



# The BACKBENDER'S GAZETTE



*The Newsletter of the Houston Gem & Mineral Society*

**Volume XLIX—No. 7**

**July 2018**



## **President's Message** *by Paul Brandes*

**A**s promised, I am writing this President's Message from the comfort of my office chair in Cypress. This won't last long however, as I will be spending some time back home in Michigan in a few weeks. Part of the trip will simply be vacation, but being a geologist, one can never truly leave "work" at home. When I'm driving along, I always wonder how the landscape I'm viewing came to be, and what immense forces must have taken place to build the landscape passing by my window. In addition, Nathalie is the keynote speaker for two events in Upper Michigan; the annual "Crackerbarrel" at the Ishpeming Mineral Show, and the annual banquet dinner of Keweenaw Week, organized by the Copper Country Rock & Mineral Club in Calumet. These are small events that I thoroughly enjoy visiting, because it gives me a chance to speak with the organizers, vendors, and attendees in a calmer atmosphere and see what



**President** Continued on Page 4



## **Upcoming Program** *by Sigrid Stewart, 1st Vice President*

**J**uly 24, 2018: July 24 General Meeting,-7:30 PM:  
**Neal Immega** is presenting the program, and his topic is "Thundereggs—what they are and how they are formed." Following his talk, he will be offering hundreds of New Mexico thundereggs—already prepriced. These eggs were donated to the HGMS, and you can buy them at the prices marked on each. Neal will begin



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

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

*Editor: Phyllis B. George*  
22407 Park Point Drive  
Katy, TX 77450-5852  
*Phone: (281) 395-3087*  
**Copy is due for the August 2018 issue by Sunday, July 15, 2018.**  
*E-mail the Editor at [pgeorge4@comcast.net](mailto:pgeorge4@comcast.net)*

## Purpose of HGMS

**T**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, ¼ page; \$150 for 6 months, ¼ 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 at 7:30. The HGMS Web site address is <http://hgms.org>.

**President's Message** Continued from page 1

ideas I can glean for our shows.

Back on June 9, I had the opportunity to give a presentation to the Mineralogical Association of Dallas (MAD) group. My presentation was on the mining heritage of the Copper Country in Michigan and it was well received by the 40-plus attendees that came out. One item I thought interesting is that the group has no dedicated meeting place. Instead, one member of the group opens their home each month to host the meeting and to provide dinner to the guests prior to the presentation. Obviously with our size, HGMS could never have meetings like this, but the small setting does give attendees of MAD events the opportunity to socialize and get to know their fellow members—which in essence, has built a very strong group.

Recently, I received an email from a group of HGMS members (specifically, the Beading Group) that set up a table at The Bead Market Show at The Stafford Centre June 8–9. Their purpose was to sell not only their items, but also extol the benefits of being a member of HGMS. As I read the email in detail, I was very pleased at the response the group received. The group did a wonderful job in promoting HGMS and the many facets our Society represents. In addition to potential new members, they also detailed the classes we offer and our annual show. Many thanks go to Maggie Manley and her people for organizing this.

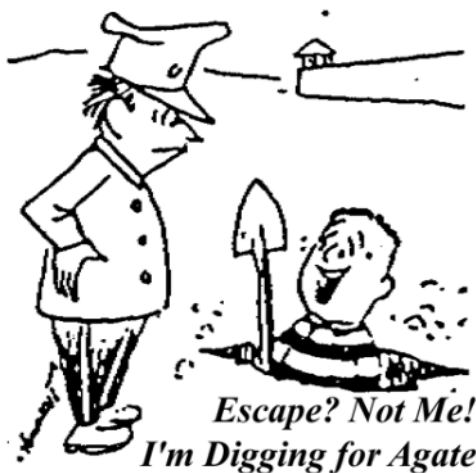
One last thing before I go. Within this Newsletter is a short piece about how every member is needed for a club/society to exist, titled "You're Nxxdx". This is something that I feel very strongly about, and I believe is key to a group such as ours to continue and grow. As a member, everyone should read this piece and remember that you **are needed**—no matter what part of the puzzle you fill.

See you all next month, likely writing from the road...

**General Meeting Program**—Continued from page 1

laying them out at 6:30 PM, so come early if you want first pick. 100% goes to HGMS.

Any left unsold will be taken to the show for the silent auction—where they will sell for much more.



From British Columbia Rock & Gem  
via T-Town Rockhound 7/97 & others



**Submitted****by Paul****Brands:**

Attached are two items for the July BBG. Both items come from "The Jaspilite," the quarterly newsletter for the Ishpeming Rock and Mineral Club in Ishpeming, Michigan. These were published in the Fall 2016 edition. At that time, Dan Fountain was the President and Editor of the newsletter.

**YOU'RX NXXDXD!**

Xvxn though my kxyboard is an old modxl, it works quitx wxll – xxcxpt for onx kxy. I havx many timxs wishxd it workxd prxfctly. It's trux that thx othxr kxys work grxat, but just onx kxy not working makxs a hugx diffxrxncx.

Somxtimxs our club sxxms a lot likx my kxyboard. You may say to yoursxlf, "Wxll, I'm just onx prxson. I don't makx or brxak thx club." But it doxs makx a big diffxrxncx bxcausx a club, to bx xffxctivx, nxxds thx activx participation of xvxy prxson.

So, thx nxxt timx you think your xfforts arxn't nxxssary, rxmxbxr my kxyboard, and say to yoursxlf, "I'm a kxy prxson in thx club, and I'm nxxdx vxy much."



**THE UNDERSTANDABLY LESS POPULAR  
GEOLOGY VERSION OF ROCK-PAPER-SCISSORS,  
ROCK-ROCK-ROCK.**



## Beading Section News

*by Nancy Fischer*

**P**aul Robles drew a large crowd at the June Beading Section meeting. He presented basic wire wrap instruction. He gave almost individual attention to the approximately 20 attendees. Paul provided all of the tools and material—and pizza too when the meeting ran late and everyone got hungry. A collection jar was filled and presented to Paul who promptly said the proceeds would be donated to the Youth Section. Each person left with a wire-wrapped stone and with the knowledge of how to do more. Paul's instructions are clear and practical. He is also very patient. Whenever Paul Robles is at the clubhouse, he is helping someone, usually involving wire and rock.

## General Meeting Minutes

*May 22, 2018*

*by Nancy English, HGMS Secretary*

**V**ice President **Sigrid Stewart** called the meeting to order at 7:38 p.m. She thanked everyone for coming to the May General Meeting. Fifteen members attended.

