

# BACKBENDER'S GAZETTE



The Newsletter of the Houston Gem & Mineral Society

Volume L-No. 12

December 2019



### President's Message by Sigrid Stewart



always like this time of year; everyone seems to be relaxing a little, and maybe starting to get into that party mood. Sure, there is a lot of work left: Christmas shopping, holiday meal preparation (yum!), accounting for the business of the year, and preparing for the New Year. The season is very enjoyable, and I love the holiday lights and decorations, even though I will do everything I can to avoid listening to Christmas music until the actual week of Christmas!



It is always a relief when the major work of the year for the club is done. Now we have the Christmas Party to look

forward to, and the parties that most of the Sections host. Be sure to check your eBlasts, and look for news from your Section heads for details.

Back in January, we had a very successful Trade Show, followed by another in April. We also represented our club at the Clear Lake Show and at the Texas Mineral and Fossil Show in Conroe, and helped promote it. We held an auction to benefit the color fund for the **Connoisseur's Choice** feature in *Rocks & Minerals* magazine.

President's Message continued on Page 4

Upcoming Program by Michael Sommers, 1st Vice President

oliday Program—December 14, 2019: The HGMS Holiday party will be on Saturday, December 14, 2019 at the Unitarian Fellowship, 1504 Wirt Rd, Houston, TX 77055. This lovely venue allows us plenty of room to visit with friends and to enjoy the sides and desserts we bring for the potluck. HGMS provides the main dish meats.

Volunteers can set up around about 4:30. Please contact Nancy English at <a href="mailto:nancyjodi@aol.com">nancyjodi@aol.com</a> to volunteer to set up tables, move pews, set up our buffet.

We can begin cocktails and potluck appetizers about 5:30 with BYO wine and beer.

Dinner buffet will start at 6:00. A bit of speechifying around 6:30 will wrap up the show reports, awards,

Vice President's Message cont. on Page 4

### **Contents**

President's Message	1
Upcoming Program—Christmas/Holiday Party	1
HGMS Purpose	
HGMS 2019 Officers, Section Chairs, and Appointed Positions	3
Pyrite Pete—Your help is needed—Our Holiday Party is Saturday, December 14	4
Archaeology Section	5
Something to try!! Make Your Own Stone to Carve	7
Your Club's Show (poem)	8
Some Signs of a Rockhound	
Sharon Thomas will be the new BBG Editor	g
Food for Thought	9
General Meeting Minutes—October 22, 2019	10
HGMS Board Meeting Minutes—November 5, 2019	14
Jewelry Bench Tips	17
Editor's Christmas and New Year's Carol	18
NASA will hunt for fossils on Mars	19
Exceptional fossils may need a breath of air to form	20
The Metals of Antiquity	21
A Night Before Christmas	24
DON'T BE A WRECK-HOUND—BE A RECREATIONAL ROCKHOUND!	25
Show Time—2019–2020	26
Calendars	27

Permission to use material originating in this newsletter is given freely providing that credit is given to the author and the source.

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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Phone: (281) 395-3087

Copy is due for the January 2020 issue by Sunday, December 15, 2019.

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

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### **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 \$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, % page: \$150 for 6 months. % page.

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President	. Sigrid Stewart	President@HGMS.org
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Secretary	. Nancy English	Secretary@HGMS.org
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Beading Section Board Member	. Maggie Manley	Beading@HGMS.org
Day Light Section Board Member	. Fred Brueckner	•••
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Mineral Section Board Member	. Steve Blyskal	Mineral@HGMS.org
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	<b>HGMS Section Chairs</b>	
Archaeology Section Chair	. Bob Moore	Archaeology@HGMS.org
Beading Section Chair	. Kim Fuselier	Beading@HGMS.org
Day Light Section Chair	. Position Open	DayLight@HGMS.org

### **HGMS Appointed Positions**

Assistant Show Chair		
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 <a href="https://hgms.org">https://hgms.org</a>.

### **President's Message continues**

The Library is back in business, thanks largely to Neal. The shop is rockin' along, also thanks to Neal. The main room has been repainted (Thanks, Jack and Tatyana), and we have one new air conditioner. The clubhouse roof is being repaired and recoated, and should be good for years.

We have had a great series of BBGs this year (Thanks, Phyllis George), and we all know what's happening because of the eBlasts Jim Kendall sends out. We have had good meetings and great talks!

The accounting for the Show is still incomplete, and will be for some time, but our attendance was exceptional, and all the dealers were very happy. Thanks, Scott, Clyde, and the Show Committee—and all the volunteers it takes to make the show happen. Knowing that we had a successful show makes all the work worthwhile.

We continue to promote our club and education in Earth Science and the Lapidary arts, and we are hosting classes again at our clubhouse. I think we can all look forward to another great year!

### Vice President's Message continues

installation of 2020 HGMS Officers, and 2019 accomplishments.

The auction begins at 7:00. Donations are welcomed and needed. Bring them to the General Meeting on November 26, 2019. Or bring them to the Party at 4:30 so we have time to log them into the Auction program.

Afterward we need volunteers to wash our dishes and put everything back for the Sunday Service. Again, let Nancy English know.

### 2020 HGMS Officers

President: Sigrid Stewart
1st Vice President: Mike Sommers
2nd Vice President Beverly Mace
Secretary Nancy English
Treasurer Tatvana Kuhn



### Pyrite Pete says,

Y'all come to the HGMS Holiday party Saturday, December 14. NOT at the Club! Come to the Unitarian Fellowship, 1504 Wirt Rd, Houston, TX 77055. Wonderful food, great friends, and a grand time!

Please volunteer to set up tables, move pews, and set up our buffet—arriving at 4:30 p.m. Let Nancy English know at NancyJodi@aol.com. If you can stay to wash our dishes and put everything back for the Sunday Service, again—let Nancy English know.

### **Archaeology Section**

by Jay Roussel

**November 7, 2019**: Bob Moore called the meeting to order at 7:35 pm. He and Nancy Engelhardt-Moore began with a few announcements. On December 5, the Section will have a holiday potluck and artifact "show and tell." In January, there will be no meeting. But in February, there will be a field trip to see the Stonehenge Exhibit, which is on display at the Houston Museum of Natural Science. Later in the spring, Bob and Nancy will present their work on Croatia.

The slate of officers was presented to the members, and they were unanimously approved. The officers elected were:

- Bob Moore, Chair:
- Nancy Engelhardt-Moore, Vice-Chair;
- Jay Roussel, Secretary.

