



The **BACKBENDER'S GAZETTE**

The Newsletter of the
Houston Gem & Mineral Society

Volume XLVI - No. 3

March 2015



President's Message

by Raymond Kizer

The President's Letter will be shorter this month because I am writing it on my cell phone, and the keys are almost too small for me to type on. Unfortunately, while I was out doing charitable works last month, someone else was busy converting all of my electronics—including my laptop—to cash at some pawn shop after burglarizing my home. That's the reason for one-finger-typing this note.



On to better news. We have started our work organizing the club's 2015 fall Show. Scott Singleton has agreed to head up our Show Committee this year, and he is building a good team—hey, I've even volunteered to be the Assistant Show Chair. Scott promises to make our commitment a fun time for all, so why not join us and help support your club? Nancy English is heading up our volunteer committee, so let her, Scott, or me know if you want to help out. Let's keep the momentum going! My finger is worn out now...that's all.

Upcoming General Meeting Programs

by Paul Brandes

March 24 2015: An Introduction into Near-Earth Asteroids: Lately, we've heard a lot about meteorites and some near misses, including some that have been captured on video (think Chelyabinsk, Russia in 2013!) This evening's presentation by Dr. Paul Abell from the Johnson Space Center of NASA will be a general overview of near-Earth asteroids explaining where they come from, what they are made of, what happens when they hit the planet, what we know about them from our ground-based telescopes and spacecraft, and why we are interested in them. Dr. Abell is the Lead Scientist for Planetary Small Bodies assigned to the Astromaterials Research and Exploration Science Division at the NASA Johnson Space Center in Houston, Texas. His main areas of interest are physical characterization of near-Earth objects (NEOs) via ground-based and

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2015 HGMS Gem & Jewelry Show—This Year ONLY
September 25–27, 2015
Y'all come!

(In 2016 our show will be held in November—As Usual.)

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

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 Wednesday, March 11, 2015.*

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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>.

Upcoming Programs continued from page 1

spacecraft observations, examination of NEOs for future robotic and human exploration, and identification of potential resources within the NEO population for future resource utilization. Please plan to attend!

April 28, 2015: Nathalie Brandes – The Famous Silver Mines of Kongsberg, Norway

Collecting Microfossil Matrix

by Chase Jennings

Member of the Houston Gem & Mineral Society

Collecting microfossil matrix is the most efficient way to collect small fossils—often the most abundant, most diverse, and best-preserved fossils at any given site. Microfossil matrix is the strata from which we often collect our small fossils. Microfossil matrix collecting involves collecting this raw fossiliferous strata in bulk, breaking it down, cleaning it, and grading it for sorting so that it can be easily searched for fossils.

Microfossils defined: Generally, these are fossils 10 mm or smaller. These fossils generally fall through a screen with 1/4" holes or larger, meaning that they are often overlooked during surface collecting or lost during sifting. Many of these fossils can be seen by those with good vision without the aid of a hand lens; however, using a traditional or digital microscope opens up a whole new world of fossils.

Where to find microfossil matrix: Most fossil sites have microfossils, but the most abundant microfossils are found in aquatic or marine deposits, which are incredibly plentiful in Texas. Anywhere you find small fossils is a good place to collect matrix for processing. If you cannot collect your own, there are places online—such as eBay—where you can find microfossil matrix for sale.

Tools Needed or Recommended: You will need a good set of tools to properly collect matrix: something to dig or scrape up matrix, something to sort matrix, something in which to carry matrix, and something in which to transport matrix home.

To dig with: Vigoro Dig Ez Mini Pick is my #1 recommendation, but here are others if you cannot find this one. Any one of those listed below will serve you well as a digging implement. It's very rare that I need any heavier-duty tools than my hand pick.

V&B Manufacturing
Groundbreakers 864-03

Mini Planter Pick
http://www.amazon.co...p_ob_ol_title_2

Vigoro Dig Ez Mini Pick with 16 in. Fiberglass Handle
Model # 1114100
Store SKU # 656089
<http://www.homedepot...dle-115668.html>

Hand Mattock, Feather Weight Mini Pick Garden Tool
<http://shop.waycoolt...-Tool-WW17A.htm>

Kusakichi Brand #11 Pick Hoe
http://www.hidatool.../hoe/g_hoe.html

To carry your matrix: Frequently you will have to work a distance away from your vehicle. Dirt is Very Heavy (usually between 8 and 15 lbs. a gallon depending on the type), so I would recommend that you get a good, comfortable hiking backpack WITHOUT zippers for hauling your matrix. (Zippers break far too easily under a heavy load.) I would highly recommend a 20–30 liter backpack. I hauled 5-gallon buckets when I started out, but using a backpack is tremendously easier and safer (I use a 30 liter, which carries 8 gallons—but I do recommend a 20 for starting out). If you get a zippered backpack, the zippers quickly become clogged with dirt and eventually fail. As heavy as dirt is, you want something made to take the weight and that can be carried easily without breaking your back. As a side note, you may want to line your backpack with a trash bag to keep it from getting so dirty.

To store/transport your matrix: I recommend a regular 5-gallon, \$3 bucket from Walmart or Home Depot. **Make sure** to buy a lid and duct tape for sealing each bucket, otherwise they can dump over in your car, spilling fossils and dirt all over your interior—which has happened to me before. Also, make sure to strap in or otherwise secure your buckets well. If you were to slam on the brakes, could a bucket come flying forward?

To sift matrix onsite: Remove any large rocks from your matrix in order to maximize your end yield. Rocks only take up space, so it's best to get all out that you can. I use a two-part sifter using 1/2" and 1/4" wire mesh. The 1/2" mesh removes large rocks and large clumps but rarely catches any fossils. The 1/4" will catch larger fossils, which are easily picked out to take home, while allowing your microfossil matrix to pass through. I use a "bucket sifter," which I can sift over a 5 gallon bucket and then pour into my backpack.

Collecting Methods: When I arrive onsite, I first scout the entire exposure to locate the highest concentrations of small fossils. I look for loose fossiliferous material that can be broken down with water or H₂O₂, although there are also methods for breaking down harder material that involves vinegar, boiling, chemicals, and freezing. I look for the most concentrated locations and either surface-scrape with the flat end of my tool (the least invasive method), scoop up gravel if in a creek, or I collect chunks of fossiliferous strata. In any case, I do not pothole or tunnel, as this is one of the reasons fossil collectors are banned from many sites. If the matrix is from a creek or loose surface material that I scooped or scraped up, I will sift out anything

larger than 1/4" and pour all the smaller than 1/4" material into my backpack to hike out. If the matrix is taken directly from strata in chunks, I usually just dump the entire chunks of matrix into my backpack to break down later.

