



The **BACKBENDER'S GAZETTE**

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

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July 2013

The Miner

by John Anderson

Member of the Houston Gem & Mineral Society

This story of *The Miner* is about going to a manganese open-pit type of mine and collecting lapidary-quality rhodonite.

In this story I feel there was a funny happening while extracting the rhodonite from a manganese open-pit type of operation that I would like to share with you.

This open pit operation was a very small operation that started with manganese ore, but the deposit of manganese ran out so the mine closed down. The mine had been abandoned for many years when an acquaintance of a school teacher friend of mine said that he used to own an old manganese claim many years ago, that it had lapidary-quality rhodonite at the site, and it was his for the taking.



So that the mineralogist can appreciate what rhodonite is, its composition is MnSiO_2 ; often with Ca and Fe: The colors can range from a light to dark pink and sometimes

Continued on page 4

General Meeting Dates

by Clyde McMeans

June 25, 2013: **Auction, and Gemstone Carving!!** (1) A brief auction from 7-7:30 p.m. conducted by the Archeology Section.

(2) The main program starting at 7:30 p.m. will be presented by Debbie Kirkpatrick on Gemstone Carving & Incorporating Carvings into Jewelry and Sculptures. Debbie will present and demonstrate the processes and mechanical means that are used to put the pieces together.

July 23, 2013: To be announced

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

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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 & 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://www.hgms.org>.

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have some yellow and green color.

I was living then in the Los Angeles, California area, and it was only about 125 miles to the manganese claim. We knew that the road to the mine had some rough dirt roads, so we elected to bring two vehicles in case one might need assistance.

We followed the owners' directions without any problem and only had to park about one hundred yards away from the claim which was on top of a hill. The condition of the road leading up to the mining claim was almost nonexistent; it wound around the hill, finally reaching the top of the hill and the mining claim.

We had brought with us a heavy sledge hammer, a single jack sledge, shovels, star drills for drilling holes, and dynamite. Yes, dynamite—because we were prepared for any eventuality.

When we arrived, we found a great big boulder of manganese that weighed about 500 pounds and was more than half rhodonite.

We combed the area for any other rhodonite specimens that might be available with no luck, so we finally concluded that the big boulder was indeed the best opportunity to get some rhodonite. With that decision made, we began drilling a hole in the manganese using the star drill. The dynamite would go in the hole. Hand drilling with a star drill and sledge is a very tough job, so we had to change sledge hammer operators about every 15 minutes. When we finally had our hole drilled, we had a hole that would accept almost two sticks of dynamite.

After planting our explosives, caps, and fuses, we lit the fuse and ran behind a large outcropping about 50 yards away. After the explosion we went to recover the Rhodonite that we knew would be laying in abundance all around the blast area. Wrong, there was hardly any of the big rhodenite manganese boulder left. So we decided to call it a day since it was starting to get dark. We collected our tools and began our walk back down the narrow steep winding road to our vehicles, but when we reached our autos, not 50 feet from our automobiles lay our somewhat smaller boulder of rhodenite that was now about 300 pounds. After the explosion, the boulder must have come tumbling all the way around the hill on the bad road to our cars.

With the help of four men, we were then able to lift the rhodonite boulder into our vehicle.

Maybe if I ever try that scenario again, I would put in only one stick of dynamite to lessen the chance of a 300-pound boulder crashing into my vehicle—which probably would have rendered our automobile inoperable.

The Miner
John A. Anderson
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Spring, TX 77389

Day Light Section May Meeting*May 13, 2013**by Karen Burns*

At the May meeting we discussed projects for the remainder of the year. Among the projects under consideration are a class on silver fusion with sterling scraps, broom straw casting, reticulated sterling silver, sand casting, a two-month project to make a handmade bezel pusher or polisher, a class on clasps for handmade jewelry, and a class on a bezel setting for calibrated stones. If any of our members have projects they would like to teach or learn, we are very interested in hearing from them.

Please come to the June meeting and let us know what you would like to learn.

At the December meeting, we will have a Holiday Lunch at the cub house with lunch served at 12 noon.

We had several new members who are new to HGMS, and Deborah Kirkpatrick took them to the shop to begin learning to make cabochons.

Day Light Section June Meeting*June 10, 2013**by Karen Burns*

Twisted wire was the subject of the June meeting. Eight members learned several methods of twisting angled and round wire for use in wire wrapping, jump rings, and for forming into objects. Future programs were discussed, and the decision was to make fusion silver the project for July.

Faceting Section Meeting*Wednesday, July 10, 7 p.m.**by James (Pat) Cockrell**jhc488(at)Hotmail.com*

We want to thank our learn-it club colleague guest speaker Neal Immega for taking time away from the club's shop maintenance and his dreams of hatching a real live Tyrannosaurus Rex for a pet to guard his home. If he succeeds, I want to see a video of how he manages to house train it. Neal's presentation of the software program "CombineZP" at our last month's meeting was very enlightening. Many of us have wondered how to get more visual depth of field from our gemstone micro photos, and this computer program solves the problem. From all of us in the Faceting Section, Thank you, Neal.

Our Section leader Patricia Hildbold has announced that at this month's meeting, we should discuss and start making plans for the November show. Everyone give it some thought before the meeting, and bring with you any new show ideas for us to discuss.

At our meetings we always take time for "Show & Tell." Bring with you any new stones you have cut—good or bad—and share your experiences. We all learn from one

another's accomplishments or failures, so don't be shy. Or bring anything else that might be related to faceting gemstones that you would like to share. Right now I am making a fairly small one-piece portable platform that will unite both a camera and the gemstone subject as one solid unit for either still shots or a photo movie of a rotating gemstone. It may not be fully completed in time for our meeting, but I'll still bring it with me for you to see. You might have an idea on its design I've not thought of yet.

We have new faceting gemstone cutters waiting patiently for the next beginner's class, and we are still looking for an experienced faceting gem cutting person with good people skills to teach the class. You will have assistance if needed, and you won't have to do it alone. Advertising our Faceting Section at shows for new members is a waste of time if we are not also teaching how to do it. These classes are important to our gemstone Faceting Section survival. If you are qualified to teach the class and have the time, "WE NEED YOU."

