



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

*The Newsletter of the  
Houston Gem & Mineral Society*

Volume XLVII—No. 11

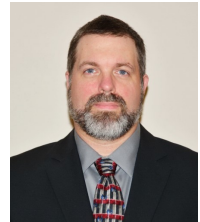
November 2016



## **President's Message** *by Paul Brandes*



Autumn is definitely in the air here in Southeast Texas. The mornings are getting cooler, the afternoons not quite as oppressive as the summer months. Soon, it will be time to complete all those outdoor chores that have had to wait since spring. Autumn also means something else for HGMS, our Annual Show at the Humble Civic Center November 11–13. I have no doubt that the Show will be another success, but to ensure that it is, the Show needs a dedicated group of volunteers. That is why I invite all members, new and seasoned alike, to visit the HGMS Web site and click on the little button on the front page labeled “**Volunteer Sign Up**” and fill out the page. I can guarantee our Volunteer Coordinator, Nancy English, will be glad you did. This is also a great opportunity to see the Show from a different perspective than that seen by a general spectator. If you have questions, please contact Nancy English or our Show Chairman Scott Singleton for more information.



Another sign that autumn is here is the rumblings I have been hearing concerning another Hill Country field trip and whether HGMS will have an encore trip this year. I can say that I have been in contact with our Hill Country guide, and he has agreed to lead a group of folks once again to some of his best mineral collecting sites. Since the trip will be after our Annual Show in November, this would be a great opportunity for new members who sign up at the Show to experience what real mineral collecting is like. This is also a great time for newer members to interact with experienced collectors within the Society and to learn the ropes, so to speak. Stay tuned; more details to come on this fantastic opportunity.

**Continued on page 4**

## **Upcoming General Meeting Program** *by Sigrid Stewart, 1st Vice President*

**N**ovember 22, 2016—Ron Talhelm: Angel Blue Calcedony, a New Lapidary Material

Voting for HGMS 2017 slate of officers

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

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

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*Copy is due for the December 2016 issue by Tuesday, November 15, 2016.*

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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>.

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One last item of note: nominations are currently open for our 2017 Officers—(President, 1<sup>st</sup> Vice-President, 2<sup>nd</sup> Vice-President, Secretary, and Treasurer) for 2017.

Due to circumstances, the Nominating Committee formation came a bit late this year (they were to be announced at the September General Meeting), but we do have a Committee. If there is someone you have in mind that you believe would be a good fit for any of these positions, please let your Section Chairman know and they will relay that information to the Committee. In addition, members attending the October General Meeting can also make nominations from the floor after the Committee's selections are presented. This is an important aspect of membership within the Society, so don't miss this opportunity to shape the future of your Society.



Dino Dig during 2015 HGMS Show



2015 Show—Terry Proctor showing hadrosaurus femur he unearthed in West Texas

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[facebook.com/KatyRockShop](https://www.facebook.com/KatyRockShop)

## Hazards of Mining

by John Anderson, *The Miner*

**T**he Miner wants you to know what a miner is not—a miner does not have an ordinary job just digging holes in the ground. What I want you to understand is that almost every hard rock miner experiences always-present dangers. Some of these dangers are physical, and some are health issues that can and do become a serious danger. People need to know about these dangers to appreciate the service that the miner brings to the health of our economy.

First, what is a mine?

1. A mine is a hole, a shaft, or a tunnel dug into the earth through which ore or minerals are extracted, Webster.
2. A surface excavation is where the earth surface is removed in order to extract ore or minerals—example, copper mining.
3. The ore or minerals being sought may be in a vein many thousands of feet deep—or wide—and can have many different tunnels running off the main shaft.
4. Often the levels of mineral follow a vein of enrichment like the gold mine in Africa which is over two miles deep. The gold there maintained a high concentration, which is why they kept digging. The big problem in mining at these depths is that the deeper you go toward the earth's core, the hotter it becomes. At two miles deep, the temperature is about 140 degrees F., which can fry an egg. In order for them to be able to mine at those temperatures, they bring down large amounts of "ice and of salt" to help cool their tools; otherwise they would burn their hands by touching anything. These, however, are unusually extreme mining conditions; they are unique to that location and are not found anywhere else in the world. I have worked at 2,700 feet in Idaho while mining silver which was a complex ore deposit and had other valuable minerals such as gold.
5. Usually when any mine begins mining the minerals that make up the ore body, they can increase its value by following a vein. Some areas, like the Calico Mountain's deposit of silver, just start and stop without a vein to follow. Nationally, digging deeper raises the mining cost by needing additional shoring and other expenses such as lifts and air being pumped to that level. The deeper you go, the hotter it gets.

I had experience in basic mine operations because my family, as far back as I can remember, always had some kind of mining claim. When I was attending college, our Geology class received an offer to do hard rock mining for the summer at the Sunshine Mining Company in the State of Idaho. Three of us took up the offer and went to work there. I immediately started work as a miner because I was familiar what mining was all about, but my friends had no experience, so they went to work as a "Mucker," which is a miner's or timber man's helper. I still was not prepared for the temperature in the high nineties and the extremely high humidity—both killers, especially at the 2,700-foot level of the mine.

You might expect there to be no sound in a deep mine, but they can and do have many different sounds. The mine sometimes had sounds like moaning caused as the timbers shifted or a pocket of some kind of gas exploded or from an explosion from mining being done on a different level.

The Internet shows that the Sunshine Mining Co. had the highest level of fatalities in the hard-rock type mining in the US. Many of the miners who had worked at the Sunshine Mining Co. for many years had fathers or a relative who were killed at that mine. As we walked toward an area to work, they would say there is where my father or my uncle was killed.

There are so many dangers when working underground: Handling dynamite is considered safe because it needs a primer cap to detonate—that is, if the dynamite is reasonably fresh. But when it is very old, it weeps little drops that deposit on the dynamite stick as nitroglycerin. These drops or beads can be shaken off, and when they hit a hard surface, they can explode. So old dynamite can be very dangerous.

Getting back to our story, I re-ask the question: Why would anyone in their right mind want to be a miner? I asked that same question a few years ago, but I still came up with about the same answer.

Many of the miners work in the mine because their father or a relative worked in the mine and might have pulled some strings to get them their job, especially when times are tough—which happens a lot in the mining districts.

A prevalent danger when working in hard rock mines is siliceous. Siliceous is caused by breathing in the dust created by drilling with a jackhammer. Water injected through the tip of the jackhammer helps control the dust and also helps cool the hardened steel tips of the hydraulic jack.

Your hearing can be damaged—even with ear plugs, the noise is excessive. Your eyes also suffer somewhat from the constant splashing of dirty water from the drilling operation. I had a pair of safety goggles that became cloudy when I started to drill, and I could not see through the lens. There is also an eye protection of fine screen that works until you have a splash of dirty water from your jackhammer. The hydraulic jackhammer that is commonly used weighs 90 pounds. If you slip when putting the 90-pound jackhammer against your drilling area, a big back injury can result.

Danger is everywhere—from a falling rock or even by stumbling in a darkened area. Remember—when working in a tunnel, lighting is supplied ONLY by the battery-powered light on your hard hat. Danger always exists from rocks or boulders that might fall from overhead.

