

The BACKBENDER'S GAZETTE

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

Volume XXXIX - No. 5

May 2008



President's Message by Terrell William "Terry" Proctor 2008 HGMS President

ust prior to writing my column, I spent a couple of hours this evening in one of the most exciting and interesting things I have ever spent time thing. I am sorry that I didn't know of this in ad-

and interesting things I have ever spent time watching. I am sorry that I didn't know of this in advance. My youngest daughter, Diana Kay Saufley, told me that her husband had taken their two young sons to see the "Walking With Dinosaurs" show at the Toyota Center. That sounded interesting, and I learned that Sunday, April 6, 2008, was the last day of the show.



Many of you have undoubtedly seen the Movie or T.V.

version of Walking With Dinosaurs, but let me tell you that seeing these creatures, full-size or almost full-size, walking in the Toyota Center was exhilarating. The walking pace was realistic, their skin moved realistically, and their eyes looked at you (actually that part I couldn't see in person as I was in the nose-bleed seats at the top of the Toyota Center, but I saw them on the Internet also).

Although this was a Paleo-moment experience, it was something I believe most HGMS members would have enjoyed, and probably some of you did. It is touring the U.S., and you can go online and see some of this. A fairly showy version is at http://www.youtube.com/watch?v=VX3_tnLDUEk&feature=related which has

Continued on page 4

General Meeting Programs

May 27, 2008: Mr. David P. Wilbur has been a significant figure in the mineral specimen world for decades. He currently is assisting Joel Bartsch and the HMNS with Geopalooza, a new lapidary and mineral display and program that opens this summer. He has much to tell us that we will find interesting, and he will bring slides and some condor agate specimens he collected after he retired and became interested in lapidary.

June 24, 2008: To be announced. July 22, 2008: To be announced.

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Every article published in the BBG is edited for grammar and content. No flaming is allowed. 22407 Park Point Drive Katy, TX 77450-5852 Phone: (281) 395-3087 Copy is due for the June 2008 issue by

Editor: Phyllis B. George

Wednesday, May 7, 2008.

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

Purpose of HGMS

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

Membership dues are \$30 for an adult membership, \$40 for a couple, \$50 for a family (including all children aged 5-18), and \$8 for a youth membership (ages 5-18). Advertising rates: \$70 for 2 months, ½ page; \$150 for 6 months, ½ page.

MEMBER: American Federation of Mineralogical Societies & South Central Federation of Mineral Societies.

All meetings are held at the Clubhouse 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.

President's Message continued from page 1

good sound quality. A longer version with somewhat poorer sound quality is located at http://www.youtube.com/watch?v=m_9GnP-lhaY. I don't know how long these will be online, but you will enjoy seeing the realistic quality of these very animated dinosaurs.

Beverly Mace is wading through the large number of membership renewals and new members. Hopefully we will have an up-to-date count of membership thus far in the year by my next message. Our September 26–28 Show at Humble Civic Center undoubtedly will swell our membership even more. If you haven't paid your dues yet, you didn't get a copy of this BBG this month. If you are a paid-up member and know someone who complains that they didn't get their BBG this month, ask them if they forgot to pay their dues.

It is time to continue the review to analyze our Club's facilities and membership growth. It is important to point out that **no portion of our present dues or our consideration of a dues increase for 2009 is to be used to fund our physical facilties.** Dues cover only a portion of our annual operating budget. Rodney Lineham, our Treasurer and Lapidary Section Board Member, and I are reviewing for the HGMS Board of Directors the increase in the expense of operating HGMS since the last dues increase a number of years back. Approximately half of your annual dues goes to ensure that you receive your copy of the Backbender's Gazette each month. The BBG is one of the best gem and mineral club publications in the U.S., and it wins awards year after year. We can thank Phyllis George for her hours of dedication in giving us such a great publication.

Virtually everything it takes to operate your HGMS Clubhouse and organization has gone up since the last dues increase. Some by a little bit, and some by a considerable amount. A modest dues increase is being considered for 2009. But again, the dues increase is an operating expense increase, not a dues increase for any change in the physical facilities.

There are limitations on where HGMS members can park. We have been using parking areas of other companies in our business center without objection. However, at least one neighbor does not want us parking in their area.

While we have added the new Air Abrasives Room, it also reduced the amount of storage space. As our club grows, so does the need for room for some activities. Matt Dillon named a committee last year to look into additional or new facilities, but nothing much has been done on that for this year.

This is a future need, and I will be setting up a 2008 Committee to continue this review, probably including members from the prior committee. Input from all HGMS members will be appreciated. Some folks feel we need no additional space and hence don't need to consider leasing or acquiring additional space. Some feel we are already feeling the effects of crowding, and others feel that with the real estate market as it is now and with HGMS having no present building payments, now may be an opportune

time in a good buyer's market to look into this matter. I have no preconceived notions on this subject, but I do recognize that the growth of HGMS probably is inevitable, and that is a good thing.

From my years in working with many organizations, I have learned that organizations either grow or wither. There is no such thing as an organization that reaches a given level and then stays there in the future. Houston is going to grow considerably in the future, and so is HGMS. It has been growing and will keep on growing. We need to plan our own future now.

Can you believe that almost one third of 2008 is already history? One thing we know as HGMS members, the eyes of earth science folks and rockhounds in this nation will be on Houston this year during our show which is hosting both the AFMS and SCFMS annual conventions. A big THANK YOU to everyone who has been doing such as great job this year in working together harmoniously and industriously to keep HGMS the great organization it is.

Wavellite, Variscite, and Other Aluminum Phosphate Minerals in Arkansas

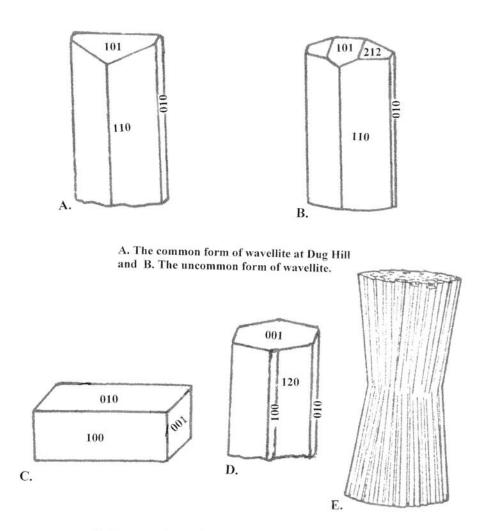
Program Presented to the HGMS Mineral Section April 2, 2008 by Art Smith artsmithite@msn.com Member of the Houston Gem & Mineral Society

The aluminum phosphate minerals listed below occur in the Ouachita Mountains of west central Arkansas. Most of this mineralization is restricted to the Big Fork Chert Formation, but it has also been found in the Arkansas Novaculite and other Paleozoic rocks.

Wavellite $Al_2(PO_4)_2(OH,F)_2 5H_2O_3$ orthorhombic, green, bl, yel. trigonal, white CaAL₃(PO₄)₂(OH,H,O)₆ Crandallite Gorceixite BaAl₃(PO₄)₂(OH,H₂O)₆ monoclinic, white Variscite AlPO₄ 2H₂O, orthorhombic green, yellow Metavariscite AlPO, 2H,O, monoclinic, green $Al_{\epsilon}(PO_{\epsilon}) (PO_{\epsilon},OH)_{\epsilon}(OH)_{\epsilon} H_{\epsilon}O,$ triclinic, blue-green **Planerite** $Cu^{3+}Al_{\epsilon}(PO_{\epsilon})_{\epsilon}(OH)_{\epsilon} 4H O, t$ riclinic, blue-green **Turquoise**

The most important mineral for the collector is wavellite. It often occurs with variscite, metavariscite, planerite, and may be altered to crandallite. Turquoise has been mined at the Mona Lisa mine on Porter Ridge in Polk County during the 1980s. Here it is in novaculite. It also occurs in the novaculite at Coon Creek and Buckeye Mountain, both also in Polk County. Gorceixite has been reported at several places, but Henry Barwood does not find the barite in it when analyzed. Crandallite forms pseudomorphs after wavellite at Dug Hill and the Stu Schmitt mine in Garland County. Variscite is usually the first mineral formed, and so when it is, wavellite is under it. Variscite crystals are usually microscopic and not uncommon. Planerite and turquoise crystals are always microscopic and very rare.

Wavellite crystals are distinctive and cannot be confused with the other phosphate minerals. The elongated crystals may form spheres with numerous terminations on the outer surface giving them a rough appearance. Some spheres of wavellite have more of a concentric internal structure, and the outer surfaces of these spheres are usually smooth. A description of individual occurrences follows on page 8.



C. Pinacoidal form of variscite common at Dug Hill. D. Pseudohexagonal variscite. E. Sheaf-like form of variscite with pseudohexagonal crystals.

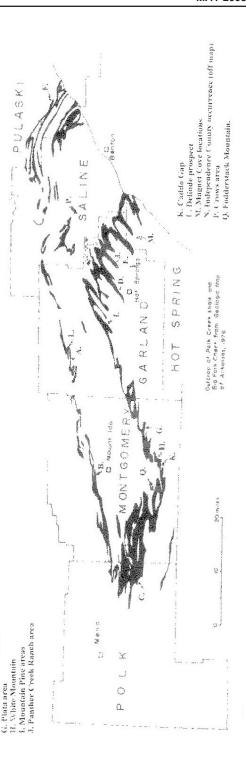
Figure 1: Typical WAVELLITE and VARISCITE Crystals



Figure 2 A. Drawing of J. M. Howard from an A. E. Foote Electroplate taken from F. K. Harvey (1886). Referred to a "Cat's eye" this specimen is probably from Dug Hill.