Mineral Section Programs

by Paul Brandeis

July 17, 2013 (Workshop): Topic to be announced

August 21, 2013 (Workshop): Introduction to Metal Detector Use:

Metal detecting has become a very popular pastime for many people, both young and old. Members of the Mineral Section will give a brief overview of how a hobbyist metal detector works, how they are used to find buried treasure, and their benefits to the mineral collector. Members that own a metal detector and want to learn more about its use are encouraged to bring it to this meeting. Also, members that have specimens that were found using a metal detector are encouraged to bring them to the meeting as well and share their stories. Refreshments will be provided.

Archeology Section Meeting Minutes

June 6, 2013

by Vice-Chairman Terry Proctor for Secretary Burton Dworsky

Before the meeting started, Chairman Garth Clark and others had a lively discussion about various Archeological and other matters. The meeting was called to order at approximately 8:00 p.m. Ten HGMS members were present: HGMS President John Caldyne, Chairman Garth Clark, M.D., Landon Clark, Jon Hart, HGMS Secretary Michele Marcel, Veronica Murdock, visitor Jane Ott, Vice-Chairman Terry Proctor, J.D., Lisa Schwartz, and Thomas Schwartz.

The minutes of the May, 2013, meeting were approved by motion of Michele Marcel and second by Terry Proctor with a unanimous vote. The Archeology Section Auction scheduled for 7:00 p.m. on June 25, just before the General Membership meeting on that date, was discussed. HGMS member and Professor at Lone Star College, Nathalie Brandes will present the program on that evening to the General Membership. *Editor's Note: Nathalie Brandes cannot make that meeting. The program will be presented by*



Debbie Kirkpatrick instead. Additional donations for the auction were brought in: Jon Hart donated an excellent collection of arrow heads from Lake Livingston, in Texas, and Chairman Garth Clark donated a real gold rockhound hammer with a diamond in the handle (see above).

These additional items join a number of other items donated by Archeology Section members and by others for what likely will be a great auction of valuable collectibles and other items.

Chairman Clark brought up the subject of a replacement for the Archeology Section Board member, Terry Proctor. There being no other suggestion, Dr. Clark gave notice that he would be willing to be both the HGMS Board Representative from the Archeology Section as well as Chairman. There was some discussion about whether this was in keeping with the HGMS Board policy. Michele Marcel stated that it was and had been done before. Dr. Clark had talked about his present work with the Boy Scouts and as President of a coin club. Terry Proctor pointed out that being on the Board required the Representative to be present at all meetings and other duties on the Board, and that the commitments which Dr. Clark already had appeared to be a lot of responsibility already. Dr. Clark said he could handle it.

Dr. Clark called for a vote which was 8 in favor and 1 abstention; therefore Dr. Clark will replace Terry Proctor on the HGMS Board as the Archeology Section Representative. Terry abstained, not as being opposed to Dr. Clark taking the position but in the belief that with something like 650 members of HGMS, members should not serve in dual capacities as both Chairman and Board Representative. He also cautioned Dr. Clark about having already a lot of duties and pointed out that others in HGMS had burned themselves out by taking on too many duties.

The Section discussed a number of current archeological matters including the recent discovery of a number of ancient past floods which together could be the basis of various religious stories of great floods. The last item covered was the topic for the evening. The subject was "On the Trail of the Mimbres." This was AmerIndians in the late Tenth Century for about a century who made rather plain-appearing bowls from the outside, but the insides were decorated in black on white clay with depictions of

tortoises, fish, jackrabbits, and humans.”

Upon a motion, its second, and a unanimous vote, the June meeting was adjourned before 9:30 p.m.

General Meeting Minutes

May 28, 2013

by Michele Marsel, HGMS Secretary

The meeting was called to order at 7:30 p.m.

Visitors and New Members: There were two visitors.

Annette Duong said she has a gemstone collection and is interested in getting advice on how to sell her stones.

Randy Allen described himself as a rock professional. He spoke briefly about his recent trip to Woodward Ranch.

Prior Month General Meeting Minutes: Karen Burns moved and Garth Clark seconded that the April 2013 General Meeting minutes be approved as published in the May 2013 BBG. The motion passed unanimously.

Drawing: Billie Clark was the door prize winner.

Announcements:

- Shop Steward Sharon Halton reminded everyone of Sunday open shop from 10:00 am to 4:00 pm. She also reminded everyone to use eye and ear protection while in the Shop.
- Reminder from the Archeology Section—their auction will take place June 25 from 7:00 to 7:30 p.m. immediately preceding the General Meeting.
- Garth Clark described the Hoppel Mineral Collection auction to be held in Dallas at Heritage Auctions on June 2, 2013.

Business: No business items were presented during the meeting.

Program: The Lapidary Section Auction was the program for the evening. Ed Clay and Mary Ann Mitscherling presided as auctioneers. The auction consisted mostly of decorative or gift items including gemstone trees and decorated rock slabs. There were also some mineral specimens. Lapidary Section still has a large amount of cutting material that will be featured in sales or auctions at a later date.

Adjourn: Michele Marsel moved and Clyde McMeans seconded that the meeting be concluded. The motion passed unanimously, and the meeting was adjourned at 9:15 p.m.

Get last-minute news about club events by sending a note to Neal Immega at
n.immega@swbell.net.

Board of Director's Meeting Minutes

June 4, 2013

by Michele Marsel

✓	President – John Caldyne	✓	Beading Rep – Jillyn Hailes
✓	1 st Vice President – Clyde McMeans	✓	Faceting Rep – Gary Tober
✓	2 nd Vice President – Beverly Mace	✓	Lapidary Rep – Phyllis George
	Treasurer – Rodney Linehan	✓	Mineral Rep – Pete Stassi
✓	Secretary – Michele Marsel	✓	Paleontology Rep – Mike Dawkins
✓	Past President – Charlie Fredregill	✓	Day Light Rep – Mary Ann Mitscherling
		✓	Archeology Rep – Terry Proctor

The meeting was called to order at 7:30 p.m. with a quorum of 10 members present.

Guest: New member Joshua Estes dove right in by sitting in on a Board meeting to find out what was going on in our Club.

