



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

The Newsletter of the  
Houston Gem & Mineral Society

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## President's Message

*by Paul Brandes*

**M**arch is almost upon us and while most will claim to have "survived" another Texas winter, I still wait for the day that winter actually arrives in Houston. It seems that many folks here equate winter with cool, cloudy, and a little rain. Where I grew up in Michigan, however, winter is in full swing. In fact, I for one enjoy real winter weather so very much. Nathalie and I just returned from Upper Michigan and Michigan Technological University where, each year, the campus shuts down for three days to host its Winter Carnival celebration. In addition to the exceptional snow statues built by students, it's also a time to enjoy the finer things in life—cross-country skiing, snowshoeing, and my personal favorite, a little pickup hockey among friends. For me, it is a time of recharge from the rat race that is Houston. Needless to say, with over four feet of snow on the ground, mineral collecting was out of the question. But Nathalie and I are already planning our next trip to the Keweenaw Peninsula this summer to poke around the many rock piles in search of mineral



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*Continued on page 4*

## Upcoming General Meeting Programs

*by Sigrid Stewart*

*HGMS 1st VP*

**M**arch 22, 2016: **Searles Lake Gem-O-Rama, presented by Michael Sommers:** Michael will talk on the area of Searles Lake, California and the minerals found there. For over 70 years the Searles Lake Gem & Mineral Society has hosted the "Gem-O-Rama," supported by Searles Valley Minerals company, who allows collectors the unique opportunity to acquire their own specimens of the rare minerals found in the lake. These minerals are evaporites, and they include one of the rarest minerals on the planet--the famous hanksite! Come learn about the area and the show, see these minerals in person, and smell the brine. (Yes, I will have some!)

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

*Copy is due for the April 2016 issue by Tuesday, March 15, 2016.*

**Articles now are due on the 15th day of the month before the date on the BBG issue.**

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

### **Purpose of HGMS**

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

Membership dues are \$40 for an adult membership, \$60 for a couple, \$75 for a family (including all children aged 5-18), \$25 for a youth membership (ages 5-18), and \$500 for an adult life membership. Advertising rates: \$70 for 2 months, 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's Message continued from page 1*

treasures.

Before leaving for the frozen hinterlands, I managed to attend the second HGMS Trade Show that occurred in late January, and what impressed me most was the number of people in attendance. For the limited time I was wandering around, it was packed to the brim with shoppers. However, as with any new undertaking, there are logistical issues that must be worked out before future shows can be planned. But with careful planning and execution, I believe these shows can be a great success for the Society. Another important show coming up in the Houston area is the Clear Lake Gem, Mineral, and Jewelry Show sponsored by the Clear Lake Gem and Mineral Society. The show will be held the weekend of February 27 and 28 at the Pasadena Convention Center. I encourage HGMS members to attend and show our support for not only the Clear Lake Society and their wonderful Show, but for earth science education in general—which leads me to my final point of this month's President's Message.

Whether you are a field collector of minerals, a "show" collector, artisan, geologist, paleontologist, etc., we all have a responsibility to teach our knowledge of the Earth and how it works to the young and the old in not only our own community, but also when we travel away from Houston. Let's face it, geoscience is a dying subject across the country, but if we as Society members reach out to the populace and show them just how fascinating yet vitally important the very ground they walk on can be, then we have succeeded in our mission and purpose as stated on Page 3 of every Backbender's Gazette.

Take care for now.

### **Polishing Rhodochrosite**

*from the late Ed Wengerd's Notebook  
via Chippers' Chatter 11/2015*

**W**hen cutting Rhodochrosite, it is important that only water be used in the saw. An oil-based product will be absorbed, and the stone's color will be deadened.

After you've shaped the stone to its desired form, first sand on a 220 wheel, then move through the various mesh wheels. Use plenty of water, and don't apply too much pressure.

Check the stone carefully with a loupe or magnifying glass between wheels to be sure you've removed all the sanding marks and flat spots.

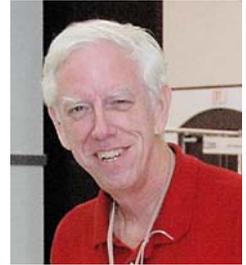
The best polishing agent for Rhodochrosite still is to use a felt wheel with tin oxide mixed with a small amount of vinegar.

## Rock Art—or the Joy of Watching Ice Melt

by Neal “artistic consultant” Immega

**N**ope, not the kind of rock art you are thinking of. This is more like what you get with a glacier. Let me explain further (you know you are in trouble now!)

The Asia Society Texas Center, over on Southmore, is a new museum with marvelous things on display. I was amused and surprised by a piece of kinetic art that depends on rocks. The artist, Mineko Grimmer, suspends an inverted pyramid made of pebbles and frozen together with water over a bamboo structure. As the pyramid melts, the rocks gradually fall off and bounce around the stack of bamboo, making marvelous sounds. It is sort of a gravity-driven vertical glacier! It is one of those mesmerizing experiences that you sit down to watch, and then find that you cannot leave.



I can imagine that, every night, some artist acolyte must gather the pebbles out of their moraine at the bottom of the art work, pile the pieces into a mold, and cart it off to a freezer in the bowels of the museum to re-solidify. I am wondering what the HGMS Board will say if I propose to build one of these for the garage area. It would be easy to build. We could even improve on the idea. We could cab and facet the stones to give them more class. And it would provide a mediation experience to counteract the stress of all our shop mistakes.



Making sound from a melting pyramid of pebbles and ice

### How Much Gold Is There?

from Choo-Choo Chatter. 04/1997, via Lapidary Chatter. 06/1997, via Gem Cutters News 5/2000, via The Backbender's Gazette 7 /2000, via The Rockpile 2/2016, via The Quarry 2/2016

**A** block of gold 18 yards on each side, represents not just the gold of America but all the gold mankind owns. It is your watch, your ring, your necklace, as well as the gold in the government reserves. It is all the gold in churches, the solid gold museum artifacts, the dental fillings, and even the gold plating on dimestore do-dads. It is all! An 18-yard-high cube is the gold of 6,000 years. No wonder it is precious. No wonder man seeks more of it.