Bob introduced the guest speaker, Dr. Michelle Marlar, Egyptologist, who is Field Director of the Osiris Temple Project in Abydos, Egypt. After the talk, there was Q&A. Meeting adjourned at 9:00 pm.

Thank you to Dr. Marlar for editing the program text and providing the Osiris profile photo. Also, thank you to Dania Fisher for taking the photo of Michelle and Nancy.

### Program:

Dr. Marlar presented "The Osiris Temple: An Offering Which the King Gives." The Osiris Temple is at Abydos, which goes back to very early Egyptian history. The first kings of Egypt were buried in this area, as it is believed they saw it as the entrance to the afterlife. The Egyptians from the



Michelle Marlar and Nancy Engelhardt-Moore

Middle Kingdom designated one of the early dynastic tombs in Umm el-Qa'Ab as the "tomb of Osiris," because they thought that Osiris was buried in Abydos. Immense royal funerary enclosures are also found in Abydos.

The myth of Osiris is that he was the first king of Egypt, but he had a jealous brother named Seth, who wanted the throne and so murdered his brother through trickery. But Osiris' wife, Isis, puts him back together, conceived a son, Horus, who avenged his father and became associated with the kings of Egypt while Osiris became the god of the dead. In Egypt, each city has a temple for a particular god (usually husband, wife, and child). The temple contained a "holy of holies," which housed a special statue treated like a living god. So, based on that and textual evidence, we could safely guess that the temple of Osiris was in Abydos. The Osiris Temple was the location of a yearly festival during which Egyptians recreated the myth of Osiris, and to which people would make pilgrimages.

Excavations by Flinders Petrie occurred in 1902, in the area of the Osiris temple, which brought forth evidence of chapels that would have been along an important procession route used during the festival. The walls of the temple enclosure are still evident. An area nearby is where there is a huge collection of limestone and sandstone fragments that was at first believed to be a temple much later in history and thus, not excavated. But in 2002, small excavation units were opened up by Dr. Marlar. The sites were chosen in part by predicting where the architecture features would be based on knowledge of how other temples were laid out. The archaeologists were surprised by what they found.

Normally, a site like this would have heen destroyed bv subsequent populations such as the Romans who burned the limestone to make concrete. However. they found in situ foundation features that allowed them to understand where the walls would have been. architectural The features proved that this was, in fact, a later temple dating to the 30<sup>th</sup> Dynasty. Further. excavations uncovered



**Osiris Stone Profile** 

re-used blocks within the foundation, which had information that linked it back to around 1300 BCE. In addition, a cartouche from Seti II allows us to place it around 1200 BCE.

Mixed in with the excavated rubble were decorated pieces of shallow, raised reliefs, which were not smoothed before painting. They started to find distinctive facial features that were indicative of a particular time period, which is from the 30<sup>th</sup> Dynasty (ca. 340 BC) when Nectanebo I ruled. Also, in the excavation, there were numerous "offering scenes", which are evidence that the site was used as a temple. This encouraged them to open more excavation units in order to find if

there was an earlier temple.

As they worked below the huge mounds, they found immense architectural features, which were below the stone foundation and sand of the 30<sup>th</sup> Dynasty temple. Despite all the architecture, they only found one inscription, which was probably a workman's mark. However, the type of hieratic script is evidence of the new kingdom (or later), indicating that it might be architecture from a New Kingdom temple. The new kingdom temple was much smaller, but aligned perfectly.

This led them to keep searching. What they found, surprisingly, was that someone had excavated years ago, but the site was never recorded. There is no stratigraphy or context; however, they did find parts of an old floor and religious artifacts which were small statues of Osiris. Several diagnostic pieces were uncovered that dated to the new kingdom pharaoh, Tuthmosis IV. The pieces were assembled based on what was already known about Egyptian art. Based on evidence from other sites, they were able to reconstruct what the pillars would have looked like. By comparing finds from the Osiris temple to the reconstructed portico of Tuthmosis IV at Karnack, they discovered that the pillars are the same between the Osiris Temple pillar and the Karnak pillar (at the temple of Amun-Re). The styles are so similar, it could have been the same artist. Dr. Marlar concluded by stating that more work remains, including a search for a potentially earlier site.

### **Upcoming Programs**

**December 5, 2019**: The Section will hold its annual *Holiday Party Potluck and Show & Tell*! This will be a fun, educational program with lots of good food. Please join us for the festivities!

January 2, 2019: No meeting due to the Holiday.

**February 2020**: Field Trip to the HMNS Special Exhibit **Stonehenge: Ancient Mysteries and Modern Discoveries.** Watch for more details about this upcoming exciting event!



# Something to try!! Make your own Stone to Carve from The Rockpile How to Book, via Hy Grader, 1987

f you want to try carving and do not have a suitable soft stone on hand, try this recipe:
Mix in a disposable plastic container one part plaster of Paris,
1½ parts vermiculite,
and one part water.

Pour into a clean half-gallon milk carton. Allow to harden for five days. Peel off carton. Carve the "stone" with kitchen or workshop tools.

This mixture, although having a granite-like appearance, is similar in consistency to gypsum. If you don't want to work on a gray-white stone, add a little liquid fabric dye to the water before mixing it with the other ingredients. -

Why are Rockbound Club Shows such great affairs?

### YOUR CLUB'S SHOW

© 2019 TERRELL WILLIAM PROCTOR, J.D. November 12, 2019 10:00 P.M. Houston, Texas

So your club had a show—big deal!

Well, IT IS, as I will now reveal.

You may have seen commercial shows,
but the difference, every rockhound knows.

Jewelry isn't the only thing there, No, it's more like a great fun Fair. One will see gems, fossils, and more. So many things to view are in store.

Dealers are friendly and informed.

You will be educated, not misinformed.

Excitement grows as you enter the Show, Exciting fossils and gems all aglow.

Members with their badges and their vests.
Visitors viewing with great interest.
Seeing friends from afar with their wares.
Glad to see you and items to share.

New items, so amazing for all to see!

Great minerals and baubles, so ritzy.

Rockhound shows are not just the norm.

It's like the contrast from breeze to storm.

You see dealers, club members, and friends,
Many clubs' success on their Show depends.
Among club members, one thing is known.
Love of Club in every heart and **shinbone**.



# Some Signs of a Rockhound via The Rock Prattle 09/2019

ou dumpster dive at a marble warehouse
You color coordinate your wardrobe to match your cabochon pendants
You like to examine the rocks in everyone's driveway.

You keep every rock you find just in case it may be worth something.