When entering your next drilling area following the previous blast, pull down any loose rock in the area or anything that does not look stable. Use a “pricker,” a heavy steel rod with a slight hook. Three or four times I had tried prying at an area that just did not look safe, and I said to myself, “Just one more time.” A boulder about the size of a small VW car crashed about six inches from my feet. If I had been drilling, the car-sized boulder would have flattened me, and I would not be telling you this story.

There are three types of mining: open pit, hard rock, and coal mining. Coal mining uses a lot of items that hard rock mining does not, like tools and large-type skip-loaders, and they usually use small amounts of timber in shoring up and supporting the area where they are digging.

In addition to falling boulders, three other major things are hazardous to a miner's health: siliceous from hard rock, coal dust black lung, and mining for mercury and arsenic. And what is the least dangerous type of mining? Salt.

The Miner

## HGMS 2016 Annual Show Schedule

by Scott Singleton  
HGMS Show Chair



Are you all getting excited about our Annual Show? I hope so! We are anticipating a stellar group of dealers—many of whom are new this year—as well as a huge crowd of customers (I'd call 3000–4000 adults a large crowd). And that's not counting the 1500–2000 kids that come on Friday and spread throughout the weekend in our Scout Geology Merit Badge program. To properly accommodate all these adults and kids, the Show Committee is counting on the 500 or so members of the HGMS to volunteer for staffing all of the varied positions that need to be staffed to run a show as large as ours. Keep in mind that the HGMS hosts THE LARGEST ROCK SHOW IN TEXAS. That fact alone should make our membership proud to be associated with our organization, AND to volunteer to help run our show. If you would like to volunteer, go to the Web site and click on the "Volunteer Sign-Up" button at the top of the home page. However, if you are reading the electronic (digital) version of this BBG, you can click [here](#) to access and fill out the volunteer form. We hope to see ALL of you helping out at the show!

**Here is the show schedule for November:**

**Saturday, November 5:** Sargent Major Beverly Mace will ride herd over the clubhouse attic and all Sections and Show Committees who have material up there. IT MUST ALL BE PROPERLY TAGGED with the appropriately-colored sticker AND HAULED DOWNSTAIRS to the garage area in preparation for loading on the show truck. If you or your Section has material up there that needs to go to the show, DO NOT expect someone else to take care of it for you. Beverly stands behind her word that it WILL be left behind if you and your Section do not get it downstairs.

**Wednesday, November 9:** Our moving company (Firefighting's Finest Moving & Storage) will be at the clubhouse and start loading at **5:00 p.m.** We need some healthy bodies to assist in the loading of their truck. This task should not last more than an hour or so.

**Thursday, November 10:** Our moving company will deliver the truck to the back freight door of the Humble Civic Center (HCC) by **8:00 a.m.** They will unload it onto the loading dock at the back of the HCC. It is up to all of us (club members) to bring these supplies to their appropriate place in the convention center. This set-up will continue all morning (should be mostly done by lunchtime), so if you can't make it there by 8:00, don't fret—there is plenty to do throughout the morning. SO PLEASE VOLUNTEER TO HELP SET UP ON THURSDAY IF YOU CAN.

**Friday, November 11:** This is the first day of the show when serious collectors come to get the best material before it sells out. It also, quite coincidentally, is called **Kid's Day**, much to the dismay of those who are serious about their collecting (and Neal). Most of our members are working Friday, so it's usually tough to get volunteers to staff all of our areas. If you have Friday off, please volunteer to help out in some capacity. Show hours are 9:00 a.m.–6:00 p.m.

**Saturday, November 12:** Same hours as Friday (9:00 a.m.–6:00 p.m.)

**Sunday, November 13:** This is the last day of the show. The show doesn't

start until 10:00 a.m., but the Rolling Rock Club meets in our hospitality room at 9:00 a.m. If you haven't been to one of these meetings, you should come out and see what they're up to. The show ends at 5:00 p.m., and we begin packing up. Our moving company will have their truck at the back freight entrance and will be packing it with what we bring out to them.

It's a well-known fact that all of us are pretty exhausted by the end of a successful show, but WE NEED VOLUNTEERS TO HELP TEAR DOWN EVERYTHING AND MOVE IT TO THE LOADING DOCK. And then, as if that isn't enough, WE ALSO NEED SOME HELP TO UNPACK THE TRUCK WHEN IT GETS TO THE CLUBHOUSE AROUND 8:00 p.m. So, please volunteer to help us with the pack-up and the unloading at the clubhouse if you can. Nancy English has promised a fried chicken dinner with all the fixings for all who come to the clubhouse for unloading. This is a treat that is very much appreciated by all those who make it that long. We deserve it!

## Lapidary Section Sponsoring TWO Stone Competitions during 2016 HGMS Show *by Edward Clay*

**T**he **Single Stone Competition** entries will be turned in to Edward Clay on Friday, November 11, during the show, and they will be judged Saturday. Depending on their skill level (Novice, Advanced, or Master/Artisan), contestants will fashion one of the cabochons listed below. The cabochons should be made to **R.O.L.E. standards**. This document is available on the Web site home page in the Lapidary Section area. OR if you are reading this in the electronic (or digital) version of this newsletter, click [HERE](#).

**Novice**—a 30 mm by 40 mm from agate

**Advanced**—a 16 mm by 16 mm square from jasper

**Master/Artisan**—40 mm or larger crescent moon made with either Montana or Brazilian agate

The **Timed Competition** takes place during the show on Saturday and Sunday. Following signing up for the competition at the show, each Contestant will be given a stone and asked to make it into a cabochon to exacting specifications which will be announced when the competition starts.

The Lapidary Section of the Houston Gem and Mineral Society exists to help those interested in creating beauty by using the skills of cutting and polishing stones and shaping metal to make jewelry, as well as mentoring other skills like intarsia, stone setting, inlay, filigree, and carving. During the October meeting, we went over the guidelines of how to decide what cutting material to buy at the show—what to look for and what to avoid.

During the Lapidary meeting on November 21—which is after the show and is the final Lapidary Section meeting for 2016—we will ask members to bring in material and other things they bought at the show and hold a “Show ‘n Tell” session. I will bring a camera and will take close-range images of items like competition cabs and such for those wanting photos. Bring your laptop computer or memory sticks if you would like copies to take home. Everyone is invited to join us on the third Monday of each month (except December) at 7:30 p.m.

## How HGMS Entries Fared in the 2016 AFMS Editors' Contest

by Phyllis George  
HGMS Newsletter Editor

The AFMS (American Federation of Mineralogical Societies) has announced the results of their Bulletin Editors' Contest during the Breakfast with the Editors and Webmasters in Albany, Oregon on August 1, 2016. The HGMS entries are listed below along with their category and ranking. Remember—this is at the NATIONAL level, so these people are among the best of the best.

