

The BACKBENDER'S GAZETTE

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

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September 2011



President's Message

by Steve Blyskal

ell the heat and the dry weather have just kept coming, and it seems there is no end in sight. I'm in a constant race against wilting plants and dried out lawns, constantly scanning the skies for any sight of a gray cloud. I see trees showing the signs of stress all over Houston, with brown leaves and dropped limbs, as they try to conserve and survive. Like the trees, we have to pull back and do just what is necessary to get by without heatstroke and sunburn. If you are like me, the only time you go outside is sunrise to 8 a.m. and after 7 p.m. We en-



joyed a brief respite from the high temperatures with a weekend in Vermont in the Green Mountains. Next time we'll go back for a full week. Vermont is a great place to visit, but it does take a while to get anywhere, since most roads are two lane and winding. A perfect place to test the power and handling of my dad's old Passat, which has a turbocharger. I see now why he liked this car so much. We did manage to find a few rocks for the school collections and shipped 25 lbs of gneiss and quartzite back to Houston by USPS Flat Rate. If you are on vacation and flew to your destination, the Flat Rate boxes make a great way to get rocks back to Houston without overloading your suitcase. Please consider doing this if you are in an area with interesting rocks or minerals that are good for our sets.

Continued on page 4

Upcoming Programs

ugust 23, 2011: Nathalie Brandes

Veptember 10, 2011--Saturday--1:30 p.m. to 4:00 p.m. New Member Orientation

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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

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

Membership dues are \$40 for an adult membership, \$60 for a couple, \$75 for a family (including all children aged 5-18), \$25 for a youth membership (ages 5-18), and \$500 for an adult life membership. Advertising rates: \$70 for 2 months, \(^{1}4\) page; \$150 for 6 months, \(^{1}4\) 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.

President's Message continued from page 1

By the time you get this issue of the BBG, the auction at the August General Meeting will be history. The items that have been donated so far are just what I hoped for, and there are a lot of them. The funds raised will be used to send a donation this month to Rocks and Minerals magazine for color photograph costs in their Connoisseur's Choice article which features a new mineral each issue.

Your Board of Directors (BOD) has been working hard this year to bring improvements to the clubhouse, shop, and classrooms. Most information on what has been done can be found in the BOD minutes published monthly in the BBG, and in the General Meeting minutes. If you notice anything that needs improvement, please mention it to your Board rep so that we can discuss and act on it.

We are on the last phase of our yearlong preparation for the annual show, and November will be here before we know it. The Show Committee has been working hard to prepare and publicize the show, and the time is coming for all of our members to step up and volunteer when asked to do a shift in the info booth, ticket booth, security, setup and teardown, and hospitality room. There are also slots available in the Section booths. The call for volunteers will start going out this month and will intensify in October and November. Please try to respond positively when one of the volunteers calls you for a commitment. Publicity has contracted for four billboards for the month before the show, and we hope this extra advertising will pay off with more people finding us for the first time. If you didn't see the billboards on Hwy 59 S and 1960 E last year, they were eye-catching and interesting.

I hope your vacations have been good ones. We are heading to the mountains in September and plan to see a lot of rocks and geology in Colorado and Alberta. Geologists need to get out and see some mountains every once in a while. It's a welcome change from computers and data. See you at the General Meeting in September.

Upcoming Programs--Continued from page 1



From the 2010 Scribe DVD

Geologic Stories Told by a Texas Gully

by Kemp Maer, Ph.D.

Member of the Houston Gem & Mineral Society

Introduction

his article illustrates how an innocuous-looking deposit of gravel in a Colorado County, Texas, gully can actually contain a considerable variety of rocks. While rather homely compared with the materials being worked on in the HGMS shop on any given day, when polished these rocks have a subtle beauty. Moreover, they tell an interesting story about the geology of the West and Central Texas locales from which they came. These rocks have participated in major geologic processes that have occurred during the Earth's history, including continental collisions, mountain building and erosion, volcanism, and river erosion and deposition.

Gully Description and Location

The gully is on a 130-acre tract of land located in northwest Colorado County near the towns of Weimar and Columbus. The land is hilly, with the highest elevations about 150 feet above the Colorado River of Texas which borders the property on one side.



Figure 1. Gully after rainfall. Note level, rocky floor.

quantity of gravel and cobbles lining its walls and paving its floor. (For simplicity the gravel and cobbles will be collectively referred to as gravel.) Also present in the gully are a few exposures of sandstone from the Pliocene Goliad Formation (5.3 to 2.6 million years ago) (Chowdhury and Turco, 2006). Figure 1 shows a portion of the normally dry gully following a rainfall. It is broad and level, with an extensive covering of gravel on its floor. Figure 2 shows gravel spilling into this gully from a deposit that lies just below the level

The gully is 1.3 miles long, of which the upper 0.3 mile is on the property in question. This upstream section is dominated by a great



Figure 2. Gravel spilling into gully from extensive deposit that underlies level surfaces of property.



Figure 3. Close-up of gravel on gully floor. Sandstone chunks are from outcrop of Goliad Formation.

surfaces on the property. Figure 3 is a close-up of gravel mixed with chunks of Goliad sandstone on the floor of the gully.

The rocks spilling into the gully are part of a "terrace deposit," a layer of gravel perched above the present floodplain of the Colorado River. This deposit was once part of the bed of the river, but it was left behind when the Colorado migrated north and eroded 150 feet down.

