



# *The* **BACKBENDER'S GAZETTE**

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

**Volume XLV - No. 7**

**July 2014**



## **President's Message**

*by Raymond Kizer*

**T**he subject of this month's letter is "Paying It Forward." For those of you who have never heard of this concept, let me give a short explanation. The theory behind "Paying It Forward" is that you do a favor or good deed for someone in need without the expectation of being paid back yourself, but instead ask that person to "Pay it Forward" and do a favor or good deed for someone else. So how does this relate to our hobby? Well, it can be as simple as helping someone to complete a lapidary or jewelry project with which they are having difficulties. Or teaching a skill you have mastered to someone who is interested in learning it. One of my favorite things about being a member of our HGMS community is that our members do this all the time. From Paul Robles teaching new members how to wire wrap, or Gary Anderson showing anyone who asks how to get



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*Continued on page 4*

## **Upcoming Programs**

*by Paul Brandes*

**J**une 24, 2014—**Texas Topaz:** B. Diane Eames is a fine jeweler, Graduate Gemologist (GIA,) and gem cutter. She specializes in the Texas state gem, topaz. Found in Mason County, Texas, Ms. Eames will discuss where and how to find the elusive topaz. She will also cover the traditional faceting of the gem. Her displays will demonstrate Mason County topaz in the rough and how to differentiate topaz from quartz—the other gem-quality mineral found in the Hill Country. In addition, the Texas Cutters Collection will be exhibited, a collection of the state gem cut by various gem cutters from Texas. Recently, Gems of the Hill Country (Ms. Eames' jewelry store) was relocated to Ingram, Texas from their original location in Mason. For the folks who believe there's nothing in Texas except agate and petrified wood, this presentation should change your perception of Texas minerals.

**July 22, 2014--To be announced**

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*Every article published in the BBG is edited for grammar and content. No flaming is allowed.*

*Editor: Phyllis B. George  
22407 Park Point Drive  
Katy, TX 77450-5852  
Phone: (281) 395-3087*

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by Wednesday, July 9, 2014.*

*E-mail the Editor and Webmaster at  
pgeorge4@comcast.net*

## Purpose of HGMS

The 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, ¼ page; \$150 for 6 months, ¼ 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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*President continued from page 1*

the perfect polish on a cabochon. How about Neal, who shares his knowledge and skills with everyone, or Beverly's work with our kids? I'm truly impressed with the storehouse of knowledge our members possess and their willingness to share.

Speaking about "Paying it Forward," the HGMS has just awarded its 2014 Earth Science/Jewelry Arts Scholarship award. The winner of our \$2,500 scholarship was Adeene Denton, a deserving sophomore (rising junior) and Earth Science major enrolled at Rice University. We hope our scholarship will help offset some of the cost of her summer field camp in Nepal. She plans to be working in the Annapurna area outside Kathmandu, looking at the convergent zone and its associated regional metamorphism. This convergent zone is the driving force uplifting the Himalaya mountain chain. The experience will give her a broader perspective on global tectonics and geology. Hopefully she will share this experience with other students—and potentially with our members when she returns in the fall.

So if you get a chance, share your experiences and knowledge with your fellow HGMS members. It's what makes our club such a great place to belong.

### **The Miner Does Australia**

*by John Anderson*

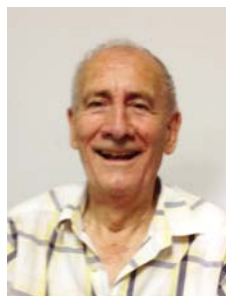
*Member of the Houston Gem & Mineral Society*

**T**here are many reasons for people to visit Australia besides viewing the sheer beauty of this beautiful country, but the prominent interests are skin diving, fire opal, and also finding some great agates. All of these would become my interests after my daughter's wedding there.

Three family members (my son Kenneth, his wife Karen, and an Aunt Mary) and I flew to Sydney, Australia to witness my daughter Karen's wedding to Jan Abadschieff. The events leading up to the actual wedding seemed almost like a fairy tale. We walked a few blocks from where we parked our auto to board a private water taxi boat that took our wedding group for a big tour of Sydney Harbor. Our boat then landed at a private pier, and we boarded a private seaplane which toured the same area and beyond—but from the air. The view of the harbor from the air and seeing the famous Sydney Opera House and its suspension bridge was a sight to behold. After landing, we were whisked away in a stretch limousine to the wedding ceremony—an event in itself.

Following the wedding, we toured the city looking for a store that had some great fire opal. We found a beautiful jewelry store that had a great display of fire opals in its front display window. That display pulled us into that store just like the smell of a freshly baked pie.

I quickly found a soft chair. I knew this was going to take a long time because of the overwhelming fire opal display.



I settled into the soft chair, thinking of a way to pass the time—the prices they were asking were a king's ransom, and not reasonable. I have been associated with the lapidary hobby for more than 50 years, and I was not impressed by their prices.

About eight feet away, a brown dog observed everything going on in the store. I looked at the dog and said, "You are really a beautiful dog."

I love animals, so I talk to them whenever I am close to them. They have never returned my compliments, so it has always been a one sided conversation. I was getting bored staring at the shop's walls while just sitting in my comfortable chair, so I repeated my original statement that the dog was a beautiful animal about every five minutes for possibly 15 minutes.

The brown dog got up, walked over to me, and proceeded to lick my hand without any movement by me. By the time the dog finished, it had done such a good job that I probably would not have to wash my hands again for the rest of the day. (I washed my hands 30 minutes prior to entering this store.) After the brown dog finished, it walked to an exit that led to the backyard of the jewelry store and disappeared. The store owners—a husband and wife team—both let out a screaming question. "Do you know what that dog is?" I said no. They said, "That is our security watchdog, and it could tear your liver out. It is a Dingo, Australia's wild dog."

It was not a big thing to me, but to the owners of the store, it was a monumental happening for this dog. It had never shown affection to anyone before. I guess the Dingo thought I was no threat to it or to the jewelry store. Perhaps it showed me affection because no one else has ever given it that much kind attention.