Previous Month Board Minutes: Clyde McMeans moved and Charlie Fredregill seconded that the May Board Minutes be accepted as published in the June 2013 BBG. The motion passed unanimously.

Treasurer's Report: No report.

Office, Committee, and Section Reports

Archaeology Section: The Section will hold an auction prior to the start of the June 25 General Meeting (7:00–7:30 p.m.) Part of the auction proceeds will go to the HGMS Building Fund. Terry Proctor will post photos of auction items on the Club Web site in advance of the auction. There will be a door prize at the June 6 Archeology Section meeting if 15 or more attend.

Beading Section: Because the Section attended the Stafford Beading show Saturday, June 1, there will be no meeting on Saturday, June 15, 2013.

Day Light Section: No report

Education Committee: Charlie Fredregill has agreed to be the interim Education Chair. He is waiting for materials from Sarah Metsa that include instructor contacts. Charlie asked Board members to give him information on potential instructors for all types of classes.

Faceting Section: Meeting explained the software that shows how to create various faceting designs

Lapidary Section: The goal of the May meeting was to emphasis R.O.L.E. standards for grading cabochons. (These standards can be downloaded from the Lapidary Section information found on the Web site's home page. Just scroll down until you reach the Lapidary button, then click on that button. You will see a R.O.L.E. button—clicking on that opens the instructions.)

Section members selected from a group of findings and will set a cabochon in their chosen findings. A storage unit has been selected for storing unsold donor materials. The Section plans to move items to storage on Saturday, June 8 and is requesting volunteers from 10:30 a.m. to 2:00 p.m. The auction held at the May 28, 2013 General Meeting brought in \$940. Proceeds will be split 50% to the donor, 25% to Lapidary Section and 25% to the HGMS. The Section's preference is that it goes to the HGMS Building Fund, but it might automatically go into the general fund.

Mineral Section: The May 15, 2013 meeting featured a talk on mines in California near the ocean and on the geology of the area. The June 5, 2013 meeting is a swap meet. Starting in July, the Section will be on summer schedule and will meet once each month on the third Wednesday.

Outreach Committee: No activity until school is back in session.

Paleo Section: At the May 21, 2013 meeting, Mike Dawkins gave a presentation on Lake Texoma and Post Oak Creek (Dennison, TX and Sherman, TX), and he discussed what can be found in those areas. Three people attended a field trip to the areas.

Show Committee: No report. It was noted that many years ago the Houston Chronicle had a small booth at our Show. It was suggested that we invite the Houston Chronicle to do this again in the hope it would encourage the Chronicle to cover the show in an article.

Youth Section: Members are busy working in the shop. At the June 1 meeting, a new 6-year-old member made his first cab and did a great job.

BBG Editor and Webmaster: The deadline for the August 2013 BBG is Wednesday, June 12, 2013.

Old Business

- **Show Trailer storage:** Both trailers have been moved into storage at AAA Storage in Humble. We are paid in full through July 2014. Insurance for the trailers and their contents has been added to the existing HGMS insurance policy.
- **HGMS Insurance:** Clyde McMeans submitted an application for D&O (Directors & Officers) Liability Insurance and is waiting for a quote. A land elevation certificate is required by our insurance company for flood insurance. The certificate has been ordered, and a flood insurance quote will be given after completion. Terry will check with Dunn SW at the June 5 Board Meeting to see if an existing one is available.
- **Bylaws Update:** No update.
- **HGMS Registered Agent:** President John Caldyne is working on finding a replacement for this position as requested by Terry Proctor. He spoke with several individuals and the search is ongoing.
- **Ceiling Tile Replacement:** Neal Immega will be asked to replace the ceiling tiles upon his return from vacation in late June.

- **Exterior Lighting:** Arrangements are in progress to move the HGMS-owned light fixture from the back side of our building now that this area has been fenced off and is no longer accessible to HGMS members.
- **Education Chair:** John Caldyne confirmed that Sarah Metsa will step down as Education Chair. Charlie Fredregill has agreed to serve as interim Chair for a couple of months until John is able to find a long-term replacement.
- **Publicity Chair:** Pete Stassi took the action item to write up a position description for this new position.
- **Trophy Display Area:** Terry Proctor reminded President John Caldyne about a planned attempt to have the original Trophy Board returned to the clubhouse. Terry will provide the name of the member who was given the board so John can contact him. More discussion was held on converting the back window wall into display space, including the use of display fixtures with open space on top for trophy and plaque display. Mary Ann Mitscherling will look into sources and cost of used fixtures similar to the ones we already have. Pete Stassi will develop a construction plan for the back wall over the windows, and will provide estimates for materials including painting the main meeting room.

New Business

- The Lapidary R.O.L.E. display plaque is missing from the wall near the Library door and has been for some time. Please contact Lapidary Section Chair Ed Clay if you know its whereabouts.
- A reminder to keep doors closed, particularly exterior access doors, was issued. The need to reinstitute use of the access log (sign in/sign out) was also noted. Posting the Log by the main entry door was suggested so it would not be overlooked.
- **2013 Budget** – A 2013 Club Budget was presented and discussed. Due to rising costs including a large increase in the upcoming 2013 show expenses (the Humble Civic Center rent again had a major jump in 2013 right after a similar jump in 2012) and the increasing cost of our insurance, it was noted the Club's profit margin continues to decrease. There was discussion about how to increase revenues. One option discussed was an increase in dues for 2014. Terry Proctor moved and Phyllis George seconded to table a vote on increased dues until the next Board meeting so that members have an opportunity to determine what they consider appropriate increases prior to voting on the matter. The motion passed unanimously. Beverly Mace will provide numbers for all membership categories to Mary Ann Mitscherling who will present an analysis of increase scenarios at the July 2 Board Meeting.

Adjourn: Charlie Fredregill moved to adjourn the meeting, and Terry Proctor seconded. The motion passed unanimously and the meeting was adjourned at 9:00 p.m.

However, following the official adjournment, Beverly Mace moved and Pete Stassi seconded that the 2013 HGMS Budget be approved as presented. Not keeping in mind

that the meeting had just officially been adjourned, the members voted on the motion which passed with ten votes in favor and Terry Proctor abstaining because the meeting had officially ended several minutes prior to the motion being offered. The vote was not valid, and the 2013 Budget will be addressed during the July Board meeting.