If you are lucky, you can sometimes find red harvester ant beds (*Pogonomyrmex barbatus*). The ants often will collect microfossils while burrowing (they move any rocks in their way while digging), and will dump them at the surface. If you do collect from red harvester ant beds, be VERY careful to remove no more than 5% of the mound from the outermost perimeter of the mound, or you may very well kill the entire mound and all of your tiny fossil sorters. It's also not a bad idea to feed them if you are so inclined.

After I have a full backpack of matrix, I hike it out to my car and dump it in 5-gallon buckets to transport back home. Use a rubber mallet to fully seat a lid on each full bucket, then use four 5" vertical strips of duct tape to secure the lid. There's nothing worse than having a bucket full of matrix dump over in your car. I also line the back of my car with a plastic painters sheet (\$1 at Walmart or Home Depot) in case any matrix does happen to spill in my car or in case the bottom of the buckets have mud on them.

Processing your matrix: After you bring your matrix home, it needs to be processed. This concentrates your matrix and cleans the fossils so they can be picked out easily during sorting. Some matrix can just be washed and then dried (such as river gravel), but others need to be broken down with water or with hydrogen peroxide. For clay-based matrix, I highly recommend first allowing your matrix to fully dry in the sun, then soak it in hydrogen peroxide which most stores carry in the pharmacy section for \$1 a bottle. Usually it takes 1-2 bottles per gallon. You want to soak every bit of your matrix. You will know this is achieved when the peroxide begins to pool on top and the matrix does not absorb more. The peroxide (H_2O_2) soaks into the pores of the clay and breaks down into oxygen and water, thus expanding and causing the clay to practically dissolve while not damaging your fossils. Leave the peroxide to soak for about 15 minutes, and then fill your bucket or other container to the top with water and leave to soak for an hour or more. It doesn't hurt to stir gently to make sure all matrix is soaked. Many non-clay matrix types can just be soaked in water overnight to be broken down.

After your matrix is fully broken down, you need to wash it. I usually use a large plastic tub—my sifter fully rests in it—to process matrix. If you have already sifted your matrix past 1/4" wire mesh, switch to a rectangular screen with 2 mm mesh (window screen/bug screen mesh). Fill your tub half-way with water, and lay your sifter perpendicular over your tub so it rests over the water. Pour some matrix "mud" onto the screen, then take your sifter, turn it parallel so it can rest in the tub, and dip it slowly in the water multiple times to "water sift" until you see that all the mud is washed out. Do this for all of your matrix as it is far less damaging to your fossils than dry sifting. Then lay your screen(s) somewhere where it (they) can dry in the sun. Usually on concrete or rocks is best. The mud left at the bottom of the tub can be

sifted with much finer mesh screens if you wish to look for “true microfossils” that can be seen only with a microscope. If you did not pre-sift your matrix before washing, wash over 1/2", 1/4", and 2mm mesh in the same fashion, then dry in the sun.

After your matrix is fully dry, then over a large sheet of paper, plastic, or cardboard, pour your screen into an aluminum pie pan or other container. When you pour matrix off a screen, much of the smaller matrix now falls through and can be caught and saved with a sheet of material underneath. Sort your processed matrix, or grade further for easier sorting using a sieve set.

Mounting/Displaying your microfossils: There is a plethora of ways to organize and display your microfossils. In the lab, I used to take small 2-ml glass bottles with corks, stick a pin in the bottom of the cork, and mount each fossil with dental wax on the pin head, then paint the top of the cork with white paint and mark with a catalogue number. At home, I either use gem jars with foam inserts—labeling each jar on the bottom—or small Riker frames with foam inserts. Using water-soluble Elmer’s glue, you can also glue your fossils to graphing paper mounted on cardboard. Anything used for mounting gems usually can be used for mounting microfossils as well.

Cataloging your microfossils: As with all fossils (but especially with microfossils), site information is paramount to both the scientific and monetary value of your microfossil collection. I always record the GPS coordinates of each site (I use a free app on my iPhone called “Commander Compass”), along with the name of the county, closest town, state, date the material was collected (in case the site is destroyed later on), and later with the formation and age after I’ve researched the site.

Some places to start collecting microfossils: To start collecting microfossils, try one of the two locations below.

Whiskey Bridge

Stone City Fm. Matrix

Location: Brazos Co./Burleson Co. line, Texas

Age: Middle Eocene

~47.8-38MYA

Fossils You Can Find: Lots of shells, turritella corals, bryozoa, fish otoliths, possible shark teeth but rare

Mineral Wells Fossil Park

Mineral Wells Fm.

Location: Mineral Wells, Texas

Age: Carboniferous (Pennsylvanian)

~323-298 MYA

Fossils You Can Find: Crinoid stems, brachiopods, mollusks, bryozoans

The Way It Was - Paleo Books to Remember

by Neal Immega

Member of the Houston Gem & Mineral Society

I am sure you have all read about the big fossil-collecting expeditions run by museums in the old days. The one to the Gobi desert led by Roy Chapman Andrews was so famous that the character of Indiana Jones in the movie "Raiders of the Lost Ark" was based on his character.

These are fun to read about, but how about something smaller—more in scale to our own efforts? I have just the books for you.

I Married a Dinosaur by Lilian Brown (1950)

Bring 'em Back Petrified by Lilian Brown (1956)

Just walk into any Harris County library or Houston Public Library, and ask for an interlibrary loan form. They will request the books for you, and the service is free. You can also do this online. The copies I got came from Baylor and from Lamar University.

Lilian Brown was the wife of the famous collector Barnum Brown, from the American Museum of Natural History in New York. He ran major expeditions all over, finding everything from huge sauropods to fossil mice.

I Married a Dinosaur tells about their first months of married life on a dig in the Siwalik Hills in what is now Nepal. You think you had adjustment troubles? She had leopards in her tent camp! Her first excavation was a seven-foot-long Pleistocene turtle, where her job was to harden the bones with shellac. When she ran out of that, she had to rush off to a nearby town to find a substitute—fish glue! Throughout the whole book, she keeps trying to arrange some time with Barnum for a honeymoon, and every time, he finds a new bone and heads off somewhere else. She is either a trooper or a saint.

Bring 'em back Petrified is an account of the Browns' scouting trip to Guatemala. The book is a charming account of Lilian's efforts to be digging partner, logistical support, medical technician to the population, and in the remotest Central American jungle.

This is my favorite quote (page 261) about their digging up a Glyptodont (VW bug-sized armadillo relative):

He faced about and commenced jabbing his awl lightly in the general direction of the tail. "Get around behind me," he directed, "and work towards me with your awl. Work in along the tail sheath."

