



The

BACKBENDER'S GAZETTE



The Newsletter of the Houston Gem & Mineral Society

Volume L—No. 9

September 2019



President's Message

by Sigrid Stewart

I am writing this on August 25, and for Texans, that means the two-year anniversary of Hurricane Harvey. If I may be forgiven a terrible pun, Harvey was kind of a watershed moment for Houston. We came together and many people assisted in the rescues and rebuilding, but do not forget that there were people who lost their lives, and many who are still recovering from the destruction.

As we slowly move into fall and begin to move out of hurricane season, let us hope and pray that we do not see any big storms or floods this year. People still feel very vulnerable, and we should all remain prepared.



Soon we will be into September, and fall will begin. Maybe cooler weather is not that far away! It is time for club members to start planning for fall activities and volunteering for our Annual show, which will be held the second weekend of November. We are a volunteer organization, and a lot of work goes into staging a major event like our **66th Annual Gem, Jewelry, Mineral, and Fossil Show**. The Show Committee will have their first major meeting in September, and planning will begin in earnest. Here is the schedule so far:

- **Show Committee meeting** September 21 6:00–9:00 pm. Interested in being on the Show Committee? Email showchair@hgms.org.
- **Postcard labeling Party** September 28 10 am–12:00 pm at the club
- **Earth Science Week** at Houston Museum of Natural Science October 12, beginning at 8:00-10 am for members, 10 am–4 pm for the public

President's Message continued on Page 4

Upcoming Program

by Michael Sommers, 1st Vice President

General Meeting Program—September 24, 2019: Diane Schaub will be giving a presentation on the history of mosaics. As part of it, she will discuss *pietra dura*, the process of inlaying polished gemstones to create artwork.

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

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

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Copy is due for the October 2019 issue by Sunday, September 15, 2019.

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

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.

2019 HGMS Officers

President	Sigrid Stewart	President@HGMS.org
First Vice-President	Mike Sommers.....	Programs@HGMS.org
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Secretary.....	Nancy English	Secretary@HGMS.org
Treasurer.....	Tatyana Kuhn	Treasurer@HGMS.org
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Beading Section Board Member	Kim Fuselier	Beading@HGMS.org
Day Light Section Board Member	Fred Brueckner	
Faceting Section Board Member	Randy Carlson.....	Faceting@HGMS.org
Lapidary Section Board Member	Phyllis George.....	Editor@HGMS.org
Mineral Section Board Member	Steve Blyskal	Mineral@HGMS.org
Paleo Section Board Member	Mike Dawkins	Field_trips@HGMS.org

HGMS Section Chairs

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Beading Section Chair.....	Kim Fuselier	Beading@HGMS.org
Day Light Section Chair	Position Open	DayLight@HGMS.org
Gemstone & Faceting Section Chair	Randy Carlson.....	Faceting@HGMS.org
Lapidary & Silversmith.....	Margaret Hardman-Muye	Lapidary@HGMS.org
Mineral Section Chair	Stephen Blyskal	Mineral@HGMS.org
Paleo Section Chair	Neal Immega	Paleo@HGMS.org
Youth Section Chair.....	Beverly Mace	Youth@HGMS.org

HGMS Appointed Positions

Assistant Show Chair.....	Clyde McMeans	
Backbender's Gazette Editor	Phyllis George	Editor@HGMS.org
Clubhouse Chair	Neal Immega	ClubhouseChair@HGMS.org
Day Light Contact Person.....	Mary Ann Mitscherling	DayLight@HGMS.org
Donations	Neal Immega	Donations@HGMS.org
HGMS Education Chair	Maggie Manley	Classes@HGMS.org
Lapidary Templates	Mary Ann Mitscherling	Templates@HGMS.org
Librarian for Main Library	Neal Immega	Librarian@HGMS.org
Publicity Chair	Sara Metsa	Publicity@HGMS.org
Scholarships.....	Mike Sommers.....	Scholarships@HGMS.org
Show Chair	Scott Singleton.....	ShowChair@HGMS.org
Trade Show	Scott Singleton.....	Tradeshow@HGMS.org
Trade Show	Sigrid Stewart.....	Tradeshow@HGMS.org
Volunteer Coordinator	Nancy English	VolunteerCoordinator@HGMS.org
Webmaster	Sigrid Stewart.....	Webmaster@HGMS.org
Youth Section Assistant	Elizabeth Guynn.....	Youth2@HGMS.org

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 (except December) at 7:30. The HGMS Web site address is <https://hgms.org>.

President's Message continues

- **Field Trips in October**—probably Whiskey Bridge and Downtown Granite Tour
- **Energy Day** at Sam Houston Park Saturday October 19 11:00 am–4:00pm—for more information, please see <https://energydayfestival.org/>
- **Pre-show Dinner and Auction**—October 26 6:00–9:00pm at the club. The Show committee pays for the entrée, and everyone brings salad and dessert
- **Weekend after Show**—Volunteer Appreciation Party
- **Post-Show Field Trip** for volunteers

Field trips! I hope so! I hope I can get one or more set up for volunteers for after the show. In addition, maybe another one in October just to celebrate decent rock-hunting weather!

**2020 SCFMS
Annual Show—
in Temple, TX**

The 51st Annual

Gem and Mineral Show

of the Tri-City Gem and Mineral Society
is proud to host
the 2020 SCFMS
Annual Convention and Meeting
October 10 & 11, 2020
Saturday 9AM-6 PM Sunday 10 AM-5 PM
Rolling Rock Club Meeting Sunday 9AM

WIRE WRAPPING
CABACHON MAKING
SILENT AUCTION
TOUCH TABLE
DISPLAYS

Admission
\$5.00 Adults
\$2.00 Teen 13-17
Children 12 and under FREE with parent

VENDORS
FINE JEWELRY
TREASURE WHEEL
DOOR PRIZES
GRAND PRIZE

Mayborn Civic and Convention Center
3303 N. 3rd St. Temple, Texas 76501
Contact David Farhie 512-826-2754 dfarhie@gmail.com



Pyrite Pete says,

Lots of great activities coming up. What position in our annual HGMS show will you volunteer for this fall? Show Setup is Thursday, November 7, and the show runs November 8–10, 2019. There are LOTS of ways you can help—and have FUN while you are doing it! Contact Nancy English at nancyjodi@aol.com to sign up. You will be glad you did.

Archaeology Section

by Nancy Engelhardt-Moore

We have a lineup of fascinating fall programs with exciting speakers! Our programs are always held on the 1st Thursday of the month at 7:30 pm in the HGMS Clubhouse. Refreshments will be available. Please check out our upcoming programs. The next one will be September 5, 2019. We hope you can join us for an in-depth look at some local history of the forgotten town of San Felipe, the first provisional capital of Texas!

Upcoming Programs:

September 5, 2019: Bryan McAuley will speak on ***"San Felipe—It's Not Just a Street in Houston; Surprising Stories of Settling in Mexican Texas."*** Bryan, Manager of the San Felipe de Austin State Historic Site, will provide an historical overview; many stories can be told about one of early Texas' most misunderstood places. Do not miss this talk!