Figure 2 B. Variscite from Panther Creek Ranch area is



D. Hot Springs Water Works E. Union Carbido vacasijan mine. Wilson Springs E. Mount Pleasant Church

MRKANSAS MAYTLLITE LOCATIONS

bigure 3.

B. County & State pils, Mauldin Mountain

C. Near Rig Fork

A. Dug Hill near Avant

Summary of Wavellite Localities of Arkansas

This is just a summary of Arkansas wavellite and other aluminum phosphate minerals. A longer, more complete article is in preparation and will be published in *Mineral News* later this year.

No.	Name	County	Location	Features	Status
Α	Dug Hill	Garland	N of Avant on ridge	Pale brown to pale gray matrix pale to dark green, yellow spheres radiating internal structure, some large, variscite, white crandallite	Hand tools only
В	Mauldin Mt. County & State pits	Montgomery	N of Mt Ida	Dark gray matrix shale, pale to medium green, blue & black, concentric & radiating spheres	County under lease
С	Big Fork	Polk	E of Big Fork in the forest	Quartz matrix, pale green transparent, jackstraw crystals on bright green variscite	Unknown
D	Hot Springs Waterworks	Garland	N. of Hot Springs	Quartz matrix, white to yellow smooth spheres, planerite, last worked in 1972	Obliterated
E	Vanadium Mine, N. Wilson pit	Garland	Wilson Springs	Pale green smooth spheres on light colored matrix	Backfilled
F	Mt Pleasant Church	Pulaski	Outcrop along road	Minute green elongated crystals in milky quartz	Posted
G	Plata area	Montgomery	NE Caddo Gap	Pale yellow to green spheres in light colored shale in road bed and adjacent woods	Private
Н	White Mt.	Montgomery	E Caddo Gap	Could not locate after long search	Unknown
I	Mt. Pine	Garland	E of Mt. Pine	Traces only, pale green	Road outcrop
J	Panther Cr. Ranch	Garland	SE of ranch in road cut	Pale green radiating, octahedral variscite,	Road outcrop
K	Caddo Gap	Montgomery	in Gap along road	Green variscite, crandallite, no wavellite found	Road and river cut
L.	Schmitt (deLinde)	Garland	E of Dug Hill same ridge	Green, bluish spheres, variscite crandallite, mined early 70s, to be mined in 2008	Private lease
М	Magnet Cove	Hot Spring	Christy & Titanium mine	White crystals, jackstaw and radiating	Obliterated & reclaimed
N	Batesville, Sand Town	Independence	outcrop off map	Poor showing in shale, white	Unknown
0	Crow's Area	Saline	Lumber company land	Yellow to orange, no matrix, fluorescent, planerite Blakely Sandstone	Unknown
Р	Fodderstack Mountain	Mont.	Base of Mtn.	White small jackstraw xls	Unknown

References:

Anderson, R.J. 1942. Mineral resources of Montgomery, Garland, Saline, and Pulaski counties. *Arkansas Geological Survey County Mineral Report* 3

Barwood, H. L. and deLinde, H. 1989. Arkansas phosphate minerals: a review and update. *Rocks and Minerals* 64:294-299.

Smith, A.E. 1985. Aluminum phosphate mineralization from Mauldin Mountain.

Mineralogical Record 15:291-295.

Cavansite—an Easy Mineral Name To Remember!

by Neal and Inda Immega

Geologists and Master Docents at the Houston Museum of Natural History Members of The Houston Gem & Mineral Society

hat do gas bubbles in lava, dinosaur extinction, low temperature crystallization of watery minerals, and India have in common? Among other things, a lovely blue mineral called cavansite in Case 46 at the Houston Museum of Natural Science.

Dinosaurs: Let me explain. At the end of the Cretaceous, the crust broke open in what is now the western desert portion of India and flooded the area with lava. Each flow is about 50 feet thick, but they stack up to a total of thousands of feet. From a distance, the eroded flows look like giant sets of stairs, and they are called the "Deccan traps"— "trap" as in *Treppe*, the German word for stairs, not as in a hole for catching tigers. The lava flows may have released enough CO2 to contribute to the



Cavansite from India

death of the dinosaurs through climate change.

Silica: The lava was so viscous that gas bubbles got trapped. These range from a quarter of an inch to yards across. Rapid cooling of the lava leaves some of it in the glassy state which is important for the formation of our minerals. If the lava cools more slowly, a felted mass of crystals forms the black rock known as basalt. However the rock near the surface nearly always cools quickly into an amorphous state, and this glass is quite unstable. No, that does not mean that it has mental problems, just that the glass has a higher energy state and tends to recrystallize to form minerals compatible with the lower pressure and temperature of the surface, and compatible with groundwater instead of magma.

Minerals: When this process occurs at a pretty hot temperature (say 600 degrees F), quartz commonly occurs, as in our huge amethyst geode. When the temperature is between 500 and 100 degrees F, the minerals that form typically contain lots of water bound up in their crystal structures. Typically these are calcium, sodium, potassium, magnesium silicates (zeolites) that may contain as much as 40% water by weight. We have many examples in the gem hall like the mesolite puffball (Case #57, the "Tide" specimen). Look in the mineral hall to find specimens from Poona, India. While the mineral shapes are fantastic, the colors are muted pastels, except for cavansite.



Mesolite from near Poona, India. Transported to Houston in a box of detergent.

Industrial Uses: Zeolites are notable for their ability to swap anions, such as sodium for calcium in water softeners. They also have a rather open structure that makes them suitable to use as a catalyst in many reactions, like in petrochemical hydro-cracking. Our crystals are much too valuable to use them in such industrial processes. Industrial zeolites are manufactured for specific purposes with specific compositions in million tons/year amounts. Although the cavansite would be a prime ore for vanadium, it is much more valuable as specimens. I am required by the Texas TAKS student testing to include this section.

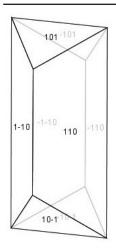
Name madness: Cavansite is named for its composition:

Ca(calcium)Van(vanadium)Si(silicon)ite(rock)

That is a good deal easier to remember than Ca(VO)Si₄O₁₀·4(H₂O).

Inexplicably, the finder left out the water in the name, so I guess it rightfully should be called Cavansioxhy. The Germans build up words just this way, calling a dishwasher a Geshirrspülmaschine (many-dish washing machine) after its function. This is fun. Shall we rename the calcite ($CaCO_3$) to be CaCarOxy and gypsum ($CaSO_4+2H_2O$) to be CaSulfHydrOxy? The curators would have a fit.

Crystal Growth: Look at the cases, and you will see a common crystal growth pattern for Poona minerals—lots of crystals growing out from a single point. This means that there were a limited number of crystallization points and that when one started, most of the crystal growth continued at that point, producing a mineral pattern like a puff ball growing out from the point. Mesolite is an example of that. Cavansite also follows this pattern with rosettes of blue crystals on the base rock.



Cavansite crystallizes in the orthorhombic system, so that crystals look like little boxes bounded by the four faces of a prism (the faces labeled 110, 1-10, -1-10, and -110 in the picture). The tops and bottoms of the boxes are usually beveled off by the four sides of a second prism (the faces labels 101, etc.) that gives the crystals the look of a double-ended chisel. When the crystals grow rapidly, they become needle-like, and the faces you can see are the sides of the vertical prisms. The tiny end faces glint in the light though when you move the crystals. If you look at our specimen under magnification (try a short-focus ocular, an Optivisor, or butterfly binoculars), you can find both needles and boxes.

Source of picture: Webmineral Mineralogy Database, © 2000-2005 by David Barthelmy, http://webmineral.com/data/Cavansite.shtml

Occurrence: The crushed stone industry is very active in the Poona area with major companies using open pits to take out million of tons of the hard, black basalt each year. Some of these mines are plagued with rock-containing cavities filled with beautiful (and valuable) minerals. As you might expect, the miners tend to pay more attention to potentially saleable specimens than to crushed rock at a few dollars a ton. Lots of specimens are just the size that will fit into a miner's lunch box. Cavansite was just a very rare mineral until 1989, when substantial quantities were found in the Wagholi quarry. The quarry mines a 30-foot thick layer of hard, black basalt and crushes it into small pieces for construction. This rock is completely free of annoying pretty minerals. When the miners encountered a zone of fractured and altered basalt, they worked around it, leaving it as a pillar about 30 feet on a side. For years, this pillar was the favorite place for government surveyors to determine how much rock had been removed for the purposes of computing taxes. The mine owners decided to remove this pillar to deprive the mine inspectors of a prime viewpoint. As you might have guessed, the pillar was full of unknown blue crystals in fractures and cavities. Beautiful minerals are a well-known business in Poona, and the collecting rights were sold. The mine still has the problem of how to keep the workers working on what the quarry wants worked on. Mineral collectors, on the other hand, are delighted at the availability of the very showy material.

Genesis: Chemical analysis found that the rocks in the area contain some vanadium. When these rocks are buried hundreds to thousands of feet deep, circulating ground water can dissolve enough vanadium from the country rock for the solutions to precipitate vanadium-rich zeolites and related minerals at a shallower level. The fractures in the basalt could concentrate the circulating water, and the water would alter the country rock. The alteration of the rock would probably include dissolving some of it, and it is in these cavities that the minerals are deposited. This explanation sounds very pat, but cavansite is extremely rare even though many basalts around the world contain similar amounts of vanadium (like at Mt. Fuji).

