



The **BACKBENDER'S GAZETTE**

The Newsletter of the Houston Gem & Mineral Society

Volume XLIX—No. 4

April 2018



President's Message *by Paul Brandes*

Spring is definitely in the air in Houston. Warmer days, cool nights, and bright sunshine remind me of times in Northern Michigan tapping maple trees to get sap for making maple syrup.

While there are no maples here in Houston to tap, spring in Houston means something different. This is the time to be outdoors to get those chores completed before the heat and humidity of summer come.



It is also time to enjoy the weather and go out collecting, and it just so happens there are some exciting field trips coming up. The first is taking place the weekend of April 14–15 to the Hill Country for some Texas mineral collecting. April 14 will be at the Emerald Ridge Pegmatite near Mason for fluorite and strawberry quartz. April 15 will be at Badu Hill for rare earth and radioactive minerals. I am the main contact for this field trip. In addition, the second fieldtrip is going to the Alpine area for agates during the weekend of April 27–29. The Lapidary Section is sponsoring this hunt. A different ranch in the area will be visited each day. Richard Good of the Lapidary Section is the main contact for the agate hunt. Lastly, on May 5, there will be a collecting trip to Midlothian for pyrites and fossils. Please contact Mike Sommers for more information. I

President Continued on Page 4

Upcoming Program

by Sigrid Stewart, 1st Vice President



April 24, 2018: Nathalie Brandes presents "California: From Drought to Deluge," The presentation covers what influences the weather patterns in California, and why the state can go from record drought to record flooding very rapidly.

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

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

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

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Copy is due for the May 2018 issue by Sunday, April 8, 2018. Note early due date!!!

E-mail the Editor at pgeorge4@comcast.net

Purpose of HGMS

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

Membership dues are \$40 for an adult membership, \$60 for a couple, \$75 for a family (including all children aged 5-18), \$25 for a youth membership (ages 5-18), and \$500 for an adult life membership. Advertising rates: \$70 for 2 months, ¼ page; \$150 for 6 months, ¼ page.

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>.

have heard that there could be other trips before the summer heat takes hold, but these are still in the planning stage. If you are interested in any of these trips, please contact the persons named above for more information. Also, if any of you have ideas about where you would like to go or if you would be interested in planning a field trip, please contact Mike Dawkins or me.

Another item of note is there will be a Trade Show at the Clubhouse on April 28. For more information about registering to be a vendor or just attending the Show, please contact Chase Jennings. As always, we will need some folks to volunteer during the Show for various activities. If you are interested, please contact our Volunteer Coordinator Nancy English.

Lastly, I want to bring up a very important point concerning the Clubhouse. Recently, I had an opportunity to do a walk-through with a former Fire Marshal to see how we are doing when it comes to building and patron safety. Overall, we fared well, but there were also some items that will require our attention. One thing that each of you can do immediately as an HGMS Member is, **if you see something that is misplaced, please put it back where it belongs. If you see trash or rubbish lying around, please throw it out. If you see an issue with something in the Clubhouse, please tell someone.** We cannot resolve the issues of the Clubhouse unless we know what they are.

See you next month!



Pay Dues

Tribute to George E. Wolf

(1935-2017)

by Al Robb

Long-term HGMS Paleo Section member George Wolf of Pasadena, Texas passed away on Saturday November 18, 2017 following a brief illness. Many will remember him for his friendly, enthusiastic attitude—"he never met a stranger." He was always passionate when talking about his many interests in natural history. He was also a regular fixture at the Annual HGMS Show, always present to assist and install displays of his vast collections.

George was born in Byers, Texas, moved back to Texas, and eventually he moved to the Houston area after serving in the military during the Korean conflict. He spent most of his career for over 40 years as a longshoreman at the Houston Ship Channel. He was a member of the Houston Bass Club for many years, and he ran a fishing lure business on the side.

George loved spending time outdoors with his four children, and he spent many hours collecting shells, artefacts, and fossils at various lakes and shorelines of southeastern Texas and in other states. He was a member of many professional and semi-professional societies. Over the years he was an active participant of the Galveston Shell Club, Texas Archaeological Society, Clear Lake Gem & Mineral Club, International Sea Bean Symposium, and the Paleontology Section of the Houston Gem and Mineral Society (HGMS).

I read the following words at George's funeral on November 22, 2017:

George was my friend, George was a collector, but, he was so much more.

He loved to share his discoveries and lessons learned with all of those around him, be it his vast collection of arrowheads and Indian relics, his tremendous shell collection, his amazing sharks teeth and fossils, or his latest pursuit—his beloved sea beans and what he called, "things cast ashore." In all of these disciplines, he devoted his attentions to the topic and became a known and respected expert in the field.

George was a great influence on all who encountered him. His school talks, visits with scouts, or displays at the library were all such successes. For many years, he was a fixture at numerous club shows regionally, including the Annual HGMS Show where he not only represented the Paleo Section at the Fossil Booth, but also prepared multiple displays of his vast collections for all to see and marvel over! It is not even possible to calculate how many young minds he may have influenced positively!