We have all had an experience where an animal senses that someone does not like them and hides—at least I have. My mother had a friend who occasionally came to our house, and she did not like dogs. She never said or did anything toward our dog, but whenever she came to our house, my dog would hide under my bed.

We toured the different areas along the coast where there are so many good beaches to free dive, but we were always watchful for some of the venomous jelly fish like the sea lemon or a few other venomous jelly fish in that particular area. We had our dive skins etc., but did not do any tank diving because of our vehicle's limited cargo space. Australia is a beautiful country to explore by land and underwater. Everyone should visit someday.

Another story happened while I was there in Australia. I asked different people where I might find a lapidary club or fossicking (*Australian and New Zealand term for prospecting*) collecting club or any mineral store. We received hardly any information except a wild description of a great place that has "Lots of Rocks." We asked different people who did help us to find the area, but we had to drive an additional 50 miles out of our way. When we arrived where this great place was supposed to be, we saw no lapidary or mineral stores or shops. A boy on a bicycle saw us driving back and forth on this road. We waved him over, and asked him, "Where are the mineral shops or

people who sell minerals out of their homes”? The boy looked perplexed by our question. What do you mean?” he asked. We are looking for an area that has lots of rocks. The boy said, “This subdivision is called ‘Lots of Rocks.’”

The Miner--John Anderson

## HGMS Ranks High in AFMS Bulletin Contest

*by Phyllis George*

*HGMS Editor and Webmaster*

**R**ecently I received a postcard from Linda Jaeger, AFMS\* Bulletin Editor Advisory Committee Chair. It announced that the following entries from HGMS have scored in the top 10 in their individual categories in the 2014 AFMS Bulletin Contest:

BBG ..... Large Bulletin Category

John Anderson ..... Adult Articles Advanced

Neal Immega ..... Features

Garth Clark ..... Features

Chris Peek ..... Features

Noelle Skubal ..... Jr. Poetry

Jackson Skubal ..... Jr. Poetry

### **Congratulations to all of you!**

As happened in the past several years, the 2014 AFMS show is occurring before the 2014 SCFMS\*\* show. Therefore, we now have a hint of how our members did in the AFMS judging even before we learn anything definite about the SCFMS judging of those same articles and bulletin.

So how does a contest entry even make it to the AFMS (national) level? Only by scoring in the TOP THREE at the SCFMS (regional) level. The top three entries in each category will be awarded a plaque by the SCFMS.

The AFMS 2014 Editors' Contest results will be announced in Tulsa, Oklahoma on Sunday, July 13 during the Breakfast with the Editors and Webmasters. The SCFMS 2014 Editors' Contest results will be announced in Baton Rouge, Louisiana on Saturday, August 9 during the SCFMS Breakfast with the Editors and Webmasters. If you can, try to attend one of the two shows. You'll really enjoy it.

\* American Federation of Mineralogical Societies

\*\* South Central Federation of Mineral Societies

**Canyon Lake Gorge—Fabulous Field Trip Destination:**  
*One man's disaster becomes everyone's field trip destination.*  
by Neal Immega - Paleontologist  
Member of the Houston Gem & Mineral Society

On July 4, 2002, the Texas Hill Country got so much rain that the Canyon Lake flood control dam was filled to overflowing—MUCH overflowing. More than 5 cubic MILES of water went over the spillway and cut a gorge through the Cretaceous Glen Rose limestone. Now it is open for visitors: The Canyon Lake Gorge Preservation Society (GPS) has a 25-year lease on the land for educational purposes, and they have done a wonderful job of preserving and providing access to the area so that nearly everyone can visit it. Because no collecting is allowed (except for approved research projects), the walk is littered with fossils.

The spillway was designed to channel excess water down an insignificant dry gulley which turned out to be the trace of the Hidden Valley fault which has a throw of about 60 feet.

Our guide, Jamie Kimscherff, is a Master Naturalist and thus can teach about bugs, birds, and plants, but he and our docent, Sid Bemus, tailored our tour to geology because the people on our trip were from the Fort Worth Gem and Mineral Club and the Houston Gem and Mineral Society. I am going to give you the paleontologist's view of the trip.

**Dinosaurs:** The spillway pan has trackways of theropod and sauropod dinosaurs. What a way to start the trip. Theropod dinosaurs walk on three toes normally. This is an uncommon trackway because it shows that the dinosaur let its heel hit the ground on each step. Was it sick, lazy, carrying heavy rocks?



Upper part of the  
Canyon Lake Gorge



Theropod foot print showing a heel  
strike (metatarsal) print.

**Get last-minute news about club events by sending a note  
to Jim Kendall at [kendal\\_ja@yahoo.com](mailto:kendal_ja@yahoo.com)**



**Faulting:** The gorge reveals fault planes showing striations (slickensides) better than I have seen before because the erosion was mechanical and quick. The Hidden Valley Fault with 60 feet of throw is revealed along most of the gorge showing downdrop blocks, relay ramps, rollover into a fault, etc.



Normal faults showing striations (slickensides).



Point bar of 1000+ pound slabs of rock.

marks in what has become hard limestone. There is a tennis court-sized exposure of ripple marks and tidal channels farther down.

**Foraminifera:** On the original mapping of the gorge, the area numbered 51 was found to have zillions of these huge (for forams) flying saucer shaped *Orbitoides texana*. Must have been a failed invasion of earth.

**Point Bar:** Point bars are found on the inside curve of rivers and normally are made of sand and gravel (and vertebrate fossils in the case of the Brazos River). This point bar is made of 1000+ pound slabs of limestone, shingled up. This bar was made by a REALLY rapid flow of water. I have never seen the like.