"Yes, sir, along the tail sheath," I chanted, like a tailor repeating measurements. I meant it to sound sarcastic but my effort failed. "What I mean," I added, bluntly, "isn't it time to eat?"

He looked up in surprise. "Lunchtime already?"

"Lunch!" I snorted. "We had lunch seven hours ago. This is supertime!"

That's what bones do to a man.

Give up modern fiction and read slushy love stories about a bone collector and his new wife in the most distant parts of the world. These are books you will not forget.

For a photo of the Browns working together, from "Bones for Barnum Brown" by Roland Bird, see: <http://tinyurl.com/nyt48hk>



Mineral Section Meeting Programs

by Paul Brandes

HGMS 1st Vice President

February 18, 2015: The Survivors of Tucson: The first of our members have returned from Tucson, and while many of their purchases are on their way, those who attended will be on hand to give a general overview and their impressions of the many shows in the Tucson area. Also, the Section will begin discussing preliminary plans for the Annual Show in September. Refreshments will be provided.

March 4, 2015: Tucson Show & Tell: For those who were lucky enough to attend 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 missed. Refreshments will be provided.

March 18, 2015: Clear Lake Show & Tell: Bring in your recent acquisitions from the Clear Lake Show (March 7–8) so that other members who were not able to attend can see the deals you got! Specimens that did not make it back from Tucson for the previous meeting will also be discussed. Refreshments will be provided.

April 1, 2015: To be announced

April 15, 2015: 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 benefit both themselves 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. Set-up will begin at 6:30 p.m. with viewing from 7:00 to 7:30. After a short business meeting, bidding will begin and last until the final item is sold.

Gemstones & Faceting Section

by Randy Carlson, Chairman and James (Pat) Cockrell, Co-Chairman

The Gemstone Faceting class that was held this January was a great success. The biggest problem we have right now is having enough club machines to accommodate all the students wanting to take the class. We only have six machines belonging to the club that we can put in a classroom. We really need a total of ten so we don't need to borrow machines from our members. Currently we don't have the funds needed to buy both more of the class consumables and more new machines. But we are working on it.

If you want to take the next gemstone faceting class, e-mail Education Chairperson Carrie Hart at carriehart1200@yahoo.com. Give her your phone number and e-mail address, and tell her you want to be notified once the next Gemstone Faceting Class is scheduled. The plan right now is to schedule another after June of this year.

Since February of 2013, we have been publishing how-to articles for those who show up at our Gemstones & Faceting Section meetings here at HGMS. You won't find them in the "Backbender's Gazette" because at times they contain drawings requiring an 8½x11-inch page format. These articles focus only on faceting gemstones. Even though they are meant only for the gemstone faceters who attend our Section meetings, most of these articles are still available to anyone who is a member of HGMS. Hard copies of these articles can be found in the club's library. Walk straight into the library—the articles are in a white three-ring binder, on the top shelf close to the corner. Using the copier in the club's office, HGMS members are entitled to make copies of these articles for their own personal use. There is a 10-cent per-page charge to use the copier. Be sure to put the money in the can in the

refrigerator. Member use of the copier is provided on the honor system.

If you are interested in gemstones or gemstone faceting or both, come join us at our monthly meetings. They are always held on the second Wednesday of the month at 7:00 p.m. in our club's meeting room.

Archeology Section

by Nancy Engelhardt-Moore

Febbruary 5, 2015: Garth Clark, Section Chair, called the meeting to order at 7:30 p.m. Attendance was taken, and visitors introduced themselves. The Section discussed having a field trip to the Houston Museum of Natural Science (HMNS) to see both "Samurai: Way of the Warrior" and the upcoming exhibit "China's Lost Civilization: The Mystery of the Sanxingdui," date to be announced. Future talks were also discussed. Garth will be giving the talk on March 5, and Bob Moore offered to give a presentation on "Avebury: Britain's Neolithic Monument" for the meeting on May 7. The April talk will be announced later. Following the discussion, the December 4, 2014 minutes were approved since there was no meeting in January. Then, Dirk Van Tuerenhout gave his talk. The meeting adjourned at 8:45 p.m.

Dirk Van Tuerenhout, Curator of Anthropology at the HMNS gave an excellent talk on the museum's current exhibit "Samurai: Way of the Warrior." He reviewed the four main periods comprising the history of the Samurai which started in 1185 with the victory of Minamoto over the opposing Taira clan. This established the superiority of the samurai over the aristocracy.

Dirk noted that in 1192, Kamakura Shogunate, or *Kamakura Bakufu*, was established, and over time the real power was then in the hands of the Shogun (=general) and the samurai (military nobility). For over four centuries, the samurai played a key role in Japan's government and history. Then during the Tokugawa era, also called the Edo Period (1608-1868), a period of peace arose. With no warfare since the early 17th century, samurai gradually lost their military function.

With the arrival of Commodore Matthew Perry's U.S. Navy ships in 1858, Japan was forced to open its borders to trade. Dirk noted that this began the modernization of the samurai army and navy. The last battle of the samurai was during the Boshin War where they defeated the Shogunate forces in 1868 and emperor rule prevailed.

In addition, Dirk covered the 15 steps required to make a samurai sword, discussed how samurais and ninjas differ, showed photos from the exhibit and the Museo Stibbert, Florence, Italy where the exhibit originated. After the talk, he graciously agreed to lead a Section tour of the exhibits for the planned field trip.

March 5, 2015: Talk by Garth Clark

HGMS Entries Submitted to the 2015 SCFMS Editors' Contest

by Phyllis George

HGMS Newsletter Editor

Rockhound newsletter editors throughout the U.S. are scouring through their previous year's newsletter issues, selecting articles and newsletters to submit to their regional 2015 Editors and Authors Contest. The SCFMS (South Central Federation of Mineral Societies) Contest entries from HGMS are listed on the facing page along with their category. The top three winners in each category will be forwarded to the AFMS (American Federation of Mineralogical Societies) judges.

This year, the annual NATIONAL SHOW is being held in SCFMS-land. This happens only once every seven years. Both the national federation (AFMS—American Federation of Mineralogical Societies) and SCFMS are being hosted by the Austin Gem & Mineral Society (AGMS). The results of BOTH the SCFMS contest and the AFMS contest will be announced during the Breakfast with the Editors and Webmasters on Saturday, October 24. Austin is about a 2½-hour drive west of Houston—roughly 170 miles. It would be wonderful if many of the people named below attended the Breakfast to accept their certificates and possibly trophies! *Note: One does need to make a reservation for the breakfast and to pay for it in advance. In years past, the Breakfast has started at 8 a.m., so you might want to make a room reservation for Friday night too. Rooms will be scarce—the Formula 1 races are on the same weekend. See the article below for information about reserving a room.*

AFMS/SCFMS Show—Book Your Hotel Rooms NOW!!