Most recently, George focused his attention to collecting sea beans, and similar to all his previous pursuits, he became a legend in the sea bean community—so

much so, that he was instrumental in convincing organizers to conduct the 2016 International Sea Bean Symposium in Galveston, Texas rather than Florida where it had been held for many years.

In another dimension, George was a decorated Veteran of the Korean War, but he never boasted of his service. I'll also note that he was very proud of all his four children!

George was a tremendous mentor and teacher to all of us who spent time with him studying things "Natural History."

He was a great companion and friend in the field, collecting whatever our "prey" happened to be, and he will be dearly missed by me and by all those who knew and collected with him.

Rest in Peace, my Friend!

Submitted by Al Robb



George with his outstanding collection

Lapidary Section Planning a Field Trip

by Richard Good

Some years have passed since the last Lapidary Section field trip, so the Section is now interested in planning one for late April. They have decided on Alpine, TX as the destination, and the 3-day weekend of April 27, 28, and 29. It's a long trip—about 600 miles and an 8–9 hour drive. Reservations will need to be made at the Antelope Lodge in Alpine.

I have not hunted the Alpine area since camping with my father in 1963. We camped at the now-gone Woodward Ranch by a creek in early June in 1963. We hunted 3 or 4 days, and only during the last day did the wind go calm and get noticeably hot. Nights in the dry air and clear skies at 4500 ft. got quite chilly. (No motel, only the back of a pickup.) I look forward to hunting there again. I am the contact person for the hunt (see the Roster for my contact info), and we anticipate 5 to 10 individuals will make the trip. Our contact (Teri) recommends spending a day each at the South Larremore Ranch, at East Needle Peak, and at Stillwell Ranch. The end of April is likely to be hot, so we may end the hunts in midafternoon. If it's not hot, they start at 8:00 a.m. at the Antelope lodge in Alpine and usually end about 5 p.m.

Teri says, "There is no minimum or maximum number of people for the trips. My deal with the landowners is they get the money, and I get to go rockhunting for free. I'll take you out to the good spots on the ranches, show you what to look for, and then hunt for rocks myself.

"East Needle Peak requires high-clearance vehicles, and only the Larremore Ranch is really good for those with limited mobility. If there's anyone in your group with limited mobility, please let me know, and we'll see what we can do to get them where they can find great stuff."

This trip is open to all members of the HGMS.

Polymer Clay Class

Sunday April 22 1–3 p.m.

by Jim Paras

Long-time HGMS member—Jim Paras—will be teaching another polymer clay (the most versatile art material ever created) class at the clubhouse. His last polymer clay class had more than a dozen attendees who enjoyed learning and creating and finished the class with a beautiful pendant.

His classes are designed to be enjoyed by people from ages 8 to 88, with or without art experience. All equipment and materials are included. No need to bring anything but enthusiasm and a desire to learn. One or more completed or nearly completed pieces of jewelry will be taken home at the end of the class.

The cost of the class is \$30. To reserve your space, please send a check to HGMS with line of "HGMS polymer class."





JOHN LEE—Congratulations to our Gemstone and Faceting Section member who won 2nd Place In the Pre-Masters Class!

Archaeology Section

by Garth Clark and Nancy L. Engelhardt-Moore

March 1, 2018: Garth Clark, the Section's Vice-chair, presided over the meeting, took notes and wrote the program summary below, since the Section's Secretary, Nancy Engelhardt-Moore was out of town. After her return, Nancy acted as technical editor for this article.

Program: Our guest speaker was Jorge Garcia-Herreros from the Gulf Coast Archaeology Group. The topic was *"Cartagena de Indias: Spanish Port an English Prize"*. The city was founded in 1533 and was important as the assembly port for the Spanish treasure fleets. That fact attracted pirates and numerous raids. In the 1540s. King Phillip II of Spain started a fortification building plan that would last 200 years. The harbor had two mouths on either side of Tierra Bomba Island. After filling in the channel closest to the city, ships had to travel a large U-shaped path lined with forts.



Jorge Garcia-Herreros (left)

Photo by G. Clark

Much of the talk centered on the War of Jenkins' Ear and the attack on Cartagena in 1741. Until D-Day, this was the largest amphibious assault yet assembled. As Cartagena has grown from a population which varied from 16000 to 33000 for centuries to the present population of over a million, the spread of the city has now reached the Tierra Bomba fortifications and threatens to lose them to development. One of the forts in particular was abandoned after the 1741 attack and never repaired or developed. Archaeologists have worked to reconstruct the battle for the fort.

Upcoming Programs:: The Archaeology Section will not have any programs this summer. Please watch for future program announcements in the fall. Have a great summer!

