

The BACKBENDER'S GAZETTE

The Newsletter of the Houston Gem & Mineral Society Houston, TX

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March 2013



President's Message by John Caldyne

appy February, everyone! February is always a good month for me for some reason. January was a rushrush month. I've been working on some items for the year; they should be voted on and put into place.

Upon receiving Bill Moore's resignation from his post as 1st Vice President, on February 5, 2013 the HGMS Board selected Clyde McMeans as his replacement. Clyde is a highly educated and skilled business administrator. He will



be resigning his current post as the Show Hospitality Chair. I too work in business, so Clyde and I agree on many things. At the Board meeting I also spent some time talking with Rodney Linehan, the HGMS Treasurer. I'd like to think the three of us will have a great working relationship in maintaining the business of HGMS. Mr. McMeans and I took a long look at HGMS, and while we saw many good things, we also saw some bad things happening at the HGMS.

At the February Board meeting, I brought up a number of things I want the Board to look at and to vote on. Some of the things I brought up during the meeting weren't immediately understood by some members. Michele Marsel was able to explain my concerns to the Board very well. She is such a great and refined HGMS Secretary. I am blessed to have her on my team. (She also lets me know when I screw up.)

A few topics I brought up:

> Terry Proctor's many professional skills should be reserved for important issues such as the HGMS Outreach Program.

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General Meeting Date
March 26, 2013

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Every article published in the BBG is edited for grammar and content. No flaming is E-mail the Editor and Webmaster at allowed.

Editor: Phyllis B. George 22407 Park Point Drive Katy, TX 77450-5852 Phone: (281) 395-3087 Copy is due for the April 2013 issue by Wednesday, March 6, 2013.

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Purpose of HGMS

he objectives of this Society are to promote the advancement of the knowledge and practice of the arts and sciences associated with the collecting of rocks, minerals, fossils, artifacts, and their identification and classification; the general lapidary art; the collecting and identification of gemstones; the designing and execution of jewelry or metalcraft; and to provide the opportunity to obtain, exchange, and exhibit specimens and rough or finished materials.

Membership dues are \$40 for an adult membership, \$60 for a couple, \$75 for a family (including all children aged 5-18), \$25 for a youth membership (ages 5-18), and \$500 for an adult life membership. Advertising rates: \$70 for 2 months, \(^{1}4\) page; \$150 for 6 months, \(^{1}4\) page.

MEMBER: American Federation of Mineralogical Societies & South Central Federation of Mineral Societies.

All meetings are held at the Clubhouse which is located at 10805 Brooklet near the intersection of Highway 59 (Southwest Freeway) and Sam Houston Parkway (Beltway 8). See the calendar inside the back page for when the different Sections meet. The General Meeting is the fourth Tuesday of each month at 7:30. The HGMS Web site address is http://www.hgms.org.

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- Members should treat each other with civility at all times. Flashes of anger toward another member have no place in our club.
- ➤ Let's ask Patricia Hildbold if she is willing to take over the 2013 Show Hospitality Committee.
- Anyone who buys items needed for the club with their own money should be reimbursed quickly by the club.
- > Shop safety rules must be rigidly enforced.
- ➤ The General Meeting shall begin and end **on time**. During the break, get your coffee, drinks, and snacks, and proceed back to the lecture room without loitering in the kitchen. (The coffee break will be 15 minutes only, starting at 8:45 p.m. and ending at 9:00 p.m.—by which time everyone should be seated.) The meeting will continue on so we can end the meeting on time at 9:30 p.m.

Have a blessed month, everyone. Talk at you later. John Caldyne

The Miner

by John Anderson 1-29-2013

Member of the Houston Gem & Mineral Society

doday the Miner has a different kind of story that is about getting to a location known for its gold deposits. I planned a trip to Papua, New Guinea, and the story centers around my travel to this area that turned out to be an adventure in itself.

My story began in Houston, traveling via Continental Airlines to Los Angeles where I boarded a Singapore Airlines Boeing 747. This was the first stage of the flight taking me to Tokyo, Japan, then to Singapore, and finally to my destination in Sorong, Papua, New Guinea. In Tokyo we exited the plane to go through Immigration, then



we were allowed to board our plane again. After we were back on the plane, we learned that all the passengers were being asked to exit the plane again. We were told that we would be transported to hotels in the city for an unexpected overnight stay.

It appears that when the Japanese Customs officials were examining a domestic cat in its airline approved carrier, they did not secure the lock on the cage, and the cat escaped into the cargo hold of the plane!

Singapore Airlines footed all the bills, including providing at least eight large buses to transport all of the approximately 400 passengers to first class hotels all over the city of Tokyo. I stayed at the Marriott Hotel in Disney Land. At the hotels, all passengers were

fed, and each passenger was given a phone card so they could contact anyone in the world about the travel delay. They had a psychologist there to counsel anyone who might be having a mental problem due to this flight delay. They rescheduled all of the passengers' connecting flights for the next day. There were many other issues that they had to address—some people were on connecting flights to tours that that now had already left, some had to get to cruise ships that had already left on their cruises, and another group was going to Africa to join their safari that also had now left.

Singapore Air Lines employees would have burped us too if we had asked for it or needed it. They were really into helping their customers to the fullest.

The next morning as we boarded our plane, we were informed that they had found the cat alive. "Hallelujah!" I did not see the cat, but I was told by a reliable source that it looked like a very scrawny, common looking, two-bit alley cat, and not the least bit like a \$1,000,000 cat, which it now had become. Most likely the \$1,000,000 Cat had lost most of its luster, beauty, and weight by being chased around and around in the cargo hold of the plane all night long.

After settling in with what I thought was a good book, I started to doze. And then I thought I heard a purring but with a voice saying, "I didn't do it, you dirty rat, it was the Japanese Customs Official that made me do it. He made me get out of my cage, so I had to go looking for someone to relock me in my cage because I was so scared with the cage door open. This is the truth, the whole truth, and nothing but the truth so help me and my 9-Lives."

I really don't know if it was a dream or if the \$1,000,000 Cat was actually talking because the Cat started to sound more like James Cagney. As I opened my eyes, they were playing an old gangster movie staring James Cagney.

I would like to finish this story about the Papua New Guinea, but I will have to make that another story by The Miner.

