



The BACKBENDER'S GAZETTE



The Newsletter of the Houston Gem & Mineral Society

Volume L—No. 2

February 2019



President's Message *by Sigrid Stewart*

February is a funny month, isn't it? Usually 28 days but every four years, with exceptions, it has 29. Here in Houston, it can be winter or spring. The name February comes from the Latin word februum or purification, and the Roman month Februarius was noted for a purification ritual held on February's full moon called Februa. I guess that means it's time for some spring cleaning!

Anyone who has been in the meeting room recently has seen activity in the Library; Neal and Clyde are busy organizing magazines and getting rid of obsolete and duplicate books. Other people are working in the office trying to straighten things out or figure out documentation. Old computers and furniture may be thrown out! People are talking about painting the meeting room, and your Board of Directors is looking at air conditioning/heating unit repair or replacement. We are all working to improve your Club and clubhouse!

Many efforts are under way, and if one of these sounds interesting, VOLUNTEER! Your presence will be welcomed. If not, just come cut some rocks! The Shop is now open five days during the week. Many members of the club are headed for Tucson, the biggest Gem &



President Continued on Page 4

Upcoming Program *by Michael Sommers, 1st Vice President*

We all know the surface of the Moon is covered by many bright (reflective) impact craters and large, darker "seas" of ancient lava flows. But less well known is that in some locations the Moon has another surface feature -one that may be unique to it - lunar swirls. Lunar swirls are bright, like fresh impact ejecta rays, yet unlike the very linear shape of ejecta rays, swirls typically have a curvy, swirly shape. What lunar swirls are or how they formed has been a mystery since their discovery about 50 years ago. However, new measurements from recent lunar missions have begun to shed new light on the lunar

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

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

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Copy is due for the March 2019 issue by Friday, February 15, 2019.

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

Purpose of HGMS

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

Membership dues are \$40 for an adult membership, \$60 for a couple, \$75 for a family (including all children aged 5-18), \$25 for a youth membership (ages 5-18), and \$500 for an adult life membership. Advertising rates: \$70 for 2 months, ¼

2019 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.....	Rodney Linehan.....	(Temporary) Treasurer@HGMS.org
Past President.....	Paul Brandes	
Archeology Section Board Member	Nancy Engelhardt-Moore	Archeology@HGMS.org
Beading Section Board Member	Kim Fuselier	Beading@HGMS.org
Day Light Section Board Member	Fred Brueckner	
Faceting Section Board Member	Randy Carlson.....	Faceting@HGMS.org
Lapidary Section Board Member	Phyllis George.....	Editor@HGMS.org
Mineral Section Board Member	Steve Byskal	Mineral@HGMS.org
Paleo Section Board Member	Mike Dawkins	Field_trips@HGMS.org

HGMS Section Chairs

Archeology Section Chair	Bob Moore.....	Archeology@HGMS.org
Beading Section Chair	Kim Fuselier	Beading@HGMS.org
Day Light Section Chair.....	Position Open	DayLight@HGMS.org
Gemstone & Faceting Section Chair	Randy Carlson.....	Faceting@HGMS.org
Lapidary & Silversmith.....	Margaret Hardman-Muye	Lapidary@HGMS.org
Mineral Section Chair	Stephen Byskal	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.....		
Assistant Show Chair.....	Clyde McMeans	
Backbender's Gazette Editor	Phyllis George	Editor@HGMS.org
Clubhouse Chair	Neal Immega.....	ClubhouseChair@HGMS.org
Day Light Contact Person.....	Mary Ann Mitscherling ...	DayLight@HGMS.org
Donations	Neal Immega.....	Donations@HGMS.org
HGMS Education Chair	Quentin Boyer	Classes@HGMS.org
Lapidary Templates	Mary Ann Mitscherling ...	Templates@HGMS.org
Librarian for Main Library	Quentin Boyer	Librarian@HGMS.org
Publicity Chair	Sara Metsa	Publicity@HGMS.org
Scholarships.....	Mike Sommers.....	Scholarships@HGMS.org
Show Chair	Scott Singleton.....	ShowChair@HGMS.org
Trade Show	Scott Singleton.....	Tradeshow@HGMS.org
Trade Show	Sigrid Stewart	Tradeshow@HGMS.org
Volunteer Coordinator.....	Nancy English.....	VolunteerCoordinator@HGMS.org
Webmaster	Sigrid Stewart	Webmaster@HGMS.org
Youth Section Assistant	Elizabeth Guynn.....	Youth2@HGMS.org

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

President's message continued

Mineral show in the world—actually 47 shows over the period of a month or so. Expect to see interesting new items available at the spring shows in Texas! Closer to home, the Clear Lake Gem & Mineral Show, hosted by our sister club, is coming up on February 23 and 24.

Upcoming Program continued

swirls. And despite the swirls only being a lunar feature, unlocking their secret is proving to be more than just understanding a lunar phenomenon. The swirls provide a laboratory to study the solar wind, space weathering, and complex electromagnetic interactions in the solar system.

Georgiana Kramer is a planetary geologist who studies the history and evolution of the Moon, planets, and asteroids, and applies her knowledge toward developing strategies for human and robotic exploration of the Solar System.

Dr. Kramer graduated from the University of Hawaii in 2000 with a B.S. in Geology and Geophysics. Her passion for planetary geology began early during her undergraduate studies, ultimately becoming the focus of her graduate work at the University of Notre Dame from where she received her Ph.D. in 2007.

Dr. Kramer studies the composition, structure, and evolution of the Moon, asteroids, and other planetary bodies. Her background in petrology and geochemistry is rooted in laboratory analysis of terrestrial, lunar, and meteoritic samples, and she uses these analyses to model their origin and evolution.

She is also a spectroscopist and geomorphologist, and for the last 12 years, her research has focused on interpretation of data from spacecraft missions. She was a member of the Moon Mineralogy Mapper Science Team, which was the first instrument to unambiguously detect water on the Moon and map its global variations. She also spent a few years on the Dawn and Rosetta Science Teams.



Pyrite Pete says,

A Silent Auction will take place before General Meetings. Be QUICK to look the auction items over, and write down your bid before the meeting begins!

Archaeology Section

by Nancy Engelhardt-Moore

Happy New Year! We are putting together an exciting lineup of speakers and programs for 2019. Remember—refreshments will be available, and parking and admission are free. Please join us for these upcoming programs that will be held the 1st Thursday of the month in the HGMS Clubhouse at 7:30 pm:

February 7, 2019: Dr. Dirk Van Tuerenhout, HMNS Curator of Anthropology will present *"The Ancient Maya in Belize."* Hidden in Belize are the remnants of many Maya sites. Nature has taken over! Occasionally, archaeologists uncover portions of these millennia-old cities and find wonderful things. Dirk's talk will deal with some of these discoveries. Mark your calendar, the ancient Maya beckon!



Main temple at Xunantunich-Belize

March 7, 2019: Jack Farrell will present *"A Brief History of Asian Archery: The Story of the Composite Bow"*. As the history of European archery is synonymous with the Yew wood long bow, Asian archery is solidly founded in the composite bow.

The first evidence of the composite bow, so-called because they are composed of wood, horn, tendon, and glue, is about 5000 years old. They continued to be improved through the millennia.

So much tradition had been invested in this development, that the last country to abandon military archery was China in 1911. Jack will bring Asian bows and sundries from his archery collection for your enjoyment. Don't miss this opportunity to see historical artifacts!