You have to have at least two buckets of every type of stone at each sale.

You stop at all "Falling Rock" signs just in case.

Your idea of a summer vacation is the nearest rock quarry.

You treasure ancient fossilized animal dung.

Your guestroom is for "Rocks Only."

The neighbors wonder when the dump truck will arrive to remove the excess rocks.

## SHARON THOMAS will be the new Editor by Phyllis George

Sharon Thomas has agreed to become the editor for the Backbender's Gazette. To make her feel that she can easily do this,

- I have told her that she DOES NOT need to attempt to duplicate the features now found in the current BBG. In fact, the BBG will become whatever her vision is for it.
- 2. As far as I know, our BBG is the only booklet-style newsletter in our federation (SCFMS). The newsletters that I have seen are 8½" x 11" sheets of paper (usually two sheets—sometimes three or four) printed front and back. It would be nice if she maintains the booklet format, but that is not mandatory.
- 3. It takes a while to learn everything necessary for putting out a newsletter. For her first year, please DO NOT expect her issues to be up to what you might be hoping. The newsletter will be made up of Items she finds in other newsletters (as mine is), and articles sent to her by club members. This will be HER newsletter, and it will become whatever her vision is for it.
- 4. The first issue that she will work on is the February 2020 issue. Therefore, she will begin assembling it January 15, 2020. **The 15th of the month is always the deadline for sending articles to her.** The last issue I will be working on is the January 2020 issue, which I will create the last half of December 2019.
- 5. PLEASE encourage her efforts and please make her feel appreciated. I'm sure she will do a great job.



### FOOD FOR THOUGHT

from New Mexico Faceter 10/1989, via The Roadrunner 05/2019

/he gem you cut today may adorn your children, your children's children, their children, and on and on through the ages. Perhaps a thousand years from now—or two thousand, or even five thousand years from now—who knows whom it may adorn or in what place it may be displayed? Anything that may endure that long surely deserves the greatest care in its creation.

The Roadrunner Editor's note: Pause and give this a second reading, then think about it when you cut your next cabochon, faceted gem, bead, chain, or whatever work you may be doing. Give it your best shot in careful creativity—use a magnifying loupe, get those flat spots and scratches out before you even get to the polishing stage. You will have created a stone that will stay beautiful through the ages.

### **General Meeting Minutes**

October 22, 2019 by Nancy English

resident Sigrid Stewart called the meeting to order at 7:37 p.m. President Stewart welcomed the fifteen attendees: Georgiana Kramer, who presented a General Meeting program, **Lunar Swirls**, on April 23, 2019, joined HGMS. Sadly, the October 22 HGMS General Meeting was competing with the Astros' World Series game, which probably reduced attendance.

### **President's Comments**

**Silent Auction** has been open since 7:00 p.m. It will end after the break. Pay after the program.

**Approval of Minutes:** Phyllis George moved to approve the minutes of the September 24, 2019 General Meeting as posted on the October 20, 2019 E-blast. Steve Blyskal seconded the motion, and it passed.

### **Section/Committee Reports**

In the interest of time, President Stewart asked members to look for reports of future Section meetings and presentations in the BBG, on the Web site <a href="https://hgms.org">https://hgms.org</a>, or by reading the weekly e-blast from Jim Kendall. If you are a member and not on Jim Kendall's e-mail list, please contact him at kendallja@att.net.

President Stewart invited other Section Chairs and Standing Committee Chairs to make any additional announcements.

**BBG Editor**: Phyllis George announced that she needs December Section Meeting information for the November BBG.

**December 5, 2019, The Archaeology Section, Thursday, 7:30 p.m.** will have their Holiday Potluck Dinner.

**December 4, 2019, Day Light, Wednesday, Noon to 2:00,** will have their Annual Holiday Party Potluck.

**December 11, 2019, Gemstones and Faceting Section Wednesday, 6:30, p.m.,** will have a Christmas party.

**Lapidary and Silversmithing Section** is NOT having a December meeting.

Mineral Section will decide on their party date at the November meeting

**Paleo Tuesday, 7:30 p.m., December 17, 2019,** will have a regular meeting. Paleo has a holiday party in July.

**Youth Section** will have a Holiday party **December 7, 2019,** featuring Show awards and FUN.

### **Old Business**

President Stewart asked members to look for the progress of Old Business items in the

BOD Meeting Minutes in the latest BBG.

**Education:** Maggie Manley said there are still spaces available for the classes. **Intermediate Wire Wrapping**—Saturday, October 26, 2019; **Beginning Wire Wrapping**—Sunday, November 24, 2019; **Beginning Wire Wrapping**—Sunday, November 24, 2019; **Beginning Wire Wrapping**—Sunday, December 8, 2019. Maggie is also looking for marketing ideas for future classes.

**Field Trip News:** Midlothian went beautifully. The day was gorgeous, cool, and sunny with a light breeze. The fossil area uncharacteristically was a dud for the most part, but with a little persuasion, we were able to get our guide to take us to the back wall of the quarry where everyone found many nice pyrite clusters!

A Field Trip is being scheduled for November 23 and 24 to Emerald Ridge and Badu Hill near Llano, Texas. Previous finds in this area include emerald green fluorite, strawberry quartz, and topaz. This may require one or two overnights in Llano. Look for instructions on signing up in the weekly E-blast.

**The Jewelry Lab improvements**: Tony Lucci reported that the chop saw is fixed. Do **NOT** use it for wood—use the band saw for wood. Tony has updated the toolboxes for classes. He found the adjustable chairs at Staples to replace the ones currently in the Lab.

**Show Committee:** From now until November 17, it is all about the Show!

- Pre-show Dinner and Auction—October 26, 6:00—9:00 p.m. at the HGMS club house. The
  Show Committee pays for the entrée, and everyone brings side dishes, salads, or desserts.
  BYO beer and wine. Dinner at 6:00 p.m., Auction at 7:00. Come early to put your food out
  and check over the auction items. We need auction items. So far, we have eight large
  thunder eggs, some minerals, honeymoon agate, and obsidian.
- Magnetic Signs—ordered: Should be available at Pre-Show Dinner and Auction.
- A-Frame signs have been delivered to Nancy English. She will bring them Saturday.
- Vance Gems is a new dealer added to the Show.
- **Volunteers** are still needed for all days, all shifts. Please contact Nancy English or sign up at HGMS.org Volunteering for the Show.
- Weekend after Show—Volunteer Appreciation Party Saturday, November 16, from 6:00 p.m. to 9:00 p.m. BYOB. This is NOT a potluck.