Get last-minute news about club events by sending a note to Jim Kendall at kendal_ja@yahoo.com

General Meeting Minutes

February 27, 2018

by Nancy English, HGMS Secretary

President Paul Brandes called the meeting to order at 7:30 p.m. He thanked everyone for coming to the February General Meeting. Twenty-three members attended. New member Wendell Dubley came for the first time.

Minutes: President Brandes asked for a motion to approve the **January 23, 2018** General Meeting minutes as posted in the February 2018 BBG. Gary Tober moved to approve the January 23, 2018 General Meeting Minutes. Joan Riley seconded the motion, and it passed. General Meeting minutes also are posted on the E-blast the Sunday before the next meeting. If you are 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.

President's Announcements:

The Clear Lake Show: Thanks go to volunteers Karen Burns, Clyde McMeans, Scott Singleton, Julie Walls, Nancy Fischer, Margaret Hardman-Muye, Quentin Boyer, and Nancy English for manning the HGMS booth at the CLGMS Show last weekend, February 24 and 25.

Georgetown Show: President Brandes attended the Williamson County Gem & Mineral Society's 47th Annual Show in Georgetown, Texas on February 17 and 18. The Show is smaller than HGMS's show, but the twelve to eighteen vendors offered a good variety. The friendly folks of WCGMS provided many educational displays.

Other upcoming shows include Corpus Christi, March 3-4; San Antonio, March 10-11. If you can, please attend and introduce yourself as being with HGMS. Take flyers with you to distribute.

Patricia Gannon-Hildbold passed away February 9, 2018. Sigrid Stewart read a tribute to her that will be posted in the March Backbender's Gazette.

Backyard Rock and Equipment Sale: Keith Harmon's sale begins at 9:00 a.m. April 7, 2018. The address is 9116 US Hwy 84 West, Rusk, Texas 75785. You may contact him at 903-316-2967 or at keithharmon19@yahoo.com.

Section/Committee Reports

In the interest of time, President Brandes asked members to look for reports of Section news in the BBG, on the Web site (**HGMS.org**), or by reading the weekly email 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 kendallja@att.net.

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

Neal Immega pointed out that there is a saw for sale on the side table.

Old Business

Library: Beginning in March, the Library will be open to members on a limited, **Read-Only basis**; no books will be checked out until the labeling and reorganization is complete. For hours, contact Quentin. que.kakashi@gmail.com. If you are interested in helping to complete the Library reorganization, all you need is a laptop and time at the club.

Trade Show—January 27, 2018, 10:00 a.m. until 6:00 p.m. Chase Jennings handled advertising, dealer registration, and organizing the set up. Although it rained all day, the results were still good. Thank you to volunteers Quentin Boyer, Paula Smith, Jeanette Fritsche, and Nancy English for providing Security. Attendance reached 783 people who kept sales high enough to make dealers happy. Beverly Mace and Karen Burns worked the membership table and the door prize sign-up. They sold eighteen memberships that totaled thirty new people. Demonstrations are a new aspect of the Trade Show. Logan Wilcox demonstrated faceting. Joy Lester demonstrated wire wrapping.

Annual dues are DUE!!

New Business

Education Coordinator: Quentin Boyer is our new Education Coordinator. He has a list of people wanting classes and some instructors. He is working with the BOD on pricing.

Show Committee 2018: Scott Singleton agreed to be the 2018 Show Committee Chairman. The Board will assist in the hunt for two more people to be on the Show Education Committee—an Education Chairperson and one more person. The Show will be on November 9, 10, and 11, 2018.

President Brandes asked if there was any other New Business.

A member asked if we could buy a 13" saw with an adjustable clamp. The Board will ask Neal Immega if he has room for it.

Karen Burns asked for another Trade Show Committee to be formed. The Board will consider that at the March 6, 2018 Board Meeting.

Donations: Nancy English reported that Rick Burris brought a donation of lovely specimens to the Clear Lake Show for HGMS. Wilbert Woelfel called to offer a donation of rough stones and subsequently brought it to the club. Thanks to you both, gentlemen.

Mary Ann Mitscherling reminded the audience that she opens the shop at 5:00 p.m. on the day of the General Meetings (fourth Tuesday of the month) and the Lapidary Meetings (third Monday of the month).

The next Board meeting is February March 6, 2018 at 7:30 p.m.

The next **General Meeting is March 27, 2018, 7:30 p.m.** Vincent Barrows will present a talk on Cahokia Mounds Bird man tablets and Indian mounds.

Show 'n Tell: Steve Blyskal brought samples of purchases he made at a Midland, Texas sale: Plume agate "biscuits" from the Woodward or Walker Ranch, Balmorhea Blue agate from Jeff Davis County in West Texas; a piece of limestone fossil hash for cutting material. He had some rudist clam fossils preserved by silica (quartz) and picked up at the Enchanted Rock Shop in Llano, TX. He also brought a couple specimens from the Core Craft Rock shop in Midland, specifically a purple/green fluorite specimen from China.

Drawing: Andrea Bruneau won the amethyst plate.