AFMS President's Message

*The Way I See It
by Don Monroe,
AFMS President
from AFMS Newsletter 6/2013*

Why Not Be a Mentor?

All of us who have been involved in various lapidary activity, federations, clubs, etc. know many, many talented people and many of them serve as instructors. There seems to be a nearly universal complaint from all of us. "No one from our gene pool (relatives or friends) wants to learn what we do." In my family, including our children and our grandchildren, there seems to be only one person who shows any interest in learning the skills in which we take pride.

Well, you may have to give up on your kids and grandchildren. An old expression is that you can lead a horse to water but you can't make him drink. We have concluded that if you want our hobby to grow and prosper, you may have to cast your net wider and find an interested person, preferably a younger one, to mentor.

Ann and I are most fortunate to find a small family (two children) who really want to learn what it is we do. They want to acquire skills and create "stuff" and do fun things. There is nothing more rewarding than teaching someone who really wants to learn, and frankly, schools do not always meet the needs of the young people. I cannot tell you how to find someone to mentor. Take every available opportunity to demonstrate your craft and speak to any groups who will let you have the floor. Be sensitive to the reactions of the audience, and you will find those who want to learn.

I'm looking forward to meeting many of you when the AFMS and SFMS hold their joint convention this September 18–22 in Jacksonville, Florida. More information should be available on the AFMS Web site shortly. Don



Refreshments Scheduled for the HGMS General Meetings in 2013

We have a donation jar—the “Sabre Tooth Kitty”—where members may make a contribution to help defray the cost of refreshments. So please remember to feed the “Kitty” while helping yourself to some sweet or savory snacks.

Name	Refreshment Months
Michele Marsel	July - August 2013
John Caldyne	September - October 2013
Clyde McMeans	November 2013

AFMS/SFMS 2013 Annual Convention and Show AFMS/SFMS 2013 Annual Meeting

September 18th-22nd

Sponsored by the Jacksonville Gem and Mineral Society, Inc

<http://www.iagxgemandmineral.org/> A 501(c)(3) not for profit organization



All AFMS and SFMS meetings will be hosted at the:

Marriott, Jacksonville, 4670 Salisbury Road

Jacksonville, FL 32256, 904-296-2222 or 1-800-962-9786

(Mention AFMS meeting for \$82 room rate. Offer Expires

August 5, 2013.) (This rate is good from Sep 15th to 25th)

AFMS Uniform Rules - Wednesday 7pm

AFMS Annual Meeting - Thursday 9am

AFMS Scholarship foundation- After Annual Meeting

You are invited Thursday Night to Hanna Park at the beach. Star Gazing with Northeast Florida Astronomy Society members and Telescopes (Saturn will be spectacular!) Cook out provided by Host society JGMS.

JGMS Annual Show and Sale Starts - Friday 1pm

SFMS Cracker Barrel Meeting - Friday 7pm

SFMS Annual Meeting - Saturday 9am

ALAA Meeting - Saturday 2:30pm

Awards Banquet - Saturday 6pm

Editors and Webmasters Breakfast - Sunday 9am

40+ retail dealers, Fantastic exhibits and speakers from around the country. See the NASA Moon Rock, Lectures on near earth bodies, meteorites, demonstrations, workshops, hourly door prizes, silent auctions and more.

Enjoy the Annual Jacksonville Gem Show!!!

Heavens and Earth

Jacksonville Gem and Mineral Society,
25th Annual Gem & Mineral Show and Sale
September 20-22, 2013 Morocco Temple



The 38th Annual ArkLaTex Gem & Mineral Society Show

is proud to host
The 2013 South Central Federation
Mineral Societies Convention



Bossier Civic Center
Bossier City, LA



August 17, 2013 10 am – 6 pm

August 18, 2013 10 am – 5 pm

Custom & Unique Jewelry Hourly Door Prizes
Lots of Demonstrations Flintknappers on site
Grand Prize Drawings

Amethyst Agate Amber Emerald Geodes Ivory
Jade Jasper Opal Pearls Ruby Fossils

Exhibits by Society members

Admission: \$4.00 Daily

Children 6 and under free, Students with ID \$1.00

Website: www.larockclub.com

For more information contact:

Antony Thomas at (318) 518-0907



Bench Tips

by Brad Smith

BradSmithJewelry@yahoo.com

More Bench Tips by Brad Smith are at [facebook.com/BenchTips/](https://www.facebook.com/BenchTips/) or see the book "Bench Tips for Jewelry Making" on [Amazon.com](https://www.amazon.com)

Easier Prong Setting

When setting stones in a prong mount, the tool is less likely to slip off the prong if you grind a groove into its face or rough up the face a bit with sandpaper. Some folks prefer a prong pusher for doing this, and others like a set of pliers.

Easiest way to cut a slot on the pusher is with a file, and the easiest way to create a slot on one jaw of your pliers is with a cutoff wheel. A knife-edge silicone wheel works well to rough polish the slot.



Revolving Solder Pad

Often when we're soldering we have multiple pieces on the pad or a single piece and would like to work on several sides of it during the same heat.

One of the ways to deal with this is to put your solder pad onto a turntable. That way you can rotate each piece into position when you need to or can rotate the pad to reach another side of a larger piece.



All you need to make one of these is a piece of aluminum sheet and an inexpensive turntable assembly. A good hardware store will have both, although you can usually find the aluminum in the scrap pile of a local sheet metal shop.

In building a turntable for my 6-inch solder pad, I used a seven-inch square piece of aluminum and cut out 1/2 inch notches from each corner. Then I used a bench vice to bend the sides along the dotted lines to form a tray that cradles the solder pad. I attached the tray to the turntable assembly with a couple small machine screws and nuts.

Spot Sanding Brush

Sometimes you have a little discoloration or debris to clean from the bottom of a pocket, from an area of coarse textured surface, or from a small space between two soldered objects. Finding something to get into those close areas is always an effort in

creativity.

One tool I have for these special occasions is a glass fiber spot sanding brush. It's great for cleaning a small area and doesn't leave deep scratches, only a faint satin finish.