### **New Business**

### **Building Issues:**

 We have had some roof leaks and are getting bids for repair. One roofing company showed up October 19 to look at the roof. The worker took pictures, and his company has sent an estimate. He talked to Neal and Sigrid and said the tar had shrunk, leaving some openings for water. Another company is scheduled to come Tuesday, October 22.

The significant cost of roof repairs needs to be approved by the General Membership. Mary Ann Mitscherling moved to approve the cost of roof repair.

Nancy Fischer seconded the motion, and it passed.

- Exhaust fans need to be installed in the restrooms and in the metalsmithing lab.
- The big mercury light above our main entry door is out. It needs to be replaced.
- The drywall ceiling is sagging in the middle meeting room.
- Filters need to be replaced in the middle meeting room and in the shop.

### The Slate of Officers for 2020 is:

Sigrid Stewart—President;

Mike Sommers—First Vice President;

Beverly Mace—Second Vice President;

Tatyana Kuhne—Treasurer;

Nancy English—Secretary.

Beverly Mace committed to one more year, 2020, as Second Vice President.

**Trash:** Neal used to take HGMS trash home with him to go out with his trash. Sigrid Stewart and Steve Blyskal have begun doing it. We need additional volunteers to haul trash on Wednesdays, and probably Saturdays.

If food trash sits around, we are likely to have problems! In addition, please dump your ice! Liquid makes a mess. If your Section Meeting creates food trash, please take that trash home.

The next Board of Directors meeting will be Tuesday, 7:30 p.m. November 5, 2019.

The next General Meeting will be Tuesday, 7:30 p.m. November 26, 2019 Program: Lydia and Francois van Driel will present "From South Africa to New Zealand to Texas." The story of our rockhound adventures and a closer look at the areas where the treasures come from.

They will talk about the land that shaped these gems, crystals, and minerals, the people involved, their experiences along the way, and the issues facing Artisanal Miners in Africa.

They will also have some of the Southern African specimens for sale, including:

- Agates (from South Africa, Namibia, Zimbabwe, Mozambique, and Lesotho),
- Crystals (from Boekenhouthoek, Orange River, and a very limited number from Brandberg in Namibia),
- Spheres and Eggs (about 40 different types of Southern African rocks e.g Verdite, Lepidolite, Leopard Rock, Springstone, Amethyst, Kalahari Picture Stone, Veld agate, Tiger's eye etc.)
- Unpolished gems and minerals (such as Tigers' eye, Rose quartz, and Fluorite)
- Petrified wood from Zimbabwe

### Show-n-Tell:

**Georgiana Kramer** showed off her new ilmenite specimen and a Stillwater anorthosite. Ilmenite (FeTiO<sub>2</sub>) is rare on Earth, and more common on the Moon

(although the crystals would not be so large). The dark areas on the Moon are basalts, and some of those basalts have a fairly high abundance of titanium. Mare Tranquillitatis (the Sea of Tranquillity, where Apollo 11 landed) is full of high-titanium basalts. That titanium comes from ilmenite. Stillwater anorthosite (>90% plagioclase) is an analog for the bright crust on the Moon - called the lunar "highlands".

**Steve Blyskal** showed a beautiful large slab of gold moss agate, to be auctioned at the Pre-Show Dinner and Auction.

Nancy and Bob Fischer recently returned from their trip to Summit County in Wyoming. Nancy brought back lots to show us—stromatolites from the Kemmerer Commercial Quarry. The Rock Show in Towella, Utah provided fire opal, agates from Milford, Utah; and topaz and garnets from Topaz Mountain. Topaz was laying on the ground, plus some rhyolite with topaz on it.

**Mike Dawkins** had peony stone—sometimes called "peony jade"—he had purchased while in China. It is an ancient basalt with feldspar crystal "flowers" that occurs in Luoyang in Henan province.

**Sigrid Stewart** showed what is probably a slab of botryoidal jade from California that she acquired at the Little Rock Shop and Gallery in Smithville, TX.

**Drawing:** Mike Sommers won the Oco geode from Tres Pinheiros region of Rio Grande do Sul, Brazil.

Refreshments tonight by Sigrid Stewart. Please, FEED THE KITTY. Maggie Manley volunteered to bring next month's refreshments. President Stewart explained that the refreshments will be reimbursed up to \$25.00.

**Adjourn**: Phyllis George moved to adjourn. Mike Dawkins seconded it. The meeting adjourned at 8:30 p.m.

After a fifteen (15) minute break, Vice President Sommers introduced the Program:

Mike Dawkins shared his trip to China, including the Beijing Museum of Natural History and The Geological Museum of China. Pictures from the museums featured the feathered dinosaurs from Liaoning Province, plus various other dinosaur, insect, plant, ocean, and other fossils from China, along with minerals and gems.

Pictures around Beijing included tourist sites such as The Forbidden City, Tienanmen Square, The Great Wall of China, The Temple of Heaven, The Summer Palace, hutongs (narrow alleys) of the older part of the city, and some food highlights.

Other pictures from Luoyang included Peony Park, the rebuilt ancient temple, and palace of the Sui and Tang dynasties, the Buddhas of Longmen Grottoes, and the residential area where I stayed.

Also a few pictures in Gansu province, in central China, of the Buddha and temples on Daxiang Mountain, the ancient Buddas on the mesa at Maijishan Grottoes near Tianshui, local

agriculture, and more food.

After the program, winners paid for their auction winnings.

### **Board of Directors Meeting Minutes**

November 5, 2019 by Nancy English

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

resident Sigrid Stewart called the meeting to order at 7:35 p.m. A quorum was present. Non-voting members in attendance: Scott Singleton–Show Committee Chairman; Foster Kneeland–member.

Approval of Minutes: Phyllis George moved to approve the minutes of the October 1, 2019 Board meeting. Mike Summers seconded the motion, and it passed.

**Treasurer Report:** Tatyana Kuhne sent the October financials to Board members on November 1, 2019.

### **COMMITTEE REPORTS**

**BBG Editor**: Phyllis George reminded the Board that Sharon Thomas is taking over the BBG with the February 2020 issue. Articles and Section Minutes are due to the BBG editor on November 15, 2019 for the December BBG.

**Education Committee:** Maggie Manley reported problems with contacting some students and payment verification. Some classes fill up, and others do not make. She is also looking for ideas to help promote classes and for other types of classes. If you have ideas or questions, please email classes@hgms.org

Also, people have shown up at the last minute rather than registering, and some have not been members. The Board agreed to be strict about membership for class students—classes involving machines or torches can be dangerous, and we need to know that students are covered by insurance. Additionally, a small group will look at how payment for classes is handled, and at the other problems Maggie reported.