**Minutes:** Vice President Stewart asked for a motion to approve the **April 24, 2018**, General Meeting minutes, as published in the June 2018 BBG and posted on the May 20 e-blast. Mary Ann Mitscherling moved to approve the minutes of the April 24, 2018 General Meeting. Tony Lucci seconded the motion, and it passed.

If you are a member and not already receiving Jim Kendall's HGMS Sunday e-blasts, email him at (kendallja@att.net). Jim also includes weekly shop status updates from Neal Immega.

### Vice President's Announcements:

Joan Riley is still recovering from her stroke in rehab hospital.

Karen Burns was at John Sealy hospital in Galveston. She was treated for atrial fibrillation. After stopping and restarting her heart yesterday, her heart began beating regularly again. She expects to be home soon. Thank you, Clyde McMeans, for taking Karen a bouquet from HGMS.

The "Teri Smith" Rock Hunts collecting trip to Alpine, Texas, organized by Richard Good for the Lapidary Section, was very successful for the strong and adventurous.

Mike Sommers reported via email that the Midlothian field trip was canceled due to rain.

President Brandes is a Professor of Geoscience in the Lone Star College System. He is still looking for Texas mineral specimens and rocks to help his students understand more about the geology around them. Please contact Paul at (281) 543-3681, via email at <mailto:eclogite@pasty.com>.

**Dues are Past Due!!!!** Anyone who has not paid their 2018 dues will not receive the weekly e-blasts or have shop privileges.

### Section/Committee Reports

In the interest of time, 1<sup>st</sup> Vice-President Sigrid Stewart asked members to look for reports of Section news in the BBG, on the Web site ([HGMS.org](http://HGMS.org)), or by reading the weekly e-blast from Jim Kendall for future Section meetings and presentations. If you are not on Jim Kendall's e-mail list, please contact him at <mailto:kendallja@att.net>.

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

**Mineral Section: June 6, 2018 set up begins at 7:00 p.m. for Swap Night.** All Sections are invited to bring items to sell or swap or come to buy items. There will be refreshments.

**Lapidary Section: June 18, 2018, 7:30 p.m.** Mary Ann Mitscherling will teach attendees how to make cabochon hearts. She is providing soft preforms for shaping and polishing.

### Old Business

**Trade Show: Trade Show—April 28, 2018, 10:00 a.m. to 6:00 p.m.:** Beverly reported five new single memberships and three new couple memberships. Renewals totaled five single, two couples, and one youth. Plus, Douglas Dodds purchased a lifetime membership for his sister who is a current member. Total members—twenty-two. Attendance was lower than past Trade Shows, 599 people were counted.

Neal Immega gave about 15 tours to people who wanted to see the facilities. He convinced several teachers of jewelry classes to join by using the argument: "Join HGMS, and we will pay you to teach classes." The usual comment was "I did not know this resource existed." He suggested every vendor pay a \$10 cleaning fee to offset the extra cleaning needed after the show.

A new Trade Show Committee has been proposed to deal with the ongoing details of the Show. Four people have expressed an interest in being on the Committee.

**Scholarship Committee:** Last year Douglas Dodds donated \$500.00 to the HGMS Scholarship fund. The donation will be given to the second-place winner. HGMS is grateful for his generous contribution.

### New Business

**The next Board meeting is Tuesday, June 5, 2018 at 7:30 p.m.**

The next **General Meeting is June 26, 2018, 7:30 p.m.** For the **July 24, 2018 General Meeting** program, Neal Immega will present information on Thundereggs. An Auction will follow.

### Show 'n Tell:

Steve Blyskal showed specimens he had acquired on a trip to New Jersey recently. He visited the

Sterling Hill Mine in Ogdensburg, New Jersey, which is now a museum with mine tours and a fabulous collection. While there, he purchased a flat of fluorescent specimens from the gift shop. He turned off the lights in our meeting room and gave everyone a treat with his fluorescent light showing off the vibrant colors. Expect a talk in the future on this must-see mine/museum. He also visited a mineral dealer friend and was able to purchase some specimens from an old collection of New Jersey minerals. He showed off specimens of amethyst on quartz pseudomorph after anhydrite from the Upper New St. Quarry in Paterson, NJ.

Richard Good showed petrified wood; chalcedony in multiple colors; red, green, and gold jasper all collected on the Lapidary field trip. He described the rough alluvial terrain and temperature swings on the three-day six-hour-per-day-adventure. "Each day we made two trips away from the pickup, mid-morning and early/mid-afternoon. We carried water in and rocks out." Nine folks went on Friday (cloudy, north wind, and 60°F high temp.) to South Larremore Ranch. Saturday and Sunday, down close to the Rio Grande, the 90-plus degrees cut the last two days shorter." They found lots of nice, small tumble-size moss and banded agates." We (son, friend, and I) chose the "trails less traveled," and we carried back 350 pounds total. Needle Peak was the most rugged for even "athletic" persons, and it was also the most barren of good material. This area has been hunted for 75 years or more, so the yield was low.

Tony Lucci presented snakewood for sale. He also brought free buckets of petrified wood. He is giving it away at his home in Crosby. Email him: [silversmith1@peoplepc.com](mailto:silversmith1@peoplepc.com) to make arrangements to pick it up.

**Drawing:** Mary Ann Mitscherling won the polished agate geode.

**Refreshments:** Nancy English provided the refreshments. Members were reminded to **FEED THE KITTY!** Foster Kneeland volunteered to bring refreshments to the June General Meeting.

**Adjourn:** James Wark moved to adjourn the business meeting, and John Mitscherling seconded it. The motion passed, and the business portion of the meeting adjourned at 8:20 p.m.

**Vice President Stewart introduced** Steve Blyskal to present geological information about the Royal Gorge in Colorado.



**INTRODUCING**  
**Backbender's own Scruffy Dude®**  
**created by HGMS Member Kim Fuselier**

## Board of Directors' Meeting Minutes

June 5, 2018  
by Nancy English

X	President—Paul Brandes		Beading Rep—Kim Fuselier
X	1st Vice President—Sigrid Stewart	X	Day Light Rep—Fred Brueckner
X	2nd Vice President—Beverly Mace		Faceting Rep—Jeanne Barna
X	Treasurer—Liane Linehan	X	Lapidary Rep—Phyllis George
X	Secretary—Nancy English	X	Mineral Rep—Mike Sommers
	Archeology Rep—Garth Clark	X	Paleontology Rep—Mike Dawkins

**P**resident Paul Brandes called the meeting to order at 7:30 p.m. A quorum was present. Non-voting member Chase Jennings, Trade Show Chairperson attended.