Manchu Archer—late 1800s

Open Access Photo Source: [gallica.bnf.fr/Bibliotheque de France](https://gallica.bnf.fr/Bibliotheque_de_France)

2019 HGMS Results in SCFMS Bulletin Editor and Author Contest				
Rank	Name	Title	Date	Year
Large Bulletins				
1	Editor: Phyllis George	The Backbender's Gazette	Sept.	2018
Adult Articles Advanced				
2	Terrell Wm. "Terry" Proctor, J.D.	The Unlikely Story of Gold's Creation	Dec.	2017
3	Paul T. Brandes	Hill Country Field Trip, 2018	June	2018
Adult Articles				
2	James Wark	Junior Precious Metal Recycling	Sept.	2018
3	Chase Jennings	A Journey to the Amber Mines of Chiapas	Feb.	2018
Features—Drawn				
1	Kim Fuselier	Name the Backbender's Mascot	Oct.	2018
Poetry—Adult				
1	Stephen Wilkerson	A Craftsman's Eye	Mar.	2018

AFMS CODE OF ETHICS

- I will respect both private and public property and will do no collecting on privately owned land without the owner's permission.
- I will keep informed on all laws, regulations of rules governing collecting on public lands and will observe them.
- I will to the best of my ability, ascertain the boundary lines of property on which I plan to collect.
- I will use no firearms or blasting material in collecting areas.
- I will cause no willful damage to property of any kind—fences, signs, buildings.
- I will leave all gates as found.
- I will build fires in designated or safe places only and will be certain they are completely extinguished before leaving the area.
- I will discard no burning material—matches, cigarettes, etc.
- I will fill all excavation holes which may be dangerous to livestock.
- I will not contaminate wells, creeks, or other water supply.
- I will cause no willful damage to collecting material and will take home only what I can reasonably use.
- I will practice conservation and undertake to utilize fully and well the materials I have collected and will recycle my surplus for the pleasure and benefit of others.
- I will support the rockhound project H.E.L.P. (Help Eliminate Litter Please).
- I will leave all collecting areas devoid of litter, regardless of how found.
- I will cooperate with field trip leaders and with those in designated authority in all collecting areas.
- I will report to my club or Federation officers, Bureau of Land management, or other authorities any deposit of petrified wood or other materials on public lands which should be protected for the enjoyment of future generations for public educational and scientific purposes.
- I will appreciate and protect our heritage of natural resources. I will observe the "Golden Rule," will use "Good Outdoor Manners," and will at all times conduct myself in a manner that will add to the stature and Public "image" of rockhounds everywhere.

There was no General Meeting in December, so there are no December General Meeting minutes. Our Holiday Party was held December 15.

Board of Directors Meeting Minutes

January 8, 2019

by Nancy English

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

President **Sigrid Stewart** called the meeting to order at 7:30 p.m. A quorum was present.

Non-voting members in attendance: Scott Singleton—Show Committee Chairman & Trade Show Chairman, Chase Jennings—Club Member, Sarah Metsa—Publicity Chairman, Rick Rexroad—Trade Show Committee Security Chairman, Foster Kneeland and Tatyana Kuhne—HGMS Members.

President Sigrid Stewart's Comments:

Holiday parties

Great HGMS Holiday Party at Unitarian Fellowship December 15, 2018. Attendance was down possibly due to being the third Saturday instead of the usual second Saturday. The decorations were lovely, the food delicious, and the Auction lucrative. Thank you to the volunteers who set up tables before the dinner and set the Sanctuary up afterward. Section Holiday parties successfully welcomed The Season: Gemstones and Faceting at Lopez' on December 12; Day Light Luncheon on December 5; Mineral Party on December 16; Youth Section on December 1. The Paleo Section has their party in July.

2019 is the Year of the Periodic Table. We should have some programs.

Approval of Minutes: Nancy English sent the BOD the final minutes for December 4, 2018, on Tuesday, January 1, 2019. Phyllis George moved to approve the minutes of the December 4, 2018, BOD meeting. Nancy Engelhardt-Moore seconded the motion, and it passed.

Treasurer's Report: Interim Treasurer Rodney Linehan emailed the December 31, 2018 financials to BOD members on January 8, 2019. Rodney will handle the 2018 Tax Return. He will need the year-end financial reports for each Section that has a bank account.

President Stewart suspended the meeting agenda to address the Trade Show, the hunt for a new Treasurer, and changes in the Publicity Committee.

2019 Trade Show: This was our first Trade Show that used the random generator lottery system to assign booths for vendors. Scott Singleton and Sarah Metsa met on December 22,

2018 to execute the random selection process to assign booths to the registered vendors. It took an hour. Of the 18 dealers who participated, 67% got their first choice. The Trade Show Committee met December 29 to wrap up details for the January 12, 2019 Trade Show. Minutes of both meetings were presented to the Board of Directors.

Nancy reported that only one volunteer has come forward so far.

HGMS Facebook and MailChimp account status: President Stewart commended Chase Jennings for having the vision to create the Trade Shows and the expertise to employ the social media advertising that have made them so successful. Chase shared his challenges from the last year which kept him from being more involved in the upcoming January 12, 2019 Trade Show. He cautioned the Board to be extraordinarily careful about who is allowed to be an administrator of the Social Media advertising for HGMS. Social Media is very sensitive to any negative influences. Scott Singleton has assured Chase that the people who will be administrators of the Facebook and Mail Chimp data bases are capable and trusted. After a difficult year, Chase is rebuilding his life. He plans to be more active in the Club. HGMS reimbursed Chase for the Mail Chimp subscription he has paid for since he started advertising on it.

New Treasurer: A new treasurer must have expert knowledge on using Quicken software, have high standards in handling money, manage financial flow well, set a tone of integrity, be able to pay bills online, and obviously be computer-literate. President Stewart introduced Tatyana Kuhne. Tatyana gave the Board an impressive verbal resume. She will work with Rodney Linehan to determine if she is a fit for the position.

Publicity Committee changes: Sarah Metsa was introduced as the new HGMS Publicity Chairman. Sarah sent a Trade Show mailing on December 29, 2018, that had a 33% click rate. She had another Trade Show mailing prepared for January 9, 2019. Sarah likes Mail Chimp for targeted mail and feedback. She is cleaning the database to identify HGMS members and dealer tags to facilitate the targeted marketing. She also created an Instagram account owned by HGMS: User ID HGMS.org. She also uncovered a previously established Pinterest account.

Club Records: Sarah Metsa has set up a Dropbox account for the club with documents as a repository. Dropbox has limited space, but it should hold all of our important records: Minutes, By Laws, Trade Show Charter for example. Sarah and Nancy English will meet to train Nancy on how to use it. HGMS needs to do more legacy planning (cross training) for filling vital volunteer positions when they become vacant.

Office, Committee, and Section Reports

Show Committee: Scott Singleton—The proposed Annual Show dates for the next two years are (on second weekend) **November 8–10, 2019** and (on first weekend) **November 6-8, 2020**. The three years after that: 2021, 2022, 2023, are all scheduled for the second weekend in November. The 2019 Dealer Contracts will be mailed the end of March. Advance notification of the 2020 Show that is scheduled for the first weekend in November will be included. Scott Singleton said to expect the 2018 Show financials and the 2019 budget at the February 5, 2019 Board meeting.

Web site: Sigrid Stewart has a plan for removing the old Web site from our server. She is also working on an appropriate location used to save the BBGs. She will continue to work on it. Libby Guynn is joining the Web site Committee.