There's probably several manufacturers of these pens, but one is the PrepPen Adjustable Sanding Pen from Amazon. You can see it at



<http://www.amazon.com/Prep-Pen-PrepPen-Adjustable-Sanding/dp/B000J18RT6/>

Dendrites vs. Moss Agates: Orbicular Jasper vs. Polka Dot Agate

from Petroglyph 06/2000, via Rock Chip Reporter, 04/2008, Breccia 09/2008, Calumet Gem & the Pegmatite 1/2010, Glacial Drifter 5/2012, Rocky Reader 6/2012, and others

We are usually delighted but not surprised to find inclusions in crystal, e.g. quartz of one color or another, rutile, sagenite, and “stars.” The appearance of inclusions is obscured, and our imagination takes hold.

Chalcedony (clear to cloudy), agates (clear but usually banded), and jasper (opaque) are all variations of silica oxides, with hardness between 6 and 7, which makes them very suitable for polishing. They may all have included material, and the nature of the inclusion is dictated by the composition of the host rock material and the manner of rock formation.

Dendritic chalcedony and moss agate are terms or names frequently applied to the same material. They are basically similar, but dendrites can form not only in chalcedony and agate but also on limestone and soapstone and some sandstone. The dendrites form on a surface and are two-dimensional, like snowflakes or frost crystals on windowpane. If the rock is chalcedony, the dendrite forms on the surface, but more chalcedony may entomb it. The dendrites are usually earthy, black, brown, or reddish, but near Four Corners in the eastern Mohave near the junction of Hwy 58 and Hwy 395, rockhounds reputedly find blue.

The “mosses” of moss agate are not organic material at all but chlorite or celadonite, and are visible impurities in the agate. Scientists attempt to distinguish between the two by determining, if possible, whether the dendrite/moss or the material rock formed first. The moss forms while the chalcedony is still gel-like and can then form three-dimensional shapes with the stone. Moss agate, also widely distributed, can be a variety of colors: green, black, white, yellow, red, orange, and tan. It is widely used in jewelry and polishes beautifully if care is taken not to cut into and pluck the moss.

Multi-colored balls can appear in rhyolite flows. Rhyolite is a fine-grained igneous

rock if it contains sufficient silica to take a brilliant polish and is sometimes called jasper. Orbicular material usually appears as a mass of rhyolite that has silicate. As the rhyolite cools, sometimes excess silica starts to precipitate out of the magma, forming spherical balls. The ball shape is the form that is extremely concentrated silica (cristbalite) takes, as opposed to the crystal form in dilute concentrations. However, any material that by composition or consistency is immiscible (not mixable) with the host magma will also form balls.

Regional metamorphism can also form orbicular jaspers. We hear names like Rainforest Jasper from Australia, Leopard Skin Jasper from Mexico, Poppy Jasper from California, and Ocean Jasper from Madagascar. We may find one color surrounding another, or bands of balls, veils of lighter colors staining the background. Polka Dot Agate, from Oregon, has iron-rich spheres floating in snowy, extremely fine-grained jasper along with veils of golden brown. The material is so fine-grained it is almost chert and resembles porcelain.

The rock distinction between jasper and chert is if it's attractive, it's jasper; but if it's dull, it's chert. Some jasper represents replaced limestone or dolomite, some occurs as nodules, and sometimes it is part of the gangue of mineral deposits by hydrothermal or meta-somatic processes. Agates are translucent and usually banded, with sub-vitreous luster. Jasper is opaque with a dull to pearly luster. To a Rockhound, jaspagate is a fine mixture of the beautiful oxides.

Here are some imposters and misnomers to look out for:

Turquoise ribbons in a mottled tan “rhyolite” matrix (like material from the Royston Mine) is being sold as “Royston” or “Sleeping Beauty” turquoise. This material is being created in China and can be spotted two ways:

- 1) The dividing line between the “turquoise” and the matrix is indistinct.
- 2) Under 10-power magnification, you can see that the “rhyolite” matrix is made up of cemented particles.

“Cripple Creek Turquoise” with gold veins running through it. This material is created in China from a turquoise powder (maybe plastic) and bronze wires.

Lapis with pyrite chunks and malachite with pyrite chunks. These are both created in China from ground lapis and ground pyrite (or malachite & pyrite) and bound together with resin.

Lapis and other opaque “crystals” that are cut to look like quartz crystals.

Howlite and magnesite dyed to resemble turquoise, lapis, rhodonite, etc.

Safety Note: A Couple of Points on Driving Safely

by Owen Martin

Safety Chairman AFMS/SCFMS
from SCFMS Newsletter 5-6/2013

Hello folks,

My inspiration for this month's safety article is from an accident we had at work recently.

While in North Dakota I received a phone call from a supervisor at one of our ND drilling sites and learned that one of our crew truck drivers had been in a rollover accident. Historically speaking, any rollover accident in the oil patch is a BAD thing. Thankfully in this case we do see that there is an occasional miracle. Although the truck flipped, it did land upright and my coworker walked away without a single injury.

With all that being said, we still needed to do a preliminary incident investigation. The gentleman involved had just finished a 13-hour shift and had about an hour drive back to camp. First thoughts were along the lines of "asleep at the wheel" or "texting while driving." It was neither.

The cause was "**deviating from the lane of traffic**" which is known amongst accident investigators to be a critical component in compounding the severity of accidents. In this case my coworker had a flock of birds (ducks or pheasants—he wasn't sure) fly out of the ditch on his right side. His immediate reaction was to swerve and miss the birds. What resulted was the loss of control of the vehicle as the rear of the truck slid into the ditch, hitting a culvert, and resulting in the vehicle rolling. The consequences of "swerving" lead to a totaled vehicle and a potential fatality. Thankfully the latter did not occur.

One thing I learned when I got my international driver's license in Japan several years ago is that Americans like to "swerve" in order to try and avoid hazardous situations. The Japanese had some extremely detailed statistics on how Americans driving in Japan, while trying to avoid accidents, actually caused something worse.

The point of the article, and I understand that not everyone will agree with it, is that swerving to avoid hazards in the road can actually increase your risk for a much more serious accident. Better to hit a few birds than flip your vehicle...

My second point for this article is that "seat belts DO work!" My coworker in ND was properly restrained and walked away from his accident.

