



The **BACKBENDER'S GAZETTE**

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

Volume XLVI - No. 10

October 2015



President's Message

by Raymond Kizer

Summer—especially August—is a fine time to be somewhere other than Houston. August in Houston can be miserable, temperatures in the upper 90s, thunderstorms, and oppressive humidity. This makes August the perfect time to get out of Dodge and take a Field Trip.

For almost 18 years now, I have been making a nine-hour journey out of Texas to attend an annual event near Hot Springs, Arkansas. A running group I know rents an old CCC-built Girl Scout camp near Lake Ouachita to hold their event. I'm not really drawn to the running aspect much anymore as my knees are almost totally shot. No, it's the chance to take a couple of newbies out collecting at my favorite quartz mine.

Over the years, I have visited all the various mines and pits located near Mount Ida, but I find them to be less productive than my old standby, Miller's Mountain operated by Coleman's. Now it's a great place for first-timers to find clear quartz points and clusters, but in August, it can get up to 100 degrees on the top of the mountain. That's not exactly the best place to find relief from the heat.

Seeking cooler days, crisper nights and the potential for some awesome additions to my mineral collection, I chose to make it different this year—

Continued on page 4



Upcoming Programs

by Paul Brandes

HGMS 1st VP

September 22, 2015: **Frank Roberts from Baringer Hill Minerals** will be giving the presentation on Hill Country Mineral Collecting.

October 27, 2015: Rose Cleveland will share the highlights of her trip to Australia to hunt for opals.

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

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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.

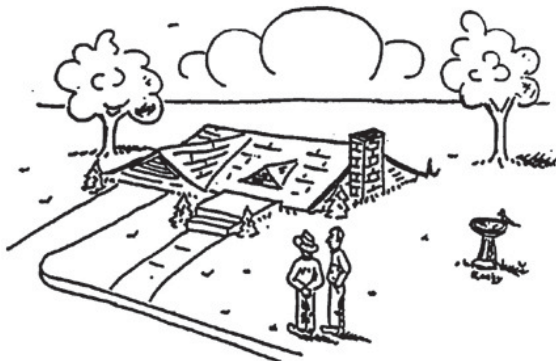
All meetings are held at the Clubhouse which is located at 10805 Brooklet near the intersection of Highway 59 (Southwest Freeway) and Sam Houston Parkway (Beltway 8). See the calendar inside the back page for when the different Sections meet. The General Meeting is the fourth Tuesday of each month at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

traveling some 1,500 miles north to the Upper Peninsula of Michigan to attend Keweenaw Mining days. Although I have collected in the U.P. before, it had been over thirty years earlier and was done on my own. This was my first time to attend a large sponsored event.

The A.E. Seaman Mineral Museum on the campus of Michigan Tech University was offering the chance to collect on seven historic Michigan copper mines. Many of the copper mines' poor rock piles are accessible to surface collecting during the summer months. If you have done your research and know where they are located, you can take your chances and possibly find something everyone else has missed. It can happen if you are really, really lucky, but these rock piles have been worked over for years by collectors and locals alike. The Keweenaw locals make extra cash during the summer selling their finds along the edge of the road to tourists.

The advantage of the Keweenaw Mining Days event is they use an excavator to prepare the piles ahead of time. They turn over a large portion of the pile so that you can get to exposures below the depth already searched by surface collectors with metal detectors. They also can get you on mine dumps that now are on private property. I took my friend Jill, a first-time collector, and she made some good finds. Beginner's luck—I love it. After she got the hang of what we were looking for, she did well. And it always helps to bring someone along who isn't red/green colorblind like myself. I kept asking her if this or that piece of rock I had picked up was green. She loved finding the small sheet coppers and float nuggets.

Now if you are hoping for alone time, this event is not the place. Picture 50 collectors from all over the country, all with metal detectors, waiting for the 9:00 a.m. starting horn to get on the piles. It's a bit crowded at the beginning, but people spread out after a few minutes as they start to dig out the targets identified by their metal detectors. If you have never collected in the Keweenaw, love mining history, and want to get out of Houston's heat, I highly recommend this trip. It was in the low 70s during the day and cooled off to the 50s at night. As an added bonus, the air is totally crisp and clean in the U.P.



***I Knew Ole Rocky Was Getting
Too Many Rocks In His Basement!***

by Rocky West in the T-Town Rockhound 7/61
via Beehive Buzzer 10/98 & others

Extended Focus—Or How To Get More Depth of Field in Your Macro Photos Than the Laws of Optics Allow

by Neal Immega

Ph.D. Paleontologist

Member of the Houston Gem & Mineral Society

You can cure the depth of field limitation in macro photography by taking a number of pictures and just extracting the parts that are in focus. Seems simple but would be a lot of work with scissors. Fortunately, there are computers and people who write and distribute the programs for free. I am talking about the British program **CombineZP** written by Alan Hadley. I am a great fan of this program. It has not been updated since Windows XT, but it runs fine on Windows 7 and probably Windows 8. I have written about it before, but I find it is still unknown in HGMS.



I have a few tips that will make everything go much more smoothly.

First, Google "CombineZP," and you will find a site <http://www.hadleyweb.pwp.blueyonder.co.uk/>. You will be invited to download and install CombineZP. On my system the files are at

C:\Program Files (x86)\Alan Hadley\CombineZP\

Then download the zip file from the same site, unzip it, and put the files at

C:\Program Files (x86)\Alan Hadley\CombineZP\

This will get you a few bug fixes and is necessary. Don't give up—this is the hardest thing you will have to do. I promise.