Eye See Everyone Needs a Safety Reminder

by Michele Marsel

he Board is concerned after recent reports from shop stewards that many members are not wearing eye protection while working in the shop and classrooms. Always wear personal protection equipment whenever using power tools (think saws and grinders), rock picks, chisels, or any other impact tools that could cause injury or damage.

Injury: Some people think they don't need protection while in the shop or classrooms because they are just in the room having a conversation and are not actually using any equipment. Do not think for a minute that flying debris will skip over you because you were not "working" in the shop or classroom. Small chips will often fly up and away from the blade when a grinder is in use. The rock being ground sometimes shatters, and razor-sharp shards can fly directly into your face or into the face of the member working next to you.

Hearing Loss: You are exposed to higher than normal decibels while grinding. Prolonged exposure to more than 90 decibels can produce permanent hearing loss. Do not deceive yourself; you haven't become used to the noise. If you think it doesn't sound as loud, this is a warning that you are losing your hearing.

Safety is everyone's responsibility, and we never want to have injuries of any kind in our shop. The Board voted recently to create reminder signs and to provide a supply of loaner eye protection as well as disposable hearing protection for member use. Eye protection is required in the main shop AT ALL TIMES. It is required of everyone in the shop, whether you are personally using equipment or not. In our two classrooms, eye protection must be worn by all in the room whenever any equipment in that room is in use. If you are working in the shop, ear plugs are also recommended, particularly if you spend a fair amount of time working on the grinding wheels.

Please follow the safety rules—your sight and your hearing are too important to risk.

Refreshments Return to General Meetings

by Michel Marsel

ur January 2013 General Meeting ushered in the return of refreshments for the New Year. Terry Proctor graciously volunteered to bring snacks for the January and February meetings. At the meeting, President John Caldyne asked other members to commit to bringing refreshments for future months. Secretary Michele Marsel will send each volunteer an e-mail reminder shortly before each General Meeting. The schedule for the year follows:

Name	Refreshment Months
Terry Proctor	February 2013
Neal Immega	March & April 2013
Phyllis George	May & June 2013
Michele Marsel	July & August 2013
John Caldyne	September & October 2013
Clyde McMeans	November 2013

Terry brought a wonderful assortment of goodies, and I'm sure we'll see a similar spread at the February General Meeting. John reminded everyone that we have a donation jar—the "Sabre Tooth Kitty"—where members may make a contribution to help defray the cost of refreshments. So please remember to feed the "Kitty" while helping yourself to some sweet or savory snacks.

Get last-minute news about club events by sending a note to Neal Immega at n.immega@swbell.net.

Win the Popularity Contest - Do Science Night

by Neal and Inda Immega Members of the Houston Gem & Mineral Society

ant to be popular and NEEDED? Do a Science Night at a local school! Scott Singleton introduced me to this by recruiting me as his helper at Rice School. Now I seem to have taken over the franchise, but I will be happy to share a gig with any of my readers. Let me know if you are interested.

Schools all over the city encourage their students by having evening programs where volunteers show science stuff related to their specialties. Of course the Houston Gem and Mineral Society specialty has to do with rocks, and I bring one or more grinders so the kids can get a feel for polishing a rock. The parents are amazed that a wheel can grind a rock and not their kid. It is funny to watch a parent who is afraid to touch a spinning wheel but will let their kids do it.



Let the kids do the grinding

There are some differences in how people take up the project. The kids are great with the grinders, but occasionally I have to discourage parents from managing the process too closely. I encourage the Moms to grind their own rocks and let the kids manage the process on their own. Dads are often a lot more willing to let the kids learn on their own. I try to make machines seem friendlier by showing that the wheel makes a great fingernail-polishing station. I put out a tub of cutoffs from our trim saws, and the girls endlessly sort through it to find the right color. The boys just pick the biggest rock.





Left: Inda showing off a mammoth *Mammoth* bone Above: Even babies like a *Mammoth* bone

As you know, I favor paleontology, and on page 7 is my wife Inda showing off a very large, fiberglass replica *Mammoth* bone. Once she gets across the idea that this bone is a femur, she gets to explain why it is not just a dinosaur bone with a 90-degree angle on the ball and socket, but a mammal bone with a 60-degree angle. Of course, all the parents see this as a photo op.

Inda put the bone on the floor so the babies could crawl on it. (See photo on page 7.) Start teaching early, bring them up right!

Come and join in the fun. It is an easy gig and much appreciated, and I am always looking for new talent. When your kids' school has a science night, volunteer to do one of the stations, and I will help set you up.

Help! Where are Mark Villanueva's Awards?

by Phyllis George

everal years back, Mark Villanueva won four certificates and three plaques in the 2008 and 2009 Bulletin Editors' Contest at both the SCFMS and AFMS levels.

The plaques and certificates were held at the club because by the time they were awarded, Mark had joined the Army (unknown by us) and was already serving in Iraq or Afghanistan. We had no idea how to contact him about the awards.

Mark is now in the U.S., is in the process of being discharged from the Army, and he would like to have his plaques and certificates—but they are nowhere to be found in the club office.

2012 HGMS President Charlie Fredregill said that he's sure someone told him that when the office was about to be cleaned up and organized during the past year or two, someone else took Mark's awards home for safekeeping. However no one seems to know who that might be.

So if you happen to have those items, or you know who does, PLEASE contact me either by phone or e-mail so we can get those items back and send them to Mark.

As a side note, last year Mark mailed to the club an America flag that had flown with him in battle and a certificate explaining the significance of the flag. Both have been framed, and the flag is now on display. The certificate should join it soon to complete the display.

Update: Shortly after the above article was published, Shira Trumble e-mailed me to say that she had taken the 2008 items home because at the time Mark had asked her to hold them until he returned from Mexico. When she heard nothing more from him, she continued to hold them. She has now mailed the 2008 plaques and certificates to him.

Now we need to find out who has Mark's 2009 plaque and certificate. If you know anything about them, PLEASE contact me.

HGMS Entries for SCFMS 2013 Bulletin Editors' Contest

by Phyllis George HGMS Newsletter Editor

t's that time of year again when rockhound newsletter editors throughout the U.S. scour through their previous year's newsletter issues to select articles and newsletters to submit to their regional 2013 Bulletin Editors' Contest. The entries from HGMS are listed below along with their category. The SCFMS results will be announced August 18 at the SCFMS Annual Show in Bossier City, Louisiana. The top three winners in each category will be forwarded to the AFMS judges, and the AFMS results will be announced September 22 during the AFMS/SFMS annual show in Jacksonville, Florida.