**Ripple Marks:** Below is our guide, Jamie, acting the part of a wave making ripple



Jamie, our guide, acting like a wave to make ripple marks





Flying saucer shaped forams,  
*Orbitoides*



Clams, snails, urchins, and  
algal (?) balls

**Fossils:** There are places where fossils are a tripping hazard, weathering out of a soft marl. These are gastropods, bivalves, urchins, *Porocystis* (whatever that is, rumored to be an algal fruiting body) and worms. So many fossils that they are a trip hazard. Watch your step.

**A special urchin:** This is *Salenia*, and that does not mean that it is salty. I feature this one because it is normally so hard to find, and here it would be a trip hazard if it were not the size of a nickel.



A wonderful symmetrical urchin, *Salenia* that is easily (unlike some of its sisters) identified by its angled anus on top.

**Facilities:** The Gorge Society has gone all out to make it easy for you to visit the place by putting in steps and handrails down the (dry) waterfalls and installing toilets at the halfway point.

This guided tour is cheap at \$10/person with a 10-person minimum. You can even join someone else's group if you do not have enough people for a private fieldtrip. If you qualify as a school group, the tour is free. To make a reservation, visit

<http://canyongorge.org/2002-flood>. And you need to be on time because they lock the gates. This is a great trip to see geology and paleontology. Where else is it so easy to take a stroll through 100 million years of geology? I rate this 5 stars.



The Gorge Society has put in steps and handrails at the steep places

## The Geology and Mining Operations of the Kiirunavaara Mine, Kiruna, Sweden.

by Nathalie Brandes

*Member of the Houston Gem & Mineral Society*

**T**he Kiirunavaara Mine is an underground iron mine operated by Luossavaara-Kiirunavaara Aktiebolag (LKAB). The ore body is the largest known massive magnetite body (Meyer, 1988) and is the largest underground iron mine in the world (Ferrer-Coll et al., 2012). The mine is located in Norrbotten County in northern Sweden (Smith et al., 2013) at the city of Kiruna, which was founded in 1900 as a result of the mining operations in the area (Sievertsson, 2012).



View of the Kiirunavaara Mine.  
Photo by P. Brandes.

The Kiruna District includes several Karelian (2.5-2.0 Ga) and Svecofennian (1.9-1.88 Ga) metavolcanics and metasediments (Smith et al., 2009; Smith et al., 2013). The rocks overlying the Archaean basement are first the Greenstone Group, which consists of >1.9 Ga tholeiitic to komatiitic volcanics (Ekdahl, 1993; Martinsson, 1997), then the Middle Sediment Group (Witschard, 1984), followed by andesitic volcanic rocks of the Porphyritic Group, and finally the syenite, quartz syenite, and sediments of the Kiirunavaara Group, which host the Kiirunavaara ore deposit (Smith et al., 2009; Martinsson, 2004). These rocks might have originally been basalt, trachyandesite, rhyodacite, and rhyolite altered by metasomatism (Martinsson and Perdahl, 1995; Bergman et al., 2001). All these rocks are intruded by the 1.9–1.8 Ga Haparanda and Perthite-Monzonite granitoids (Skiöld, 1987) as well as the 1.7 Ga Lina granitoids (Skiöld, 1988; Bergman et al., 2001). Around the same time of the intrusions, deformation and greenschist to amphibolite facies metamorphism affected the rocks (Skiöld, 1987; Bergman et al., 2001). The rocks of the region also underwent scapolitisation and albitisation (Frietsch et al., 1997).

The Kiruna District is the type locality for Kiruna-type iron oxide-apatite deposits (Vogt, 1927; Geijer, 1931; Smith et al., 2009). While sharing many similarities with iron oxide copper gold (IOCG) deposits, Kiruna-type ores are recognized as a distinct, but possibly related, type (Williams et al., 2005). There is debate concerning the origin of Kiruna-type deposits. Several researchers believe the ore resulted from an oxide

melt enriched in volatiles (Geijer, 1931; Asklund, 1949; Nyström, 1985; Nyström and Henriquez, 1994; Naslund et al., 2002). Others suggest magmatic fluids involved in exhalative deposition (Oreskes et al., 1995; Bookstrom, 1995; Sillitoe, 2003). Barton and Johnson (1996, 2000) propose that evaporate-derived brines were drawn into a hydrothermal system and promoted ore formation. Timing and emplacement of the Kiirunavaara ore system has been dated to 1.88 to 1.87 Ga (Romer et al., 1994; Smith et al., 2009; Smith et al., 2013). Shortly after emplacement, the ores underwent metamorphism and hydrothermal alteration (Romer et al., 1994).

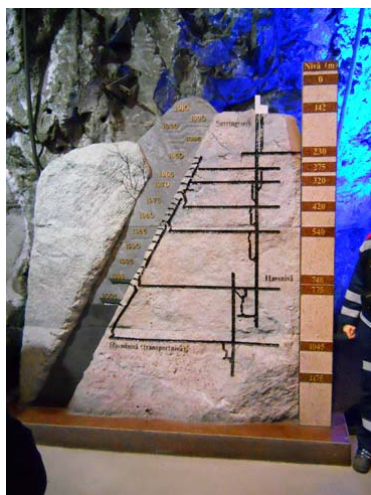


Underground museum of the Kiirunavaara Mine.  
Photo by P. Brandes

minor amounts of micas, chlorite, pyrite, chalcopyrite, talc, anhydrite, gypsum, titanite, and allanite (Nordstrand, 2012).

LKAB was established as a company in 1890 (Kuchta et al., 2004; Sievertsson, 2012). Mining at Kiruna began in 1898. Ore was extracted using an opencast method until 1952, when underground mining began. The mine currently employs the sublevel caving method for ore extraction (Kuchta et al., 2004). Both remote control and driver-operated equipment is used in the mining operation. Primary crushing of the ore is conducted underground, after which it is hoisted to the surface for processing which includes magnetic separation and flotation. The ore is then pelletized and sent to the harbor at Narvik, Norway, to be shipped to customers (Kuchta et al., 2004; Magnusson, 2012).