Next you have to shoot your pictures. You need a manual focus camera, a focusing rail, and a tripod. Don't even think of trying this technique without a rigid setup.

Set your macro lens on manual focus, and using the focusing rail, crank the camera to focus on the point closest to the lens. Adjust your lighting. Shoot a picture every 2 mm while cranking the camera out. Your camera should look like this:

**Camera
mounted on a
focus rail,
mounted on a
tripod.**



Suppose you have taken 7 photos in sequence from near to far.

Execute CombineZP, and you will first see a menu bar with the word “NEW” on the far left side.



This is what it looks like.

Beginning menu

Click on the “NEW” (on left) and you will be able to navigate to where your string of pictures is located. Select them and click on OPEN.

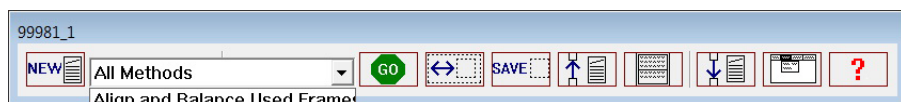


You will then see this menu:

Pictures are loaded. Click on “GO” to “Align and Balance Used Frames.”

You are going to make sure all the frames are squared up by clicking on “GO.” On my fast machine, it only takes seconds.

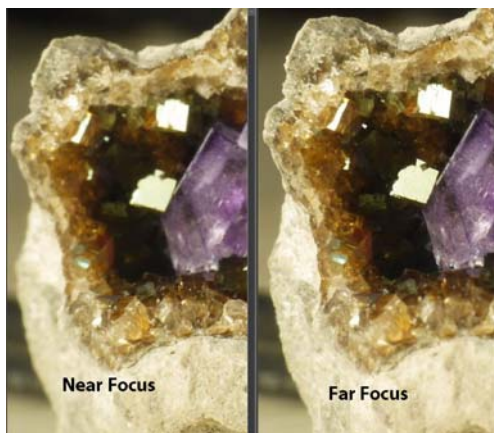
Next you are going to select the method of stacking the frames. Make it easy on yourself and select “All Methods,” and then click on “GO.”



Use “All Methods” of stacking the frames.

You are using all the stacking methods so you can select the results you like, rather than trying to understand each of the methods. On my machine, it takes less than a minute. Wow, it is wonderful having a fast computer.

Let's see if we did anything. This is a composite of the near and far images. Notice that different parts of the specimen are in fo-



cus. There are five other pictures between these.

Go to the folder where you selected the images to stack, and you will see another folder called "OUTPUT."

The "All Methods" command generated seven pictures, and I like "New-Out99999-Do Stack[1,0,1]"

The program is a little daunting because it can do many things, but you need some successes first before you attempt to read the manual. We have simplified the process by having the camera rigidly mounted and thus can use the automatic "Align and Balance Frames." We have avoided reading about 1/2 of the manual by running the "All Methods" for stacking the frames and just picking the one we like. We have accepted the default parameters in the stacking process,



My selection of the best stack results.



**Quadrops— really spiny trilobite
from Morocco**

and the results support the programmer's choices. An easy first success!

Extended focus is particularly rewarding on spiny trilobites because nothing else will produce a sharp image across nearly 2 inches of the spines.

Don't settle for blurry photos when it is easy to get perfect ones. Be sure to look at this article in color on the Web site archive.

See <http://www.hgms.org/BBG/Oct15.pdf>

Hematite Art by God

by Terrell Wm. "Terry" Proctor, J.D.

Member of the Houston Gem & Mineral Society

Curator Proctor Museum of Natural Science since 1989

Past President Houston Gem & Mineral Society 2008–2010

Hematite photos by Terry Proctor

Note: "Hematite" normally is not capitalized. It is capitalized here as it is the mineral being written about, and hence it is capitalized as a proper name only in this article for that purpose)

You may be a rockhound, geologist, mineralogist, paleontologist, archeologist, some other -ologist, or just an adventuresome soul. If you go into the field or badlands, you are bound to be amazed at the wonders of formations, rocks, minerals, plants, birds, mesas, ravines, and many other things in nature just waiting to be discovered. Always bring your camera on your trip.

My first dinosaur fossil dig was a week-long dig at Como Bluff, Wyoming in 1994 with Robert T. Bakker, PhD. I learned a great deal from "Dr. Bob," who is America's best-known and most famous paleontologist. I just turned 81 this year, and since that first dinosaur fossil dig, I have led five dinosaur fossil digs. The most recent one was this summer in July, 2015.

This year's dig was to two locations—first, an upper Cretaceous Epoch dinosaur fossil dig in Montana, and second, to dig for Oligocene fossils in Nebraska. Over many years on many kinds of digs, I have seen a lot of gorgeous natural things in the fields and badlands in many States.

The dig this year provided probably the most beautiful mineral form I have ever seen. It was easily the most unusual. I call the mineral stones I collected "Hematite Art by God." The stones I found were in the badlands of Eastern Montana on top of a mesa. My friend Bob, who lived in Montana, invited me to come collect dinosaur fossils. We collect on private ranches, with permission of the owners. Bob had invited me on several previous dinosaur digs in that area, which I had made. On those trips, I realized that there is Hematite in the same area where we



had found upper Cretaceous dinosaur fossils in years past. Some pieces of Hematite were small, and some were larger. There is just a lot of Hematite of all kinds around dinosaur fossils.