**Paul McGarry—In Memoriam**  
*1934–2016*

**P**aul McGarry passed away Saturday, January 16, 2016 in Houston, Texas at the age of 81.

Paul's greatest pleasure was spending time with his family at his ranch in Kimble County, Texas. Paul enjoyed working with stones and minerals and created many beautiful spheres and polished objects. He traveled extensively throughout the world and especially enjoyed hunting and fishing adventures. Paul was co-founder and co-owner of Tubes, Inc. and will be remembered for his ethical approach to business.

In lieu of usual remembrances, memorial contributions may be directed to the Houston Gem and Mineral Society ([www.hgms.org](http://www.hgms.org)); or the Blue Bird Circle ([www.thebluebirdcircle.com](http://www.thebluebirdcircle.com)).

**Memories of Paul McGarry**  
*by Anthony Lucci*

**P**aul was always a trooper, no matter when or where. If there was an agate bed to be found, he was on the hunt for it. I remember one morning getting up at the crack of dawn to meet Paul. We were going to hook up the trailer and load up the 4-wheel-drive truck. But by the time I got there—which was nearly 6 a.m.—he already had the truck, trailer, and four-wheeler loaded and ready to go.

We took off from Houston just as the sun was coming up and headed west. After nearly 100 miles, we pulled in to a spot unknown to any other rockhounds, and we started picking. By this time the sun was up, it was a hot day, and conditions were perfect. And then we found it—an agate pocket that filled our buckets and bags to the top. With our prize, we stopped at the front of the truck and that's when I snapped this photo by setting the camera on the hood of the truck. As you can tell from the looks on our faces, we've had the greatest day ever. (See photo on page 9.)

I will miss Paul. He was one of the few people who understood my sense of humor, and I understood his.

Your friend, Anthony Lucci

**Paul McGarry - HGMS's Godfather**

*by Neal Immega*

**T**he saying "There is no limit to what you can accomplish if you don't care who gets the credit," certainly applies to Paul McGarry. He was the mainstay for HGMS for ages, and many important decisions can be attributed to him.

When something needed doing, he acted. Here are just a few anecdotes. I was having a problem in the shop with the high cost of grinding wheels. I went to Paul for advice, and he told me to spend MORE money per wheel to buy sintered diamond wheels. They would last far longer than the plated wheels we had been using. When I asked the Board for authority to spend \$500 each for sintered wheels, Paul got the approval. We are STILL using those wheels today.

Another shop project that he was responsible for was the super grinder. It needed a special shaft, and he had it made by his mechanic at his business, "Tubes Inc." When I needed resources, he shared. When Paul saw how difficult it was to get the display cases and fluorescent display to the show each year, he paid [from his pocket] for collapsible cases and two trailers, and he stored them at his business. He never sought credit.

No one was a better friend, and I will miss him.

**Paul McGarry**

*by Jill Rowlands*

**I** was sad to hear of the passing of Paul McGarry. He was a kind and gentle man who went out of his way to help friends. He was generous to HGMS with his time, attention, rocks, and money.

I worked with him when I was President of HGMS. Prior to that, I enjoyed his company and that of other steadfast members at the weekly Saturday Lunch Bunch gatherings where the conversation varied from corporate issues to how to polish a difficult rock. He was indeed a shrewd businessman who could turn a hostile takeover into a gentle corralling and who dealt cleverly with other issues regarding quality contractual work. Since I had corporate purchasing and expediting experience, we shared ideas how to deal with different kinds of industrial problems during the Saturday lunch gathering. Regarding the lapidary side of the conversations, he became an expert at making spheres, and I used to joke with him that he never "lost his marbles" because he has the largest marbles in

town, and they were too big to lose. We would also banter on how to best display them at the annual HGMS shows. When the display cabinets became too old, he assisted in finding a pattern and having better cabinets built.

I served on the HGMS nominating committee frequently, and we were all thrilled when Paul McGarry agreed to continue as treasurer from year to year. One year, I jumped at the chance and honor to work with an incredible team that the Nominating Committee had lined up but was missing a candidate for president. I still call this particular executive team, "Camelot" where squabbling was minimal or nonexistent, and brainstorming to improve the club was high. Paul McGarry provided sensible ideas and sound comments which always added value to the meetings during the discussions that involved finances. Paul McGarry's legacy will live on in many arenas in life. But at HGMS, he will be remembered for decades as a helpful, kind, and generous man. We all share the loss of a great man and offer sincere condolences to his fantastic family whom I also remember fondly.

### Memories of Past Members

*by Clyde McMeans*

**S**ome donations come to mind ... For instance, **the donation from Millar Quarles' daughter during 2015.** Millar was a very colorful character on the Houston scene. Just two weekends ago, an estate sale was advertised to HGMS members. Turns out that the estate was that of Dr. Lee Trick: psychiatrist, ham radio guy, pottery maker, metal worker, etc. who used to be a member of HGMS. He wired/installed all the electrical outlet drops in the HGMS building. Dr. Trick is moving into an assisted living center somewhere.

**The Arkansas, Oregon, etc. rocks from Gloria Jones that were collected by her grandparents.** I never knew Paul McGarry, but I have fussed around with his trailers and rolling display case racks. I also met one of Paul's employees who was familiar with the trailers. Paul had a large collection of spheres he had cut.

Matt Dillon's move to Beeville resulted in tons of his material being donated to HGMS a few years ago.