### President's Comments:

**Status of Jim Kendall:** Update—Jim Kendall was able to produce the E-blast on Sunday, June 10, 2018. He is home recovering after emergency eye surgery for a detached retina. Until he is able, Margo Bedman and Fred Brueckner will handle the soft drinks.

**Busy Summer of Travel:** Paul will not be here for the July General Meeting or the August Board Meeting. He will be in Houghton, Michigan at Keweenaw Week 2018.

**MAD group presentation:** On Saturday, President Brandes will give a presentation to the Mineral Association of Dallas.

**Lone Star College Mineral collection:** Thank you for the donations. More are still needed.

### Approval of Previous Month's Board Minutes:

Beverly Mace moved to approve the minutes of the May 1, 2018 Board Meeting. Phyllis George seconded the motion, and it passed.

**Treasurer's Report:** Liane Linehan emailed the May 31 financials to all Board members in advance of the meeting.

### Office, Committee, and Section Reports

**Archaeology Section: No programs this summer.** Look for future program announcements in the fall.

**Beading Section: Saturday, June 16, 2018 1:30 p.m.** The June Beading Section Meeting will be guest-led by Paul Robles. He will teach how to wire weave a cabochon. All materials will be provided. He asks for no money for his supplies, but a donation of \$5 to \$10 would be a good idea.

**Day Light Section: On Wednesday, June 6, 2018 at 1:00 p.m.** Members will finish their covered small clay pots and plant succulents in them. **The July meeting will be held on July 11** because July 4 is a Holiday. The July activity will be a design-it-yourself piece with some wonderful beads,

courtesy of Nancy English's friend. Karen Burns will bring some designs we have used before and some ideas from her musings in June. Many of the beads are larger, and we will have copper sheet and wire to play with—also a bit of brass for shine. If you have wire, bring it as well as pliers and wire cutters. As always, HGMS will have some tools available.

The Day Light Section Chair position is still open.

**Gemstones and Faceting Section: Wednesday, June 13, 2018, 6:30 to 8:30 p.m.** Our educational topic will be Diamonds, Part 2. We will look at the Cut, Color, and Clarity grading of diamonds. Time permitting, we will look at a typical grading report and discuss diamond "certificates."

**Lapidary and Silversmithing Section: Monday, June 18, 2018, 7:30 Program:** Mary Ann Mitscherling will present Cutting and polishing soapstone.

**Library: Quentin Boyer** reported via email that HGMS has received a donation of lapidary-related magazines (*Rock and Gem* and *Lapidary Journal*) from the 1980s and 1990s. He will need to audit our existing magazines to see what needs to be added—and Quentin will need some help with this activity.

**Mineral Section: June 6, 2018, 7:30. "Swap Night,"** This will be an informal event, held inside where excess material from collections can be bought, sold, and swapped. All Sections are invited to participate. Setup begins at 7:00 p.m., and the formal business meeting will be kept to a minimum to allow ample time for specimen exchange and socializing. Visitors are always welcome, and there will be plenty of variety to get your mineral fix. **This is also our last regularly scheduled meeting before the summer hiatus.** Refreshments will be provided.

**Paleo Section: Tuesday, June 19, 2018. 7:30 p.m.** Program to be announced.

**Shop Report:** In Neal's absence, the Shop Supers did not have anything to report.

**Show Committee: Scott Singleton** reported via email. **Homeschool Conference** was successful. Lots of people came by the booth. Four pages of addresses for mailouts were collected. Thanks go to Nancy Fischer, Randy Carlson, and Clyde McMeans for helping staff the booth. Three people immediately went to our Web site and registered for the K-12 School Earth Science Program, even though registrations are not really open yet.

No Show Education Chairperson yet. The Show Committee also needs a Homeschool Registrar.

**Volunteer Sign Up Program:** Nancy English and Charlie Holden are planning to meet to set up a program to easily download volunteer contact information and simplify scheduling.

**Youth Section:** The next meetings will be **Saturday June 2 and June 16, 2018 from 10:00 a.m. to noon, also July 7 and July 21** from 10:00 a.m. to noon.

**BBG Editor:** The deadline to send in articles and other pertinent information for inclusion in the July 2018 BBG is **Thursday, June 15, 2018**. The BBG "**Mascot**" is almost finished: Kim Fusilier is working on the sketches of possible caricatures for the Back Bender's Gazette.

Phyllis George announced that all entries (articles) that will be submitted to the SCFMS Bulletin Editors' Contest need to be written and submitted for publication in the BBG no later than the September issue (August 15 to Phyllis). This year the cutoff date to submit HGMS entries to the 2019 SCFMS contest is the end of October. Articles published in October, November, and December will be entered in the 2020 SCFMS Contest.

## Old Business

**Building Safety:** Some issues have been identified that will need to be addressed this year. President Brandes will share the information with Neal Immega so a strategy can be planned.

**Web Site:** Phyllis George has been doing event updates on the Web site. Sigrid is working on front page advertising for Paleo Books and Lapidary Templates.

**Scholarship Program:** Mike Sommers reported that two complete applications have been received by email and several other inquiries to this date. The deadline is Friday, June 8. Maybe some mailed applications will be at the clubhouse.

**Security System:** Garth Clark was not available for a report.

**Creating "How-To" videos:** Sigrid Stewart reported that some research has been done. No other progress yet.

**Handheld Vacuum:** Jim Paras will purchase within the week

**Phone Services:** Phone calls being made to HGMS are now automatically being forwarded to Nancy English's phone. This change allows callers to be promptly served. Nancy reported that she has only received two calls so far and is not expecting a large volume of callers.

**The SCFMS Annual Meeting:** Susan Burch represented HGMS at the SCFMS Annual Meeting. Saturday, May 5, 2018. The 2018 convention for the South Central Federation of Mineral Societies was hosted by the Lubbock Gem and Mineral Society in Lubbock, Texas. Fifteen member societies were represented, including HGMS. The 2019 SCFMS annual convention will be hosted by the Fredericksburg Rockhounds in conjunction with their 50th annual show and will be held in Fredericksburg, TX on January 20, 2019, at 1:00 p.m. For more detail about the reports presented by each committee, please see the Meeting Minutes as printed in the SCFMS May-June newsletter available at scfms.net. Susan also brought home the trophies and certificates awarded to HGMS members. They will be distributed at the June General Meeting; the results were published in the June BBG.

**The Vacuum Cleaner** for the floors has stopped working. Nancy Fischer donated a vacuum she is no longer using. Thank you, Nancy.

**Trade Show Committee:** Representing dealers from previous Trade Shows, Chase Jennings proposed having a July Trade Show. The Board emphatically said, "No." The weather is already too hot for parking lot usage. The public would want to be indoors, causing an overcrowding hazard. January will be the next favorable month for a Trade Show. The new Trade Show Committee will plan to meet in August.