Program updates: Charlie Holden is updating the Web site with the Section Program information. Section Chairmen will be receiving an email reminder every month from Nancy

English. Please respond with the program information to Nancy English, Charlie Holden, and Jim Kendall. Thank you for sending your information for this month.

Archaeology Section: Thursday, January 3, 2019—no meeting due to New Year's holiday. The next meeting is Thursday, February 7, 2019, 7:30 p.m. Dr. Dirk Van Tuerenhout, HMNS Curator of Anthropology, will present "The Ancient Maya in Belize." Nancy Engelhardt-Moore is recruiting speakers through May. Then the summer hiatus starts.

Beading Section: Saturday, January 19, 2019, 1:30 p.m. The Project will be a Right Angle Weave (RAW) Bracelet. Supplies needed are listed on the Web site.

Day Light Section: Because of the New Year Holiday, the January 2, 2019, meeting is postponed until **Wednesday, January 9, 2019, 1:00 p.m.** Susan Burch will teach members how to make beaded rings. Tools, silver wire, and beads will be available. Supplies will cost \$2.00.

Gemstones and Faceting Section: The Gemstones & Faceting Section will have their first meeting of the year on **Wednesday, January 9, 2019 at 6:30 P.M.** Topics will be Faceting Hints & Tips, U.S. Faceters Guild, Report on the use of Lightning Laps, the causes of color in gemstones, the mysterious properties of light. Featured Gemstone: Zircon.

Lapidary and Silversmithing Section: Monday, January 21, 2019 at 7:30. Richard Good will be presenting the Lapidary program on healing fractures in stones. Section Chairman Margaret Hardman-Muye will be having her second knee replacement on January 24. She will not be at the January meeting.

Library: Quentin, Clyde, and Neal Library

- Quentin, Clyde, and Neal decided there is no need for the Economics of Geology sequence of books in the Library. Former President Paul Brandes agreed. The Mineral Section agrees. President Sigrid Stewart agrees reluctantly. They have verified that these periodicals are available online. Neal has a potential buyer for them.
- Foreign language magazines *Lapis* (in German) and *Revista* (In Italian) may also be removed.

Mineral Section: The Mineral Section has been meeting twice a month since the 1970s. It will now meet only once a month in 2019 on the third Wednesday. This may be reconsidered later in the year. **On Wednesday, January 16, 2019 at 7:30,** the program will include the video "What's Hot in Tucson 2018."

Paleo Section: Tuesday, January 15, 2019 at 7:30. Paleo has been asked to supply a fossil collection (with an emphasis on petrified wood) for the Mozambique National Museum. Neal will give a presentation of the genera of wood found in Texas and will see what donations have arrived. Mike Dawkins said last month there was a flood at the Whiskey River Bridge. This should create a great field trip in the future since many very good finds will be exposed.

Youth Section: Three new youth members came on Saturday, January 5, 2019. The next three meetings are on **Saturday, January 19, 2019, February 2 and 16, 2019 from 10:00 to Noon.**

BBG Editor: The deadline to send in articles and other pertinent information for inclusion in the February 2019 BBG is **Tuesday, January 15, 2019.**

Old Business

Shop Rules: Toni Lucci is out of town. He has finished his interviews of Shop Foremen and prepared the results. He will give his presentation at the February BOD meeting. Sigrid Stewart and Steve Blyskal are opening the Shop on Thursdays from 10:00 a.m. to 3:00 p.m. As Shop Foremen, they will run a tight ship, requiring people to sign in upon arrival and then checking that they are following the shop rules.

Building: More estimates for HVAC repair should be available soon. Sigrid will forward quotes to Board Members. Generally, repair now and replace later may be the right plan for now. Clyde has made an inventory of the Key supplies.

Education: Fred Brueckner and President Stewart plan to work with Quentin to solidify plans to create classes, find and pay Instructors, and determine how student payment is accepted.

Building Safety: no report

Mascot Naming Contest: The winning name for the Backbender's Gazette mascot is **Pyrite Pete**, the name submitted by Sigrid Stewart.

Scholarship Fund: Rodney Linehan reported via email that Douglas Dodd sent a letter to Liane Linehan dated November 3, 2018 with a generous donation of \$500 specified for the 2019 HGMS General Scholarship fund. Nancy English provided a Thank You letter for President Stewart's signature. Mike Sommers will continue to chair the Scholarship Committee. He will need one more volunteer to share the work.

New Business

The Kingwood Library called. They want us to make a display for them for the month of February. They would like us to come out and give some talks during February. Pamela Reese—832 927 7830—is the lady who approached us. Steve Blyskal has volunteered to participate. Nancy English will contact Pamela Reese and get more details for Steve. Hopefully, the flyers for the 2019 HGMS Annual Show will be available by then for display.

The Honor Roll School in Sugar Land is having a School-wide Science Night on January 23 from 5:00–8:00 p.m. They have the Zoomobile, HMNS Discovery Dome, and the teachers do in-class activities on minerals. They typically have 1500 people on campus (not necessarily all will visit the speaker/presenter). School ages range from Toddler (2 yrs.)–8th Grade. Nancy Engelhardt-Moore offered to contact Cinnamon Baldwin, Coordinator of Student Activities (Cinnamon.Baldwin@nlcinc.com)

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

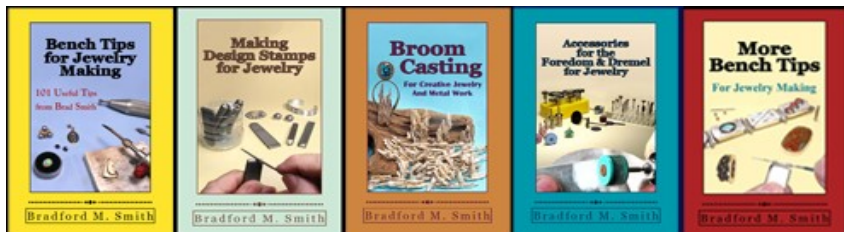
The first **2019 General Meeting** will be **January 22, 2019 at 7:30 p.m.** The program will be Dave Dobson demonstrating sphere making. It was suggested that we have auctions—either live auctions or silent auctions—before the General Meetings. President Stewart will talk to Neal about having auctions.

Adjourn: Nancy English moved to adjourn the meeting. Phyllis George seconded the motion, and the motion passed. The meeting adjourned at 9:33 p.m.

Bench Tips

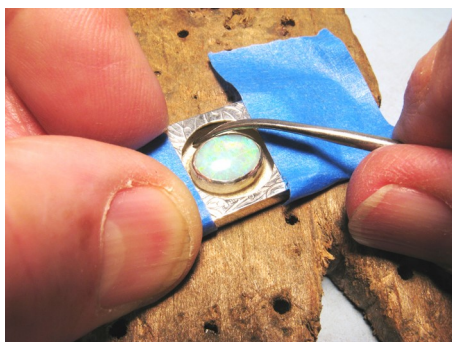
by Brad Smith

Be More Productive With Brad's "How To Do It" Books
[Amazon.com/author/bradfordsmith](https://www.amazon.com/author/bradfordsmith)



PROTECTING FINISHED SURFACES

Figure that any accidental scratch I make on a piece means about 15 minutes of extra sanding and polishing. So after finishing major surfaces I typically cover them with some masking tape to avoid any scratches when doing final work like cleanups and setting of stones. The blue masking tape used by painters works particularly well because it doesn't leave a sticky residue.