The Kiirunavaara ore body trends 4 km north-south, is at least 2 km deep, and averages 80 m. wide (Sievertsson, 2012). It dips 60° to 70° to the east (Cliff et al., 1990). The ore is mostly low phosphorus high iron content magnetite, although about 20% of the ore body includes high phosphorus, apatite-rich magnetite (Kuchta et al., 2004). In addition to apatite, other gangue minerals include actinolite, calcite, and



Cross-sectional view of the Kiirunavaara Mine.  
Photo by P. Brandes

The city of Kiruna was founded in 1900 to serve the LKAB mining operations. LKAB's first managing director, Hjalmar Lundbohm, is considered the city's founder. He tasked Per Olof Hallman to devise a city plan that fit well with the local topography. Unfortunately, the Kiirunavaara ore deposit extends under the city Hallman designed. In the 1950s, ground surface deformation was recorded near the mine and has been slowly progressing towards the city. Beginning in 2004, LKAB and the municipality of Kiruna have been slowly moving the town away from these deformation zones. Historic buildings are moved while others are purchased for market value. Over time, Kiruna will migrate to nearby areas not underlain by ore, all paid for by LKAB (Sievertsson, 2012).



Kiruna City Hall

The clock tower will be moved by LKAB.

Photo by P. Brandes

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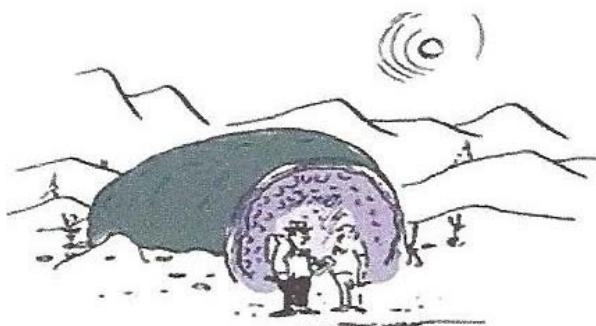
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**"This map says there's suppose to be geodes around here."**

via Gneiss Times 6/02  
Gem-N-i.org 8/10



## SHOW COMMITTEE HAS OPEN POSITIONS - COME SHOW US WHAT YOU CAN DO

Here's your opportunity to make a difference for your club – become part of the Show Committee and help us build another successful Show.

Whether you want to put your organizational skills to work by chairing a subcommittee or just help out in a smaller way, we have a place for you! All subcommittees can be co-chaired, so recruit your friend or significant other. Get to know other club members and participate in fun activities like the Show Committee party and field trip. Experienced show committee members are here to help you get started.

### Information Booth Chair(s) and Committee Members

- Work with the public
- Coordinate door prizes, merchandise sales, and silent auctions
- Provide information on our club and accept new member applications

### Show Volunteers Chair(s) and Committee Members

- Manage Online volunteer sign up
- Coordinate college volunteers with campus focal points
- Oversee volunteer check-in during the Show
- Prepare nametags for general volunteers, dealers, demo, and other club areas
- Identify new opportunities for volunteer recruitment

### Show Publicity Chair(s) and Committee Members

- Coordinate publicity and marketing opportunities including
  - Show Fliers – creation and distribution
  - Show Postcards – creation and delivery to labeling party and dealer committee
  - Ad placements – Houston Chronicle Fall Bazaar and free public service ads/announcements
  - Transtar sign
- Identify new opportunities for both free and paid marketing
- Work with HGMS Webmaster to keep Show pages updated

Email Michele Marsel at [Show@hgms.org](mailto:Show@hgms.org) for more information

## In Memoriam--Three Members

*by Phyllis George*

**I**t was with great sadness that I learned of the passing of three of HGMS's own: **John Emerson, Jeanne Gurski, and Steve McCaleb.** Jeanne passed away from heart failure on April 29, 2014, John Emerson passed away Saturday, May 24, and Steve McCaleb passed away from cancer June 6, 2014.

Long-time members will remember Jeanne's Rock Shop in Bellaire, TX and how sad everyone was when the store front closed down to become a Web-based store. Our most convenient source for lapidary supplies was gone. Jeanne's expanded obituary can be found at [www.MemorialWebsites.Legacy.com/JeanneGurski](http://www.MemorialWebsites.Legacy.com/JeanneGurski).

John Emerson, a past HGMS President and co-author of several fossil identification books, wrote monthly articles for the BBG for two or three years. He quit only when a stroke began playing havoc with his memory about two years ago. He told his family that he did not want an obituary or any other announcement when he passed, and they are honoring his request. So there is no Web site where you can learn more. I learned about it only because his daughter saw that I was listed on his cell phone, and she called me.

Steve McCaleb was a long-time member who didn't come to the club that often, but he did come on Saturdays. Matt Dillon and he were very close friends—Steve and other club members helped Matt in his recent move to Beeville. Steve's memorial page can be found at [https://www.facebook.com/steve.mccaleb.9?fref=tl\\_fr\\_box](https://www.facebook.com/steve.mccaleb.9?fref=tl_fr_box)

**Do you have fond memories of any of these three?** I would like to publish your personal memories of John, Jeanne, and Steve in the August BBG. Please e-mail them to [pgeorge4@comcast.net](mailto:pgeorge4@comcast.net) by Wednesday, July 9, 2014. I asked for such stories about Frances Arrighi when she passed away, and was able to publish several. I hope I will receive several for John, Jeanne, and Steve.

I have already received one such article from Neal Immega on John Emerson:

### In Memoriam - John Emerson

*by Neal Immega, paleontologist*

**J**ohn was a top-flight petroleum engineer who worked all over the world for Bechtel, retired to Houston, and then wrote and published Texas fossil identification books illustrated by his wife Barbara. Irene Offman started study groups on various phylum, and the most energetic members were Tom Akers and John Emerson. John's engineering background probably led him to do solid research to find all the pertinent references and to collate them into one volume—remarkable work. His last work is on Texas oysters, and I am currently rewriting it to develop it as a Web-based book with modern photographs showing the identifying features.

