the hard basalt underneath. The Devil's Postpile near Mammoth Lakes, California is another example of columnar jointing as is Paul Bunyan's Woodpile in central Utah.

Depending on where you live, it may be called buh-SALT or BAA-salt, but either way, it's hardened lava. It can look like charcoal pellets, but it can also be a nest for amethyst or other gems to grow inside.

Well, I'm getting pretty long-winded about a boring black rock, but I did tell you that even though the rock is rather plain and not very exciting, the process for us to be able to see and use it is fascinating! Basalt does have a hardness of 8 on Moh's Scale making it a very hard rock, but it will take a nice polish, though it's just as beautiful in the unpolished state.

# **Non-Jewelry Basalt Uses**

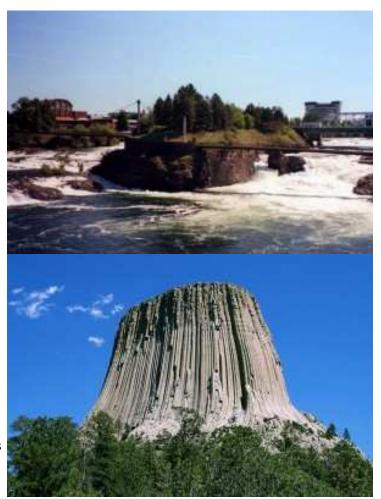
Basalt stones are used in massage therapy to help alleviate stress. They're also thought to rid the body of anger

and help with understanding another's point of view; even to promote reproductive health and bring stability and clarity. If you're going through a difficult time in your life, Basalt is said to be able to help you draw your upon your own "fire within" and diminish the negative influences in your life.

# Resources & Recommended Reading

**Basalt Healing Properties** Basalt on Galleries Basalt on USGS What is Basalt, How Does It Form and How Is It Used? Columbia River Flood Basalt Province

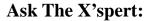
From Huntin'& Diggin', 3/13.



Top photo: Spokane, Washington, like much of the Northwest, resides on a field of basalt. Spokane's famous river runs through the city. Those rocks in the water are basalt.

Bottom photo: Devil's Tower in Wyoming.





Q: I have noticed a lot of Chinese minerals at every show I attend. Why are there so many?

A: Back in the late 1980s, a group of Americans toured Hunan Province and were so impressed with the quality of the specimens that they set up a trade route, much like Marco Polo did hundreds of years ago! On the down side, the Chinese miners were not familiar with the need for care in extracting and packaging the minerals so the first minerals exported were often damaged and not in prime selling condition. Therefore these American dealers returned and taught the miners how to get a better return on their labor by careful removing and packaging the specimens to withstand the rigors of shipping. So for the last 20+ years, vast numbers of superb specimen have been coming onto the world markets for us collectors to enjoy. These minerals specimens were so fine and numerous that nearly every mineral collector has many examples in their collection. The names of Chinese Provinces and even the mines are becoming common among collectors: Hunan, Xinjiang, Guangdong, Guangxi, Inner Mongolia, and Funjian! For the 2013 year, a large collection of the wonderful minerals is on display at the U. of Arizona Flandrau Center in Tucson, AZ. Try to see it !!! ( Ref: Rock&Gem Mag.Feb.'13)

Q: Our rock club purchased a large mineral collection and it contained many fluorite specimens. Other than specimens, does fluorite have any commercial uses?

A; Oh my, does it !! Huge amounts are used for every-day toothpaste, nonstick coatings on our pots and pans, the production of aluminum, much of the glass objects we use, and are part of the solder we use to make jewelry. And that is only a small list of its uses! In America, the "tri-state" area of Missouri, Tennessee, and Illinois has some of the largest deposits and that is why the rock club's mineral collection is so rich in 'fluorite' specimens.

Q: I was in Arkansas last month and there was a mineral that they called "Arkansas turquoise". I did not think Arkansas had any turquoise so what is it?

A: Hmmm, most likely what you saw was the mineral called 'varisite', a yellow green to blue green mineral that often fills in cracks in the limestone (Arkansas's base rock). This material is 'aluminum phosphate' and can look somewhat like turquoise.

Q: At a recent rock show in Tyler, TX., I overheard a dealer discussing the fine 'dendrites' in a specimen. What is a dendrite?

A: Most dendrites are the mineral Pyrolusite and appear as blackish tree/ fern like patterns in cracks or inside a rock. If extensive, they give the look of a bed of moss on a specimen. Chemically, it is manganese oxide.

From Huntin' & Diggin', 3/13.



#### BENCH TIPS BY BRAD SMITH

# **CUTOFF WHEELS**

Cutoff wheels are inexpensive and do a great job cutting or shaping steel. You can use them to sharpen tool points, cut piano wire to length, make slots, and sharpen worn drills. Other uses include modifying pliers and making your own design stamps.

My preference is the one inch diameter size. Be sure to hold the wheel firmly so nothing moves to break the disk, and definitely wear your safety glasses. Those are little flakes of hot steel coming off the disk.

BTW - Cutoff wheels are poor at soft metals like copper, silver and gold. Soft metals clog up the cutting edges.

# **DEBURRING JUMP RINGS**

When cutting jump rings from large gauge wire for chain making, you'll notice the saw leaves a small burr. An easy way to remove these is to tumble the rings with some fine-cut pyramids. Only a minute or so is needed, and in fact you don't even need a tumbler. I just put a handful of pyramids in a wide mouth plastic jar and shake for a bit.

You can find these pyramids in the tumble finishing section of most jewelry supply catalogs.

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

# A FEW PICTURES OF PENDANTS MADE AT THE RECENT WIRE-WRAPPING CLASS







Made by Becky McMichael



Made by Linda Moore

Pictures of the projects made by the other two students were not available for photographs. In all, I count the class a great success. Each student expressed that they learned something new and enjoyed the class. I'm looking forward to holding more classes in the future. Susan Burch



AGE 8 ROCK-N-ROSE



TYLER, TX

**MARCH 2013** 

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#### **CLUB OFFICERS**

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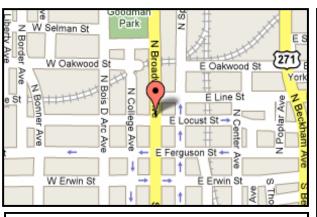
SHOW Keith Harmon 903-795-3860 CHAIRMAN: 9116 US HWY 84 W

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CLUB East Texas Gem & Mineral Society

ADDRESS FOR P. O. BOX 132532 MEMBERSHIP Tyler, TX 75713-2532

DUES:



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.

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



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