## New Business

### Paleo Museum Tour

Thursday, June 28, at 6:00 p.m. is a free tour of the Science Museum Paleo Hall. (NOTE: the date announced earlier is NOT a free night.) Meet Neal Immega at the entrance to the Paleo Hall at 6:00 p.m. If you are late, find us in the hall. He starts the "7 best things" tour with the Jurassic Croc and ends with the wall of skulls in Human Evolution. If you have not been on a tour with me, you have not seen the Paleo Hall. Thursday is a free night—6:00-9:00 p.m. Reservations are not required.



Inda and Neal will be offering tours of Egypt, Gem and Minerals, Faberge, Weiss energy, etc. over the summer. Note: you CANNOT see the whole museum in 3 hours. You cannot even see all of Paleo in 3 hours. The Paleo floor is BIGGER than a football field.

**Next Board of Directors meeting: Tuesday, July 3, 2018 at 7:30 p.m.**

**The next General Meeting is on Tuesday, June 26, 2018:** Sigrid Stewart will present "Viking Gold," a travelogue and metallurgical talk on Viking-age hoards of gold and silver found in Scandinavia.

**Adjourn:** Mike Dawkins moved, and Fred Brueckner seconded the motion to adjourn the meeting. The motion passed, and the meeting adjourned at 9:03 p.m.

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### Bench Tips

*by Brad Smith*

For more tips or to learn new jewelry skills see <http://Amazon.com/author/bradfordsmith>  
[www.BradSmithJewelry.com](http://www.BradSmithJewelry.com)

### SAVE WHEN BUYING SILVER

**S**ilver products like sheet, wire, and casting shot are sold by the Troy ounce at what is called the spot price. That's what companies pay for the pure metal on the commodities market, and the spot price changes daily.

But in addition to the spot price, there is also a cost to fabricate the metal into wire or sheet, so the price of the item you buy is the cost of the metal plus the cost to make it. Different products have different fabrication charges because each takes a different amount of labor. Also, different companies will have different fabrication charges because of local labor rates and their desired profit margin.



You can save money by finding a company with a lower fabrication charge. Also, note that the fabrication charge per ounce is less on larger orders, so you can save more by buying more. Find a friend to place a joint order and split the shipping charges.

But for casting purposes, there's an even better way to save. Buy your silver at a coin store. They sell bars and rounds in pure and Sterling for the spot price plus about a dollar per ounce.

The local coin shop adds only a small profit over the spot price. So I save about \$3 per ounce, pay no shipping charges, don't have to wait for mail order, and support a local business.

### SAWING JUMP RINGS

The difficult part of making jump rings for me has always been holding the coil while cutting off the individual rings. I use a saw to get the best fit when closing the rings later. I've seen all sorts of suggestions for ways to hold the coil, but the one that works best for me is this little jig made from scrap wood.



It's about 2 inches wide and 4–5 inches long with a groove cut down its length to cradle the coil of wire and a thin stop attached to the front end.



To cut the rings, thread your saw blade through the coil, hold the coil down in the groove and against the front stop, and saw through the bottom of the coil at about a 40-degree angle.

Don't forget to use some wax or cutting lube. It really does make a difference. If you don't believe me, do an experiment while you're cutting a lot of rings. Count how many rings can be cut before the blade breaks. First, do the test without lube, and then do it again while adding some lube to the blade after cutting every 8–10 rings.

It's the best way I've ever found to hold the coils easily and securely. If the coil doesn't move, you break fewer blades. And it is safer than some other techniques because you are cutting away from the fingers.

Pick Up a Few New Jewelry Skills With Brad's "How To Do It" Books

<http://amazon.com/author/bradfordsmith>



"Bring me that little shovel out of the car."

via Golden Spike News 8/00

## AFMS President's Message

*by Sandy Fuller, AFMS President  
from AFMS Newsletter 06-07, 2018*

**A**s I make my way east in the first of many trips this year to visit our seven federations and almost 54,500 members, I just had to take a short detour to visit Flint Ridge, OH and collect some of the colorful materials found there. I knew the young visitors to our annual show would love to add some of the flint and colorful chert to their rock boxes.

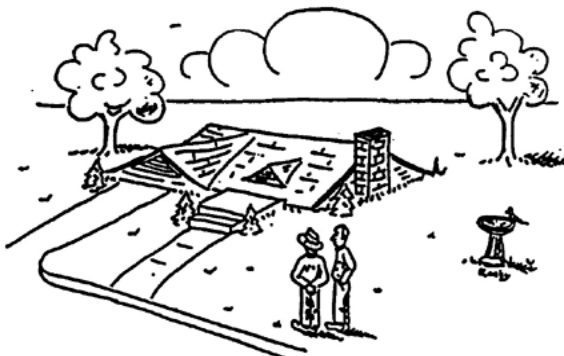
There were a few very serious diggers going at the hard rock with sledgehammers and pry bars, while some of us were content just to check out the small "leavings" left by others. In a brief chat with one young woman, she said, "I just like pretty rocks."

In our quest for pretty rocks and not-so-pretty ones, many of us will be visiting collecting sites across the nation—and even across the world. At each site we visit, we are ambassadors for all the casual and serious collectors. It is up to us to model responsible collecting and to care for the areas we visit. Our AFMS Code of Ethics provides a great foundation for our behavior in the field.

But our behavior in the small towns near collecting areas also reflects on us all. When my large club visited a small town for the weekend, local merchants asked us to spread our business across the various "mom and pop" restaurants and to break into smaller groups when traipsing across town. Our group took these suggestions to heart, so we are welcomed each year at a favorite collecting locale.

In some areas, clubs are doing trash cleanup at roadside and collecting sites—especially in public areas—to help take care of collecting areas. Still others are getting involved in local planning initiatives to keep collecting sites open. Their actions benefit all of us.

On the other hand, always a few brag about flouting the law and property boundaries to collect in off-limits areas. Their behavior hurts all collectors and leads to the closing of collecting locales. As club members, we need to be vigilant in identifying those who flaunt our ethics and to take appropriate actions to limit the damage they inflict on all of us.



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

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

## Safety Matters: The Price of Safety

*by Ellery Borow, AFMS Safety Chair  
from AFMS Newsletter 06-07/2018*

The price of safety rarely is discussed. Having read many manuals of OSHA safety, MSHA safety, corporate safety, Federation safety, workshop safety and club safety, rarely is there ever a mention of why. Why be safe? And at what cost? One might think the answers are obvious, but if so, why are more people not striving toward being safe?