### **Upcoming Classes:**

**Beginning Silversmithin**g—Instructor, Tony Lucci, Monday and Wednesday evenings, November 11, 13, 18, and 20, 7:00 to 10:00 p.m.

**Beginning Wire Wrapping**—Instructor, Joy Lester, Sunday, November 24 from 1:00 to 4:00 p.m.

**Beginning Silversmithing**—Instructor, Tony Lucci, Monday and Wednesday evenings, five sessions, December 2, 4, 9, 11, and 16, 7:00 to 10:00 p.m.

**Beginning Wire Wrapping**—Instructor, Joy Lester, Sunday, November 24 from 1:00 to 4:00 p.m.

**Wax Carving & Casting**—Instructor, Tony Lucci, Tuesday and Thursday evenings, January 7, 9, 14, 16, 21, and 23, 7:00 p.m. to 10:00 p.m.

**Library Committee: Neal Immega** will be color-coding the Sections.

**Publicity Committee:** A new publication (Montrose Star) was added to the list of hard copy ads. There are a number of publications and Web sites on which HGMS posts ads. The Show, via Scott Singleton, paid Facebook for "boosts" to the Scout and School Daze pages.

### **Show Committee: Scott Singleton**

ENERGY DAY Thank you to Scott Singleton, Elsa Kapitan-White, and Clyde McMeans for presenting HGMS at the Energy Day Celebration on October 19, 2019, at the Sam Houston Park downtown Houston.

Energy Day October 19, 2019 was a smashing success! **Thank you** for helping us celebrate nine years of putting the energy in STEM education.

28,000 people visited Energy Day at Sam Houston Park

**67** Houston-area school groups were bussed to the SHP from 13 area school districts

STEM Friends at CEEF gave away nearly **\$23,000** in awards to more than **200** K-12 students and teachers at the Energy Day award ceremony

**Mayor Turner** revved up the crowd by encouraging our STEMmers to work hard in school and reach for the stars in the Energy Capitol of the World—Houston!

- Show Dinner and Auction on October 26, 2019, competed with the Astros
  playing in the World Series. Twenty-two people ate great barbeque ribs,
  chicken, sausage, brisket, and potluck sides. Seventeen bidders spent their
  auction money on the best bargains EVER.
- **A-frame signs for Show:** Nancy English delivered the signs to the Club on October 26, 2019.
- Magnetic Car Signs: The signs were distributed at the Show Dinner and Auction.
- Saturday November 2, 2019, "A Few Good Men" finished unloading the Club attic of all things Show and put them in the garage for pickup on Wednesday, November 6 at 5:00 p.m.
- Thursday November 7 is Show Set-up day—we still need volunteers at 9:00 a.m. at HCC.
- Fluorescent Room: Volunteers and Firemen Movers will put up the room.
- Sunday November 10: volunteers tear down, load, and unload at the Club.
   We feed all the people that come back to the club to unload the truck. We need more people for this.
- Volunteer Appreciation Party, Saturday November 16, 6:00–10:00 p.m. at the home of Nancy English. Food will be provided by the Show Committee. RSVP/BYOB.

**Post-Show Field Trip** for volunteers. Details will be posted in an e-Blast for the trip to Emerald Ridge and/or Badu, Texas.

**Web Site Committee:** The Web site committee will consider some ways to co-ordinate Current Events and Upcoming Programs on the HGMS Web site.

Youth Section: Saturday, 10:00 a.m. to Noon, November 2, 2019 was the last day to work on cabochons for the Show competition. Saturday, 10:00 a.m. to Noon, November 16, 2019 work on cabochons.

The Holiday party will be **December 7, 2019,** and feature Show awards and FUN.

No meeting December 21, 2019, because of the Holidays.

### **Old Business**

### **Building Issues:**

- We have had some roof leaks, and received bids for repair. We considered
  the companies involved and the different levels of repair or replacement
  recommendations. After discussion, Phyllis George moved and Steve Blyskal
  seconded that we accept the option to fix all visible problems (rather than
  just the ones causing leaks now), and then to apply a sealant to the roof.
- The light over our main entry door is out, and the bulb needs to be replaced.
- Filters need to be replaced in the middle meeting room and in the shop.

Donations Process Committee: Tatyana is working on it.

**Printing for Show:** HGMS Business Cards and Trifolds were printed so that we would have plenty for the show.

The Gemstone and Faceting Section Equipment repair: Randy Carlson was not at the meeting: he reported via email: We have completed our review of faceting machine maintenance. We have two of six masts that need to be sent to the manufacturer for rebuilding. We cannot tell the extent or cost of repairs until the manufacturer tears them down and sees what needs replacing. We will be sending the two masts in during the next week. The other four machines can be fixed in-house.

Nominating Committee: Slate of Officers to be voted on at November General meeting.

President:Sigrid StewartVice President:Mike SommersSecond Vice President:Beverly MaceTreasurer:Tatyana KuhneSecretary:Nancy English

**Tools and equipment for Metal Shop:** Tony Lucci has been refurbishing the Jewelry Fabrication Room and restocking equipment.

### **New Business**

**Remove Lectern** from the ladies' room to make room for storage.

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

The next General Meeting will be Tuesday, 7:30 p.m., November 26, 2019. Francois and Lydia Van Driel will present "From South Africa to New Zealand to Texas," the story of our rockhound adventures. They will have agates, spheres and eggs, crystals, minerals, and petrified wood from these localities for sale.

### Jewelry Bench Tips by Brad Smith

th the holidays coming up soon, one of Brad's "How To" jewelry books is a great way to help a friend learn a few new skills. See all the books at

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

As a rockhound myself, I am pleased to be able to share material like this with other clubs. I hope that the tips are of interest to your members and provide a bit of fresh content for your bulletin.

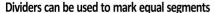
I have been involved with lapidary and jewelry making in my own rock club for about twenty-three years now. It has added so much to my own life, and I have been glad to do a few things to help build membership and promote sister clubs in my area.

WISHING YOU AND YOURS A HAPPY HOLIDAY SEASON. HAPPY HAMMERING. BRAD

### **DIVIDERS**

A set of dividers is a tool I find very useful in laying out the geometry of a piece I am making. It has two needle-like tips with an adjustment to set the spacing between them.