Photo Courtesy of B. McAuley



Statue at San Felipe de Austin

October 3, 2019: Dr. Dirk Van Tuerenhout, Curator of Anthropology at the Houston Museum of Natural Science, will present ***"Indigenous Arctic Cultures—from Earliest Settlers to Today's Inuit."*** The North American portion of the Arctic region was one of the first pieces of real estate in the Americas to be settled by humans. It was also one of the last areas in which humans settled. As the ice cap melts and the ice retreats, fragile artifacts are laid bare for explorers to find. These finds illustrate how, for millennia, people have pursued the same food resources with technology that hardly changed. However, for more than a century, the outside world has intruded more forcefully into the world of the Inuit. Mark your calendar for this informative talk.

Photo Courtesy of D. Van Tuerenhout

November 7, 2019: To Be Announced

December 5, 2019: The Section will hold its annual ***Holiday Party Potluck and Show & Tell***. Please join us for the festivities!



Source: [NPS.GOV/BEL](https://www.nps.gov/BEL)

Val Link

In Memoriam

by Deborah Kirkpatrick

I took several courses in Jewelry making from Val Link at The University of Houston. Of all the instructors I had in the Fine Arts department, he was the most patient and easy going. His good nature was in direct opposition to the general idea that great artists must be tortured. But make no mistake—he was a great artist.

His greatest failing as an instructor was that he made everything look so easy. He would demonstrate a technique, seemingly without any effort and in very little time, and then leave us to attempt to duplicate the process. Of course, our results and efforts were far different, taking hours to try to do something that even resembled in part what he had done. He was so skilled that it almost appeared supernatural.

I had the privilege of seeing some of his work at a faculty show hosted at U of H. I remember the amazing sculpture of toucan birds that he created—a combination of wood, metal, jewels, and who-knows-what-else. It was an amazing piece of work.

The last time I saw Val, I asked him if he had put any photos online so I could share his work. Sadly, he said that most of his portfolio was in slide form. He had not found an easy way to transfer them to digital photos. I hope that the private collectors and museums who have his work will eventually post them so everyone can be as inspired and awed by his work as I was—then and now.

Debbie Kirkpatrick



Val Link

In Memoriam

April 28, 1940—July 22, 2019

by Neal Immega

Val Link was a long-time, highly valued member of HGMS. He could do ANYTHING with metal, passing on his knowledge to countless students during his 37 years in the jewelry and metalsmithing program at the University of Houston. After his retirement, he continued to teach and give programs at HGMS—members of HGMS were beneficiaries of his experience, creativity, and patient efforts. Those who took classes from him could not help be in awe of his skill level and teaching ability. For me, his most difficult class was anaclastic raising—a technique for hammering a flat sheet into a hollow object. The photo below is one of the simpler pieces we worked on. I wish I had had more training by him. Let people teach you when they are available.



Midlothian Field Trip: Great Day—No Rain!

by Michael Sommers

Member of the Houston Gem & Mineral Society

"There's a 4:30 in the morning now?" – Bart Simpson

It's actually an hour and a half earlier than the time mentioned in Bart's now classic quip: 3 a.m., and a humid, sticky July Saturday morning on top of that. For some reason, I am awake and out of bed. I am awake at a time that might normally be referred to as the "crack-of-[expletive]," willingly and deliberately, getting dressed, and into my car. There are very few *good* reasons to be doing this, but I have one—get to Midlothian from Houston by 7:45! What could possibly drive me to set that as a goal, on a weekend morning of all times? Well, a big hole in the ground!

This is because Midlothian, Texas is home to the Martin Marietta Materials Midlothian Cement Plant, off Highway 67 just south of the town. The facility was formerly owned by Texas Industries (or TXI) and known as the TXI Midlothian Plant up until July 2014. Many people in the mineral and fossil collecting worlds still refer to it that way—although my first trip there was not until after it was purchased. When it was first built, the TXI Midlothian plant was the largest cement plant in the country. It accomplished this, in part, by mining a vast deposit of limestone referred to as the "Austin Chalk" and turning it into the key ingredient for cement—lime. The Austin Chalk is Cretaceous in age, and is the result of millions of years of deposition of little calcium carbonate platelets from microscopic marine algae called coccolithophores. This was during a period of time when what is now north-central Texas was covered by a vast, inland sea that went all the way into Canada. Of course, chalk by itself is not very interesting to the general mineral and fossil collector, and certainly, chalk is no reason to get out of bed at 3 a.m. (although it makes some fascinating microscopic specimens). BUT, other creatures stirred in those ancient, briny waters, and they left behind traces of their existence, which has my interest piqued!

Martin Marietta digs deep into the chalk in Midlothian, all the way down into the underlying rock layers known as the Eagle Ford Formation. You may have heard about this as an oil-rich formation that drillers target (although when it is this close to the surface, it does not produce oil). Right above the Eagle Ford, at the very base of the Austin Chalk, is a thin layer only a few feet thick known sometimes as the "Fish Bed Conglomerate." This layer contains an abundance of brownish-black phosphate nodules, and plenty of fossils including clams, snails, rare ammonites, the occasional carbonized wood, and then what the layer is best known for—fish bones and teeth. Many of the fish were sharks! Teeth of many different shark species can be found, ranging from the sharp daggers of "Jaws" to the knobby, shell-crushing teeth of skates and stingrays. On top of that, the truly fortunate can find bones and teeth of mosasaurs! It is a fossil-collecting wonderland.

As if that is not enough, the Austin Chalk also offers mineral collectors a chance to pick up amazing nodules of pyrite. This is due to the high productivity of those ancient



Shark teeth montage – Example of shark teeth found at Midlothian.

Left: *Ptychodus whipplei*, a type of crushing tooth, found in skates and rays;

Center: *Ptychodus latissimus*, another crushing tooth;

Right: a nice, large pointy tooth (not identified)

oceans. All those coccolithophores growing, dying, and sinking to the bottom of the shallow sea created a lot of organic matter that sucked up oxygen as it decayed. As more and more chalk accumulated, it buried this carbon-rich muck where the anaerobic bacteria were able to thrive—producing energy in the “opposite” way from what we’re used to—“reducing” elements rather than oxidizing them. It was creating sulfide from sulfate and iron from what we’d refer to as “rust,” both of which are naturally present in seawater and in sediments washed in from land, as well as in dead animals. Iron and sulfide in turn combined into the mineral pyrite (and very occasionally, marcasite) around the dead, decaying bits of former animals buried in the limestone, growing into beautiful crystals while the sediment was still soft. This pyrite is bad for cement makers. **Pyrite, if mixed into concrete, will rot back into rust and sulfate—producing acid and increasing in size enough that the concrete it is made into can crack and shatter!** Martin Marietta



Pyrite – Massive cluster of cube-octahedral pyrite crystals in a hash of broken oyster shell, weighs over 3 lbs. Collected by the author during a previous trip.

employs machinery that can separate the pyrite crystals from the limestone, but of course they do not mind if we come in first and pick out as much as we can carry!