Refreshments: Foster Freeman provided delicious refreshments. Members are reminded to **FEED THE KITTY!** Neal Immega will bring the refreshments for the March General Meeting.

Adjourn: Karen Burns moved to adjourn the business meeting, and Joan Riley seconded. The motion passed unanimously, and the business portion of the meeting adjourned at 8:10 p.m.

President Brandes introduced Sigrid Stewart's program on "Midnight Miners."

Board of Directors' Meeting

March 6, 2018 Minutes

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	X	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

President Paul Brandes called the meeting to order at 7:40 p.m. A quorum was present. Non-voting member Chase Jennings—Show Publicity Chair was in attendance.

President's Comments: I Visited the **Williamson County Gem & Mineral Society's** 47th Annual Show in Georgetown, Texas held February 17–18. Small show, but very nice with good displays and friendly people.

I went to the **Clear Lake Show**, held February 24 and 25 of 2018. The HGMS Banner hung prominently on the back wall. Thanks to all the volunteers who promoted HGMS and the 2018 Annual Show all weekend.

I visited the **Corpus Christi Show** this past weekend, March 34, 2018. It was also a good show with lots of familiar vendors. I spoke with the Corpus Christi Gem & Mineral Society President about sharing program presenters. Sigrid Stewart welcomed the idea of exchanging contact information for shared speakers.

Approval of Previous Month's Board Minutes: Fred Brueckner moved to approve the minutes of the February 6, 2018 Board Meeting. Mike Dawkins seconded the motion, and it passed.

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

Office, Committee, and Section Reports

Archaeology Section: The Archaeology Section will not have any programs from now until fall. Please watch for future program announcements in the fall. Have a great summer!

Beading Section: March 17, 2018 1:30 p.m. They will make a Tubular Peyote Weave. A materials list can be found on the Web site: hgms.org > Events > Upcoming Programs > Beading.

Day Light Section: On March 7, 2018 at 1:00 p.m. Members will learn to make a wire wrap Bracelet. The Day Light Section Chair position still is open.

Education Committee: via email, Quentin Boyer suggested we rethink the fee setup. After discussion, the BOD agreed the fee should be \$5.00 per ½ day class (4 hours) per day. Full day class fees will be \$10.00 per day. This is a daily fee paid for out of the total tuition of all students for each day.

Quentin reported that the first two classes are already scheduled with a third on the way.

He has requested an update to the education page to clarify what the classes offer. He requested

a PayPal link so we can get payments processed directly through the Website, if not, preferably with a way to add a memo so we can know for which class the money is destined to make it easier to disburse. Sigrid is working on this for him.

We currently have 90 subscribers to the classes mailing list. That list has been helpful.

Gemstones and Faceting Section: March 14, 2018 the Gemstone lecture is on beryl and all its colored variations. In addition, the ID filter Chelsea will be explained and used on different gemstones. The Faceting lecture will be on YAG (yttrium aluminum garnet), a synthetic crystalline material of the garnet group. John Lee recently taught three weekend classes on faceting.

Lapidary and Silversmithing Section: March 19, 2018 6:30. Karen Burns, Mary Ann Mitscherling, and Margaret Hardman-Muye: Using the jump ring maker: Make enough jump rings for Byzantine earrings or a bracelet.

Library: The Library will open in March for read-only use. Quentin is looking at different opportunities for volunteer help, and progress is being made toward getting 2.6 thousand items Library of Congress call numbers.

Things we still need are labels for the books, labels for the shelves, and a new computer. Quentin will start offering library hours on Tuesdays at 4:30 p.m. and by appointment.

Mineral Section: The March 7 program will be about the recent Clear Lake Mineral Society Gem and Mineral Show.

March 21, 2018, at 7:30. Program to be announced.

Paleo Section: Tuesday, March 20, 2018. 7:30 p.m. Program to be announced.

Security Report: Garth Clark was not available. However, more improvements are being made.

Youth Section: The next meetings will be March 3 and March 17, 2018 from 10:00 a.m. to noon.

BBG Editor and Web site committee member: The deadline to send in articles and other pertinent information for inclusion in the April 2018 BBG is Thursday, March 15, 2018.

Old Business

New Web Site: Sigrid Stewart is working diligently on the education screen additions, learning about plug-ins, and updating the current events screen. Thank you, Sigrid.

Show Committee 2018: The Show Education Committee still needs at least two more people. Section Representatives were encouraged to ask for volunteers at the Section meetings. These positions need to be filled soon!

New projector system. President Brandes presented information on the projector that he has chosen. The BOD agreed that he should proceed. Sigrid Stewart moved that President Brandes buy the projector for the stated guideline amount. Mike Sommers seconded it, and the motion passed.

Past Presidents Board: Beverly Mace has completed the list of names and will deliver it to Monarch Trophy on March 7, 2018.

Preservation of Documents: No volunteers have come forward yet. Due to the lack of time, interest, and resources, this project will be explored later.

Creating "How-To" videos: Sigrid Stewart has restarted the process.