Curious as to the why and what of safety, I have asked many folks those questions about safety. Their answers include:

- It costs too much.
- It takes too much time.
- It is too distracting.
- My own safety ideas are better.
- No one was watching, so I didn't need to.
- And my own personal favorite— I'm a lucky kind of guy.



Well, let us evaluate those answers. Yes, I will freely admit that if one suffers a minor laceration and applies a 15-cent adhesive bandage (injury) compared with the **cost** of an eight dollar pair of gloves (prevention) it appears that the prevention could be more expensive than the cost of the injury. But what about a \$900 emergency room visit to remove a foreign body from the eye (injury) compared with the cost of a pair of three-dollar goggles (prevention). In that case, prevention is far cheaper.

**Taking too much time?** Too much time (three seconds) to lower and secure the hood of a slab saw? Too much time to buckle one's automobile seat belt (two seconds)? Too much time to put on and adjust eye safety goggles (four seconds)? Too much time to walk over and turn on the ventilation fan for the soldering torch fume exhaust hood (nine seconds)? Really? Too much time?

**Distraction** does indeed occur with some safety gear. Gloves might not fit well. Goggles may indeed restrict some vision. Hearing protection sometimes muffles quiet voices. I would however submit that undamaged hands, injury-free eyes, and slightly muffled voices may be preferred in most cases over a slight amount of inconvenience.

While **ones own safe ideas** may at times be advantageous in certain unique circumstances, tool, equipment, and hobby supply instructions have been well-thought by experts in the area. Please give considerable weight to the collected wisdom of manufactures, suppliers, and various safety organization's offerings.

**"No one was watching so I didn't need to."** Do I really need to talk about this one? To the individual who offered this response, if you are reading this, please remember it is not just about you. You no doubt have brothers or sisters, husband or wife, or significant other, parents, neighbors, friends, or a four-footed friend who cares about you. If you don't want to be safe for yourself, please consider being a bit altruistic and be safe for the special people in your life.

I'm a lucky kind of guy. Hmmm, are there any mathematics majors out there? Answer me this if you will—after performing a heads or tails coin toss game 10 times in a row and obtaining heads

each time—what are the odds that, on the 11th time, it will be heads? The odds are again, still 50/50. Each toss of a coin, each strike of a chisel by a hammer, each lighting of a torch is a new game. In each instance of a possible unsafe act, please consider doing the right thing and be safe.

Safety is more than any rulebook, sometimes it even defies "common sense" (shouldn't that 11th toss of a coin also come up heads?). Safety is an attitude, an attention to detail, and a certain modicum of creativity.

Your safety matters, no why's or what's about it



**T-rex encounters a turtle.**



**Sea creature**

Photos taken  
by John  
Mitscherling  
at Houston  
Museum of  
Natural Science  
in the Paleo  
Hall





## Using GIS or Mobile Mapping Apps

by Ruth Hidalgo

*from the American Lands Access Association Newsletter, 10-12/2017,  
via the Minnesota Mineral Club's Rock Rustler News, via The Quarry,  
03/2018; via MWF Newsletter, 03/2018; via The Tumbler 06/2018*

Numerous apps for mobile phones allow you to track your routes and favorite collecting spots. You need not have a separate GPS unit to create maps anymore. These apps work even when you do not have cell service.

My app of choice is Avenza. I started using an iPhone app called Terra Nova well over 15 years ago, and it has evolved into Avenza. I have used the data stored in that app to make several National Environmental Policy Act (NEPA) comments. Basically, this is how it works:

You download the app.

You select the maps you want to download. Some are free, some you have to purchase. There are now thousands of maps from which to choose. You can even download a geological map that will show you where you are and what the geology is around you.

I prefer the BLM maps and USGS Topo maps for trail tracking. You have to have Internet service to download a map, but not to use the app once the map is downloaded.

When in the field, open the app, and you will be able to see where you are on the map.

You can then choose to record your track or trail as you drive or hike. Save the trail, and the next time you go out in the field, just follow the trail on your map. You will know how to get back to that collecting spot. Gone are the days of trying to remember which fork you took, or wondering if you are on the right path. You can then export that information to Google Earth or to other GIS programs. You can even email it to your friends.

You can also choose to place markers on the map showing collecting areas and to use that data the same way. You can insert a GPS coordinate a friend gave you and see where it is on the map relative to where you are.

You can use the data to create maps easily to attach to your formal NEPA comments. This gives the agency the exact trail you use, and shows it to them on their own map. Alternatively, you can export the data to Google Earth or other GIS mapping programs and create maps to attach from there. I used a trail exported to Google Earth to create a map I attached to a formal comment on the West Mojave (WEMO) Travel Management Plan, where the Bureau of Land Management had not included a road that rockhounds use in their inventory. In this way, they could see that the road clearly existed, as you could see it on the satellite image in the map I attached.

Nowadays, making formal comments is much easier, thanks to apps like Avenza. If you are not taking advantage of this technology to make your formal comments, give a try. If you are not speaking up because you think it is too complicated, try using this kind of technology. You may find it is easier and less time consuming than you think.

## Agate

by Don Shurtz, Editor

### Pleasant Oaks Gem and Mineral Club of Dallas from Chips and Chatter 06/2018

Quartz is the second most common mineral in the Earth's crust. To reach this distinction, one must include all varieties of quartz including the cryptocrystalline members that includes agates and jaspers. The crystal structure of cryptocrystalline rocks and minerals is, by definition, microscopic crystals that are generally only visible in thin sections using a polarized light source.



Although agates and jaspers are composed of the same materials, agates are transparent or translucent while jaspers are opaque. Thus, a rock that is composed of cryptocrystalline quartz but does not let light pass through it would be jasper; if it lets some light pass through, it is classified as an agate.

Most agates are banded and form in nodules. Agates are often formed in volcanic materials such as basalt, rhyolite, and andesite, but can form in sedimentary rocks such as limestone. It is thought that silica-rich gels with other minerals in the mix are deposited layer by layer on the inside of the voids left by gas bubbles in the original volcanic flow. As a layer is deposited, it depletes the concentration of the other minerals, so that an area of the band is clear or more translucent than the initially deposited material. The question yet to be answered is whether the bands are deposited slowly over thousands of years or if they are deposited much more rapidly, perhaps in a matter of minutes. This question is one that geologists are trying to solve.

It is interesting to note that quartz macro-crystal varieties (quartz, amethyst, citrine, etc.) can be made in a lab or on a production line, but they have not yet been able to produce a cryptocrystalline quartz such as agate or jasper. At least for now, you can rest assured that your agate formed naturally. However, agate can be dyed. When you see the pink, neon blue, and bright purple agates from Brazil and other locations, they likely are colored by a dye.