One of the saddest statistics I ever read came from some research I did a few years ago for a safety presentation. The NTSB had a statistic that over about a year's time in the mid-2000s that 31,000 children were fatally injured in automobile accidents. Of those 31,000, investigations



showed that 16,000 of those children were shown to not have been properly restrained in seat belts or car seats. This is a systemic failure in our society's commitment to protect our children.

Please do not be cavalier with the safety of your children and do keep them properly buckled up while on the road.

Thanks and be safe!!!

Safety Tip—Think!!!
from The Roadrunner 3/2013

It's not just the hard hat, the specs and the glove,
That bring you home safe to the family you love.
The guard on the grinder, the chain on the hose,
The safety load blinder, the foul weather clothes,
The latch on the load hook, the outrigger block,
Emergency brakes, the standard wheel chocks,
The safety valve feature on high pressure tanks,
The cave-in protection on vertical banks.
The well installed belt guard, the safety toe shoes,
The fire extinguisher ready to use,
The seat belt that holds you inside of your car,
The road sign of safety, wherever you are,
These things are mere tools, like a carpenter's plane.
They won't produce safety, or minimize pain.
Your health and your safety depend upon you,
On whether you think about things that you do.
So think before acting; make thinking a rule.
Make use of your brain, your best safety tool.

Press Release: Casting Underway for Gem-mining Television Show
from Rock&Gem 6/2013

Rock & Gem is not responsible for the claims made in this press release. Interested parties should exercise due diligence before participating.

The creators of the hit show "American Pickers" are seeking all types of people to prospect a wealthy miner's land for emeralds! A small portion of this land has already generated millions, and now the landowner is sharing the rest of his land and its wealth with you!

We are looking for 15 teams of two from all walks of life that are up for an adventure and are willing to do what it takes to bring home the big bucks. We are looking for average Joes, married couples, professional miners, and everyone in between. Just be a pair/team—brothers, sisters, friends, father and son, mom and daughter, coworkers, married, divorced, rich, poor, anything-as long as there are two of you willing to work together to make the big bucks. Just appear to be between 18 and 65 years old and live

anywhere in the USA or Canada.

If you or anyone you know would like a shot at adventure and millions in cash and jewels, please e-mail Casting AP at prospectmyland@gmail.com or call (310) 358-3010.

Editor's note: Caution!! Caution!! Please see Rock & Gem caution at the beginning of this article! Who knows--it might be a scam.



World's Largest Rose Rock Cluster

Ardmore, Oklahoma

by Paul Good

SCFMS Newsletter Editor

from SCFMS Newsletter 5-6/2013



(SCFMS Newsletter Editor's Note: Information taken from printed pamphlet. Margaret and I were able to see this on display a few years ago. I just wish we had a picture of it.) Paul

The world's largest single rose rock cluster known to exist weighs 788 pounds, is 62 inches long, 24 inches high, and 18 inches thick. The barite rose rock can be found only in an 80-mile strip which runs north to Guthrie, OK and south to Paul's Valley, OK.

The Oklahoma legislature adopted the rose rock as the official State Rock in 1968. This cluster was named "Redwine and Rose" for its founders, Tom and Ann Redwine. It was discovered 20 miles southeast of Norman, and it required three months to excavate the rock through the use of small brushes to keep the cluster intact. The rose rock cluster required four men working for two days to extract and four days to remove sand and debris.

A rose rock cluster of this kind and quality are many times rarer than diamonds. Rose rocks grew from the slow crystallization of sand and seawater supersaturated with barium sulfate, resulting in tabular crystals. The rose rock is composed of numerous tabular crystals intersecting one another around a central axis that appears to rotate on the axis. The result is a rosette.

It is this rare formation of tabular crystals that makes the rose rock unique. This took place under the Permian Sea 250 million years ago in what is today Oklahoma. Because barite is harder and more durable than sandstone, the sandstone eroded leaving the rose rock formation on exposed rock surfaces. Further weathering caused them to detach into individual specimens. Barite is just one type of mineral capable of forming rosettes. Others are hematite, aragonite, chalcedony, and selenite. Oklahoma, however, is the only place in the world where barite rose rocks can be found.

This specimen is owned by LOVES. It is displayed at LOVES, 12th Avenue N.W., Ardmore, OK. (North of I-35 at exit 32). This cluster is on view for the public when LOVES is open for business.

The Ten Rockmandments

from Nana Gems via the Berks Geode, Desert Diggings 3/1999, The Franklin County Rockhounder 3/2013, Rock Buster News 4/2013, and Mineral Minutes 6/2013

- Thou shalt not touch thy neighbor's minerals unless he placeth them into thy hand.
- Thou shalt not test the strength of crystals by punching, squeezing, or biting.
- Thou shalt not drop thy neighbor's fossil, for many do not bounce properly.
- Thou shalt not place thy neighbor's specimen into thine own pocket.
- Thou shalt not argue the name of that mineral too violently; sometimes thou couldst be wrong.
- Thou shalt not test thy neighbor's agates for hardness by rubbing them together.
- Thou shalt not climb over thy neighbor when on a field trip, lest thou art willing to spend the remainder of the day digging him or her out.
- Thou shalt protect thine eyes, hands, and feet, so thou canst enjoy many more field trips.
- Thou shalt not encroach upon thy neighbor's digging, lest his hammer be dropped upon thy toe.
- Thou shalt not complain about or denounce thy club officers, under penalty of being elected as one thyself.

Just Another Rock

by Rex Barrie

from Owyhee Gem 5/91

via Rockhound Gazette 1/1994, via The Roadrunner 3/2013

"It's just another rock!"
That's what most folks say,
But to us rockhounds
We see it quite another way!
Turn it over—round and round,
And try to size it up,
I think I'll split this open,
And maybe try my luck!
Anticipation is growing
As the blade comes near the end,
It's bound to be a beauty,
It just has to be a gem.
And now the blade quits spinning,
The treasure's cut in two,

Lift the lid and look inside,
That's what rockhounds do!
Just another rock?
This time I guess it's true,
But the next one will be better!
I hope so—don't you?