Phone Services: The Board decided to keep the land line. Fred Brueckner will investigate the possibility of forwarding the calls to Nancy English's phone. She is currently responsible for retrieving messages left on the answering machine.

HGMS Spring Mineral Collecting Field Trip to the Hill Country. Still working on securing a date (likely in April) for the trip. Very good potential to visit a new site which includes bungalows/bunkhouse for trip attendees.

Handheld Vacuum: Jim Paras and Nancy English will shop for a hand-held vacuum before the next meeting.

New Business

Shop Report: At the February General Meeting, a member asked if we could get a 12" saw with an adjustable guide for the Shop. Nancy English will discuss it with Neal Immega. President Brandes wants to remind the Shop users that when something is broken, they will not be chastised for telling the Shop Foreman on duty. It is important for the people responsible for the Shop to know when something is broken.

Lapidary Field Trip in late planning stages: Several years have gone by since the Section's last field trip, and Richard Good is now setting up a great one in Alpine for April 27, 28, and 29. He expects that 5 to 10 people would make the trip. Richard is the contact person, and this field trip is open to all HGMS members.

Scholarship Program: Mike Sommers reported that Jean-Hugh Fillacier has volunteered to assist notifying colleges. We plan to put all information about the scholarship, including a downloadable, electronically fillable application document (PDF) on the HGMS Web site. This will be filled out and emailed back, rather than needing to be scanned or printed/mailed. Based on the small number of applicants we typically receive each year, we are concerned that our outreach is not targeting appropriate and available students.. Ideas to increase that are to directly target student groups at various colleges and to ask members to spread the information. We will be sending out notices in the weekly e-blast.

Trade Show—April: Nancy English moved to schedule the April Trade Show for April 28, 2018, 10:00 a.m. until 6:00 p.m. The motion passed. Like the January Trade Show, more single tables will be offered inside than in the past. Chase Jennings will post the date of the Trade Show and registration in the next E-blast. Chase also reported that on February 3, The Houston Chronicle published an article about the January 28, 2018 Trade Show. He will post it on the next E-blast.

Open House: President Brandes would like to explore the idea of having an open house in the summer to highlight to the community what the HGMS is about. Sections could have their own table to promote their activities which might include demonstrations, short lectures on various topics, mineral and rock Identification. The event would exclude selling.

Next Board of Directors meeting: April 3, 2018 at 7:30.

The next General Meeting is on March 27, 2018: Vincent Barrows will present Cahokia Mounds Bird man tablets and Indian mounds.

Adjourn: Fred Brueckner moved, and Mike Dawkins seconded the motion to adjourn the meeting. The motion passed, and the meeting adjourned at 9:45 p.m.

Bench Tips

by Brad Smith

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

NO-MAR PLIERS

Pliers can often leave nicks and scratches on your work. If this is giving you a problem, first take a close look at the plier jaws. New tools can be a little rough. I typically relieve any sharp edges, sand

away any tool marks, and give working areas a quick polish.

If that does not solve the problem, you probably need to cover the jaws. Plastic electrical tape provides a quick fix but can leave messy adhesive on the jaws—and clips do not seem to last very long.

A quick and easy solution is to slip a length of 1/8" diameter vinyl tubing over each jaw. It works well and leaves no sticky residue. The tubing can be found in a store that sells

aquarium supplies. Note that this will increase the size of the plier jaws a bit, but I have not found that to be a problem.

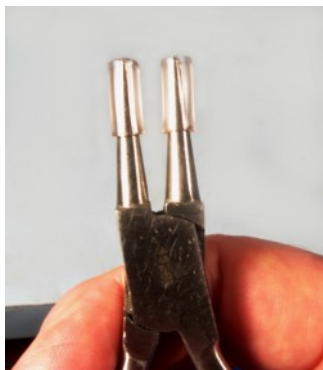
PATINA RECIPES

Sometimes it is fun to explore some new patinas. If this appeals to you, here are a couple Web sites that have ideas particularly for copper and bronze.

The first is The Science Company at <http://www.sciencecompany.com/Do-It-Yourself-Patina-Formulas-W12C672.aspx> with plenty of formulas for a variety of colors. And there are more formulas at Tim McCreight's Brynmorgen Press Web site at <http://www.brynmorgen.com/resources.html>

Small quantities of chemicals for making your own patinas are available from The Science Company at <http://www.sciencecompany.com/Patina-Chemicals-Patina-Book-C672.aspx>

If you prefer to buy the patinas ready for use, one of the best sources I've come across is Sculpt Nouveau at <http://www.sculptnouveau.com/> Don't miss all the instructional pdfs on the site, and be sure to take a look at the videos showing how to use the products at <http://www.youtube.com/sculptnouveau>



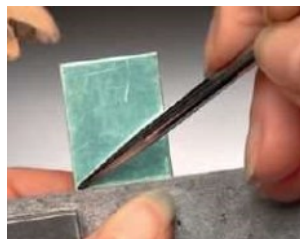
Metal Tidbits

*Excerpt from Jeff Fulkerson
from The Cowtown Cutter 03/2018*

1. Metal on File vs File on Metal: It is not always easy to get an edge that is straight, not to mention a long edge that is flat, straight, and square, when using a jeweler's file. Try the opposite of what you have learned: bring the metal to the file and not the file to the metal. Using a large 14" fine-cut file, sold as a Formica file for smoothing the edges of countertops, place the file flat on the bench and then, holding the metal in a vertical position, pull it along the cutting surface of the file. This method creates a long, flat, square edge in a fraction of the time of the traditional method.