**Another source:** Scott Singleton has written about HGMS history.

Clyde



Paul McGarry, Matt Dillon, and Anthony Lucci  
Big grins after finding an agate pocket at a "spot no other rockhounds know about"

### Archaeology Section Minutes

February 4, 2016

by Nancy Engelhardt-Moore

**B**ob Moore, Section Chair, called the meeting to order at 7:43 p.m. He moved to approve the January minutes. The motion was seconded and unanimously approved. A brief discussion followed on upcoming talks. Then, Bob introduced the guest speaker, Dr. Scotty Moore, Program Coordinator for Anthropology at Houston Community College in Texas. Scotty earned a Ph.D. in Anthropology from the University of Washington and has been studying the history and culture of societies throughout the world over the last 16 years. He participated and supervised anthropological projects on 5 continents and in locales as diverse as the Egyptian desert and jungles of Belize. In 2007, he hosted one of Discovery Channel's first HD programs: "*Bone Detectives*." Over the course of 23 episodes in 12 countries, Scotty took viewers on a CSI-like exploration of ancient societies, murder victims, and unexplained deaths.

**Program:** Dr. Scotty Moore gave a talk entitled "*It's the pits! The Search for Lewis & Clark's Lost Fort.*" After the Louisiana Purchase in 1803, President Jefferson sent Captain Meriwether Lewis & Second Lieutenant William Clark on an expedition to map the new area. Lewis recorded detailed journals with maps of the entire area, except Oregon. The expedition built their last fort called Fort Clatsop along the Oregon coast and stayed there during 1805–06. Lewis died there at age 35 after acting very strangely. Although scores of historians and archaeologists tried, no evidence of the fort was found for over 200 years. So, a location was chosen as the Fort Clatsop National Me-

memorial. The most likely reasons that the fort was not found are 1) wet environment, 2) limited materials—wood, 3) short 4-month occupation, 4) poor records—Clark's map too generalized and 5) local Indians—recycled the wood. Many standard approaches were tried without success, so Scotty tried new approaches. First, he tried using electrical soil resistivity to locate wooden fort post holes. He found 1,000s of holes, but none lined up like a fort fence wall. Next, Scotty went back over the records of Lewis's death and learned that both he and Clark had been prescribed "Dr. Rush's Thunderbolt" pills. Dr. Benjamin Rush had concocted the pills with a mixture of calomel, chlorine, and jalap. Calomel contains mercury chloride, which would have caused Lewis's strange behavior before dying. Scotty realized that mercury is insoluble, so he began looking for the fort's privy pit, because there should be high levels of mercury at its location due to toxic vomit and excrement. He took numerous samples from 100 holes where he thought the pit should be and found twice the toxic level of mercury even after 200 years! Scotty then began searching for the fort based on military regulations defining privy locations relative to fort placement and found evidence of the fort! Now, the actual site has been designated a monument, based on Scotty's unique approach! Q&A followed the talk.

Dr. Clark said he will be speaking on amazing artifacts from Ecuador (400–700 AD) in April. The meeting adjourned at 8:35 p.m.

**March 3, 2016:** Dr. Dirk Van Tuerenhout, HMNS Curator of Anthropology, will speak on "*Life and Death in Maya Cities.*" When the western world became aware of the ancient Maya, they were seen as the world's only peaceful civilization. The fact that they lived in the rainforest made it even more intriguing. According to 19th century investigators, ancient Maya cities were no more than ceremonial centers, very different from our own urban centers. All of this has changed. We now know that Maya cities fulfilled many of the same functions as their modern counterparts, but also had unique aspects. Come hear this fascinating talk and learn about Maya cities!



Left to right: Clyde McMeans, Melissa Sambrooks, Garth Clark, Scotty Moore & Bob Moore

## You've Polished the Rock, Now what?

by Karen M. Burns

**A**fter you've polished dozens of beautiful cabochons, shown them to all of your family, friends, and coworkers to be admired, what do you do with them—keep them in a cigar box, on a shelf?

My stock answer, when asked, is that you mount them in a sterling or gold-filled setting and sell them.

Recently, I was selling at a small but well-attended geologically-oriented show where I had a white-elephant type on display. It was not too well designed, and I was trying to reduce my inventory of sterling silver mounted items—a bit of this and a bit of that.

As I was going through my inventory and picking out what I thought would sell, I came across three orphaned cabochons I had made several years ago, but I had never mounted them to be worn. To fill a small space, I put them on the table. About two hours into the sale, I glanced up from pricing something to find a lovely lady picking up a pretty triangular free-form crazy lace agate cab.

“How much is this,” she asked.

Off the top of my head I responded, “Fifteen dollars.”—and she bought it without hesitation.

I noticed her pretty pendant and asked if she had made it to which she replied, “I make beaded settings for cabs.” Not a lapidary—a jewelry maker. How nice, but what made me price that fifty-cent piece of rough I had polished years ago at fifteen dollars?

After a bit, I remembered I had been reading an older issue of *Lapidary Journal's Jewelry Artist* which highlighted jewelers who purchased their stones and the lapidaries who made them. The focus was what prices finished cabs were selling for at that time. They showed purchased stones in the under and over twenty-five dollar categories.

In the past, when talking to the parents of children who were interested in polishing the stones they had picked up, I told them that learning to do so was a great hobby, might be a paying avocation, or could even lead to a career in one of the geological fields. Now here was proof—proof to refer to that they could sell them for more than three or four dollars.

Here at HGMS we have a very active program that teaches children over the age of five—yes, I mean five—how to polish stones on an eight-inch set of diamond wheels. The instructors coach the children, and the finished stones are as fine as an adult can make.

Not many of our members sell unset stones, but they need to remember that those cabs are worth more than double or triple their purchase cost to a fabricating lapidary. Even when slabbing a large piece of rough, no two slabs will be exactly alike front and back. No two cabs will be the same, front and back—and the work to bring out the beauty has real value.

So often hobbyists price their output cheaply, and when asked why, say that they just sell to cover the cost of their hobby. It seems that they are demeaning the value of their artistry and that of serious lapidaries and jewelers when that happens.

Most diamonds are look-alikes. We forget that cabs are unique; there will only be one *exactly* the same as the one at which they are looking. Even the mirror pair are different on the reverse side.

