



# ROCK-N-ROSE



NEWSLETTER OF THE EAST TEXAS GEM & MINERAL SOCIETY

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VOLUME 40

TYLER, TEXAS

ISSUE 12

DECEMBER 2014

## Coming Shows, 2015

**Jan. 23-25**  
**East Texas G&M Show**  
**Tyler Rose Garden Center**  
**Tyler TX (903) 539-0439**

### February 14-15

**Georgetown, TX**  
**Williamson Co. G&MS**  
**San Gabriel Park**

**Plainview, TX**  
**Hi-Plains G&MS**  
**Ollie Liner Ctr**

### March 07-08

**Big Spring, TX**  
**Big Spring**  
**Prospectors Club**  
**Howard Co. Fair Barn**

**Robstown, TX**  
**Gulf coast G&MS**  
**Regional Fairgrounds**

**Pasadena, TX**  
**Clear Lake G&MS**  
**Pasadena Convention Ctr.**

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## PRESIDENT'S MESSAGE

We all had a fun time at our December Meeting Christmas Party. There was a large turnout, lots of food and a lot of laughter. For those of you that missed it, mark your calendars, we'll do it again next year.

We have us a new Fieldtrip Chairman. Fred Mahaffey volunteered to fill the position. He would appreciate any ideas and information from members on places you might want to go for a fieldtrip. There are no fieldtrips scheduled for December or January due to the Holidays and the Annual Show.

I know I've said this before, but I want to remind everybody again that our Annual Gem & Mineral Show is almost here, just a short time away. If you haven't already signed up to take part in the show, and would like to, please let me know. We need members to sign up for the Dealers' Dinner, Silent Auction, Wheel of Fortune, Fluorescent Display, Front Desk, Show Setup, and Showcases. Sign up early, so you can select a time that works best for your schedule. I would like to encourage our members to set up a showcase. If you think you want to and need some help, me or one of the other members will be glad to help. There are only 6 showcases left. I will have the signup sheets at the January meeting. If you have any items you can donate for the Silent Auction or materials to make items for the January Show, you can bring them to our monthly meeting. If you need help getting these items to the club give me a call, and I will see if we can get you some help.

We have the display cases at the Tyler Library again this year for January 2nd – 31st. These are some large cases, and are a great way to show the Tyler community what the East Texas Gem & Mineral Society is all about. Also another way to advertise the annual show. These are locked cases, so any items displayed will be locked up. Members that have items related to our club, that we can use to fill these cases please contact me. We need minerals, fossils, jewelry, other lapidary items, geological maps, pictures of field trips, and any other items you think would work well in the displays. I will need some help setting up the displays January 2nd, and I need all these items by the end of December. Please don't wait until the last minute.

Any member wishing to have a nametag made, let me know. Name-tags are \$12.50. Also, we will have vests, patch and pins available for purchase at the January meeting.

Yearly membership dues were due in October. We will be updating our members list this month, and remove everybody that haven't paid their membership dues. If you haven't paid your dues please get them in

President's Message continued on page 3



## DECEMBER MEETING MINUTES

President Kinney Polve called the meeting to order at 6:55 p.m. on December 1, 2014.

No guests or new members were introduced.

Minutes were approved as printed in the newsletter. The motion was made by Becky Whisenant and seconded by Bill Faulkner.

Colleen Hayes gave the treasurer's report. Dues are past due please check with Colleen if you have any questions. There were no door prizes due to the program.

**Lapidary Arts Sub Group:** Terry Roberts stated that 8 attended the meeting last month where they worked on wire wrap and making cabs. The January meeting will be the all member pre-show workday on January 10<sup>th</sup>.

**Field Trips:** A big thank you to Fred Mahaffey who has volunteered to be Field Trip Chairman. A trip is being planned for February or March to hunt fluorite in Mason County.

**Newsletter:** Susan Burch is looking for member participation. Please send her articles for the newsletter.

**Old Business:** All were excited to know that the IRS has approved our 501-3C status. We now can receive tax-deductible gifts. Everyone should take some business cards to carry with them. They need to be given to anyone that each person talks to about the clubs interest. Everyone needs to assist in building membership. Jack Shull gave information about a field trip he attended with the Albuquerque, New Mexico Club to look for fluorite on the Blanchard Ranch.

