

THE BACKBENDER'S GAZETTE

NEWSLETTER OF THE HOUSTON GEM & MINERAL SOCIETY



FEATURED MEMBERS:
ANGELA FOWLER & RON TALHELM

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BACKBENDER'S GAZETTE SUBMISSION DEADLINES

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

Copy is due for the next issue by the 15th of this month. Email content to editor@hgms.org



The

BACKBENDER'S GAZETTE



The Newsletter of the Houston Gem & Mineral Society

PRESIDENT'S MESSAGE

by Sigrid Stewart

Well, that was an interesting and somewhat painful experience. I am speaking about our Virtual Annual Show Event, with its two-part format, featuring presentations on Facebook Live, and Dealer Pages and Silent Auction on our website. The Auction we worked so hard on was too big a success – the traffic on the website bogged down the server and many people weren't able to log in. We are still looking at the problem. A call to the hosting company improved things for a while, but then it got worse. We will need to improve our service.

The Dealer Pages worked well when people could see them; some people were able to get onto the auction site and make bids. People registered for the Grand Prizes, and both were awarded.

When people came to the club to pick up their auction winnings and door prizes, they said they enjoyed the show and thanked us for putting it on.

We hope to do this again as a Trade Show. Let us all hope that next year's show does not have to be a virtual show.

On a brighter note, we are planning a Zoom Christmas Party on December 12th at 7:30, with contests, live auction and door prizes. Look for the invitation and the link on next Sunday's eBlast.



SECTION REPORTS

ARCHAEOLOGY SECTION

by Nancy Engelhardt-Moore

November 5, 2020: The Section hosted a virtual Zoom program at 7:30 PM since the HGMS Clubhouse is closed due to the pandemic. Bob Moore, Section Chair, called the meeting to order at 7:35 PM. There was a great turnout! A total of 34 people attended, including 21 members of the Friends of Archaeology. Bob announced the upcoming Section virtual programs including the HGMS Annual Show on Nov. 14. He also announced that the 2021 officers would remain the same. There were no new volunteers or objections.



*Egyptian faience amulets: Eye of Horus and Bes
Photo by N. Engelhardt-Moore*

Bob then presented “**Egypt: The Dendera Temple Complex**” and showed actual Egyptian artifacts (see photo). This was followed by Q&A with many questions and lots of positive feedback. The meeting adjourned at 8:30 PM, but some people stayed online for further discussion. Please watch for future announcements about our programs and Zoom login information. We hope to see you online.

UPCOMING PROGRAM

December 3, 2020: Bob Dodge, Founder and Executive Director of Artemis Gallery, will do a virtual presentation through Zoom entitled “Is It Ancient or Not? How Science Can Tell.” He will show how X-Ray Diffraction (XRF) technology helps authenticate artifacts. Bob will demonstrate using actual artifacts. He is an entertaining speaker, so don’t miss this fun and educational event.

January 7, 2021: our guest lecturer will be Dr. Dirk Van Tuerenhout, Houston Museum of Natural Science Curator of Anthropology. Dirk will present “A War of Words: the story of the Code Talkers”. He will speak about the role played by Native Americans who acted as Code Talkers in both WWI and WWII. He plans to talk about who served, when, and where—since this topic will be covered in sections of the revitalized Hall of Americas. Also, he will give an update on the current preparation of this particular display. So, please join us for this informative program!



*Replica Congressional Medal –
Navajo Code Talkers*

Photo courtesy of D. Van Tuerenhout

February 4, 2021: Program—to be announced; please watch for further details about our programs on the HGMS Web site, in the BBG, and on Facebook.

MINERAL SECTION

The Mineral Section held a two-hour Virtual Meeting on November 18, 2020. Members discussed the recently completed HGMS Virtual Show Event and what they like about it. Those members who had new specimens for their collection showed their finds using their computer cameras. Steve Blyskal show a calcite from Terlingua, Texas, shown below, and some recent prehnite acquisitions. Michael Sommers showed us Celestine crystals he had recently added to his collection. The special free programs Mineral Talks Live and Aloha Friday mineral gatherings were also discussed. These free Zoom meetings take you behind the scenes with noted dealers, collectors and museum professionals. Check them out at <https://www.facebook.com/bluecapproductions>



Copyright Steve Blyskal 2020

calcite from Terlingua, Texas Photo by Steve Blyskal

MESSAGE FROM THE AFMS PRESIDENT 2020-2021

by Judy Beck, from 12/2020 AFMS Newsletter

Greetings to everyone in the American Federation of Mineralogical Societies!

I have been elected President for this coming year, and I am excited to serve all of my fellow rock hounds! For those of you who do not know me, I thought I would tell you just a little about myself.



AFMS President Judy Beck

I am a Registered Nurse by profession, and I currently teach part time in the Practical Nursing Program at Salina Technical College. I have been married to my wonderful husband, Larry, for the past 28 years. We have made Salina, Kansas our home for the past 22 years. We have two boys, a bonus daughter, and two bonus grand girls. Our oldest, Ken, is in the US Air Force, and last November he married a beautiful young woman. They both love rocks, and were just joining the club in their new home of Abilene, TX when COVID hit. Our grand girls are little junior rockhounds, and I hope you will get to meet them as we visit the various shows in the coming year.

Larry is a 3rd generation rockhound, and we belong to the McPherson Gem & Mineral Club in McPherson, Kansas. Early in our marriage we lived in Yakima, WA and then in Durango, CO. He “volunteered” me to

work with the RMFMS/AFMS show in Durango, Colorado in 1997. Ruby Lingelbach was President, and she said, “We need to get you involved.” Shortly thereafter, I was secretary of the Rocky Mountain Federation, and I kind of worked my way up into the President’s job from 2003–2005. I have served in each of the American Federation Vice-President’s positions, and I am thankful to serve you now as President this coming year!

It has been a strange year to say the least, and I was saddened to see that so many of our federation shows had to be cancelled. Many thanks to David Wayment for finding alternative ways for us to connect, and for his service to the AFMS during this past year! I am really hoping that as we move into 2021, shows will be able to return, and we will be able to attend each federation’s convention.

