



# ROCK-N-ROSE



NEWSLETTER OF THE EAST TEXAS GEM & MINERAL SOCIETY



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VOLUME 37

TYLER, TEXAS

ISSUE 12 DECEMBER 2011

## Coming Shows, 2012

Jan. 21 - 22

FREDERICKSBURG, TX  
Fredericksburg Rockhounds  
Lady Bird Johnson Municipal Park

**January 27-29—TYLER, TEXAS:**  
**Annual show; East Texas Gem & Mineral Society; Rose Garden Center; 420 Rose Park Dr.; adults \$3, students \$1, Scouts in uniform free; Grand Prize drawings, silent auction, Wheel of Fortune, show cases, 11 dealers, gemstones, jewelry, fossils, minerals, geodes, lapidary demonstrations Rock Food Table; contact Keith Harmon, 8316 Oxford Dr., Tyler, TX 75703, (903) 581-4068; e-mail: keithharmon19@yahoo.com**

Feb. 18 - 19

GEORGETOWN, TX  
Williamson Co. G&MS  
San Gabriel Park

Feb. 18 - 19

PLAINVIEW, TX  
Hi-Plains G&MS  
Oliver Liner Ctr.

Feb. 25 - 26

PASADENA, TX  
Clear Lake G&MS  
7902 Fairmont Parkway

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## PRESIDENTS MESSAGE

Here we go again. I'm president again. My second time. I'm looking forward to serving with our new officers Becky Whisenant, vice president; Laura Wilson, secretary; and Jeri Kitchens, treasurer. Thank you to Becky and Jeri for agreeing to serve again this year. Thank you to Rip Chris and Penny Hawkins for their past three years of serving as president and secretary. They did a great job.

Our next club meeting will be Monday, January 9<sup>th</sup> since the 1<sup>st</sup> Monday is the legal New Year's holiday.

The December meeting gift exchange party was a lot of fun as usual, and we had a lot of great treats to eat as well.

Our January 27-29 gem & mineral show is fast approaching and we need club members to volunteer their time to prepare for the show and work during the show. First we will have a show work day at my office, Layne Texas, 5734 American Legion Rd. Tyler, Texas 75708 on Saturday January 14<sup>th</sup> at 9am-1pm to work on assembling items for the silent auction table & wheel of fortune game. Please bring hot glue guns, hot glue sticks and Dremel /drills to cut out holes in blocks of wood to glue on rock, fossil and mineral specimens. We will also be placing stamps on mail-out cards. We desperately need folks to make donations of rocks, minerals & fossils to use on the silent auction table and wheel game. You can bring these to the January 9<sup>th</sup> club meeting or to the work day. We will have signup sheets at the January meeting for folks to sign up to prepare food for the Friday night dealer dinner, to help set up the show on Thursday the 26 and work slots for the show on Friday-Sunday. Please call Keith Harmon to volunteer to work @ 903-316-2967. Call me, Don Campbell @ 903-520-4085 to get directions to my office for the work day, and any other questions you might have. Also please consider filling one of our 15 available show cases with items you have collected or made related to our hobby for display at the show.

Don Campbell



**The date for the Mason, TX field trip has changed. It's now February 17-18 & 19**

## JANUARY MEETING PROGRAM

Jan 9th club meeting program: By Donald Campbell "Fossil collecting in the Eagle Ford Shale"



## DECEMBER MEETING MINUTES

Don Campbell (President) opened the meeting up at 6:43pm. We appreciate you serving as President, and wish you well, and hope you abundance for 2012.

There was talk about the Tyler Gem Show January 27-29, 2012. There is still availability to use the displays. See Don Campbell. There is also a scheduled workday at Layne, 2226 NNW Loop 323 Tyler, Texas. It will start about 9 to 1pm. (Thanks again to Don Campbell for allowing us to do a workday at his business again).

Don talked about the fossil hunt at Lake Nacogdoches and how it was accessible, and what was found.

We then went into election of officers:

The slate presented was:

Don Campbell- President

Becky Whisenant – Vice President

Jeri Kitchens- Treasurer

Laura Wilson- Secretary

No other nominations were made from the floor. A motion was made to accept the slate by Laura Wilson, seconded by Colleen Hayes. It went to vote, and was unanimous to accept the officers for 2012.

We then had our White Elephant exchange party, o man, if you weren't there you missed a really really good time! Lots of thievery going on (our two guests, got the blunt of it) But everyone went away with something!

The incoming officers wish you a Happy New Year!

And look for more field trips, and things to do!