Name	Title	Month					
Large Bulletin							
Phyllis George	July & October 2012						
	Advanced Adult Article						
John Anderson	The Miner	November					
Steve Blyskal	Houston Fine Mineral Show	June					
Neal Immega	The Seymour Blob	September					
Mark Villanueva	Markings and Hallmarks: How to Decipher the Code	November					
	Adult Article						
Karen Burns	What is HGMS	June					
	Adult Poetry						
Edward Clay	The Bench	September					
Owen Martin	Ode to My Rock Brothers	March					
Terrell William Proctor	November						
	Junior Article Under 12						
Jackson Skubal (10 years old)	The Tourists of Today Meet the Mine of Yesterday	June					
	Feature						
Steve Blyskal and Sigrid Stewart	South Texas Field Trip (Zapata and Laredo)	March					
Burton Dworsky	Beware the Tommyknockers	November					
John Emerson	The Old Geezer Bird Watches	January					
Nancy Fischer	Day Light Section—Making a Copper Bracelet	November					
Neal Immega	Day Light Section—Gemstone Carving	May					
Deidre D. Prince	Paddles Flying at the Show Committee October Auction	December					
Terrell William "Terry" Proctor, J.D.	McFaddin Beach—Revisited by the Archeology Section	November					
Mark Villanueva	Surviving in Afghanistan	October					

Beading Section Earring Project

Photo by Nancy Fischer

he January meeting of the Beading Section produced the lovely earrings shown in the picture. Everyone was able to complete a pair.

The February meeting project is a bracelet to be constucted of four strands of small gold-colored chains with interspersed amethyst and peridot beads. The bracelet can be seen on the Web site on the Upcoming Programs page.

Everyone is welcome to attend the meetings that occur on the third Saturday of each month at 1:30 p.m.



Mineral Section Programs

by Paul & Nathalie Brandes

the most famous mineral gathering in the world, bring in your recent acquisitions from the many Tucson Shows. Give us your impressions and regale us with your experiences. For those who could not make it, come and see what you are missing. Refreshments will be provided.

March 6, 2013: Clear Lake Show & Tell: Bring in your recent acquisitions from the Clear Lake Show (February 23–February 24) so that members who were not able to attend can see the deals you got! Specimens that did not make it back from Tucson in time for the previous meeting will also be discussed. Refreshments will be provided.

March 20, 2013: To be announced

April 3, 2013: To be announced

April 17, 2013: Section Auction: The Mineral Section will be hosting its annual auction to help raise money for the Section. Once again, we invite all HGMS members to bring specimens to the auction. This is how it works: all of the proceeds (100%) of at least one (1) specimen of your choice must be donated to the Section. Five (5) additional specimens are allowed for each donor with a portion of those specimens (10%) going to the Section and the rest going to the donor (i.e.: if a specimen sells for \$50, \$5 goes to the Section, the remaining \$45 to the donor). This is a great way for all HGMS members to thin out their duplicate specimens and to benefit both yourself and the Mineral Section. You can put a minimum reserve bid on the more expensive pieces if

you desire. Since this event will draw from all Sections, expect a variety of items to be auctioned as this promises to be a very interesting and entertaining evening. Setup will begin at 6:30 p.m. with viewing from 7:00 to 7:30. After a short business meeting, bidding will begin, and it will last until the final item is sold.

May 1, 2013: Houston Fine Mineral Show Wrap-up: Bring in your recent acquisitions from the Houston Fine Mineral Show (April 26–28). Let other Section members gaze at your shiny new specimens while telling us how you came about it and from what dealer. Also, please share your experience of the show—good or bad—with the rest of the Section; what did they do correctly or poorly in your mind? What did they do that could benefit our show in November, etc. Refreshments will be provided.

May 15, 2013: To be announced

Day Light Programs

by Mary Ann Mitscherling

arch 11: An alternative jump ring project, such as foxtail, triangle necklace, etc., will be decided on during the February meeting.

April 8: We will engage in metal sheet forming using 4" x 4" soft copper or soft brass. Practice in class will first be on 4" x4" sheets of paper. Our goal will be to produce art objects.

How to Cut Fire Agate

from Gem Cutters News, 2/1996 and 11/2011, via Breccia 06/2012

he "fire" in fire agate is actually a very thin layer of limonite. When obtaining fire agate, look for thick brown areas because that's where the fire is. If there is white under a thin layer of brown, the piece is not good; however, if white is on top and the brown underneath, there's a good chance of fire. If you grind too deeply, there will probably be more fire under the layer you ground away.

It's easy to grind or sand through the fire, so carefully orient the fire. Look for the tops of bubbles on the top of the stone. The bottom of the stone should be the area where it was attached to the host rock.

Once you have oriented the fire and the top has been determined, carefully grind away colorless or white agate to expose the fire. When the excess material has been ground away and the fire exposed, establish the base and perimeter of the fire. The base should be parallel to the top of the cab.

After size and shape have been established, work the same as any stone except that fire agate is very heat sensitive. Use lots of water, grind a little, and look a lot. You can polish with cerium, tin, chrome oxide, or diamond.

General Meeting Minutes

January 22, 2013 by Michele Marsel HGMS Secretary

he meeting was called to order at 7:30 p.m.

Visitors and New Members: Six friends of guest speaker Gretchen Sparks joined the group to hear her presentation.

Prior Month General Meeting Minutes: Karen Burns moved that the November 2012 General Meeting minutes be approved as published in the January 2013 BBG. Joan Riley seconded, and the motion passed unanimously.

Show & Tell

- Al Tarr brought sepiolite specimens he collected on the Turkish Anatolian plateau while serving in the military. Meerschaum is the common name for this soft, white mineral. Al showed several carved pipe heads made from the material and explained that the sepiolite must be soaked in water before being carved.
- John Anderson brought a petrified vertebrae from a large animal that he collected near Capital Reef National Monument. Everyone was clearly able to see the marrow cavity although it was not silicified.
- Matt Dillon showed flower garden agate that he collected in 2008/2009 at a Mexican location known as "Tinaja Espetacion." The site is about six to seven miles northeast of the Mexican town of Manuel Benavidies, in the general area of San Carlos Canyon. The agate displayed lots of formation even though the plumes were a bit difficult to see.