BEWARE THE IDES OF MARCH!!

by Austin Gem & Mineral Society

As you may know, the Austin Gem and Mineral Society will host the SCFMS/AFMS convention on the 23rd, 24th, and 25th of October, 2015. Since the Formula-1 races occur this same weekend, hotel space is at a premium and will be scarce during this time.

AGMS has a contract with the Doubletree Inn at 6505 IH35-north, for 25 rooms for our convention. The hotel is giving us a rate of \$139 per night for Wednesday, Thursday, Friday, and Saturday nights. You can contact the Doubletree Inn directly by phone at (512) 454-3737. If you contact them directly, be sure to mention it's for the Austin Gem and Mineral Show in order to get this rate. Carleen Paz is the name of the contact person at the Doubletree Inn.

We have searched the Austin area for other hotels and found more possibilities:

*Hyatt Place for \$139. . . 7522 North IH-35 (near Hwy. 183 & IH-35)

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HGMS Entries in the 2015 SCFMS Editors' Contest		
Name	Title	Month, 2014
Large Bulletin		
Phyllis George	The Backbender's Gazette	
Advanced Adult Article		
John Anderson	The Miner's First Trip to San Carlos, Mexico	August
Nathalie Brandes	The Famous Silver Mines of Kongsberg, Norway	August
Paul T. Brandes	Porcelaneous Datolite of the Keweenaw Peninsula, Michigan	February
Paul V. Heinrich	Llanite and the Blue Quartz in Texas	May
Neal Immega	<i>Tiktaalik</i> —A Fish Trying to Get Out of Water	April
Mark Villanueva C.S.P., A.J.P	Mind-Bending Minerals at 2014 Tucson Gem & Mineral Show	March
Jonathan A. Woolley	Manganese Nodules and the CIA's Deep Ocean Mining Venture	February
Adult Article		
Chase Jennings	Preserving Pyritized Fossils	December
Adult Poetry		
Edward Clay	God's Fire	March
Kemp Maer	Gravity and Ice	June
Feature		
John Anderson	The Miner—The "Cool Water" Aquamarine	January
Dr. Garth A.A. Clark	Archeology Evolves with Genetics	June
Neal Immega	Canyon Lake Gorge—Fabulous Field Trip Destination	July
Terrell William "Terry" Proctor	Paleontological Preservation Act	March
Scott Singleton	Homeschoolers at the HGMS Annual Show	October

*Country Inn and Suites for \$149. . 7400 North IH-35 (near Hwy. 183 & IH-35)

*Embassy Suites Hotel for \$179 . . 5901 North IH-35 (near Hwy. 290 & north IH-35)

To get these rates, you must reserve your room on the Web site **tripadvisor.com** rather than directly.

TripAdvisor will not allow AGMS to reserve these rooms, so we recommend making reservations as soon as possible, since all available space is being booked up fast. We suggest making them before March 15 (the Ides of March), as TripAdvisor informs us the rates may go up after April 1, depending on the percentage of hotel rooms booked for F-1 week.

As you make your plans, please note that most of the events will be held at the Palmer Events Center. The only exceptions are the URC meeting and Wednesday Evening Social, which will be held at the AGMS clubhouse, 6719 Burnet Lane in Austin.

As we find additional possible accommodations, we will let everyone know.

Sincerely,
Austin Gem and Mineral Society

General Meeting Minutes

01-27-2015

by Nancy English, HGMS Secretary

The meeting was called to order by President Ray Kizer at 7:30 p.m.

President's Comments: The President thanked everyone for coming to the January General Meeting. He also thanked all those who helped with the successful December Holiday party. The potluck food was outstanding, and Ray thanked those who cooked the club-supplied turkey, ham, and brisket. The live auction was very successful, earning the club \$1379.00.

President Kizer announced: "It was brought to my attention that on Monday January 5, there was an armed robbery just down the street at 10403 Rockley in the Dunn Southwest business complex. The manager and employees of Southwest Moving Company were robbed at 11:00 a.m. by two men dressed in black who entered into their warehouse and tied them up. They took \$500.00 in cash, wallets, and purses, and all of the managers' truck keys. They did not hit them or threaten them verbally, but they did have guns. The manager said that he does not think it was anyone who had been in his place before, and that the men acted nervous and excited. His opinion is that they were not experienced. I bring this up first to let everyone know it happened in the middle of the day and just down the road. So please, be very aware of your surroundings any time you are entering and leaving the clubhouse. **And please pull the door shut when entering or leaving.**"

Ray asked the company next door to HGMS if members could use their parking lot for the Holiday Party. The owner agreed to allow us to use his parking places after 5:00 p.m. on weekdays and on Saturday evenings, and on Sundays when his business is closed. **DO NOT PARK** in their lot during their business hours.

The meeting was attended by 33 regular members, one new member, and three visitors. The President asked the visitors to stand and be recognized. The visitors were Jim and Lea Anne Kleutzman and Dorothy Green. The new member is David Cunningham.

Drawing: David Cunningham won the Mineral Box. Sigrid Stewart won the drawing for the fossil necklace..

Minutes: Paul Brandes moved to approve the minutes of the December General Meeting as published in the BBG. Gary Tober seconded, and the membership passed the motion.

Show Committee Report / Wrap Up: At the January Board of Directors meet-

Get last-minute news about club events by sending a note to Jim Kendall at kendal_ja@yahoo.com

ing, Michele Marsel reported that the 2014 Show profit is \$13,315. Board members congratulated Michele for coming in right on budget. (\$15.00 more profit than planned). Ray Kizer previously announced the 2015 show dates are September 24 through September 27, 2015. The Show Committee had their first meeting on Tuesday, January 13, 2015, at 7:30. Scott Singleton has agreed to be the Show Chair, Ray Kizer is the Assistant Show Chair, Rick Rexroad is the Dealer Chair, Nancy English is the Volunteer Chair. A Publicity Chair is still needed. There are still opportunities to volunteer for show chairpersons and to work on committees.

Show-n-Tell: Chase Jennings showed the fossilized sharks teeth he accumulated at Whiskey Bridge and Galveston. Chase will be presenting “**Microfossils- How to Purchase and Use an Affordable Digital Microscope**” at the **February 17 Paleo Section meeting.**

Section Reports

Archeology Section: The next Archeology Section meeting is Thursday, February 5 at 7:30 p.m. Garth Clark will present **Mysteries of the Neolithic Cultures of the Upper Levant.** That is an area in the Middle East. There was no meeting on January 8, 2015. The December meeting featured speakers Bob and Nancy Moore talking on the **Hidden Treasures of Rome and Naples, Italy.**

Beading Section: The next regular Beading Section meeting will be on Saturday, February 21 at 1:30 p.m. At the January 17, meeting they made a Garden Necklace.