A little research online will help you find pricing for cabs similar to yours. When you go to shows, look for vendors selling free-form cabs, as they are usually hand-polished on a Genie or a similar set-up. Make a note of their prices. Talk to vendors who buy finished stones, and ask about where they buy theirs. Your cabs are no longer rough rock—they are gemstones worthy of gemstone prices. Put a few out with your finished jewelry, and listen to potential purchasers. You will be surprised.

### Lapidary Section Meeting

*February 15, 2016*

Ed Clay brought the meeting to order around 7:30 p.m. Since the only cabochon shape presented was too close to ones already on one of the Lapidary templates, the new template shapes project was tabled until the March meeting.

The Lapidary Section membership voted to donate \$100 to the HGMS shop toward buying new shop aprons.

**Stone Competition** is to be judged during the 2016 HGMS show. Finished stones are to have been created to specifications (below) prior to the show and submitted for judging at a date to be determined a week or two before the show. There will be two categories: **Novice and Master**. Those entering the **Novice category are to cut a 30 x 40 oval cabochon from jasper**. Those entering the **Master category are to cut a square between 20 mm and 30 mm from jasper**. All entries will be judged according to the R.O.L.E. standards that can be found on the HGMS.org Web site in the Lapidary Section.

**Program:** Following the business meeting, Lapidary Section Chair Edward Clay encouraged the attendees to talk about why they enjoy working in lapidary and to identify all the various skills that are needed (taught) in lapidary work. The list became quite long: making cabochons; creating inlay of various kinds: metal-in-stone, stone-in-metal, stone-in-stone; creating intarsia

of various kinds: random mosaic, pattern mosaic, picture intarsia; fancy cabochons (unique outlines), spheres, scrimshaw, sand-blasting patterns on rock, working with metal: melting it and casting an object, annealing metal to restore flexibility, drawing wire out into increasingly finer and finer gauges. During one's "journey" through the many facets of lapidary work, Ed said it's likely that one or more aspects will make such a strong impression on him or her that that person will then go on to become quite expert in that skill and in others.

### General Meeting Minutes

January 26, 2016

by Nancy English, HGMS Secretary

The meeting was called to order by President Paul Brandes at 7:30 p.m., and he thanked everyone for coming to the January 26, 2016 General meeting.

The meeting was attended by 28 regular members, three visitors, and one guest. President Brandes asked the visitors and guest to stand and be recognized. The three visitors are planning to join: Jaclyn Bush, Adriane Garcia, and David Stripling. Tom English was Nancy English's guest.

**Minutes:** Karen Burns moved to approve the minutes of the December General Meeting as published in the February 2016 BBG. Joan Riley seconded, and the membership passed the motion.

#### President's Announcements:

1. The first Trade Show of 2016 will be held on Saturday, January 30, 2016, from 10:00 a.m. until 6:00 p.m.
  - a. Chase Jennings has sent nearly 4,000 emails.
  - b. He has posted the event again on two dozen Face Book pages, and a little over 1,300 people have seen it.
  - c. Thirty-two tables are sold for vendors inside and outside the building.
  - d. A food truck will be on the property.
  - e. Two volunteers will be available to help with membership sign-ups.
  - f. Nancy English suggested that we will need more volunteers to help with crowd control. President Brandes asked prospective volunteers to check with Chase Jennings.
2. The Hill Country field trip was a success. Depending on future interest, another trip will be planned for this autumn. Members in the audience—

Ken and Andrea Bruneau—found strawberry quartz, purple fluorite, and purple fluorite on pyrite. That drew instant interest from the audience.

3. The Clear Lake Gem & Mineral Show is being held February 27–28 at the Pasadena Convention Center.
4. President Brandes invited other announcements from the floor.
  - a. Beverly Mace announced that 2016 dues need to be paid. She also reminded the audience that name badges ordered before the 2015 Show are available.
  - b. Joan Riley thanked everyone for the clothes they have donated to the homeless.

### Section Reports

In the interest of time, President Brandes asked the members to look at the Web site or read the weekly email blast from Jim Kendall for future meetings and presentations. He invited Section Chairs to make special announcements. There were none.

### Old Business

Also in the interest of time, President Brandes asked members to follow the progress of Old Business items from the January 2016 Board meeting and the December 2015 General Meeting minutes as published in the February 2016 edition of the BBG.

### New Business

- 1) **Library Project** – Margo Bedman and Debbie Kirkpatrick began the much-needed cleanup of the common area in the library. To continue improving the library, an individual has been offered the position of HGMS Librarian, pending her acceptance. Please do not check out any books at this time, and please return any checked-out or borrowed books you may have.
- 2) **Web site** – The new Web site is nearly complete and ready for rollout in February. Big thanks to Scott Singleton and Autumn Breese for their work.
- 3) **Wi-Fi Connection** – The Board is working on a solution to keep Wi-Fi in the building. This is important for several reasons, not the least of which is the Library project.
- 4) **2016 Show** – At this moment we have no 2016 Show Chair, and it is beyond crunch time! If interested, please contact President Brandes, Mike Sommers, or Scott Singleton immediately.

**The next Board of Directors meeting is Tuesday, February 2, 2016 at 7:30 p.m.**

**The next General Meeting is Tuesday, February 23, 2016 at 7:30 p.m.** The program will be presented by **Roland Fields**, Supervisor of Technicians covering Manufacturing for Houston Community College, and supervisor of a Fabrication Lab—the Advanced Material Resources Center. Mr. Fields will introduce the subject of **Videography (3D printing)**, and he will provide a demonstration. He will also discuss lost wax applications. Expect a lively discussion of new technologies!

**Show 'n Tell:** There was no show and tell.

**Drawing:** Al Robb won the drawing for the agate slab.

**Adjourn:** Phyllis George moved to adjourn the business meeting, and Joan Riley seconded. The motion passed, and the meeting was adjourned at 7:52 p.m.

### Refreshment Break

**Refreshments:** Provided by Nancy English. If you take some of the refreshments, don't forget to "Pay the Kitty" to keep the fund solvent.