Drawing: Clyde McMeans won the door prize which was a large chunk of amethyst seam rough donated by Matt Dillon.

Program: Gretchen Sparks presented a program on Geology and Art. Gretchen paints pictures of rocks, not on rocks. She is currently working on an Art Certification at the Houston Museum of Fine Arts Glassell School of Art. Gretchen began her talk with some personal photos and stories detailing how she became interested in rocks and geology. She discussed the spatial quality of geology and showed slides of well-known art through the ages with clear geologic depictions. Gretchen also shared photos of her own geo art. The presentation was very interesting and informative and gave a very different perspective to geology.

Business

Phyllis George awarded the 2012 SCFMS Bulletin editor's contest plaques. All contest winners were announced in the October 2012 BBG and received certificates at that time. Due to ordering issues, the plaques were just recently received. Plaques went to all who placed 3rd and above in their category.

Name	Rank	Category	Title	Month
Phyllis George	1	Large Bulletin	The Backbender's Gazette	February & September 2011
Albert J. Robb III	1	Advanced Adult Article	Some Interesting Paleozoic Sharks of Texas	November 2011
Kemp Maer Ph D		Advanced Adult Article	Geologic Stories Told by a Texas Gully	September 2011
Deidre D. Prince	Prince 3 Adult Article Rock Stars Shine in Sugar Land		August 2011	
Noelle Skubal	1	Junior Article	Our Topaz Mining Adventure	January 2011
Neal Immega	1	Features	Crusin' the Fossil Freeway	September 2011
Kemp Maer	1	Adult Poetry	The Arrow Point	October 2011
LaVon Westfall	3	Adult Poetry	Rock Hound's Lament	November 2011

President John Caldyne thanked Terry Proctor for bringing refreshments for the evening. He asked that those present donate to the "Sabre-Tooth Kitty" to help defray the cost of the food. John announced that Terry had agreed to provide refreshments for the February General Meeting as well and asked for volunteers to supply refreshments for the remainder of 2013. The schedule of volunteers will be published in the BBG, and HGMS Secretary, Michele Marsel, will send a reminder notice each month shortly before General Meeting dates.

Name	Refreshment Months
Terry Proctor	February 2013
Neal Immega	March & April 2013
Phyllis George	May & June 2013
Michele Marsel	July & August 2013
John Caldyne	September & October 2013
Clyde McMeans	November 2013

General Meeting Refreshment Schedule

Adjourn: Terry Proctor moved and Karen Burns seconded that the meeting be adjourned. The motion passed unanimously, and the meeting adjourned at 8:45 p.m.

Board of Director's Meeting Minutes

February 5, 2013 by Michele Marsel

√	President – John Caldyne	\checkmark	Archeology Rep – Terry Proctor
	1 st Vice President – Vacant	V	Beading Rep – Jillynn Hailes
V	2 nd Vice President – Beverly Mace	V	Day Light Rep – Mary Ann Mitscherling
\checkmark	Treasurer – Rodney Linehan	√	Faceting Rep – Gary Tober
\checkmark	Secretary – Michele Marsel	✓	Lapidary Rep – Phyllis George
\checkmark	Past President – Charlie Fredregill	√	Mineral Rep – Pete Stassi
		\checkmark	Paleontology Rep – Mike Dawkins

The meeting was called to order at 7:30 p.m. with 11 members present—over a quorum.

Previous Month Board Minutes: Charlie Fredregill moved and Gary Tober seconded to approve the minutes of the January Board meeting as published in the February 2013 BBG. The motion was approved unanimously.

Treasurer's Report: Rodney Linehan reported checking account and CD balances. He confirmed that we will use the existing Prosperity checking account for the HGMS Building Fund and identified the amount to be transferred to the account from 2012 Auction proceeds. Terry Proctor gave Rodney checks for bag, pin, and sticker sales at recent General Meetings.

Office, Committee and Section Reports

Archaeology Section: Field trips will be planned at the February 7 (Thursday) meeting. Terry Proctor was contacted by a woman with a large collection of arrowheads and fossils which may be shown at future meetings. The Section auction date is still to be scheduled—possibly for March. The Lapidary Section requested confirmation of the actual auction date as soon as possible so other auctions may be scheduled and announced.

Beading Section: Everyone was very happy with January's earring project. The February project is a bracelet that will allow much practice with wrapped loops (details on Web site).

Daylight Section: At the last meeting, wire rings were made using mandrels. Details of the next three months' meeting projects are on the Club Web site. February and March are jump ring chain projects, and April will be metal sheet forming.

Education Committee: A casting class is in progress. Four additional classes were announced for February and March. Sarah Metsa requested two new cabinets to hold class materials with limited access due to space constraints in existing cabinets and the recent disappearance of materials. Discussion was held and the Board agreed we have enough space for the cabinets, and the proposed cost is \$100 per cabinet. Charlie Fredregill moved and Jillynn Hailes seconded that we acquire two additional, lockable cabinets for this purpose. The motion passed unanimously.

Faceting Section: No one present attended the last meeting.

Lapidary Section: The February 18 program will be about opals of various types. Details will be posted on the Club Web site shortly. Phyllis George mentioned her request for the Section to donate funds from its Treasury to the HGMS Building Fund in lieu of sponsoring a scholarship in 2013. This will also be discussed at the February meeting.

Mineral Section: At the last meeting, what was new at Tucson 2012 was reviewed, and the program was on fluorite, the featured mineral at the 2013 Tucson show. The next program will be on crosoite and a recap of Tucson 2013 by members who attended. The Section has a new projector and purchased a new long-wave UV light for the Show. They purchased a short-wave light last year. Assembly work for 50 new fossil and mineral sets for schools will begin in February, and help may be needed from

members. The Section was asked to publicize dates and times to be published in the BBG, put on our Web site, and through the e-mail blast managed by Neal Immega.

Outreach Committee: No new activities reported.

Paleo Section: The Section reelected Mike Dawkins to continue as the Paleo Board Representative. The new annual party and auction will be February 19. Chase Jennings presented at the last meeting, and he gave a demonstration of fossil extraction from Midlothian materials.