**New Business:** The club will be setting up a display in the cases at the Tyler Public Library for January. Your help would be appreciated. This helps get the public's attention for the gem show. Judith Burleson informed the group that there would be a Chili Cook-off behind Gander Mountain the first weekend in March. Vendor tables are available for \$20. She will get more information on how the club can participate and make a report at the January meeting. It was announced that an interesting TV show appears on the Weather Channel on Sundays at 8:00 p.m. It is called The Prospectors.

**Announcements:** Please check the sign-up sheets and agree to work at the January Gem and Mineral Show. Many volunteers are needed.

January 5<sup>th</sup> will be the regular meeting date. The program will be "Lick and Stick". This is when we get postcards ready to mail out to people who have attended previously.

January 10<sup>th</sup> will be the pre-show workshop at the Church of Christ in Bulard. Location information will be emailed. All members need to attend.

Becky made a motion to close the business meeting. Colleen seconded the motion.

We enjoyed snacks everyone brought and then selected gifts or stole gifts for a fun evening.

Respectfully submitted, Carolyn Davis





President's Message continued:

as soon as possible, so you won't miss out on the next Rock-N-Rose Newsletter and ETGMS update.

I know all our members should know that we have a website at; [etgms.com](http://etgms.com). I only mention it, because only about 10% of our members have signed up and received logins. All members need to sign up and login to the members' only page, and verify that your membership information is accurate and complete. This is also the place to get information to contact other members that you wish to communicate with. This is the information I use to contact you, so please verify that it is correct. If there is anything that you think might be a nice addition to the site, please make a suggestion.

Okay everyone, the Annual Show is a little more than a month away, and barely half of our display cases for the show are spoken for. We still need members to fill 7 more display cases. I would think with a club our size that there would be a waiting list of members to step up and fill these cases. The display cases are a big part of the January Show. They show the public what our club is about, and the areas that our members are involved in. This drives the public interest to come to our meeting and join our club, as well as educating young minds. I know we have a lot of experienced & beginner lapidary artisans, mineral collectors, and fossil collectors in our club. If you have never set up a display case and need more information or help, don't hesitate to call me at 903-646-3189. And I know some of you forgot to put yourself on the list to reserve a case. Just email or call, and I'll put you on the list. I'm attaching a sheet on the display case liners, for those of you that might want to make liners for your case. Also, you can get an idea of the case dimensions from the sheet.

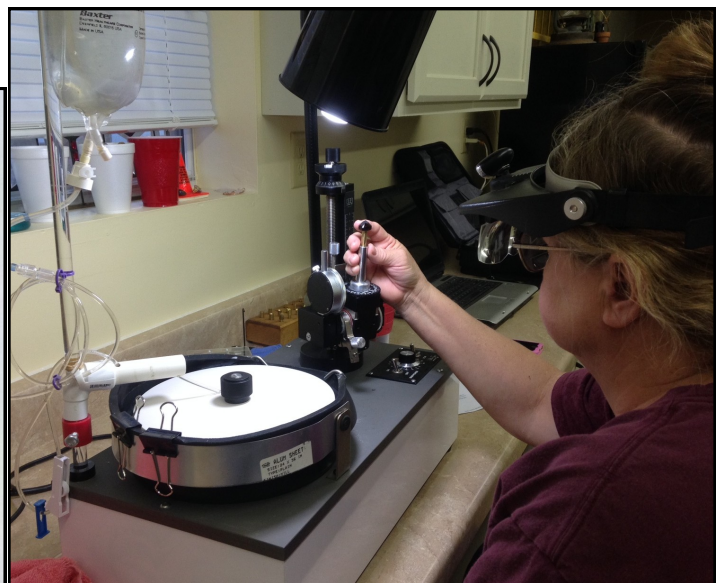
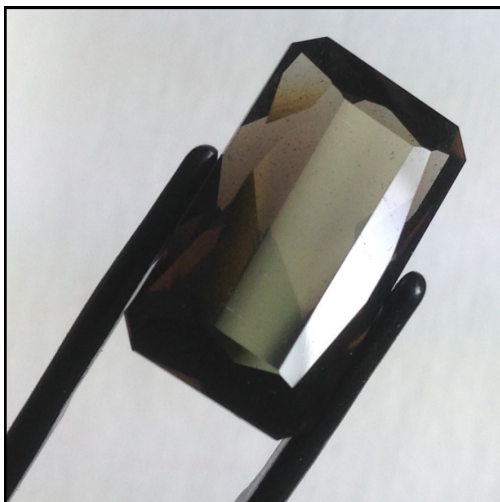
P.S. We have had a great response on members volunteering & signing up for our January show. But we still need a couple of items for the Dealers' Dinner, and there are still some time slots that need to be filled to work the show. Kinney Polve