They can be used to transfer a measurement. Let's say you need a 7 mm-wide strip of sheet metal. Set the spacing between the divider tips to 7 mm on the ruler. Then lay the sheet on the bench, put one tip against the edge, and run the dividers down the edge—scribing a line parallel to the edge.



of a line or arc. For instance, assume a line between A and B that might be straight or curved, and you want to divide it into 5 equal lengths. Set the dividers to an estimate of the distance. Starting at Point A, use the dividers to mark off five lengths along the line. If you end up short of Point B, lengthen the distance on the dividers. If you end up overshooting Point B, shorten





the length of your dividers. After a few tries, the length on the dividers will be the exact distance you need to mark the 5 segments.

**Dividers can let you quickly find the center of a circular disk.** With one tip of the dividers at the edge of the disk, set the other tip to an estimate of where the center might be. Fix one tip of the dividers at the 3 o'clock position and scribe an arc with the other tip near the center. Do this again from the 6 o'clock, 9 o'clock, and 12 o'clock positions. The arcs at the center will form a small four -sided box, and the center of the box is at the center of the disk.

### **Editor's Christmas and New Year's Carol**

by Don, Jessica, and Kathy Shurtz from the January 1999 Chips and Chatter

'Twas the night before Christmas and all through the house Not a creature was stirring except for the mouse. Pointing and clicking its way 'cross the screen, An article for the newsletter soon to be seen.

A story 'bout agates or maybe 'bout calcite Or fossils, or diamonds, or even anhydrite. When all of a sudden I heard a loud clatter I jumped out of my chair to see what was the matter.

A grinding and rattling noise came from afar, Then suddenly rocks spilled all over my car. My tumbler had split, or so it did seem. I had but one option, so I let out a scream.

Then what to my wondering eyes should appear? But a tiny old man who shouted "Have no fear!" He had emeralds, and diamonds, and lots of gold, All that my hands and my pockets could hold.

And newsletter stories from his bag did he pull; I'll take them all; this editor's no fool.
Then with a start, I awoke from my dream
And found I was staring at a blank screen.

No article would be finished upon this dark night; The end of the newsletter was still not in sight. With nothing to do and nothing to hope, I said out loud, "I feel like a dope."

But not to worry, have a Good Christmas day. The newsletter deadline's a full week away. Then from behind me a voice in my ear Said "Give up for now, have a Happy New Year."

This Poem won first place in the 2000 SCFMS Editor and Author Contest, Poetry Category!

### NASA will hunt for fossils on Mars

via Cowtown Cutter 11/2019

/ he Mars 2020 rover will investigate an intriguing type of mineral deposit known for producing fossils on Earth. <u>Click here for link to complete article.</u>

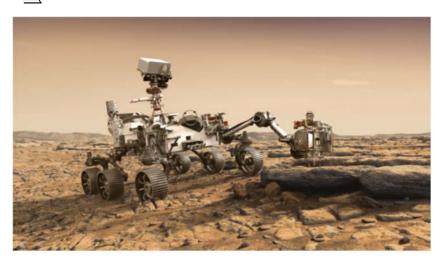


Photo: Courtesy NASA



# Exceptional fossils may need a breath of air to form via The Cowtown Cutter 11/2019

ew research has found that a long-held belief by paleontologists about the fossilization process may be wrong. The team has found that while low oxygen environments set the stage, it takes air to catalyze the fossilization process. The image below is a fossilized mantle of a vampyropod—a relative to the vampire squid. The ink sac is the raised structure in the center, and muscles have a striated appearance. Credit: Rowan Martindale/The University of Texas at Austin Jackson School of Geosciences.

### Click here for link to complete article.





### The Metals of Antiquity

by Don Shurtz, Pleasant Oaks Gem and Mineral Club of Dallas from Chips and Chatter 11/2019

efore looking at the Metals of Antiquity, let's start with some definitions. Antiquity means ancient. It generally refers to the times before the Middle Ages of European history. The Middle Ages were from about 500 A.D. to 1350–1500 A.D. The definition of Antiquity is rather straightforward when compared to the definition of Metal.

The word Metal comes from Latin *metallic* from Greek *metallon* meaning the product of a mine. Dictionary.com defines metal as (a) "any of a number of chemical elements, such as iron or copper, that are often lustrous ductile solids, have basic oxides, form positive ions, and are good conductors of heat and electricity" and (b) "an alloy, such as brass or steel, containing one or more of these elements."

However, if you were a physicist, you would define a metal as any substance capable of conducting electricity at a temperature of absolute zero, otherwise it is a non-metal; however, a chemist would confine the definition of metal to elements only. They would agree that elements capable of conducting electricity would be metals or metalloids, but their distinction of metals and metalloids would vary, as they cannot seem to gain a consensus of the boundary between metals and metalloids. The boundary between metals, metalloids, and non-metals also fluctuates, but about 95 of the 118 known elements are metals or metalloids.

If the difference in definitions as used by chemists and physicists were not enough, the astrophysicists will define a metal as all elements in a star heavier than hydrogen and helium. They do not have the distinction that metals must be capable of conducting electricity.

So with these crystal-clear definitions of metal in hand (pun intended, but at least a vague idea of what a metal should be) let us press on. Give several men a piece of iron, aluminum, copper, brass, or stainless steel, and they would all agree that they were holding a piece of metal. Some are alloys, but they are all solid, capable of conducting electricity and heat, ductile or malleable, and lustrous—all characteristics of a metal. Now hand them some mercury (of course, they are wearing protective equipment) and ask them if it is a metal. Right off, they will notice that it is not a solid. It is lustrous and can be stretched and formed, but it will immediately try to return to its ball shape due to surface tension. With a little effort, they would find it could conduct electricity and heat. Still, it is not a solid. So is it a metal? If you were to repeat the experiment at minus 50 degrees Fahrenheit, all the results would be the same except that the mercury would now be solid. So is it a metal? Yes, there is no requirement that a metal is solid; a metal can exist as a fluid above its melting point. In the case of mercury, it is a metal and a fluid (melted) at room temperatures.

The Metals of Antiquity were those metals known by humans in pre-historic times. **The seven Metals of Antiquity are Gold, Silver, Copper, Tin, Lead, Iron, and Mercury**—also known as Quicksilver. Five of these metals are sometimes found as native elements: gold, silver, copper, and mercury as natural native elements and iron from meteors.