Show Committee: The Club still needs an Assistant Show Chair who will be in training to chair the 2014 Show. The 2013 Show Budget of \$47,300 was presented for approval. Terry Proctor noted that the only real increase was for the increased cost of the show location, and he moved to approve the budget as presented. Jillynn Hailes seconded the motion, and it passed unanimously.

Youth Section: Four new members joined our Section Saturday, February 2, and enough shop space was available for all the youth.

Membership: Beverly Mace reported she will be sending an e-mail blast to remind everyone to send in their 2013 membership renewals. Terry Proctor suggested the blast could include encouragement for lifetime members to make annual donations to help cover club expenses such as the cost of their BBG each month, as they no longer pay annual dues. Beverly also reported that about half of our members now get the BBG electronically. This saves money in printing and postage, and at this point it is not endangering the Club's bulk mailing permit.

BBG Editor and Web site: The due date for items to be included in the March BBG is February 6. The February printed BBG contained errors on several Sections' meeting dates. All dates appear correctly in the electronic version on the Club Web site. Phyllis George requested Paleo and Lapidary sections to please send information on scheduled programs for posting on the Web site and for the BBG as far in advance as possible. Neither of these Sections currently has any upcoming program information posted.

Old Business

- Michele Marsel reported that volunteers were secured at the January General Meeting to bring refreshments at all remaining 2013 General Meetings. The volunteers are: Terry Proctor, February; Neal Immega, March/April; Phyllis George, May/June; Michele Marsel, July/August; John Caldyne, September/October; and Clyde McMeans, November. Volunteers will be published in each issue of the BBG, and Michele Marsel will send an e-mail reminder each month.
- > Terry Proctor reported that an editor is working on compiling changes previously approved by the Board in the last few years so that a fully updated set of Club Bylaws can be presented to the membership for approval at the April General Meeting.
- > Terry Proctor reported no progress on permission to park in our next door tenant's

lot. He will pursue this discussion at his earliest opportunity.

Discussion was held on the need for a club-level publicity chairperson for all-year club promotion and to take over the staffing and HGMS promotion at Intergem shows from the Show Committee. Gary Tober moved and Terry Proctor seconded a motion to establish a Club Publicity Chair as a Board-appointed position. The motion passed unanimously. The Board will hold an e-mail discussion to detail position duties and will use the BBG and the Club e-mail blast to request a volunteer to fill this position. A question was also raised about Club demonstrations being presented at the Houston Museum of Natural Science. The Board will request an update on who is currently providing programs and the frequency. This new appointee will work with others who also work on Club Publicity, i.e. Education Chair, Outreach Chair, Show Committee Publicity Chair, to jointly promote HGMS and its projects.

New Business

- President Caldyne brought to the Board's attention that Bill Moore has resigned as First Vice-President, and the Board needed to appoint a new First Vice-President according to Article II, Section Three of the Bylaws. The name of Clyde McMeans was submitted by President Caldyne. After some discussion, it was moved and seconded to appoint Clyde McMeans as First Vice-President. The motion passed by unanimous vote.
- Storage for Show trailers was discussed along with the need to repair the top on one trailer. Terry Proctor moved and Phyllis George seconded the motion to fix the top of the leaking trailer and to determine the exact dimensions of both trailers (height, width, and length) for the purpose of assessing storage options. The motion passed unanimously. Michele Marsel presented quote estimates from two Humble-area storage facilities, and the Board deferred a decision until the exact dimensions of the trailers are known and there can be further consideration of a permanent storage location. Steve Blyskal e-mailed that the company where he works will allow HGMS to store the trailers on their property for up to two months, assuming that a permanent storage location is found at the end of that time. Terry Proctor will contact Bill Moore and Steve Blyskal about arranging the temporary move from Bill's warehouse to Steve's company lot. The Board will make a final decision on a long-term storage location at the March meeting.
- Shop safety was discussed. John Caldyne mentioned his concerns over members failing to wear eye protection in the shop and classroom areas. Shop stewards and Neal Immega have requested enforcement of the use of safety glasses. The following actions were discussed: remind shop stewards that it is their responsibility to be sure members use eye protection in the shop and classrooms when equipment is in use, send an e-mail blast to remind everyone of this requirement, put up signs on the outside of rooms leading into the shop and classrooms regarding the use of safety equipment, and ensure an adequate supply of loaner eye protection and ear plugs. Gary Tober moved and Pete Stassi seconded a motion to buy at least 24 pair of safety glasses and to maintain that number, to also purchase disposable ear

plugs, and to place receptacles for each outside shop and classroom doors. The motion passed unanimously.

Phyllis George noted that the trophy display board in the main room had been removed from the wall without notice to the Board or Board approval to do so. Mary Ann Mitscherling moved and Phyllis seconded that the Board find out why the display board was removed and where it currently is located. Terry Proctor agreed to check with Neal Immega, Clubhouse Chair, as a starting point. The motion passed with two objections.

Adjourn: Terry Proctor moved and Jillynn Hailes seconded for adjournment of the meeting at 9:18 p.m. The motion was approved unanimously.

Always Vigilant!

by Owen Martin Safety Chairman AFMS/SCFMS from SCFMS Newsletter 1-2/2013

meetings at work. I mentioned a tactic I sometimes use when conducting safety meetings at work. I mention to the group or class that before I walked in to the room I let two five-and-a-half-foot diamond- back rattlesnakes with heads the size of my fist loose on the ground and then closed the door. Then I tell them that they can leave. Everyone *thinks* I'm joking and yet there is a definite hesitation before anyone starts to get up.

The point being that you should always be vigilant and aware of your surroundings so that those metaphorical snakes don't reach out and strike you.

The discussion exercise that follows is about "safe behaviors" and how we can teach ourselves to recognize hazards in our work environment. Thus we will keep ourselves safer.

In our daily lives, most of us have adopted a variety of safe behaviors both in and out of work. Holding the handrail on the stairs, wiping your feet dry on a mat when you come in from the rain, buckling your seat belt, not leaving burning candles unattended, etc. What we unfortunately see at work though, is that our coworkers do all the right things here, but when they go home, safety goes right out the window!

First things first: speeding home and rolling through stop signs. Something we don't do in our company trucks! Then on Saturday morning, it's time to weed-eat the lawn, usually in flip flops, shorts, and wearing sun glasses. Maybe my favorite is cooking on the stove while barefoot! Nothing like hot oil flying off the stove and landing on the top of your foot to ruin a romantic dinner!