PICKLE PRECAUTIONS

A hot pickle pot gives off fumes that bother me in my home workshop. I get around that by using my pickle cold. I mix it a little stronger than for a hot pot, so that it works almost as quickly. I keep it in a large-mouth plastic bottle and cap it off whenever I'm done using it.

SCFMS President—A Note from Roger...

by Roger Burford, SCFMS President
 from SCFMS Newsletter 11-12/2018

Weather is cooling down, making for great rock hounding as long as it isn't raining. The change in weather also brings hunting season for things other than rocks. Please be careful while out collecting your treasures, and wear proper hats and vests for visibility. We all want you to come to the annual convention in January. Our jolly friend in red will be making his annual rounds very soon, and most clubs will be having Christmas parties to get together and share stories and presents.

I will not attend this year's convention due to a prior commitment Liz and I have in Arizona. Jerald will be holding down the fort in my absence, but I will be available by phone if something comes up.

Thank you for giving me the opportunity to be your President.



Paul W. Good served as Editor of the SCFMS Newsletter for 17 years. Paul retired as editor a year or two before he passed away. He will be sorely missed. "Garden Rocks" on page 13 was written by Paul's son, Edward Good, as a tribute to his father.

SCFMS NEWSLETTER

PAGE 05

NOVEMBER-DECEMBER, 2018



January 22, 1936 — September 17, 2018

Paul W. Good

In
*Loving
Memory*

Paul served as an elder in the churches of Christ at three congregations: Hammond, IN, Stephenville, TX and San Marcos, TX. He has done evangelistic work through the years as a Christian should.

Paul W. Good was an active Gem and Mineral person. It started when Paul and Margaret took a trip to Albuquerque, NM visiting Margaret's brother Roger. Roger asked Paul if he would like to go up to 9 mile hill and pick up some petrified wood for his yard. Paul said, "No, I don't want any of that stuff." but he went anyway, and returned home to Indiana with pounds and pounds of petrified wood.

Lyle Lovell encouraged Paul to go to the Calumet Gem and Mineral Club of Highland, IN. Paul became a member in 1966. He began putting rock displays in the schools, malls, libraries, and shows. Sometimes he gave presentations to the children in the schools. The placing of displays in the schools lasted for 47 years from Feb. 2, 1970, until Feb. 2, 2017.

He became the Editor of the clubs' newsletter '69-70. Paul and Margaret's first trip was to South Dakota for a convention. There they met June Zeitner and others. Some of his service included: Delegate to the convention in Minnesota 1970. Newsletter and publicity 1970-'72. Midwest Federation bulletin Editors Chairman '71-75. Duneland Rock Club member and editor. Then a member of a Michigan Club when AFMS convention was there and their club was small, so several from other clubs joined for a year. Paul served as BEAC Editors. He created BEN (Bulletin Editors News). He became President of the Midwest Federation.

Paul was also involved in African Violet Club and was editor. Then NW Indiana Florida College Booster Club editor, president and other offices. He was an assistant leader for 17 years with the "Griffith Grinners 4-H Club. He served as a 4-H Geology Superintendent at the annual Lake County fair.

After moving to Texas he and his wife joined the Cross Timbers Gem and Mineral Club of Stephenville. They moved to Kyle, TX and joined the Austin Gem and Mineral Society. He served as liaison for AGMS and AFMS. He was an editor for SCFMS for 17 years.

Written by Margaret and Edward Good (512) 268-4555 mgpoet@verizon.net.

Obituary: <https://www.harrellfuneralhomes.com/obituaries/Paul-Good/>

"GARDEN ROCKS"**by Edward Good**

I am the son of Paul W. Good. He was born in 1936 in southern Indiana about an hour south of Terre Haute. His father was a Coal Miner. They lived on 19 acres and had a rather large vegetable garden. The flower gardens of his mother were rather large also and gorgeous too...that is what dad told me. I recall the area of Greene County, Indiana with well cut lawns and lots and lots of beautiful flowers.

I remember the "garden rocks" dad spoke of. His family drove a few miles away to get rocks to outline their flower beds. Many families did the same thing. They didn't know what kind of rocks they were. I remember dad saying, "We just called them garden rocks." Some of them were the size of a basket ball but most not quite that big. The rocks are a golden sandy color. The rocks must have had the mumps because they sure have the bumps on the outside.

Later after becoming a rock hound, Dad found out those "garden rocks" were GEODES and when cracked open many of them had Crystals inside. Never once did we open one of them to find a Magic Genie that gave us 3 wishes.

Mom mentions how Uncle Andy (dad's brother) had some of those large geodes at his home in Griffith, IN. That is my growing up hometown just in case you did not know. I remember dad would notice the geodes and it seems like he would say something like, "That is what Dad and mom had back home. We just called them "garden rocks." Then after that the conversation mom would say something about us going back to southern Indiana to get some of those geodes from Grandpa Good's place (with permission.) We used to drive by and or stop by the old home place. We did this many times year after year. We would go down to Linton, IN for the family reunion and stop at the old home place of dad's growing up years. (One year we actually went to one of the places where the geodes were originally found and got permission to gather some.)

In the early years we noticed that there was a tree which had a fork in it. Inside that fork of that tree was one of those old "garden rocks". We saw that rock for many years but then finally that tree buried that rock by growing around it. We could no longer see that geode anymore. I wonder if the family that lives there knows about that "garden rock". Is it a new family that lives there? Is that "garden rock" forgotten? How would you like to be cutting up a big tree after a

strong wind knocked it over and have your chainsaw hit that geode? I think I could pick out that tree. I also wonder if we have old pictures with the "garden rock" in it by chance.

To this day we have a few of these specific Geodes left. One is open and not a good grade of crystals but another one is opened and sits outside in the garden beds with very nice looking crystals. We have another geode (the size of a small cantaloupe) here that is still whole and unopened. My arm is against it right now as I type...that old garden rock. It is cold too. It just makes one wonder what is on the inside.



DID YOU KNOW THAT SCFMS TURNED 75 IN DECEMBER 2018?*from SCFMS Newsletter 01-02/2019*

The SCFMS has a long history dating back to 1943, and it has experienced a number of name changes. For an interesting read, check out our History.

http://www.scfms.net/about_scfms.htm

Thank you to Virginia Adian and Liz Burford for passing this info along.

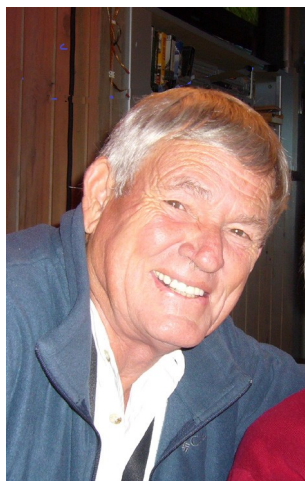
**AFMS President's Message***by Doug True, President**from AFMS Newsletter 11-12/2018*

Welcome from Montana. By now summer is waning, fall is here, and winter is showing her ugly head in some places around the country. We are now getting ready to make our way down to Quartzsite, Arizona for the winter months. You should visit some time, as thousands of collectors come to see the beautiful things that are found on this great land of ours.

Quartzsite grows from 3000 to well over 150,000 in January every year. Gems, Minerals, Fossils, Jewelry, and many other unrelated items are for sale. Come take a field trip into the desert—see the uniqueness of the Southwest.