2. File Straight, Flat Edges: When filing flat edges, mark a straight line on your metal using a square and scribe for you to work toward. Make sure your file does not "dip" or slope up or down at the beginning and end of your cutting stroke, because that will create an uneven or rounded edge.



3. Recycling Charcoal Soldering Blocks: You probably know that soldering and fusing on a charcoal block generates a reducing atmosphere that diminishes silver oxidation and produces stronger soldered joints. However, charcoal blocks deteriorate rapidly, so you might end up with unusable chunks of charcoal. These blocks are expensive to replace, too. Try rubbing broken charcoal into the surface of a white firebrick to create the same effect.

4. Smooth Sawing from the Start: Begin sawing with the blade tilted at a slight angle; then return to a vertical position to continue sawing sheet silver.

5. Oversized Sawing Solution: Have you ever attempted to cut a piece of silver sheet that is longer than your saw frame and come to a screeching halt when you realized it won't fit? One solution is to use your pliers to twist your saw's blade



90 degrees so that the saw frame is perpendicular to the axis of the saw cut. With the saw frame to the side, you can make cuts of unlimited length as long as the width of the silver sheet is not greater than the saw frame depth.

6. Pickle-Safe Strainers: Sometimes it can be a challenge to fish out small pieces in your pickle

pot. Look for nylon-screened or plastic strainers to use as "dipping baskets" in your pickle pot: Cool the soldered piece in water first, place it in your metal-free strainer, and then place the strainer in the pickle pot. Retrieve and then rinse it right in the strainer, too. Do not use metal strainers in your pickle pot or you will risk copper plating all the metal pieces in the pickle.



7. Protect Textured Metal While Dapping: Cover textured metal with a couple layers of masking tape while dapping, or you can place a layer of thin craft foam between the dapping block and the textured metal to protect the texture during forming. Craft foam can also help protect the wood from being marred by the texture on your metal if you are dapping with wooden blocks. If you are texturing both sides of a metal piece, use craft foam or a couple layers of masking tape to protect one textured side against the bench block while you texture the other side.

8. Form Perfectly Round Rings on Tapered Mandrels: When forming rings and bangles on tapered mandrels, keep turning the metal around the mandrel to counteract its tapered shape and to ensure that both edges become the same size.



9. Control Your Liver of Sulfur: The longer you leave metal in liver of sulfur (LoS), the less control you have over the color. Dip your metal into the LoS and rinse it off with water. Repeat this process until you achieve the color you wish. Darkening in layers will also give you a more durable patina. Remember that copper can affect the chemical balance of your LoS, so if you put silver into LoS that has already had copper dipped in it, you will see that it turns a yellowish color. Either make a separate liver of sulfur solution for your silver, or dip copper after you have finished with your silver pieces.

10. Quiet Pounding: Ever notice how loud the sound is when pounding on your steel bench block while it is sitting on a wooden bench top? The bench top reverberates like a drum, amplifying the sound. To correct this, simply place your steel bench block on an old computer mouse pad to help absorb some of the shock and noise. You will still have the benefit of the bench block's hardness.



Cartoon by Erston Barnhart in Rock Buster News 5/00
via T-Town Rockhound 6/00

Seeking "Lapidary of the Month" Articles for Rock & Gem Magazine

by Jim Brace-Thompson

from T-Town Rockhound, 11/2017, via The Tumbler 2/2018

Rock & Gem magazine is the officially endorsed hobby magazine of the American Federation of Mineralogical Societies. In other words, it is our magazine! Not only does it contain articles of immediate interest each and every month, it welcomes contributions by each and every one of us to better inform our fellow practitioners in our fun hobby. R&G Managing Editor Lynn Varon notes that one especially popular feature is the "Lapidary of the Month" article submitted by people to highlight some new technique or novel lapidary art that they've mastered and would like to share with their fellow rockhounds. However, the supply of entries for this monthly feature has been drying up in recent months, and Lynn welcomes new articles to keep this feature lively and relevant.