Most of this material was based on *The Mineralogical Record*, Vol 22, 1991 – pages 415-420.

There is a good article on the Deccan lavas in Wikipedia: http://en.wikipedia.org/wiki/Deccan Traps

Vanadium in Mt. Fuji basalt:

http://en.wikipedia.org/wiki/Vanadium

Photographs were taken in the Houston Museum of Natural Science Mineral Hall by the author or from Masterpieces of the Mineral World, 2004 by W. Wilson, J. Bartsch, and M. Mauthner (with permission by J. Bartsch).

Susan Lenz Update

by Norman Lenz

ear HGMS Friends,
Susan has been mostly good since my last update. She has had one or perhaps two seizures in the last six weeks. Her new seizure medication is still being ramped up in hopes that we can reduce or eliminate her other seizure control medication and its side effects

Installation of the wheelchair lift for our retirement apartment is almost complete. It is useable now, and we have used it on the last two trips to San Marcos.

Spring break allowed two of Heather's and Tanya's friends to visit from Indiana. At the same time, Susan's high school friend Carmen and her granddaughter, Celica, came to help me care for Susan. Heather and Tanya took their friends to see the sights around Houston and Galveston while Susan and I took Carmen and Celica to our retirement property near San Marcos. It was fun to watch a nine-year old feed longhorns and donkeys.

Tanya purchased the Wii game made by Nintendo as a physical therapy tool for Susan. It is still too early to know if she can learn to compete successfully or if it will help her eye/hand coordination.

The last two weeks have been difficult in several ways:

- ➤ I had surgery to repair a hernia last week on Wednesday.
- > Susan slumped over at lunch on Saturday. We spent all evening at the ER trying to understand what caused her blood pressure, pulse, and respiration to decrease. We may never know if she had a seizure or if the drop in her blood pressure caused her to become unresponsive.
- My mother was found unresponsive Wednesday afternoon and is still in an intensive care unit at St. Johns Hospital in Springfield, Missouri. Bacterial meningitis is suspected as the cause.
- I did not feel comfortable going to Missouri before my stitches were out Wednesday or before Susan's appointment with her seizure control specialist yesterday.

Positives:

- My mother is responding appropriately again. She may be contagious. So, it is probably best that I did not go immediately to Missouri. I can try to go when she is better and I needn't worry about bringing anything contagious back to Houston.
- My surgeon seems happy with my hernia patch and has pronounced me well enough to lift up to 25 lbs for the next month. After that, I should be almost as good as new.
- Susan seems to have no after effects from her episode last Saturday.
- Susan and I had a good visit with Carmen and Celica.
- Susan is sleeping better and does not have any pain except from an old knee injury.

Her long term memory is good, and her short term memory is fair.

➤ Her verbal communication has improved further.

Susan is feeding herself more than at my last update.

Photos, in no particular order:

Susan and Heather riding in the new wheelchair lift; Celica feeding young longhorns outside our barn/apartment



Kudos to Senior Shop Foreman Gary Anderson

by Neal Immega

am sure that you have heard about companies that replace a senior man with two kids and think that they have done a smart piece of business. No matter that the kids know nothing.

Well, at HGMS we do not have that policy. Our senior shop foremen are the best, and we intend to keep them on the job. This is not to say that young whippersnappers like me are not welcome, but we just do not have the depth of knowledge the senior guys possess. I expect that Gary Anderson has forgotten more shop lore than I ever knew.

For example, I recently turned on the motor that spins our big, heavy, cast iron lap plate only to find that **nothing** spun. Shoot, I just needed to plug it in. Nope, it was plugged in. Okay, it was probably a tripped circuit breaker. No, a trouble light worked just fine in that outlet. I guessed I needed to find the thermal breaker on the motor, but there was none. Was the motor bad or the arbor? I took the belt off the pulley and found out that the motor spun quite freely, but the lap plate arbor did not. This was bad. I took the lap plate off to see if the bearings were rusted, but they were swimming in grease. Rats, it was beyond me. TIME TO CALL FOR HELP.

Fortunately, our 20+ years-on-the-job shop foreman, Gary, wandered by and asked me what was wrong. I told him that the shaft was nearly frozen in place and asked for advice. Gary looked at the unit and said, "Gee, it has worked for the past 20 years. Why did it stop now?" Oh, great, it was now going to be exploratory surgery like where the mechanic tears your car apart looking for something "funny" at \$100/hour shop time. So, I said to Gary, "Where should I start?" He suggested that I back off the nut that pushes the bottom thrust bearing upward toward the lap plate and the main rotational bearing. He is the boss, so I loosened it 1/8 of a turn. Lo and behold, the arbor spun freely. Gary then went into his lecture about thrust bearings and mountings and how things can get too snug for proper operation. Whoosh! over my head. The only thing that Gary did not know is how that nut got tightened 1/8 of a turn too much.

I bet you know the moral of the story – <u>Never</u> Let Your Senior Shop Guys Retire!

Great General Membership Meetings!

by Terry Proctor 2008 HGMS President Photos by Terry Proctor

f you missed the March 25, 2008 General Membership Meeting, you missed a really interesting and valuable meeting.

Our own Tom Wright, with the assistance of Larry Tischler and Kelly Sumrall, performed three types of silver casting for HGMS members who brought their own silver or purchased 1/3 ounce of silver for \$9.00. Tom did broom straw, pine needle, and rock salt castings. In all Tom did over 15 castings, delighting everyone.

The broom straw and pine needles were tied tightly in clumps and put into cans. Tom



used a torch to melt the silver in a small shallow crucible along with bromide. When the silver was red and molten hot, he poured the silver over the broom straw, pine needles, or rock salt. (Tom has discovered that using rock salt to line the bottom of the tray on

which the clumps in cans sit allows him to easily reclaim any silver that escapes the tightly tied clumps. After he is finished casting, he dissolves the salt in water and retrieves any silver that fell onto it.)

When the silver hit these items it cooled quickly, but not before taking on the shape of the item into which it was poured. One of the





assistants then promptly quenched the item in water to keep the broom straw or pine needles from burning. In the case of the rock salt, the water dissolved and loosened the rock salt.

The final effect was

a one-of-a-kind silver piece of rough jewelry ready for cleaning, polishing, and in the case of rock salt castings, possibly setting it with stones. One of the most unique was the broom straw casting Tom did for HGMS member Regina Gorman. The silver casting came out looking like a flag pole leaning at an angle with a flag fluttering at the end. This was promptly compared with the flag the U.S. Marines posted at the battle of Iwo Jima. An eArt Scan of that casting is shown on the right.



Some HGMS members liked the castings so well that they paid for a second casting. Finally the silver ran out before every HGMS member who wanted castings got them, but it was close. Everyone proclaimed this program a great success and went home happy with either a piece of jewelry in the making or the knowledge of how to do this casting of beautiful silver jewelry.

HGMS members, if you aren't attending our Monthly Meetings, you are missing some good programs. Upcoming programs are:

April 22—Richard Zingula, PhD to speak on "What's going on in the oceans and how ocean fossils were created." Dr. Zingula has spoken to our club for years and is a most interesting and knowledgeable speaker.

May 27—David P. Wilbur. Joel Bartsch was to be our speaker but he had to cancel, and he assisted by providing Mr. Wilbur for our program. Mr. Wilbur has been in rockhounding for 61 years, having been a hobbyist and a dealer at times, and he is now retired—somewhat. Mr. Wilbur lives in Tuscon, Arizona, but is assisting Joel Bartsch and the Houston Museum of Natural Science in a new lapidary and mineral display and program (Geopalooza) this summer and also assisting in part of the expanded permanent mineral display at the HMNS. He will tell us how he has spent many years in the mineral specimen hobby (and has collected MANY marvelous specimens), and after retiring developed lapidary interests. He will also tell us about his current connection with the HMNS in these new exhibits and program. He brought in six tons of fluorescent minerals to HMNS for their Geopalooza exhibit. See page 36 for complete information on the Geopalooza exhibit.

On **June 24** or **July 22** we plan to have Glen J. Kuban speak to the Club on his field of making castings of dinosaur and other trackways. Glen had presented such a program in the past to the Paleo Section, and it is very interesting. Glen goes to the various trackways and makes castings of the tracks on location. He will have tracks at this meeting for HGMS members to see along with his enlightening presentation. The other of these two months is open at this time.

August 26—Patrick J. Lewis, PhD, who is a professor at Sam Houston State University in Huntsville, Texas will tell us about his paleontology dig in South Africa on which he has or will be leaving shortly to excavate a cave there. In the summer of 2007, Dr. Lewis did excavation in the desert Northwest of Cairo, Egypt where his expedition located the oldest known primate in the World, and they found more species of prehistoric primates in one location than have been found anywhere else in the World. He is a fascinating speaker, and we look forward to hearing about his 2008 expedition—and we perhaps will be his first audience after he returns. Dr. Lewis is also on the 2008 Board of Directors of the Proctor Museum of Natural Science.

Other excellent programs are being planned. We would like some program suggestions from the Lapidary and Faceting Sections and at least one other Mineral Section program for the year. If your Section can provide a speaker or program in the area of your Section's interest, please contact me, Terry Proctor, at my law office (713) 453-8338 {most of the day and night} or on my cell phone (713) 453-1300 if you can't reach me there.