## General Meeting Minutes

05-27-2014

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

President Ray Kizer thanked everyone for coming out to the meeting on such a dicey evening. (The entire Houston area had experienced heavy rains and flooding.) This evening we have 21 regular members, no new members, and no visitors in attendance.

**Drawing:** We had two door prizes: Brazil jasper donated by John Anderson, and a bottle of Riesling wine from the Mosel Valley wine region donated by Nathalie and Paul Brandes. (Nathalie, the evening's speaker, told us about many geologic and physical wonders to be found in Germany—including the almost vertical hillsides hosting vineyards along their faces.) Clyde McMeans won the jasper, and Deborah Wilson won the wine.

**Minutes:** Karen Burns moved to approve the minutes of the May General Meeting as published in the BBG. Joan Riley seconded, and the membership passed the motion.

### Section Reports

**Archeology Section:** The next Archeology Section meeting is Thursday, June 5, 2014 at 7:30 p.m.

**Beading Section:** The next regular Beading Section meeting will be Saturday, June 21 at 1:30 p.m.

**Day Light Section:** Karen Burns announced that the next meeting is scheduled for Monday, June 9, 2014 at 1:00 p.m. During the May meeting, they made a copper with pearls pendant. During the June meeting, they will make a collar that goes with the pendant. At the July meeting, Jim Hara will conduct a "Mini Fossil Hunt."

**Education Committee:** Carrie Hart has lined up several instructors and is now in the process of organizing a schedule for summer classes at HGMS. Currently we are seeking members interested in forming class groups of five or more students wanting the following Beginning classes: Wire Wrap, Cabochon Making, Foil Picture Making, and possibly Jewelry Fabrication. These classes will teach the basic skills needed to complete one or more jewelry items. Intermediate classes will follow if there are interested students. All tools and materials will be covered by course fees unless specifically noted. Course fees must be paid in advance. Contact Carrie Hart for availability, course schedules, and fees. Please e-mail her at [classes@hgms.org](mailto:classes@hgms.org) or at [carriehart2000@yahoo.com](mailto:carriehart2000@yahoo.com).

**Faceting Section:** The next meeting is on Wednesday, June 11 at 6:30 p.m. The program will be **Rough Gemstone Sources:** The Good, the Bad, & the Ugly—or how not to waste your hard-earned dollars. Plus, you will be introduced to using a Refractometer.

**Lapidary Section:** The next regular meeting is June 16, and it will feature Ed Clay explaining and demonstrating *Intarsia*.

**Mineral Section:** On June 4, the Mineral Section will hold its popular Swap Night, where excess material from our collections can be bought/sold/swapped. This will be an informal event and will be held inside. All Sections are invited to participate and swap. Setup begins at 7:00 p.m., and the formal business meeting will be kept to a minimum to allow ample time for specimen exchange and socializing. June 18 will see the beginning of our once-a-month Workshop sessions on the third Wednesday. We will be going over the many collection items Art Smith left to the Section.

**Paleo Section:** The next meeting is scheduled for Tuesday, June 17. The program will be announced in an e-mail blast.

**Youth Section:** The Youth Section will meet Saturday, June 7. On June 21, the group will be taking a field trip to Mt. Ida, Arkansas—home of quartz crystals.

**Shop Report:** A number of the machines are now back in service. Neal commented that Gary Anderson had saved him a months' worth of work by changing a saw blade bushing instead of Neal taking the saw apart to replace the drive shaft.

**BBG Editor and Webmaster:** Phyllis George mentioned that the due date is Wednesday, June 11 for all submissions for the July edition of the BBG.

Phyllis also announced she had just learned of the passing of two long-time HGMS members. Jeanne Gurskey passed away April 29. (Jeanne and her family were widely known for their Jeanne's Rock Shop on Bissonnet and Bellaire. It closed in 2007.)

John Emerson passed away May 24. For several years he submitted monthly articles to the BBG, and his byline was "The Old Geezer." At one time, John was the President of HGMS. John and wife Bobbie authored several comprehensive books on fossils—and they are still available through the Paleontology Section.

Phyllis hopes that everyone who knew these two members will write an article talking about the memories they have of these friends and send it to [pgeorge4@comcast.net](mailto:pgeorge4@comcast.net) for inclusion in the August BBG. The due date is July 9, 2014.

**June 24 General Meeting:** The program will be on "Texas Topaz" by speaker B. Diane Eames. Diane is a fine jeweler, Graduate Gemologist (GIA), and gem cutter. She specializes in the Texas state gem—topaz—found in Mason County, Texas. Ms. Eames will discuss where and how to find the elusive topaz. She will also cover the traditional faceting of the gem. Her displays will demonstrate Mason County topaz in the rough and how to differentiate topaz from quartz—the other gem-quality mineral found in the Hill Country. In addition, the Texas Cutters Collection will be exhibited—a collection of the state gem cut by various gem cutters from Texas. For the folks who believe there is nothing in Texas except agate and petrified wood, this presentation should change your perception of Texas minerals.

### Old Business

In the interest of time, President Kizer asked the members to follow the progress of Old Business items in the May 6 Board meeting minutes as published in the June edition of the BBG.

### New Business

**Amended HGMS Bylaws Vote:** The membership took a yes or no vote on the amended HGMS Bylaws that previously had been reviewed and approved by the 2013 HGMS Board. Karen Burns moved that the amended HGMS Bylaws be approved as written, Joan Riley seconded, and the membership voted to accept the Bylaws as amended.

**Donated Items for Auction:** HGMS received the donation of a jeweler's workbench, some torch parts, bench tools, and graving implements. Debbie Kirkpatrick, the intermediary who delivered the bench and tools, relayed the owner's wishes that all proceeds from the sale go to the Day Light Section.

The next **Board of Directors meeting** is Tuesday, June 3. The next **General Meeting** is Tuesday, June 24, 2014.

At 8:15 p.m. the silent auction was officially closed. A dozen different bidders participated in the auction. The auction brought in \$393.00 for the Day Light Section.