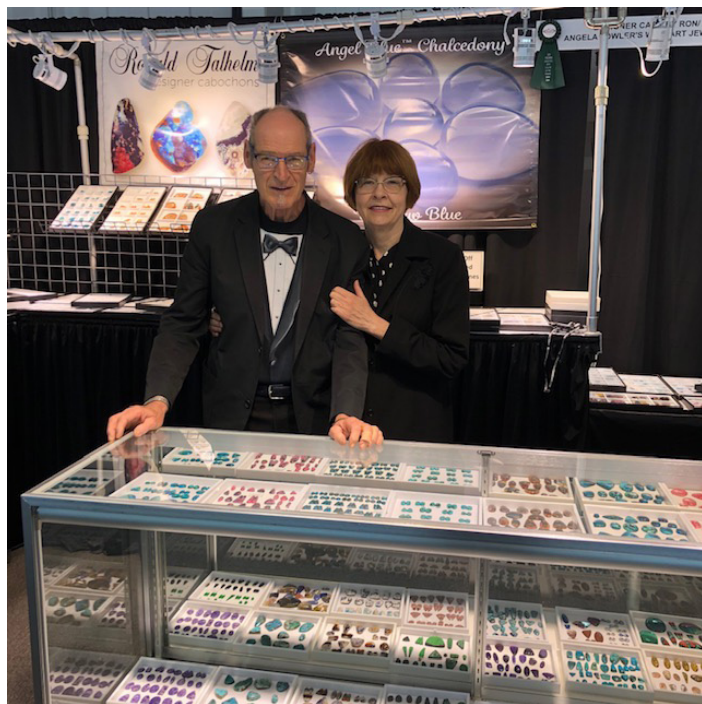
My husband and I bought a new truck camper that was supposed to go to Alaska this year, but didn’t because of COVID. We are hoping that we will be able to drive it all around the U.S. to visit with a lot of you!

Wishing all of you the best of health!

FEATURED MEMBERS: ANGELA FOWLER & RON TALHELM

by Sigrid Stewart, HGMS President

She grew up in Winslow, Arizona and after attending Northern Arizona University, came to Houston for work opportunities. He grew up in Gettysburg, Pennsylvania, and came to Houston in 1976, immediately finding a job in construction. After 6 months, he decided to go out on his own. After meeting at Unity Church, they married in 1988 and settled in the Houston Heights neighborhood, and began looking for a hobby they could share. Not long after, a friend and mentor of theirs, Leon Chambers, who was a member of HGMS, introduced them to quartz crystals. He took them to the Hot Springs area in Arkansas to dig. They fell in love with quartz crystals and didn't realize at the time that this would be life-changing for them.



Ron & Angela Fowler

Houston downtown law firm and started a full-time business making jewelry. She never looked back.

Ron also had a roofing business for a while but gave it up as they prospered in their new business. They also began buying rent houses in the Heights area and fixing them up. They moved into property flipping as the area gentrified, tearing down old houses to build new ones, working with a contractor friend who had all the necessary sub-contractors lined up. For example, when former HGMS member Matt Dillon moved to Beeville, they bought his old house, had a crew demolish it, had an architect on the contractor's staff design the new home, and then Ron supervised the building process.

Ron and Angela soon found themselves in Tucson participating in the G&LW Show at the Holidome, one of the biggest shows in Tucson at the time. In the meantime, Ron was

Soon after, Leon introduced Angela and Ron to the Club where he taught Ron how to cut stones and make spheres. He took them to their first gem and jewelry show where Angela saw Jim Fowler, a well-known and respected professional wire-wrap jewelry designer and member of the Lapidary Hall of Fame – and no relation. Angela said, “I think I can do that,” and so she did. She started selling her designs at arts and craft fairs, juried art fairs and metaphysical bookstores. She was so successful that within a year she quit her job at a large

honing his skills cutting cabochons and beginning to focus on cutting rare and exotic materials. Tucson became a wonderful month-long annual adventure and served to anchor their business.

While in Houston, Ron was very active in the Club. He served in various roles including janitor, Vice President and Show Chairman and spent many hours in the workshop. He also played a part in getting the loan for the Clubhouse refinanced. He served as Show Chairman for several years, and for two of those years HGMS held two shows annually, to pay off the Clubhouse loan, and they did.

Angela and Ron have enjoyed many field trips and adventures along the way. They went to New York to mine Herkimer diamonds, to New Mexico to dig up black drusy psilomelane and to Arizona for petrified wood. Ron also had the experience of a lifetime, making a trip to Ethiopia with close friend and fellow Club member Neb Mekonnen, who was originally from Ethiopia and had a successful opal business. Ron and Neb went to Ethiopia to buy opals, but instead they developed a closer friendship along with finding a new blue chalcedony, which they later named Angel Blue (TM) chalcedony, the “New Blue.” Ron was privileged to be invited by Matt Dillon to go to Mexico on a field trip to collect bouquet agates. Matt Dillon also introduced Ron and Angela to Texas shrinkwood, petrified wood which was cracked and desiccated before petrification when its voids filled with chalcedony. The checkered black and brown pattern prompted them to popularize it as “Midnight Sable.”

On a trek to the Big Bend area Angela and Ron found some unusual concretions which could be made into unique natural surface cabochons and named them “Rio Grande Rustics.” They have been quite a success with many jewelry designers.

Ron was one of the first stone cutters to introduce natural drusy cabochons to the market during the early 90s. At the time jewelry designers did not know what to do with the drusy cabochons and it took a while for the drusy cabs to catch on. Ten years later, drusy jewelry had spread into the mainstream retail market. He was also known as the “Drusy King” after he helped to launch the craze for titanium-coated drusy.

Meanwhile, back at the ranch, Angela was making real progress with her jewelry. She was designing beautiful pieces using stones that Ron cut in their home shop. Many Club members and others in the community have collected her jewelry pieces. Both came to the realization that quality was the cornerstone of their business. They have become quite the tag-team over the years. Unfortunately, their Gem & Mineral Show business has probably come to an end with the onset of the Covid-19 epidemic. You can see some of their work on Facebook, on “Designer Cabs and More.”

What is ahead for Ron and Angela now? Right now, they are focused on selling their custom home. Once that is taken care of, they will be moving. Somewhere in Oro Valley north of Tucson, Arizona the perfect house is waiting for them, where they can begin a new life in an area uniquely suited to rockhounds and lapidaries. They do not plan to give up cabochon-cutting and wire-wrapping.

In closing, Ron and Angela would like to thank all the many Club members who have provided advice, support and friendship over the years.

WHAT IS WRONG WITH THIS PICTURE?

by Neal Immega

Look at the article on the web site to see the color photo.

Actually, there is nothing wrong with this picture. I missed the key signals that would have immediately helped me identify the rock. This specimen is another of the hundreds that my friend Clyde has showed us during the outdoor socially distanced lunches we have in his driveway. Many of his specimens have poor or no labels. The usual question is: “what is it and where did it come from”.



What is this mineral?