President Paul Brandes called on 1<sup>st</sup> Vice President Sigrid Stewart to introduce our speaker for the General meeting, **Dr. Garth Clark**. He presented "**The Evolution of Genetics and Archaeology**." Genetics and DNA analysis has played a vital part in tracing the origin of human populations and the domestication of various animal species by humans. Two of the special-purpose gourds developed by early civilizations are shown.



Front and side views of ancient South American alcohol drinking vessel

**Board of Director's Meeting**  
*February 2, 2016*  
*by Nancy English, Secretary*

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

**Call to Order:** President Paul Brandes called the meeting to order at 7:30 p.m. A quorum was present. Four non-voting members attended the meeting: Scott Singleton and Autumn Breese, Web page Designers; Chase Jennings, Trade Show; and Nathalie Brandes (Librarian candidate).

**President's Comments:** Kudos to Chase Jennings because the Trade Show appears to be another success.

**Approval of Previous Month's Board Minutes:** Gary Tober moved and Phyllis George seconded a motion to approve the corrected minutes of the January 5, 2016 Board Meeting as published in the February 2016 BBG. The motion passed.

**Treasurer's Report:** Rodney Linehan emailed financials to all Board members in advance of the meeting. He emailed answers to Board Member's questions in January regarding depreciation amounts on financials.

### Office, Committee, and Section Reports

**Archeology Section:** The next Archeology Section meeting is **Thursday, February 4, 2016 at 7:30. Dr. Scotty Moore**, Program Coordinator for Anthropology at Houston Community College in Texas, will give a talk entitled **"It's the pits! The Search for Lewis & Clark's Lost Fort."**

**Beading Section:** The next regular Beading Section meeting will be on **Saturday, February 20, 2016 at 1:30 p.m.** The project will be a flat spiral bracelet.

**Day Light Section:** The next meeting is scheduled for **Wednesday, February 3, 2016 at 1:00 to 3:00 p.m.** Kate Shaw will be available to help those who are still working on their clasps. After the business meeting, attendees may take advantage of open shop.

**Education:** Please contact Carrie at [carriehart2000@yahoo.com](mailto:carriehart2000@yahoo.com) to reserve your class space or to request classes. Carrie announced that a jewelry fabrication class by James Burrell is planned for February and March. The cost for five classes is \$400 per student including supplies. PayPal is available for pay-

ment. TENTATIVE dates are February 21 and 28, and March 6, 13, and 20.

**Gemstones and Faceting Section:** The next regular meeting is **Wednesday, February 10, 2016 at 6:30 p.m.** Gary Tober reported that they will be learning how to use the “cheater” adjustment on their faceting machine to slightly modify the angle of a facet while cutting a stone.

**Lapidary and Silversmithing Section:** The next meeting is on **Monday, February 15, 2016 at 7:30 p.m.** The program will be announced. Final decisions on the new template will be made. The shop will be open from 5:00 p.m. until 7:15 p.m.

**Mineral Section:** The next regular meeting is **Wednesday, February 3, 2016** at 7:30 p.m. Steve Blyskal will show photos of **Blue Minerals** and conduct a discussion on the causes of blue color. The second meeting on February 17, 2016 at 7:30 p.m. will be a discussion of the Tucson show by members who were there at different times. If not enough Tucson Show attendees come to the meeting, we can listen to the reports from the Web that Steve will have on this year’s show and look at the “What’s Hot in Tucson” video again.

**Paleo Section:** The next meeting is scheduled for **Tuesday, February 16, 2016 at 7:30 p.m.** The program will be announced.

**Youth Section:** The next meetings are scheduled for **February 6 and February 20, 2016 from 10:00 a.m. until 12:00 noon.** Jim Paras will be presenting an interactive fossil program at the February 6 meeting.

**BBG Editor and Webmaster:** Phyllis George reported that the deadline to send articles to her is February 15, 2016. She also asked the Section representatives to please send her the program schedules two months in advance. That way the BBG will have current program information.

Phyllis was just charged \$142 for the next two years of hosting our Web site on Infinology. She encouraged the Club to make the change to the new Web host before February 26. That is the deadline for her to be reimbursed.

### Old Business

1. **Web Site update:** Autumn Breese presented the HGMS new Web site, ready to go live. The Board approved a motion by Gary Tober to authorize Autumn to proceed according to her printed plan to bring the HGMS new Web site live. She will be reimbursed for any expenses. Mike Dawkins seconded. Autumn presented her research and recommendation for the new Web host. The Board agreed with her suggestion of Winhost. She will enroll us, expecting reimbursement for any expenses. Mary Ann Mitscherling moved to authorize Phyllis George to purchase, for reimbursement, the appropriate thumb drive to copy the current HGMS Web site for transfer by Autumn Breese to the new host, Winhost. Mike Dawkins seconded. The motion passed. Phyllis and Autumn will work together to complete the Web site move.

2. **Club House Repairs / upgrades:** Mike Dawkins presented his research on wireless doorbells. After a discussion of the options for wireless doorbells, Gary Tober moved that Mike Dawkins purchase the appropriate one, spending up to \$100. He will be reimbursed. Diane Sisson seconded it. The motion passed.
3. **Security System Status**
  - a. Garth will come by as soon as he can to mount the outdoor cameras. He will set up the security alert system. He will research smoke detectors and report on them at the March BOD meeting.
  - b. Dunn SW provides drive-by patrols several days a week in the evenings. Dunn SW encourages Individual businesses to get their own security systems. HGMS has done so. Things appear to have quieted down with regard to crime (break-ins, prostitution, graffiti, etc.) in our area in recent months.
4. **Show Chair for 2016:** We have Show Chairs! Scott Singleton is the 2016 Show Chair, with a significant delegation of duties to his Assistant Show Chairs, Sigrid Stewart and Clyde McMeans.
  - a. Scott will present the 2016 Show budget at the March 1, 2016 Board Meeting.
  - b. Rick Rexroad has agreed to be the 2016 Dealer Chair.
  - c. Publicity is underway. The ¼ page flyer will be complete in time for the Clear Lake Show, February 27 and 28.
  - d. Nancy English contacted Cindy at Humble Civic Center concerning the 2016 contract. The HCC office sent the invoice, but the contract was not yet ready. When she receives it, Nancy will forward it to Scott, Clyde, and Sigrid for review, and to Paul for signature.
5. **Trade Show: January 30, 2016:** Chase Jennings reported that the Trade Show was very successful for the Club, the dealers, and the public. He estimated there were three times as many attendees as the first show which occurred in July, 2015.
  - a. Beverly Mace has already recorded the 24 new members in the Roster—18 new memberships, thirteen (13) singles, three couples (6), one family (4), and one youth.
  - b. Chase brought an updated floor plan for the next show to alleviate congestion.
  - c. After some discussion, Nancy English moved to schedule the next Trade Show for April 30, 2016. Phyllis George seconded, and the motion passed.
  - d. Nancy English moved to reimburse Chase for the fourteen tables he