Agates can be found in most parts of the world. Many agates from Brazil and Mexico are noted for their brightly colored banding. Agates can form without bands and often have mineral inclusions referred to as dendrites or moss.

#### References:

Geology In, How Do Agates Form, <http://www.geologyin.com/>

Minerals.net, The Gemstone Agate, <http://www.minerals.net/>

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

**Picture by Hannes Grobe**, from Wikimedia Commons, <https://commons.wikimedia.org/wiki>, used under Creative Commons Attribution – Share Alike 2.5 Generic license.

## Jasper

by Don Shurtz, Pleasant Oaks Gem and Mineral Club of Dallas  
from Chips and Chatter 07/2018

For the last two months, we have featured varieties of quartz, including the microcrystalline variety agate. Continuing this trend, this month will feature the microcrystalline variety jasper. The most distinguishable difference between agate and jasper is that jasper is opaque (blocks light).

Jasper, as microcrystalline quartz, should have a Mohs hardness of 7, but due to the impurities in the stone that gives it color and patterns, most jasper is a little softer, ranging from 6 to 7. Jasper is generally in massive form but can also be found in botryoidal or as nodules of small pebbles. Most beaches that claim to have agate generally have more jasper than agate, but the beach does give you a head start if you plan to tumble the stones.

The name Jasper comes from the Hebrew word *yashpeh* and means spotted or speckled. Jasper does come in spotted and speckled forms, but it can also be banded, brecciated (breccia are rocks formed of fragments and cemented back together), solid, picture, or just about any other way a rock can look. The common colors for jasper are red, yellow, and brown. Less common colors are green and blue.

Some of the most highly prized jaspers are orbicular jaspers. They contain spherical inclusions of differing colors. Two sought after varieties are Poppy Jasper from Morgan Hill in Santa Clara County, California and Ocean Jasper from northeast Madagascar. Poppy jasper typically has a red, brown, black, or yellow background with red or red and yellow spherical inclusions. Unfortunately, Poppy Jasper is no longer being mined; only previously mined material is available at a premium price. Ocean Jasper comes in many differing colors; the spherical inclusions being



green, white, pink orange and yellow with white, green, black, red, and grey backgrounds. Ocean Jasper is still being mined, but it still commands a premium price.

In the Picture Jasper category, the favorites are Biggs and Bruneau. These could also be classified as Banded Jasper. They are named after the areas they are found in: Biggs Junction, Oregon and Bruneau Canyon, Owyhee County, Idaho. Both are still

available, but are hard to find.

One of the favorite Brecciated Jaspers would be the Australian Mookaite. It comes in a variety of colors, generally several colors mixed in one stone. Colors include brown, yellow, orange, red, pink, and white. Some of the other Australian



brecciated jaspers are also popular including Black Jasper Conglomerate, Outback, and Noreena Jasper,

#### References:

- Australian Outback Mining, <http://www.outbackmining.com/>
- The Mineral Jasper, Mineral.net, <http://www.minerals.net/gemstone/>
- Wikipedia, <https://en.wikipedia.org/wiki/jasper/>

Pictures from Wikimedia Commons, <https://commons.wikimedia.org/wiki>

- Ocean Jasper, photo by Vassil, released to Public Domain
- Bruneau Jasper, Photo by Chris857, licensed under Creative Commons Attribution-Share Alike 3.0 Unported
- Mookaite, photo by Michelle Pemberton, licensed under Creative Commons Attribution-Share Alike 3.0 Unported



## Poland Treasures—Amber and Salt

*by Andy Thompson, Secretary  
from Mineral Minutes 06/2018*

**D**ave Hennessey introduced Denise Nelson as the evening's

presenter. Denise is a certified gemologist and President of a sister mineral club, GLMSDC. Her theme, "Poland's Treasures: Amber and Salt" stems from her three-week tour of Poland and other countries, which, in some ways, was for her a return home. Having grown up as a teenager in Austria

and, having made many visits to Vienna's Natural History Museum with her grandmother, her exposure to its gem and other displays helped set her on a course for life.



Denise began her presentation by showing a map of the Polish Baltic Sea coastline and by describing its bitter cold winters. Using the map, she showed the path taken in January of 1945 by the Wilhelm Gustoff ocean liner with its 10,000-plus multi-national passengers who were fleeing from an advancing enemy army. A submarine sank the ocean liner and due to the ice cold Baltic waters there were few survivors thereby The Prime Source for Collecting Amber The evening's amber tour focused on Poland's Baltic Sea city of Gdansk (AKA Danzig), the world's Mecca for amber. Thirty to sixty million years earlier, Denise noted, that area was the site of a plenteous pine forest whose species has since become extinct. The sap drippings from those trees subsequently became the high-quality amber for which the Gdansk region has been



internationally famous.

She provided a photographic tour of the sea coast and noted the amber is typically found in the rocky areas rather than the beach. However, collecting can be dangerous as novices sometimes pick up yellow concretions of World War II phosphorous they mistake for amber. Once pocketed, the ammunition remnant can spontaneously catch fire and burn the collector's skin.

Additional major caveats mentioned for collectors include tourism traps such as:

- ◆ An abundance of fake stones made of reconstituted, heated, painted, or dyed amber
- ◆ Inflated pricing, especially when purchasing while in close geographic proximity to amber mines, where asking prices are often double the going price in the city of Gdansk or even at the annual Tucson, Arizona mineral show
- ◆ Abundant fake amber made of plastic and polymer fabrications, some of which have barely visible manufacturing seams that are never present on real amber
- ◆ Fabrications having deep orange color, a high glossy finish, and seemingly organic inclusions—all of which can be signs of artificial heat treatment
- ◆ Natural Baltic amber rarely has inclusions that are more common in South American amber.
- ◆ The Polish government has taken steps to crack down on man-made, fake amber items and to support the pride and value of the national treasure of real amber. Gdansk amber, being tens of millions of years older than that found in other countries such as Mexico, Columbia, South America and tree resin, is stronger and so much easier to carve. The Mexican Chiapas amber and Columbian copal, although true forms of amber resin, are not nearly as old as Baltic amber. They are more fragile and tend to have more organic inclusions. So, buyer beware.

### History of Amber

With regard to the history of amber, Denise noted that the Romans loved it and their intaglio, the carved forms of gems or amber, was a popular form of jewelry. The J. Paul Getty Museum in Los Angeles, Denise noted, has an excellent collection of Roman-carved amber. The Vikings also appreciated amber and used flat, thin squares of amber—sewn onto clothing—as a form of insulation from the cold. The Knights Templar in the 12th century promoted the international trade of amber which extended from Gdansk in the north to the tip of the boot on the Italian peninsula. The seafaring traders of Venice also played a large role in amber's dissemination.