Respectfully submitted,

Laura Wilson

Secretary



## NOTE FROM THE EDITOR

Becky Whisenant stopped by the Cherokeean Herald (one of my jobs) last week. We spoke about several issues, one of which concerned the club. At the December meeting elections for the 2012 officers were held. The office of Newsletter Editor is an elected one, and does require the approval of the club as a whole. Unfortunately, I was not at the December meeting. If you will have me, I'd be glad to continue as Newsletter Editor for 2012.

On that note, I usually rework the headers a bit and the Rock N Rose title on the front page every year. Changing the content of the pictures. If you have any suggestions for changes or new content for the newsletter, please call me at (936) 615-5397 or email me and let me know. Thank you, Susan Burch



## WHAT WILL YOU BE DOING JANUARY 26, 27, 28 AND 29?

It's time again for our annual show, what can you do to help out during the show? Here are some of the activities involved. Won't you take a moment and see if you might help out in any of these areas.

Thursday before the show starts we will be bustling with activity as people arrange their displays and merchandise. At 5:00 p.m. on Friday, members will begin to arrive with dishes for the Dealer Dinner.

Friday, Saturday and Sunday some of our members and dealers will sell their jewelry, rocks, minerals, fossils and other items.

Other members will have exhibits in the cases lined up in the lobby. Volunteers will distribute door prize tickets, sell raffle tickets, lure children to play a game for prizes and sit at the front table to promote the club, answer questions and collect dues from members. The silent auction table and Wheel of Fortune game will need volunteers on Saturday and Sunday. Hourly door prizes are awarded on both Saturday and Sunday. Shortly after the show closes, raffle prize winners are announced. After the show Sunday, volunteers dismantle exhibit cases and load vehicles for the trip back to storage. Think about what you would like to do at the show. The gift of your volunteer efforts is especially valuable. Choose from any or all of the following activities:

- Bring a dish and participate in the "Dealer Dinner" Friday evening.
- Help with Student's day on Friday.
- Hand out door prize tickets to visitors Saturday and/or Sunday.
- Work at the front table, silent auction table or Wheel of Fortune game table Saturday and/or Sunday.
- Help tear down, pack up and load vehicles Sunday evening.
- Be available at the show throughout all or part of Saturday or Sunday to work where needed.

We will have sign-up sheets at the January 9 meeting for these activities. The shifts are usually two hours, and some people work more than one shift with a rest in between.

Be sure to save all or some of the January 27, 28 and 29 dates for a good time and to show support to the club...it's your hobby, pursue it.



A club member asked me if I recalled a tip that was published in the Rock N Rose some time back. It concerned hard to polish material and what to add to help it polish. I could not find the tip in the newsletter archives. If anyone recalls what the tip was, please contact me.

Susan Burch





## PYRITE

by: Alice Copeland

If you find pyrite and think it's gold, you're not alone. The minerals' brassy color has fooled so many people that pyrite is known as "fools' gold." But one shouldn't be too foolish and overlook this mineral. Once in a while, gold really is found in or associated with pyrite. Pyrite also has a value of its own. The Olmac people, who lived in Mexico before the Aztecs and Mayan Indians, from about 1000 to 400 B.C., used pyrite for mirrors. Today, pyrite is used in industry because it contains sulfur, which is used to make sulfuric acid. The acid is important in the production of paper, rubber, chemicals and medicines.

You will find pyrite in the U.S., Germany, Italy, Greece, Spain, Sweden, and South Africa. It exists in nearly every kind of rock. That's why it's called a "persistent" mineral. You can strike pyrite with a hammer and sparks will fly! In Greek "pyritēs" means "of fire."

On a freshly broken surface, pyrite is closer in color to "white gold," or electrum—an alloy of gold and silver. But pyrites' beauty is not just in its metallic colors. Pyrite has beautiful shapes also. It forms simple cubic crystals, as well as complex twelve-face crystals prized by collectors!

—SCFMS Newsletter, Nov-Dec 2011, via Fredricksburg Rockhounds Newsletter





## Heat Treating Rocks

Jim and Bridget Marler of CenLa RockHounds

Heat-treating minerals has been a common practice throughout the ages. It began, of course, when ancient man noticed that certain rocks bordering the camp cook fire turned much nicer colors or were easier to knap into arrow points after getting hot. Later they also learned that metals were produced at the bottom of long-term fires. From that the smelting arts developed, and into the 'bronze' and 'iron' ages civilization went!

This article will cover a few of the lapidary uses of heat to enhance minerals. The most easy to do are the quartz minerals and the most exacting are the gemstone, such as sapphires and rubies.

The Beryl called Aquamarine is basically a blue-green color (hence its name) when dug out of the ground. Mine owners found that if one heats the crystal, it often turns it into a fine blue, with no green overtones. Today it rare to find the natural color aqua in any jewelry booth!