Which brings me back to why I’m in a car driving north at 3 a.m. Martin Marietta continues a noble practice started by TXI, allowing groups of geo-

enthusiasts such as our Houston Gem & Mineral Society access to their quarry floor on some Saturday mornings from 8 a.m. to noon, weather permitting. And lately, the weather has not been permitting. When I say lately, I mean the past two years! The last time HGMS was in the quarry was October of 2017 (the trip I am writing about now occurred in July of 2019). It became a sad, running joke about rain cancellations plaguing this trip – three dates prior to the October 2017 trip, five dates (the ENTIRETY of scheduled attempts) for 2018, and the first three scheduled attempts of 2019! Our quarry guide, Doyle, says we are the first group back into the fossil pit of the quarry since 2017! This is quite likely why 15 other brave HGMS members joined me on this early morning trek into the quarry on a hot July morning—a hunger built up literally over years.



**Group photo—The “Sweat Hog” crew of the July 2019 Midlothian field trip.
Notice the big smiles!**

Midlothian is an operational quarry, and while Martin Marietta typically does not have employees quarry on weekends, if they have not made a quota during the week (due to weather, typically) they will work on a Saturday. This was the case this weekend, which was unfortunate because that limits our collecting area. The quarry hauls limestone using enormous mining dump trucks, and for safety and productivity issues, our puny road-legal autos cannot occupy the same roads in the quarry. The area where the haul trucks work happens to be the area where the best pyrite occurs. This is in the back (south) end of the quarry, over two-and-a-half miles from the front of the facility. It is here where they rip new limestone out for processing. This limestone is from a higher stratigraphic level than the Fish Bed Conglomerate, and while it does contain fossils, they are not nearly as abundant. However, here the pyrite can be found in clusters of large modified cubic crystals, the biggest clusters I have seen—larger than softballs and weighing over three pounds! These clusters are often around or on fragments of giant oyster shells. This contrasts to pyrite from the conglomerate, which are tiny nodules of miniature cubes. Doyle hopes that in the future, he can get an employee to bulldoze out a path along the east side of the quarry that would allow our street vehicles safe access to the south wall without disrupting quarry operations. Cross your fingers!

For this trip, we were limited to the “shale pit” area of the quarry, roughly in the middle,

but still almost a mile-and-a-half in from the gate. It is here that the quarry operators dig down into the Eagle Ford to get shale, which is used as a catalyst in their lime production process. These pits fill up with water, and Doyle mentioned they had three large pumps draining them so we could access the collecting area more easily. The conglomerate beds have been ripped up and dumped into piles around the pits—this is not material the quarry wants. This limestone conglomerate is particularly soft, quickly falling apart with just a minor amount of effort, exposing fossils, and liberally littering the ground with them. The group quickly descended upon the piles, spreading out and exploring around the pits, and everyone was soon rewarded with exquisite shark teeth from the age of dinosaurs. One relatively new member even found a partial jawbone of a gar, with a few teeth sticking out. Even though it is not the best area for pyrite, decent



Gar skull—Nice fragment of gar skull and jawbone with teeth.



Carbonized log—Left, showing the remains of the wood with some of the limestone “ribbons” atop it; Right—Remaining impression of the other side of the log. Crumbled carbonized wood, and “ribbon” fragments lie crumbled at the base. Approximately 2 ft long.

nodules can still be found here if one looks hard enough. Several of us found good examples. Finally, I found the remains of a large, carbonized log with incredible, delicate limestone “ribbons” formed into an exquisite pattern. I assume the ribbons were some form of concretion, or rather formed in a somewhat related process as concretions, but as thin as cardboard. The wood material—

basically charcoal—is ridiculously fragile, and it cannot be collected without extreme measures. Likewise, the patterned limestone “ribbons” fell apart when they were merely looked at strongly (or so it seemed). For the most part, they were for gazing upon and marveling in the work of nature, appreciating that you are one of the few, perhaps only, humans to see it with their own eyes.

Four hours roll by quickly when one is having this much fun, and noon was upon us in no time. As disappointing as that was, the heat was building steadily the whole morning, and the temperature climbed into the low-nineties, with no shade to be found anywhere. At least there was a decent breeze. But it was time to roll out, and better to do so while still maintaining some sense of well-being before any heat-exhaustion or dehydration effects came about.

Everyone had a great time, and just as importantly, everyone had a safe time. It is important to remember that latter part and to keep it as a priority—not just for you, but for everyone in the club and for all other clubs and groups that visit, too. This is an active, industrial site, and Doyle and the people in the quarry are employees whose livelihood is at stake should anything unfortunate occur. In today’s hypersensitive, liability-conscious world, the fact that Martin Marietta allows us in to collect fossils and minerals at all is a privilege that needs to be cherished and respected, and I am proud of Houston Gem & Mineral Society members acting in a manner that demonstrates that. I have been told we are welcome back in October, and I can barely wait for that trip! When you see it announced, I hope you can make it, and please hope for clear blue skies and no rain!

Collecting Rocks

from Breccia 09/1972, via Breccia 06/2019

I think that there shall never be an ignoramus just like me,
Who roams the hills throughout the day, to pick up rocks that do not pay.
For there’s one thing I’ve been told, I take the rocks and leave the gold.
Over deserts wild and mountains blue, I search for rocks of varied hue,
A hundred pounds or more I pack, with blistered feet and aching back.
And after this is said and done, I cannot name a single one.
I pick up rocks where’er I go, for reasons why I do not know.
For rocks are found by fools like me, where God intended them to be.

Author Unknown

See page 13.

Lost in the Stacks

Brief book reports of books I took with me on the road.

by Neal Immega

The rise of broken hill by Blainey, 1968—Everyone has had the urge to strike it rich, and the people who investigated a ragged-top hill in the Australian outback really did it. The ore was so rich that they even made money after paying to haul the ore out by oxcart to the coast and then send it to Germany for smelting. The ore was mostly lead and zinc, but it had so much silver that some shipments had 1000 oz. of silver/ton of concentrate. A great story.

I found some marvelous memorabilia as bookmarks—a boarding pass from Sydney, a ferry ticket from Bay of Islands, and an entry ticket for the Capt. Cook Memorial Museum.

Life Etched in Stone – Fossils of South Africa—by MacRae 1999, 300 pages. What a surprise this was. Fossils from an area that I knew about only vaguely. The Karoo basin is full of things that lived AFTER the Dimetrodons we find in North Texas. I tell people all the time that they should get out more, and this is a way to do it easily. I guarantee you will like it—or you can check out another book!