purchased: \$482.00. Gary Tober seconded and the motion passed.

6. **Replacement of Wi-Fi in club building:** Jim Kendall emailed his report and recommendations to the Board.

To summarize, Comcast could bundle Wi-Fi, TV, and phone in a 3-year contract for \$104.80 month. If we dropped AT&T for \$115.00 per month, HGMS would be paying less for more. The Comcast deal is contingent on the results of a site survey to see how much trouble it will be to connect us.

7. **Scholarships:**

- a. **Update Scholarship Contact list: Sigrid Stewart has started the review of the scholarship contact list.** All applicants will be considered for all three HGMS scholarships.
- b. **Elizabeth Jean Smith Scholarship fund** will be funded by Art Smith's book, *The Mineralogy of Texas*. Monies will need to accumulate before a scholarship can be awarded. At the BOD's request, Nancy English emailed Rodney to ask if a fund had already been established for the monies. Treasurer Rodney Linehan responded, "To my knowledge, in the past there have been no actual separate bank accounts set up for designated funds except for the building fund. Bank accounts with only a couple of thousand dollars (or less as they get spent down) tend to have issues with fees, dormancy issues, etc. In the past, the funds have been in the main operating account and tracked as to how much is available. Separate accounts can be set up if the board desires." Nancy suggested the BOD request an accounting line item for the Scholarship funds to be tracked.
- c. **Richard Baker Scholarship fund:** Rhonda Burrage donated a \$2,500 scholarship in her father's name, Richard Baker. It will be presented in 2016 to the winning candidate. Nancy English will ask Rhonda if she wants to review the applicants.
- d. **Annual HGMS Scholarship \$2500:** The HGMS Earth Science/Jewelry Arts Scholarship. Sigrid has started the process of verifying the contact information for the Universities, Colleges, and 2-year degree schools.
- e. **The Paleo Section** also provides a scholarship. The Paleo scholarship is awarded to candidates Paleo recruits. **Thank-you letters to Mark Jacobson and Rhonda Burrage** have not yet been prepared by Secretary Nancy English for President Brandes' signature. She will have them ready for President Brandes signature by the February General Meeting.

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

- f. **Chase Jennings** will broadcast the Scholarship information and application on Face Book as soon as we provide the information.
8. **The Library:**
  - a. **Subscription to magazines:** Margo Bedman suggested that subscriptions need to be renewed for periodicals that interest the club. President Brandes proposed that Board Members have their Sections pick one periodical of interest. Bring the choices to the next BOD Meeting, and the Board will approve subscriptions.
  - b. **New Librarian:** President Brandes introduced the prospective Librarian, Nathalie Brandes. Nathalie verified her interest and she explained her expectations. The Board was very supportive. She will present a diagram of her plans for the library at the March 1 BOD meeting. If the Board accepts the plans, President Brandes will appoint Nathalie Brandes to the post of HGMS Librarian, and she will accept the position.
9. **Clubhouse Cleanup:** Great strides have been made to improve the appearance of common areas. Keep up the good work!
10. **Change to General Meeting Agendas:** The Board congratulated President Brandes on the results of the changes to the General Meeting Agenda. He referred the audience to the minutes as published in the BBG for Section Meeting information and Old Business. That shortened the business meeting to 20 minutes, allowing the program to begin at 8:00 p.m.

### New Business

1. **Dunn SW Representative:** Michele Marsel's term as the HGMS representative for Dunn SW ends at the next Dunn SW's Annual Meeting in July. President Brandes tasked the Board to talk to their Sections about a replacement. Except for the Annual Meeting, most meetings are conducted online via email.
2. **The next Board of Directors meeting is Tuesday, March 1, 2016, at 7:30 p.m.**
3. **The next General Meeting will be Tuesday, February 23, 2016 at 7:30. Roland Fields,** Supervisor of Technicians covering Manufacturing for Houston Community College, and supervisor of a Fabrication Lab—the Advanced Material Resources Center—will present on the subject of 3D printing, including a demonstration, and discussion of lost wax applications. Expect a lively discussion of new technologies! Email [roland.fields@hccs.edu](mailto:roland.fields@hccs.edu) for more information.
4. **Appointments:** In light of the success of Chase Jennings' publicity for the 2015 Show and the two successful Trade Shows, President Brandes

appointed Chase Jennings to the post of HGMS Publicity Chair. Sigrid Stewart asked Chase to be the Publicity Chair for the 2016 Show as well. Chase accepted both positions.

**Adjourn:** Garth Clark moved to adjourn the meeting, and Gary Tober seconded. The motion passed unanimously, and the meeting was adjourned at 9:35 p.m.