Paul Brandes introduced the program: **Volcanoes, Romans, Rivers, and Wine!** Our own Nathalie Brandes spoke on an area of Europe filled with volcanic features, Roman ruins, beautiful rivers, and fine wine. She took us on a tour of Western Germany to visit the Vulcaneifel, the former Roman cities of Trier and Xanten, and the wine-producing Mosel and Rhine River valleys. Along the way, she introduced us to castles with moats, fighting castles vs. pleasure castles, Drachenfels (the Dragon Mountain—she grew up in its shadow), lava bombs, cold-water geysers (CO<sub>2</sub> causes an eruption when the gas builds up enough pressure), and many great photos. Nathalie also spoke about how these features tie together in European history.

**Refreshments:** Provided by Ray Kizer

The meeting was adjourned following the presentation.

**Adjourn:** Karen Burns moved to adjourn the business meeting, and Joan Riley seconded.

The motion passed unanimously, and the meeting was adjourned at 9:05 p.m.

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### Wise Sayings

"I find television very educating. Every time somebody turns on the set, I go into the other room and read a book. - Groucho Marx

"We cannot solve our problems with the same thinking we used when we created them."  
- Albert Einstein

## Board of Director's Meeting

June 3, 2014

by Michele Marsel

X	President - Ray Kizer	X	Archeology Rep - Garth Clark
X	1st Vice President - Paul Brandes	X	Beading Rep - Jillynn Hailes
X	2nd Vice President - Beverly Mace	X	Daylight Rep - Mary Ann Mitscherling
X	Treasurer - Rodney Linehan	X	Faceting Rep - Gary Tober
	Secretary - Nancy English	X	Lapidary Rep - Phyllis George
	Past President - John Caldyne		Mineral Rep - Sigrid Stewart
		X	Paleontology Rep - Mike Dawkins

**Call to Order:** The meeting was called to order at 7:35 p.m. with a quorum of eight members present. President Ray Kizer presided over the meeting.

**Approval of Previous Month Board Minutes:** Gary Tober moved and Jillynn Hailes seconded that the minutes of the May 2014 Board Meeting be accepted as published in the June 2014 BBG. The motion passed unanimously.

**Treasurer's Report:** Rodney Linehan e-mailed financials to all Board members in advance of the meeting. He reported the balance of the club's insurance has been paid in full for the year. Ray Kizer relayed member requests during the May General Meeting asking to have Treasury reports made available to the membership. Ray will print copies of recent months' finances and put them in a binder in the kitchen.

**Show Committee:** Michele Marsel – The next meeting will be June 10, 2014. The deadline for returning dealers to commit is June 15, and dealers on the waiting list will be assessed shortly thereafter, based on space available. Michele will submit copy for the BBG detailing specific areas on the Show Committee that still need more people.

### Office, Committee, and Section Reports

**Archeology Section:** June Program—Ancient Technologies. The July 3, 2014 meeting is moved to the second Thursday (July 10) to not interfere with July 4 plans. We will explore the exciting application of genetics in archeology.

**Beading Section:** The bead crochet program at the May meeting was led by a guest instructor. The Section will make red, white, and blue earrings at the June meeting, and they will decide on projects for future meetings.

**Day Light Section:** Next meeting is Monday, June 9, 2014 at 1:00 p.m. The project will be to create a collar for the copper with pearls pendant we made in May. On July 14, Jim Hara will take our members on a "Mini Fossil Hunt"--in the clubhouse.

**Education Committee:** Carrie Hart has lined up several instructors and is now in the process of organizing a schedule for summer classes at HGMS. The first class will be Wire Wrapping with Charlie Fredregill as instructor. The nine-hour class will be held



on three consecutive Sundays starting on June 8. Six students are interested, and several have signed up with payments pending. Carrie is working on a list of instructors, and she particularly is looking for faceting, PMC, and dichroic glass instructors.

**Faceting Section:** Next meeting is Wednesday, June 11 at 6:30 p.m. The program will be on Sources for Gemstone Rough: The Good, the Bad, & the Ugly. Get tips on what to look for and how not to waste your hard-earned dollars. On July 9 the Section will host its Summertime SWAP Meet! Bring your gemstone rough and any other Rock & Gem equipment or supplies that you might want to swap out! Pat Cockrell gave all participants at the last meeting a timing wheel synchronizing tool. He also talked about using LED vs. fluorescent lighting. LED does not bounce off reflectors.

**Lapidary Section:** Next meeting is Monday, June 16 at 7:30 p.m. Ed Clay will explain and demonstrate intarsia. Lapidary intarsia is a jewelry-making technique that uses varied shapes, sizes, and species of highly polished stone fitted together in a host matrix to create a mosaic-like picture with an illusion of depth. At the May meeting, Ed demonstrated jewelry repair where cutting a stone to fit an existing mounting is required.

**Mineral Section:** Next meeting is Wednesday, June 4 at 7:30 p.m. The Mineral Section will host a Swap Night where excess material from our collections can be bought/sold/swapped. This will be an informal event and will be held inside. All Sections are invited to participate and swap. Setup begins at 7:00 p.m. This will be the last regular meeting before our summer break. We will have workshops throughout the summer. On June 18, members will go through items left to the Section by Art Smith. Future workshops will be held July 16 and August 20.

**Paleo Section:** Next meeting is Tuesday, June 17 at 7:30 p.m. The program will be announced. The last meeting was on fossil fish. Larry Mornhinveg brought samples from Wyoming that sold for \$1 each, and George Wolf gave away shark and ray teeth and gar scales.

**Publicity Committee:** Tamara Richie will provide a spreadsheet of free advertising opportunities to Ray Kizer to be shared with Sections and Committees.

**Youth Section:** Meetings are on 1<sup>st</sup> and 3<sup>rd</sup> Saturdays at 10:00 a.m., June 7, June 21, July 5, and July 19, 2014. A field trip is planned for the third weekend of June (6/20–21/2014) to Mt. Ida, Arkansas for youth members and chaperones only.