All of the Metals of Antiquity are solid at room temperature, except mercury. However, mercury has been found in tombs dating to 1600 BC. Mercury was also known to be poisonous; Pliny outlined a method of purification of mercury using leather as a filter, and noted that it was harmful to humans. The ancients also figured out that mercury would dissolve gold, silver, and copper as their mercury amalgams were used for filigree plaiting. Perhaps Pliny's method for



Cinnabar, Mercury Ore

purification of mercury was also used to concentrate the amalgams for plating.

Iron is the most common of the Metals of Antiquity to be found in the earth's crust (4th in occurrence), but was the rarest of the

Metals of Antiquity. The melting temperature of iron was too high for the techniques used in ancient times to smelt or melt iron. The iron of

antiquity was iron extracted from rare meteorites. It was cold-hammered to shape, but once formed, it was the strongest of the metals for spear points, knife blades, and swords.



**Iron Meteorite** 



Galena, Lead Ore

Lead beads dating back to 6500 BC have been found in Turkey. This implies that lead was being smelted at that time. Galena is abundant in many parts of the world and can be easily smelted into lead. The ore galena was placed in a hot fire, and after the fire burned out and cooled, lead could be collected below the layer of ash. The temperature of the fire roasted the galena (lead sulfide) to form lead oxides that were further broken down into lead and carbon dioxide. Lead was likely the first processed metal. Lead could be used for ornaments, lead "shots" for slings, and was great for adding mass to a club, but was too soft for swords or arrowheads. However, the ancient Romans used lead for their famous aqueduct systems. Lead pipes were formed into 10-meter

long sections in about 15 standard diameters. The aqueducts can still be found in England, France, and Italy. In the US, lead was the primary pipe used for plumbing until the 1920s and could still be legally used until the 1980s.

Tin processing dates back to about 1800 BC, but it was unknowingly being used much earlier. Bronze is formed by the alloving of copper with tin or arsenic. Bronze was being made by 3500 BC by smelting copper with unknown concentrations of tin and/or arsenic, making a harder form of copper-bronze. Bronze was almost immediately being used for swords, knives, spearheads, and arrowheads. The Bronze Age started in Europe about 3500 BC, and several hundred years later in Asia. The first



Cassiterite. Tin Ore

intentional bronze to be made by alloying copper with tin was about 1800 BC. Tin was being made from cassiterite, a tin oxide. It could be smelted in much the same manner as lead—by simply placing broken-up cassiterite on a hot, open fire and then removing the tin from under the ash layer after the fire cooled, or the cassiterite could be added to the copper ores and smelted together. In addition to being used for bronze, tin was also alloyed with lead to form pewter by 1200 BC.

Some of the characteristics and lore of the Metals of Antiquity are shown in the following table. It should not be a surprise that with seven Metals of Antiquity, seven days of the week, and seven known heavenly bodies (moon, sun, and planets [not including the Earth]), that someone would associate them together. Of course, for good measure they tossed in some of the ancient "Gods."

Metal	Chemical	Heavenly	Ancient	Day of Week	How Common in	Melting	Mohs	Where produced
	Symbol	Body	"God"		Earth's Crust	Temp.	Hardness	(top 3 locations)
Gold	Au (Aurum)	Sun	Apollo	Sunday	72nd, (1.1 ppb)	1947 °F	2.5 – 3.0	China, Australia, Brazil
Silver	Ag (Agentum)	Moon	Diane	Monday	65th, (70 ppb)	1763 °F	2.5 – 3.0	Mexico, China, Peru
Copper	Cu (Cuprum)	Venus	Venus	Friday	26th, (50 ppm)	1984 °F	2.5 – 3.0	Chili, Peru, China
Lead	Pb (Plumbum)	Saturn	Saturn	Saturday	37th, (14 ppm)	621 °F	1.5	Australia, United States, China
Tin	Sn (Stannum)	Jupiter	Jupiter (Jove)	Thursday	49th, (2.2 ppb)	449 °F	1.5	China, Indonesia, Peru
Iron	Fe (Ferrum)	Mars	Mars	Tuesday	4th , 50,500 ppm	2800 °F	4.0	Australia, Brazil, China,
Mercury	Hg (hydrargyrum)	Mercury	Mercury	Wednesday	66th, (50 ppb)	-38 °F	1.5 if solid	Spain, Yugoslavia, United States

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### Pictures

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### A Night Before Christmas

from The Gem News 1972

As posted on the www.rockrollers.com Web site

T'was the eve a'fore Christmas And there in the night, The desert was quiet Not a rockhound in sight.

Our socks were all hung By the fire's ruby glow – In the hope that Mama Would sew up the toe.

The kids were all stacked In their warm little bunks With visions of agate — Slabs, boulders, and chunks.

Me in my long johns And Ma in her sack, Had jumped into bed It was cold as a tack.

From out in the sage brush Came a hullaballoo; I sprang to the window To throw out a shoe.

I strained my eyes
Til my brow was a furrow
Along came a geezer
A-leading his burro.

By the size of his belly And his face full of hair, I knew it was Santa... Or a grizzly bear.

"Go Rudolph, go Rudolph You stubborn old mule, Get moving there Rudolph You lop-eared old fool."

Then quick as a polecat I heard him on top That durn red-nosed burro Goin' clippity clop.

Santa's trip down the chimney Was something uncanny, The fire was burnin" And scorched his poor fanny.

He was dressed all in denim From his head to his shoes And his nose was all red Like he'd drunk too much booze.

He has a middle age spread That just wouldn't quit, And a rock bag so big It was already split.

He spied my old trim saw, The one that was broke. "By golly you're rockhounds, You're my kind of folk."

He sat down at the table And we both had some java And threw bull about agate, And opal, and lava.

He told me of old times — Of Horse Canyon agate, Of the good times at Boron, Of jasper from Daggett.

He told of deliveries to What are now ghost cities — Of Bullfrog and Bodie They're dead, what a pity.

Then from out of his pack For me and for Ma, What did he pull But a big slabbing saw.

There was a hammer for Dougie, And a black light for Ginny, And a bag of rock candy So we wouldn't get skinny.

Then lookin' at the fire And feelin' his sore He decided it was best To leave through the door.

But I heard him exclaim As he fell in the mine, "Merry Christmas, you rockhounds And Auld Lang Syne."

# DON'T BE A WRECK-HOUND—BE A RECREATIONAL ROCKHOUND!

by Shirley Leeson Ambassador American Lands Access Association via 10/2018 newsletter of the Southern Illinois Earth Science Club; via NWF News 01/2019, via SCFMS Newsletter 07-08/2019

We are asking you to help us re-brand our name, who we are, and what we do.