The crystal shape is cubic and the heft of the specimen suggests that it is fluorite. Fluorite is commonly zoned. I have seen this regular color banding in many Illinois fluorites, but I did not see any zoning in this one. When I looked at it in the sunlight, I see blotchy purple colors on a green background. This was very strange to me and I wondered why the colors did not seem to follow a crystal form. In fact, the purple colors are only in some areas and not others. I rejected the fluorite identification.

What did I miss?

1. I missed making the observation that the purple areas moved when I rotated the rock in the sun.
2. I did not look at the rock in non-sunlight and notice that there were no purple areas.
3. Since I collected at the famous Cave-In-Rock localities in high school, I think that fluorite should look like the ones in my collection.
4. 3 directions of cleavage can be seen and just scream FLUORITE.

I borrowed the specimen from Clyde to show my mineralogist wife (Inda) and she

immediately said - "Fluorite showing Fluorescence." The emphasis is my attempt to show her emphasis (and maybe sarcasm). Ah, there is a famous green fluorite locality in England, Rogerley Mine in the Weardale region of England, where the green fluorite shows marvelous fluorescence under long wave ultraviolet light, and there is plenty of UV in sunlight. I even have a nice thumbnail from that mine. Ok, I am convinced. **It is fluorite.**

I would get an F on this identification but other people helped lead me astray. Sir George G. Stokes in 1857 named this strange phenomenon after the mineral fluorite because his samples all fluoresced. It turns out that very few fluorites show fluorescence except for a few localities in England. Evil mineralogy teachers have bedeviled students forever with this. I could not possibly comment on how common evil mineralogy teachers are.

This all just shows that an old dog can mess up an old trick.

For more about Rogerley Mine fluorite visit:
<http://www.ukminingventures.com/rogerley.html>

HOW TO MAKE SEASONAL SNOW GLOBES

*Source unknown, contributed by John Martin
from AFMS Newsletter 11/2020*

You will need:

- Plastic or ceramic figurines appropriate for the season such as flags, shamrocks, bunnies, or for the Christmas season, synthetic ever-green tips)
- Glass jar with lid
- Oil-based enamel paint (optional)
- Sandpaper
- Clear-drying epoxy
- Distilled water
- Glitter
- Glycerin

Sand the inside of the lid until the surface is rough. With clear-drying epoxy, adhere the figurine to the inside of the lid, and let the epoxy dry.

Fill the jar almost to the top with distilled water; add a pinch of glitter and a dash of glycerin (available at drugstores) to keep the glitter from falling too quickly. Do not add too much, or the glitter will stick to the bottom of the jar when it is flipped. Screw the lid on tightly, being careful not to dislodge the figurine. Turn the jar over and back again—and let it glitter.

You can paint the jar lid with the enamel



paint if you want to disguise its original purpose.

Almost any jar works for this project, but one with a diameter at least half its height may work best: baby-food, pimienta, small pickle and olive jars are all good choices. Look for plastic or ceramic figurines (metal ones are prone to rust) at flea markets and hobby or model-railroad shops. Synthetic evergreen tips are available at many floral-supply stores. Photos may be plasticized and inserted, likewise plastic flowers.

Although Snow Globes are usually associated with the Christmas season, they may be purposed for many other uses—Easter, St. Patrick's Day, Valentine's Day, Flag Day, 4th of July, Hallowe'en, Thanksgiving, and so on.

HAVING FUN: JUNIOR ACTIVITIES JIM BRACE-THOMPSON, AFMS JUNIORS PROGRAM CHAIR

A NEW EDITION OF THE AFMS/FRA BADGE MANUAL IS ON ITS WAY!

from AFMS Newsletter 11/2020

The little boy in the accompanying photo is my Scottish grandson Lukáš enjoying a visit to the National Museum of Scotland with my Slovakian son-in-law Peter. What does this family portrait have to do with junior activities and the Federation? The young lady who took the photo is my daughter Hannah, a former Pebble Pup and CFMS award-winning junior exhibitor. Watch for her photo—and many, many others to appear soon in the Fifth Edition of my AFMS Future Rock-hounds of America Badge Manual! I've been busy wrapping up the new edition, which I hope to send to AFMS webmaster Marty Hart for post-ing by the end of October. If all goes as planned, by the time you read this article, it should be posted and ready for use. Go to the following page on the AFMS website: www.amfed.org/fra/fra_badge.htm.

While I have not added new badges to this new edition, I have tweaked virtually every badge unit. Without getting into the weeds, here's a snapshot of the big changes:

- I've added pagination and a new Table of Contents coordinated to that pagination. (As some will say: "Duh. It's about time!")
- I've added a very large number of photos to better illustrate activity instructions. Many come from my own photos assembled over the years; others were sent by Youth Leaders of local clubs.
- I've gone through to ensure all suggested websites are still functional, and I have replaced those that have gone by the wayside (a tediously frustrating endeavor).
- My original intent was to add still more multimedia, such as YouTube videos, but many of those seem to have short half-lives. Thus, rather than provide a link to specific YouTube videos, here and there I suggest where you can do a Web search for such a YouTube link (for instance, for "recipes" on growing crystals, of which there are many).
- I have expanded our "Leadership Badge" into a badge entitled, "Leadership & Citizenship." We have awarded very few Leadership Badges, but I hope the expansion to include "Citizenship" will see us awarding many more of this particular badge. It is one that I, personally, consider especially important for us to work on with kids.
- I've added a new activity to each and every badge, namely, "WILD CARD: Do Your Own Thing." This provides flexibility for clubs to add activities that match

their kids and their local resources, to allow for creativity and locally sourced ideas. A “WILD CARD” can be a whole-club activity or an activity chosen by each individual child.

I wrote and released the first edition of this manual in 2003/2004 and have continued to pursue this as an entirely free labor-of-love with new editions every four years. **Again: entirely free.** If your club is not utilizing this program, what is holding you back? Here's hoping you and your club's kids find the Fifth Edition better, more visually inviting, easier to use, and more flexible than ever for learning—while having fun!

CITRINE AND TOPAZ

from The Rock Prattle 11/2020



Those born in November are lucky enough to have two stunning gems as their birthstones. One is topaz, which comes in a variety of colours, and the other is sunny citrine. Citrine is the yellow variety of quartz, and its name comes from the Old French word for lemon. Its warm colour is said to be a gift from the sun, making this golden gemstone the perfect option for brightening up a typically chilly autumnal month.