It was found that heat treating sapphires and rubies often result in a 'double' treatment, i.e., the color and the clarity were enhanced! Enhancing the corundum's (rubies and sapphires) takes controlled conditions and a skilled operator. The temperatures are very high and are near the melting point of the crystal. Basically the valence (charge) of the coloring element (often iron) is changed to make it a more attractive or deeper color. For example, sapphires mined in Montana are often very light blue and full of clouding inclusions. When heated, the crystal will deepen into a fine blue color and the clarity will increase significantly. Rubies are only slight enhanced in color but greatly enhanced in clarity. A cloudy, silk filled reddish stone will often turn into a rich clear red jewel! The operator heats the corundum up slowly and melts the internal inclusions so that they meld back into the crystal matrix and are no longer visible. It is generally accepted that all corundum on the market is heat treated.



Common agate is most often colored by iron (Fe) compounds. Most of the time this agate is a dull brown, tan, or light yellowish color. Heat-treating the agate can sometimes turn these dull unattractive colors into bright oranges, red, and yellows, and perhaps a nice shades of purple. With nearly all quartz, the process can often be done "at home"... wife permitting, of course. The iron is often in a mixed oxidized / reduced state (Fe +3 / Fe+2) and if you heat it up correctly, most of the iron moves into the oxidized state (Fe+3) and is very colorful: reds, orange, yellows. The crystalline nature of

some quartz (cherts and flints) changes slightly as the water is driven off and makes the chipping (knapping) of them into arrow points much easier, with sharper edges!

By trail and error, one can do some heat-treating in one's own kitchen. Take a piece of agate, a dull brown color is a good starting color, and bury it in a coffee can of very clean sand. Turn the oven to 200 °F and cook for about 2 hours. This drives out residual water. Now raise the temperature 25 degrees every 30 minutes until you reach 350 °F. Cook for another 2 hours and than turn off the stove... and go to bed. In the morning, dig out the agate and record the color change. If you are satisfied with the color enhancement, repeat the process on the whole bag of agates from the same mined area.

If the color change was NOT as good as you wanted, skip the 200 degree stage (the water is gone) and raise the temperature to 400 °F, raising it 50 degrees every 30 minutes until you get to 500 °F. Cook for 2 hours and turn off stove... go fishing or something until the stove is cold. Check the color enhancement again and if it is good, note in your treatment log book that this type of agate needs higher temps than others.

Can you do this to a jewel? Yes, amethyst can be changed into citrine by the same process. The iron's +2 can be changed to a +3 and a nice yellow-to-orange color will occur.

Should there be 'resistance' to using the kitchen oven.... there are wives like that we are told.... go get a roaster oven—it has been reported to be even better for this and can be used out on the patio. Good luck cooking those agates!!!! Via Huntin' and Diggin' 12/11.



AFMS ENDOWMENT DRAWING FOR 2012 AT THE AFMS MEETING AND SHOW JULY 26–29, 2012, Wayzata, MN

by Pamela Hecht, Endowment Fund Chair

**An Exceptional Opportunity!!**

The excitement is building as we unveil the first of what we hope will be many wonderful prizes for the 2012 AFMS Endowment Fund Drawing.

A little history of our first 4 items that are a VERY SPECIAL donation to the AFMS Endowment Fund by Hi-Tech Diamond Company. I was contacted in June by e-mail from Hi-Tech's President Neer Patel asking how they would like to donate some lapidary equipment to help benefit our Endowment Fund drawing. After communications with Neer I received four huge boxes just days before our convention in July. I made an announcement at the convention in New York and now I'm happy to offer the chance for you all to have the opportunity to purchase a ticket or two or three or four or five or six or seven....you get idea !!!

This year's drawing is going to be different from those of the past in that the first four items will be available for you to pick which one you would like your tickets to be for should it be selected in the drawing. When tickets are purchased the prize # of either 1, 2, 3 or 4 will have to be written on the front of the ticket as to which prize item you would like your tickets to go towards. This will only be for the first four prizes -- the remaining prizes, to be announced during the coming months will be awarded via a random drawing. Please PRINT your name and address clearly on the other side so that we can read who won - better yet put an address label on you ticket along with your phone number. And now, let's have a drum roll as we announce those first four prizes:

**#1 CABKING-6V3 MACHINE** is a direct drive 6" diameter diamond wheel grinding and polishing unit for all your capping needs This system is based on an industry leading adjustable, independently controlled drip feed cooling system that drips clean water on the wheels instead of bubbling up dirty water. Included is an accessory kit that features a flat diamond lap for putting flats on the backs of cabs as well a buffing disc with diamond paste. Donated by the Hi-Tech Diamond Company, it has a retail value of \$1,500.00.