When New Years gets here and it is time to make that New Year's resolution, why not reach out and invite someone to attend your next gem club meeting? For every gem club member in the US, at least 20 others are out there who collect rocks, minerals, fossils, artifacts, and items related to the earth sciences. That means we have a lot of work to do. In addition, I would like to ask everyone to look at what they have made or collected, purchased or traded, and enter it into your next local or federation show.

Happy Holidays, Doug



When Rockhounding – Don't Overlook Fenn's Treasure!

by Stan Strike, Wyoming State Director
via Rocky Mountain Federation News 01/2019

Somewhere in the Rockies, in the roughly 1,000 miles between Santa Fe, New Mexico, and the Canadian border, may be a treasure chest worth millions. The man who claims to have hidden the fortune back in 2010 is Forrest Fenn, now 87, a former Vietnam fighter pilot and art dealer. "No one knows where that treasure chest is but me." The main piece of guidance Fenn has offered is a cryptic 24-line poem he wrote in his self-published memoir, *The Thrill of the Chase*. "Read the clues in my poem over and over and study maps of the Rocky Mountains. Try to marry the two. The treasure is out there waiting for the person who can make all the lines cross in the right spot."

The chest is nearly a square foot in size and weighs 40 pounds when full. It supposedly contains emeralds, rubies, gold coins, and diamonds—all artifacts that Fenn, a self-taught archaeologist, amassed during his own explorations and successful business enterprises in the Southwest. "There's 265 American gold eagles and double eagles. There's ancient Middle Eastern gold coins. There's hundreds and hundreds of gold nuggets, two of them as big as [a] hen's egg," he said.

Fenn originally filled the chest after he was diagnosed with cancer in 1988. He planned to drag it into the mountains to die beside it. After he survived, he left it in a walk-in vault at his house for years, where a couple of witnesses confirmed that they saw it filled to the brim with valuables. He decided to hide it and launch the hunt years later, during the Great Recession. "Lots of people [were] losing their job, despair was written all over the headlines, and I just wanted to give some people hope."

Fenn, 87, claims he hid a treasure—estimated by some to be worth \$2 million—somewhere in the Rocky Mountains in 2010. His final clues were: "The treasure chest is not under water, nor is it near the Rio Grande River. It is not necessary to move large rocks or climb up or down a steep precipice," he writes. "Please remember that I was about 80 when I made two trips from my vehicle to where I hid the treasure."

Here is the poem with the nine clues from "The Thrill of the Chase," Fenn's self-published autobiography:

1. *As I have gone alone in there
And with my treasures bold,
I can keep my secret where,
And hit of riches new and old.*
2. *Begin it where warm waters halt
And take it in the canyon down,
Not far, but too far to walk.*
3. *Put in below the home of Brown.*
4. *From there it's not place for the meek,
The end is drawing ever nigh;
There'll be no paddle up your creek,*
5. *If you've been wise and found the blaze,
Look quickly down, your quest to cease
But tarry scant with marvel gaze,
Just take the chest and go in peace.*
6. *So why is it that I must go
And leave my trove for all to seek?*
7. *The answers I already know
I've done it tired, and now I'm weak*
8. *So hear me all and listen good
Your effort will be worth the cold.*
9. *If you are brave and in the wood
I give you title to the gold.
Happy hunting! Forrest Fenn*

Some treasure hunters believe the start of the poem's clues refers to Yellowstone National Park known for its hot springs, mud spots and geysers. "We're going to start where warm waters halt. And for us, that's Madison junction, and it's inside Yellowstone National Park. And the reason that it's Madison junction, is because two of the warmest rivers in the park absolutely halt and stop." So Fenn's treasure could be in Wyoming's own backyard?? So Wyoming Rock Hounds, keep your eyes on the ground and treasures may be found!!

I THINK I FOUND IT!!!!???

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2. <https://abcnews.go.com/US/people-continue-seek-reported-hidden-treasure-rockymountains/story?id=51766060>
3. <https://www.today.com/news/follow-these-9-clues-find-forrest-fenns-treasure-1C8598924>
4. <https://illinoisghost.files.wordpress.com/2016/07/poem2.png>

AFMS LAND USE POLICY

1. Adherence to the AFMS Code of Ethics assures compliance with most statutes and regulations governing collecting on public lands and encourages respect for private property rights and the environment. Clubs are urged to read the AFMS Code of Ethics in at least one meeting every year, to publish the Code frequently in the club newsletter, and to compel compliance on club field trips.
2. Individuals and clubs are urged to write their elected representatives and land use management agency supervisors regarding issues of rule making, legislation, and enforcement affecting field collecting of minerals and fossils.
3. Individuals and clubs are urged to join and support activities of the American Lands Access Association (ALAA), a sister organization with responsibility for advancing the interests of earth science amateurs with legislatures and land use management agencies.
4. The AFMS will receive a report from ALAA at its annual meeting.
5. The AFMS endorses the principle of multiple use of public lands as a guarantee of continuing recreational opportunities.
6. Wilderness and monument designations are inconsistent with the principle of multiple use. In view of the vast amount of public land already designated as wilderness and monuments, future such designations should be minimal, taking into account the increased demand for recreational opportunities, including rockhounding, created by a growing population.
7. In furtherance of the principle of multiple use, the AFMS believes that laws, regulations, and rules established by relevant governmental authorities should be designed to allow the greatest possible access to all public lands, coupled with minimal restrictions on the recreational collection of minerals, fossils, gemstone materials, and other naturally occurring materials.
8. A right to collect minerals and fossils on public lands should be protected by statute.
9. The AFMS urges its members to work with any or all government authorities to achieve a good working relationship in order to improve the "Public Image" of recreational collectors.

Dinosaur Battle Begets Court Fight

Are all fossils minerals?

*Adapted from Amy Beth Hanson, Associated Press
from The Living Stones 1/19/2019, via The Rockpile 02/2019*

A fight between dinosaurs has evolved into an unprecedented human legal dispute—66 million years later. An amateur archaeologist named Clayton Phillips uncovered the skeletons of two "Dueling Dinosaurs," who were apparently locked in combat, in fossil-rich eastern Montana. The skeletons, valued at \$7–9 million, were buried on land whose owners do not have mineral rights to their property. The previous owners, who retained mineral rights in the sale, claimed the skeletons were minerals, prompting a unique court case to define whether the fossilized skeletons are, in fact, legally minerals.

No U.S. Court had taken up that question before. The 9th U.S. District Court of Appeals eventually ruled in November that the skeletons are indeed minerals, by both scientific and legal definitions.

Ever wonder what our skeletons will be worth in another 66 million years?

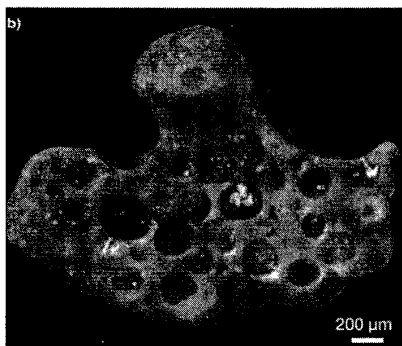
FOSSILIZED BUBBLES HINT AT EARLY LIFE

Science Daily, March 2, 2018

from the MWF Newsletter 12/2018

Take a good look at this photo: It shows you 1.6 billion-year-old fossilized oxygen bubbles, created by tiny microbes in what was once a shallow sea somewhere on young Earth. The bubbles were photographed and analyzed by researchers from the University of Southern Denmark, the Swedish Museum of Natural History, and Stockholm University, who were studying early life on Earth.