Citrine has been a popular decorative gemstone since ancient times. Bearing such a resemblance to yellow topaz, it's not surprising the two November birthstones share a history of mistaken identity and both are thought to carry similar powers. For some, citrine is considered a healing gemstone – calming, soothing and comforting. It is also said to spark imagination and encourage fresh beginnings and prosperity. In ancient times, citrine was carried as a protection against snake venom and evil thoughts. The Egyptians were among the first to discover the yellow stone and used the gems as talismans. The ancient Greeks carved iconic images into them and shaped them into rock crystal ornaments, while Roman priests made them into rings. Between 300 and 150 BC they were found on the handles of swords and daggers in Scotland. While thought to be added for decorative purposes, the stone was also considered as protection. Today, citrine is known as the 'merchant's stone' and is associated with success and wealth.

Citrine is a variety of quartz whose color ranges from a pale yellow to brown due to ferric impurities. Natural citrines are rare; most commercial citrines are heat-treated amethysts or smoky quartzes. However, a heat-treated amethyst will have small lines in the crystal, as opposed to a natural citrine's cloudy or smoky appearance. It is nearly impossible to differentiate between cut citrine and yellow topaz visually, but they differ in hardness. Brazil is the leading producer of citrine, with much of its production coming from the state of Rio Grande do Sul. The name is derived from the Latin word *citrina* which means "yellow" and is also the origin of the word "citron". Sometimes citrine and amethyst can be found together in the same crystal, which is then referred to as ametrine.[18] Citrine has been referred to as the "merchant's stone" or "money stone," due to a superstition that it would bring prosperity.

Citrine was first appreciated as a golden-yellow gemstone in Greece between 300 and

150 BC, during the Hellenistic Age. The yellow quartz was used prior to that to decorate jewelry and tools but it was not highly sought after.

Topaz was once the name for any yellow gem; today, it describes the mineral aluminum fluoro-hydroxy silicate, the hardest of all silicate minerals. Topaz is found in igneous rocks and sometimes hydrothermal veins.

TOPAZ SYMBOLISM

The ancient Greeks believed that topaz could make a wearer invisible.

The gem was also thought to calm anger and balance strong emotions.

A symbol of honor and strength, topaz was believed to bring longevity and wisdom.

Topaz in its natural state is a golden brown to yellow – a characteristic which means it is sometimes confused with citrine, a less valuable gemstone.[5] A variety of impurities and treatments may make topaz wine red, pale gray, reddish-orange, pale green, or



Copyright Steve Blyskal 2018

pink (rare), and opaque to translucent/transparent. The pink and red varieties come from chromium replacing aluminium in its crystalline structure.

Orange topaz, also known as precious topaz, is the conventional birthstone for November, the symbol of friendship and the state gemstone of the U.S. state of Utah.

Imperial topaz is yellow, pink (rare, if natural) or pink-orange. Brazilian imperial topaz can often have a bright yellow to deep golden brown hue, sometimes even violet. Many brown or pale topazes are treated to make them bright yellow, gold, pink, or violet colored. Some imperial topaz stones can fade on exposure to sunlight for an extended period of time.

Blue topaz is the state gemstone of the US state of Texas. Naturally occurring blue topaz is quite rare. Typically, colorless, gray, or pale yellow and blue material is heat treated and irradiated to produce a more desired darker blue.

Mystic topaz is colorless topaz which has been artificially coated via a vapor deposition process giving it a rainbow effect on its surface.

Source: Wikipedia and Diamond Rocks Magazine, London

BENCH TIPS FROM BRAD SMITH

Reprinted by permission of the author, Brad Smith. Received as an email from Brad Smith

LOOSE HEADS

Flying off the handle is never good, particularly if it's a hammer head. The traditional way to tighten a loose hammer head is a bit of work with wedges, but if the head is basically secure, there's a fast and easy way to tighten a loose head for about 50 cents - superglue.

Simply put a couple drops in from the handle side, let it set up, and then a few drops from the top side. Be sure to get the thin super glue, not gel. It penetrates better. Packages of two superglues are usually available at the 99-cent store.



Note that this is only a safe practice if the hammer head is just a little loose but is basically secured onto the handle. Gluing is not a fix for a hammer head that has come off the handle or is at risk of coming off.

AVOIDING SOLDER LINES

After finishing a soldered joint on say a bezel, have you ever seen it reappear after you've soldered the bezel to a base plate? What's happening is that every time you heat a soldered piece to the temperature that solder flows, the liquid solder seeps a little more into the surrounding metal. This leaves a small furrow where the solder had been sanded off flush at the joint. To get rid of the furrow, you have to re-sand the joint area down to the bottom of the furrow.

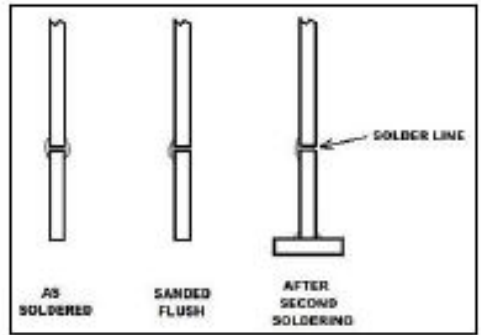
To avoid this when I have another soldering operation to follow, I try to leave a little extra solder on my joints. For instance, when trimming off excess base plate from around a bezel, I leave a paper thickness of excess plate material whenever possible until I'm done with all soldering.

CUTTING MOLDS

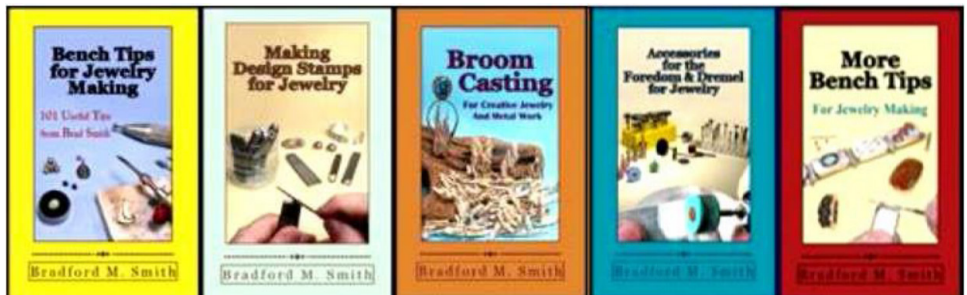
Cutting molds is easier and more precise with a sharp blade. A new X-acto blade is sufficient for cutting RTV molds but is usually not sharp enough for vulcanized rubber. For that, it's best to use scalpel blades available from most jewelry supply companies. The #11 blade is triangle shaped, and the #12 is hawksbill shaped. I find the hawksbill is particularly nice for cutting the registration keys of the mold.