Show Committee Happenings

by Scott Singleton 2008 Show Chairman

ate spring is the time we start cranking into gear with all sorts of activities. We are nearing the final stages of our dealer registration and should have that completed by late May. The Publicity Committee is finalizing a brand-new flier that we will present to the club after it gets printed in May. And of course, the AFMS Liaison Committee is working diligently to make sure we have all Federation meetings and activities planned and are ready to accommodate their every need.

But we also like to do a lot of fun things during the spring and summer. For instance, we are already planning our show shirts for this year, so you should see committee members wearing those around in the near future. We have already staffed an HGMS table at two large events—the Clear Lake Gem & Mineral show and the April Intergem Show. It's satisfying to have people come by and tell us how they love gems and minerals and how they support the things that our club does. We have another Intergem Show in June as well as two homeschool conventions in which we will participate.

Also on the fun list is a late spring Show Committee party that we throw each year. It's a pot luck affair, and we invite interested club members to stop by. The door prizes alone are reason to check it out! We will be holding this event in late May or June. Details will be posted in the next BBG, but please feel free to ask any Show Committee member about it.

Lastly, we generally host at least one spring field trip. This year we will be going back to Jasper to continue some of the geological research I conducted last year. Because I need to hold down the number of people on the trip (in order to be able to get into my dig site), we are restricting this field trip to Show Committee members only. If you are interested in this trip, please consider this an invitation to join this fun group and be an active participant in the 2008 National AFMS/SCFMS/HGMS Annual Show!

In Our Library

by Art Smith, Librarian

am a little behind in my cataloging and getting new books and publications on the shelf. So if you need a certain magazine, book, or journal, just e-mail or call me and I can arrange to make it available to you when you need it.

There have been several recent donations of DVD videos to the library, and they are much appreciated. There has been little use recently of our VHS videos, and I am thinking of investing in a machine that will convert them to DVD. Some have already been converted. The DVDs take much less space than the video tapes, and they are quickly going the way of the 8-track tapes.

Fred Brueckner has donated a large and expensive book, *Renaissance Jewellery* (sic.) by Y. Hackenbroch. It is a 1979 book but evidently out of print. It will be in the Lapidary Jewelry section and is not available for checkout.

Vacation time is coming, and if you plan to be someplace where you can collect, you better do the book research now. It will be difficult to help you when you ask for it a couple of days or a week before you leave.

Education Chair Needed!

Provide a Great Service to HGMS by Terry Proctor

GMS is blessed with so many talented individuals and so many folks who give tirelessly to the Club for the benefit of all. However, we have an opening for one or two members to work on a very important part of the Club's program, and to date it remains unfilled.

Education is vitally important to HGMS. We have some great teachers, but we need someone to coordinate the Educational classes, AND we need someone who lives nearby to appear to collect the fees and introduce the instructors. The HGMS Board of Directors is working on some incentives to offer, but basically this is a good job (or jobs) for some of our HGMS members who have a little time and are willing to help out. One incentive already on the table is a half-price offer on classes for the person acting as our educational chair person. The reduced fee is based upon someone actually fulfilling the job. But this could be your chance to both learn and help out your fellow HGMS members who want to take the classes.

If you are interested, call Terry Proctor at his law office (713) 453-8338 almost any hour of the day or evening or on his cell phone (713) 453-1300 if you can't reach him at the office. You will really be appreciated if you can help out on this important part of the overall HGMS program.

Scholarship Acknowledged by University of Houston

by Terry Proctor

GMS has received a letter from the University of Houston acknowledging receipt of the \$2,500.00 scholarship awarded to Carol LeDoux Locke. The Vice-Chancellor for University Advancement thanked HGMS for the scholarship made to this student of the Art Department Jewelry and Metal Project, which is part of the College of Liberal Arts and Social Sciences of the University of Houston.

Carol LeDoux Locke also sent a letter thanking HGMS and asking if she might come out for the May 27 HGMS General Membership meeting. She has been invited, and we look forward to Ms. Locke visiting us and telling us a little about her studies at the U of H. Her final semester is this fall, and she plans to start her own jewelry business after graduation. A copy of the letter from the University of Houston System is on the opposite page.



University of Houston System University of Houston

MICHAEL RIERSON

Vice Chancellor for University Advancement UH System

Vice President for University Advancement University of Houston

March 26, 2008

T. W. Proctor, J.D. President Houston Gem and Mineral Society 10805 Brooklet at Rockley Houston, Texas 77099

Dear Mr. Proctor:

I am delighted to thank you, on behalf of the University of Houston, for Houston Gem and Mineral Society's gift of \$2,500 to the Art Department Jewelry and Metal Project in the College of Liberal Arts and Social Sciences.

Private giving enables the University of Houston to succeed every day in its role as an economic, cultural, and creativity engine for our stakeholders, and we are grateful for your confidence and support.

The very fact that you have chosen to give to the University of Houston means we have inspired you, and that our programs and activities are important to you. As stewards of your philanthropy, we pledge to work diligently to continue to be worthy of your support.

Thank you, again, for your gift and for your friendship.

Sincerely.

Michael Rierson

MR:cmv

Learning. Leading.™

(land you so much

204 E Cullen Building • Houston, TX 77204-2021 • (713) 743-8165 Fax: (713) 743-0946 • E-mail: mrierson@uh.edu

June 4 Is Early Deadline for July BBG

by Phyllis George HGMS Editor

/he June deadline for the July BBG needs to be moved earlier by one week. It will be June 4.

Why? Well my daughter and son-in-law have invited me to go on a week's vacation with them. It starts on the day I would normally start working to put the BBG together, and we'll be gone all the next week. Since telling them that I can't go is NOT an option, I can either do the BBG one week early, or I can do it two weeks late—in which case you won't get it until sometime in July. Didn't think you'd like that last option, so one week early it is.

The new deadline is June 4. This deadline change occurs in June only. The other months are not affected. If you are planning an article for the July BBG, be sure to mark June 4 on your calendar as the deadline for getting it to me.

Day Light Section

by Tom Wright

The Day Light Section met at 1:00 p.m. on April 14. Tom Wright demonstrated and explained how to operate the pneumatic-operated hydraulic press, and several members used the 20-ton hydraulic press to form metal shapes.

The Day Light Section also met a second time in April on the 21st. Val Link described and demonstrated various methods for making forming dies, and he explained how the rubber and polyurethane pieces used in the press forming differ. Val also demonstrated how the hydraulic press can be used to make complex curves in metal sheet.

The May 12, 2008 1:00 p.m. Daylight meeting will be a hands-on workshop where the members will be provided materials to make a plume agate doublet with a quartz cap. All of the material and supplies have been donated by various members.

The June 9 meeting will be on the subject of putting patinas on jewelry.

Lapidary and Silversmithing Section

by Stephen Wilkerson

The Sew Business: Mary Ann Mitscherling reported that we are getting low on three of the templates and will need to order more this summer to have a supply for the show.

Visitors: We had several new members at tonight's meeting. Christine Ando joined the club several months ago and came to her first Lapidary meeting. Mike Dibenedetto attended with his wife Wendy and children Harry and Hannah. They just joined this month, and Harry and Hannah are already cutting their first stones. I gave a brief overview of the classrooms and amenities offered at the clubhouse.

Show and tell: I recently bought a bag of miscellaneous cabs for wire wrapping. The stones had been rough shaped and tumble polished. Most were horribly shaped and only a few could be readily identified. I have been recutting the larger stones and brought them in to get help identifying what materials I had. The consensus was that I had several calcite stones, a couple of fluorite pieces, and one honey-colored aventurine. There was one light green stone with some chatoyancy that no one could identify. Hopefully, someone at the General Meeting can help me.

A program suggestion was made for making bracelets from heavy-gauge pattern wire later in the year. These might show up as Christmas gifts.

Program: John Zanders gave the program tonight on paste solder.

Paste solder has flux and solder mixed together in a syringe. It comes in two grades, EZ and Extra EZ. John gets his from Hoover and Strong Jewelry Supply and has been using the same syringe for over a year. Like all solder, clean contact between the pieces being soldered is required. It will not fill in gaps.

John soldered two sets of earrings, one with a pin back, and the other with ear hooks. The earrings were PMC forms he had made to look like flowers with curved petals. First he put a prong setting in the heart of the flower to hold a small faceted stone. A tiny dab of the solder was put on the setting, and then the setting was positioned inside the flower. The paste solder is thick and will hold the setting in place when the torch is applied. John applied the torch until the solder flowed. This took just long enough for the flowers to begin to glow red, but not to begin to melt. Then the earrings were pickled.

The posts John soldered were standard silver posts purchased at any jewelry supplier. But the ear hooks were of his own design using silver tubing and wire, and the wire must be a perfect fit in the tube. He takes light-wall silver tubing and cuts pieces about 8 mm long with a rotary cutting tool. This keeps the tube from being damaged or mashed flat, rendering it useless. The silver wire is cut into pieces about an inch long. One end of the tube is crimped, and the end of the wire is dipped in the solder to get a tiny bead of solder on the wire. He then slides the wire into the tube and hammers the tube and wire flat. This gives him a large surface to solder against the back of the flower earring. A small drop of solder was put on the back of the earring, and the flattened end of the wire was laid down and pressed flat. He had some trouble getting good contact on one of the wires, but he eventually succeeded in soldering both wires. When the torch was applied, the solder both inside the tube and outside flowed at the same time, making it all one solid piece. The earrings were then pickled again. He will tumble the pieces to harden them and then bend the wires into the hook shape. The last step will be to set stones in the prong settings.