### FACETING FENOM

Vicky is expanding her lapidary skills. She has gotten over her fears of operating a faceting machine and the possibility of destroying a beautiful stone. And I'm glad she did. This is the second stone she has faceted. An Apache Tear, commonly mistaken as Smoky Quartz when faceted. She doesn't want to take all the credit for the finished stone, because she had a little help on the final polishing. I told her she deserves all the credit. It's a beautiful stone, and I'm proud of her accomplishment.

Thanks, Kinney



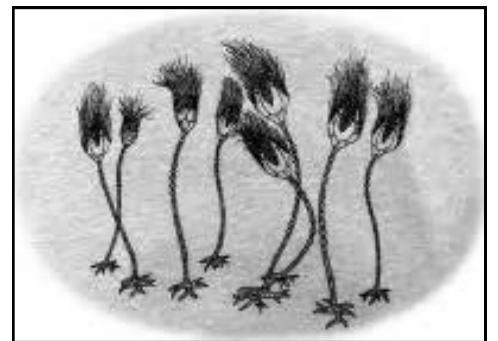


## BLASTOIDS

Blastoids (class Blastoidea) are an extinct type of stemmed echinoderm. [1] Often called sea buds, blastoid fossils look like small hickory nuts. They first appear, along with many other echinoderm classes, in the Ordovician period, and reached their greatest diversity in the Mississippian subperiod of the Carboniferous period. However, blastoids may have originated in the Cambrian. Blastoids persisted until their extinction at the end of Permian, about 250 million years ago. Although never as diverse as their contemporary relatives, the crinoids, blastoids are common fossils, especially in many Mississippian-age rocks.



Like most echinoderms, blastoids were protected by a set of interlocking plates of calcium carbonate, which formed the main body, or theca. In life, the theca of a typical blastoid was attached to a stalk or column made up of stacked disc-shaped plates. The other end of the column was attached to the ocean floor by a holdfast, very much like stalked crinoids. The stalk was usually relatively short, and in some species, was absent, with the holdfast being attached directly to the base of the theca. The mouth was located at the summit of the theca. Radiating like flower petals from the center were five food grooves, or ambulacra. Each ambulacrum had many long, thin, fine structures called brachioles, which were used to trap food particles and bring them to the mouth. Brachioles were delicate structures, and in fossils are not usually preserved in place. A series of five spiracle plates surrounded the star-shaped mouth, which included the anus, mouth and entrances to a set of five complex, folded respiratory organs known as hydrospires. These spiracles prevented mixing of the various fluids. Waste elimination was through the anispiracle, an opening formed by the fusing of anus and adjacent spiracles.



Like crinoids, blastoids were high-level, stalked suspension feeders (feeding mainly on planktonic organisms) that inhabited clear-to-silty, moderately agitated ocean waters from shelf to basin. The food gathering system of blastoids consisted of several types of ambulacra. Food entered the brachiolar ambulacra, was transferred to the side ambulacra through the brachiolar pit, then transferred to the main (median) ambulacra, and finally entered the mouth. Each of these ambulacra was roofed by cover plates. The cover plates of the brachiolar groove were movable and could open, allowing food to enter, or close as needed. Other cover plates may also have been movable. Via Stoney Statements, 12/14