This year on top of a mesa, I found large pieces of Hematite lying on the surface where I was collecting dinosaur and turtle bones. The Hematite has some type of dark, rust-colored, crust on the surface. Often part or all of this crust is gone or partially broken off. Under the crust is left fantastic designs on the surface of the Hematite. These designs on the surface of the Hematite are raised perhaps $1/16^{\text{th}}$ to $1/8^{\text{th}}$ inch high. It is very difficult or impossible to get the remaining crust off.

The pieces of Hematite I found vary greatly in design. There are some with circles, arcs, lines, rows of small dots or very small circles, loops, and just all kinds of strange shapes and patterns. Some pieces look like Egyptian Hieroglyphics or like the Rosetta Stone.

I have included photos of pieces of Hematite I found, displaying the variety of the surface patterns. Sometimes these patterns also appear on the edges of the pieces of stone. One small round piece I found several years back, I call my "Spidey Man Rock" (see right) as it is covered with a perfect cobweb design. It is a great conversation piece. When I give Earth Science talks in schools, Scouts, Senior Groups, and at Houston Gem & Mineral Society Shows, the kids love to see the "Spidey Man Rock." They, like me, are amazed at this natural design of a rock found lying in the badlands.



I wash the Hematite stones off to remove a small amount of dust and dirt which has gotten into some of the pores of the Hematite designs. Then I coat the Hematite stone with Future brand of acrylic floor wax. This gives the Hematite a nice sheen. It also makes the reddish-brown, dried-blood-color show up just a bit better than the natural matte finish. The photos show some of these designs—just as they were found—lying on the mostly Bentonite surface of the mesa.

If you are reading this article, you probably know what Hematite is—or at least you think you do. I say this because I thought I did, but I have since learned that Hematite comes in many colors, forms, and appearances. Nothing in the literaturum, which I have thus far been able to find and read, describes the form of Hematite I found in Montana. The color, yes—but not the physical appearance of the stones with the designs.

The University of Minnesota's Mineral Pages on Hematite state "With all of hematite's many varieties, it is natural that some of them can be easily confused with other metallic minerals. All of the hematite varieties though, exhibit the same distinctive red to red-brown streak when scratched across a rough hard surface, which should serve to distinguish hematite from similar-appearing minerals."¹

Iron, chemical symbol "Fe," is one of the most abundant rock-forming elements. Fe constitutes about 5% of the Earth's crust. Fe is the fourth most abundant element after oxygen, silicon, and aluminum. Fe is simply indispensable to modern civilization. The people of the Earth have been skilled in the use of Fe for more than 3,000 years. The use of Fe became widespread only since the 14th century, when smelting furnaces began to replace forges. Later, blast furnaces replaced the smelting furnaces.

Iron ores are rocks from which metallic iron can be economically extracted. These rocks are usually found in the form of **Hematite** (Fe_2O_3 which is about 70% Fe; **Magnetite** (Fe_3O_4) which is about 72% Fe; **Goethite** ($Fe_2O_3 \cdot H_2O$) which is about 63% Fe, and **Limonite**, a mixture of hydrated iron oxides up to 60% Fe.² There are other iron-bearing ores, but the cost of extracting them is for the most part uneconomical.

Hematite (*also spelled Haematite*) as stated, is mined as the ore of iron. It comes in black, brown, red to dark red, silver gray, and some things in between. It comes in a metallic, splendid (very shiny) metallic to dull earthy appearance. Hematite is not magnetic or only nominally magnetic and under certain conditions—not under normal temperature. Hematite crystallizes in the rhombohedral lattice system, and it has the same crystal structure as ilmenite and corundum.

Huge deposits of Hematite are found in banded iron formations. Gray Hematite is typically found in places that have still, standing water or mineral hot

springs such as those in Yellowstone National Park. The Hematite mineral can precipitate out of water and collect in layers at the bottom of a lake, spring, or other standing water. Hematite can also occur without water, usually as the result of volcanic activity. The crystallography of Hematite is trigonal. 3

The hardness of Hematite is 5 to 6.5 on the Mohs Scale. The hardness test developed by Friedrich Mohs was developed in 1812 and was the first known test to assess resistance of a material to scratching. 4

Hematite was originally named about 300–325 BCE (*Before Christian Era*) by Theophrastus from the Greek word for bloodstone. It was translated in 79 by Pliny the Elder to haematites “bloodlike” in allusion to the vivid red color of the powder. 5

Hematite has been known for centuries and back for thousands of years. The red chalk writing of this mineral was one of the earliest in the history of humans. The powdery mineral was first used 164,000 years ago by the Pinnacle-Point man, possibly for social purposes. Hematite residues are also found in old graveyards from 80,000 years ago. Near Rydno in Poland and Lovas in Hungary, Palaeolithic red chalk mines have been found that are from 5,000 B.C., belonging to the Linear Pottery culture at the Upper Rhine. Rich deposits of hematite have been found on the island of Elba that have been mined since the time of the Etruscans. 6

Hematite has been the red pigment used throughout history for red color in many things, right up to modern times. Some examples of things using Hematite for red color include rouge; lipstick; red paint for fire engines and for red barns; red clothing; red ocher used for face and body paint; red in sandstone; red clay; and other naturally occurring red material; jewelry (*carved Hematite and other prepared as jewelry, NOT including the magnetic jewelry called Hematite, which ISN'T really Hematite*); warships; submarines; tanks; modern ships; buildings including skyscrapers; burglar bars; cans and millions of other modern inventions.