The guidelines are simple:

- 1) Write a 500-word step-by-step description of how you crafted a particular lapidary project, then save it as a document file.
- 2) Take at least one sharp, close-up, color digital photo of the finished project. (Use high resolution: 300 dpi at 4 inches by 5 inches, minimum.)
- 3) Attach your document file and digital photo (.tif or .jpg) to an e-mail and send it to editor@rockngem.com with the subject line "Lapidary of the Month"
- 4) E-mail the editor or call (972) 448-4626 with any questions. Lynn is happy to provide guidance! For an example, see page 8 of the September issue of Rock & Gem, where the Lapidary-of-the-Month article describes how to make drawer pulls and knobs decorated with agate cabs for kitchen cabinets. Let's all help keep our own hobby magazine lively and relevant with projects and techniques that should prove of interest to all of us!



"I've changed my mind, Edgar
go ahead and buy the facet cutter!"

by Bill Mittlebeeler via Dust & Grit 2/00
via Golden Spike News 4/00

Charcoal—A Handy Miracle

from Rock Buster News, via High Country, via The Roadrunner 10/2017

Charcoal is really a sort of miracle material. It can be used to filter. Water purification is perhaps the most widely known result of charcoal use. It is also widely used to purify the air we breathe in filters used in heating and cooling systems and in gas masks. It filters most of the war gasses and also industrial chemicals, such as ammonia.

Charcoal was used to smelt iron before coke was discovered. When the cheaper and more abundant coke came into fashion, charcoal was relegated to only specialty irons, such as some cast-iron used in roller bearings. Charcoal has fewer undesirable byproduct gasses than coke and makes a more pure material.

You may have seen the words "activated charcoal." Have you thought that was only a come-on to grab your attention? It is not, because charcoal CAN be activated. By superheating charcoal to 300° to 400°F, it becomes more porous and can absorb many times more than ordinary charcoal. It may be reactivated many times before becoming useless.

Bone charcoal is used to decolor glucose and sucrose (your sugar and some syrups). It contains about 75% calcium phosphate and is better than hardwood charcoal to decolor syrup.

Charcoal was first made commercially in the 1800s. It was made then by stacking hardwood in conical piles with a kindling pile in the middle. The wood was then covered with dirt, leaving air holes at the bottom and a flue in the middle top. It still is made in much the same manner, except the ovens are now concrete and have steel doors and shutters. When the internal temperature reaches 400° to 500° F, the air holes at the bottom and the shutters at the top are closed. The temperature inside still climbs to 700° to 900°F, although the wood cannot burn due to lack of oxygen—it "chars." Thus, the name charcoal.

As much as 70,000 tons are made each year just for briquettes to use in grills. Many more tons are used for filtering material. (Only the finest charcoal, gathered from the top of the pile, is used for filters.) Probably most lapidaries have soldered on charcoal blocks. Many municipalities use charcoal to filter the drinking water supplied to the people.

CONCRETIONS

*from Wikipedia, via Stone Chipper, Aug 2017,
via Stoney Statements, 09/2017*

Origins

Detailed studies (i.e., Boles *et al.*, 1985; Thyne and Boles, 1989; Scotchman, 1991; Mozley and Burns, 1993; McBride *et al.*, 2003; Chan *et al.*, 2005; Mozley and Davis, 2005) published in peer-reviewed journals have demonstrated that concretions form after sediments are buried but before the sediment is fully lithified during diagenesis. They typically form when a mineral precipitates and cements sediment around a nucleus, which is often organic, such as a leaf, tooth, piece of shell or fossil. Some of the most unusual concretion nuclei, as documented by Al-Agha *et al.* (1995), are World War II military shells, bombs, and



shrapnel, which are found inside siderite concretions found in an English coastal salt marsh. Depending on the environmental conditions present at the time of their formation, concretions can be created by either concentric or pervasive growth (Mozley, 1996; Raiswell and Fisher, 2000). In concentric growth, the concretion grows as successive layers of mineral precipitate around a central core. This process results in roughly spherical concretions that grow with time. In the case of pervasive growth, cementation of the host sediments, by infilling of its pore space by precipitated minerals, occurs simultaneously throughout the volume of the area, which in time becomes a concretion. Concretions are often exposed at the surface by subsequent erosion that removes the weaker, uncemented material.

Composition

They are commonly composed of a carbonate mineral such as calcite; an amorphous or microcrystalline form of



silica such as chert, flint, or jasper; or an iron oxide or hydroxide such as goethite and hematite. They can also be composed of other minerals that include dolomite, ankerite, siderite, pyrite, marcasite, barite, and gypsum. Although concretions often consist of a single dominant mineral, other minerals can be present depending on the environmental conditions that created them. For example, carbonate concretions, which form in response to the reduction of sulfates by bacteria, often contain minor percentages of pyrite. Other concretions, which formed as a result of microbial sulfate reduction, consist of a mixture of calcite, barite, and pyrite.

Occurrence

Concretions are found in a variety of rocks, but are particularly common in shales, siltstones, and sandstones. They often outwardly resemble fossils or rocks that look as if they do not belong to the stratum in which they were found. Occasionally, concretions contain a fossil either as its nucleus or as a component that was incorporated during its growth, but concretions are not fossils themselves.