## A LESSON IN 'TREE OF LIFE'

With Christmas coming up, it seemed to be a good time to have a wire wrapping class with the grandkids, Kanon & Breyanna Angulo. Kanon age 13 & Breyanna age 11, are two of our junior members. They wanted to learn how to make Tree of Life pendants. The one on the left in the picture was made by Breyanna, and the other two were made by me. Kanon also made two, but they were wrapped for Christmas presents as soon as he finished them. Kinney Polve



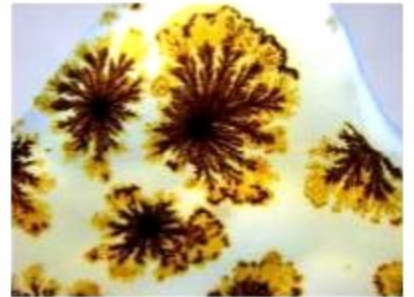


### THE STORY OF MONTANA AGATES

It's a mystery how the peculiar little scenes got inside a rock as hard as agate. Geologists claim that the spots were caused by infinitely minute seams or fissures in the softer parts of the rock being filled with metallic oxides when the world was young. These oxides make four different colors that form various combinations of color when blended together, or appear in single colors in each rock. The red color is oxide of iron. The black is oxide of manganese. The green is oxide of copper. The blue is oxide of nickel.



This theory has been explored with the help of high-powered microscopes that show the tracings of little canals so fine the naked eye cannot detect it; but the oxides remained, staining the rocks in wonderful designs. The fernlike and branch effects of the trees, grass, and shrubbery come from the fact that the tiny canals branched out in various subdivisions, forming smaller canals from a common center.



In addition to these canals, the rock became flawed through shrinkage while passing through a period of evaporation which, according to scientists, has taken more than three million years to reduce the stone to the hardness of 7 on the Mohs scale. These canals and flaws have been perfectly healed by soft silicate formations of which the stone is a part, and the evaporation has caused the oxides to take on forms such as are seen on the window after a frosty night.



Technically, Montana agate is known as "dendritic" agate, and the moss spots are called "dendrites." It is the third-hardest stone in the world, and is cut only with a diamond saw. There can never be two pieces alike, even though cut from the same stone. from the Petrified Digest 5/2001, via Gem Cutters News 10/2014, via BBG (HGMS), 12/14; Via Gritty Greetings 12/14.

**EAST TEXAS GEM & MINERAL SOCIETY  
MEMBER REGISTRATION FORM**



Name(s): \_\_\_\_\_ Anniversary \_\_\_\_\_ Birth Date: \_\_\_\_\_ Adult: \_\_\_\_\_ Jr. \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

E-mail: \_\_\_\_\_ Newsletter via e-mail? Y \_\_\_ N \_\_\_

Special Interest in the hobby: \_\_\_\_\_ Date Paid: \_\_\_\_\_

Home Phone: \_\_\_\_\_ Work Phone or Cell: \_\_\_\_\_ Dues Paid: \$ \_\_\_\_\_





## BENCH TIPS BY BRAD SMITH

**SILVER DISCOLORATION:** Working with jewelry involves an ever increasing number of skills. Chemistry is one of them that comes into play when dealing with a discoloration on the metal caused by a chemical reaction between it and the environment. In the case of Sterling silver there are three discolorations we typically encounter: a tarnish, a firescale, and a firestain. Each is different in its cause, in its cure and in its prevention. All three have to do with the metals in the Sterling alloy (92.5% silver and 7.5% copper) and how they react with oxygen and the heat of soldering or with pollutants in the air over the long term.

Tarnish is a grayish coating that builds up slowly on the surface as a result of a reaction of the silver with sulfur-based compounds in the air. Typically these are pollutants from the burning of petroleum fuels, but they can come from other sources as well. I once tarnished all the silver in my display case by putting a pretty specimen of iron pyrite in with the jewelry. Turns out pyrite has sulfur in it! Sulfur combines with the silver to form a grayish silver sulfide film on the surface. Preventing tarnish involves keeping sulfur away from the metal. Plastic bags will help, and anti-tarnish strips are available from jewelry supply companies to pack near your items. Tarnish is easily removed by hand polishing with a jeweler's cloth or with one of the products sold for cleaning the good silverware for holiday dinner. Another way is to remove it chemically. Put a piece of aluminum in the bottom of a dish large enough to contain your piece. Heat enough water to cover the silver. Mix in 2 tablespoons of sodium carbonate per cup of water and pour into the dish. Be sure the silver touches the aluminum. Sodium carbonate is the main ingredient in washing soda. Read the labels in grocery and hardware stores.

