



ROCK-N-ROSE



NEWSLETTER OF THE EAST TEXAS GEM & MINERAL SOCIETY

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VOLUME 39

TYLER, TEXAS ISSUE 6

JUNE 2013

Coming Shows, 2013

June 28-30

GRAPEVINE, TEXAS

Annual show

EGI Show

Grapevine Convention Center

August 10-11

Baton Rouge, LA

Baton Rouge Gem & Mineral

Society, Bossier City Civic

Center

August 16-17

TAHLEQUAH, OKLAHOMA

Annual show

Tahlequah Rock & Mineral Society

Tahlequah Community Bldg

Aug 17-18

BOSSIER CITY, LA

SCFMS Federation Show

sponsored by the Ark-La-Tex

Gem & Mineral Society

Bossier Parish

Convention Center

August 24-25

MOUNTAIN HOME, ARKANSAS

Annual show

Ozark Earth Science Gem,

Mineral & Fossil Club

Cooper Park

Van Matre Senior Center

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PRESIDENT'S MESSAGE

We had a show and tell night for our program at our June 3rd club meeting. To me its one of my favorite programs because it allows club members to show off and tell us about what they like to do regarding our hobby. We have some great presentations, and wonderful specimens and creations to observe. Thank you all for your participation. It was great. While we're discussing programs, we need volunteers who are willing to present a program for our club at our monthly meetings. I don't mind putting programs together and presenting them, but we need to hear from others. I know nothing of the jewelry and lapidary arts, thus we need club member who are knowledgeable of these to give us some programs. I'm willing to assist anyone putting a program into Power Point or a picture slide show if they can provide the images and information. I'm not sure what we will have for a program at the July 1st club meeting, but we'll have something.

We will be electing new club officers at the September 9th club meeting. Each year we elect a club President, Vice President, Treasurer, Secretary, and two executive board members. If you are interested in serving as an officer or board member please let me know so we can talk and discuss the required responsibilities and get you listed on the September ballot.

We have a couple of community outreach opportunities I would like to mention. First, club member Randy Harmon put me in contact with the City of Tyler Public Library regarding putting two displays up of our hobby related stuff in the Library next January. We use to do this each year, but personnel changes at the library over the years made it too difficult continue. So, thanks to Randy, we're back in and at a really good time. Think of it, two rock, mineral, fossil, jewelry displays, one upstairs and one downstairs during the month we have our annual Gem & Mineral show. Great publicly. So you have been warned. We will be asking club members to be willing to display some of their collections or creations for a month in locked display cases at the Tyler Public Library next January.

Second; During the week of July 21st and July 28th the Discover Science Place is conducting a earth science themed camp at their facility, and have asked our club to participate by providing some guest speakers to share their earth science related information to the campers. If you are interested in the education of our local children, please let me know by calling 903-520-4085. I'll have more information about this at the July 1st club meeting.

I hope everyone has a safe and fulfilling summer of collecting and creating.

Don Campbell



JUNE MEETING MINUTES

Meeting called to order at 7:00 by President Don Campbell, members and guests were welcomed. Terry Roberts moved minutes be approved as published, Bill Faulkner seconded. Bill Faulkner gave the treasurer's report. A copy of the report is available for viewing at the meeting by members.

Field Trips

Becky is out of town, Don gave a report on the quartz digging trip. 12 people attended, a great trip and good time had by all.

A trip to the Perot Museum is in the works during the summer. Date to be determined

Announcements

The Lapidary group will meet at Bill's home in Whitehouse at 2 p.m. Will work on cabbing. Kinny, Bill and others moved Bill Holder's saw to Bill Faulkner's shop for use by members. Sylvia stated she has a saw that belongs to the club she would like to have moved. Don said someone will get together with her about the saw. The Mineral Group will meet Thursday the 20th. Meetings are the 3rd Thursday from 7-9 p.m. Topic is the properties of minerals.

July 22 – 26 and July 29 – Aug 2 the Discovery Science place is hosting a Day Camp. The first week's subject will cover rocks and minerals. Second week the topic will be fossils. Volunteers are needed.

Scholarship donations were made in memory of Al Davis and Charlotte Harmon. Acknowledgements were received for both from Dee Holland, President of the AFMS Scholarship Foundation.

Old Business

No old business

New Business

No new business

Tickets were drawn for door prizes

Program is Show and Tell

Respectfully Submitted,

Suzan Chapman, Secretary



LAPIDARY/JEWELRY SUBGROUP

The Lapidary/Jewelry subgroup held its monthly meeting at the home of Bill Faulkner on June 8. A total of 6 members were present and 3 of the members had a chance to use a trim saw to cut cab blanks from slabs and practice using two Genie cab machines. The group also discussed problems encountered during practice, as well as potential dangers that could be encountered using different types of machines. The group thanked Bill for his hospitality and the great refreshments he provided.