**BBG Editor and Webmaster:** July BBG deadline is June 11. John Emerson and Jeanne Gurski recently passed away, and Phyllis would like memory articles submitted for the August issue.

Phyllis shared two notes she received: one from Diane Dare (AFMS past judge—retired due to health) commending an article by Neal Immega and the quality of BBG articles), and the second a postcard from Linda Jaeger (AFMS Bulletin Committee Chair) announcing that six of our members plus the BBG itself are in the top 10 in their categories at the national level of judging. In order to be judged at the AFMS

(national) level, being in the top three in your category at the regional level is a prerequisite.

### Old Business

1. **Proposed 2014 Budget:** Rodney Linehan – Final review of previous profit and loss statements to build a functional 2014 budget. Phyllis George moved to approve the proposed 2014 Budget as presented by Rodney Linehan, seconded by Jillynn Hailes. The motion passed unanimously.
2. **Show Trailer Repairs and Rental Payment:** Trailer storage is up for renewal at end of July. The Board discussed a member offer to store the trailers on personal property in New Caney, but decided to decline the offer because our insurance company will only offer coverage if the trailers are stored in a commercial location. Michele Marsel will obtain quotes from other facilities in the Humble area and e-mail them to Ray Kizer.
3. **Clubhouse Repairs/Upgrades:** Ray Kizer – Update – The clubhouse entrance door has received its second coat of paint, and final painting will happen in the next two weeks. The doorbell system has been rewired and will be connected shortly. The next project will be the front wall repair and repainting project. The old TV and stand have been removed, and the drywall will be repaired. A flat-screen TV will be put up shortly with hookup to a DVD player. A solar light (purchased last year) for use under the parking lot door awning will be installed.
4. **General Meeting Presentation:** On June 24, the meeting will focus on **Texas Topaz**. B. Diane Eames is a fine jeweler, Graduate Gemologist (GIA,) and gem cutter. She specializes in the Texas state gem—topaz—found in Mason County, Texas. Ms. Eames will discuss where and how to find the elusive topaz. She will also cover the traditional faceting of the gem. Her displays will demonstrate Mason County topaz in the rough and how to differentiate topaz from quartz—the other gem-quality mineral found in the Hill Country. In addition, the Texas Cutters Collection will be exhibited—a collection of the state gem cut by various gem cutters from Texas. Recently, Gems of the Hill Country (Ms. Eames' jewelry store) was relocated to Ingram, Texas from their original location in Mason.
5. **Student Scholarship Award:** A final vote was taken on our two potential scholarship candidates—Ms. Adeene Denton and Ms. Zhenchen (Stephanie) Zou. Both students are currently enrolled in Earth Science at Rice University, and each has displayed outstanding scholarly efforts so far. They are both entering their junior year this coming fall and hope to apply the HGMS Scholarship funds to offset some of the cost of their proposed summer 2014 field camp training. Voting members were polled. Adeene Denton received the majority, and she will be awarded this year's scholarship.

### New Business

1. Paul Brandes will contact Adeene Denton, the 2014 scholarship recipient, and ask if she will present a program at a fall General Meeting about her summer field camp experience in Nepal.

2. VA outreach: Gary Tober created an outline of tasks needed to organize the activity with the VA. It was suggested that an onsite Genie demonstration be conducted to show what the vets would be learning at HGMS. The VA Hospital will provide transportation to HGMS for those participating if required.
3. Paul Brandes mentioned that we have several out-of-town speakers and discussed providing an honorarium to cover hotel expenses. The consensus was that HGMS does not have a budget for that, and that we should look for members to host out-of-town speakers when needed.

**Adjourn:** Paul Brandes moved to adjourn the meeting, and Jillynn Hailes seconded. The motion passed unanimously, and the meeting was adjourned at 8:49 p.m.

## Bench Tips

by Brad Smith

Get all 101 of Brad's bench tips in "Bench Tips for Jewelry Making" on Amazon.com (<http://www.amazon.com/dp/0988285800/>)

### S/awing Jump Rings

The difficult part of making jump rings for me has always been holding the coil while cutting off the individual rings. I use a saw to get the best fit when closing the rings later. I've seen all sorts of suggestions for ways to hold the coil, but the one that works best for me is this little jig made from scrap wood.

It's about 2 inches wide and 4–5 inches long with a groove cut down its length to cradle the coil of wire, and a thin stop attached to the front end.



To cut the rings, thread your saw blade through the coil, hold the coil down in the groove and against the front stop, and saw at about a 40-degree angle.

Don't forget to use some wax or cutting lube. It really does make a difference. If you don't believe me, do an experiment while you're cutting a mess of rings. Count how many rings you cut before breaking a blade, first without lube and then with adding some lube about every 6–8 rings.

### Save When Buying Silver

Silver products like sheet, wire, and casting shot are sold by the Troy ounce at what is called the "spot price." That's what companies pay for the pure metal on the commodities market, and the spot price changes daily.

But in addition to the spot price, there is also a cost to fabricate the metal into wire or sheet, so the price of the item you buy is the cost of the metal plus the cost to make it. Different products have different fabrication charges because each takes a different amount of labor. Also, different companies will have different fabrication charges because of local labor rates and their desired profit margin.



You can save money by finding a company with a lower fabrication charge. Also, note that the fabrication charge per ounce is less on larger orders, so you can save more by buying more. Find a friend to place a joint order, and split the shipping charges.

*But for casting purposes, there's an even better way to save. **Buy your silver at a coin store.*** They sell bars and rounds in pure and Sterling for the spot price plus about a dollar per ounce.

The local coin shop adds only a small profit over the spot price. Further, they often waive the sales tax on a cash buy. So I save about \$3 per ounce, pay no tax, no shipping charges, and support a local business.

## **Bumble Bee Agate—Great Stuff—But It Comes with a Warning**

*by Carolyn Weinberger  
from Chippers' Chatter 4/2014  
Photos on next page*

I first saw slabs of Bumble Bee Agate at Helen and Andy's booth in Tucson during the 2012 show. It's a very attractive material found in Indonesia and mined from sulfur vents. Its composition is anhydrite (gypsum), sulfur, and hematite in a matrix of volcanic tuff.