The Kid's Corner

by John Peters

How do Fossils Form? In a Lot of Different Ways

from The Conglomerate 02/2017, via The Rockpile 11/2017

There are six pathways to the formation of a fossil:

Amber - Full body insect fossils can be found preserved in a hardened plant resin called amber. These fossils can remain preserved in amber for up to millions of years.

Carbonization - Carbonization is when all the elements of the organism are dissolved except for the carbon. The carbon leaves a residue, or thin film, which shows an outline of the organism. Fish fossils, feather impressions, and ancient fern fossils are examples.

Casts and molds - A cast or a mold fossil is an impression of a living organism. They are made when an organism dissolves in the Earth and leaves a hollow mold behind. The mold is then filled in by minerals, leaving something like a statue of the intact dinosaur fossil or human remains as two examples.

Permineralization - Permineralization is when a mineral deposit forms a cast of the organism. Fossils formed this way can be very detailed.

Common minerals include silicate, carbonate, and pyrite. Brachiopods and trilobites, shelled animals found in Michigan, are this type. Petrified wood is another example.

Freezing - Some fossils are preserved in ice. As long as the ice does not melt, the fossil may be preserved for thousands of years. Large fossils such as the woolly mammoth are discovered in the glaciers of the Arctic.

Mummification - In really dry areas, a fossil may be formed through mummification. This is when the dead organism quickly dries out. Because there is little moisture, the remains of the organism—even the soft parts!—can be preserved for a long time.

Source: http://www.ducksters.com/science/earth_science/fossils.php

Show Time—2018

- April 6-8 Raleigh, NC EFMLS/AFMS/Tar Heel Gem & Mineral Club
North Carolina State Fairgrounds
Kerr Scott Bldg., 1025 Blue Ridge Rd.
<http://tarheelclub.org/>
- April 14-15 Abilene, TX Central Texas Gem & Mineral Society
Abilene Convention Center, N 6th & Pine
kmcdaniel23@suddenlink.net; www.new.calichetimes.com
- May 5-6 Lubbock, TX Lubbock Gem & Mineral Society **hosting SCFMS Federation**
Lubbock Memorial Civic Center; 1501 Mac Davis Lane
walt@lubbockgemandmineral.org; www.lubbockgemandmineral.org
- May 26-27 Fort Worth, TX Fort Worth Gem and Mineral Club
Will Rogers Memorial Center; 3401 West Lancaster;
fwgmc.info@gmail.com;
www.fortworthgemandmineralclub.org
- 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; www.agemclub.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; 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; larockclub.com
- 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; mountidachamber.com
- 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; www.sedonagemandmineral.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; showchair@hgms.org

2018		April				2018	
Sun	Mon	Tue	Wed	Thu	Fri	Sat	
1 10-4 Shop Open EASTER	2	3 11-3 Shop Open 7:30	4 10-3 Shop Open 1:00-3:00 Day Light Section 7:30 Mineral Section	5 7:30 Archaeology Section	6	7 10-4 Shop Open 10-Noon Youth Section PASSOVER ENDS	
8 10-4 Shop Open	9	10 11-3 Shop Open	11 10-3 Shop Open 6:30 Gemstone & Faceting Section	12	13	14 10-4 Shop Open	
15 10-4 Shop Open	16 7:30 Lapidary Section	17 11-3 Shop Open 7:30 Paleo Section	18 10-3 Shop Open 7:30 Mineral Section	19	20	21 10-4 Shop Open 10-Noon Youth Section 1:30 Beading Section	
22 10-4 Shop Open 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	

2018		May				2018	
Sun	Mon	Tue	Wed	Thu	Fri	Sat	
		1 11-3	2 10-3 Shop Open 1:00-3:00 Day Light Section 7:30 Mineral Section	3 NO Archaeology Section Meetings until fall	4	5 10-4 Shop Open 10-Noon Youth Section	
6 10-4 Shop Open	7	8 11-3 Shop Open	9 10-3 Shop Open 6:30 Gemstone & Faceting Section	10	11	12 10-4 Shop Open	
13 10-4 Shop Open Mother's Day	14	15 11-3 Shop Open 7:30 Paleo Section	16 10-3 Shop Open 7:30 Mineral Section	17	18	19 10-4 Shop Open 10-Noon Youth Section 1:30 Beading Section	
20 10-4 Shop Open	21 7:30 Lapidary Section	22 11-3 Shop Open	23 10-3 Shop Open	24	25	26 10-4 Shop Open	
27 10-4 Shop Open	28 Memorial Day	29 11-3 Shop Open 7:30 General Meeting	30 10-3 Shop Open	31			

The BACKBENDER'S GAZETTE

**The Newsletter of the
Houston Gem & Mineral Society**

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Houston, Texas 77099

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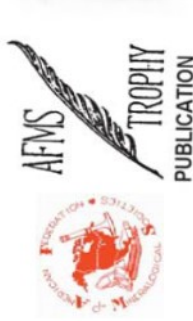


SCFMS

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