**Rockhound**: Currently, what does that word mean?

- Does the general public see us as people who left huge holes where we dug out rocks?
- As someone who left their gates open? This could be a property owner, or a company owner who has granted us access to something they consider useless, but that is of real interest to a rockhound.
- When we ask to have public lands areas kept open for multi-use, how does Washington, D.C. look upon us?
- Environmentalists who see us as "stealing natural resources" and who wish them left in the ground?
- A government employee who sees us taking a truckload of material off public lands, only to put it up for sale on social media?

### As a "rockhound," what does that word bring to mind to you?

- A grandfather or uncle taking you on a collecting trip for pretty rocks?
- A teacher opening up the wonders of the environment by showing you rocks, minerals, and fossils in the classroom setting?
- A rockhound visiting a school and bringing rocks that have been cut and polished to show the inside of a very plain rock?
- A rockhound club putting an exhibit of gems, minerals, and fossils in the library or at the entry to a public building?
- A rockhound club inviting you to their show and showing you what collecting rocks is all about?
- A demonstrator showing you how a gemstone is cut?
- A county fair where there is a gem and mineral department showing you all the joyous things about being a rockhound?

**Here's the problem**: Our image has been tarnished by some. What can we do to restore it to a good image—to a good brand?

The American Lands Access Association (ALAA) has tried to change the image. We're asking you all to begin to use the term, "Recreational Rockhound," like "recreational off-roading." This implies that we are on public lands as a recreational occupation and using it as a teachable moment, a pleasant experience for those attending, maybe for the first time. We are asking you to look around and see what you can do personally to make "recreational rockhounding" a noble occupation once again, please. Just maybe, when we attend management meetings for the Bureau of Land Management or Forest Service, they will look upon us as "recreational rockhounds." Do not forget, most recreational rockhounds belong to a regional society or club, and nationally we have a code of ethics.

Let's follow them.

### **Show Time 2019**

Dec. 6-8 El Paso, TX El Paso Mineral and Gem Society

El Maida Shrine Auditorium, 6331 Alabama St. l1155@vahoo.com; www.epmgs.com

### 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. 2426 Tyler, TX The East Texas Gem & Mineral Society

Tyler Rose Garden Center, 420 South Rose Park Dr. Margaret Kilanski—mlkilanski@vahoo.com

Feb. 15-16 Georgetown, TX Williamson County Gem and Mineral Society, Inc.

Georgetown Community Center at San Gabriel Park

445 East Morrow Street

wcgmstx1@outlook.com; www.wcgms.org

Feb. 22-23 Pasadena, TX Clear Lake Gem & Mineral Club

Pasadena Convention Center, 7902 Fairmont Parkway

clgmsvendors@gmail.com; http://www.clgms.org/page2.html

Feb. 22-23 Plainview, TX Hi-Plains Gem & Mineral Society

Ollie Liner Center, 2000 S Columbia

bobcat22@suddenlink.net

Mar. 7-8 Robstown, TX Gulf Coast Gem and Mineral Society

RMB Fairgrounds, 1213 Terry Shamsie Blvd, Exhibit Hall A gulfcoastgemandmineralsociety@gmail.com; gcgms.org

Mar. 14-15 San Antonio, TX Southwest Gem and Mineral Society

San Antonio Event Center, 8111 Meadow Leaf Drive

krbotx@gvtc.com; SWGMS.ORG

May 30-31 Lubbock, TX Lubbock Gem and Mineral Society

Lubbock Memorial Civic Center, 1501 Mac Davis Lane

walt@lubbockgemandmineral.org; www.lubbockgemandmineral.org

Jun. 25-28 Lodi, CA **CFMS** putting on its own show

Lodi Grape Festival Grounds, 413 E. Lockeford Street

Sep. 18-20 Howell, MI MWF hosted by ??

Oct. 12-13 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

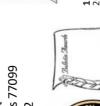
Oct. 16-18 Knoxville, TN **SFMS** hosted by ??

2019	2019 December 2019						
Sun	Mon	Tue	Wed	Thu	Fri	Sat	
1 10–4 Shop Open	2	3 11–3 Shop Open 7:30 Board Mtg.	4 10–3 Shop Open 1-3 p.m. Day Light	5 10–3 Shop Open 7:30 Archaeology Christmas Party	6	7 10–3 Shop Open 10–Noon Youth Section Pearl Harbor Day	
8 10–4 Shop Open	9	10 11–3 Shop Open	11 10–3 Shop Open 6:30 p.m. Gemstone & Faceting Section	12	13	14 10-3 Shop Open 1-3 Beading Section HGMS Christmas Party	
15 10–4 Shop Open	16 NO Lapidary Section	17 11–3 Shop Open 7:30 Paleo Section	18 10–3 Shop Open NO Mineral Section	19 10–3 Shop Open	20	21 10–3 Shop Open NO Youth Section 1:30 Beading Section 1:1 Day of Winter	
22 10–4 Shop Open Hanukkah Begins	23	24 11–3 Shop Open NO General Meeting Christmas Eve	25 NO Shop Open Christmas Day	26 10–3 Shop Open Kwanzaa Begins	27	28 10–3 Shop Open	
29 10–4 Shop Open	30 Hanukkah Ends	31 NO Shop Open New Year's Eve					

2020	20 January 2020						
Sun	Mon	Tue	Wed	Thu Fri		Sat	
			1 NO Shop Open NO Day Light New Year's Day	2 10–3 Shop Open NO Archaeology	3	4 10–3 Shop Open 10–Noon Youth Section	
5 10–4 Shop Open	6	7 11–3 Shop Open 7:30 Board Mtg	8 10-3 Shop Open 6:30 p.m. Gemstone & Faceting Section	9 10–3 Shop Open	10	11 10–3 Shop Open 1-3 Beading Section	
12 10–4 Shop Open	13	14 11–3 Shop Open	15 10-3 Shop Open 7:30 Mineral Section	16 10–3 Shop Open	17	18 10–3 Shop Open 10–Noon Youth Section	
19 10–4 Shop Open	20 7:30 Lapidary Section	21 11–3 Shop Open 7:30 Paleo Section	22 10-3 Shop Open	23 10–3 Shop Open	24	25 10–3 Shop Open	
26 10–4 Shop Open	27	28 11-3 Shop Open 7:30 General Meeting	29 10-3 Shop Open	30 10–3 Shop Open	31		

Houston Gem & Mineral Society The Newsletter of the

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1998 - 1st (Large) 2000 - 1st (Large) 2003 - 1st (Large) 2005 - 1st (Large)

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