Helen and the other dealers in Tucson who were selling the material all warned that it should be cut as follows:

- in a well-ventilated place
- wearing a respirator
- with plenty of running water
- washing your hands very well after working the material
- polishing the finished material—both front and back—to seal it after cutting

Why all the precautions? Some tests have shown that this material contains traces of arsenic. Some specimens also show a mild trace of radioactivity.

Please use caution—and if you're examining a piece of rough, wash your hands well after touching. If buying a finished cabochon, be sure it's polished on all surfaces. (See photos on next page.)



**THE BATON ROUGE GEM & MINERAL SOCIETY SHOW  
and  
SCFMS REGIONAL CONVENTION SCHEDULE  
Marriott Hotel  
Hilton Ave.**

Show Times: Saturday, August 9      10:00 – 5:00  
Sunday, August 10      10:00 – 5:00

**SCFMS Activities: Saturday, August 9 in the Beauregard Room**

**Breakfast with the Editors and Webmasters: .....8:00**  
**SCFMS Meeting: .....1:00**  
**SCFMS Awards Banquet: .....7: 00**

Sunday, August 10<sup>th</sup> in the Beauregard Room

**Rolling Rock Club Meeting: .....8:00**

Room Rate Discounts will be available

**Show Time 2014**

July 9-13	Tulsa, OK	AFMS/RMFMS/Tulsa Rock & Mineral Society Tulsa Fairgrounds, Central Park Hall 4800 E. 15th St. S; Finis Riggs, (918) 486-3788 lriggs1331@cox.net www.ttownrockhound.org
August 9-10	Baton Rouge, LA	SCFMS/Baton Rouge Gem & Mineral Society Marriott Hotel, 5500 Hilton Ave. cajunladi@cox.net; www.brgemandmineral.org
August 16-17	Bossier City, LA	ArkLaTx Gem & Mineral Society Bossier Civic Center, 620 Benton Rd. larockclub@gmail.com; www.larockclub.com
August 23-24	Jasper, TX	Pine Country Gem & Mineral Society The Event Center, 6258 State Hwy. 190W 5 miles west of Jasper; Jonetta Nash jonetta.nash@yahoo.com
October 3-5	Austin, TX	Austin Gem & Mineral Society Palmer Events Center, 900 Barton Springs Rd. showchairman@austingemandmineral.org www.gemcapers.com
October 4-5	Stafford, TX	The Bead Market Stafford Centre, 10505 Cash Rd. rebekah@thebeadmarket.net www.thebeadmarket.net
October 10-12	Metairie, LA	Gem & Mineral Society of Louisiana Best Western Plus Landmark Hotel 2610 Severn Ave.; gemshow2014@gmail.com
October 10-12	Mount Ida, AR	World Championship Quartz Crystal Digging Montgomery County Fairgrounds Fairgrounds Rd. director@mtidachamber.com www.mtidachamber.com
October 11-12	Temple, TX	Tri-City Gem & Mineral Society Mayborn Civic and Convention Center 3303 N. 3rd St.; Chip Burnette burnette@aceweb.com www.tricitygemmineral.org
November 1-2	Amarillo, TX	Golden Spread Gem & Mineral Society Amarillo Civic Center, 400 S. Buchanan St. Wanda Finley, finfran@midplains.coop



2014		July					2014
Sun	Mon	Tue	Wed	Thu	Fri	Sat	
		1 7:30 Board Meeting	2 NO Mineral Section 10-3 Shop open	3	4 <b>Independence Day</b>	5 10-5 Shop Open 10-12 Youth Section	
6 10-4 Shop Open	7	8 7:30 Show Committee	9 6:30 Faceting Section 10-3 Shop Open	10 7:30 Archeology Section	11	12 10-5 Shop Open	
13 10-4 Shop Open	14 1:00 Day Light Section	15 7:30 Paleo Section	16 7:30 Mineral Section 10-3 Shop open	17	18	19 10-5 Shop Open 10-12 Youth Section 1:30 Beading Section	
20 10-4 Shop Open	21 7:30 Lapidary Section	22 7:30 General Meeting	23 10-3 Shop open	24	25	26 10-5 Shop Open	
27 10-4 Shop Open	28	29	30 10-3 Shop open	31			

2014		August					2014
Sun	Mon	Tue	Wed	Thu	Fri	Sat	
					1	2 10-5 Shop Open 10-12 Youth Section	
3 10-4 Shop Open	4	5 7:30 Board Meeting	6 NO Mineral Section 10-3 Shop open	7 7:30 Archeology Section	8	9 10-5 Shop Open	
10 10-4 Shop Open	11 1:00 Day Light Section	12 7:30 Show Committee	13 6:30 Faceting Section 10-3 Shop Open	14	15	16 10-5 Shop Open 10-12 Youth Section 1:30 Beading Section	
17 10-4 Shop Open	18 7:30 Lapidary Section	19 7:30 Paleo Section	20 7:30 Mineral Section 10-3 Shop open	21	22	23 10-5 Shop Open	
24 10-4 Shop Open / Shop Open 31	25	26 7:30 General Meeting	27 10-3 Shop open	28	29	30	

# **The BACKBENDER'S GAZETTE**

**The Newsletter of the  
Houston Gem & Mineral Society**

10805 BROOKLET

HOUSTON, TEXAS 77099

(281) 530-0942



## **SCFMS**

1998 - 1st (Large)  
2000 - 1st (Large)  
2003 - 1st (Large)  
2005 - 1st (Large)  
2006 - 2012 - 1st (Large)  
2013 - 1st (Large)



## **AFMS**

1998 - 2nd (Large)  
2004 - 3rd (Large)  
2007 - 1st (Large)  
2010 - 2nd (Large)  
2012 - 3rd (Large)  
2013 - 3rd (Large)



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