Day Light Section: The next meeting is scheduled for Monday, February 9 at 1:00 p.m. They will make Copper Tube Bracelet bending tubing using a tube bender. This can then be cut (sliced) to allow placement of stones, beads, pearls, etc. You will use the tube bender, the flex shaft with a saw blade, assorted files, and other club tools. This is a work in progress—bent, sliced, ready to fill, file, and finish. The aluminum nails were not made at the January meeting. The alloy to be used turned out not to be aluminum.

Mary Ann Mitscherling announced that on April 1, 2015 (Wednesday) Day Light permanently changes its meeting DAY to the 1st Wednesday, 1:00-3:00. It was asked if the information cards should be changed to reflect the new date and time. The consensus was no, not at this time.

Education Committee: Carrie Hart is now making up class lists for those who are interested in learning a new skill or just brushing up on a skill they haven't used in a while. See the Web page links for more details. Gemstone Faceting Class 101 was held on January 11 and 18, 2015, two Sunday afternoons, two 4-hour training sessions 1-5 p.m. Attendees said the class was difficult but informative. Charlie Fredregill is teaching a Master Casting class on four Sundays in March: March 1, March 15, March 22 and March 29, 2015. The class

costs \$200.00. There are six slots. Please e-mail Carrie Hart at classes@hgms.org or at carriehart2000@yahoo.com.

Gemstones and Faceting Section: The next regular meeting is Wednesday, February 11, 2015 at 7:30 p.m. The program will be announced. At the last meeting—January 14, 2015—the program was Polish Overall Review, Sequencing.

Lapidary and Silversmithing Section: Phyllis George and Mary Ann Mitscherling reported the next regular meeting is Monday, February 16, 2015 at 7:30 p.m. The program will be announced. Monday January 19, 2015 at 7:30 p.m. provided open shop hours. The meeting focused on showing new members the steps for making cabochons and on coaching experienced members with problems they might be having.

Mineral Section: The next regular meetings are Wednesday, February 4, 2015, and February 18, 2015, at 7:30. February 4 DVD of attendees' choice: Due to the participation of many Mineral Section members in Tucson, those not able to attend can chose a DVD from the Library to view (the tentative choice is to continue with another part of the 2014 "What's Hot in Tucson") or attendees can discuss their possible collecting plans for the spring/summer. Refreshments will be provided. February 18, 2015, program to be announced. At the last meeting —January 21, 2015 the program was "Minerals of Western Europe in honor of this year's Tucson show theme "Minerals of Western Europe." Attendees said the program was great. Paul Brandes showed Minerals from 20 western countries.

Paleo Section: The next meeting is scheduled for Tuesday, February 17, 2015, at 7:30. Chase Jennings is presenting "**Microfossils- How to Purchase and Use an Affordable Digital Microscope.**" Neal Immega announced that his Paleo Team came in first in the Houston competition.

Youth Section: Beverly Mace reported that three new members joined at the January 3, 2015 meeting. Future meetings will be held on January 17, 2015, February 7, 2015 and February 21, 2015.

Shop Report: Shop Notes--The Diamond Pacific Titan grinder with 8" wheels (gift from the Lapidary Section) is up and running. Likewise the super grinder has new blades on it and has been speeded up 2X to try to reduce the out-of-roundness caused by the rock chattering on the blade. Really, REALLY high rates of rock removal. Dangerous to touch - really! Ask a Shop Super for help before you try it. Until I replace the water shields, wear an apron.

BBG Editor and Webmaster: Phyllis George reported that the Web site is up to date. The deadline for the March BBG articles is February 11, 2015. Nancy English suggested the Web site and the BBG should have announcements of the 2015 Show dates in a prominent place from now until the Show—September 24 through September 27, 2015. Phyllis agreed to put it in place.

Old Business

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

New Business

Membership Dues: Beverly Mace reminded Board members that 2015 membership dues are due now. She will post reminder signs around the club and in the BBG and on the Web site.

The next Board of Directors meeting is Tuesday, February 3.

The next General Meeting on Tuesday, February 24, 2015, Fluorescent Minerals—Some How's and Why's presented by Aaron Rever. Aaron will focus on all aspects of fluorescent minerals, including the science of why minerals fluoresce, the history of collecting fluorescent minerals, and several of the worldwide locations historically famous for their collecting sites. Such locations include Franklin and Sterling Hill, New Jersey; Mt. St. Hilaire, Quebec; as well as Langesundsfjord, Norway; Langban, Sweden; and Illimassaq, Greenland. A short lesson on the chemistry and physics of fluorescence will be discussed, including activators and quenchers of fluorescence in minerals, as well as the intrinsic fluorescence present in some minerals. In addition, there will be a brief discussion of the evolution of ultraviolet lamps from historic to modern-day. Following the presentation, there will be a Show and Tell session of various specimens from Aaron's personal collection.

Adjourn: Phyllis George moved to adjourn the business meeting, and Neal Immega seconded. The motion passed unanimously, and the meeting was adjourned at 8:10 p.m.

5-minute break

The President called on Vice President Paul Brandes to introduce our speaker for the General meeting: the long-awaited **"Oh, those EVIL Mineralogists!"** presented by Neal Immega.

Amethyst Sceptor
from 2013 SCRIBE DVD



Board of Director's Meeting

February 3, 2015

by Nancy English

x	President - Ray Kizer	x	Archeology Rep - Garth Clark
	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
x	Secretary - Nancy English	x	Lapidary Rep - Phyllis George
	Past President - None		Mineral Rep - Mike Sommers
		x	Paleontology Rep - Mike Dawkins

Call to Order: President Ray Kizer called the meeting to order at 7:40 p.m. with a quorum present. Carrie Hart, Education chair, non-voting member attended.

Approval of Previous Month Board Minutes: Gary Tober moved and Phyllis George seconded a motion to approve the minutes of the January 2015 Board Meeting as published in the February 2015 BBG. The motion passed unanimously.

Treasurer's Report: Rodney Linehan e-mailed financials to all Board members in advance of the meeting. He will e-mail each Section requesting their 2014 income for tax reporting purposes.