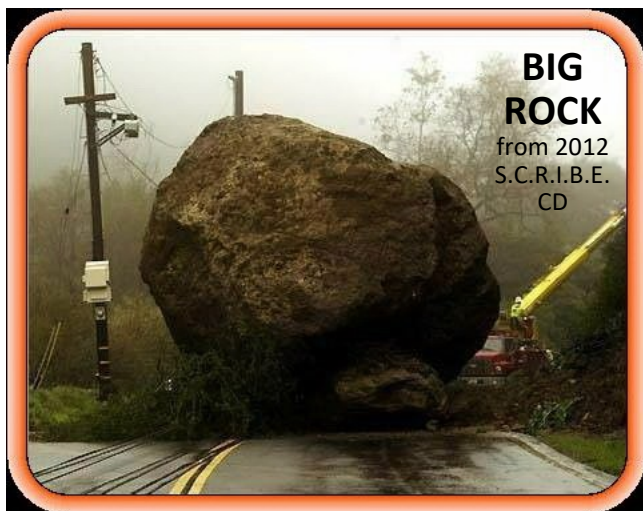
New book - *Banded Agates, a genetic approach* by Campos-Venuti 2018, 200 pages—I bought this book for the library at the Agate Expo in Austin. When I get back, come into the library, and check it out. It is about the genesis of agates with great pictures. This is the best book I have seen on the subject. Understand this book, and you will know more than Matt Dillon (though with a poorer collection).

Agates—Don't tell Joan Riley that I found a Michigan dealer who would sell me candy-striped lakers that I can cut! I bought a handful, so after I cut a good cab, you can buy my other pieces for what I paid (about \$10 each). No, Foster, you cannot tumble them.

Don't tell Kendall that he should have bought agates rather than Microsoft many years ago. The prices here are amazing. Too many zeros. Speaking of zeros—anyone who bought a \$100 thunderegg from me owes the club about \$900 more. I am not even going to talk about dryhead agate prices. I think I will put together a program on this agate show.

Inda and I did the fifth anniversary of the Whiteside museum of Paleo. Over 900 people showed up from a town of 3,000. Their new fossil is a skeleton of Seymouria. The last find was in 1885. I will tell you more later.

On the road in Seymour, TX



General Meeting Minutes

July 23, 2019

by Nancy English, HGMS Secretary

Vice President Sommers called the meeting to order at 7:33 p.m. He thanked the eighteen people for coming to the July General Meeting. Joseph Sinkiewicz rejoined HGMS before the meeting. He was a member a long time ago. He is interested in Lapidary and in Beading.

Minutes: Tony Lucci moved to approve the minutes of the June 25, 2019 General Meeting as posted in the July 21, 2019 e-blast. Tatyana Kuhne seconded the motion, and it passed.

Vice President's Announcements

Nancy English reported that a friend of Max Washburn's is trying to check on him. Max had bypass surgery last year. He did not renew his membership in 2018 and 2019. His phone mailbox is full. Does anyone know anything? Nancy English has the friend's contact info.

The Silent Auction opened at 7:00 p.m. Bids will end after the break. Payment for winning bids will be collected after the program—**cash or check only**.

Section/Committee Reports

In the interest of time, Vice President Sommers asked members to look for reports of Section news in the BBG, on the Web site <https://hgms.org>, or by reading the weekly e-blast from Jim Kendall for future Section meetings and presentations. If you are a member and not on Jim Kendall's e-mail list, please contact him at kendallja@att.net. VP Sommers invited other Section Chairs and Standing Committee Chairs to make any additional announcements.

Nancy English announced the **Day Light program—Wednesday 1:00 to 3:00 August 7, 2019**. Mariana Rombado will get the holiday started in August. Ten to fifteen participants will make at least two beautiful and unique ornaments that can be used for the Holidays, given as gifts, or hung in their homes or cars. Mariana will provide tools and materials of the best quality and good taste: semiprecious stones, Czech crystals, metal, wires, and findings. Two ornament kits may be purchased for \$10.00.

Paleo Section: Vice President Sommers announced that during the summer, the Houston Museum of Natural Science has free admission on Thursdays from 6:00 p.m. to closing. Neal Immega will give free tours of the Paleo Hall to HGMS members starting at 6:00 p.m.—IF you call him **AT LEAST THE DAY BEFORE** to schedule his time.

Old Business

Vice President Sommers asked members to look for the progress of Old Business items in the BOD Meeting Minutes in the latest BBG.

Education Classes: Joy Lester is teaching this year's first beginner's wire wrap class in August. Watch the E-Blast for dates and times.

Field Trips: Vice President Mike Sommers reported that sixteen people enjoyed the RAIN-FREE, fossil-rich, July 13, 2019 Midlothian field trip. People found *Ptychodus* crusher teeth, shark's teeth, and a gar skull. Some pyrite was found, but they did not get back to the south wall where the great pyrite collecting is done. Mike Sommers will schedule another Midlothian field trip for October. Check the HGMS Web site, hgms.org, and the Jim Kendall weekly E-blasts.

HVAC: More work is to be done on the plenum and the ductwork.

Scholarship: The 2019 HGMS Scholarship was awarded to Kira Mitchell, currently of San Jacinto Community College. She is transferring to the University of Houston Downtown this fall. She plans to get a Bachelor of Science Degree in Earth Sciences. Douglas Dodds has graciously added his \$500.00 Scholarship to our \$2500.00 to give her a total of \$3000.00.

New Business

The next Board meeting is, August 6, 2019 at 7:30 p.m.

The next General Meeting will be Tuesday, 7:30 p.m. August 26, 2019. The Mineral Section is holding its annual auction in an effort to raise the \$1000.00 they donate annually to *Rock and Mineral* magazine in the name of HGMS. The periodical uses the money to offset costs of color pictures, and they give HGMS credit for the donation. New donations to the club will be available for the auction.

New Assistant editor of the BBG: Phyllis George introduced Sharon Thomas to the audience. Sharon has volunteered to become the BBG Editor when Phyllis retires in February 2020.

Donations from HGMS: Neal Immega announced that a printer is available for a good home. Two desks are in the garage waiting for a new home. All are free.

Show 'n Tell: Nicole Ayuob brought a pair of polished polyhedral agates, dry head agate, purple passion agate, and crater agate from Argentina. Owen Martin showed petrified palm wood. Neal Immega displayed serpentine from the Coal Creek Serpentine deposit.

Drawing: Foster Kneeland won the Crystal Cluster.

Vice President Sommers reminded the crowd to check the Silent Auction table during the break and to make their final bids. Payment will be taken by check or cash after the program.

Adjourn: Richard Good moved to adjourn the business meeting, and Phyllis George seconded it. The meeting adjourned at 8:10 p.m.

Refreshments were served by Sharon Thomas. Thank you, Sharon. Members were reminded to **FEED THE KITTY!** **Secretary Nancy English** explained that the refreshments will be reimbursed up to \$25.00. Jack Opatrany offered to bring refreshments to the next General Meeting on August 27, 2019.

Vice President Sommers introduced the Program: Neal Immega had created a PowerPoint presentation about the International Exposition of Agates held in Austin June 6–9, 2019. Many of the pictures were taken by Steve Blyskal.