ALAA Needs You!*by Shirley Leeson**President, ALAA**(president@amlands.org)**from AFMS Newsletter 6/2013*

With the push by the ultra-environmentalists to close even more public lands, I am urging all rockhounds to join ALAA. If we are united in our cause and can produce numbers large enough to impress governmental officials, we might have a chance at getting our voices heard. We have been in touch with like-minded organizations all over the country in a loose coalition to hold back the tide of special interests, and many of these organizations have taken the time to share their expertise and knowledge to bring us up to speed.

What is happening to our public lands??? Sometimes it's just a small, charming animal who desperately needs hundreds of acres of land to exist and has the clout behind it to make it happen. Other times it's beautiful scenery that must not be sullied. Let the professionals take pictures, put it in a book and sell it to you to look at, instead of being there to see it yourself. And most recently it's wind farms and solar panels—these are rising up like phoenixes all over the western public lands landscape. Why not use public lands? It's there for them to take. All they need is an order to release public lands for GREEN (commercial) purposes....the government will get their money back.

Well, the dirty little secret is that many have gone belly up on more than one occasion. Many of the projects are now being run by foreign companies. And the public lands shrink to next to nothing. Question: when public lands aren't there any more, where will the special interests go? Eminent Domain?

Recently there was news of a Congresswoman from New York, Carolyn Maloney, who was advocating for an additional 23 million areas of wilderness in Idaho, Montana, Oregon, Washington, and Wyoming. Tell me what she knows about these states and would she consider putting New York's Central Park in "Wilderness."? This is why we need rockhounds from the Eastern states to step up and ask, "What do you know about wilderness in the western states? Why is someone from the east advocating wilderness in the west???"

But I digress.... WE NEED YOU. First we need you to join—to swell our ranks to a proportion that will make the government take notice. And then, we need you to get involved.

Please go to www.amlands.org and look on the left side for JOIN-APPLICATION. Our membership chair, Colleen McGann, will cheerfully accept your checks and sign you up. Or we can sign you up at several of the regional shows throughout the year.

I can tell you that in the 1970s and 80s, rockhounds were known by the BLM and Forestry...in the Western States, then we faded away. With our "ALAA Clean-up Program" we are being recognized, and that's a good thing.

Join us and help us keep our public lands open for the public.

New Method of Tumbling

by Al Nutile in *Tulip City Conglomerate*
from *Pickin's & Diggins* 7/1996 et al, via *SCRIBE* CD 2008,
via *The Pineywoods Rooter* 5/2013

The writer believes that the following idea can take much of the work from the popular method of tumbling. All of the instructions we have seen state: "Wash stones and tumble very clean between each change of grit or final materials," at the same time stating, "If liquid is too thick add some slurp or grit from previously used material."

We know some will argue against our method, but—here goes: Don't wash at all after each week of tumbling with grit. Start with #50 grit, tumbling for a week. Then DON'T EMPTY THE TUMBLER, but add 5 teaspoons of new grit [one step finer] to the mixture in the three pound tumbler. Follow this procedure through #190, #320, and #600 grit. Now [finally] thoroughly wash the stones and tumbler before pre-polish and final polishing.

For a really glossy finish, take one or more weeks [after washing out the polishing powder] and adding three spoons of sugar, one spoon [level] of *Cascade* or *All* or any non-sudsing detergent, and add about ten drops of muriatic acid if you have some. I let it stand one minute—open, close tub, and tumble for a week.

We have run eleven tubs using this method and found that even ordinary sandstone comes out highly glossed. Except for extra final steps, you save three washings and getting rid of the slurp each time. Saves time, work, and mess, and still gets a better polish.

Pterosaur: Dinosaur Named After Daisy Morris

via *Huffingtonpost*, 3/2013, via *The Rockpile* 5/2013

A girl who was just five years old when she stumbled across a completely new species of flying dinosaur is to have it named after her. Daisy Morris, who is now nine, found the fossil at Atherfield beach on the Isle of Wight in 2009 and took it to local dinosaur expert, Martin Simpson.

With colleagues from the University of Southampton, he confirmed it was a new species of pterosaur, about the size of a crow, from about 115 million years ago and which will now be called *Vectidraco daisymorrisae*. *Vectidraco* means "dragon from the Isle of Wight," while the rest of the title refers to the young fossil-hunter.

Mr. Simpson said: "When Daisy and her family brought the fossilized remains to me in April 2009, I knew I was looking at something very special. And I was right."

"The fossil turned out to be a completely new genus and species of small pterosaur, a flying reptile from 115 million years ago in the Lower Cretaceous period, which because of the Island's eroding coastline, would have been washed away and destroyed if not found by Daisy.

"It just shows that, continuing a long tradition in paleontology, major discoveries can be made by amateurs who often are in the right place at the right time."

The pterosaur fossil has now been donated to the Natural History Museum.

Crystal Formation

by Aletha Hoogeterp

from Rock Dust, March 2012 via Gem Cutters News 5/2012

Crystals are among the Earth's most beautiful creations, appearing in the patterns of snowflakes, the frost on your windows, or stones in your backyard. Crystals are solid material in which the atoms are arranged in regular geometric patterns. Each geometric shape is the result of the way the atoms come together as the mineral forms. Factors like temperature, pressure, available space, and chemical conditions present in the minerals affect the formation and growth of crystals. Many crystallize from watery solutions, and some crystallize from molten rock such as when a volcano erupts and then cools down quickly.

Crystals can be metals like gold, copper, silver, mercury, and iron and also in precious stones like diamonds, rubies, sapphires, emeralds, and topaz. You will also see crystals in ice, snow, sugar, sulfur, and salt. The three-dimensional properties of crystals reflect the internal atomic structure of the molecules that create them. Each mineral will always form in a range of crystal shapes. Although there are literally thousands of minerals, their crystal shape can be grouped on the basis of their symmetry into seven systems of three-dimensional patterns. These seven patterns are: cubic, tetragonal, hexagonal, trigonal, orthorhombic, monoclinic, and triclinic.

Crystallography is the scientific study of crystals and their structure. Crystals such as quartz and calcite are made up of trillions of mineral atoms or molecules arranged in a uniform pattern. The repeating patterns give the crystals their shapes and colors. Most crystals are clear with smooth flat sides and were formed millions of years ago, deep inside the earth, far underneath the crust where the high heat and pressure helped the crystals grow. Natural crystals start off as solutions of dissolved or melted rock. Crystals form when liquids inside the Earth cool and harden, or when liquids underground flow into cracks and slowly form minerals.