John passed out a handout giving greater detail about using paste solder. He answered a few questions about using PMC and stone setting and has offered to do another program on precious metal clay later in the year.

Mineral Section

by Steve Blyskal, Chairperson & Dean Lagerwall, Assistant Chairperson

ineral Section meetings occur on the 1st and 3rd Wednesdays of each month from September (3rd Wednesday only) through June (1st Wednesday only).

Upcoming Meeting Topics

May 7: AUCTION: Specimens from HGMS members will be auctioned with a portion of the proceeds going to the Mineral Section. This is the same auction format practiced the past few years. Please read the accompanying announcement for further details. Refreshments will be provided.

May 21: American Mineral Treasures: Steve Blyskal will give a pictorial review of the 2008 Tucson Exhibit: American Mineral Treasures. Come see the wonderful specimens that represented America's finest collecting localities of the past 50 years. Refreshments will be provided.

June 4: Annual Swap & Sell: For the last meeting before our summer hiatus, we will be setting up tables in the clubhouse and having a social/swap/sell event. Come and improve your collection and enjoy the fellowship of other like-minded collectors. Refreshments will be provided.

We will meet again in September in preparation for the September HGMS show.

Any special meetings during the summer will be announced via the club e-mail.

If you have any topics or ideas you wish to have presented or would be willing to present at our Mineral Section meetings, please contact Dean at dean_lagerwall@yahoo.com or (979) 480-9373.

May 7 Mineral Section Auction Format

by Dean Lagerwall

n Wednesday May 7 at 7:30 p.m., the Mineral Section will be having its annual auction to help raise money for the Section. Once again, we are allowing ALL HGMS members to bring specimens to the auction and to keep a portion of their proceeds. The proceeds of at least one of the specimens you bring (your choice) must be donated to the Section. Five additional specimens may be auctioned by each person, with a portion of each specimen (10%) going to the Section and the rest going to the donor.

This is a great way for ALL HGMS members to thin out their duplicate specimens and to benefit both themselves and the Mineral Section. You can put a minimum bid on the more expensive pieces if you desire. Since this event will draw from all Sections, expect a variety of items to be auctioned and a very interesting and entertaining event. Setup and viewing is from 7:00 to 7:30, and bidding begins at 7:45.

If you have any questions, call Dean at (979) 480-9373.

HGMS General Meeting

March 25, 2008 by Nancy Fischer 2008 HGMS Secretary

The minutes of the February General Meeting were approved as published in the March BBG.

The HGMS Treasurer was not present. However Terry Proctor indicated that our finances were good, saying, "The ship will float."

Announcements and Introductions:

Jan Barr and Kelly Sumrall attended their first meeting as new members. Hanan Alatter, an opera singer from The Metropolitan Opera in New York, was visiting.

Terry Proctor said that there were pictures of a Hadrosaurus on the front table. These will be used on cups for the Proctor Museum.

There were also draft copies of the proposed HGMS Code of Conduct. Terry said that the AFMS Code of Conduct was published in the April BBG. He thought that it was a good one, and he would try to incorporate some of the salient points in ours. He also said that Matt Dillon has arranged for a speaker to come to the Club to talk about child molestation and procedures with which to channel complaints. When the Code is complete and accepted by the membership, it will be posted in the clubhouse.

Terry also explained for visitors and new members how the Silent Auction works.

Committee and Section Reports:

- Mineral Section: Dean Lagerwall reported that the next meeting (April 2) would be about wavelite localities in Arkansas, and it will be presented by Art Smith. The following meeting (April 16) will be a member-presented travelogue about a trip to the Galapagos Islands. The first meeting in May (May 7) will be the Mineral Auction to which all HGMS members are invited. This will be followed (May 21) by a presentation about the American Mineral Treasures given by Steve Blyskal. The first meeting in June (June 4) will be a swap and sell
- Paleo Section: Neal Immega reported that the field trip to Brownwood was terrific. They found Pennsylvanian shark cartilage at the Wilson Clay Pit. He also said it was the most exciting trip they'd had.
- > **Shop**: Tom Wright said that everything was OK. Neal Immega said that the squashing machine that Tom built really squashes.
- > Show Committee: Scott Singleton reminded everyone that the Intergem Show is coming up, and the Show Committee is staffing a table. However, several

Show Committee members will be out of town that weekend, so he needs volunteers for a couple of time slots.

Joan Riley had left Scott a flyer from the 1981 show. He will include it with the other historical documents. Adult tickets were \$2.00, and the show was billed as "The Hobby Show."

Terry Proctor said that the Clear Lake Show was a big success for the Show Committee.

Old and New Business

- Karen Burns asked if there were any field trips planned. She related that the Clear Lake Club went to Llano, but they did not respect the rules set forth by the land owner so they are now banned at that location. Steve Blyskal said invitations had been sent to a private list. They wouldn't say where you would go or what you could collect. Terry Proctor mentioned that several years ago he wrote an article in which he said landowners are the most valuable asset for Rockhounds.
- > Terry said that Paleo plans to go to Bryan for barbeque. They will have another trip to McFadden Beach which has more clovis points than any other place in North America. Terry Brawner will arrange the trip in conjunction with the Proctor Museum. He said they are also talking about going back to the Little White River.
- Dean Lagerwall said the Mineral Section may arrange a day trip to Dallas for the Mineral Show there.
- ➤ Neal Immega said there may be a trip to Texoma on Memorial Day weekend if the water is down.
- > Scott Singleton said he is planning a trip to Jasper for Show Committee members. (There is still time to join the Show Committee)

Show and Tell

- ➤ Beverly Mace brought treasure from the Brownwood field trip. She found the biggest Pennsylvanian snail anyone had ever seen, according to Neal Immega, a Nautaloid and again, according to Neal, a "cute" specimen.
- Karen Burns, who usually works with cabochons, had been designing pieces of jewelry using wire wrapped beads. She showed a beautiful example of her new work.
- > Scott Singleton had a piece of petrified wood that George Wolf gave him. He had cleaned it up a bit. It was really interesting because terredos, a bivalve, bores into the wood or other soft material. The tubes get larger as they go in. Terrados were opportunists and thrived in tropical waters where they flocked to soft material. The pieces get preserved if something happens so they get covered. The tubes were lined with chalcedony. The piece Scott has is from Louisiana.
- Mike Dawkins brought pieces of palmwood and snakewood that he found in College Station.

Door Prize: There was no door prize this month; however Mike Dawkins won the drawing and the opportunity to bring the door prize next month.

Program: Tom Wright presented a program about silver casting using various materials. He passed several examples of the finished product around. He said that after much trial and error, he now uses pine needles, broom straw, and rock salt. He had tried rice, beans, and peas, but these do not give good results.

He had a table set up with the turbo torch, the aforementioned materials, and a tray lined with a bed of salt. He said that at the end of the process, you could dissolve the salt in water and retrieve any spilled metal. Silver was available for sale. Tom said that about 1/3 ounce works well. He buys it for the club from Albuquerque at a much better price than if he bought it in Houston.

He charged up the turbo torch and melted the silver in a small crucible, using a carbon rod to stir the silver as it was melting. He said you could put a bit of flux into the mixture, but this was new silver and didn't need it. He then poured the molten metal into a can holding the pine needles or other chosen material. There were some beautiful shapes of silver as a result.

HGMS Board Meeting Minutes

April 1, 2008 by Denise Bicknell Filling in for Nancy Fischer, Secretary

х	President	T. W. "Terry" Proctor	х	Faceting Rep.	Phyllis George
	1 St Vice President	Vacant	х	Lapidary Rep.	Karen Burns
X	2 nd Vice President	Beverly Mace	X	Mineral Rep.	Denise Bicknell
	Treasurer	Rodney Linehan	X	Paleontology Rep.	Rick Rexroad
	Secretary	Nancy Fischer	Х	Day Light Rep.	Tom Wright
	Past President	Matt Dillon			

Approval of March Minutes: Karen Burns moved that the March minutes be approved as printed in the April BBG. Tom Wright seconded the motion, and it passed.

Treasurer's Report: Rodney Linehan was absent. A Balance Statement and a Profit and Loss Statement were distributed prior to the meeting via e-mail.

Committee and Section Reports:

- > **Day Light:** The Day Light Section worked on hydraulic pressing.
- **Faceting:** The Faceting Section will be making copper laps.
- Lapidary: The Lapidary Section had a presentation on paste solder during their March meeting. They will be making doublets at the April and May meetings.
- Mineral: Recent Mineral Section meetings include Farrar Stockton's presenta-

tion of The Canadian Rockies and Art Smith's presentation of Arkansas Wavellite localities

- ➤ **Paleontology:** The Paleontology Section had a presentation by Chuck Finsley of Dallas. They also had a nice turnout for their Brownwood trip. Their April program will feature Illinois invertebrates by Ann Mallineaux. The Section will take a field trip to Lake Texoma in May.
- ➤ General Meeting Programs: On April 22, Dr. Richard Zingula will speak on "What's Going on in the Ocean, and How Ocean Fossils Were Created." On May 27, Dr. Joel Bartsch, President of the Houston Museum of Natural Science is speaking on "HMNS Past, Present, and Future" and on his years of membership in the HGMS. June 24 and July 22 are open. Dr. Patrick J. Lewis, Professor at Sam Houston State University, is scheduled to speak about his trip to a South African cave looking for prehistoric animals (including primates) on August 26.
- **Beading Grou**p: At the beading group's last meeting, they made a ring out of a button, and at their next meeting they will be making a chain mail bracelet.
- ➤ Web site: Phyllis George presented January documents showing that she had renewed our contract with Infinology, our Web site host, for two years. It expires on January 26, 2010. Our domain name expires in 2013. The documents are attached.
- ➤ **Show:** A Show Committee field trip to Jasper for fossil wood is scheduled for May. They will be meeting with the Fiendish Dr. Phil on April 12.