The next meeting will be held at Terry Roberts' home at 2:00 pm on July 13.

Terry Roberts

Also,

Bruce Walker, our newest member, who is an electrician, came over the same afternoon and went over the needs of the club slab saw. He has volunteered to do all the work required to get the saw running. A big thank you goes out to Bruce for his generous donation of time and talent.

Bill Faulkner



**The Up and Downsides of minerals
The hazardous ones!
Bridget Joubert, CenLA Rockhounds**



Columbite specimen

In last month's Rock and Gem magazine (Apr. 2013), there was an excellent article by Bob Jones on the "Rare Earth" elements. Few of us have heard of many of these elements but they are essential for today's modern electronics. Do elements like 'scandium, yttrium, lutetium, cerium, neodymium, gadolinium, thulium, or europium' roll of your tongue or are they tying a knot in it just trying to speak them? We were introduced to them when we were in the Black Hills and visiting the Etta Mine. Jim found a very nice dark mineral crystal that did not fit any that we knew about (see pic, page 43, in R&G Mag). Lots of inquiry finally got us to a man who said, "Oh yes, that is "columbite", a niobium/tantalum ore. You know, the rare minerals" We nodded our heads "Yes" but had only vague ideas what rare elements were since the last time we saw them was in Chem 101 decades ago! Why don't

we see more of them offered at shows? Well, as for specimens, they tend to be unattractive, drab, seldom seen in mines, or occur as small crystals that catch no ones eye so it's a rare dealer that has some for sale.

Where can I get some specimens, you ask? Guess who controls the production of 90% of today's rare earths? Yep, CHINA! None are actively mined in the US! The closest mine to us is in Bancroft, Canada and it just so happens that our DeRidder club has a mess of mixed specimens from that mine. Now the trick is to ID the rare earth ones from the common ones. If you are looking on E-Bay, look for gadolinite, bastnasite, and monazite, plus to a lesser extent, fergusonite, parasite, allanite, betafite, columbite, and xenotime. What about all the Chinese stuff? The material the Chinese are digging is not even a mineral at all but 'Clay', yes, plain ole clay, but it is abnormally rich in rare earths. Try displaying a lump of that and see if you get any blue ribbons!

Of course, if you are a great analytical chemist, you can recover these rare earths from all the devices we have become addicted to: special magnets of gadolinium/samarium are needed for the military (nite vision goggles, armour, speakers) , lasers (erbium, ytterbium, thulium), surveyor tools, super conductors, Hg vapor street lamps (scandium), fluorescence in minerals, UV coatings on sunglasses plus polishing all glass products and gems (cerium), self-cleaning ovens (thorium), anything that 'sparks'-from lighters to toys, catalytic converters on autos, electric car batteries, cell phones, iPad stuff, oil cat-cracking into gasoline, all computers..... and the list goes on and on! Our modern electronics would cease or revert back to the 1940s if these elements disappeared. .i.e. I would be typing this on an 'inked ribbon' Smith-Corona typewriter! And, oh yes, no TV! So as you can see from this, we are completely dependant on them for our modern life style.

Following on the heels of this article was one in PC World magazine (Vol 31, May, 2013) outlining a totally different aspect to these 'electronic miracle' elements.... The toxicity or environmental damage during mining, manufacturing, and disposal of all our electronic gadgets and toys! Think for a minute, is there anything today that is not run by mini-circuit boards? All of our appliances, vehicles, phones, TVs...oh, heck, everything! Now how did they come about and where do they go after the 'thing' breaks?



Mercury



First there is the mining part to get things started. Lead, mercury, arsenic, rare earths, and other metals are essential to electronics and getting them from the ground takes serious digging. Gone are the days of a tiny hole in the side of a mountain, today they strip the whole mountain down as they try to get these metals (visit Cripple Creek, CO). Once the earth is extracted, now comes the isolation of the desired elements. This is very difficult in many cases and requires toxic agents (acids, Cyanide, etc). What happens to the waste?

Sometimes it is detoxified and sometimes NOT! Ask the city fathers of Baotou, Inner Mongolia, China about their water supply! If toxic metals like mercury are not cleaned up, they end up in the lakes and ocean... and into the salmon and tuna fish we love. One of the reasons that most mining is now overseas is that there is little environmental oversight in Africa, Asia, and South America and sloppy mining practices make more money than careful extraction and clean up.