HGMS Entries Sent to the 2016 AFMS Editors and Authors Contest			
Rank	Name	Title	Month, 2015
<b>Large Bulletin</b>			
4	Phyllis George	The Backbender's Gazette	June & November
<b>Advanced Adult Article</b>			
6	Nathalie Brandes	Legendary Leadville, Colorado	February
11	Terrell Wm. "Terry" Proctor, J.D.	Hematite Art by God	October
14	Neal Immega	Collecting Petrified Wood at the Lignite Mine Near Jewett, Texas	November
<b>Adult Article</b>			
9	Chase Jennings	Collecting Microfossil Matrix	March
<b>Feature</b>			
2	Neal Immega	Extended Focus—Or How to Get More Depth of Field in Your Macro Photos Than the Laws of Optics allow	October

## Archaeology Section Upcoming Field Trip

Date: November 5, 2016

by Nancy L. Engelhardt-Moore

**T**here will be NO MEETING on our usual date, November 3.

Instead, please join us on a **November 5** field trip to tour the "Mummies of the World" exhibit at the Houston Museum of Natural Science (HMNS). Dr. Dirk Van Tuerenhout, HMNS Curator of Anthropology, will lead the tour. The group will meet at the Museum at 10 a.m. The Section will be offering discounted tickets to this event. Watch for further updates.

## Day Light Section

by Karen Burns

**T**he Day Light Section will have a Holiday Party on the regular meeting date, December 7. Everyone who comes to the shop to work on Wednesday also is invited. We will have a potluck lunch and will eat at 12:00 noon.

Guests whose names begin A–G please bring an appetizer or salad, letters H–M a side dish of vegetables, and N–Z a dessert. A recipe for four is sufficient. Day Light will provide the entrée of turkey and ham. The building will open at 10 a.m. as usual, and the shop is available for those who still have unfinished gift projects. If you need suggestions, e-mail me and I will help. No three-green-bean salads and no sweet potatoes, please. karen\_b\_75@yahoo.com

**AFMS President's Message**  
*by Ron Carman, President*  
*from AFMS Newsletter 11/2016*

**F**or the second time I am taking this position, and again I have some big shoes to fill (no offense intended, Matt!) I'm following some very capable presidents who have done much to help bring all the federations together and I will try to continue with this work. Many of you may know me from various shows around the country. For those who don't, I am a member of three clubs in the South Central Federation and I enjoy collecting minerals (although I appreciate fossils and gemstones too) and visiting shows all over. In the coming year, I hope to attend each regional federation convention and become better acquainted with the folks in all seven federations, starting with the Southeast Federation show in Marietta, Georgia in November. The coming year will have conventions all around the U.S., so I will have the chance to travel and visit places I haven't been before.



One thing Matt encouraged during his presidency, and I do also, is for all our members, no matter where you live, to get involved with your clubs and federations. Every club has numerous jobs it needs to fill, and the willing volunteers who fill them are the backbone of the clubs and federations. Also, if you see something that you think needs improving or could be done better, speak up and tell someone about it. And don't be afraid to do something to help improve things if needed.

Here's looking forward to a great year, and I hope to meet many of you in person.

Ron

*Editor's Note: Ron has been an HGMS member for many, many years—and he still is. He served as the HGMS President in 1981, and he was 1st V.P. the prior year.*

AFMS and Federation Shows							
	California Federation	Eastern Federation	Midwest Federation	Northwest Federation	Rocky Mountain Federation	South Central Federation	Southeast Federation
2016	Sept 16-18 Placerville, CA	October 21-23 Rochester, NY	August 19-21 South Bend, IN	AFMS July 27-31 Albany, OR	April 22 -24 Wichita, KS	May 7-8 Lubbock, TX	Nov. 18-20 Marietta, GA
2017	AFMS June 9-11 Ventura, CA	October 21-22 Bristol, CT	May 6-7 Brainerd, MN	May 19-21 Hamilton, MT	March 18-19 Albuquerque, NM	November 10-12 Humble, TX	October 20-22 Knoxville, TN
2018		AFMS	Oct. 6-7 Springfield, IL	April 27-29 Yakima, WA			

*Can't afford expensive entertainment?  
Join a Rockhound Club!*

## ROCKHOUNDING—THE PERFECT HOBBY

© 2016 TERRELL WILLIAM PROCTOR, J,D  
22 October 2016 8 23 P.M  
Houston, Texas

**T**o me, myself, I says, now what?  
I have a job just as I ought!  
But after work, what do I do?  
Have me some fun, just like you!

You must work some, to pay your bills.  
It takes that, so your life fulfills.

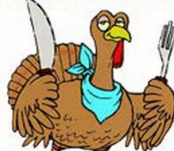
I looked for fun, of every kind.  
Most take money, as you will find.  
I checked many, and the cost of each.  
I had enough, to go to the beach.  
A friendly group, I had a hunch,  
A rockhound club, what a great bunch.

Some learned folks were in this group,  
But I learned now, I had to stoop.  
The things they all looked for on a trip  
required sometimes, a hammer on hip.  
Learning at great meetings and classes,  
gaining knowledge and using glasses.

Always there was help from some friend  
A tool I had not, she would lend.  
Some digs were close, others were far.  
None was left behind, always a car.  
In our group, someone knew the way,  
and landowners rights we do obey.

Fun you can have, with limited money.  
I didn't know this, isn't it funny.  
I now have a hobby, improving my life,  
relaxing, fun, and without the strife,  
You don't need a fortune for this fun.  
For treasures, fresh air, and your Hon.

**Gobble till ya**



**WOBBLE!**  
*Happy Thanksgiving!*

## Irene Offeman Passed Away

by Carolyn Rosenthal

Dear HGMS Friends,  
 It is with great sorrow to lose our dear friend Irene Offeman. Irene just turned 96 years old, and I have been seeing her periodically up until her death. Her son, Jimmy, here in Houston just informed me her visitation will be October 21 from 6-8 p.m. at the George Lewis Funeral Home at 1010 Bering Drive 77057. The service will be there the next day October 22 at 2:00 a.m. There should be a write up in the paper this Sunday. I've only sent this e-mail to a few of you guys, so please spread the word at the next meeting, and if possible through a club e-mail. Many thanks for getting the word out as we know how instrumental Irene was in the club as well as a great friend.

Thanks and best wishes to all.

Carolyn Rosenthal

*Editor's Note: Neal Immega forwarded this note to me, and he had an email blast sent out in which he asked people to send him stories of their memories of Irene. I plan to have space in the December BBG dedicated to memories of Irene, so please do send those to Neal or to me.*

## General Meeting Minutes

September 27, 2016

by Nancy English, HGMS Secretary

The meeting was called to order by Vice President Sigrid Stewart at 7:30 p.m. She thanked everyone for coming to the September 27, 2016 General Meeting.

Thirty-five members attended and one guest—Marisela Reed.

**Minutes:** Karen Burns moved to approve the minutes of the August 23, 2016 General Meeting as published in the October 2016 BBG and in the HGMS weekly email blast. Joan Riley seconded, and the membership passed the motion.

### Announcements:

#### Volunteer: Nancy English reported

**Trade Show:** The Trade Shows Committee is almost complete. We need one more member who has been to The Trade Show but has not been a dealer. So far, the members are Chase Jennings, Fred Brueckner, Steve Blyskal, and Sigrid Stewart.

**Show Dinner and Auction October 8, 2016.** We need volunteers to manage the kitchen, food arrangements, and cleanup. Scott will talk more about the event.