AND, we all know how to use PPE (personal protective equipment) and how to keep an eye out for hazards in our workplaces. So I simply want to encourage you to take the same precautions at home that you do at work. Check behind your car before pulling out. Put on safety glasses when mowing. Use ear plugs when using a chainsaw.

Use an oven mitt and not a towel when getting something out of the oven. Do these things consciously, and soon, like with seat belts, you will do them automatically and thus keep yourself a little bit safer every day.

HAPPY NEW YEAR!!!

Upcoming Regional Federation Conventions

from Bob Livingston from AFMS Newsletter 2/2013 (also SCFMS Newsletter)

	California	Eastern	Midwest	Northwest	Rocky Mountain	South	Southeast
	Federation	Federation	Federation	Federation	Federation	Central	Federation
2013	May 31–June 2	June 1–2	April 6-7	August 16–18	May 17–19	August 17–18	AFMS Sept. 20-22
	Ventura, CA	Plainview, NY	Lincoln, NE	Butte, MT	Sandy, UT	Bossier City, LA	Jacksonville, FL
2014		March 29–30 Plymouth Mtg, PA	Oct. 18–19 Des Moines, IA	August 15–17 Hermiston, OR	AFMS July-13 Tulsa, OK	Baton Rouge, LA	
2015						AFMS Austin, TX	

SCFMS President's Message

The Nash Rambler by John Nash from SCFMS Newsletter 1–2/2013

appy New Year, everybody! The New Year has started out great. Now, if only I could get these other committees filled. It seems that everyone is busy. Of course if you have not been approached and are interested in serving, please let me know.

Ray Duplechain from Baton Rouge is handling the Bulletin Editors' Competition, Jim Marler from Alexandria, Louisiana is chairing the Audit committee, Wanda Reynolds from Austin is chairing the Nominating Committee, and Don Shurtz has agreed to handle the Web Page. Do not forget Phyllis George from Katy, Texas who is handling the SCFMS Web Site Contest.

This is by no means all the officers and committee members; they are just the ones that come to mind right off. If you want a copy of all officers and committee members, our Web site has been updated, and you can download a copy.

Our Web-site is: www.scfms.net.

The Clubs that are members of SCFMS need to remember the AFMS Scholarship raffle. First, we need someone to head this up. The SCFMS Scholarship Honoree selects two graduate students in the earth sciences to receive scholarships. These scholarships are funded, in part, by this raffle.

Another thing that some clubs do not accomplish is sending us the information list of its officers, bulletin editor, and webmaster. This list should be mailed or e-mailed to Jonathan Moehring of the SCFMS. This list helps the various clubs keep in contact with one another. Can you tell your club members when a certain club will have its show?

That is enough griping on my part. I really do hope that each and every one of you has a happy New Year, but don't forget your duties!

From the SCFMS Bulletin Aids Chairman

by Ray Duplechain, Chair from SCFMS Newsletter 1-2/2013

ow that the holiday season is over and we are into another calendar year, most of us are busy preparing for all our club's yearly activities. So many great ideas are being formed and implemented. Some of the regular functions that we do annually are eagerly anticipated. One such thing that should be part of our clubs' regular activities is the Bulletin Editors' Contest.

The contest can be an avenue for promoting our memberships' articles that have appeared in our newsletters. Everyone enjoys the competition, and the recognition of one's work is always fruitful.

So as the deadline for getting your entries back to me gets closer (February 16), I encourage everyone to begin downloading the forms and putting their packets together. Remember to contact me to expect your package once you send it out. I will also let you know as I receive it.

Again, thanks for all you do to help promote your newsletter, and I look forward to hearing your name and your club's name being announced as winners at this year's Editors' Breakfast at the August 17–18 convention in Bossier City, Louisiana.

My e-mail address is: rayduplechain@hotmail.com, Phone 225-978-0031.

South Central Federation Convention News

from SCFMS January-February/2013 SCFMS Annual Show

he ARK-LA-TEX Gem and Mineral Society, Bossier City, LA, will host the SCFMS Show in 2013, to be held on August 17–18, 2013. So, mark your calendar and plan to be there for that show. The festivities are being planned at this moment, and we will have more information as time goes on.

Annual Meeting: The Federation's next annual meeting will be held on August 17, 2013.

Annual Silent Auction: The annual silent auction will be held during the SCFMS Show and Convention, August 17–18, 2013. Donations are greatly welcomed and

needed. Rocks, fossils, minerals, jewelry, and hobby-related items are among the items needed. Bring or send these items to the show. Proceeds from the silent auction will go into the South Central Federation Endowment Fund.

Oxalic Acid—Notes and Safety Tips on Using

by Duane Leavitt

from the Rocky Road, date unknown, via Gem Cutters News 2/2013

ne often reads about and sees reference to oxalic acid (wood bleach) in publications such as our newsletter when the topic of cleaning minerals is discussed. Oxalic is used to dissolve the iron oxide (brown) stain on all minerals. This chemical, while an excellent cleaner for some types of minerals, poses some serious health risks which are not widely understood and can be confusing when considered in light of other acids that are sometimes used for cleaning purposes.

Oxalic acid, chemically $H_2C_2O_4$, is an organic acid, which means that it contains, among other things, the element carbon. At room temperature it is a white, crystalline, odorless, solid looking a lot like granular sugar in physical appearance.

When we look at oxalic acid, we find that as acids go, it is quite weak. Acid strength is measured by how much hydrogen acids give up in water solutions. It is obvious that oxalic acid is nowhere near as strong or as soluble in water as hydrochloric acid or nitric acid. These two acids are also used in mineral cleaning. There is NO correlation between acid strength and how poisonous it is—its toxicity.

As an organic acid, oxalic acid, and/or its water solutions, can be absorbed directly through the skin into the bloodstream. Powders from the dry acid and vapors from solutions can be absorbed into the body through the lungs. This has serious implications for those who like to clean specimens in a crock pot of simmering oxalic acid solution in their basement. Residues from improperly neutralized and rinsed specimens may be absorbed through later handling. Dust from the solid acid can damage the cornea of the eyes.