The next process is the actual manufacturing of the gadgets we love. We don't have to handle the metals in our electronic toys we play with but someone has to! Circuit boards require soldering and as automated as some of this process is, there are still lots of metal vapors in the air in a factory. Remember the asbestos law suits that continue today, long after the material was banned? Often things do not just go away! High rates of cancer and organ damage among electronic workers are being reported in Japan, Korea, and now, even China. Jim says that for years, the 14K gold solder he used contained trace amounts of cadmium to make it work better.... and that stuff vaporizes under a torch! Today, the solder is cadmium free.... in America and Europe at least.

Piled on top of that, there are the many plastics that cover the electronic toys and cables, batteries, carrying cases, packaging, and so forth. Sadly there are few facilities capable of recycling or disposing of these plastics. Just burn them, you say? Well, an extremely nasty by-product of burning plastics is "dioxin", a carcinogen! We all know of the hazards of lead, mercury, cadmium, and arsenic and these elements are common in all electronics, batteries, and lights. They are very stable in the 'toys' but as we discussed, pose a great hazard to those making the gadgets! Even worse, almost none of the electronics are totally recycled today. Our Government just gives away cell phones today (for votes some say) but has NO plan at all to recycle them! When you turn in a dead cell phone, it is often sent to Africa for salvage but less than 50% is, and the rest of the 'phone' is dumped into a pit for burning. Guess what happens to those metals after that? So all in all, as wonderful as the modern life style is, somewhere down the line we will have 'pay the piper' in costly dedicated recycling plants or a live in a very toxic environment... your choice! Via Rock Club Newsletter of the Gem, Mineral and Lapidary Society of Central Louisiana, 5/13.

Photos:

Top, cadmium crystal

Bottom, crystalized gold

All photos in this article via the internet.





1983 - 2013 = 30 Years of Displaying

Article by Bill and Lois Pattillo

www.rockfoodtable.com

After visiting a Gem and Mineral Show in Portland, Oregon and digging thunder eggs at The Richardson Rock Ranch, in October 1982, I decided to fix a table for our March 1983 Corpus Christi Gem and Mineral Show. With my muffins and items from club members, we had a Food Table. Not really a table of food, mainly a lot of dishes with a few rocks. As we were set up at our March show, San Antonio Club members came and invited us to their show, the next week. Houston saw us in San Antonio, invited us to their show, in September. Jackson, Mississippi saw it in Houston and invited us to their show in February. We were off and running.

At Houston we were offered a loaf of bread. At show's end we went to return it, thinking it was to be used just that weekend. You don't want it? Yes indeed. It fit just right in a breadbasket.

In the next few years, invitations to shows grew and so did the table. One year we did twenty-two shows. That's lots of packing dishes, so as not to break with rocks. Lots of rocks. Many donations from a small piece of candy to a 12 pound round loaf of bread. Now donations make up most of the table. A young girl in Denver gave us a fried chicken drumstick. We asked if she didn't want to keep it. No it was for us. A little boy donated a piece of fruit. I asked him if he didn't want to keep it and start his own collection. "No, I want you to have this one, then I will start my collection." In over the last 30 years, the Food Table has grown from a standard 8 foot table, to a false top, to make it 9 feet by 4 feet and then later added the breakfast table.

Because of the rock food table, we were honored with a Certificate of Achievement by the National Rockhound & Lapidary Hall of Fame, Murdo, South Dakota, December 2005.

Rock Food Table articles were in the Rock and Gem Magazine in November 2000, by Laura Dow, of Austin and August 2009 by Lari Carter, Atlanta, Georgia.

This year at the Corpus Christi Gem and Mineral Society Show, the first weekend of March, the Rock Food Table was thirty years old. That's a long time for an exhibit that started with a lot of dishes and a few rocks.



Bill & Lois Pattillo's Food Table

From SCFMS Newsletter May-June 2013; via Fredricksburg Rockhounds Newsletter, 06/13



June Birthstones

June counts three gems as birthstones, pearl, Alexandrite, and moonstone.

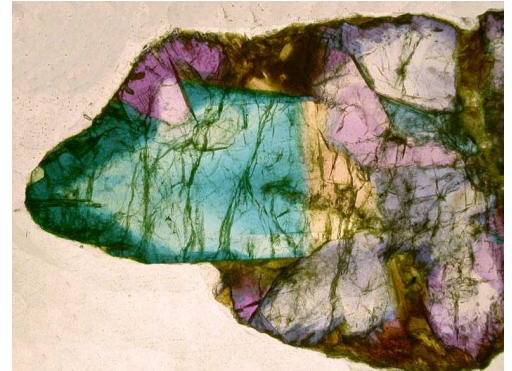


Pearl

Historically, pearls have been used as an adornment for centuries. They were one of the favorite gem materials of the Roman Empire; later in Tudor England, the 1500s were known as the pearl age. Pearls are unique as they are the only gems from living sea creatures and require no faceting or polishing to reveal their natural beauty. In the early 1900s, the first successful commercial culturing of round saltwater pearls began. Since the 1920s, cultured pearls have almost completely replaced natural pearls in the market.