Board of Directors Meeting Minutes

August 6, 2019
by Nancy English

	President—Sigrid Stewart	X	Beading—Kim Fuselier
X	1st Vice President—Mike Sommers	X	Day Light—Fred Brueckner
X	2nd Vice President—Beverly Mace		Gemstones & Faceting—Randy Carlson
	Treasurer—Tatyana Kuhne		Lapidary & Metalsmithing—Phyllis George
X	Secretary—Nancy English		Mineral—Steve Blyskal
	Archaeology—Nancy Engelhardt-Moore	X	Paleontology—Mike Dawkins

Vice President Sommers called the meeting to order at 7:30. A quorum of seven was not present. Foster Kneeland was the only non-voting member in attendance. It was noted that Paul Brandes is no longer a member of HGMS. Secretary Nancy English removed his name from the Board of Directors list.

Approval of Minutes. The minutes of the July 2, 2019 Board Meeting could not be approved without a quorum.

Treasurer Report: Treasurer Tatyana Kuhne emailed the financials to the Board members on Monday, August 5, 2019. Nancy English delivered the final redo of the new signature cards to Prosperity Bank. Tatyana Kuhne set up \$100.00 bank transfers from Chase to Prosperity on the fifteenth of each month. The first transfer is scheduled for August 15, 2019. Nancy English ordered and received the Chase Deposit card for Tatyana to make cash deposits in Chase Bank.

COMMITTEE REPORTS

BBG Editor: Articles for the September BBG are due Saturday, August 15, 2019. Phyllis George introduced Sharon Thomas at the General Meeting on July 23. Sharon will be the Assistant Editor, learning the systems Phyllis uses. Then Sharon will become the BBG Editor when Phyllis retires in February, 2020.

Education Committee: Joy Lester is teaching the year's first Beginner's Wire Wrap class on August 18. Students will pay \$50.00 for all supplies and teaching. Tools will be provided. As of the BOD meeting, the class is full.

Library Committee: Jim Kendall purchased a color laser printer with wireless capability for the library. He installed it on Saturday, August 3.

Jim will work on a set of instructions so that members can add the printer to their own devices. He is hopeful Windows, Apple, and Android devices will ALL be able to print.

Jim Kendall provided a Canon Toner Cartridge price chart and committed to managing the consumables for the near term.

Fred Brueckner suggested a new black and white laser printer for the office to minimize the use of the more expensive one in the Library.

Publicity Committee: via email, Sarah Metsa reported that she sent a request for the show

to be listed in the AAA Texas magazine. Thanks to Fred Brueckner for finding that. She will be doing the same thing in Houston local publications offering free listing.

Show Committee: via email, Scott Singleton reported

Web site has all show info updated and pics of the last show inserted on Annual Show, School Daze, and Scout pages. It is ready for school and Scout programs signups. Several signups have been received.

School Daze postcards Beverly will pick up the postcards (should be ready next week) and mail them as soon as she can finish the prepping for mailing. Dates for September Show Committee meeting, September Postcard Labeling and Pizza Party, and Show Auction are undecided. Scott will reach out to committee members next week to plan them.

2019 Trade Show Committee: Members of the Trade Show Committee are currently investigating insurance questions related to liability coverage, specifically with regard to Trade Shows and non-member visits.

The next Trade Show Committee meeting is on August 31, 2019, at the Club, 2:00. Mike Sommers will not be able to attend.

Web site Committee: Lauren added the "subscribe for event info" link to the Web site for people who want information about an event. Sarah Metsa gets notice of new subscribers every couple of days. These are active subscribers which is very good news! This is a subscription to get Mailchimp blasts that tell people about upcoming events like Trade Shows and The Annual Show.

Section Reports

Archaeology Section: In August, the Archaeology Section is on summer hiatus. Thursday, 7:30 p.m., September 5, 2019, Bryan McAuley will speak on "*San Felipe—It's Not Just a Street in Houston; Surprising Stories of Settling in Mexican Texas.*"

Beading Section: Saturday, 1:30 p.m. August 17, 2019. Beaders will be using a video instruction format from "Potomac Beads" to make a Breaking Waves Bracelet.

Day Light Section: Wednesday, 1:00 p.m., August 7, 2019. Mariana Rombado, owner of Soul Healing Jewelry by Mariana, and proud member of HGMS, will get the Holidays started in August. Ten to fifteen participants will make two or more beautiful and unique ornaments. Mariana will provide tools and quality materials such as semiprecious gems, Czech crystals, metal wires, findings, also jingle bells. Refreshments will be provided. Total cost for two kits is \$10.00.

Gemstones and Faceting Section: Wednesday, 6:30, p.m., August 14, 2019. via email, Randy Carlson reported: Our August meeting will include a continuation of our (Faceting) Hints & Tips, plus a discussion and hands-on use of a spectroscope for use in gem I.D. Members will also begin cleaning and repairing the Faceting machines. Randy Carlson said he will not hold any more classes in 2019 because the equipment needs work.

Lapidary and Silversmithing Section: Monday, 7:30 p.m., August 19, 2019. Judges of the R.O.L.E. program will explain how they judge entries.

Mineral Section: Wednesday, 7:30 p.m., August 21, 2019. no report.

Paleo Section: Tuesday, 7:30 p.m., August 20, 2019. Mike Dawkins said he will be

presenting Part II of his trip to China. He will consider sharing his presentation at a General Meeting.

Youth Section: Saturday, 10:00 a.m. to Noon, August 17, September 7 and September 21, 2019. Beverly Mace reported that kids are working on their Show Cabochons.

Vice President Sommers noted that the Beading, Day Light, and Lapidary Sections are underrepresented in the General Meeting programs. He encouraged Kim Fuselier and Nancy English to create a program that would interest creative members of the Club. They agreed to consider it. Lapidary Section Chairman, Margaret Hardman-Muye, will be contacted, also.

Old Business

Building Issues: HVAC status

The shop air conditioner quit working on Saturday, August 3. The Lee Thompson HVAC was called for service for Tuesday, but they could not make it. Fred Brueckner asked them to come on Wednesday. *Since the BOD meeting, the repairman found that the new thermostat Neal Immega installed was the problem. It is working fine now.*

Sigrid Stewart forwarded the new quote for the plenum rebuild and duct work for discussion. The Board encouraged President Stewart to accept the proposal for the repairs to the Main Hall plenum, dampers, and ductwork. Approval was sanctioned by motion in July. *FROM July BOD minutes: "Sigrid moved to replace the plenum, dampers and duct work. Tatyana Kuhne seconded the motion, and it passed."*

Donations: At the July 3 BOD meeting, Tatyana Kuhne and Randy Carlson agreed to form a committee to make plans for better tracking of donations. They will encourage Neal Immega to join them. Since then, all three of them have been on vacations. No report yet.