**Annual Show:** We have 100-plus 3-hour shifts to fill for the Show. That does not include the Demonstration tables and other Section tables. It does include Thursday's setup, Friday's School Daze, daily Dino Dig, Ticket Sales, Ticket Takers, Information Booth, Swap Area, Volunteer Sign-in, and Sunday's take down and unload at the Club.

Volunteers should contact Nancy English: nancyjodi@aol.com 832-722-5441.

**HGMS Web Site online sign up.** Phyllis George and Scott Singleton are

working on the online volunteer sign-up system. It should be available by the Show Auction and Dinner.

**Scholarship Committee:** We have two very qualified volunteers: Kathrine Kelly and Mary Ann Mitscherling. We only need one or two more. Contact Nancy: nancyjodi@aol.com, 832-722-5441.

**Show Committee—Scott Singleton:** We have a full **Show Committee meeting** on Tuesday, October 11, to go over final preparations. We are still looking for an Information Booth Chairperson. Scott said the **Postcard Labeling Party** was a great success. Twenty people started at 10:00 a.m. and had 5,000 postcards labeled by 11:15 a.m. Pizza, salad, and cake fed everyone.

**Show Dinner and Auction:** The Show will provide a meat main dish. Attendees, please bring side dishes and desserts. Contact Nancy or Clyde to let them know what you are bringing. Bring late auction donations before 5:00 p.m. Dinner starts at 6:00, and the Auction at 7:00 p.m.. The Board of Directors has approved BYOB—for beer and wine only—for this event.

**Phyllis George** distributed 2016 AFMS awards.

### Section Reports

In the interest of time, Vice President Stewart asked the members to look for Section Reports in the BBG, on the Web site, or by reading the weekly email blast from Jim Kendall for future Section meetings and presentations. If you are not on Jim Kendall's email list, please contact him at [kendal\\_ja@yahoo.com](mailto:kendal_ja@yahoo.com).

Vice President Stewart invited Section Chairs at this time to make any additional special announcements. None were made.

### Old Business

Also in the interest of time, Vice President Stewart asked the members to follow the progress of Old Business items from the September 6, 2016 Board meeting minutes and the August 23, 2016 General Meeting minutes as published in the October 2016 edition of the BBG.

### New Business

**The next Board of Directors meeting is Tuesday, October 4, at 7:30 p.m.**

**The next General Meeting is October 25, 2016 at 7:30 p.m. Alan Morgan** will present "The role of plate kinematics in modern geophysical exploration." Alan is an expert in the field of plate tectonic modeling and restoration.

**Drawing:** Steve Blyskal won the drawing for a Brazilian Agate Slab.

**Show 'n Tell:** James Wark brought a contact mechanism that had a silver-coated bar of copper with a small platinum rectangle at the contact point.

**Adjourn:** Karen Burns moved to adjourn the business meeting, and Terry Proctor seconded. The motion passed unanimously, and the meeting was adjourned at 8:00 p.m.

**Refreshments:** Provided by Nancy English.

**Vice President Sigrid Stewart** introduced Dr. Inda Immega who took us on a virtual journey to the Craters of the Moon National Monument in Idaho. We had a brief look at the geology, the volcanic features that are preserved there, and the strangely delicate ecology fostered among those rocks.

## Board of Director's Meeting

October 4, 2016

by Nancy English

X	President—Paul Brandes		Archeology Rep—Garth Clark
	1st Vice President—Sigrid Stewart		Beading Rep—Diane Sisson
X	2nd Vice President—Beverly Mace	X	Day Light Rep—Fred Brueckner
X	Treasurer—Rodney Linehan		Faceting Rep—Gary Tober
X	Secretary—Nancy English	X	Lapidary Rep—Phyllis George
	Former President—Ray Kizer	X	Mineral Rep—Mike Sommers
		X	Paleontology Rep—Mike Dawkins

**P**resident Paul Brandes called the meeting to order at 7:30 p.m. A quorum was present. One non-voting member also attended: Chase Jennings—Trade Show and Publicity.

### President's Comments:

President Paul Brandes and wife Dr. Nathalie Brandes just returned from the Annual Meeting of the Geological Society of America. Paul described the sessions as very informative; one in particular was new information about how gemstones and diamonds are formed. While in the area, they visited the Colorado School of Mines Geology Museum in Golden, and then on through Estes Park and Rocky Mountain National Park to take hundreds of pictures of the autumn foliage. On the way home, they went through New Mexico to the Trinity Site where the first atomic bomb was tested. It is only open twice a year.

**Approval of Previous Month's Board Minutes:** Beverly Mace moved to accept the minutes of the September 6, 2016 BOD meeting. Phyllis George seconded the motion, and it passed.

**Treasurer's Report:** Rodney Linehan emailed financials to all Board members in advance of the meeting. This is the time of year a lot of money goes out—insurance premiums and Show expenses, including the final payment for rental of the Humble Civic Center as the venue for our show.

### Office, Committee, and Section Reports

**Archeology Section: Thursday, October 6, 2016, 7:30 p.m. Dr. Garth Clark—The Decline of the Celtic Empire and the Rise of a Celtic Identity:** On April 7, Garth gave the first part of his talk, and this second talk will complete the story. In the middle of the 2nd century BC, the majority of Europe was controlled by Celtic tribes. The first talk discussed how the Celtic culture rose from its source in southern Germany and Austria to control much of Europe. This talk will explore how the great migrations of German tribes from the north and the expansion of the Roman Empire either conquered, absorbed, or pushed Celtic power to the fringes of their territory (or both). In the remaining strongholds, their culture continued to change—leading to today's Celtic identity.

**Thursday, November 3, 2016, NO meeting.** Instead there will be a **Saturday, November 5, 2016 Field trip to tour the "Mummies of the World" exhibit at the Houston Museum of Natural Science.**

**Beading Section: Saturday, October 15, 2016 at 1:30 p.m.** Making autumn leaves with beads. Bring any finished project you wish to display at the show.

**Day Light Section: Wednesday, October 5, 2016 at 1:00 p.m.** Attendees will be making a lacy-looking **silver plated stainless steel ring bracelet and learn a new chain maille pattern.** Materials will be available for \$3.00. Bring 2 needle nose pliers if you have them. The Section has some, but probably not enough for everyone.

**Education Committee:** Carrie Hart reported that Karen Burns' Byzantine bracelet class (September 24) was cancelled due to lack of students. No other classes are scheduled yet. She would love to hear of any Halloween, Thanksgiving, Christmas, fall, or winter project ideas. Particularly with an instructor name. Carrie requested a separate PayPal account for Education use. A separate account would allow direct class creation and report access for Carrie. She also appreciates the link on the Education page of the HGMS Web site that notifies her when someone signs up for a class.