Basically, crystallization is a separation of solids and liquids when molecules cluster together in a repeated pattern. There is an attractive force between the crystal's molecules, and they start to stick together. Sometimes they do this by themselves; other times they start to grow by sticking to a small stone or piece of rock. As the molecules group together, they attempt to become stable or solid. This process is also called nucleation and is the beginning of crystal formation. When the conditions are just right, the crystals slowly begin to grow. As long as the temperature is consistent and the molecules outnumber the liquid, crystals will form. If the molecules cannot join the group, they are reabsorbed back into the liquid. Examples of natural crystal formations are the stalactites and stalagmites in underground caves.

Nucleation can either start with the molecules themselves (unassisted nucleation), or with the help of some solid matter already in the solution (assisted nucleation). When molecules of the “solute” (the dissolved mineral) are in solution, most of the time they encounter only solvent molecules around them. However, occasionally they will encounter other solute molecules. If the compound is a solid when it is pure, there will be some attractive force between these solute molecules. Most of the time when these solute molecules meet they will stay together for a little while, but then other forces eventually pull them apart. Sometimes though, the two molecules stay together long enough to meet up with a third, and then a fourth (and fifth, etc.) solute molecule.

Once there are a certain number of solute molecules, a so-called “critical size” where the combined attractive forces between the solute molecules become stronger than the other forces in the solution which tend to disrupt the formation, this “protocrystal” (a sort of pre-crystal) becomes a nucleation site. As this protocrystal floats around in solution, it encounters other solute molecules which feel the attractive force of the protocrystal and join in. That’s how the crystal begins to grow. It continues growing until eventually it can no longer remain “dissolved” in the solution, and it falls out of solution.

Now other solute molecules begin growing on the surface of the crystal, and it keeps on getting bigger until there is an equilibrium reached between the solute molecules in the crystal and those still dissolved in the solvent. Pretty much the same thing happens in assisted nucleation, except that a solid surface (like a stone) acts as a place for solute molecules to meet. Solute molecules will tend to absorb and aggregate on the surface where the protocrystal will form and the same process will happen.

Our favorite quartz crystals typically grow in hot watery solutions, in so-called hydrothermal environments, at temperatures between 100°C and 450°C and often at very high pressures. If the temperature and pressure changes are steady and slow, large crystals tend to form. If the changes are rapid, smaller crystals will result. No one knows how long it takes for a natural crystal to grow, but the next time you look at one of these most beautiful creations, hopefully you will have a little better understanding and appreciation of the process involved.

Resources used include:

“What Are Crystals” - Creetown Gem Rock Museum 2012

www.gemrock.net/content.asp?page=crystals

“Learning about Crystals for Kids” - eHow

http://www.ehow.com/way_5255258_learning-crystals-kids.html

“How Are Crystals Formed (for Kids)?” – eHow

http://www.ehow.com/info_7946636_crystals-formed-kids.html

“How do crystals form and how do they grow?” - Kiwi Web Chemistry & New Zealand

http://www.chemistry.co.nz/crystals_forming.htm

Show Time 2013

August 10-11	Baton Rouge, LA	Baton Rouge Gem & Mineral Society Baton Rouge Marriott; 5500 Hilton Ave. Diana Martin, (225) 931-7543; Cajunladi@cox.net; Brgemandmineral.org
August 17-18	Bossier City, LA	SCFMS Convention & Show Ark-La-Tex Gem & Mineral Society Bossier City Civic Center larockclub@gmail.com; larockclub.com
August 24-25	Jasper, TX	Pine Country Gem & Mineral Society Events Center, 6258 Hwy. 190W earthscache3@yahoo.com www.pinecountrygms.org
September 14-15	Grapevine, TX	Arlington Gem & Mineral Club Grapevine Convention Ctr., 1209 S. Main St. show@agemclub.org www.agemclub.org/events.php
September 21-22	Denison, TX	Texoma Rockhounds Denison Senior Center
September 28-29	Mesquite, TX	Dallas Gem & Mineral Society Rodeo Center Exhibitor Hall
October 12-13	Temple, TX	Tri-City Gem & Mineral Society Mayborn Civic Center, 3303 N. 3rd ddunn2199@yahoo.com www.tricitygemmineral.org
October 12-13	Fort Worth, TX	Lockheed Martin RA Stone Steppers LMRA Picnic Area, 3400 Bryant Irvin Rd. steve.l.shearin@lmco.com www.facebook.com/#!/groups/132202050142082/
October 18-20	Austin, TX	Austin Gem & Mineral Society Palmer Events Center, 900 Barton Springs Rd. www.austingemandmineral.org
October 19-20	Amarillo, TX	Golden Spread Gem & Mineral Society Amarillo Civic Center 400 S. Buchanan, Regency Room finfran@midplains.coop

2013		July				2013
Sun	Mon	Tue	Wed	Thu	Fri	Sat
	1	2 7:30 Board Meeting	3 NO Mineral Section 10-3 Shop Open	4 Independence Day	5	6 10-5 Shop Open 10-12 Youth Section
7	8 1:00 Day Light Section	9 7:30 Show Committee	10 7:30 Faceting Section 10-3 Shop Open	11 7:30 Archeology Section	12	13 10-5 Shop Open
14	15 7:30 Lapidary Section	16 7:30 Paleo Section	17 7:30 Mineral Section 10-3 Shop Open	18	19	20 10-5 Shop Open 10-12 Youth Section 1:30 Beading Section
21	22	23 7:30 General Meeting	24 10-3 Shop open	25	26	27 10-5 Shop Open
28	29	30	31 10-3 Shop open			

2013		August				2013
Sun	Mon	Tue	Wed	Thu	Fri	Sat
				1	2	3 10-5 Shop Open 10-12 Youth Section
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18	19 7:30 Lapidary Section	20 7:30 Paleo Section	21 7:30 Mineral Section 10-3 Shop Open	22	23	24 10-5 Shop Open
25	26	27 7:30 General Meeting	28 10-3 Shop open	29	30	31 10-5 Shop Open

The BACKBENDER'S GAZETTE

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

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