USING YOUR THUMB

When using multiple bits in a Foredom, we often have to deal with different shaft sizes - the usual 3/32 inch burs, the larger 1/8 inch shafts sizes and of course the many different sizes of twist drills. For some reason I really dislike having to turn the key multiple times to open or close the jaws of the hand piece chuck. So I have two ways to speed up that task. For opening up the jaws, I just remember "four", the number of turns I have to make to open the chuck just enough from the 3/32 bur shaft size to the larger 1/8 bur shaft size. For closing the jaws around a smaller shaft, there's a neat trick. Hold the new bit in the center of the open jaws of the chuck, put your thumb lightly onto the outer-toothed collar of the chuck, and gently start up the Foredom. As the chuck turns, it will naturally tighten the jaws around the bur shaft or the drill bit. Then all you have to do is a final tightening with the key.



Learn New Jewelry Tricks and Tequiques with Brad's Jewelry-Making "How To" Books
<https://Amazon.com/author/bradfordsmith>



LAZURITE

*by Don Shurtz, Pleasant Oaks Gem and Mineral Club of Dallas
from Chips & Chatter 11/2020*



Lazurite Crystals on Calcite with Pyrite

Lazurite is a popular blue mineral generally associated Lapis Lazuli. Lazurite will often have calcite inclusions and an affinity with pyrite to fill in any cracks, particularly in massive forms of Lazurite. It rarely forms crystals. Chemically Lazurite is Sodium Calcium Aluminum Silicate Sulfur Sulfate; it has a chemical formula of $(\text{Na}, \text{Ca})_8\text{Al}_6\text{Si}_6\text{O}_{24}(\text{S}, \text{SO}_4)$. Lazurite, when it does form crystals (which is infrequent), crystallizes in the isometric crystalline system generally forming dodecahedrons (12 faces) and, rarely, cubes (six faces). It is normally blue to greenish-blue in color. Lazurite has a Mohs hardness of 5 to 5.5. It belongs to a family of minerals known as feldspathoids and is a member of the sodalite group. A feldspathoids closely resemble feldspars but have significantly lower silica (SiO_2) content. Feldspathoids form in rare igneous rocks that do not have quartz.

Lazurite name comes from the Persian word Lazhwad that means blue. It is interesting to note that the etymology of Azurite is also from Lazhwad. Both Lazurite and Azurite are intensely blue minerals.

Mining of Lazurite in Afghanistan has been ongoing for 6,000 years. Since the 7th century CE, Lazurite has been ground up and used as a dye for clothing and painting. It was also used for jewelry. Crystallized Lazurite is a rare but popular mineral for collectors.

The type locality for Lazurite is the Sar-e-Sang District, Koksha Valley, Badakhshan Province, Afghanistan. This continues to be the most productive area for mining Lazurite despite being mined for 6,000 years. It is also found in Ovalle, Cordillera, Chile; near Lake Baikal, Russia; Mt. Vesuvius, Italy; Cascade Canyon, San Bernardino Mountains and Ontario Peak, California and in the Sawatch Mountains, Colorado, USA.

Lazurite is the key components of the rock Lapis Lazuli (also frequently called Lapis), a semi-precious stone that has been used since antiquity. Lapis is formed from Lazurite, Sodalite, Calcite, and Pyrite and sometimes with minor amounts of other minerals. The Lazurite content generally ranges from 25 to 40 per cent. As with Lazurite, the pyrite often appears as veins filling in voids in the Lapis. Lapis and massive Lazurite are very similar in appearances and are often confused with each other.



References:

Lazurite, Wikipedia, <https://en.wikipedia.org/wiki/Lazurite>,

Minedat.com, <https://www.mindat.org/>

The Mineral Lazurite, Amethyst Galleries' Mineral Gallery, <http://www.galleries.com/default.htm>

Pictures by Don Shurtz of specimens in a private collection

COLLECTING AT THE RED CLOUD MINES OF LINCOLN COUNTY, NEW MEXICO

from MNCA Mineral Mite 11/2020

On December 21st Dr. Scott Braley will present a program to the Clear Lake Gem & Mineral Society, on the Red Cloud mines of Lincoln County, NM – two small, distinct mines a few hundred feet apart in the Gallinas Mountains, within the Cibola National Forest. The Red Cloud Fluorite mine presents interesting micro fluorites and some rare earth minerals, while the Red Cloud Copper mine yields beautiful vanadinite, wulfenite, mimetite, cerussite, and more. Both have been only sparsely written about in the mineralogical literature, so are only lightly visited.



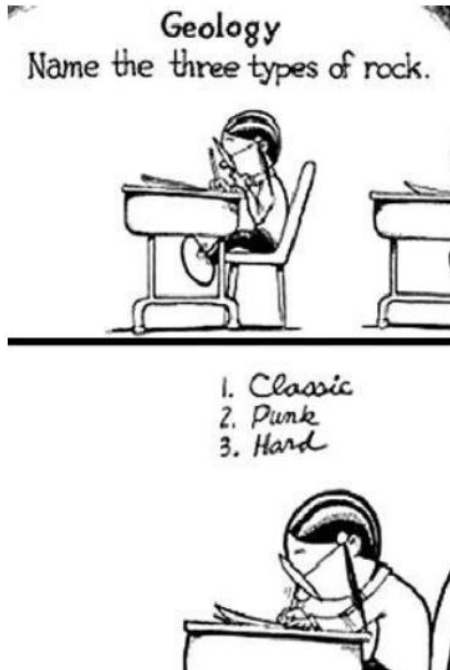
Red Cloud Wulfenite

The Zoom link is not yet available, but will be sent out December 20th, and also posted on the web site. Now this is inter-club co-operation!

TRUTHS

A poem, by Edward Clay

A clear stone
with rainbow flashes,
taken from rough—
so that when polished,
one can see
live
the creator's rainbow
held in hand.
Look deep into it.
See and be seen
by the magic
of this creator's play of color.
Know
we were also made
by that who made the stone,
have been given the gift
to appreciate it.
Some, given the skill,
the ability to learn, patience,
also experience,
help others to see.
So look deep,
dive in, and find truths.



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, 1/4 page; \$150 for 6 months, 1/4 page.

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

All meetings are held at the Clubhouse which is located at 10805 Brooklet near the intersection of Highway 59 (Southwest Freeway) and Sam Houston Parkway (Beltway 8).

See the calendar inside the back page for when the different Sections meet.

The General Meeting is the fourth Tuesday of each month (except December) at 7:30PM.