Microbes are of special interest. They were not the first life forms on Earth, but they also turned our planet into a tolerable environment for plants and animals. Some of these early microbes were cyanobacteria that thrived in early shallow waters. They produced oxygen by photosynthesis, and sometimes the oxygen was trapped as bubbles within sticky microbial mats. Dr. Therese Sallstedt and colleagues studied fossilized sediments from India, and found spheres in the microbial mats. "We interpret them as oxygen bubbles created in cyanobacterial biomats in shallow waters 1.6 billion years ago," she said. Cyanobacteria changed the face of the Earth irreversibly, since they were responsible for oxygenating the atmosphere. Simultaneously, they constructed sedimentary structures called stromatolites, which still exist on Earth today. The researchers—Dr. Sallstedt, S Bengtson, C. Broman, P.M. Crill, and D.E. Canfield—now think that cyanobacteria played a larger role than previously believed in creating phosphorites in shallow waters. They published their findings in the journal *Geobiology*, under the title "Evidence of oxygenic phototrophy in ancient phosphatic stromatolites from the Paleoproterozoic Vindhyan and Aravalli Supergroups, India."



Fossilized oxygen bubbles in 1.6-billion-year-old cyanobacterial fabric. Photo by Swedish paleontologist Stephen Bengtson



On to Mexican Hat with Forrest Gump: *I guess sometimes there aren't enough rocks*

By Mike Nelson, Colorado Springs Mineralogical Society, csrockguy@yahoo.com



I'm pretty tired...I think I'll go home now (Still photo courtesy Paramount Pictures). Monument Valley in the background.

The journey through the Red Rock Country of southeastern Utah continues. At the last stop we were camping in Monument Valley and keeping a sharp eye out for John Wayne or Jim Chee. But now it is on to Mexican Hat—a great moniker for a village and, we will be looking for Forrest Gump chugging down the road. Before leaving the Navajo Nation a glance to the west revealed some sort of a rocky creature protruding out of the red rock desert. This is Alhambra Rock, a feature that early Spanish Explorers decided looked like Alhambra Castle in Granada, Spain. I suppose wanderers wondered if they would ever return to the homeland.

Alhambra Rock is another one of those igneous intrusions that blew through the overlying sedimentary rocks leaving behind particles of the red rocks encased in cooled magma. These rocks associated with the diatreme are known as minettes and those at Alhambra Rock are similar to the rocks at Agathla Peak visited in the last newsletter. The difference is that Agathla Peak is a sharp-pointed igneous feature that resembles the throat of a volcano. Alhambra



An igneous dike creating a wall; the softer sedimentary rocks have eroded away from the intrusion.



Rock is a vertical dike that has a very low relief, ~250 feet, but “cuts through” the surrounding country rock for about three miles. It is just harder to get a good picture in your mind of the dike.



Google Earth © image of Alhambra Rock with trace of dike extending “right” until it crosses U.S. 163.

However, one can easily see the dikes trending southward and actually intersecting U.S. 163. Again, both Agathla Peak and Alhambra Rock are part of the much larger Navajo Volcanic Field where the numerous intrusions are ~25-30 Ma.

Mexican Hat is sort of a blip on the road but has some great geology and interesting photo ops. The village was founded in in very early 20th Century when a prospector noticed an oil seep along the San



Mexican Hat is situated in a syncline and the small oil pump produced from shallow and small carbonate reefs. Ruplee Anticline with the beds dipping toward the viewer is in the background.

Juan River. Drilling commenced and for a few years the boom was on. However, the source rock turned out to be a few small carbonate reefs in a Pennsylvanian limestone situated in a syncline. That is an unusual occurrence since oil is often found in the crests of anticlines (dome-like structures). By the 1950s the oil boom was over but every itinerant rockhound was out with a small Geiger counter looking for uranium to supply the needs of the U.S. Government. When Uncle Sam decided he had enough radioactive material, the hunt was over. Interestingly you can still see some of the old claim markers scattered around the countryside. Today the visitors to Mexican Hat are there to see the “Hat” and to stop in at the San Juan Trading Post to chomp down on Navajo tacos. I did both!



Stratigraphically below the Halgaito (but not exposed at the Hat) is the Honaker Trail Formation (Hermosa Group) of Pennsylvanian age composed of marine carbonates and clastics grading eastward into arkosic (feldspar-rich) sediments shed from the rising Uncompahgre Range to the east (part of the Ancestral Rockies)—another story for later. The Honaker Trail crops out in the exposed core of the Raplee Anticline and is overlain by the Halgaito Shale. The Honaker Trail is also exposed at the San Juan River bridge at Mexican Hat.

The Colorado Plateau has several anticlinal uplifts (along with monoclines and synclines) scattered across the landscape. These are Laramide (refers to the mountain building event creating the current "Rocky Mountains") structures but unlike the Laramide mountains, for example the Big Horn Mountain Range in Wyoming, the Plateau uplifts do not expose Precambrian rocks in the center of the fold. The best-known folds in Utah includes the



The bridge over the San Juan River at Mexican Hat. This is a view from the San Juan Trading Post, home of fantastic Navajo tacos!



The "Hat" is an erosional remnant of sandstone layers in Late Pennsylvanian rocks belong to the Halgaito Shale of the Cutler Group. Readers may also see references to the "lower Cutler beds" but Stevenson (2000) believed that Halgaito is the correct designation and noted the red siltstones and sandstones, with accompanying carbonate tidal channels, were deposited along an arid and low-lying coastal floodplain.



Steeply dipping beds of the front of the Raplee Anticline with exposures of Honaker Trail Formation in the draws overlain by the Halgaito Shale (lower Cutler beds of earlier authors).

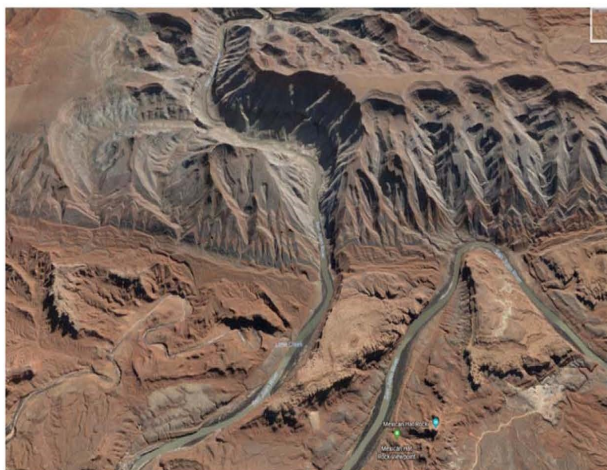
Monument Upwarp near the Four Corners area and the San Rafael Swell in the central part of the state (see next issue of Newsletter). In addition to the board uplift of these major features, often there are smaller fault and fold structures present. One of these geologically interesting smaller folds is located just east of Mexican Hat and is known as Raplee Monocline (single dipping arm), Raplee Anticline (two dipping arms), Raplee Ridge, or any



combination of the three. Although the Anticline is short in length, about 8 miles, it has a spectacular dipping front. The San Juan River has incised a spectacular cut through the Anticline that is best seen from the air! These Laramide structures, both major (for example San Rafael Swell) and minor (for example the Raplee Anticline) are directly related to compression and shallow plate subduction to the west.