One of Denise's favorite amber museums that she visited on her three week driving tour was the Muzeum Bursztynv (Amber Museum) in Gdansk. Originally used as a prison in the medieval period, its basement now houses the oldest amber specimens, while the upper levels of the tower structure display a time-line continuum of the newer amber items. Denise's photos illustrated the wide range of skillfully carved and highly detailed amber items such as jewelry, chalices, boxes, flowers, faces, animals, and even a fancy guitar. Although the majority of Baltic amber rarely has organic inclusions such as insects or vegetation, the Muzeum has gathered many such items. Its most prized possession is a large piece of amber with the inclusion of a lizard. Artistic designers prefer to use amber offset with silver rather than gold because gold does not provide an appealing visual contrast.

### The Wieliczka Salt Mine

Salt is the second Polish treasure Denise and Denny explored during their three-week European



tour. Given that salt was for centuries treasured as more valuable than gold, and essential for preserving meats and dairy products. The premier mine which enriched the entire region is located near the southern border of Poland, at the opposite end of the country, and practically due south of Gdansk. The salt mine is located directly beneath the town which gives the Wieliczka mine its name and is near and a little southeast of Cracow (Krakow).

By means of abundant photos, Denise shared the wonder of this world-famous mine which opened in the 13th century and was commercially viable until the late 20th century. Now that commercial mining has ceased, the mine-turned-museum has drawn over a million tourists a year. Throngs of adult visitors and school children are eager to descend the 900 steps to see the grand ballroom with its spectacular crystal chandeliers entirely made of salt, carved rooms for displaying ancient and modern museum pieces, chapels and statues, bas reliefs of biblical stories, and a horse-driven large treadmill wheel which for centuries powered the elevator for bringing the salt rocks up to the surface. With the advent of refrigeration, salt prices dropped, and the complex shifted from commercial mining to tourism. Given the monumental nature of this mine, Denise strongly recommended that everyone consider putting it on their list of “must visit” destinations.

After leaving Poland, the Nelsons continued heading south en route to Vienna, Austria and passed through the Czech town of Kutna Hora where they visited the century-old silver and lead mine museum. It also displayed abundant



mineral specimens such as pyrite and garnet, etc. South of Vienna, they stopped at Maissau, whose Amethyst World Museum holds an interesting lesson in the value of mineral education. The amethyst vein in the mine was not commercially viable long-term, so instead of shutting down the mine, the towns' leaders turned it into an educational site so children and the general population could see how amethyst appears in nature, practically side by side with mineral displays and explanations.

While visiting the churches of some of these smaller ancient towns, she found something she never saw in other churches in Europe, namely statues of miners. Although none sported the haloes commonly found in church paintings and statues, clearly miners were held in the highest respect.

Having concluded the formal presentation, Denise fielded a number of questions concerning salt mining, and she explained the two methods for mining. The first was carving out and hauling the rock chunks of salt to the surface. The second was to flush out the mine's brine water, pump it to the surface, and spray it over twigs and the ground so it could dry out and crystalize for harvesting as table salt or for other uses.

She also brought numerous samples of amber bracelets and jewelry—including, to the surprise of many audience members, lots of fake amber. Denise explained that as an appraiser, she is responsible for being able to identify many forms of fabricated and fake items. She showed many examples of clues collectors can look for when considering amber purchases, such as looking for faint traces of a telltale seam that would indicate the beads or specimens were artificial and were fabricated.

Dave Hennessey thanked Denise for her interesting presentation. The audience applauded with gratitude for her sharing her expertise and exploration of Poland's amber and salt treasures.

### **The Rockhound's 10 Commandments:** *via The Rockpile 06/2018 and others*

1. Thou shall not touch thy neighbor's minerals unless he places them in thy hands.
2. Thou shall not test the strength of crystals by pushing, squeezing or biting.
3. Thou shall not drop thy neighbor's fossils, for many do not bounce properly.
4. Thou shall not place thy neighbor's specimens in thine own pocket.
5. Thou shall not collect at a neighbor's land unless thy neighbor knowst thee is there.
6. Thou shall not argue names of minerals too violently; for sometimes thou couldst be wrong.
7. Thou shall not climb above thy neighbor's head when on a field trip, lest thou art willing to spend the rest of the day digging him out.
8. Thou shall protect thine eyes, hands, and feet, so that they mayst enjoy many future field trips.
9. Thou shall not encroach upon thy neighbor's diggin's, lest thy neighbor's hammer be dropped upon thee.
10. Thou shall not break uncollectable specimens.

## The Editor's Poem

*by Kinney Polve*

*via SCFMS Newsletter 05-06, 2018*

The newsletter is a representation, of our club.  
The one communication, members have grown to love.  
Each month it comes out, with something new.  
Always so anticipated, I can't wait to view.

It builds a strong club, and holding it together like glue.  
What makes it so great, are contributions from you.  
There's club information, and the meeting times of groups.  
There are articles and features, to give the latest scoops.

There's field trip information, and a whole lot more.  
Just about anything, you may be looking for.  
There may be a poem, if one was submitted.  
Along with some updates, all tightly knitted.

By reading the pages, our members grow.  
And that's a positive thing, as you all know.  
You need to contribute, and this is why.  
So, when the editor asks you, don't be shy.

There's always a need for educational things.  
If you write an article, just think what it brings.  
All of your knowledge, you keep trapped inside.  
Send it in, and let it be someone's guide.

Tell us about a field trip, that you may have took.  
It's always a good thing, like reading a good book.

Original articles, are certainly the best.  
And please no plagiarism, that I detest.

Worth a thousand words, a picture is nice.  
And a nice caption, will really add some spice.  
Your knowledge about fossils, could be put to good use.  
There's so much that's needed, go ahead and let loose.

If you know a good joke, send it to me.  
I can always use it, to bring a little glee.  
Sharing your expertise, is always great.  
Writing down a great tip, will help to educate.

Your article is needed, so the need is there.  
Send in your contribution, so the pages aren't bare.  
I've given some suggestions, so now you know.  
Put your fingers to the keyboard, and help us grow.