### HGMS Member Donates \$2500 Scholarship in Father's Memory

*Houston, TX February 12, 2016*

The Houston Gem and Mineral Society is pleased to announce the gift of a \$2,500 scholarship fund donated in honor of Richard Baker of Hallettsville, TX. Mr. Baker, proprietor of The Blue Crystal Rock Shop in Hallettsville, was a long-time member of the Victoria Gem and Mineral Society. He shared his passion for rocks with many children in our area. His family hopes that a student completing their sophomore year of college (or better) and majoring in earth sciences will take the time to apply. The Houston Gem and Mineral Society awards scholarships each year through their simplified application which can be downloaded from [www.hgms.org](http://www.hgms.org). County restrictions do not apply to this privately funded scholarship. The filing deadline is May 1, 2016. Instructions and contact information are on the HGMS Web site.

### Photos taken at the January 30, 2016 HGMS Trade Show

*Photos by Jeanne Barna*



More photos taken at the Trade Show are on page 24.

## Bench Tips

by Brad Smith

[www.BradSmithJewelry.com](http://www.BradSmithJewelry.com)

*“Bench Tips for Jewelry Making” and “Broom Casting for Creative Jewelry” are available on Amazon*

### IDENTIFYING UNMARKED SOLDERS

There are plenty of ways to mark your sheet or wire solders, but suppose you forgot to mark them and have a couple that you can't identify. The answer is to compare the melting temperature of the unknowns with that of a known solder.



What I do is take a thick scrap of copper or nickel, and arrange several solders on it. Ideally, I would have a sample of easy, medium, and hard known solders surrounding the unknown solder. Then,

I heat the plate from the bottom and watch the order in which the solders melt.

I heat the plate from the bottom and watch the order in which the solders melt.



### INEXPENSIVE ELECTRIC WAX PEN

You can make your own wax pen from a small soldering iron plugged into a light dimmer switch for heat control. Both components are easily found at Radio Shack, or a big hardware store, or at Harbor Freight. As an example of the components, see [www.harborfreight.com](http://www.harborfreight.com) items #43060 and #47887.

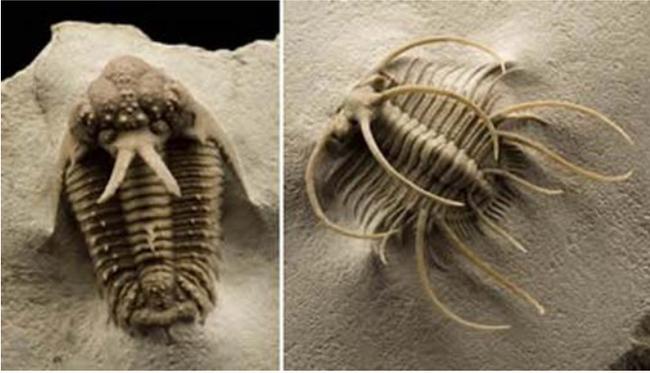
File the tip of the soldering iron into the shape you prefer—or even better, get a soldering iron with replaceable tips. Then you can make several tip shapes for different tasks. Set the dimmer control just hot enough to melt the wax without producing any smoke.

A tip design that I find ideal for some work is a length of small-gauge wire that lets me reach in around the model to melt some wax. The wire is about 15 mm long and is 18- or 20-gauge. To conduct heat all the way to the tip, I use sterling wire, then silver-solder it into a hole on the end of a copper or brass rod that will fit into the soldering iron.



## The Age of Trilobites

by Mark Nelson, Pasadena Lapidary Society  
from *Rockhound Ramblings* 2/2016



Images 1 and 2: courtesy of Chip Clark, Smithsonian Institution, National Museum of Natural History

**T**rilobites are found on six continents and in some 75 countries. They adapted to their environments in so many ways that scientists are still trying to understand their functions and purposes! Fortunately for us, trilobites' hard bodies made excellent fossils, and thousands have been preserved. From looking at them, we can gain a sense of Earth's amazing diversity—in just a single group of ancient animals!

Known as the “Cambrian Explosion,” the Cambrian Period is the first geological time period of the Paleozoic Era (the “time of ancient life”). This period was marked by a dramatic burst of evolutionary changes in life on Earth. In the early Cambrian (520 million years ago), Earth was generally cold but was gradually warming as the glaciers of the late Proterozoic Eon receded. During this time, the single supercontinent Rodinia broke apart which increased coastal area. The glacial retreat created more shallow sea environments where life could take hold.

At this point, no life yet existed on land. All life was aquatic, and it was in this environment that we see the first trilobites. “What exactly is a trilobite?” you may ask. Distantly related to modern lobsters, scorpions, and insects, trilobites were among the earliest arthropods—animals with segmented bodies, jointed legs, and an exoskeleton.

Trilobites had long antennae and flattened bodies with three sections: a head, middle,



Image 3: *Walliserops trifurcatus* (400mya), from Djebel Oufaten, Morocco. Photo by Kevin Walsh - originally posted to Flickr as Trilobite 3

and tail. But that may have been where their similarities ended and their differences took off. This group of animals evolved some 15,000 species. Trilobites ranged from a few millimeters (less than half an inch) to 58 centimeters (23 inches) long.

The success and disappearance of trilobites illustrate evolution's ups and downs. By learning to crawl or burrow or swim, their first identified fossils are among the fossils of the Atdabanian stage of the Early Cambrian period (521 million years ago). They learned to be both hunters and passive feeders. Trilobites flourished during the Cambrian Period, throughout the lower Paleozoic era, before beginning a drawn-out decline to extinction when, during the Devonian, all trilobite orders except the Proetids died out. Trilobites finally disappeared in the mass extinction at the end of the Permian about 250 million years ago.

The trilobites were among the most successful of all early animals, roaming the oceans for over 270 million years.

Many people (myself included before researching this article) are unsure of the pronunciation of the word "Trilobite." According to Cambridge Dictionary Online, it is pronounced "*try-low-bite*," with the long *i* as in *tricycle*.

Sources for this article include the Smithsonian Natural History Museum, Wikipedia, and Live Science.