NASA knows about Hematite also. NASA has discovered that the Martian landscape is covered with fine red hematite dust. 7

This year's Montana dinosaur fossil-collecting trip didn't result in any large dinosaur bone find (*only about 100 pounds of dinosaur and turtle bones which were all fairly small and probably unidentifiable*). However, this trip was really a great trip just for the find of the beautiful Hematite Art by God which I found, some of which will be on display at the Houston Gem & Mineral Society annual Show September 25, 26, and 27, 2015.

There are a lot of folks today who are deciding there is no God. As you look at this beautiful handiwork of nature found in these various pieces of Hematite, in this article, and at the HGMS Show, try to tell yourself that there is no

Creator of the Universe, who has blessed this Earth with such beauty for us to see. Go ahead, I double-dog-dare you! (Whoops, that term really is telling my age, isn't it. LOL).

NOTE: to contact the author:

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End Notes:

1. <https://www.esci.umn.edu/courses/1001/minerals/hematite.shtml>
2. http://www.australianminesatlas.gov.au/education/fact_sheets/iron.html
3. <https://en.wikipedia.org/wiki/Hematite>
4. <http://geology.com/minerals/mohs-hardness-scalt.shtml>
5. <https://en.wikipedia.org/wiki/Hematite>
6. <https://en.wikipedia.org/wiki/Hematite> ibid
7. <https://en.wikipedia.org/wiki/Hematite> ibid

General Meeting Minutes

August 25, 2015

by Nancy English, HGMS Secretary

President Raymond Kizer called the meeting to order at 7:30 p.m. He thanked everyone for coming to the General Meeting. The meeting was attended by 23 regular members, four visitors, and one new member. The President asked the visitors to stand and introduce themselves. The visitors were Bria Patterson, Charlotte Lerma, Jose Masis, and Lorena Oliver. Jeanne Baroa has just rejoined the club as a new member. Jose Masis and Lorena Oliver joined the club before the meeting was over.

The President's comments: The President reminded us that we are one of the largest and best clubs in Texas and our show draws thousands of visitors each year, which is why we need everyone's help to make it run smoothly. We need help in many different areas, from the Dino Dig to the information booth. We will have forms available at each of the upcoming Section meetings for you to choose a time and to sign up for your volunteer preference. Please sign up well before the show so we know which shifts are covered.

Nancy English, Show Committee Volunteer Coordinator, explained the sign-up forms and announced that an online sign-up would be available soon.

Drawing: Sue Moore won the drawing for the Arkansas Quartz crystal.

Minutes: Karen Burns moved to approve the minutes of the July General Meetings as published in the September BBG. Phyllis George seconded, and the membership passed the motion.

Show-n-Tell: Mary Ann Mitscherling showed slabs of palm wood and Mexican Crazy Lace that she had just cut. Steve Blyskal brought a flat of agate that he bought on a field trip to a Dallas area dealer. He also brought other minerals he found at the Singleton Ranch north of Big Bend. Steve encouraged members to sign up for field trips by Teri Smith. Teri's field trips yield agate and chalcedony. Check her Facebook page for details. Sigrid Stewart shared pieces of Turkish purple jade and marcasite. Beverly Mace passed around a box of drusy in quartz crystal that she mined at the Jewett mine. Jose Masis shared two large, very beautiful paintings done in oil paint with crushed quartz crystal and crushed glass. Lorena Oliver passed around jewelry she made with resin, organite, quartz, minerals, and metals.

Nominating Committee: the President explained that **each** Section chooses a candidate for the five-person nominating committee. So far, we have four: Neal Immega, Mike Sommers, Richard Goode, and Margo Bedman. At the **October General Meeting**, the Committee shall present a slate of nominees for the offices of President, First Vice-President, Second Vice-President, Secretary, and Treasurer. Following that announcement, additional candidates can be nominated from the floor. The General Meeting attendees will vote on the new slate at the November General Meeting. Once elected, the officers will take office January 2016.

Show Committee Report: Scott Singleton reminded us that the Preshow Pizza Party and Auction kicks off at 6:00 p.m. on August 29, 2015 with pizza, salad, and pot-luck desserts. If you bring donations for the auction that night, come early to get them listed. Donations before the party should be put in the Donation Box on the table. Auctioneers Steve Blyskal and Neal Immega will make it fun. The next meeting is September 8, 2015 at 7:30 p.m.

Section Reports

Archeology Section: September 3, 2015: Bob Moore: Villa Romana del Casale, Sicily. Bob Moore, the Section Vice-Chair, will give a talk on the Villa Romana del Casale that was built around 325 AD.

Beading Section: The next regular meeting will be on **Saturday, September 19, 2015, 1:30 p.m.** Program to be announced.

Day Light Section: On Wednesday, September 2, 2015, 1:00 to 3:00 p.m. Debbie Kirkpatrick will teach stone setting with hand gravers.

Education Committee: Course Fees must be paid in advance. Contact Carrie Hart for availability, course schedules, and fees. Please e-mail her at classes@hgms.org or at carriehart2000@yahoo.com . Ray Kizer will schedule another Cabochon class when the Show is behind us.

Gemstones and Faceting Section: The next meeting is **Wednesday, September 9, 2015, 6:30 to 8:30**. The program will be announced.

Lapidary and Silversmithing Section: The next regular meeting is **Monday, September 21, 2015 at 7:30 p.m.** Program to be announced.

Mineral Section: The next meeting is on **Wednesday, September 2, 2015 at 7:30 p.m.** Members should bring their summer acquisitions and collecting stories.