**Gemstones & Faceting Section: Wednesday, October 12 at 7:30—**The program will be announced.

**Library Committee:** The Librarian has set a goal to work on the library twice a month.

**Mineral Section: Wednesday, October 5 at 7:30 p.m. The Agate Expo 2016 Steve Blyskal and Sigrid Stewart:** Steve is scheduled for outpatient sinus surgery Tuesday morning and may not be recovered enough to be present. Sigrid will present if Steve is not able to do so. The Mineral Section members will have the option that night to delay the talk and spend the evening preparing materials for the Section booth at the upcoming Annual Show in November. With three members in the Swap Area and one as a dealer, it is important for other members of the Section to volunteer at the Section Booth. We also need volunteers to assist in setup and take-down of the booth and the Fluorescent Exhibit.

**October 19 and November 2** meetings will be **Work Sessions in preparation for the show.**

**November 16** will be to **Show off your purchases** from the Show and to review impressions of the **mineral** dealers and of the show in general.

**Paleo Section: Tuesday, October 18, 2016, at 7:30 p.m.** Neal will teach members how to use fossil prep equipment: trim saws, flat laps, air scribes, air abrasives, and a big chisel. Mike Dawkins reported that the Paleo Section Midlothian Field Trip scheduled for October 29 is full.

**Publicity Committee:** Chase Jennings reported that we have 1329 followers on Face Book. That is 50% more than last year before the Show. He is making plans for recruiting Show goers.

**Shop News:** The shop will be open on October 8 because Gary Anderson is back.

The **Lap Plate** rusts when not properly cared for after being used. When finished with the lap plate, turn off the water, spin it dry, and oil it. Please take more care.

**Youth Section:** The next meetings are on **October 1 and October 15 at 10:00 a.m.** October 15 and November 5 are the last Youth meetings

before the November Show. Libby Guynn needs any youth member who plans to enter a stone in our annual competition to turn them in preferably by October 15 if possible.

**BBG Editor:** Phyllis George reported that the deadline to send in articles and other pertinent information for inclusion in the November BBG is October 12, 2016.

### Old Business

1. **Future Trade Shows:** Nancy English has attended Section meetings recruiting any active HGMS member who has attended the Trade Show and who would be willing to be on the Trade Show Committee. She will be attending more meetings this week. Contact Nancy English at nancyjodi@aol.com if you are interested in developing guidelines for the Trade Shows of the future. The next Trade Show is scheduled tentatively for January 28, 2017.
2. **Web Site:** Phyllis George is working on the volunteer online sign-up program with the vendor.
3. **Security System:** Garth Clark did not attend, so there was no report.
4. **Show Committee:**
  - a. **Show Committee General Meeting**—Tuesday, October 11. All committee members will be present to wrap up the key area plans.
  - b. The Show Postcard Labeling Party—Saturday, September 24 10:00 a.m.—was a huge success. Twenty people came to label the postcards. We were finished by 11:00. There was plenty of pizza, salad, and dessert for everyone to enjoy. According to Beverly Mace, the postcards and member tickets have been mailed. Members should send \$70.00 (\$7.00 per ticket) or return the tickets to HGMS.
  - c. The **Pre-Show Committee Dinner and Auction**—Saturday, October 8 at the Clubhouse. Clyde McMeans will look after the October 8, 2016 Pre-Show Auction food business. He will bring the entrée meat (beef brisket and/or ham). Everything else will be pot luck. The table in the middle shop room will be set up for main dishes. Dessert tables will be set up in the garage. Dinner will start at 6:00. This year the Board has approved BYOB for beer and wine. **Late donations** for the auction should be brought to the Clubhouse no later than 5:00 p.m. **The Auction will start promptly at 7:00.** Dr. Neal is in charge of the auction, and it is going to be first-rate. We have prime agate slabs and rough, a dual shaft buffer, spin caster, facet topaz and amethyst, Mexican Lace Agate, good jade in slabs and blocks, and an epidote slab sprinkled with native copper. Auction material will be set up in the main meeting room. Nancy English will ask Jim Kendall to send an e-blast letting people know that they can pay by credit or debit card and also about the BYOB addition. Nancy English has been attending all the Section meetings in September to recruit volunteers for The Show. She has recruited a few and will continue to attend the Section Meetings in October, ever hoping

for a functional online volunteer application form before October 8.

5. **Copier/Printer Status:** It is still available for anyone willing to cart it away.
6. **Subscriptions:** Rodney Linehan contacted the *Rock 'n Gem* magazine to ensure we are paid up and will receive only one subscription. Since our club library is not available, magazines cannot be accessed at the present time. President Brandes will ask our Librarian, Dr. Nathalie Brandes, for a temporary solution.
7. **Scholarship Committee** Two very qualified volunteers, Kathrine Kelly—an educator and Mary Ann Mitscherling have volunteered. We only need one or two more. Please let Nancy know. nancyjodi@aol.com.
8. **HGMS Annual Christmas Party and Auction** possible alternate restaurant venue. Mike Dawkins reported that it is too late this year to find a different location for it. He will continue to research local meeting halls.
9. **Building Safety:** Volunteers for the ADA-compliant research have not come forward. Volunteers would assist in researching the regulations to see what improvements are needed. Then costs can be determined. Potential fire hazards in the Clubhouse will also be evaluated. The President continues to explore the building for obvious needs.
10. **Code of Conduct:** The BOD considered adopting a code of ethics. Discussion had been tabled until October. While work on a Code of Conduct is just beginning, some basic rules might be:
  - Treat members, guests, and officers with politeness and respect.
  - Refrain from aggressive or abusive behavior.
  - Avoid any kind of sexual harassment or mistreatment of minors, and be aware that innocent adult behavior may be all too easily misconstrued.
  - Be sensitive to the diversity of political opinions and religious beliefs, of race and sexual orientation, and do not engage in disruptive conversations while representing HGMS in public.

A frank discussion ensued. The Board will revisit this in November.

### New Business

1. **Nominating Committee:** Section Representatives were tasked to find five members to be on the Nominating Committee. The Committee will present the new Slate of Officers to the membership at the October 25 General Meeting. Members will vote on the nominees at the November General Meeting.
2. **Next Board of Director's meeting: November 1, 2016, 7:30 p.m.**
3. **Next General Meeting: October 25, 2016 at 7:30 p.m.** Program to be announced.
4. **Refreshments for General Meeting:** With the exception of a few meetings, Nancy English has provided refreshments for the General Meetings for the last three years. She asked other Board

members to volunteer for the October and November meetings (there is no General Meeting in December), and for the 2017 meetings. Beverly Mace will bring refreshments for October.

**Adjourn:** Phyllis George moved to adjourn. Fred Brueckner seconded. The motion passed, and the meeting adjourned at 9:30 p.m.

## Bench Tips

by Brad Smith

See all Brad's jewelry books at [Amazon.com/author/BradfordSmith](https://www.amazon.com/author/BradfordSmith)  
[www.BradSmithJewelry.com](http://www.BradSmithJewelry.com)

### TEMPLATES

Whenever I have to make more than 2–3 exact copies of anything, I think of making a template. A template lets me easily draw the shape of an item. Art stores sell templates for common shapes like circles, ovals, hearts, etc. Other sources would include [cooltools.us/](http://cooltools.us/) and [kingsleynorth.com/](http://kingsleynorth.com/).