Show Committee: As announced at the January General Meeting, Scott Singleton has accepted the position as Show Chairman. Scott is building his team for this year's show. He is looking for people willing to work on the show and at the show. Ray Kizer is the Assistant Show Chair. Rick Rexroad is Dealer Chair and has already met with his committee. Nancy English is the Volunteer Coordinator. The Publicity committee is meeting to discuss ads and notifications. Beverly Mace is making a list of new members for Scott and Nancy to look at for getting more members involved. Seasoned club members are always welcome participants. The Dealer committee will be sending out contracts after final edits are agreed upon. The publicity committee has five members, and they will meet within the next two weeks to plan publicity for the year and get pad fliers printed for the Clear Lake Show. Ray Kizer heads the new Strategic Committee—tasked to propose medium- and long-term strategies for the Annual Show. Scott and the new Education Chair have been invited to participate in the annual Scout fair at Reliant. Their participation should drive up participation in the Scout program at the HGMS Show.

Some changes are in store for the Show and the way the Show Committee is run. First, the regular Show Committee meetings are cancelled until a large-

enough committee is built and as more committees become active. Second, dealer table rates are raised \$50 per 8-foot table because the Humble Civic Center raised our rates. Other changes may involve removing, changing, or adding to what has been done in past. The Board will be notified at each change point through Ray. Bottom line regarding the Show—expect change.

Office, Committee, and Section Reports

Archeology Section: The next Archeology Section meeting is Thursday, February 5 at 7:30 p.m. Samurai—The Way of the Warrior, presented by Dirk Van Tuerenhout, Curator of Anthropology at the Houston Museum of Natural Science. Mr. Tuerenhout will speak on the exhibit Samurai: The Way of the Warrior, currently at the museum until September 7, 2015.

Beading Section: Jillynn Hailes reported that the next regular Beading Section meeting will be on Saturday, February 21 at 1:30 p.m. The program is to be announced. There was a large turnout for the January 17, 2015, meeting where members made a Garden Necklace.

Day Light Section: Mary Ann Mitscherling reported that the next meeting is scheduled for Monday, February 9, 2015, at 1:00 p.m. The project will be to make a Copper Tube Bracelet. Members will bend tubing using a tube bender. The result can then be cut (sliced) to allow placement of stones, beads, pearls, etc. They will use the tube bender, the flex shaft with a saw blade, assorted files, and other club tools. This is a work in progress—bent, sliced, ready to fill, file, and finish.

At the Monday, March 9, 2015, meeting members will work on focal beads. The focal bead sections will be cut from a slab. Four sections with two very smooth sides will be glued together to form a long, unfinished construction with a large hole down the middle. After drying, the rough bead will be ground to the desired shape in the Shop and then polished. The bead can be further enhanced with a metal tube down the middle with the ends flared to stay in place. Or it can be worn without the extra tube on a chain, or leather or silk cord.

Mary Ann reminded us that Daylight is changing the meeting date in April to the first Wednesday of the month. So the April meeting is April 1, 2015, 1:00–3:00 P.M.

Education Committee: Carrie Hart reported that Charlie Fredregill will be teaching a **Master Lost Wax Casting class:** Multiple classes for \$200.00 on March 1, March 15, March 22, and March 29, 2015. A **Wire Wrapping class** is now scheduled over three Sundays in June: June 8, June 15, and June 22, 2015, from 2 p.m. to 5 p.m. each Sunday. This is a 9-hour class. This class is limited to six students and costs \$135 per student. All materials and tools are included in the class fee.

After hearing the programs for the Day Light Section and Lapidary Section meetings, it was agreed that Carrie will add the information to the e-mail interest list. A discussion of class cost based on instructor pay, supplies, and club overhead followed.

Gemstones & Faceting Section: The next regular meeting is Wednesday, February 11, 2015 at 7:00 p.m. The program will be announced.

Lapidary and Silversmithing Section: Phyllis George and Mary Ann Mitscherling reported the next regular meeting is Monday, February 16, 2015 at 7:30 p.m. The program will be an Open Shop night for cabochon making. The attraction here is the one-on-one help members get in learning proper techniques in the Shop. (No large saw use).

Mineral Section: The next meeting is on February 4, 2015: DVD of attendees' choice. February 18, 2015 program will be announced.

Paleo Section: The next meeting is scheduled for Tuesday, February 17, 2015, at 7:30. Chase Jennings is presenting "**Microfossils- How to Purchase and Use an Affordable Digital Microscope**": Small ammonites, shark teeth, crinoids, shells, possible trilobites, and more will be found, and there will be free fossils for attendees. Learn about the benefits of using a digital microscope. Learn how to collect, process, and sort microfossil matrix, how to display microfossils, learn why microfossils and small macrofossils are important to paleontology, and explore 20-plus types of fossil matrix from across the country—each with a unique assemblage of fossils. This will be a very informative, hands on, and overall fun meeting, so be sure to attend. Bring any small fossils or anything else you'd like to view at up to X500 on the big screen. Scott Singleton identified different petrified wood samples at the January meeting.

Youth Section: The next meeting (Saturday, February 7, 2015) is cancelled so the members can attend the Clear Lake Show in Pasadena. Two new members joined the club. The kids continue to learn to cut and polish stones. The second meeting will be on February 21, 2015, from 10:00 to noon.

BBG Editor and Webmaster: Phyllis George reported that the deadline to receive articles is February 11, 2015. New members have reported that they found out about HGMS on our Web site.

Old Business

1. **Club House Repairs / upgrades:** Ray Kizer reported that Neal Immega will be creating a block-and-tackle door-closing system for the backdoor going out to the parking lot.
2. **Security System:** Garth Clark showed us the new security system. It will take a few weekends to get the 10 cameras hooked up and 16 channels

installed. There are enough channels for fire alarm and motion detectors.

3. **Sign on club front door to direct people to side door:** Nancy English brought the laminated sign to be attached to the door facing Brooklet, directing people to the parking lot entry. Ray Kizer will bring some Velcro mounting tape to put it on the door.
4. **Member Badges** - Beverly Mace reported that badge ordering will start soon. If you want a badge, you must pay in advance. Give your check to Beverly Mace.

New Business

1. **Scholarship letters:** Nancy will update the scholarship letter and get Ray's signature so she can mail them to last year's list.
2. **Austin Gem & Mineral Society Show:** Jillynn Hailes moved and Garth Clark seconded a motion for HGMS to pay for travel and hotel expenses for the President, Vice President, and Editor to attend the Austin Gem & Mineral Show October 25–27, 2015. They will represent HGMS at the AFMS and SCFMS meetings. The motion passed.
3. **Shop Manager:** We need a Shop manager from 5:00 p.m. to 7:15 p.m. before the General Meeting on February 24, 2015.
4. **General Meeting Presentation:** February 24, 2015: **Fluorescent Minerals—Some How's and Why's presented by Aaron Rever.** Aaron will focus on all aspects of fluorescent minerals, including the science of why minerals fluoresce, the history of collecting fluorescent minerals, and several of the worldwide locations historically famous for their collecting sites. Such locations include Franklin and Sterling Hill, New Jersey; Mt. St. Hilaire, Quebec; as well as Langesundsfjord, Norway; Langban, Sweden; and Illimassaq, Greenland. A short lesson on the chemistry and physics of fluorescence will be discussed, including activators and quenchers of fluorescence in minerals, as well as the intrinsic fluorescence present in some minerals. In addition, there will be a brief discussion of the evolution of ultraviolet lamps from historic to modern-day. Following the presentation, there will be a Show and Tell session of various specimens from Aaron's personal collection.