On **Wednesday, September 16, 2015**, the meeting will be **Last Minute Show Prep**, focusing on any last-minute items the Section needs to complete before the Annual Show. Even though this technically will be a “work night,” the meeting likely will turn into a “tall tale” discussion of past mineral collecting trips and field stories. While there will not be a formal presentation for this meeting, this will be a great opportunity for new and potential members alike to join us for an evening of fun and lively discussion. Refreshments will be provided.

At the meeting on August 19, 2015, members looked at the fluorescent rocks under the newly purchased lights.

Paleo Section: The next meeting is scheduled for **Tuesday, September 15, 2015 at 7:30**. Chase Jennings will show **Fluorescents and Fossils**. Mike Dawkins announced a **field trip to lower Midlothian area** scheduled for **Saturday, October 31, 2015**. There is lots of material there like pyrite crystals, sharks teeth. You must be at the gate at 8:00 a.m. A good place to stay is Americas Inn. Bring sturdy shoes, hard hat, and bucket. Check the Web site for more details.

Youth Section: The Youth Section will meet **Saturday, September 5, 2015** and **September 19, 2015** from 10:00 a.m. to noon. They are working on projects for the Gem & Mineral Show.

Shop Report: Everything is working, according to Neal. “It all spins. Come and use it.”

BBG Editor and Webmaster: Phyllis George reported that the September BBG was mailed later than usual but everyone has already received it.

Old Business

In the interest of time, President Kizer asked the members to follow the progress of Old Business items in the August 4, 2015 Board meeting minutes and the August General meeting minutes as published in the September edition of the BBG.

New Business

The next Board of Directors meeting is Tuesday, September 1, 2015 at

7:30 p.m. The next General Meeting is on September 22, 2015 at 7:30 p.m.

Adjourn: John Mitscherling moved to adjourn the business meeting, and Mary Ann Mitscherling seconded the motion. The motion passed unanimously, and the meeting was adjourned at 8:12 p.m.

5 minute break

The President called on 1st Vice President Paul Brandes to introduce our speaker for the General Meeting:

Unusual Gems of the HMNS: For this month’s presentation, **Inda Immega** spoke on the more unusual gems displayed in the “Jewels of the Connoisseurs” exhibit of the Smith Gem Vault at the Houston Museum of Natural Science. Following her presentation, Inda cautioned us that if we wished to see the jewelry in her photos, we should do it quickly. That display will be replaced as soon as the museum receives a new display.

Refreshments: Provided by Ray Kizer

Board of Directors Meeting
September 1, 2015
by Nancy English

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

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

President’s Comments: The Pre-Show Pizza party and Auction made \$1205. There was plenty of pizza, salad, and dessert. Twenty people attended. Some large equipment was auctioned.

Approval of Previous Month Board Minutes: Phyllis George moved and Beverly Mace seconded a motion to approve the minutes of the **August 2015 Board Meeting** as published in the **September 2015 BBG**. A vote was called, and the Board approved the minutes as written.

Treasurer’s Report: Rodney Linehan emailed financials to all Board members in advance of the meeting.

Office, Committee, and Section Reports

Archeology Section: The next Archeology Section meeting is **Thursday, September 3, 2015, 7:30 p.m.** **Bob Moore, the Section Vice-Chair**, will give a talk on **the Villa Romana del Casale** that was built around 325 AD during the decline of the Roman Empire. This amazing villa contains the richest, largest, and most complex collection of Roman mosaics in the world! Life in the Roman Empire is portrayed in the mosaics from racing at the Circus Maximus, trapping and importing exotic animals, to children at play, and successful female Olympian athletes. The villa was the home of a very powerful Roman family as shown by their wealth, love of family, and children. See what we have in common with the Romans through a series of personal photos, and learn about the real origin of the bikini.

Thursday, October 1, 2015: See, feel, and discuss amazing ancient artifacts brought in by members. Some items are local, but others may be from anywhere in the world.

Beading Section: The Saturday, September 19, 2015, 1:30 p.m.: The project will be making Halloween Spiders.

Day Light Section: The next regular meeting is **Wednesday, September 2, 2015 at 1:00–3:00 p.m.** Debbie Kirkpatrick will teach stone setting with hand gravers.

Education: Carrie Hart: Jill Moffitt is having a New Ad Hoc Casting Weekend - Saturday/Sunday September 5 & 6 at 10:00 a.m. Cost is \$10 per flask. Please notify Jill at gemsbyj@aol.com if you will be participating. Carrie reported that Mary Ann Mitscherling gave her a list of former and potential instructors. Carrie will be contacting them. Carrie suggested a new payment plan for instructors. Mary Ann will create a model of the current plan and the new one to present at the October Board meeting.

Gemstones and Faceting Section: The next regular meeting will be on **Wednesday, September 9, 2015, at 6:30 p.m.** The program will be announced.

Lapidary and Silversmithing Section: The next regular meeting is **Monday, September 21, 2015 at 7:30 p.m.** Program to be announced. Open Shop will be held 5:00–7:15 p.m. prior to the meeting.

Mineral Section: The September meetings will be held on Wednesday September 2 and September 16 at 7:30 p.m. On **September 2, 2015:** First regularly scheduled meeting after the summer hiatus will be a synopsis of each member's summer mineral collecting adventures and a discussion of the Dallas Symposium.

On **September 16, 2015** the meeting will be **Last Minute Show Prep** focusing on any last minute items the Section needs to complete before the Annual Show.

October 7, 2015—Gem and Mineral Show Wrap-up: This is our opportunity as a Section to review the show while it is still somewhat fresh in our minds. Bring your comments on what we did right and where we can improve. Also, bring in your show purchases and be prepared to discuss why you purchased what you did. Section members who attended the Denver Mineral Show in September also are encouraged to discuss that event and to show off any minerals they brought back. Refreshments will be provided.