*HGMS Editor's Note: the HGMS Lapidary Section also sells six different templates—all with shapes not already on the commercial templates. Check the Lapidary Section on the HGMS Web site: [www.hgms.org](http://www.hgms.org) (or click [here](#).)*

For nonstandard shapes, it's easy to make your own template. Simply cut the shape out of sheet plastic or thin sheet metal. My preference is brass. I carefully lay out the shape using a steel ruler, a set of dividers, a scribe, and a fine center punch.

One example is the brass template in the pic below that lets me quickly trace the design of ginkgo leaf earrings onto silver sheet. Another is the nickel template which makes it easy to drill a pattern of holes for pin inlay into wooden handles.

### DENTAL TOOLS

A ready source of free tools is your local dentist. Dental picks can be reworked into wax tools or be straightened and sharpened to make a stylus for marking and layout. The steel in these tools is high quality, and the handles are designed for comfort.

A special note however—If you want to modify the shape of the tool, don't try to just bend it with pliers. Working this alloy of steel while it's cold will cause it to snap. Changing its shape can only be done when it's hot. I work it like a blacksmith. Prop your torch up on the bench so that you can use both hands for the work. Have a hammer and bench block ready. Heat the tip red hot, and hammer it straight or bend it with pliers.

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

And don't forget to ask your dentist for some of the cutting burs they throw out. These are useful for a variety of things. It's best to call a week or two before your visit and ask the dentist or hygienist to put some of these tools aside for you. It's good practice also to ask that they run them through the



# Pietersite

by John Bennett  
from *Gritty Greetings* 10/2016

**P**etersite (pronounced PEE-tur-site) was discovered by Sid Pieters while visiting a farm in Namibia, Africa in 1962. The stone was heavier than expected, so he took it back to his shop to learn more about it. When he cut the stone open and saw the colors inside, he is quoted as having said, *"Of all the gemstones I have seen in the world, this is one of the most beautiful."*

In 1993, a variety of pietersite was discovered in the Henan Province in China, although it wasn't until 1997 that Chinese pietersite began appearing on the market. Partially due to the fact that pietersite is found in only two places in the world, it is a relatively expensive stone with small cabochons selling for several hundreds, or even thousands, of dollars. Pietersite beads sell for about \$20 per gram while the larger, rough pieces can easily cost as much as \$100 a gram.



**Rough Namibian Pietersite**



**Namibian Pietersite Cabochon**

Pietersite is a colorful aggregate of hawk's eye and tiger eye. Namibian pietersite has a bluish color while the pietersite that is found in the Henan Province of China has more of a reddish-brown hue. Both colors of pietersite contain swirls and streaks of crocidolite that can be in shades of gold, orange, yellow, or even fiery red. Crocidolite is responsible for the streaks of light, or chatoyancy, in both pietersite and tiger eye. While the crocidolite in tiger eye is predominately parallel, the crocidolite inclusions in pietersite randomly differ in density and alignment causing areas of varied, intense color. The crocidolite fibers in pietersite are eventually replaced by quartz which causes

white and clear areas to be interspersed with its already chaotic colors. Pietersite is also sometimes used as a term to describe brecciated tiger eye.

Pietersite is a transparent mineral with a silky luster that can be intensified by polishing. It is another variety of quartz, so it is one of the harder minerals with a 6.5 to 7 on the Moh's scale although the different areas of chatoyancy can break apart if the stone is struck against a solid surface.

Pietersite is most often cut into cabochons that capture the beauty of its chatoyancy, although care must be taken to ensure that it is cut parallel to the crocidolite fibers. The crocidolite in pietersite is a mildly hazardous material. The Center for Disease Control recommends wearing long sleeves, glasses, a mask to filter out dust particles, and adequate ventilation when cutting pietersite or tiger eye. Getting crocidolite dust in your eyes can cause redness and irritation. It will cause mild coughing if inhaled, and it will dry exposed skin.

The vibrant colors of pietersite work well for both men's and women's jewelry. Cabochons can be used for pendants, bracelets, rings, or earrings. The stones used in earrings, because of the smaller size needed, will usually lack the combinations of banding and chatoyancy of larger specimens, so that

is something to keep in mind when cutting. Pietersite looks equally good whether set in gold or silver-tone settings. It is also a nice stone for wire-wrapping. Pietersite jewelry is available from some stores; however, the stones in mass-produced jewelry are generally common looking. If you want to display the true beauty of pietersite, you are better off creating your own.



**Chinese Pietersite Rough**

chemicals will change the color to a dull gray. Simply wiping the stone with a soft cloth will take care of most of the cleaning that needs to be done. Also, avoid exposing pietersite to temperature extremes. There have been cases of high heat ruining the color of pietersite pendants.

Under an ultraviolet lamp, pietersite will glow with a moderate to strong fluorescence, either green or white.

There is another mineral available that is marketed as Arizona pietersite. Actually, pietersite from Arizona is a form of serpentine containing chrysotile fibers. The serpentine can be either green or brown with gold or silver chrysotile inclusions. It is an attractive stone, but it is not really pietersite.

There is no documented evidence of pietersite that has been treated or enhanced in any way. Pietersite has yet to be synthesized. It still isn't a commonly known mineral.

**Pietersite in History:** There are no historical references to pietersite as it has only recently been discovered.

## Mystical Properties of Pietersite

Pietersite is sometimes called "Tempest Stone" because of its dark blue color and bright golden flashes reminiscent of stormy, lightning-filled skies. Pietersite removes negative energy and emotional turmoil. It will clean your aura, much like a rainstorm will clear the air. It helps to calm pets and people during storms, protects you from the elements as well as guarding your home or business against storm damage.



**Carved Chinese Pietersite Angel**

Pietersite shields against the negative effects of technology, especially if you spend a lot of time on a computer or use your cell phone often.

It brings you the power to overcome your tension and hardships. Its energies will increase your focus and personal will. Pietersite will enhance your clarity of thought and encourage intuition.

Pietersite will aid in bringing pent-up feelings to the surface, allowing you to remove negativity from conflicts and begin the process of healing your emotions. It also gives you the will to take the steps toward new goals.

This stone can help to cure various addictions and increase your confidence in yourself. Even if you have failed to get over an addiction many times, a piece of pietersite carried or worn can grant extra insight in the underlying reasons for the addiction and increase your resolve to "kick the habit."

Pietersite may even relieve eye infections. Some people carry it to improve their long-distance and night vision.

Pietersite stimulates your body by providing extra energy and strength. It is a useful stone for the nervous-system as it stimulates and strengthens the nerves and brain. It also can relieve headaches and neutralize diseases of the nervous system.



**Multi-Color Pietersite**

Pietersite grounds your body to the etheric realms, helping to regulate your physical energy. This will enhance meditation and aid in the use of your telepathic powers. Pietersite even helps to balance your hormones, temperature, and blood pressure.

Pietersite is very useful for those creative people who don't have enough confidence in their artistic abilities. It increases attention to detail and

instructions, as well as carrying the potential to impart the clarity of vision necessary to see the true beauty of life and the world around us.

Pietersite is said to hold the "keys to the kingdom of heaven." It is a great stone for spiritual seekers studying the philosophies of mysticism. It helps you to visualize your thoughts with greater clarity, allowing you to gather your disparate thoughts, and understand the connections between them. The blue shades of color that are found in Namibian pietersite help us to experience trust, faith, patience, and respect. Darker blue stones will increase the respect and compassion for others that we have within ourselves. They will teach us discretion, and honor, as well as encouraging us to act more charitably and to focus our efforts on service to others.