Adjourn: Rodney Linehan moved to adjourn the meeting. Beverly Mace seconded. The motion passed unanimously, and the meeting was adjourned.

Bench Tips

by Brad Smith

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

Tapered Reamers

A tool you don't see often these days is a tapered reamer. It's not a tool you'll use every day, but they're particularly useful for making an irregular hole round or for enlarging a hole to an exact diameter. For example, the small set in the yellow pouch is for holes in the range of 0.3 mm to 2.5 mm. They are great for sizing a tube to fit a hinge pin.



Other times when I'm drilling a hole for riveting and can't find the exact-size drill, I simply drill the holes with a slightly smaller bit and enlarge them with a reamer until the wire just fits.

For larger hole sizes in sheet metal up to 14 ga, I really like the reamer with the black handle. It makes quick work of sizing holes from about 3 mm to 12 mm. You can find them in well-equipped hardware stores.

You may never use the large-diameter reamers, but when sawing out some rings from 4 mm thick sheet, I found they worked well for rounding and sizing the hole.

Testing for Silver

With the price of silver as high as it is, jewelry people need to keep their scrap metals sorted. Part of that process is identifying some of those unknown "silvery" pieces in the bottom of the toolbox.

Silver-testing solutions can be used to distinguish high silver content alloys like Fine (.999), Sterling (.925) and Coin (.900), from alloys that have the same appearance but no silver content, like German Silver or Nickel.

I purchased a half-ounce bottle of JSP Silver Testing Solution #GT41 for \$3. With a fresh solution, you have an instant reaction after applying it to the metal being tested. The procedure is simple—as you apply a small drop, look for a color change. Note that the acid will leave a slight mark, so choose a spot that is out of the way or will be easy to polish.

If you suspect the object is silver plated, you should file a little notch somewhere inconspicuous to expose what metal is below the surface. Otherwise,

all you test will be the surface plating.

Here's the reaction I get when testing various materials:

- ◆ Fine silver: Red/Orange
- ◆ Sterling silver: Brick Red
- ◆ 80% silver 20% copper: Dark red changing to gray
- ◆ Brass: Yellow changing to blue
- ◆ Nickel: Gray-green
- ◆ Copper: Yellow changing to blue
- ◆ Steel: Black
- ◆ Stainless Steel: No color change

Caution—If you do any of this testing, know that you are handling a reasonably strong acid. The GT41 label says it includes nitric acid and potassium dichromate.

- ◆ Wear safety glasses.
- ◆ Do not get any testing solution on your skin.
- ◆ Always have a solution of baking soda and water handy to neutralize acid.
- ◆ Wash and clean up well when you're done.

Science Project Geodes

*The Sooner Rockologist 6/2014, via The Rockhouser 2/2015
<http://www.marthastewart.com/343344/crystal-egg-geodes>*

Geodes can be grown without using egg dye. The resulting crystals are clear to milky white, like quartz. While large chicken eggshells are suggested in this process, larger eggshells can be used. Simply increase the size of the plastic or glass container, and double or triple the amounts of dye (1 packet), alum (3/4 part), and water (2 parts) used to create the growing solution. This craft from Jim "Figgy" Noonan doubles as a science project, offering an opportunity to show kids the crystallization process at work. To make a fluorescent variation for Halloween, substitute the water and egg dye solution with glow water.

Resources: If you don't want to blow your own egg or would like to try a larger eggshell, pre-blown shells are available from The Eggery Place. Alum is available at most grocery or drug stores, but can also be purchased online from Talas. Powdered egg dye is available from Surma: The Ukranian Shop. Ready-made Crystal Egg Geode kits are available from Professor Figgy's Fabulous Science Kits at www.professorfiggy.com.

MATERIALS:

- ◆ Blown-out eggshell
- ◆ Plastic or glass container

- ◆ Alum powder
- ◆ White glue
- ◆ Small paintbrush
- ◆ Egg dye
- ◆ Hot water
- ◆ Craft stick or spoon
- ◆ Latex gloves
- ◆ Drying rack or newspaper

STEP 1 Start by blowing out a large white chicken egg and splitting it in half lengthwise. The egg can be cracked by striking it against a surface or cut with a small pair of scissors. Make sure the inside of the eggshell is clean and dry.

STEP 2 With a small paintbrush, apply white glue to the inside and to the cracked edges of each half of the eggshell, and sprinkle with alum powder until completely coated. Set eggshell halves aside to dry overnight.

STEP 3 The next day, prepare your growing solution in a glass or plastic container by using a craft stick or spoon to mix 2 cups of very hot water (almost boiling) with an entire packet of powdered egg dye. Be sure to wear latex gloves to protect your hands from the dye. Tip: Liquid food coloring can also be used to dye the geode—30 to 40 drops will adequately saturate the solution.

STEP 4 Add 3/4 cup of alum powder to the hot dye bath and stir until completely dissolved. If there are remaining crystals in the bottom of the container, place the solution in the microwave for a few minutes to dissolve them. This will prevent alum from being drawn away from the geode.

STEP 5 Once the alum is completely dissolved, let the solution cool slightly (for about 30 minutes) and then submerge one of the dried, alum-coated eggshells in the growing solution, allowing it to rest on the bottom of the container with the inside of the shell facing up.

STEP 6 Set the container aside in a safe place overnight to allow the crystals to grow undisturbed. The longer the eggshell is in the solution, the larger the crystals in the geode will be. Twelve to 15 hours will usually result in a perfect geode.

STEP 7 The next day, remove the geode from the growing solution very carefully (as wet crystals are quite fragile), being sure to wear latex gloves to prevent the dye from staining your hands. If you are not satisfied with the size of your geode crystals, return the geode to the growing solution and wait a day or two. As water evaporates from the solution, more alum will be deposited in your geode, increasing the size of the crystals.



STEP 8 Place your geode on a drying rack or newspaper and allow to dry completely before handling.

STEP 9 To grow a second geode in the other half of the eggshell, simply re-dissolve the crystals remaining at the bottom of the growing solution in the microwave, and follow the instructions above starting at step 5.