Old and New Business:

- 1. There is no news regarding a person to fill the First Vice President position. Terry Proctor has been scheduling programs for General Meetings.
- 2. There is nothing new on the Code of Conduct.
- 3. There is no news from the Dues Review Committee.
- **4.** The Child Security issue is on hold. Terry Proctor will be looking into the issue.
- **5.** Tom Wright presented a photo of a broken curb in our parking lot. Terry Proctor will check with Matt Dillon about repairs.
- **6.** Central Management power-washed the building in preparation for painting.
- 7. Tom Wright moved that the following guidelines be put in place for scheduling an auction. The motion was seconded by Karen Burns:

Prior to holding any HGMS auction, the following rules shall be followed. These rules do not apply to Section auctions or to silent auctions held by the Main Club.

- **A.** Advance notice about the auction shall be published in the Backbender's Gazette, and the auction shall not be held until on or after the 16th day of the month of that issue of the BBG. This is to ensure that HGMS members have adequate time to see the Notice prior to the auction.
- **B.** Notice of the auction shall be sent to the person who does the e-mail distribution to HGMS members, and that information must be promptly

sent on to all members.

- **C.** Notice shall be written on the HGMS Clubhouse blackboard as soon as possible giving the Auction details. These notices shall not be erased prior to the Auction.
- **D.** Notice shall be sent to the HGMS Webmaster for its prompt placement on the HGMS Web site on the Upcoming Programs page.

A copy of these steps for holding an Auction shall be printed and posted at the HGMS Clubhouse, and these Auction Rules shall be published in the BBG. (*Editor's note: These Auction Rules have now been printed in the BBG.*)

The motion passed unanimously.

Tom Wright moved that the meeting be adjourned; Rick Rexroad seconded. The meeting was adjourned at 8:35 p.m.

AFMS President's Message (excerpts)

by Shirley Leeson from AFMS Newsletter 4/2008

et me update you on some things that have been happening. Bob and Kathy Miller, members of the Ad Hoc Committee on studying if the contests should continue, have been working on asking the Midwest Federation what they think of continuing with many of the current contests. I hope that everyone will not just vote an up or down vote but will take time to evaluate whether the program needs tweaking and why more people are not entering the various contests.



One problem that I see is the lack of interest by contest winners in attending events in the regional federation promoting

the contest. At the Eastern Federation's Editor's Breakfast, there were beautiful awards and stacks of certificates that were not picked up. If you enter the contest, shouldn't you be a part of the end product and be there to pick up your award? I know that the snow was deep and many chose not to travel, but Eastern President Ellery Borow, came all the way from Maine for the event.

Wendell Mohr, Commemorative Stamp Chair, worked in the AFMS booth at Tucson asking people, especially teachers, if they would make a class project out of it. He had information on who to write to, a sheet on birthstones found within the U.S., and suggestions on reading about gemstones, etc. Thanks, Wendell and JoAnn, for your efforts.

I had a chance to visit with Joy Bourne, our AFMS President-Elect. We worked out a plan whereby she will represent the AFMS at the Midwest Show in June, and I will attend the Northwest Show on the same date in Oregon. I'm sorry that I won't be able to attend the Midwest Show and Convention, but I can't be in two places at once. Which brings me to another problem. Please see that your regional federation conven-

tion is listed in the AFMS Newsletter as soon as possible. Contact Bob Livingston, AFMS Show Consultant, as soon as you have a date for your regional show. He can be reached at <gemguy@verizon.net>. It's important that Bob knows your federation plans so that we can avoid having more than one convention on the same weekend.

The Eastern Federation is the third regional federation to support the AFMS dues increase of \$0.25 per member, along with Southeast and South Central. I can't thank you enough for your support.

AFMS—Quick Tips for Editors

(and other computer-bound professionals!)
by Linda Jaeger
AFMS Club Publications Chair
from AFMS Newsletter 04/2008

f you have a question (or suggestion) about editing, writing, the bulletin contest, or something related, send it to me by e-mail: <a href="mailto: LigrAlg@aol.com or at home address: 3515 E. 88th St., Tulsa, OK 74137. If I cannot find an answer to your question, we will publish the question and ask the readers for their answers.

Take 5 — Just for You!

"I try to take one day at a time, but sometimes several days attack me at once" could easily be an editor's mantra, especially when you are almost at your deadline and still typing like mad. That's when you begin to feel stress and tension, especially in your head, neck, shoulders, and back.



There are some simple things you can do to release the tension, without even getting out of your chair²:

- 1 Sit back in the chair, feet on the floor, hands in your lap, and breathe in deeply and slowly. Let your belly expand and your shoulders rise, then exhale completely; you can close your eyes if you'd like, taking several deep breaths (concentrate on breathing—I promise you won't go to sleep).
- 2 To relax your neck and shoulders, inhale slowly and deeply as you lengthen your spine, sitting up tall. Then slowly exhale as you look to your right; inhale and look forward; exhale and look left; repeat several times.
- 3 To relax your back, scoot that chair away from the keyboard, plant your feet firmly on the ground, chair-width apart. Inhale for a long spine, then exhale as you bend at the hips (not your waist) and walk your hands down the front of your legs. You can let your head drop between your arms, nodding "yes" then shaking it "no". If this makes you dizzy, just keep your head higher than your heart. After several breaths, walk your hands back up your legs; if you have lower back issues, you can do this by supporting yourself with your hands on your thighs as you hinge forward at the hip.

4 To reenergize and get ready to type again, move to the front edge of your chair, feet firmly planted about 10 inches apart. Reach both hands behind you to the seat or to the outside edges of your chair. Each time you inhale, let your chest rise and pull the shoulder blades together — you'll feel your spine get longer. Exhale and relax your shoulders; repeat several times.

Feeling better? Got two more minutes? Go ahead and get up, walk to the kitchen, and get a drink of water. Then you can sit back down and keep those attacking days at bay!

¹Seabrook, Jane, ed. *Furry Logic —A Guide to Life's Little Challenges*. Berkley/Toronto: Ten Speed Press, 2004.

²Suggestions based on *Tools for Teachers Training Handbook* by Leah Kalish and Tara Lynda Guber.

Clip art from Discovery Channel School Image Gallery, ©2003. Permission granted to use for educational, not for sale publications.)

AFMS—Be Safe – Be Well

Reported by Herb Whittington to Don Monroe AFMS Safety Chair from AFMS Newsletter 04/2008

Help from Members

ore and more I receive suggestions and assistance pertaining to our safety articles. At the recent SFMS annual meeting in Biloxi, several people came up with great subjects for future articles. I also read a large number of bulletins from many sources. I want to share with you one by Herb Whittington that was published in the "Rockhounds Tale" from the Panama City Gem & Mineral Society, entitled "Vegas On Your Mind?"

Would you guess that one of our club members would end up needing eight stitches from a shard knocked off a boulder with his own sledgehammer? Odds are, it was bound to happen sooner or later. What are the odds of another club member being peppered with three tiny, sharp, and dangerous shards immediately ABOVE his eye (some bleeding, needed pressure to stop it) just three weeks later at another sledge-hammer party at a different location? Personal safety begins to invade your conscious mind and makes you wonder: "Well, it's possible, not necessarily probable."

Then guess the likely odds of the first injured club member having bought some shin protectors, failing to wear them on Dig #2, and ending up with ANOTHER large cut from yet another sharp flake. You can decide the odds of this happening again. If anyone gives you mere even odds that this will happen a third time to "scar leg," JUMP on this bet without delay. I'll be dragging my knuckles on the ground before I'll ever put my eyes or legs at risk on a rock dig again. You can take that to the bank. My wife says "Well, it is about time."

This safety issue is noteworthy only because we all know someone who has been seriously hurt during a dig. Many times over the years, had I not been wearing glasses

that were badly scratched at a dig by flying chips and pebbles, the alternative might have been an eye loss. It was only a matter of time. Safety will one day become a paramount issue to our hobby as it grows, leading to more digs and the inevitable injuries. That is a sure bet!

At the November SFMS meeting, I met Herb Whittington. We discussed his story, and I saw the scars. They were reald, and it was scary. As Paul Harvey would say "and that is the rest of the story."

Tips & Hints

olishing Cabochons: original source unknown; via Thunder Bay Gems and Calgary Lapidary Journal 4/2008

When polishing, do not use a saucer, dish, or pan and messy brush to apply the polishing agent. Such methods invite contamination. Instead, use a plastic spray bottle. Put the polishing agent into the bottle, add water and a small stone or buck shot. The purpose of the stone or buck shot is to agitate and stir up the polishing powder when you shake the bottle. Shake well and squirt the solution on the felt, leather or poly pad. No more contamination. No waste of polishing agent, and the polishing agent may be applied exactly where you want it.

Make Your Own Jewelry Cleaner: from BC Newsletter 12/1987, via Calgary Lapidary Journal 4/2008

Before beginning this project, gather all your materials and place them by an open window. The fumes will surely open your sinuses but won't hurt you. The recipe may sound explosive, but NO, it isn't.