October 21, 2015: Locality Presentation of Greenland Minerals and Rocks.

Paleo Section: The next meeting is scheduled for **Tuesday, September 15, 2015 at 7:30 p.m.** Neal Immega will be discussing dinosaurs. Mike Dawkins announced the **Midlothian field trip on Halloween, October 31, 2015.** Rock Hounds will find pyrite crystals, marcasite, and sharks teeth.

Show Committee: The next meeting is **Tuesday, September 8, 2015 at 7:30.** Nancy English again encouraged members to volunteer. Nancy also announced that we have a caterer for all four days: Thursday–Sunday. They will be selling breakfast and hot food for lunch.

Youth Section: The next meetings are scheduled for **September 5 and September 19, 2015 from 10:00 a.m. until 12:00 noon.** The Youth Section is preparing their cabochons for the cabochon Show displays this month.

BBG Editor and Webmaster: Phyllis George reported that the deadline to receive articles is Wednesday, September 9, 2015.

Old Business

1. **Security System:** Ray Kizer reported that only two more cameras need to be installed. All the installed cameras are working.
2. **Donation Form:** Last month the BOD passed a motion to put the donation form on the HGMS Web site. As it turns out, the form has been on the Web site for about a year. Phyllis George will rename it for better recognition.
3. **Bulk Emailing System:** The bulk emailing service called Mail Chimp is in progress of being installed. This system will be able to fully utilize our ever-growing 2850-entry long email list. The annual fee will not exceed \$300 a year. Fees will be calculated monthly based on usage, so the cost may be less. It will be used to advertise the main show and our smaller shows and to notify members of meetings and notices.
4. **Sharing Advertising:** Chase Jennings is in the process of extending an invitation to the Dallas Paleo Society to combine advertising efforts for events. Houston GMS and Dallas GMS will send their advertising to a designated person at each club. Our person will send the Dallas announce-

ment to the HGMS email list, and Dallas GMS will email the Houston advertising to the Dallas email list. At no time will HGMS share its email list with Dallas or vice versa.

5. **The number and timing of future Trade Shows.** Discussion and vote tabled at August BOD. Rodney Linehan is looking into the IRS rules on the number of events a non-profit is allowed to have in a year. He is still researching it.

New Business

1. The next Board of Directors meeting is Tuesday, October 6, 2015 at 7:30 p.m.
2. **The next General Meeting is Tuesday September 28, 2015 at 7:30 p.m.** Frank Roberts from Baringer Hill Minerals will be giving the presentation on Hill Country Mineral collecting.
3. **The Nominating Committee** shall consist of five senior members selected by the Board of Directors. Each member must represent a different Section of the club. Members of this Committee shall be introduced at the **September General Meeting** so they may have time to receive recommendations from club members.

At the **October General Meeting**, the Committee shall present a slate of nominees for the offices of President, First Vice-President, Second Vice-President, Secretary, and Treasurer.

If at this time either the Show Chairman position or Assistant Show Chairman position is empty, the Nominating Committee shall include those positions in their search. They shall present their nominees to the Board for approval as per Article V, Section 2.

Nominations from the floor may be made after the Committee announces its list. The names of all nominees shall be recorded on ballots and sent to each Senior Member at least three weeks before the November General Meeting.

In the event that a single slate of candidates is presented and these candidates are unopposed, no ballots will be necessary. **Voting may be accomplished by a show of hands at the November General Meeting.**

As of the August General Meeting the nominating committee consists of Neal Immega, Mike Sommers, Richard Goode, and Margo Bedman. One more committee member is needed. Phyllis George has a list of people who indicated in years past that they might be available "in the future."

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

She will suggest their names to members of the current committee for consideration.

Adjourn: Paul Brandes moved to adjourn the meeting. Garth Clark seconded the motion. A vote was called, and the motion passed. The meeting was adjourned at 8:35p.m.

Archaeology Section

by Nancy Engelhardt-Moore

September 3, 2015: Garth Clark, Section Chair, called the meeting to order at 7:35 p.m. Garth said it was time to set up a Nominating Committee for Archaeology Section officers, since it is time for a new Chair. A brief discussion followed, and it was decided not to set up a committee. Bob Moore, the Vice-Chair, offered to run for Chair, and Garth said he was willing to run for Vice-Chair. Anyone is welcome to volunteer for these two open positions. Nancy Engelhardt-Moore will continue as Secretary for another year.

Next, there was a discussion on ideas for future events. Suggestions included a Metal Detection Course, Bosnian Pyramids, and Aborigines of New Zealand. Garth said he would look into the first two suggestions.

Then, attendees were asked to bring donations to the HGMS Clubhouse for the planned show fund-raising auction. Bob Moore moved to approve the August 6 minutes as published in the September issue of the BBG. The motion was seconded by Jon Hart, and the attendees approved.

Next, volunteer sign-up sheets were handed out for setup on Thursday, September 24 prior to the Annual Show (September 25–27). Nancy English is looking for help! If you can, please contact her at 713-973-9513. Garth mentioned that the Section will have two display cases at the show. Jon Hart agreed to loan some of his beautiful points and pots for the cases.

Bob brought a few Roman artifacts to show and gave his talk from 8–8:45 p.m. Q&A followed, and the meeting was adjourned at 9 p.m.