Image 4: An *Olenoides superbus* trilobite, collected from the Upper Marjum Formation, House Range, Millard County, Utah, USA, lived during the late Middle Cambrian, exhibited in the Houston Museum of Natural Science

### More Photos Taken at the Trade Show

*It Was Crowded in the Clubhouse*



Austin Gem & Mineral Society & Texas Faceters' Guild  
 2016 Rock Swap

6719 Burnet Lane, Austin Texas

[www.AustinGemAndMineral.org](http://www.AustinGemAndMineral.org)

<b>DATE:</b>	<b>Saturday</b>	<b>09 April 2016</b>
<b>TIME:</b>	<b>9am to 3pm</b>	<b>Set Up at 8am</b>

Austin Gem & Mineral Society  
**2016 ROCK SWAP**  
 Gems, Minerals & Fossils  
 In conjunction with  
**TEXAS TOPAZ DAYS**  
 by the Texas Faceters' Guild

**Head to Austin for an old fashioned swap meet**

Plenty of rocks, minerals, gems, fossils, petrified wood, agates, fluorescent minerals, crystals, rough rock, gift items, jewelry, beads, tools & equipment, local mineral & fossil specimens.

Texas Faceters' Guild will be on hand selling gem stones, gem rough and giving demonstrations



**FREE ADMISSION**

**FREE PARKING**

**Club House Tours**

**Potluck Lunch**

**KIDS Activities**

**Demonstrations**

**Raffles**



**CONTACT:**

1st VP James Mercier

E-Mail:

[vpresident1@austingemandmineral.org](mailto:vpresident1@austingemandmineral.org)

Phone:

512-458-9546 (Voicemail ONLY)

## Show Time 2016

February 27-28	Pasadena, TX	Clear Lake Gem & Mineral Society Pasadena Convention Center, 7902 Fairmont Parkway
March 5-6	Robstown, TX	Gulf Coast Gem & Mineral Society Richard M Borchard Regional Fairgrounds 1213 Terry Shamsie Blvd., Exhibit Hall A rockcamp_speaker@outlook.com; www.gcgms.org
March 12-13	San Antonio, TX	Southwest Gem & Mineral Society San Antonio Event Cntr, 8111 Meadow Leaf Dr. krbotx@gvtc.com; www.swgemandmineral.org
April 9	Austin, TX	Austin Gem & Mineral Soc. Annual Rock Swap 9 a.m. to 3 p.m. <a href="mailto:vpresident1@austingemandmineral.org">vpresident1@austingemandmineral.org</a>
April 9-10	Abilene, TX	Central Texas Gem & Mineral Society Abilene Civic Center; 600 Pine St. <a href="mailto:kmcdaniel23@suddenlink.net">kmcdaniel23@suddenlink.net</a>
April 15-17	Alpine, TX	Chihuahuan Desert Gem and Mineral Club Alpine Civic Center; 801 W. Holland (Hwy. 90) <a href="mailto:paulgraybeal@sbcglobal.net">paulgraybeal@sbcglobal.net</a>
April 22-24	Houston, TX	Fine Mineral Show Embassy Suites Hotel, 2911 Sage Rd. <a href="mailto:info@finemineralshow.com">info@finemineralshow.com</a> FineMineralShow.com
April 30-May 1	Waco, TX	Waco Gem & Mineral Club Extraco Events Center; 4601 Bosque Blvd <a href="http://www.wacogemandmineral.org">www.wacogemandmineral.org</a> <a href="mailto:showchair@wacogemandmineral.org">showchair@wacogemandmineral.org</a>
May 7-8	Lubbock, TX	SCFMS/Lubbock Gem & Mineral Society Lubbock Memorial Civic Center 1501 Mac Davis Lane <a href="mailto:walt@lubbockgemandmineral.org">walt@lubbockgemandmineral.org</a> <a href="http://www.lubbockgemandmineral.org">www.lubbockgemandmineral.org</a>
September 10-18	Denver, CO	Multiple shows and locations Eons Expos, Denver Coliseum, 4600 Humboldt St 250 dealers in Denver Coliseum plus 100 tents <a href="http://www.ColiseumShow.com">http://www.ColiseumShow.com</a>
November 11-13	Humble, TX	Houston Gem & Mineral Society Humble Civic Center, 8233 Will Clayton Pkwy. 5 miles east of Bush Intercontinental Airport 1 mile east of Hwy. 59 <a href="http://www.hgms.org">www.hgms.org</a> ; <a href="mailto:showchair@hgms.org">showchair@hgms.org</a>

2016			March				2016
Sun	Mon	Tue	Wed	Thu	Fri	Sat	
		1 7:30 Board Meeting	2 10-3 Shop Open 1:00-3:00 Day Light Section 7:30--Mineral Section	3 7:30 Archeology Section	4	5 10-5 Shop Open 10-12 Youth Section	
6 10-4 Shop Open	7	8 NO Show Committee	9 10-3 Shop Open 6:30 Gemstones & Faceting Section	10	11	12 10-5 Shop Open	
13 10-4 Shop Open Daylight Saving Begins	14	15 7:30 Paleo Section	16 10-3 Shop Open 7:30 Mineral Section	17 St. Patrick's Day	18	19 10-5 Shop Open 10-12 a.m. Youth Section 1:30 Beading Section	
20 10-4 Shop Open Palm Sunday First Day of Spring	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 Easter	28	29	30 10-3 Shop Open	31			

2016			April				2016
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 10-3 Shop Open 1:00-3:00 Day Light Section 7:30--Mineral Section	7 7:30 Archeology Section	8	9 10-5 Shop Open	
10 10-4 Shop Open	11	12 NO Show Committee	13 10-3 Shop Open 6:30 Gemstones & Faceting Section	14	15	16 10-5 Shop Open 10-12 a.m. Youth Section 1:30 Beading Section	
17 10-4 Shop Open	18 7:30 Lapidary Section	19 7:30 Paleo Section	20 10-3 Shop Open 7:30 Mineral Section	21	22	23 10-5 Shop Open	
24 10-4 Shop Open	25	26 7:30 General Meeting	27 10-3 Shop Open	28	29	30 10-5 Shop Open	

# 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)
- 2015 - 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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