Mix the following ingredients in a wide-mouth jar:

1/4 cup white vinegar

1/4 cup household ammonia

Into this pour a little bit of liquid dish detergent. Mix well. Dunk your silver and gold chains and settings and whatever else you want to clean into this mixture. Stir around in the jar with a silver fork.

This stuff will clean your silverware and copper items; copper specimens, too. After three minutes, remove and place in a colander. Wash under the hot water tap, drain, and lay on a towel to dry. Are you in for a surprise! Sparkling gold, silver and copper with all the dark tarnish gone.

WARNING: Make sure the stones in your settings will be able to go into this solution and not be harmed by the ammonia (such as malachite, pearls, etc.) When finished, pour the solution down the drain. It won't hurt the pipes. The reason for not keeping the solution is that after cleaning all the metal items, it has become dark and not fit to save.

Late-Breaking Club News

Are you getting e-mails about HGMS activities? If not, contact <u>n_immega@swbell.net</u> and let him know that you want to be on the list.

Safety in the Shop!

A note on safety in your shop, lab, work room, basement, etc.

by Owen Martin

SCFMS Safety Coordinator

(Also a member of the Houston Gem & Mineral Society)

from SCFMS Newsletter 3–4/2008



s a fossil hunter, sometimes the thing that I look forward to most and likewise dread the most is getting my "stuff" back to the house.

I may have to use a pressure washer to blast off mud from my fossilized wood or 40-pound ammonites, use some chemicals to clean lime off some invertebrates, or maybe use some tools, be they hand or pneumatic, to chip off the tougher crust. Maybe if I'm lucky I found a good "round" of petrified wood that I want to cut and polish down at the club. Ooooh, and I just found my first agate ever, and I don't even know what I can do to that yet!

Whatever I do, there is almost always some inherent risk in the process. Below is a list of different hazards to consider in the shop.

Eye protection

As I mentioned above, power washing is a good example of something a lot of us do that can potentially injure our eyes, however it's certainly not the only thing. Almost every type of prep-work that we practice necessitates eye protection: grinding, polishing, cutting, chipping, sand blasting, soldering, chemical cleaning, etc. Different types of eye protection should be used, depending on your activities. For most of us, protective glasses are good; however, goggles may need to be worn when using chemicals or when grinding certain materials.

As a coworker of mine once said to a lady who liked to put on makeup while driving, "no matter how advanced modern medicine has become, glass eyes still don't look real."

Respiratory protection

Similar in some ways to eye protection, respiratory protection can be very important when handling certain cleaning chemicals and when dealing with certain dusts. Asbestos is a common example of a respirable dust that is not inherently toxic, but it can cause cancer, especially with smokers. Other dusts can temporarily clog breathing passages thus impacting—sometimes critically—the body's ability to get oxygen into the blood. Chemicals can be very bad too, as the lungs can quickly introduce toxins into the blood. Note that some of the oils that we use in our cutting saws can be dangerous. Keep in mind that dust masks may not stop some dusts, and they certainly will not stop airborne chemicals.

Chemical safety

The most common chemical accidents usually have something to do with the above mentioned issues and involve acids, soaps, other caustics, and sovents. **PLEASE READ** the safety notes or MSDS (Material Safety Data Sheets) on all chemicals you

may use. Some need to be used in areas where there is good ventilation, others require high-end respirators, and still other may necessitate protective clothing. Such needs are not common in the shop, but you never know! Also, be aware of the potential danger of mixing chemicals, and as a general rule don't do it. Most of us know that mixing chlorine and ammonia, two of our most common household chemicals, is a huge no-no. Mixing the two releases chlorine into the air you breathe—very bad.

Hearing protection

What? You didn't hear me the first time? Do you remember the pictures of all the trees blown down in the same direction after Mount St. Helens erupted? Loud noise does the same thing to the ear, and much like the trees, once the filia (hearing fibers) are damaged, they don't stand themselves back up. If you think "maybe I should be wearing ear plugs," then you have already answered the question.

Electrical and fire hazards

If your shop is like mine, then it can get pretty cluttered. Bottles of flammables may end up next to overloaded electric outlets or boxes of old journals. Cleaning up the clutter can reduce fire hazards and make it more obvious where potential problems exist—like damaged electrical cords or overloaded outlets. Ideally, flammable liquids will be stored in a flammables storage cabinet. If you have a pretty good-sized shop, then such a cabinet is a good investment. For most clubs, the local fire code will require a cabinet large enough to handle what you have onsite.

The hazards involving fire and electrical vary in type and risk level. Having been "grounded" on four different occasions, I can tell you that water and electrical cords do not mix! I used to work as a caretaker for saltwater fish tanks, and it had its challenges. Overloaded plugs can be a problem in our shops. Keep in mind that just because a tool isn't turned on doesn't necessarily mean that electricity isn't running through it. Fire and shock are both risks in this situation. It's safer to keep your equipment unplugged and properly stored when it's not in use.

For some general rules

- > Always wear eye protection.
- > Keep your shops cleaned and well organized.
- > Make sure electrical cords are in good condition.
- ➤ Keep reactive things away from each other, whether they are chemicals, electrical, fire hazards, or combinations of each.
- Don't mix chemicals.
- > Practice safety in your shops!

As always, if anyone has a safety incident or issue that they would like to share with the organization, please contact me at owenmartin@yahoo.com - Thanks!

Be safe and have a great spring!

SCFMS President's Message

by Chuck Schuler SCFMS President from SCFMS Newsletter 3–4/2008

his has been a very busy time for me. In turn, I haven't much news for this month.

I spoke with Ron Carmen regarding the outcome of the Judging and Display Seminar that was held in Austin recently. He was very upbeat and enthusiastic about the level of participation. Thanks to the Austin Club for letting Ron use their club house for the classes. Our hope is that those who came and learned will now return to their respective clubs and encourage them in this area of our hobby. Display cases at club shows are an easy way for club members to reach out to the public that attends. Many thanks to Ron for organizing and executing this for our Federation. Having this seminar was Ron's idea, and we appreciate his initiative and willingness to offer this service.

Bill Pattillo has notified me that he will be unable to finish his term as the Uniform Rules chairperson. We need a person who is willing to fill the position until nominations in September. If there is anyone who would be willing to step up to the plate and serve for the last few months, please call me, and let's talk.

The weather is warming up, and thoughts are turning more and more to that elusive fossil or mineral specimen just waiting for our hands to bring it into the light. Remember as you go into the field to prepare with safety first in mind. Happy hunting.

As always, let's all remember our sick members. God bless our troops who are serving our country..

"ICE"—In Case of Emergency

from AFMS Newsletter 3/2008 via The Rockpile 3/2008

e all carry our mobile phones with names and numbers stored in its memory, but nobody other than ourselves knows which of these numbers belongs to our closest family or friends.

If we were to be involved in an accident or were taken ill, who would they call? Yes, there are hundreds of numbers stored, but which one is the contact person in case of emergency?

Hence this "ICE" (in case of emergency) Campaign. The concept of ICE is catching on quickly. It is a method of contact during emergency situations. As cell phones are carried by the majority of the population, all you need to do is store the number of a contact person or persons who should be contacted during the emergency under the name ICE (in case of emergency)

The idea was thought up by a paramedic who found that when he went to the scenes of accidents, there were always mobile phones with patients, but the paramedics didn't know which number to call. He therefore thought that it would be a good idea if there

was a nationally recognized name for this purpose.

In an emergency situation, Emergency Service personnel and hospital staff would be able to quickly contact the right person by simply dialing the number you have stored as ICE.

For more than one contact name, simply enter ICE1, ICE2, and ICE3 etc. A great idea that will make a difference!

Let's spread the concept of ICE by storing an ICE number in our mobile phones.

Specific Gravity

Last month we learned about the physical property called *hardness*. The physical property for this month is called *specific gravity*. Specific gravity is a measure of how <u>dense</u> a certain type of mineral is compared to the density of the same amount of water. A mineral like galena or gold is very dense which means it has a lot of heavy elements (like lead and gold) packed very close together making the mineral heavy.

Mineralogists measure specific gravity using an instrument called a *Jolly Balance*. You can make a simple jolly balance with materials found around your house. You will need the following items:

1 stick, 1 foot-long ruler, 1 medium-sized rubber band, 2 large paper clips, a glass half filled with water, 2 piles of books that are about 1 foot high each, string, masking tape.

Creating a Jolly Balance:

- Attach the rubber band to the middle of the stick. NOTE: You can use a stretchy spring here instead of the rubber band. It needs to be able to stretch easily.
- Place the stick across the two piles of books so that the rubber band hangs down in the middle.
- 3. Tape the ruler to the left of the rubber band so that it stands straight up and down. Set it up so that the numbers on the ruler are facing you.
- 4. Un-bend one end of the paper clip to make a pointer. Attach the paper clip near the end of the rubber band (using the tape) so that the pointer is in front of the numbers on the ruler. The picture below should help you.
- 5. Fill a glass about 1/2 full of water and set it aside to use later.

Using your Jolly Balance:

- Choose a mineral and tie a string around it. Don't use your good display specimens just in
 case it gets dropped by accident. You don't want to damage your good specimens. Unfold
 the second paper clip and loop one end around the string that is tied to the mineral.
- 2. Hang the other end of this paper clip on the rubber band.
- 3. Read the number that the paper clip pointer is pointing to on the ruler. Ask your parents or a teacher for help if you need to for this part. It is possible that the pointer is pointing between two numbers. Read the number as accurately as you can. For example, it may be pointing to 5 1/2 inches. Write this number down on a piece of paper.
- 4. Place the glass of water underneath the hanging mineral specimen.
- 5. Let the specimen hang in the water. Make sure there is enough water in the glass so that the specimen is completely covered with water.
- Read the number the pointer paper clip is now pointing at. You will notice that the second number is smaller than the first number (because the water in the glass is pushing up on the mineral specimen).