The second type of tarnish is called firescale. It is the dark gray to charcoal colored film that forms on Sterling or other copper alloy like copper or bronze when we heat it with a torch. The copper in the alloy reacts with oxygen in the air to form a dark cupric oxide coating on the surface. Luckily, the oxide is easily removed by dissolving it in a mild acid - generally called a pickle. It's important that we not let firescale form on a solder joint because it will block the flow solder over the joint. Prevention can be done two ways. Most common is to use a flux, a borax-based solution applied to the metal before soldering. When melted, borax forms a thin glassy layer that keeps oxygen away from the metal. A second way is to do your soldering on a charcoal block. Together with the flame, charcoal greatly reduces the amount of oxygen in the area being soldered. In either case oxygen is prevented from reaching the metal, so no cupric oxide firescale is formed.

A second oxide can also be formed when soldering copper or a high copper content alloy like bronze or brass. It's called cuprous oxide and is reddish in color. That's why a black looking piece you put in the pickle sometimes comes out red. Problem is that while the black cupric oxide is dissolved by a pickle, the red cuprous oxide is not. The discoloration can be sanded or polished off, but an easier way is to use a "super pickle". This is a mixture of fresh pickle with a healthy shot of hydrogen peroxide from the local store.

I've saved the worst form of discoloration, firestain, for last. Think of firescale (above) as like getting dirt on your shirt that you have to wash off. Firestain is like getting ink on it. The discoloration is not just on the surface, it seeps down and stains the material. Firestain happens when we heat a piece of silver too hot, too long, and/or too many times. Firestain occurs when the oxides start to build up below the surface of the metal. You generally don't notice it until after polishing. It appears as a darker area of the surface and is easy to spot when viewed under light bounced off a piece of white paper. Because firestain is below the surface, there's no easy bench tip solution. Depletion gilding may work for some pieces. Otherwise, removing it calls for sandpaper and aggressive polishing.

A much better approach for a piece that will require a large number of solderings is to protect the metal from developing firestain by applying liberal coats of a firecoat. Regular soldering flux will provide some protection but will not be as effective as preparations made specifically for the task.

Attribution to be included with each publication:

'Get all 101 of Brad's bench tips in "Bench Tips for Jewelry Making" on Amazon' and if you publish as a pdf, I'd appreciate 'Amazon' to be a live link to [www.amazon.com/dp/0988285800/](http://www.amazon.com/dp/0988285800/)



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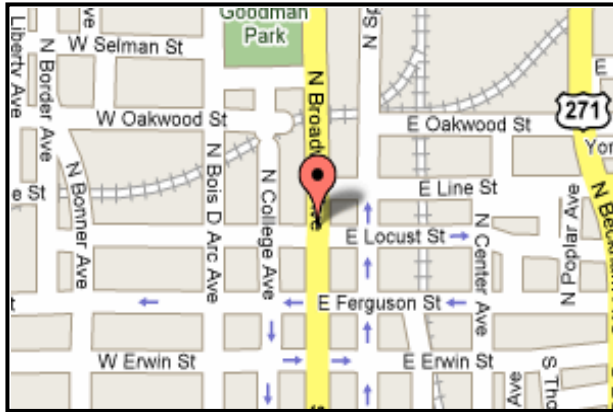
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THE EAST TEXAS GEM AND MINERAL SOCIETY MEETS ON THE FIRST MONDAY OF EACH MONTH, UNLESS THAT DAY IS A HOLIDAY, THEN THE MEETING IS MOVED TO THE SECOND MONDAY. WE MEET AT THE DISCOVERY SCIENCE PLACE, 308 NORTH BROADWAY, JUST NORTH OF DOWNTOWN TYLER,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

Please send any info or articles to be included in the newsletter to the Editor at the address or email listed below 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, as that is the best way to reach me. Thank you... Susan Burch

### 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, \$2.50 for juniors, or \$20 for a Family.



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