Shop News: Regarding the Lapidary Section's request for wide-wheel grinding wheels, Neal Immega says "the way the professionals polish large rocks is with a hand-held grinder/polisher. He has one in the shop, and he is willing to train any member who shows up with a large rock and wants to use it. The pros do slabs, stumps, lumps of all sizes. We already have the machine." Some new polishing pads will be necessary. He also submitted a link that shows the machine and the pricing of various models:

https://www.ediamondtools.com/products/5-variable-speed-wet-polisher?utm_source=google&utm_medium=cpc&utm_campaign=google_shopping&matchtype=&network=g&device=c&keyword=&campaign=1898012567&adgroup=pla-743201237423&gclid=Cj0KCQjwsrpbBRCsARIsAKBR_OlelQz10jCflfyxJU0kim5kJYDWOEQFvwLnpDLyCmmmqLaWHHOYaAiJyEALw_wcB

Paint the Main Hall: via email, Jack Opatrany said he is in Ohio for a week. When he returns, he and Tatyana Kuhne will finish painting the Main Hall. Tatyana will pick a projector-white color that is the easiest to put on the wall. She returns from vacation in the Midwest in mid-August.

New Business

HGMS BUSINESS CARDS: HGMS is out of business cards. Nancy has contacted Garth Clark to ask him to order more. She explained the Mineral Section meetings are now once a

month on the third Wednesday.

The ceiling in the Main Hall leaked. On Monday July 29, the ceiling in the Main Hall leaked during a heavy rain. The stained ceiling tiles mark the spot. It has not leaked since. The sash around the parking lot door leaked on the same day. Nancy English also reported a leak in the office by the mail slot. The glass near the slot is cracked and should be replaced. Years ago, the roof leaked because the drainpipes were clogged with a Nerf ball and leaves. Someone will need to go onto the roof.

Dunn Southwest quarterly meeting: Nancy English attended the DSW quarterly meeting on July 17, 2019 at the PPSI office.

Nancy English noticed the Flammables sign on the door of the PPSI building. The owner said he had to have it on the doors to notify Firefighters that flammables were inside. Nancy suggested to the HGMS Board that we put those signs on our doors. Fred Brueckner said we would have to buy fire cabinets to store our flammables. Nancy agreed that precautions should be made.

A leak in the ground pipes has caused pooling puddles near one of the DSW buildings. Depending on what it may cost to find the leak in the ground pipes, a special assessment may be needed.

Also, an assessment may be needed to paint the buildings.

The DSW BOD voted to give Coir Property—aka Audrey Kelly—a 5% raise.

Nancy forgot to tell the HGMS Board that DSW knows the flooding that happens in our area after heavy rains has been attributed to a 60-foot collapsed line under Beltway 8 and SW freeway. It is a TxDot issue. No solution has been offered so far. Our area has been downgraded to the 500 Year Flood Plain. Nancy English suggested to the HGMS Board that HGMS purchase flood insurance if we do not have it.

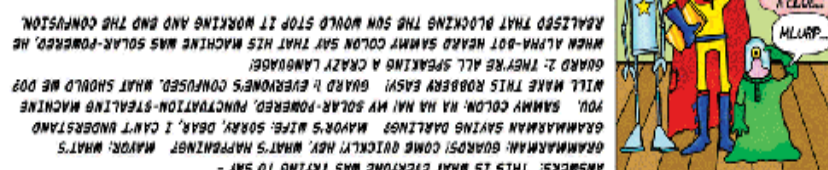
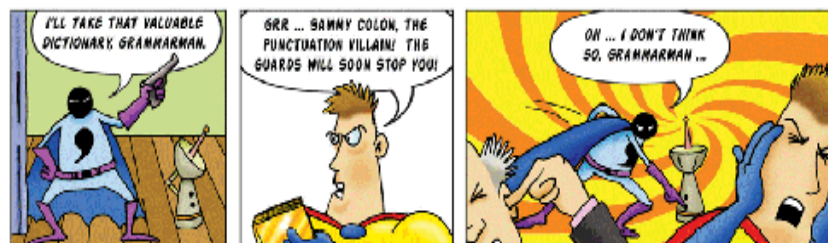
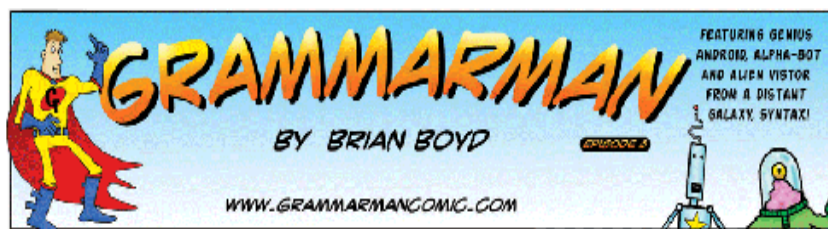
New officers were elected. Sandy Dasigenis agreed to be President. Rex Chu moved to Secretary. Joel Robinson filled his position as director. Another Director position may be available. Nancy English declined the position. If it still is available, another HGMS member may be willing to serve.

The next Board of Directors meeting will be Tuesday, 7:30 p.m. September 3, 2019.

The next General Meeting will be Tuesday, 7:30 p.m. August 27, 2019. The Mineral Section will hold an auction to generate funds for their annual \$1000.00 donation from HGMS to *Rock & Mineral* magazine. The periodical uses the money to offset costs of color pictures and gives HGMS credit for the donation. Art Smith used to send them his own money for that page. After Art passed away, the Mineral Section wished to continue the donation. New rock donations to the club will be available for auction. Steve Blyskal and the Mineral Section may need help to categorize, label, and price the large donation received from Linda Saxman. Linda also has a set of grinding and polishing wheels for sale that have not yet been picked up.

Adjourn: At 8:48 p.m. the Board agreed to adjourn.

S.C.R.I.B.E. - Special Congress Representing Involved Bulletin Editors - Volume 43 No. 3 May/June 2019



Jewelry Bench Tips

by Brad Smith

*Work Smarter & Be More Productive With Brad's
"How To" Jewelry Books*

<https://www.Amazon.com/author/bradfordsmith>

FOREDOM STAND



A quick and easy way to suspend a flex shaft over your jewelry bench is to use some steel pipe components from the hardware store. You can buy it today; it attaches with a couple of screws, and it only costs about \$10.



I use 1/2 inch galvanized pipe and fittings. To build a stand that attaches to the top of your bench, all you will need is a flange and a thirty-inch length of the pipe. If you prefer a stand that attaches to the side of your bench, you will need a little longer pipe—three foot, a flange, and a 90 degree "street L" elbow.

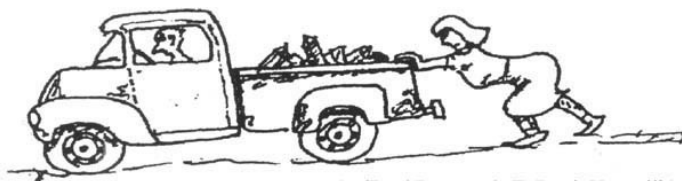
Finally, make a hook that goes into the top of the pipe from which to hang the motor. You can use heavy coat hanger wire or 1/8 steel rod from the hardware store.