The HGMS web site address is <https://hgms.org>

HGMS BOARD OF DIRECTOR MEETING MINUTES

NOVEMBER 3, 2020

by Nancy English

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

President Sigrid Stewart called the November 3, 2020 Zoom meeting to order at 7:37 p.m. A quorum was present. Michele Marsel, First Vice President candidate for 2021, attended.

PRESIDENT'S COMMENTS

The date for our Virtual Show is getting closer, and your President, Show Chairman, and Web Site Committee are working on it. Participation is important—we need you, club members, to sign in and join some of our Facebook Live events. Please “like” and register for prizes! Instructions will be available online soon, and you will enjoy the new Show page when we switch to it.

The shop is available for use if **AND ONLY IF** a Shop Foreman and a helper are available to operate the machines. **NO ONE IS ALLOWED TO USE THE MACHINES UNATTENDED!!** If you need to use the shop, contact Neal Immega at nealimmega@gmail.com. He will schedule an appointment. Beyond that, the HGMS clubhouse remains closed for member use in order to minimize the danger of Coronavirus spread. The Board of Directors will determine when it is safe to reopen. Some Sections are scheduling virtual meetings. November and December General Meeting programs can be experienced virtually. In-person classes will not be scheduled until the Club reopens.

Approval of Minutes: Phyllis George moved to approve the minutes of the October 6, 2020 Board Meeting as published in the November BBG. Maggie Manley seconded the motion, and it passed.

Treasurer Report: Treasurer Tatyana Kuhne sent the Treasurer's Report to members on November 3, 2020. It confirmed that the annual insurance payment was made to The Hanover Insurance Group. The IRS sent HGMS a full refund for the penalty charged earlier for the late filing of the 2018 taxes. Rodney Linehan submitted the 2019 IRS tax return.

COMMITTEE REPORTS

BBG Editor: Beverly Mace emailed the on-line version of the November BBG to members on November 2, 2020. She mailed hardcopies of the BBGs on November 5, 2020.

Education Committee: Members can find links to online projects in the Sunday E-blasts sent by Jim Kendall.

Shop News from Neal Immega: The big news is that we received a 1-ton donation of rocks, etc. on Friday. I am in the process of sorting, and the good stuff will go into the Virtual Show. The bulk of the material will be available for member digging. I will put material on the shop porch and invite members to make a local field trip. There will be plenty. I will let you know when I am ready. We are using the porch rather than the parking lot to avoid trouble with the building association.

Tony Lucci is working on some saws and grinders. I particularly like the trim saw that is mounted on a kitchen cart. I will post a picture.

Virus and the Shop—Remember that I—Neal Immega—am the keeper of the shop access. That means that I am trying to keep people apart. Please schedule with me **FIRST** when you are going into the shop so I can space people out. Let us try to do this correctly.

Virtual Show Update November 14 from 10:00 a.m. to 4:00 p.m.: Scott Singleton—We are now up to 14 dealers in the virtual show. They are all in the process of submitting images and videos of their product offerings, and Lauren Blyskal, our webmaster, is busy creating their dealer pages. Soon we will go live with this virtual show Web page so that all of you can go to our Web site to see who will be participating.

On the education side, we have signed up Mad Science to have one or two online demonstrations. We have How-To videos from Richard Good on gemstones and from Nathan Gandara on collecting and making cabs in our workshop. Joy Lester and Lavonne Atchley made videos on silversmithing. Neal Immega is finishing his video on Texas

Fossils, and Scott Singleton is working on a video on identifying petrified wood. We are looking forward to receiving several more from our club experts who have agreed to make these videos. This is an important part of our club. The accumulation of expertise in our club is something many clubs can only aspire to, and our workshop and classrooms are exceptional. It is important that we showcase this expertise in a virtual sense in our virtual show, and we do that by making short (5–20 min) videos on subjects in which we have great skill. We are looking for more, so if you can make one of these videos, please contact Sigrid Stewart (sigrid.stewart@gmail.com) or me (fossilwood@comcast.net).

Web Site Committee: Currently, the committee is working on the show.

SECTION REPORTS

**All in-person Section Meetings are canceled until further notice.
Some Sections conduct virtual meetings.**

Archaeology Section: First Thursday, 7:30 p.m., December 3, 2020. Special guest, Bob Dodge, Founder and Executive Director of Artemis Gallery, will do a virtual presentation through Zoom and show amazing artifacts for the Section. He will show how X-Ray Diffraction (XRF) technology helps authenticate whether artifacts made of gold, silver, and gemstones are truly ancient. Watch for more details about this program soon.

HGMS Archaeology Section made an agreement with Friends of Archaeology to share programs. Bob Moore and Nancy Engelhardt-Moore are busy planning future programs.

Beading Section: Third Saturday, 1:30 p.m., November 21, 2020. This Friday, Saturday, and Sunday (November 6–8) is a free event for beading enthusiasts called The Great Bead Extravaganza. Seventeen well-known jewelry artists will share skills, techniques, ideas, and beads in one and a half hour sessions from 11:00 a.m. to 8:00 p.m. daily. Go to <https://www.facebook.com/groups/thegreatbeadextravaganza> to register. You can also see a preview by presenters and a schedule at this site. You will be able to view presentations after-the-fact for a specified period as well.

Nancy English has also registered for the **Silver Silk Two-Year Anniversary Workshops** to be held daily at Noon and 5:30 PM on December 14. It costs \$125 for the kit that goes with these sessions; but she thought it sounded interesting. This series of workshops is more related to products sold by Silver Silk.

The Beading Section is considering Zoom meetings for the group beginning on November 21, 2020. We can start by just chatting with each other to catch up, and maybe we can show some items that we have been working on since March.

Day Light Section: First Wednesday, 1:00 p.m., November 4, 2020. No program planned.

Gemstones and Faceting Section: Second Wednesday, 6:30, p.m., November 11, 2020. Watch the Sunday E-blasts for instructions on how to sign in and access the online meeting. The November meeting will have a presentation on Maine Tourmalines. The October meeting included a presentation on Montana Sapphires.

Lapidary and Silversmithing Section: Third Monday, 7:30 p.m., November 18, 2020. No program planned.

Mineral Section: Third Wednesday, 7:30 p.m., November 18, 2020. No program planned.

Paleo Section: Third Tuesday, 7:30 p.m., November 17, 2020. No program planned.

Youth Section: First and Third Saturdays, 10:00 a.m. to Noon, November 7 and 21, 2020. No program planned.

OLD BUSINESS

Clubhouse Keys: Rekeying the HGMS Clubhouse is postponed until after the Virtual Show on November 14 and 15, 2020.