Dark gold color energy is dominant in pietersite. It provides us with the ability to lead projects and organizations. Stones with the darker shades of gold are the ultimate power crystals. They will impart authority, control, influence, leadership, and success.

Pietersite is an excellent stone for those who are interested in interdimensional travel, vision quests or shamanic journeying. It works with your body during meditations and acts quickly to access a high state of altered awareness.

### Arizona Pietersite Cabochon

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## ELECTRICAL SAFETY

by Marty Hart, AFMS Webmaster

from AFMS Newsletter, 12/2004–01/2005, via The Shin-Skinner News, 01/2005, via The Quarry 09/2016

**M**ost lapidary work involves the use of electric motors, and usually also includes water. This can lead to some very dangerous situations. Not only does water make the human body more electrically conductive, it also manages to work itself into electrical components, providing additional seriously dangerous electrical current paths. Then compound all of this with some of the equipment being very old, home built, and possibly not well maintained.

Two very simple things can be done to improve the situation: Providing proper electrical grounding and using a GFCI (Ground Fault Circuit Interrupter).

**Electrical Grounding:** Most modern electrical equipment now includes an electrical plug that has 3 prongs with an electrical ground. There are some limited exceptions where 2-prong groundless connections are currently manufactured, but a lot of older equipment was built before grounding was a standard. Sometimes equipment may have been built with an electrical ground, but someone wrongly cut it off the plug because it did not plug into the 2 prong electrical outlet that was in an older house.

The electrical ground provides a safety shield around electrical components. To accomplish this task, the electrical ground is connected to a conductive surface that is between the electrical components and the person using the equipment. This conductive surface would include such items as the motor's chassis and other electrical enclosures. If an electrical fault creates an electrical path to this grounded surface, the electrical charge is carried to ground, rather than to the operator. If the electrical fault is highly conductive, then it will probably trip the household circuit breaker, further protecting the operator from harm.

The electrical ground is a safety conductor that does not normally carry any electrical current. Just because the equipment works, that does not mean the ground is connected. The electrical ground must be continuous from the power distribution to the house, all the way to the point of use. A break in this circuit defeats the ability of the ground to protect the operator from electrocution. Just because the outlet has the 3rd prong electrical ground, it does not mean that it is connected, especially in older homes where it was originally wired with only two conductor outlets. A small tester can be bought for only a few dollars that plugs into the outlet to check a lot of common wiring errors. To use the tester, simply plug it into the outlet and see which lights light up. If you ever feel even a slight tingle from a piece of equipment, it probably means that there is an electrical fault, and the ground is not properly connected. You should immediately have the situation corrected before using that equipment again. Don't forget to also check the electrical outlet.

**GFCI:** A GFCI is a very sophisticated but simple to use, inexpensive device. A GFCI measures the current that is being sent to the device (hot wire), and the current that is returning from the device (neutral wire). The GFCI compares these currents and if there is even a very small difference, the GFCI will trip to disconnect the appliance from the electrical circuit. This

difference in current represents a current fault through a ground path. The magnitude of this small difference is only about 0.005 Amps, or about 0.5 Watts. Not only will a GFCI trip with such small current faults, it does this in about 0.025 seconds. In comparison, the circuit breaker protecting the appliance circuit may likely be rated at 20 Amps. The circuit breaker would therefore require about 4,000 times more current to trip! This could easily mean the difference between life and death.

The GFCI is such an inexpensive device that it continually saves lives. I have routinely seen GFCI outlets for about \$10, and on sale for as low as \$5. GFCIs are available in many forms. The most common is a duplex outlet that is permanently wired into the house wiring. They are also available as a combination with a circuit breaker, and as a simple plugin device that goes between the outlet and the powered device. Many appliances now even come with a GFCI built into the device's power cord.

Even though the GFCI can protect people from many, if not most household electrocutions, it cannot protect from all situations. For instance, if a person becomes connected to both the hot and neutral wires without any ground current path, the GFCI cannot detect a problem and will not trip. A GFCI can provide protection with even a 2-wire connection if the fault current flows through an alternate path. This is because the GFCI measures the currents in the hot and neutral wires. GFCI protection is in addition to, not as a substitute for the grounding requirements and proper safety procedures.

The U.S. Consumer Product Safety Commission recommends the use of a ground fault circuit interrupter (GFCI) with every power tool to protect against electrical shock hazards.

Be sure your shop is safe for you and others. Proper safety doesn't have to cost a lot, unlike the lack of proper safety.

## Forensic Mineralogy

by Dr. Vivien Gornitz

*from: The Bulletin of the NY Mineralogical Club, 05/2005; via The Rockhouser, 03/2014, via Pick & Shovel, 09/2016*

**T**he popularity of TV shows like CSI has spurred a growing interest in forensic science. Soil and mineral particles found at crime scenes can offer vital clues, and therefore, mineralogical analysis has become an important component of criminal investigation.

On a rainy fall day in 2002, two men sitting in an old black pickup truck were shot; one killed, the other badly wounded. The survivor pointed the police to a known drug dealer who lived in Alexandria, Virginia, 75 miles east of the crime scene. The cops kept an eye on the suspect, and when he was seen about to wash his Jeep of mud and dirt, they arrested the man and seized his vehicle for telltale evidence. A preliminary examination of mud on the Jeep suggested that it had been near water. Microscopic observations further revealed signs of cross-bedding, well-rounded sorted grains (indications of water-deposited sediments), and more importantly, the same set of minerals, including azurite and malachite, found at the murder site. It turns out the murder occurred only a half mile from a rock quarry where copper, granite, limestone, and other rocks and minerals were mined. Traces of azurite and malachite were also present in mud samples from the crime scene. The shooter is now in prison; the surviving victim was blinded in one eye.

In another murder case, bentonite, a type of clay mineral, provided the crucial clue that helped solve the crime. A man was shot three times while hunting with his wife in the mountains of Colorado in 1995. His wife's ex-husband had also been camped in the general area at the time, and therefore became a prime suspect. However, he claimed that he was out hunting with his boss far from his campsite, and furthermore he insisted his .308 rifle with cartridges had been stolen. A bullet and shell case of that caliber had been found near the body, but searches for the murder weapon had turned up nothing. The investigation continued over several summers. In a conversation during the extended search, one of the investigators happened to mention to his fellow searchers that a cattle pond near the ex-husband's camp was lined with bentonite in order to prevent seepage of water from the bottom. Another investigator later remembered seeing dried mud on the wife's clothing and her remark that she stepped into a bog near camp. Mud samples were collected from the cattle pond, another nearby pond, the bog "near the camp," and mud scraped off the wife's hunting overalls, which she had worn that day. Only the mud containing bentonite from the cattle pond matched that found on the wife's clothing. She had apparently been to the ex-husband's camp, stolen the rifle, and then killed her husband. The woman is now serving a life sentence without parole.