BROKEN DRILLS

Have you ever broken a drill bit off in a hole? Sometimes you can grab it with pliers, but other times the steel piece is below the surface in the hole. If this happens, a quick fix is to dissolve the steel in a solution of alum or fresh pickle. The solution will not affect your silver or gold piece.

Alum is typically available from a food store. It is used to preserve some foods. Use about a tablespoon per cup of warm water. Submerge your piece so that the partially-drilled hole is facing up to let the bubbles float free and not block the hole.



by 'Dug' Dugger via Ft Lewis News 6/01
via Golden Spike News 7/01



Scientists Find 68-Million-Year-Old Triceratops Fossil in Colorado

from *The Rockpile* 09/2019

Read more at <http://www.geologyin.com/2019/07>

Several weeks ago, construction workers digging near a Denver, Colorado, retirement home made a startling discovery—dinosaur bones.

Paleontologists say fossilized bones unearthed at a suburban Denver construction site are those of a large, adult triceratops.

Maura O'Neal, a spokeswoman for the Denver Museum of Nature & Science, said Friday the partial skeleton included a limb bone and several ribs of the three-homed dinosaur.

The Denver Post reports the bones were found at a construction site near a retirement community in Highlands Ranch in May in a rock layer that dates back 65 million to 68 million years.

Construction crews are using heavy equipment to dig a deep trench in search for other dinosaur fossils next to the area where the triceratops bones were found. O'Neal says that of all the dinosaur bones discovered in Colorado, the remains of triceratops have been among the most common.

Scientists say the possibility of unearthing more fossils runs very high. The construction crews are now working hand-in-hand with scientists to explore the site further in search of more fossil finds.

2018 GEOLOGY IN REVIEW: ICE, WATER, WIND, AND EARTH

by Dr. Bill Cordua

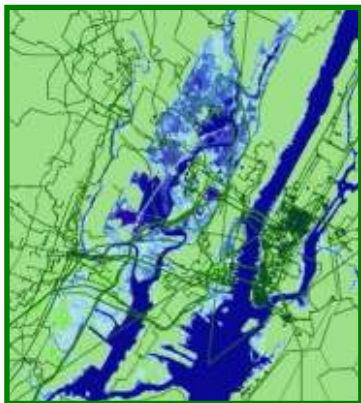
MWF Geology Committee Chair

via MWF News January 2019, via SCFMS Newsletter 07-08/2019

Here are some geology news items from 2018 that might interest MWF (and SCFMS) readers.

Ice in "ice"? A report in the journal *Science* by geologists at the University of Nevada-Las Vegas describes finds of the high-pressure form of H₂O, ice VII, as inclusions in diamonds forming below 200 kilometers in the earth's mantle. The discovery of water (NOT as liquid) at these depths has important implications in modeling the deep mantle, including effects on magma origin and plate movement.

Map of New York City's Internet infrastructure, with blue-shaded areas representing places projected to be underwater by 2033. Picture by senior study author Paul Barford, who said, "The expectation was that we'd have 50 years to plan for [seawater inundation]. We do not have 50 years."
via news.wisc.edu.



A study by University of Wisconsin-Madison computer scientists shows that many Internet hubs and wires in coastal cities will be submerged by rising sea levels within the next 15 years. New York, Miami, Seattle, and other coastal communities are at risk of losing their Internet connections. These will need to be either relocated or replaced by equipment designed to function underwater.

Can dust be your friend? Texas A&M researchers found that abundant dust blown off the Saharan Desert can suppress the number and severity of Atlantic hurricanes. Who says an ill wind can blow no good?

A paper recently published in *Nature* revises ideas about the temperature at which granitic magma crystallizes. Conventional thoughts puts this temperature at about 650–700°C, based on laboratory modeling of artificial granite magmas. Trace element work on quartz in granite in Yosemite Park suggest granitic magma can be liquid as low as 475–560°C. This has important implications on how granite can form the associated ore deposits and pegmatites so beloved by mineral collectors.

Structures in Australian chert at Stanley Pool, dated as 3.4 billion years old, were controversially proposed to be microfossils. New studies presented in August, 2018 verify the presence of organic molecules in the structures similar to those in modern bacteria, supporting the idea that life was present on Earth that long ago.

The Minnesota DNR has granted a permit to mine and other needed permits to PolyMet for their proposed copper-nickel open pit mine in the Hoyt Lakes-Babbitt area in northern Minnesota. Environmental groups continue to fight the proposed \$945 million operation. The ore is

associated with a 1.1-billion-year-old mafic igneous body, the Partridge Ridge Intrusion. It contains an estimated 225 million tons of ore, enriched in nickel, cobalt, copper, and platinum group metals. And unfortunately, sulfur.

Also in Minnesota, Crow Wing Power, which owns mineral rights to the manganese deposits in the Emily area on the Cuyuna Iron Range, continues to consider mining the ore. Economic manganese deposits are rare in the US. In fact, there has been no significant manganese mining here since 1970. This requires US companies to import 100% of the manganese used in manufacturing—mostly from South Africa, Gabon, Australia, and Norway. Manganese is used in many industrial processes, such as hardening steel and making lithium batteries. Should these mines re-open in Minnesota, it is possible that very good specimens of manganese-rich minerals (rhodochrosite, groutite, manganite) will emerge to grace our collections.

Old mines are also in the news. On the one hand, there are renewed calls to seal them off for safety reasons, especially in places like Colorado and Utah, where hundreds of abandoned openings exist. On the other hand, old mines are popular sites for mineral collecting (and preservation), tourist attractions, and other underground exploration adventures. They are also increasingly used as research facilities. Some research uses are detection of neutrinos, investigation of sub-surface bacterial ecosystems, and feasibility of carbon and hazardous waste sequestration. The Tower-Soudan Mine in Minnesota has been used for such research since 1981.

Old mines underground tours



Use of certain clear minerals, such as a cleavage rhomb of clear (“Iceland spar”) calcite, can be effective in navigating in cloudy conditions. Molecules in the atmosphere act as a weak polarizing filter. Studying the sky through a piece of calcite, another polarizing material, will show darker or lighter shading depending on the geographic direction, thus help locate north. Two University of Hungary researchers used computer simulations to show that this would be an effective way to navigate from Norway to Greenland under various cloud cover conditions. Now I encourage these researchers to duplicate this “in the field” with a real Viking ship and a piece of calcite. A convincing proof would be their safe arrival in Greenland.

WHAT WE CAN'T
DO ALONE
WE CAN DO
TOGETHER



What does AFMS do for its members?