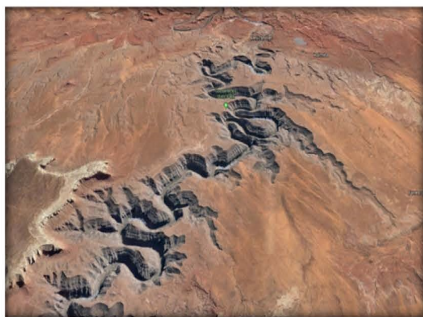
Google Earth image © showing the westward dipping beds of the Raplee Anticline and the incised San Juan River.



Google Earth © image of incised San Juan River canyon as it cuts through the Raplee Ridge. Looking north. See above image.



Above two photos are two of the "goosenecks" as observed from the state park. Below is a Google Earth © image of the San Juan River and these entrenched meanders.



I have always noted, on my Bucket List, a visit to Goosenecks State Park (Goosenecks of the San Juan). UT 61 takes off from US 163 a few miles north of Mexican Hat and connects with UT 316 for a short trip the Park. These incised meanders of the San Juan River are pictured/figured in virtually every Physical Geology and Geomorphology textbook and this was my year to check them off the list.

At the Park overlook visitor look down about 1100 feet to the meandering San Juan River. However, unlike most river meanders the features on the San Juan have "cut down" into the Honaker Trail Formation so that the River bends are entrenched in the bedrock. The mechanism and timing for the entrenchment has baffled geologists for decades. Stevenson (2000) noted that "in general, the river course formed in Tertiary lake and river deposits and were subsequently superimposed onto the underlying bedrock and buried structures across the Province." The rate of downcutting is about comparable to the rate of uplift of the Colorado Plateau. This rate of uplift had become significant during Oligocene to early Miocene. Whatever the case, the view from the State Park is absolutely amazing and any visitor to the area should take in the site—a real bargain for the \$5 park fee.

You try to walk a straight path in life. When you get to be my age, you look back at your footsteps and you can see where you went wrong. Wilson Sam (Navajo Nation) in the Tony Hillerman book Skinwalkers.

References Cited

Stevenson, G.M., 2000, Geology of Goosenecks State Park, San Juan County, Utah in Geology of Utah's Parks and Monuments, D.A. Sprinkle, T.C. Chidsey, Jr., and P.B. Anderson, eds.: Utah Geological Association 28.

GEOLOGY IN THE NEWS

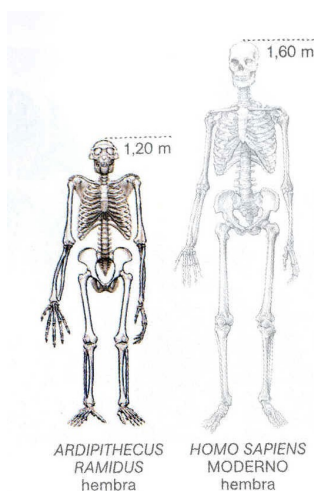
*Reports spotted by Jim Brace-Thompson in recent newspapers
from Rockhound Rambling 10/2018*

One Month after Lombok, Still More Tectonic Disasters Strike Indonesia. It is proving to be a tough, sad year for Indonesia. The island of Sulawesi was hit by a magnitude 6.1 earthquake on September 28, and before any response could be mounted, yet another, much more massive 7.5 quake struck. This one generated a tsunami that hit the coast with 10- to 20-foot waves. In the immediate aftermath, it was reported nearly 400 people had perished in the city of Palu alone. In just a few days, that number spiraled to 1,400, and it is feared that rescuers will find the death toll to be many times higher as they fan out and establish communication with remote villages. Palu was particularly hard-hit because it hugs a narrow bay that concentrates ocean waves generated by the second big quake that also destroyed buildings and that has left thousands of survivors camping outdoors in fear of more buildings toppling due to relentless aftershocks. Families are still seeking loved ones ripped from their hands by the onrushing waters, and cries for help from beneath the rubble have grown ominously silent. On top of it all, just five days later, on October 3, the stratovolcano Mount Soputan blew its top on the very same island, sending a plume of ash 2.5 miles into the sky. While no deaths or injuries were reported, it is feared that the ash may hamper efforts to fly in relief supplies for the earthquake and tsunami victims.

Is It Grandpa Ardi—or Uncle Ardi? In *Natural History* magazine, Prof. Jeremy DeSilva discusses fossils and research reports that attempt to pin down the split between humans and our African ape relatives. Which pieces in the fossil record are from our direct grandparents, and which are from aunts and uncles and cousins that are ever more distant? A lot of attention has focused on a critter called *Ardipithecus*. Is Ardi our ancestor? DeSilva points out that “fossils do not come with labels,” and that many discussions of human and ape origins have long been “based on a collection of fossils that could fit comfortably in a single grocery bag.” While we have new specimens that are tantalizingly suggestive, he laments, “Obviously, more fossils are needed!” (Image right)

<http://www.hermeticum.net/paleo/html/ardipithecus.htm>

A Long Journey Home for an Ancient Sea Cow. Its bones were first spotted in 2012 by a geologist mapping fault lines. But only now, six years later, has it been excavated, crated, and transported by helicopter, boat, and truck. No matter the delay. The extinct sea cow discovered in a remote ravine on Santa Rosa Island had been waiting patiently some 20 to 25 million years to be found! Its new home is the Santa Barbara





Museum of Natural History, and it may prove to be the oldest sea cow ever discovered in southern California. As scientists prep out the skull from rocky matrix, they hope it also may prove to be a whole new species and might help in the quest to determine why sirenians, which once numbered more than a dozen species around the world, dwindled to just the manatees and dugongs currently living in restricted parts of our planet Earth. (Image left)

©www.ktla.com

LOUPES 101 (Excerpted)

from Agate Explorer 02/2017; via WGMS the Rockhounder 09/2017; via Glacial Drifter 11/2017, via Stoney Statements 12/2017

Loupes come in several varieties. Gemologists prefer the hand loupe. For gemologists, the 10X loupe (with ten-power magnification) is the standard for hand-held gem identification. Although you will find more powerful loupes, the depth of field (the area that is in focus) is so small above 10X that they are hard to use. With lower-powered magnification, you just cannot see as much detail.

How to Use a 10X Loupe



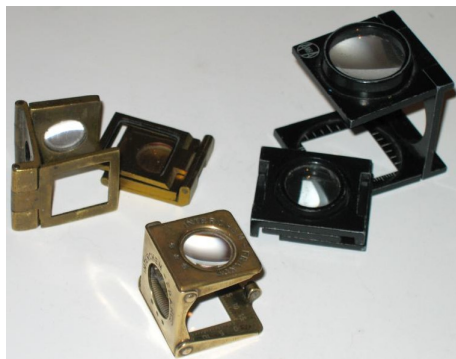
Using a loupe gracefully takes some practice, but soon it becomes second nature. Before you focus on anything, consider the light around you.

To evaluate cutting and polishing, you need to see the gem surface. Shine your light down on the stone. This is simple in a room with overhead lighting. If your best source is a window, position yourself so the light comes over your shoulder. Most importantly, avoid casting your

shadow on the stone. To see the inclusions in a gem, you need to see the interior. Place your light behind the stone, shining through it.

With minimal adjustments and a little thought, you can often see both the surface and interior of a gem. Having too little light to see well is usually the only limitation. When you open a loupe, the cover becomes a handle. To focus your loupe, slide your index finger through the opening, then rest your hand against your cheek to steady the loupe. Now, you only have one hand to move for focusing.