\$400 Million Emerald

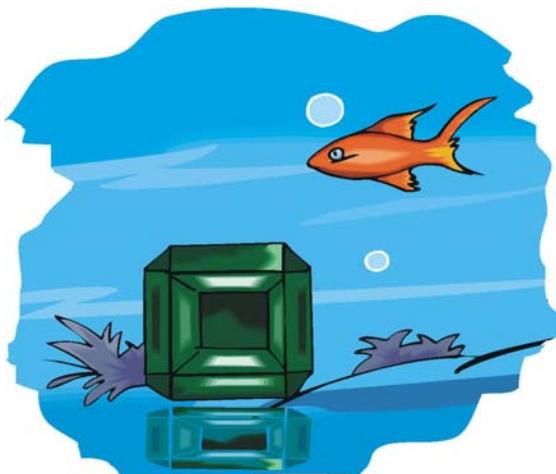
by Brad Smith

*from Rock Rustler News 1/2015; via The Rock Collector,
via Stoney Statements 1/2015*

For a glimpse into the emerald gem trade, from South American mines to storefront dealers, the National Geographic Channel aired a program called “The 400 Million Dollar Emerald.” The subject is called the Bahia emerald. Some say it’s the largest ever found, weighing in at 840 pounds and containing roughly 180,000 carats.

Unearthed in Brazil in 2001, the Bahia emerald has an incredible history that fits its massive size. It spent months in a submerged bank vault in New Orleans after Hurricane Katrina and was even posted on eBay with a “Buy It Now” price of \$75 million. Others point out that the real stone is presently in lock-up pending litigation, and the piece shown in the NatGeo story is just a mock-up that is far more spectacular than the real stone. Regardless of what Bahia really looks like, the program gives an interesting view of how emeralds are found, cut, and traded.

Web site: <http://channel.nationalgeographic.com/channel/explorer/400-million-dollar-emerald-pictures>



Show Time 2015

March 7-8	Pasadena, TX	Clear Lake Gem & Mineral Society Pasadena Convention Center 7902 Fairmont Parkway http://www.clgms.org/page2.htm
March 7-8	Robstown, TX	Gulf Coast Gem & Mineral Society Richard M. Borchard Regional Fairgrounds 1213 Terry Shamsie Blvd. Linda Simpson, lsimp@swbell.net www.gcgms.org
March 7-8	Big Spring, TX	Big Spring Prospectors Club Howard County Fair Barn Big Spring Rodeo Grounds Lola Lamb, lolabellelamb@yahoo.com
March 14-15	San Antonio, TX	Southwest Gem & Mineral Society 8111 Meadow Leaf Dr., I-410 W./Marbach Robert Bowie, krbotx@gvtc.com www.swgemandmineral.org
March 27-29	Hickory, NC	Eastern Federation (EFMLS) Show
April 10-12	Ogden, UT	Northwest Federation (NFMS) Show
April 11-12	Abilene, TX	Central Texas Gem & Mineral Society Abilene Civic Center; N. 6th and Pine kmcdaniel23@suddenlink.net rockclub.txol.net
April 17-19	Alpine, TX	Chihuahuan Dessert Gem & Mineral Club Alpine Civic Cntr, 801 W. Holland Ave. (Hwy 90) Judith Brueske, jbrueske@sbcglobal.net
May 2-3	Waco, TX	Waco Gem & Mineral Club Extraco Events Center 4601 Bosque Blvd., Creative Arts Bldg. babydocmac@aol.com www.facebook.com/WacoGemAndMineralClub?ref=hl
May 2-3	Lubbock, TX	Lubbock Gem & Mineral Society Lubbock Memorial Civic Center 1501 Mac Davis Lane, Contact Walter Beneze walt@lubbockgemandmineral.org
May 23-24	Wheaton, IL	Midwest Federation (MWF) Show
June 12-15	Lodi, CA	California Federation (CFMS) Show
July 16-18	Cody, WY	Rocky Mountain Federation (RMFMS) Show
September 25-27	Humble, TX	Houston Gem & Mineral Society

2015		March					2015
Sun	Mon	Tue	Wed	Thu	Fri	Sat	
1 10-4 Shop Open	2	3 7:30 Board Meeting	4 10-3 Shop Open 7:30 Mineral Section	5 7:30 Archeology Section	6	7 10-5 Shop Open 10-12 Youth Section	
8 10-4 Shop Open Daylight Savings begins	9 1:00 Day Light Section	10	11 10-3 Shop Open 6:30 Gemstones & Faceting Section	12	13	14 10-5 Shop Open 1:30 Beading Section	
15 10-4 Shop Open	16 7:30 Lapidary Section	17 7:30 Paleo Section	18 10-3 Shop Open 7:30 Mineral Section	19	20 First day of Spring	21 10-5 Shop Open Youth Section	
22 10-4 Shop Open	23	24 7:30 General Meeting	25 10-3 Shop Open	26	27	28 10-5 Shop Open	
29 Palm Sunday	30	31					

2015		April					2015
Sun	Mon	Tue	Wed	Thu	Fri	Sat	
			1 10-3 Shop Open 1:00-3:00 Day Light Section 7:30 Mineral Section	2 7:30 Archeology Section	3 Passover begins Good Friday	4 10-5 Shop Open 10-12 Youth Section	
5 10-4 Shop Open ? Easter	6	7 7:30 Board Meeting	8 10-3 Shop Open 7:00 Gemstones & Faceting Section	9	10	11 10-5 Shop Open	
12 10-4 Shop Open	13	14	15 10-3 Shop Open 7:30 Mineral Section	16	17	18 10-5 Shop Open 10-12 Youth Section 1:30 Beading Section	
19 10-4 Shop Open	20 7:30 Lapidary Section	21 7:30 Paleo Section	22 10-3 Shop Open	23	24	25 10-5 Shop Open	
26 10-4 Shop Open	27	28 7:30 General Meeting	29 10-3 Shop Open	30			

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

The Newsletter of the
Houston Gem & Mineral Society

10805 BROOKLET

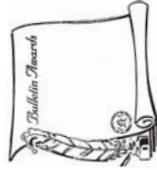
HOUSTON, TEXAS 77099

(281) 530-0942



SCFMS

- 1998 - 1st (Large)
- 2000 - 1st (Large)
- 2003 - 1st (Large)
- 2005 - 1st (Large)
- 2006 — 2012 - 1st (Large)
- 2013 - 1st (Large)
- 2014 - 1st (Large)



AFMS

- 1998 - 2nd (Large)
- 2004 - 3rd (Large)
- 2007 - 1st (Large)
- 2010 - 2nd (Large)
- 2012 - 3rd (Large)
- 2013 - 3rd (Large)
- 2014 - 2nd (Large)



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