**#2 SLANT CABBER MACHINE** is an angled lap machine in a 8" diameter size. The machine's unique 45 degree grinding angle makes it easier to see your work piece as you grind flats, work crystals, or make cabochons. The system allows you to grind, shape and polish gem material immediately. Donated by the Hi-Tech Diamond Company, it has a retail value of \$600.00.

**#3 ALL-U-NEED MACHINE** is a horizontal lap machine in a 6" diameter size. You can grind flats, re-work crystals, or make cabochons. The system makes it possible for you to grind, shape and polish gem material immediately. Donated by the Hi-Tech Diamond Company, it has a retail value of \$490.00.

**#4 TRIM SAW MACHINE** is a 6" machine with a diamond blade is ideal for trimming all kinds of stones. The saw has a large 15" x 9" working area. The durable housing is made of a rust-proof, unbreakable plastic. The motor is variable speed and ranges from 800 to 3400 RPM. Donated by the Hi-Tech Diamond Company, it has a retail value of \$440.00.

Want to donate a prize yourself? Send me your donation. If it's too heavy to mail, e-mail me a photo and description and we'll discuss how to get it to me in time for the drawing in Minnesota this coming July. My contact information is:

Pamela Hecht  
25393 Oak Street  
Calumet, MI 49913  
(906) 337-2274  
steverox@up.net

Tickets are \$5 each or 5 for \$20. To order, make your check payable to "AFMS Endowment Fund" and mail it along with a stamped self-addressed envelope to your regional federation representative listed below. Be sure to include your name, address and phone number when placing your order.

## BENCH TIPS BY BRAD SMITH

### SHARP KNIVES FOR CUTTING MOLDS

Cutting molds is easier and more precise with a sharp blade. A new Xacto blade is sufficient for cutting RTV molds but is usually not sharp enough for vulcanized rubber. For that it's best to use scalpel blades available from most jewelry supply companies. The #11 blade is triangle shaped, and the #12 is hawksbill shaped. I find the hawksbill is particularly nice for cutting the registration keys of the mold.

### USE YOUR THUMB

When using multiple bits in your Foredom, you often have to deal with several different shaft sizes - the usual 3/32 inch burs, the larger 1/8 inch shafts sizes and of course many different drill sizes. For some reason I really dislike having to turn the key multiple times to open or close the jaws of the handpiece chuck.

There's nothing you can do to avoid multiple key turns when opening up the jaws, but there's a neat trick to close the jaws around a smaller shaft. Hold the new bit in the center of the open chuck jaws, put your thumb lightly onto the outer toothed collar of the chuck, and gently start up the Foredom. As the chuck turns, it will naturally tighten the jaws around the shaft of the bit. Then all you have to do is a final tightening with the key.

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



## WHO RECENTLY SHARED THEIR LOVE OF ROCKS WITH OTHERS?

It was me. I made three presentations on the 11th of November to the Kissame (SP) Elementary. The students varied from 3rd to 5th grades. I don't know a whole lot about gems and minerals, but I have a nice selection of mobile stones that I love to talk about. Of course, I have to take my "cheat sheet" to remember names of some of the stones because I have plenty of "senior moments." But, I enjoyed the interaction with the kids. And, they fed us a wonderful lunch. Thanks for allowing me to show the students what a wonderful world can open up with the study (and playing) with rocks.  
Sherry Breedlove



Sherry Breedlove presenting to a class at Kissame Elementary

**CLUB OFFICERS**

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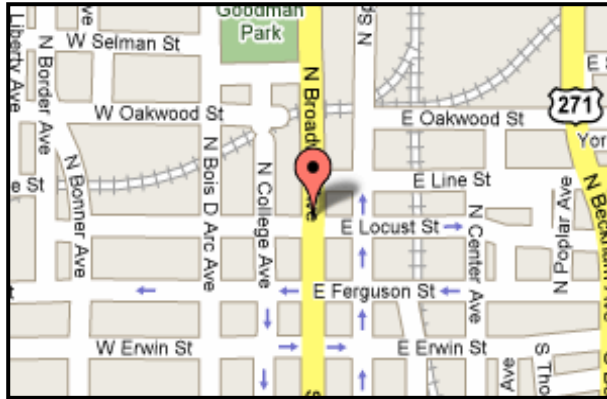
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**FIELD TRIP CHAIRMAN:** Your name could be HERE!!!  
Volunteer Today!

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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.**

**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.

Thank you... SB



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