Alexandrite

A relatively modern gem, Alexandrite, was first discovered in Russia in 1831 during the reign of its namesake, Czar Alexander II, and is an extremely rare chrysoberyl with chameleon-like qualities. Its color is a lovely green in both daylight and fluorescent light; it changes color to a purplish red in incandescent light. Due to its rarity, some jewelers stock synthetic versions of this enchanting gemstone. (Synthetic gemstones are man-made alternatives to the natural material, possessing the same physical, optical, and chemical properties as the natural gemstone.)



Moonstone

The third birthstone for June is the Moonstone. It was given its name by the Roman natural historian Pliny, who wrote that moonstone's appearance altered with the phases of the moon — a belief that held until well after the sixteenth century. A phenomenal gemstone, moonstones show a floating play of light (called adularescence) and sometimes show either a multi-rayed star or a cat's eye. Considered a sacred stone in India,



moonstones of-
ten are displayed on a background of yellow (a sacred color) and are believed to encapsulate within the stone a spirit whose purpose is to bring good fortune. Part of the family of minerals called feldspar, moonstone occurs in many igneous and metamorphic rocks and comes in a variety of colors such as green, blue, peach, and champagne. The most prized moonstones are from Sri Lanka; India, Australia, the United States, Myanmar, and Madagascar are also sources.

- See more at: <http://www.americangemsociety.org/june-birthstones#sthash.cPc8BnvE.dpuf>

Via Stoney Statements 06/13



Changes for AFMS Scholarship Foundation Fund by Virginia Adian

The American Scholarship Foundation Fund was established in 1964. Clubs and individuals have donated all the money for this fund. Interest from the fund is used to award scholarships every year to graduate students in the earth sciences.

Six Regional Federations (California, Eastern, Midwest, Rocky Mountain, South Central) chooses an honoree from nominations of people who have contributed toward earth science education. The six chosen regional honorees work with professors in a graduate school of their choice to select two worthy recipients in the earth sciences.

AFMS then awards two \$4000 scholarships to the students selected in each federation. That is \$48,000 in scholarships every year! There is no fund raising effort for this fund except for a spontaneous auction which is held at the AFMS meeting. Some beautiful faceted or rare stones have been donated for these auctions. These scholarships have grown and been maintained, even in our recent economic decline, because of the generous donations from gem clubs. Records have been kept since the founding of this fund in 1964. When a club donates \$1 for each member, its percentage point moves up 100%. Reports are provided annually to clubs so they can perhaps set some goals for donations.

I am now the SCFMS member of the AFMS Scholarship Foundation. Any donations for the AFMS Scholarship Fund should be sent to me. Jonathan Moehring remains Executive Secretary and receives dues and insurance, but the AFMS Scholarship Foundation member is separate and is appointed by the president.

I will record your club's donation, inform you of your percentage of donations, and then pass your donation on to AFMS. I will also submit a list of clubs making contributions since the last publication for each SCFMS newsletter. Checks should be made payable to AFMS Scholarship Foundation and mailed to:

Virginia Adian
109 Katie Court
Boerne, TX 78006

You may contact me at 830-755-6105 or v.adian@gvtc.com

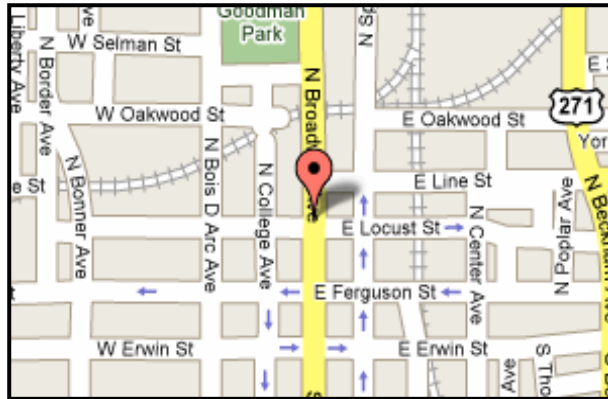
I urge your club to make a donation this year. You don't have to send \$1 per member every year or every donation. You can send any amount and it will go toward reaching your next percentage point.

(SCFMS Editor's note: There are seven Federations in the American Federation. Southeastern Federation has their own Scholarship Fund).

From SCFMS Newsletter Mar-Apr 2013

CLUB OFFICERS

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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

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.



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