Laboratory analyses are also indispensable in solving many mining scams. Typically, a gullible investor will be told of "secret processes" that can detect gold, silver, platinum, and other precious metals that otherwise would not be detected by fire assay, the standard analytical method of assaying ores. The "inventor" is usually very tight-lipped about details of his process, "fearing that rival companies or competitors will steal his trade secrets." Often such scams are backed up by shady assayers who find much larger quantities of precious metals in the ores than those found by reputable labs, and who furthermore claim that they are "correcting" analytical errors made by other instruments. One investigation showed that if iron were not removed from the sample prior to analysis, the analytical instrument would give an erroneous reading for the platinum group metals. As an example, a U.S. nickel was analyzed without taking the proper precautions. Had it been a "sample," it would have been reported by the shady assayer "to contain 11.5 troy oz. of platinum, 5.63 troy oz. of palladium, and 5.314 troy oz. of iridium per ton." A U.S. nickel is actually composed of copper with some nickel.

Minerals may also figure in poisoning cases. For example, a small child in the state of Washington became seriously ill from arsenic poisoning. Forensic examination of the child's home turned up a number of mineral specimens, apparently left in the house and yard by a former occupant who was a mineral collector. Among the specimens were arsenopyrite and iron arsenic sulfide. Foul play was ruled out. The child had evidently been chewing and swallowing this mineral. Case closed!

#### References:

- Abbot, D. M., Jr., 2005, Investigating Mining Frauds., *Geotimes*, Jan. 2005, p30-32
- Murray, R. C., 2005, Collecting Crime Evidence from Earth, *Geotimes*, Jan. 2005, p18-22
- Sever, M., 2005, Murder & Mud in the Shenandoah., *Geotimes*, Jan. 2005, p24-29

**Show Time 2016–2017**

- October 21-23 Austin, TX Austin Gem & Mineral Society  
900 Barton Springs Rd.; [www.gemcapers.com](http://www.gemcapers.com)  
[showchairman@austingemandmineral.org](mailto:showchairman@austingemandmineral.org)
- October 29-30 Glen Rose, TX Paleological Society of Austin  
Somervell Expo Center; Hwy 67
- October 29-30 Oklahoma City, OK Oklahoma Mineral & Gem Society  
Modern Living Building;  
3001 General Pershing Blvd  
Oklahoma State Fairgrounds
- November 6-7 Midland, TX Midland Gem & Mineral Society  
Midland Center
- November 5-6 Amarillo, TX Golden Spread Gem & Mineral Society  
Amarillo Civic Center, 400 S. Buchanan St.  
[kendrick@amaonline.com](mailto:kendrick@amaonline.com)
- 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  
[www.hgms.org](http://www.hgms.org); [showchair@hgms.org](mailto:showchair@hgms.org)
- November 19-20 Mesquite, TX Dallas Gem & Mineral Society  
Rodeo Center Exhibit Hall; I-635&Military Pkwy  
[dallasgemandmineral.org](http://dallasgemandmineral.org)
- December 2-4 El Paso, TX El Paso Mineral and Gem Society, Inc.  
El Maida Shriners Hall, 6331 Alabama  
[L1155@yahoo.com](mailto:L1155@yahoo.com), [www.epmgs.com](http://www.epmgs.com)
- December 3-4 Leesville, LA DeRidder Gem & Mineral Society  
West LA Forestry Fair Grounds  
276 H. M. Stevens Blvd.  
[deridder.rockandgem@gmail.com](mailto:deridder.rockandgem@gmail.com)

**Show Time 2017**

- January 21-22 Fredericksburg, TX Fredericksburg Rockhounds  
Lady Bird Johnson Park; The Pavilion  
[gideonjim1@gmail.com](mailto:gideonjim1@gmail.com)  
[tgabrish@gmail.com](mailto:tgabrish@gmail.com); [www.OMGS.org](http://www.OMGS.org)
- January 27-29 Tyler, TX Fredericksburg Rockhounds  
Lady Bird Johnson Park; The Pavilion  
[gideonjim1@gmail.com](mailto:gideonjim1@gmail.com)
- February 25-26 Pasadena, TX Clear Lake Gem & Mineral Society  
Pasadena Convention Center  
7902 Fairmont Parkway  
[temp3@mflan.com](mailto:temp3@mflan.com); [www.clgms.org](http://www.clgms.org)
- March 4-5 Big Spring, TX Big Spring Prospectors Club  
Howard County fair Barn; Rodeo Grounds  
[lolabellelamb@yahoo.com](mailto:lolabellelamb@yahoo.com)
- April 8-9 Abilene, TX Central Texas Gem & Mineral Society  
Abilene Civic Center; 1100 N. 6th St.  
[kmcdaniel23@suddenlink.net](mailto:kmcdaniel23@suddenlink.net)  
<http://www.new.calichetimes.com>

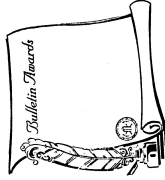
2016		November					2016
Sun	Mon	Tue	Wed	Thu	Fri	Sat	
		1 7:30 Board Meeting	2 10-3 Shop Open 1:00-3:00 Day Light Section 7:30--Mineral Section	3 7:30 Archeology Section	4	5 10-5 Shop Open 10-Noon Youth Section	
6 10-4 Shop Open  Daylight Saving Ends	7	8 7:30 Show Committee	9 10-3 Shop Open 6:30 Gemstones & Faceting Section	10	11 HGMS Annual Show Kids' Daze	12 HGMS Annual Show Shop Closed	
13 HGMS Annual Show Final day Shop Closed	14	15 7:30 Paleo Section	16 10-3 Shop Open 7:30--Mineral Section	17	18	19 10-5 Shop Open 10-Noon Youth Section 1:30 Beading Section	
20 10-4 Shop Open	21 7:30 Lapidary Section	22 7:30 General Meeting	23 10-3 Shop Open	24 Thanks-giving	25	26 10-5 Shop Open	
27 10-4 Shop Open	28	29	30 10-3 Shop Open				

2016		December					2016
Sun	Mon	Tue	Wed	Thu	Fri	Sat	
				1 7:30 Archeology Section	2	3 10-5 Shop Open 10-Noon Youth Section	
4 10-4 Shop Open	5	6 7:30 Board Meeting	7 10-3 Shop Open 1:00-3:00 Day Light Section Holiday Party 7:30--Mineral Section	8	9	10 10-5 Shop Open HGMS HOLIDAY PARTY!!	
11 10-4 Shop Open	12	13 7:30 Show Committee	14 10-3 Shop Open 6:30 Gemstones & Faceting Section	15	16	17 10-5 Shop Open 10-Noon NO Youth Section 1:30 Beading Section	
18 10-4 Shop Open	19 NO Lapidary Section	20 NO Paleo Section	21 10-3 Shop Open NO Mineral Section First day of winter	22	23	24 10-5 NO Shop Christmas Eve 1st Day of Hanukkah	
25 10-4 NO Shop Christmas Day	26	27 NO General Meeting	28 10-3 Shop Open	29	30	31 10-5 NO Shop New Year's Eve	

# 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)  
2016 - 1st (Large)

#### AFMS

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



**DATED MATERIAL - PLEASE DO NOT DELAY !**

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