*Contributed by Sandy Fuller, Past President
from AFMS Newsletter 06/2019*



At the recent AFMS Board meeting, participants were asked to describe the AFMS in 10 words or less. Although a few got wordy, here are the results:

- AFMS gives clubs direction and resources
- Assure national-level focus on the health of federation-level rockhounding activities
- Insurance, work to keep collecting areas open, coordinate regions
- AFMS promotes camaraderie among the regional federations
- Long-range planning, insurance for field trips and shows
- Meeting with old friends and making new friends from around the country who share a similar interest in our rockhounding hobby
- The camaraderie, making friends, working together, sharing
- The AFMS newsletter has a lot of good and useful information
- The AFMS provides support and guidance to regional federations as well as coordination for events and issues of national importance to club members
- National network, young rockhounds, case competitions, program library, ALAA, ethics
- Provides guidelines and resources for the gem & mineral societies across the country
- AFMS is the head of the seven federations from all around the US. AFMS is our glue.
- To work toward saving rock collecting sites
- Encourage competition for cases at all levels with fair judging
- Scholarship—Almost \$2 million awarded
- AFMS provides resources to help regional federations make clubs stronger
- AFMS coordinates and standardizes rules and procedures between all seven regions
- AFMS provides guidance, networking opportunities, and information
- AFMS recognizes rockhounds for their contributions to our hobby in the form of awards and acclamation
- AFMS: Communication between regions, program competition provides presentations for regional libraries, scholarships for each region, Web site makes contacting clubs across the country much easier, a great place to find information, keeps abreast of legislation that affects collecting areas and other matters affecting our hobby.

Show Time 2019–2020

Sept. 13-15 Denver, CO	Denver's Original Gem & Mineral Show Denver Mart, in the Expo Hall, 451 E. 58th Ave.
Oct 11-12 Mount Ida, AR	Annual Championship Quartz Crystal Digging Contest Montgomery County Fairgrounds, Fairgrounds Rd. director@mtidachamber.com ; www.mtidachamber.com
Oct. 12-13 Temple, TX	Tri-City Gem and Mineral Society Frank W. Mayborn Civic and Convention Center 3303 N. Third Street lrolston@hotmail.com ; http://drarhie.wixsite.com/tcgm
Oct. 18-20 Austin, TX	Austin Gem and Mineral Society Palmer Events Center, 900 Barton Springs Rd. showchairman@austingemandmineral.org ; www.agms-tx.org
Oct. 18-20 Lewiston, ID	NFMS hosted by Hells Canyon Gem Club Nezperce County Fair Building, 1229 Burrell Avenue hcgemclub@yahoo.com ; http://www.hellscanyongemclub.com/
Nov. 2-3 Midland, TX	Midland Gem and Mineral Society Barbara and George H. W. Bush Convention Center 105 N. Main St.; mgmstx@gmail.com ; www.midlandgemandmineral.org
Nov. 8-10 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 HGMS.org ; Showchair@hgms.org
Nov. 23-24 Mesquite, TX	Dallas Gem and Mineral Society Mesquite Rodeo Center Exhibition Hall, 1800 Rodeo Dr lynnouvillion@gmail.com ; www.dallasgemandmineral.org

Show Time 2020

Jan. 18-19 Fredericksburg, TX	Fredericksburg Rockhounds Lady Bird Johnson Park at the Pavilion, Hwy. 16 South hcgms20@gmail.com ; fredericksburgrockhounds.org
Jan. 24-26 Tyler, TX	The East Texas Gem & Mineral Society Tyler Rose Garden Center, 420 South Rose Park Dr. Margaret Kilanski— mlkilanski@yahoo.com
May 30-31 Lubbock, TX	Lubbock Gem and Mineral Society Lubbock Memorial Civic Center, 1501 Mac Davis Lane walt@lubbockgemandmineral.org ; www.lubbockgemandmineral.org
Oct. 10-11 Temple, TX	SCFMS hosted by Tri-City Gem & Mineral Society Mayborn Civic and Convention Center, 3303 N. 3rd St. David Farhie 512-826-2754, dfarhie@gmail.com

2019		September				2019
Sun	Mon	Tue	Wed	Thu	Fri	Sat
1	2 LABOR DAY	3 11-3 Shop Open 7:30 Board Meeting	4 10-3 Shop Open 1-3 p.m. Day Light	5 7:30 Archaeology Section Meeting	6 7:30	7 10-3 Shop Open 10-Noon Youth Section
8 10-4 Shop Open	9	10 11-3 Shop Open 7:30 Board Meeting	11 10-3 Shop Open 6:30 p.m. Gemstone & Faceting Section	12 10-3 Shop Open	13	14 10-3 Shop Open
15 10-4 Shop Open	16 7:30 Lapidary Section	17 11-3 Shop Open 7:30 Paleo Section	18 10-3 Shop Open 7:30 Mineral Section	19 10-3 Shop Open	20	21 10-3 Shop Open 10-Noon Youth Section 1:30 Beading Section
22 10-4 Shop Open 10-4 Shop Open 29	23 First Day of Autumn 30	24 11-3 Shop Open 7:30 General Meeting	25 10-3 Shop Open	26 10-3 Shop Open	27	28 10-3 Shop Open

2019		October				2019
Sun	Mon	Tue	Wed	Thu	Fri	Sat
		1 11-3 Shop Open 7:30 Board Mtg.	2 10-3 Shop Open 1-3 p.m. Day Light	3 10-3 Shop Open 7:30 Archaeology Section Meeting	4	5 10-3 Shop Open 10-Noon Youth Section
6 10-4 Shop Open	7	8 11-3 Shop Open 7:30	9 10-3 Shop Open 6:30 p.m. Gemstone & Faceting Section	10 10-3 Shop Open	11	12 10-3 Shop Open
13 10-4 Shop Open	14 Columbus Day	15 11-3 Shop Open 7:30 Paleo Section	16 10-3 Shop Open 7:30 Mineral Section	17 10-3 Shop Open	18	19 10-3 Shop Open 10-Noon Youth Section 1:30 Beading Section
20 10-4 Shop Open	21 7:30 Lapidary Section	22 11-3 Shop Open 7:30 General Meeting	23 10-3 Shop Open	24 10-3 Shop Open	25	26 10-3 Shop Open
27 10-4 Shop Open	28	29 11-3 Shop Open	30 10-3 Shop Open	31 10-3 Shop Open Halloween		

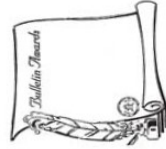
The BACKBENDER'S GAZETTE

The Newsletter of the
Houston Gem & Mineral Society

10805 Brooklet

Houston, Texas 77099

(281) 530-0942



SCFMS

1998 - 1st (Large)
2000 - 1st (Large)
2003 - 1st (Large)
2005 - 1st (Large)
2006-2016- 1st (Large)
2017 - 1st (Large)
2018 - 1st Large
2019 - 1st Large



AFMS

1998 - 2nd (Large)
2004 - 3rd (Large)
2007 - 1st (Large)
2010 - 2nd (Large)
2012 - 3rd (Large)
2013 - 3rd (Large)
2014 - 2nd (Large)
2017 - 3rd (Large)
2019 - 2nd (Large)

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