Program: Bob Moore gave a fascinating talk on “**Sicily: Roman Villa of Casale.**” He showed amazing mosaics from the villa that was built around 325 AD. The villa contains the largest collection of Roman mosaics that cover almost every floor in the extensive complex including the latrines and the kitchen. The stones used to make the mosaics came from throughout the Roman Empire. In 491 AD, the villa was attacked by Vandals and also by Visigoths in 530 AD. It suffered from natural disasters and was abandoned after it was covered by a landslide in the 12th century. Although buried, the floors and about 4 feet of the walls were preserved. Serious excavations began in the early 20th century. Designated a World UNESCO site in 1997, restoration re-

vealed beautiful, intricate mosaics. Unfortunately, we don't know for sure who owned the villa, but the mosaics imply that it was a rich family of four that included two children; a boy and a girl. The latter competed in the Olympics and won an event as shown in the photo below (left), which shows her receiving a crown in an athletic "bikini"-style outfit. The Great Hall in the villa is 66 yards (198 ft.) in length. It shows numerous scenes of men capturing exotic animals from around the world for the Circus Maximus. A photo below (right) shows one of the scenes depicting the capture of a rhino with ropes, which looks very dangerous!

October 1, 2015: The Section's next meeting will be a **Show & Tell**. Don't miss this interactive and fun evening when members and visitors bring ancient local and international artifacts to see up close! On November 5, archaeologist Dr. Gail Larsen Peterkin will present a talk on "*French Upper Paleolithic Hunting Technology*." So, mark your calendar for these events and watch for more information.



Female Olympian in athletic "bikini" receiving crown. Scene of capturing a rhino for the Circus Maximus.

Upcoming Mineral Section Programs

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October 21, 2015—Locality Presentation of Greenland Minerals and Rocks

November 4, 2015—To be announced

November 18, 2015—To be announced

Bench Tips

by Brad Smith

www.BradSmithJewelry.com

"Bench Tips for Jewelry Making" and "Broom Casting for Creative Jewelry" are available on Amazon.

Smoothing Earwires

Any time I make my own earwires, the hardest part for me is sanding and polishing the end that's inserted into the ear. Any sharp edge there is no fun. I've tried using sanding sticks, cup burs, and silicone polishing wheels. I've tried buffing on a Zam wheel, and I've tried spinning the wire in the Foredom to polish the tip. While all of these techniques do the job, none is very easy, and none are as fast as I'd like.

Then it occurred to me—I could melt the wire smooth. One quick touch in the flame of the propane/oxygen Little Torch does the trick—not enough to form a bead on the wire, but just enough to round off the tip.

I find it's worth practicing the maneuver a couple times on some scrap wire before trying it on completed earrings.



Ball Burs

I use ball burs quite a bit for carving and for cleaning up bits of solder that need to be removed. The ball shape seems to be more controllable than other cutting burs. They're less apt to grab and walk over your piece.



As to sizes, I've found that 8 mm is a very useful size for carving while a half mm or smaller at high speed works great for signing your name on the back of your work.

Deburring a Hole

When you drill a hole, there's usually a burr produced on the underside of the metal. Typically, burrs are removed by filing or sanding the area smooth, but doing it this way will put scratches on your piece that must be polished off.



A quick way to remove the burr is to grab a drill that's two or three times larger than your hole. Simply twist it in the hole to cut off the burr. I usually do this twisting by hand, but if you have many holes to do, it's easier on your fingers to put the drill into a holder like a pin vice.

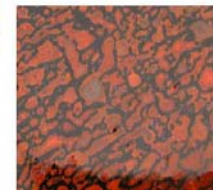
Cleaning Steel Shot

Steel shot in a vibratory or rotary tumbler works great to burnish and shine your finished silver pieces. But a common problem is how to keep the shot clean. Carbon steel shot can get rusty if exposed to the air, and even stainless steel shot can sometimes develop a blackish coating that's hard to remove.

My solution of choice to clean the shot is Classic Coke. Just pour an ounce or two over the shot and let the tumbler run for an hour or so. A bad case might require a second cleaning. Some folks like to let the bubbles in the Coke dissipate before using it so that gas pressure doesn't build up in the tumbler barrel. I've heard that it's the phosphoric acid in Coke that does the trick.

While you're waiting for the shot to clean up, just settle back and enjoy the rest of the Coke.

Unique Patterns of Petrified Dinosaur Bone--Going Into Style Down Under!



**The Unique Patterns of Petrified
Dinosaur Bone are Going Into Style
Down Under:**

Rocky Pictures

A few photo insets in the Monrovia Rockhounds' MOROKS Newsletter of January 2015 led me to Alain Bernegger's whimsical creations and I thought you might enjoy them and/or find inspiration for displaying your field trip rocks when you don't have time to use them for lapidary purposes. Maybe it will change the way you collect rocks!



An ammonite in a wall?
Think smaller scale
when displaying your
ammonites!

A garden layout for next year?

2015 Single Cabochon Contest

Hosted by the Austin Gem & Mineral Society (AGMS)

The **Austin Gem & Mineral Society** is proud to announce the hosting of a **single cabochon competition**. The competition will commence during the AFMS Show held in Austin, Texas; October 23-25, 2015. The required material **must** come from one of the South Central Federation states—**Arkansas, Louisiana, or Texas**. Entry deadline is by NOON, October 23, 2015. Entry forms will be available at the show. Contact person is Laird Fowler: lairdf@earthlink.net (512-971-8224). An entry form can be emailed to you prior to the show.