In the body, oxalic acid removes calcium from the blood, forming insoluble crystalline masses of calcium oxalate. These eventually wind up in the kidneys where they will obstruct and abrade the kidney tubules and cause the kidneys to bleed. They may block the kidneys and have to be removed surgically—kidney stones. In respiratory passages the material will cause severe irritation, possible hemorrhaging of these tissues and burns. When the material gets into the digestive tract, it causes severe gastroenteritis and vomiting, shock, and convulsions, cardiovascular collapse, or kidney failure (or all of them) and can lead to death. A lethal dose of oxalic acid is somewhere between 5 and 15 grams. Severe health problems occur at much smaller levels of exposure. OSHA recommends a threshold limit value (TLV) for airborne concentration of no more than 1 mg (that is one thousandth of a gram) per cubic meter. For comparison, 1 restaurant packet of sugar contains about 1 gram of material or 1000 times the recommended exposure value!

Unlike neutralized hydrochloric, muriatic, and nitric acids, the products of "neutralized" oxalic acid are STILL poisonous—they just are no longer acidic. Oxalate compounds of any nature are still a threat to your health. People wishing to use oxalic acid can do so successfully and safely, provided they incorporate the following procedures into their mineral cleaning:

- 1. Always use long-sleeved rubber gloves, a splash-proof apron, and full eye/nose protection when handling either dry oxalic acid crystals or oxalic acid solutions.
- 2. Avoid heating solutions of oxalic acid—it will work cold, it just takes longer.
- 3. Keep containers of soaking specimens covered so that acid vapors stay inside the container. Lids should NOT be airtight.
- 4. Rinse any specimens cleaned with oxalic acid with copious amounts of water and test with pH paper to ensure that all acid is gone. A post-treatment bath in dilute (household) ammonia or sodium bicarbonate solution is a good idea.
- 5. In the event of a spill, remove affected clothing immediately, rinse affected areas with copious amounts of water, then rinse and wash affected clothing. If there is any doubt as to the severity of the exposure, seek medical help immediately.
- Small amounts of used solutions of oxalic acid can be disposed of by the following method:
 - a. Neutralize the solution with sodium bicarbonate or sodium hydroxide. TEST with pH paper to make sure it is neutral (or slightly basic).
 - b. Dilute the solution from step A above, 20-fold with water (example, to 1 pint of neutralized acid solution add 20 pints of water.
 - c. Pour solution B down the drain with plenty of cold water. This disposal technique is identical to Flynn Scientific disposal technique 24A (Flynn, 2006).
- 7. Read up on cleaning techniques (Cleaning and Preserving Minerals by Richard Pearl is a good place to start) and educate yourself about techniques, materials, and alternatives.



Artificial Weathering

by Chuck Safris, Central Iowa Mineral Society via Gem Cutters News 10/2012

a light tap of a rock hammer to reveal a beautiful fossil. More often, however, a promising-looking concretion is not already cracked and resists being broken. When it finally breaks under the blows of a rock hammer, there is some shattering or uneven breaking that can damage the enclosed fossil. And even then, there is a chance that the enclosed fossil is not exposed. With a little patience, there is another way to expose the enclosed fossil. Artificial weathering is a simple alternative that may lead to the collection of fine, undamaged, fossils if the matrix material is suitable.

Freezing and thawing causes accelerated mechanical weathering of a rock. If water can seep into pores or micro cracks in the rock, the rock will become saturated. When the water expands as ice forms during a freezing cycle, pressure is exerted on the rock, leading to cracking or exfoliation. If the fossil is a carbon film, then the fossil is a natural weak spot in the concretion, and with luck the subtle pressure of freezing will open the concretion so that the fossil is perfectly exposed and undamaged.

The process is very simple for any rock that will take up water. A container (other than glass, which might break during the freezing process) suitable for the specimen's size is selected, and the concretion is covered with water and allowed to soak for several days. Then a series of freezing and thawing cycles are achieved by using the freezer in the summer or the back porch in the winter. By achieving a freeze-thaw cycle every day, the process is accelerated. It is important that loosened residue from each cycle be removed and examined, because if there are any fossils reveled, the next freeze cycle could destroy them. If you live in a northern climate and there is no hurry, the suitable rocks could be placed in a container full of water and simply left outdoors all winter where the daily temperature swings would do all the work. It has been reported that thousands of Mazon Creek (IL) fossils have been exposed using accelerated artificial weathering this way.

In Iowa, fossil collectors are on the lookout for blade-shaped nodules of limey shale in Pennsylvanian exposures and stream beds. With any luck and some artificial weathering, a well-preserved, beautiful fern frond is likely to join your fossil collection.

Reference:

"Freezing and Thawing of Fossils"; J. Pojeta and M. Balanc, U. S. Geological Survey, Reston, VA, Undated.

The reference material is printed in the book "Paleotechniques." The book is subtitled "The Paleontological Society Special Publication No. 4," 1989 and is edited by Rodney M. Feldmann, Ralph E. Chapman and Joseph T. Hannibal. It is published by the Department of Geological Sciences, The University of Tennessee, Knoxville, TN. Its ISBN number is 0-931377-04-2. The article appears on pages 223–226 and is not dated. The article goes deeply into the use of various freezing agents, of which tap water is the one I wrote about.

Mineral/Gem of the month: Opal

by Lyn Kalinoski from Rocky Reader 12/2012

hether you call it precious Opal, Australian Opal, black Opal, crystal Opal, fire Opal or white Opal, the word "opal" conjures up the image of a kaleidoscope of color. What is Opal, and why does it have such remarkable color properties?

Opal is the national gemstone of Australia, and approximately 97% of the world's Opal production comes from Australia. Chemically, Opal is amorphous silica, and it is classed as a mineraloid, not a mineral.



Opals on display at Carnegie Natural History Museum, Pittsburgh, Pennsylvania: Photo by Stephen Shimatzki

- 10. Opal in Ametrine pendant "Blissful Fish,"
- 11. Opal ring Australia,
- 12 Opal Australia,
- 13. Black Opal Australia,
- 14. Black Opal ring Australia,
- 15. Fire Opal Mexico

Although related to quartz, Opal does not have a crystal lattice structure like quartz, but instead it is composed of pockets of silica spheres compressed into a cubic or hexagonal lattice. Light passing through these microstructures is what gives Opal its fire and play of color as each pocket produces different color flashes due to diffraction of the visible light wavelength from the spacing and orientation of the sphere planes. Visible light, however, cannot pass through very thick slabs of Opal, so preparing the gem for jewelry takes considerable knowledge and skill.