To figure out the specific gravity of a mineral, you will need to take the two numbers you read on the ruler and plug them into this formula:

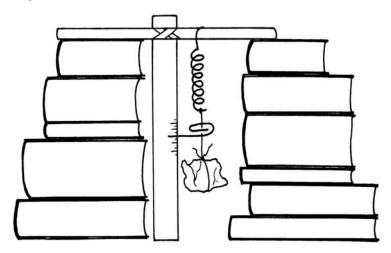
Measurement in Air

Measurement in Air - Measurement in Water

Choose 5 different minerals and take measurements in air and water. Record your observations in the chart below.

Specimen Number	Mineral Name	Reading in Air	Reading in Water	Specific Gravity based on my numbers	Specific Gravity from a mineral book
1					
2					
3					
4					
5					

How accurate were your calculations? Remember that a home-made Jolly Balance will not be as accurate as a professionally built scientific instrument. I bet your results are pretty close, though!



Editor's Note: I subscribe to the Mini Miners Monthly magazine and have received permission to include a few pages each month in the BBG and also on our Web site at www.hgms.org. These pages are from the April 2008 issue.

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products, including mineral activity books, note cards and Mineral Bingo!

Geopalooza! A Hard Rock Anthology

May 23–August 24, 2008
Submitted by Jason Korfhage
Marketing & Sales Manager
Houston Museum of Natural Science

iscover a new dimension of "rock" when *Geopalooza! A Hard Rock Anthology*, a new special exhibition created by the Houston Museum of Natural Science, debuts May 23–August 24, 2008.

Geode Forest: Navigate a forest of dozens of geode cathedrals from South America. Many of these striking specimens are three to five feet in height, all filled with lustrous crystals of deep purple amethyst or rich orange citrine. These stunning formations were created when superheated water, rich with dissolved silicon (quartz), entered natural cavities in the rock. When the silica solution cooled, crystals formed on the walls of the cavities where they remained hidden until the geodes were discovered and carefully sawn open to reveal their never-before-seen contents.

Colossal Crystals: Marvel at mineral crystals of extraordinary size in this section of the exhibition, including mammoth examples of almost-transparent rock crystal quartz, milky calcite crystals the size of dinner plates, lustrous amethyst clusters, and more. Admire examples of amazing gypsum crystals from the recently discovered Cave of Giants in Chihuahua, Mexico, a geologic formation that contains the largest individual crystals ever found—some over five feet in diameter and thirty feet long.

Great Balls of Fire: Space out with rocks from other parts of the cosmos in this gallery filled with an array of meteorites—from a massive boulder of over one thousand pounds to hand-sized fragments sliced open to reveal natural crystals of glimmering green peridot and other surprises. Many of these meteorites are fragments of asteroids, while others were ejected from the surface of Mars. Visit (or revisit) the 1960s as you inspect a lunar rock recovered from the surface of the Moon during the Apollo program.

Turned to Stone: Explore an assemblage of spectacular plant and animal fossils, including a giant gar, two giant crocodiles, and the porpoise-like ichthyosaur, an enormous swimming reptile. Discover a stunning 10-foot wide section of stone containing the remains of hundreds of giant pecten—huge scallops—that all perished together in some ancient calamity. Other highlights of this section include massive turtles, three pterodactyls, and a fossil coelacanth, an ancient order of fish once thought extinct—until members of the species were rediscovered alive in the 1930s.

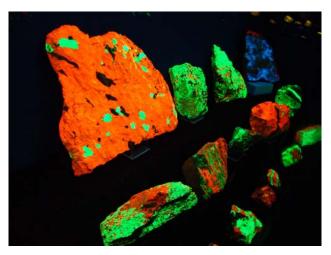
Jurassic Bark: Selections from the Zuhl Collection of Petrified Wood, renowned as one of the finest in the world, will be featured here. Over millions of years, quartz crystals in an array of colors replaced the wood and bark in ancient trees, preserving every detail of their structure. When sliced and polished, these spectacular pieces resemble works of art. Several of the specimens on display are more than a yard in diameter.

Once Trilo-bitten...: Discover some of the largest and most intricately detailed trilobite specimens ever found. Marvel at the surprising diversity of this resilient class of

arthropods, the last of which died out nearly 300 million years ago.

Dig Pit: Kids will dig the chance to try their hand at uncovering replica fossil dinosaur bones buried in a "desert" of crystalline sand.

See the Light: Take a psychedelic journey through one of the most dazzling collections of fluorescent minerals ever assembled. Appearing in literally every color of the rainbow, these vibrant glowing treasures are completely unremarkable in natural white light. Once exposed to the ultra-violet radiation of "black light," they release their hidden hues in a spectacular explosion of color



Agates and Friends: In this section, admire the handiwork of nature enhanced by humans as you view some of the finest sliced and polished agate in the world. Selections from the world-famous Condor, Laguna, and Queensland localities are displayed alongside a treasure house of lapidary masterpieces, including carved lapis, turquoise, ruby in zoisite, and many more rare and highly unusual works of natural art.

The Mother (Lode) of All Geodes: Confront one of the most magnificent amethyst geodes ever to have been discovered. Weighing several tons and standing more than five feet high, this amazing mineral specimen has never before been publicly displayed in the United States.

Break on Through: Finally, be the first human to view the contents of a natural geode when it is cracked open right in front of you. As smaller versions of the huge specimens on display in the exhibition, these geological curiosities contain quartz crystals in a variety of forms and colors. Take home both halves of your geological treasure as a one-of-a-kind souvenir.

This exhibition is sponsored by Spectra Energy and Weatherford International Ltd.

Tickets for this special exhibition are \$15 for adults; \$10 for children (3 - 11); \$9 seniors (62+) and college students with a valid ID; \$7 Museum members; \$3 school groups; and \$8 for groups of 20 or more.

Behind the scenes tour for Geopalooza! A Hard Rock Anthology

- Tuesday, June 17, 6 p.m.
- Tuesday, July 22, 6 p.m.
- > \$20 members, \$27 nonmembers
- > Tour this rockin' exhibition with Museum geologists.

ShowTime 2008

April 26-27	Waco, TX	Waco Gem & Mineral Club Heart of Texas Fairground
May 3-4	Lubbock, TX	Lubbock Gem & Mineral Society Lubbock Civic Center, 1501 Mac Davis Ln. Archie Scott (806) 894-1584 Ed Ries (806) 799-2722
May 24-25	Fort Worth, TX	Fort Worth Gem & Mineral Club Amon Carter Exhibit Bldg Will Rogers Memorial Center 3401 W. Lancaster; fwgmc@embarqmail.com www.fortworthgemandmineralclub.com
June 20-22	Houston, TX	Intergem Show Reliant CenterHall E, One Reliant Park www.reliantpark.com http://www.reliantpark.com/en/cms/?132
August 16-17	Bossier City, LA	Ark-La-Tex Gem & Mineral Society Bossier City Civic Center
August 23-24	Jasper, TX	Pine Country Gem & Mineral Society VFW Hall, 7 miles west of Jasper
August 30-31	Arlington, TX	Arlington Gem & Mineral Society Arlington Convention Center
September 20-21	Richardson, TX	Pleasant Oaks Gem & Mineral Club EMGI at Brookhaven College
September 26-28	Humble, TX (Houston)	Houston Gem & Mineral Society hosting the 2008 AFMS and SCFMS Shows Humble Civic Center, 8233 Will Clayton Pkwy. 5 miles east of Bush Intercontinental Airport 1 mile east of Hwy. 59; www.hgms.org Scott Singleton, fossilwood@comcast.net
October 9-11	Mount Ida, AK	World Champ. Quartz Crystals Digging Contest; Mount Ida Area Chamber of Commerce Montgomery County Fairgrounds, Fairgrounds Rd.; Maureen Walther, (870) 867-2723 www.mountidachamber.com director@mountidachamber.com
October 11-12	Temple, TX	Tri-City Gem & Mineral Society Mayborn Civic Center

2008	3		MAY	2008			
Sun	Mon	Tue	Wed	Thu	Fri	Sat	
				1	2	3 10–12 Youth Section 10–5 Shop Open	
4	5	6 7:30 Board Meeting	7 7:30 Mineral Section Annual Auction	8	9	10 10–5 Shop Open	
11	12 1:00 p.m. Day Light Section	13 7:30 Show Committee	14 7:30 Faceting Section	15	16	17 10–5 Shop Open 10–12 Youth Section 1:30 Beading Group	
18	19 7:30 Lapidary Section	20 7:30 Paleo Section	21 7:30 Mineral Section	22	23	24 10–5 Shop Open	
25	26	27 7:30 General Meeting	28	29	30	31 10–5 Shop Open	
2008	}		JUNE	JUNE 2008			
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29	30						

The BACKBENDER'S GIVENTE

The Newsletter of the Houston Gem & Mineral Society

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1998 - 1st (Large)

2000 - 1st (Large) 2003 - 1st (Large) 2005 - 1st (Large) 2006 - 1st (Large) 2007 - 1st (Large)

AFMS

1998 - 2nd (Large)

2004 - 3rd (Large) 2007 - 1st (Large)

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