HVAC—A/C replacement: On November 12, 2020 Neal Immega reported that the Shop A/C finally went out. Sigrid contacted the Lee Thompson HVAC to schedule a replacement. The unit we ordered in May is available now.

2021 HGMS Officers Nominating Committee: Phyllis George announced the new slate of HGMS officers for 2021.

President: Unfilled at this time

1st Vice-President: Michele Marsel

2nd Vice-President: Beverly Mace

Secretary: Nancy English

Treasurer: Tatyana Kuhne

The membership will vote on them at the November 24, 2020 General Meeting.

NEW BUSINESS

Due to the Forest Service's restrictions against rockhounding on Federal land, The American Land Association is working on a lawsuit against them. They need a Texas name on the suit. A member, who wishes to remain anonymous, has offered their name.

The next Board of Directors meeting will be Tuesday, 7:30 p.m. December 1, 2020.

The next General Meeting will be Tuesday, 7:30 p.m. November 24, 2020. Neal Immega will present a program from the University of Freiburg, Germany, Albert Ludwig Freiburg museum. They created a PowerPoint slide show for their exhibit of minerals and the insects that look like the mineral. We all knew that the Germans have a wonderful eye for minerals. Now we know they have a great appreciation for Insects too! Inda Immega found the presentation on the Web, and Mike Sommers suggested that we see it.

Adjourn: Nancy English moved to adjourn. Phyllis George seconded the motion, and it passed. The meeting adjourned at 8:41 p.m.

HGMS GENERAL MEETING MINUTES

OCTOBER 27, 2020

by Nancy English

President Sigrid Stewart called the meeting to order at 7:40. She welcomed fifteen attendees.

PRESIDENT'S COMMENTS

Members of the Web Site Team are hard at work on the Virtual Show. If you are asked to participate, provide information, or to help in some other way, please do so! This is our chance to keep us in the public eye and to fulfill our Educational mission in this difficult time.

Approval of Minutes: The minutes of the September 22, 2020 General Meeting have not been published, so the vote to approve is delayed.

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 <https://hgms.org>, 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 to be added.

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

Archaeology Section: First Thursday, 7:30 p.m., November 5, 2020. The Section will host a virtual meeting through Zoom. Following a short business meeting, Bob Moore will present "Egypt: The Dendera Temple Complex." He will show photos taken by his wife, Nancy Engelhardt-Moore, during their 2007 trip to Egypt. They were able to visit the Dendera Temple Complex that contains the Temple of Hathor. Bob will describe the many temples and churches in the complex to understand their effect on life and death in ancient Egypt. Gaining access to The Complex today is difficult, but you will have the opportunity to see it and learn its fascinating history. We hope to see you online!

Archaeology Section: First Thursday, 7:30 p.m., December 3, 2020. Special guest, Bob Dodge, Founder and Executive Director of Artemis Gallery, will do a virtual presentation through Zoom and show amazing artifacts for the Section. Watch for more details about this program soon.

President's Comment: I am impressed with Archaeology's meetings! I think Archaeology and Gemstone and Faceting are the only groups having virtual meetings.

OLD BUSINESS

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

Building Issues: The Air Conditioner ordered from Lee Thompson HVAC is still not available. HGMS will try to get on a list for early spring.

Rugs in Clubhouse: Michele Marsel reports that Bissell Pro Oxy Power Shot is actually removing stains from our carpet.

Nominating Committee: Phyllis George announced the new slate of HGMS officers for 2021.

President: Unfilled at this time

1st Vice-President: Michele Marsel

2nd Vice-President: Beverly Mace

Secretary: Nancy English

Treasurer: Tatyana Kuhne

The membership will vote on them at the November 24, 2020 General Meeting.

Taxes: The IRS refunded an earlier penalty.

Shop News: Saw-Neal Immega continues to work on the Highland Park saw that is located just behind the Texaco saw. It has the typical problem—worn parts. The screws that adjust the thickness of the saw cut use a piece of threaded brass with a fine thread. Of course, it is continuously awash in grit and oil, and it has just worn out. He upgraded the unit to a coarse thread and a steel nut. This should last a long time, and he can buy the parts off the shelf at Home Depot. John Cooper is turning the ends so they fit, and that should be it. Neal used the jewelry TIG welder to attach the steel nut to a steel plate. He thinks it is great having a dual-use piece of machinery—jewelry and industrial—like the welder. The Board has authorized the purchase of the TIG welder from Paul's parents.

Wheels- Is anyone interested in upgrading their grinding setup? Neal has discovered a nice supply of NEW diamond plated grinding wheels and NEW or NEARLY new sanding wheels in 6- and 8-inch sizes. He also has used sanding wheels that he recoated. They have a 10 year recoat warranty. If you wear them out, let Neal know. nealimmega@gmail.com

Next project- Cleaning up the paleo reference materials in the air tools room. Neal Immega was quite ruthless when he cleaned up the library. He threw away useless publications—but strangely enough, none of the old paleo fossils is in that category.

Show Committee: Virtual Show Update- As of this point in time, we have 14 dealers signed up to participate in our virtual show. Each is being given his/her own page to populate with images and videos of their product offerings. On the education side, we have signed up Mad Science to have one or two online demonstrations, and we have how-to videos from Richard Good on gemstones, and from Nathan Gandara on collecting and making cabs in our workshop. We are looking forward to receiving several more from our club experts who have agreed to make these videos. This is an important part of our club—the accumulation of expertise is something many clubs can only hope to achieve plus our workshop and classrooms are exceptional. It is important that we show this expertise in a virtual sense in our virtual show, and we do that by making short (5–20 min) videos on subjects in which we have expertise. Scott Singleton has committed to doing such a video on petrified wood ID, as has Steve Blyskal on minerals, Neal Immega on Texas fossils, and Randy Carlson on faceting. We are looking for more, so if you can make one of these videos, please contact Sigrid Stewart (sigrid.stewart@gmail.com) or Scott Singleton (fossilwood@comcast.net).

Web Site Committee: Currently the committee is working on the show.

NEW BUSINESS

Bob McNeil died on May 29, 2020, after an intense battle with pancreatic cancer. Bob was an avid collector of Rare Earth Minerals who also loved attending the Archeology section talks and exhibit trips to the Houston Museum of Natural Science. The Board agreed, via email, to donate \$100.00 to an endowment at his undergraduate institution, the New Mexico Institute of Mining and Technology, to fund the Robert McNeil Award for the CJ Keizer Chemistry Summer Assistantship. This award will allow the university to pay for the research work of a graduate student in the chemistry department each summer.