Precious Opal has a significant water content usually ranging from 6–10% although it can reach as high as 30%, and geologists can use the amount of water in a slab or vein to determine the temperature when it was formed. Most precious Opal comes from Australia, with Mexico, Brazil, Nevada, Ethiopia, and Mali producing a limited quantity. The best quality Australian Opal and the most sought-after for gemstones come from the legendary fields of Coober Pedy and Andamooka in South Australia, and White Cliffs and Lightning Ridge in New South Wales. Opal rough comes in different grades, depending of course upon the quality of color and its potential for gemstones.

Although Opal was known in the Roman world, it came into favor as a gemstone in the late Victorian era and was widely popular in the Art Deco period from 1925–1945. Designers liked the subtle play of color in Opal combined with gold, platinum, and enamel work. Some of the best and most valuable antique Opal jewelry is from the Art Deco period.

The geological history of Opal's origins dates to millions of years ago. Opal is one of the few gemstones that are sedimentary in origin. As water ran down cliffs, hot springs bubbled or flooding occurred, the water picked up silicon from sandstone, volcanic rock, or weathering Cretaceous sediments. The resulting silica-rich solution crept into crevices and voids. As the water evaporated, the silica remained. Over generations, Opal was formed when conditions were ideal for uniform silica spheres to settle under gravity, then falling water tables concentrated the silica solution.

The majority of precious Opal mined in Australia comes from sediment hosts in the Great Artesian Basin.

Boulder Opal comes from Queensland, Australia and forms inside ironstone concretions or boulders.

Ethiopian Opal, which is gaining popularity, comes from several regions, some quite similar in geology to the Australian mines of the Great Artesian Basin. The best play of color comes from black Opal. Milky or white Opal is less valuable as it has less play of color.

Opal is a relatively soft stone on the Mohs scale, 5.5–6 due both to its high water content and lack of a crystalline lattice structure, so it scratches easily and is not suitable for faceting except for the best quality fire Opal. Most Opal is cut and polished as a cabochon to bring out the color. Mass-produced low end Opal jewelry is made of doublets or triplets to enhance the color of the stone. A doublet involves placing a thin layer or layers of opal on a darker base such as black glass, obsidian, onyx, or even basalt. A triplet has, in addition to the dark base, a layer of material such as rock crystal, plastic, or hard glass placed over the Opal layer.

Opal can become brittle if allowed to dry out, and it should never, ever be put in a vibrasonic cleaner. Sudden changes in temperature can crack or damage the stone. Store Opal in a soft cloth bag or a lined jewelry case.

To clean, use a small amount of lukewarm water to rinse the stone, then gently polish with a soft material such as silk. Be aware that some pieces of dust can be abrasive, so rinsing first is always advisable. Do not use jeweler's rouge cloths to clean Opal jewelry.

A word of caution: buying Opal rough for lapidary work is not for the novice or faint of heart. The Internet makes it easy to buy from far-away sources, but it's equally easy to find nothing worthwhile in the packet that arrives.

Sources:

http://www.opalsdownunder.com.au http://www.gemstone.org http://www.opalsdownunder.com.au



Faceted Eggs from the 2012 S.C.R.I.B.E. DVD

Show Time 2013

March 2-3	Big Spring, TX	Big Spring Prospectors Club Howard County Fair Barn
March 2-3	Robstown, TX	Gulf Coast Gem & Mineral Society Richard M. Borchard Regional Fairgrounds jsimpson1@stx.rr.com; www.gcgms.org
March 16-17	Live Oak, TX (San Antonio)	Southwest Gem & Mineral Society San Antonio Event Center Near NW Loop 410 & Marbach
April 13-14	Abilene, TX	Central Texas Gem & Mineral Society Abilene Civic Center, North 6th & Pine Linda Walker; 325-537-4557; linewalk@juno.com
April 19-21	Alpine, TX	Chihuahua Gem & Mineral Society Alpine Civic Center
April 20-21	Waco, TX	Waco Gem & Mineral Society Extraco Events Ctr.
April 27-28	Lubbock, TX	Lubbock Gem & Mineral Society Lubbock Memorial Civic Center 1501 Mac Davis Ln; 806-797-5832 walt@lubbockgemandmineral.org
May 25-26	Fort Worth, TX	Fort Worth Gem & Mineral Society Will Rogers Memorial Center
August 10-11	Baton Rouge, LA	Baton Rouge Gem & Mineral Society The Marriott
August 17-18	Bossier City, LA	SCFMS Convention & Show Ark-La-Tex Gem & Mineral Society Bossier City Civic Center
August 24-25	Jasper, TX	Pine Country Gem & Mineral Society Events Center
September 14-15	Arlington, TX	Arlington Gem & Mineral Society 1010 Event Center, Rollins/Randoll Mill Rd.
November 8-10	Humble, TX	Houston Gem & Mineral Society Humble Civic Center, 8233 Will Clayton Pkwy. 5 miles east of Bush Intercontinental Airport 1 mile east of Hwy. 59 www.hgms.org; ladyt682@yahoo.com

2013			Marc	2013		
Sun	Mon	Tue	Wed	Thu	Fri	Sat
					1	2 10–5 Shop Open 10–12 Youth Section
3	4	5 7:30 Board Meeting	6 7:30 Mineral Section 10-3 Shop Open	7 7:30 Archeology Section	8	9 10–5 Shop Open
10 Daylight Saving Time begins	11 1:00 Day Light Section	12 7:30 Show Committee	13 7:30 Faceting Section 10-3 Shop Open	14	15	1610–5 Shop Open 10-12 Youth Section 1:30 Beading Section
17 Palm Sunday	18 7:30 Lapidary Section	19 7:30 Paleo Section	20 7:30 Mineral Section 10-3 Shop Open 1st Day of Spring	21	22	23 10–5 Shop Open
24 31 Easter Sunday	25	26 7:30 General Meeting	27 10-3 Shop open	28	29 Good Friday	30
2013			Apri			2013
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21	22	23 7:30 General Meeting	24 10-3 Shop open	25	26	27 10-5 Shop Open
28	29	30				

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