### What Is “Frac Sand”?

*from Leaverite News, 01/2018, via The Franklin County Rockhounder 05/2018, via CMS 05/2018 Tumbler, via Golden Spike News, 01/2018;*

**T**his special sand is one of the keys to producing oil and natural gas from tight shale formations. A Crush-Resistant Sand for Oil and Gas Wells “Frac sand” is a high-purity quartz sand with very durable and very round grains. It is a crush-resistant material produced for use by the petroleum industry. It is used in the hydraulic fracturing process (known as “fracking”) to produce petroleum fluids, such as oil, natural gas, and natural gas liquids from rock units that lack adequate pore space for these fluids to flow to a well. Most frac sand is a natural material made from high-purity sandstone. An alternative product is ceramic beads made from sintered bauxite or small metal beads made from aluminum. The demand for frac sand has exploded in the past several years as thousands of oil and natural gas wells are being stimulated using the hydraulic fracturing process. A hydraulic fracturing job on one well can require a few thousand tons of sand. This surge of specialized drilling has created a billion-dollar frac sand industry in a very short time. Between 2005 and 2015, the amount of frac sand used by the oil and gas industry has increased dramatically.



## Show Time—2018

- Jun 30-Jul 1 Grapevine, TX      Arlington Gem & Mineral Club Fossil Show  
Grapevine Convention Center (10 min. from DFW Airport)  
1209 S. Main St., Grapevine, TX 76051  
[show@agemclub.org](mailto:show@agemclub.org), [www.agemclub.org](http://www.agemclub.org)
- Jul 20-22 Rapid City, SD      Rocky Mountain Federation hosted by Western Dakota GMS  
Rushmore Plaza Civic Center, Barnett Arena  
[Westdakota.rocks@gmail.com](mailto:Westdakota.rocks@gmail.com); <http://www.wdgms.org>
- Aug 11-12 Gonzales, LA      Baton Rouge Gem & Mineral Society  
Lamar Dixon Expo Center-Trademart Building  
9039 S St Landry Ave;  
[mercymom3@gmail.com](mailto:mercymom3@gmail.com); [www.brgemandmineral.org](http://www.brgemandmineral.org)
- Aug 18-19 Bossier City, LA      Arklatex Gem & mineral Society  
Bossier City Civic center; 620 Benton Rd, 2009 Chelsy Dr  
[larockclub@gmail.com](mailto:larockclub@gmail.com); [larockclub.com](http://larockclub.com)
- Aug. 25-26 Jasper, TX      Pine Country Gem & Mineral Society—24th Annual Show  
The Event Center, 6258 Hwy 190 West, Jasper, Texas 75951  
[earthscache3@yahoo.com](mailto:earthscache3@yahoo.com); [jonetta.nash@yahoo.com](mailto:jonetta.nash@yahoo.com)
- Oct. 6-7 Springfield, IL      Midwest Federation hosted by Lincoln Orbit Earth Science Soc.  
Orr Building, Illinois State Fairgrounds, 801 Sangamon Ave.  
<http://www.loess.org/>
- Oct 12–13 Mount Ida, AR      Mount Ida Area Chamber of Commerce  
31st Annual Amateur World Championship Quartz Crystal  
Digging Contest against other miners—maybe win cash & a trophy  
[director@mountidachamber.com](mailto:director@mountidachamber.com); [mountidachamber.com](http://mountidachamber.com)
- Oct. 19-21 Austin, TX      Austin Gem & Mineral Society;  
Palmer Events Center, 900 Barton Springs Rd  
[showchariman@austingemandmineral.org](mailto:showchariman@austingemandmineral.org);  
[www.agms-tx.org](http://www.agms-tx.org)
- Oct. 20-21 Sedona, AZ      Sedona Gem & Mineral Club  
Sedona Gem and Mineral Club  
Sedona Red Rock High School; 995 Upper Red Rock Loop Rd  
[webstuff1954@hotmail.com](mailto:webstuff1954@hotmail.com); [www.sedonagemandmineral.org](http://www.sedonagemandmineral.org)
- Oct. 26-28, Glen Rose, TX      Dallas Paleontological Society; Somervell County Expo Center  
202 Bo Biggs Blvd., Apt. 10208  
[markrandall00@sbcglobal.net](mailto:markrandall00@sbcglobal.net); [dallaspaleo.org](http://dallaspaleo.org)
- Nov. 9-11 Humble, TX      Houston Gem & Mineral Society  
Humble Civic Center, 8233 Will Clayton Pkwy.  
5 miles east of Bush Intercontinental Airport  
1 mile east of Hwy. 59  
[hgms.org](http://hgms.org); [showchair@hgms.org](mailto:showchair@hgms.org)

2018		July					2018
Sun	Mon	Tue	Wed	Thu	Fri	Sat	
1 10-4 Shop Open	2	3 11-3 Shop Open	4 <b>Independence Day</b>  Clubhouse closed	5 <b>NO</b> Archaeology Section Meetings until fall	6	7 10-4 Shop Open  10-Noon Youth Section	
8 10-4 Shop Open	9	10 11-3 Shop Open	11 10-3 Shop Open <b>Day Light 1-3 p.m.</b> 6:30 Gemstone & Faceting Section	12	13	14 10-4 Shop Open 1:30 Beading Section	
15 10-4 Shop Open	16 7:30 Lapidary Section	17 11-3 Shop Open 7:30 Paleo Section	18 10-3 Shop Open	19	20	21 10-4 Shop Open 10-Noon Youth Section	
22 10-4 Shop Open	23	24 11-3 Shop Open 7:30 General Meeting	25 10-3 Shop Open	26	27	28 10-4 Shop Open	
29 10-4 Shop Open	30	31 11-3 Shop Open					

2018		August					2018
Sun	Mon	Tue	Wed	Thu	Fri	Sat	
			1 10-3 Shop Open 1-3 p.m. Day Light	2 <b>NO</b> Archaeology Section Meetings until fall	3	4 10-4 Shop Open 10-Noon Youth Section	
5 10-4 Shop Open	6	7 11-3 Shop Open	8 10-3 Shop Open 6:30 p.m. Gemstone & Faceting Section	9	10	11 10-4 Shop Open	
12 10-4 Shop Open	13	14 11-3 Shop Open	15 10-3 Shop Open	16	17	18 10-4 Shop Open 10-Noon Youth Section 1:30 Beading 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	24	25 10-4 Shop Open	
26 10-4 Shop Open	27	28 11-3 Shop Open 7:30 General Meeting	29 10-3 Shop Open	30	31		

# The BACKBENDER'S GAZETTE

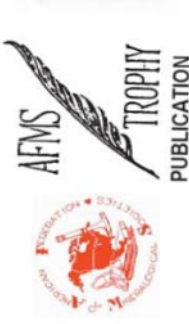
The Newsletter of the  
Houston Gem & Mineral Society

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Houston, Texas 77099  
(281) 530-0942



## SCFMS

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



## AFMS

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

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