Keep both eyes open to reduce eye strain. Position the gem in front of the loupe. Next, move it slowly upwards and away from the loupe until it comes into focus. Practice adjusting the focus



from the top surface to the far side. On a smaller gem, you can get the entire stone in focus at once. On a larger gem, you'll have to focus on one area at a time.

To judge the quality of a gem's lapidary work, you need to study its surface. A smooth, glass-like surface is the sign of a perfect polish. You may see pits or scratches, however if they are few and invisible without magnification, they will have little effect on the beauty of the gem.

Sometimes, you will see a stone with small pits covering its entire surface. Although invisible to the naked eye, they do affect the gem's brilliance. If you compare the stone to non-pitted stones of the same species, you will see the reduction in brilliance more readily.

Occasionally, you will have trouble distinguishing whether marks are on the surface or inside the gem. To resolve this, rotate the gem so the light reflects off the facets. When a facet acts as a mirror, inclusions beneath it disappear. However, scratches on the surface remain visible.



An unpolished girdle reveals the gem cutter was in a hurry. (A custom gem cutter would finish this off.) Diamonds are an exception. Gem cutters cut them differently than colored stones because of their extreme hardness. Rounded, unpolished girdles are common in diamonds.

To evaluate cutting quality further, look at the facet meets. On a well-cut gem, they form sharp corners. All the facets in a row will be the same size and shape. You will frequently see facets that vary in size and corners that don't meet or overlap. If the differences are small, they will not affect a gem's beauty significantly. However as the problems increase, the brilliance of the gem suffers. Due to diamond's hardness, they have the sharpest edges. This clue helps identify them. The edges of harder colored stones, such as rubies and sapphires and cubic zirconia, come in a close second. Softer gems (below a nine in hardness) usually have slightly rounded facet edges. Occasionally you will encounter a custom-cut gem with exceptionally sharp edges in a material of only 7 or 8 hardness. Although you may be unable to appreciate all the subtle decisions made while cutting a gem like this, you can spot the workmanship by the polish, meets, and facet edges.

Next, turn the gem upside down and look at the culet. Sometimes gems carried together in paper wrappers suffer chips on the culet. This is called paper damage. Again, if invisible without magnification, this will not impact the gem's beauty significantly.

To read the entire article, follow the link below:

<https://www.gemsociety.org/article/10x-loupe-the-gemologists-best-friend/>

Show Time 2019

Jan 24-Feb. 11 Tucson, AZ	Tucson Show—multiple venues
Feb. 16-17 Georgetown, TX	Williamson County Gem & Mineral Society Georgetown Community Center San Gabriel Park, 445 East Morrow Street sparksaustin@outlook.com
Feb. 23-23 Plainview, TX	Hi-Plains Gem and Mineral Society Ollie Liner Center, Business I-27 bobcat22@suddenlink.net
Feb. 23-24 Pasadena, TX	Clear Lake Gem & Mineral Society Pasadena Convention Center, 7902 Fairmont Parkway www.clgms.org/
Mar. 2-3 Robstown, TX	Gulf Coast Gem & Mineral Society Richard M Borchard Fairgrounds, 1213 Terry Shamsie Blvd president@gcgms.org ; www.gcgms.org
Mar. 8-10 Pomona, CA	CFMS hosted by Pasadena Lapidary Society
Mar. 9-10 San Antonio, TX	Southwest Gem and Mineral Society; San Antonio Event Center 8111 Meadow Leaf Dr. (N/E Corner of Marback and Loop 410) krbotx@gvtc.com ; swgms.org
Mar. 23-24 Cedar Rapids, IA	MWF-AFMS hosted by Cedar Valley Rocks & Minerals Society
Apr. 13-14 Abilene, TX	Central Texas Gem & Mineral Society Abilene Convention Center, 1100 N 6th kmcdaniel23@suddenlink.net http://www.new.calichetimes.com/page13.html
Apr. 19-21 Alpine, TX	Chihuahuan Desert Gem and Mineral Club Alpine Civic Center, 901 West Holland Avenue ocoent895@gmail.com
May 4-5 Waco, TX	Waco Gem And Mineral Club Extraco Events Center (General Exhibits Building) 4601 Bosque Blvd; Alison.redding@ctxwifi.net ; https://www.wacogemandmineral.org
May 25-26 Fort Worth, TX	Fort Worth Gem and Mineral Club Will Rogers Memorial Center, 3401 W. Lancaster fwgmc.info@gmail.com www.fortworthgemandmineralclub.org
June 1-2 Monroe, NY	EFMLS hosted by Monroe Gem & Mineral Society
Aug 2-4 Prescott, AZ	RMFMS hosted by Prescott Gem & Mineral Club Prescott Valley Event Center at Glassford Hill & Florentine
Oct. 18-20 Lewiston, ID	NFMS hosted by Lewiston Gem & Mineral Society
Nov. 8-10 Humble, TX	Houston Gem & Mineral Society Humble Civic Center, 8233 Will Clayton Pkwy HGMS.org , Showchair@hgms.org">Showchair@hgms.org

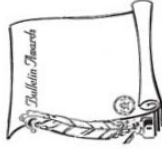
2019		February				2019	
Sun	Mon	Tue	Wed	Thu	Fri	Sat	
					1	2 10-4 Shop Open 10-Noon Youth Section	
3 10-4 Shop Open	4	5 11-3 Shop Open 7:30 BOD Meeting	6 10-3 Shop Open 1-3 p.m. Day Light	7 10-3 Shop Open 7:30 Archaeology Section Meeting	8	9 10-4 Shop Open	
10 10-4 Shop Open	11	12 11-3 Shop Open Lincoln's Birthday	13 10-3 Shop Open 6:30 Gemstone & Faceting Section	14 10-3 Shop Open St. Valentine's Day	15	16 10-4 Shop Open 10-Noon Youth Section 1:30 Beading Section	
17 10-4 Shop Open	18 7:30 Lapidary Section Presi dent's Day	19 11-3 Shop Open 7:30 Paleo Section	20 10-3 Shop Open 7:30 Mineral Section	21 10-3 Shop Open	22 Washing- ton's Birthday	23 10-4 Shop Open	
24 10-4 Shop Open	25	26 11-3 Shop Open 7:30 General Meeting	27 10-3 Shop Open	28 10-3 Shop Open			

2019		March				2019	
Sun	Mon	Tue	Wed	Thu	Fri	Sat	
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3 10-4 Shop Open	4	5 11-3 Shop Open 7:30 BOD Meeting	6 10-3 Shop Open 1-3 p.m. Day Light Ash Wednesday	7 10-3 Shop Open 7:30 Archaeology Section Meeting	8	9 10-4 Shop Open	
10 10-4 Shop Open Daylight Saving time begins	11	12 11-3 Shop Open	13 10-3 Shop Open 6:30 Gemstone & Faceting Section	14 10-3 Shop Open	15	16 10-4 Shop Open 10-Noon Youth Section 1:30 Beading Section	
17 10-4 Shop Open St. Patrick's Day	18 7:30 Lapidary Section	19 11-3 Shop Open 7:30 Paleo Section	20 10-3 Shop Open 7:30 Mineral Section 1st Day of Spring	21 10-3 Shop Open	22	23 10-4 Shop Open	
24 10-4 Shop Open 31	25	26 11-3 Shop Open 7:30 General Meeting	27 10-3 Shop Open	28 10-3 Shop Open	29	30 10-4 Shop Open	

The BACKBENDER'S GAZETTE

The Newsletter of the
Houston Gem & Mineral Society

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



SCFMS

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

AFMS

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



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