Overall guidelines for fabrication and judging will be defined in the updated American Federation of Mineralogical Federation's Rules: Section 9.0; DIVISION C – LAPIDARY; Rule 9.1

Cabochons: A cabochon shall be lapidary material of a size that could be worn for jewelry, cut free hand without having been tumbled. Cabochons fall in two categories:

(1) Traditional: Traditional cabochons must have domed tops and must have at least one plane of symmetry. A plane of symmetry exists when a straight line passed through the middle of a cabochon gives two equal halves in size and shape. Some examples of traditional cabochons are heart, cross, star, square, rectangle, diamond, teardrop, pear, circle, oval, and kite.

(2) Modern and Creative: Modern and Creative cabochons may have either domed or flat tops and have any shape that exhibits both the skill and creativity of the lapidary. They are not restricted to having a plane of symmetry. (Category sometimes known as Free-Form)

The reverse side of any cabochon—modern, traditional, or creative—may have a bevel or chamfer. A bevel or chamfer is not mandatory.

OUT-OF-CLASS (ineligible) materials for THE 2015 Cab Contest are:

- (a) Mineral specimens
- (b) Materials embedded in plastics
- (c) Tumbled material
- (d) Material **NOT** from one of the South Central Federation States—**AR, LA, or TX**

While Rule 9.2 considers the following to be OUT-OF-CLASS, the 2015 Cab Contest **will allow** the following: any lapidary entry that has more than fifty percent of the specimens composed of **petrified wood**.

We look forward to your entry in this competition.

AFMS/SCFMS/AGMS ANNUAL SHOW



The Austin Gem and Mineral Society, Austin, TX
Will host the American and South Central Federations Annual Show
Make plans now to attend this Show
You don't want to miss this one.



AUSTIN GEM AND MINERALS SOCIETY 53rd Annual Gemstone, Jewelry, Mineral & Fossil Show.

GEM CAPERS



This year's theme:
PEGMATITES

October 23, 24 & 25, 2015
Fri. & Sat. 9am -6pm
Sun. 10am - 5pm



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Wheel of Fortune Fluorescent Cave Special Exhibits Fluorescent Cave

MORE INFORMATION WILL BE PRINTED IN THE SCFMS NEWSLETTER IN FUTURE ISSUES

Show Time 2015 - 2016

September 25-27	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 ; showchair@hgms.org
October 9-11	Mount Ida, AR	Annual Quartz Crystal Digging Contest director@mtidachamber.com www.mtidachamber.com
October 10-11	Temple, TX	Tri-Cities Gem & Mineral Society Mayborn Civic Center, 3303 N. 34rd St. burnette@aceweb.com
October 16-18	Metairie, LA	Gem & Mineral Society of LA Best Western Plus Landmark Hotel 2601 Severn Avenue gemshow2015@gmail.com
October 23-25	Austin, TX	AFMS/South Central Fed. (SCFMS) Shows Palmer Events Center Exhibit Hall 900 Barton Springs Road susanp@austingemandmineral.org http://www.austingemandmineral.org/
November 7-8	Amarillo, TX	Golden Spread Gem & Mineral Society Amarillo Civic Center, 401 S. Buchanan St. finfran@midplains.coop
November 7-8	Midland, TX	Midland Gem & Mineral Society Midland Center, 105 N. Main St. midlandgemandmineral.org
November 21-22	Mesquite, TX	Dallas Gem & Mineral Society Mesquite Rodeo Center Exhibit Hall 1800 Rodeo Dr.; bravo1bravo@sbcglobal.net http://www.dallasgemandmineral.org/
December 4-6	El Paso, TX	El Paso Mineral & Gem Society El Maida Auditorium, 6331 Alabama e-mail: gemcenter@aol.com

Show Time 2016

January 16-17	Fredericksburg, TX	Fredericksburg Rockhounds Lady Bird Johnson Park, HWY 16 So. gideonjim1@gmail.com fredericksburgrockhounds.org
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2015		October					2015
Sun	Mon	Tue	Wed	Thu	Fri	Sat	
				1 7:30 Archeology Section	2	3 10-5 Shop Open 10-12 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 7:30 Mineral Section	8	9	10 10-5 Shop Open	
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 10-12 Youth Section 1:30 Beading Section	
18 10-4 Shop Open	19 7:30 Lapidary Section	20 7:30 Paleo Section	21 10-3 Shop Open 7:30 Mineral Section	22	23	24 10-5 Shop Open	
25 10-4 Shop Open	26	27 7:30 General Meeting	28 10-3 Shop Open	29	30	31 10-5 Shop Open Halloween	

2015		November					2015
Sun	Mon	Tue	Wed	Thu	Fri	Sat	
1 10-4 Shop Open Daylight Saving Time Ends	2	3 7:30 Board Meeting	4 10-3 Shop Open 1:00-3:00 Day Light Section 7:30 Mineral Section	5 7:30 Archeology Section	6	7 10-5 Shop Open 10-12 Youth Section	
8 10-4 Shop Open	9	10 7:30 Show Committee	11 10-3 Shop Open 6:30 Gemstones & Faceting Section	12	13	14 10-5 Shop Open	
15 10-4 Shop Open	16 7:30 Lapidary Section	17 7:30 Paleo Section	18 10-3 Shop Open 7:30 Mineral Section	19	20	21 10-5 Shop Open 10-12 Youth Section 1:30 Beading Section	
22 10-4 Shop Open	23	24 7:30 General Meeting	25 10-3 Shop Open	26 Thanksgiving	27	28 10-5 Shop Open	
29 10-4 Shop Open	30						

The BACKBENDER'S GAZETTE

*The Newsletter of the
Houston Gem & Mineral Society*

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2014 - 1st (Large)



AFMS

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



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