The next Board of Directors meeting will be Tuesday, 7:30 p.m. November 3, 2020.

The next General Meeting will be Tuesday, 7:30 p.m. November 24, 2020. Our next presentation will be a program by the German museum in Freiburg. They created an exhibit of minerals and the insects that look like the mineral. We all knew that the Germans have a wonderful eye for minerals. Now we know they appreciate insects too! They created a PowerPoint slide show for their exhibit, and Linda Immega found it on the Web.

Show-n-Tell: Before our Zoom meeting started, people showed specimens:

Mike Sommers showed a piece of veszelyite from M'Fouati, Republic of the Congo. This is a new find just recently brought to market by the Polish mineral dealer, Spirifer Minerals.

Steve Blyskal showed a large Viburnum trend piece of galena and marcasite capped with druzy quartz. He also displayed a calcite on siderite from Ouray, Colorado.

Paul Brandes showed a New Zealand agate, a calcite from Shullsberg, Wisconsin, a fluorite from Rosspoint, Ontario, and a beautiful aquamarine from Erongo, Namibia.

Adjourn: Paul Brandes moved to adjourn. Phyllis George seconded it, and it passed. The adjournment time was not recorded.

Vice President Sommers introduced the Program: Maggie Manley presented "The History of Beads." The program was about the History of Beads, and it included slides of pictures found in HGMS Library books.



2020 HGMS OFFICERS

President	Sigrid Stewart	President @HGMS.org
First Vice President	Mike Sommers	Programs@HGMS.org
Second Vice President	Beverly Mace	Membership@HGMS.org
Secretary	Nancy English	Secretary@HGMS.org
Treasurer	Tatyana Kuhn	Treasurer@HGMS.org
Archaeology Section Board Member	Nancy Engelhardt-Moore	Archaeology@HGMS.org
Beading Section Board Member	Maggie Manley	Beading@HGMS.org
Daylight Section Board Member	Fred Brueckner	
Faceting Section Board Member	Randy Carlson	Faceting@HGMS.org
Lapidary Section Board Member	Phyllis George	
Mineral Section Board Member	Steve Blyskal	Mineral@HGMS.org
Paleo Section Board Member	Mike Dawkins	Field_trips@HGMS.org



HGMS SECTION CHAIRS

Archaeology Section Chair	Bob Moore	Archaeology@HGMS.org
Beading Section Chair	Kim Fuselier	Beading@HGMS.org
Day Light Section Chair	Nancy Searle	Daylight@HGMS.org
Gemstone & Faceting Section Chair	Randy Carlson	Faceting@HGMS.org
Lapidary & Silversmith Section Chair	Anthony Lucci	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		Editor@HGMS.org
Clubhouse Chair	Neal Immega	ClubhouseChair@HGMS.org
Day Light Contact Person	Nancy Searle	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	Scholarship@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

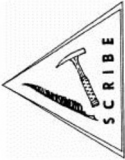
DECEMBER 2020						
SUN	MON	TUES	WED	THURS	FRI	SAT
	X	1 11a-3p Shop by Appt.	2 10a-3p Shop by Appt. 1p-3p Day Light Section	3 10a-3p Shop by Appt. 7:30p-9:30p Archaeology Section	4	5 10a-12p Youth Section 12-3p Shop by Appt.
6 10a-4p Shop by Appt.	7	8 11a-3p Shop by Appt.	9 10a-3p Shop by Appt. 6:30p-8:30p Gemstones & Faceting Section	10 10a-3p Shop by Appt.	11	12 10a-3p Shop by Appt.
13 10a-4p Shop by Appt.	14	15 11a-3p Shop by Appt. 7:30p-9:30p Paleo Section	16 10a-3p Shop by Appt. 7:30p-9:30p Mineral Section	17 10a-3p Shop by Appt.	18	19 10a-12p Youth Section 12:15p-3:15p Shop by Appt 1:30p-3:30p Beading Section
20 10a-4p Shop by Appt.	21 7:30p-9:30p Lapidary & Silversmithing Section	22 11a-3p Shop by Appt. 7:30p-8:30p General Meeting	23 10a-3p Shop by Appt.	24 10a-3p Shop by Appt.	25	26 10a-3p Shop by Appt.
27 10a-4p Shop by Appt.	28	29 11a-3p Shop by Appt.	30 10a-3p Shop by Appt.	31 10a-3p Shop by Appt.	X	X

JANUARY 2021						
SUN	MON	TUES	WED	THURS	FRI	SAT
 Due to coronavirus, many club events are postponed -Please check our online calendar at hgms.org/events/calendar for updated information 				X	1	2 10a-12p Youth Section 12-3p Shop by Appt.
3 10a-4p Shop by Appt.	4	5 11a-3p Shop by Appt.	6 10a-3p Shop by Appt. 1p-3p Day Light	7 10a-3p Shop by Appt. 7:30p-9:30p Archaeology	8	9 10a-3p Shop by Appt.
10 10a-4p Shop by Appt.	11	12 11a-3p Shop by Appt.	13 10a-3p Shop by Appt. 6:30p-8:30p Gemstones & Faceting Section	14 10a-3p Shop by Appt.	15	16 10a-12p Youth Section 12:15p-3:15p Shop by Appt 1:30p-3:30p Beading Section
17 10a-4p Shop by Appt.	18 7:30p-9:30p Lapidary & Silversmithing Section	19 11a-3p Shop by Appt. 7:30p-9:30p Paleo Section	20 10a-3p Shop by Appt. 7:30p-9:30p Mineral Section	21 10a-3p Shop by Appt.	22	23 10a-3p Shop by Appt.
24 10a-4p Shop by Appt.	25	26 11a-3p Shop by Appt. 7:30p-8:30p General Meeting	27 10a-3p Shop by Appt.	28 10a-3p Shop by Appt.	29	30
31						

THE BACKBENDER'S GAZETTE
NEWSLETTER OF THE

HGMS | HOUSTON GEM &
MINERAL SOCIETY

10805 Brooklet
Houston, Texas 77099
(281) 530-0942



SCFMS

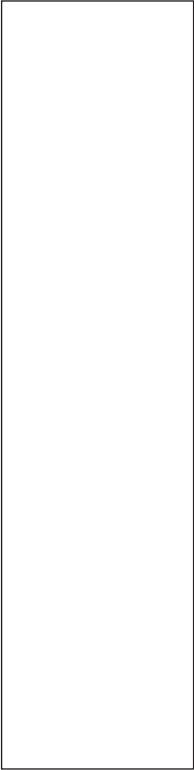
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