Seven Colorado River terrace deposits have been identified between Austin and Columbus (Blum, 1992). Based on the similarity in gravel elevation relative to the river, it is probable that the terrace deposit being discussed corresponds to the "Capitol Terrace" in Austin, on which the Texas State Capitol sits. The Capitol Terrace is believed to have formed during the Sangamon Interglacial Period, 130,000 to 115,000 years ago (Blum, 1992).

Types of Rocks in Terrace Deposit

The composition of the terrace deposit gravel on the property shows its provenance to be West and Central Texas, in particular the Llano Uplift northwest of Austin where Precambrian igneous and metamorphic rocks are found. The Colorado River has eroded rocks in these areas and carried them to the property, breaking them down and smoothing them in the process. In this section, the specific rock types found in the gully are discussed, and photographs of some of the more interesting ones are displayed. These include sedimentary, igneous, and metamorphic types.

Sedimentary Rocks

In addition to chunks of poorly-cemented Goliad sandstone, the gully has yielded conglomerate (including breccia), well-cemented sandstone, siltstone, chert (including agate and jasper), and petrified wood, all of which are sedimentary in origin. Interestingly, no limestone has been found in this gully despite the presence of the Edwards Plateau 100 miles or so upstream. This rock is so easily weathered that very little makes it this far downstream. A study of Colorado River gravels found that limestone comprised 60% of the gravel at Austin, but only 2% at Columbus (Sneed and Folk, 1958). Nonetheless, some good specimens of fossil-bearing silicified limestone have been found.

Chert nodules are the dominant rock type in the gully. These formed in the limestones



Figure 4. Chert samples from gully. All but one at lower left have been at least partly polished. Second sample from left in bottom row is agate.



Figure 5. Jasper samples from gully. Those on bottom row have been polished.

of the Edwards Plateau and are typically rounded cobbles with a white, gray, or brown cortex. The fine-grained quartz interior is usually rather uninteresting, but some quite attractive samples have been found. Figure 4 shows some of the more interesting chert pieces from this gully. Samples of jasper are shown in Figure 5.

Much petrified wood is found in the gully. The most likely source is the Catahoula Formation of Oligocene age (23–34 million years ago), which outcrops in Fayette County upstream from the property. This formation contains abundant ash deposits from extensive volcanic activity in West Texas and northern Mexico (Ledger, 1988). The ash



Figure 6a. Top view of petrified wood from gully showing preserved tree rings.



Figure 6b. Side view showing knot preserved in sample.

could have buried trees and contributed minerals that replaced the wood. A specimen from the gully exhibiting tree rings and a knot is shown in Figures 6a and 6b.

Igneous Rocks

The gully has yielded small quantities of granite, diorite, rhyolite, basalt, and tuff. Granite



Figure 7. Igneous rocks from gully. Clockwise from left: tuff, granite, basalt, rhyolite, diorite. Tuff, granite, and diorite have been polished.



Figure 8. Samples of hydrothermal quartz from gully. Those at bottom have been polished.

and diorite are intrusive rocks formed from magma that did not reach the surface. Rhyolite and basalt are extrusive, i.e., hardened lava, and tuff is hardened ash. Figure 7 displays examples of each. These rocks formed as a result of plate tectonics, the process by which continents split apart, move around on the earth's surface, and collide.



Figure 9. Metamorphic rocks from gully. Two at left are gneiss (lower one has been polished); upper right is schist; lower right is metamorphosed shale (polished).



Figure 10. Polished quartzite samples flanking sample of metamorphosed quartzite, all from gully. Note blue quartz crystals in polished face of latter sample.

Where collisions occur, one plate plunges below the other, lifting it to form a chain of mountains. The crustal material riding on the subducted (submerged) plate is carried far below the surface, where it is subjected to high temperature and pressure. When this

happens, the crustal material may melt to form magma that, being lower in density than the surrounding rock, rises towards the surface, causing further uplift and volcanic eruptions. The granite and diorite in the gully formed in this way 1.3 billion years ago in what is now the Llano Uplift in Central Texas (Spearing, 1991). Uplift and subsequent erosion by the Colorado River and its tributaries provided the mechanism to get them to Colorado County. Volcanic activity has occurred in West and Central Texas at times.

Hydrothermal quartz, another type of igneous rock, is plentiful in the gully. It formed by precipitation of silica carried by hot water flowing through fractures, probably in the vicinity of the Llano Uplift. Examples are shown in Figure 8.

Metamorphic Rocks

Some of the rock riding on the subducted plate described above was metamorphosed rather than melted. Sandstone was converted to quartzite, some of which was further metamorphosed, and shale became gneiss, schist, slate, or other metamorphic forms. Samples of gneiss, schist, and metamorphosed shale from the gully are displayed in Figure 9, while Figure 10 shows two quartzite samples flanking a specimen of metamorphosed quartzite. All of these metamorphic rocks, with the possible exception of some of the quartzite, are from the Llano Uplift. The oldest of these are the same age as the igneous rocks, 1.3 billion years (Spearing, 1991).

Some of the quartzite in the Colorado River gravels has been attributed to the Ogallala Formation of West Texas (Blum, 1992), which in turn was derived from the Rocky Mountains (Hurst and Rebnegger, 1999).

Conclusions

The rocks that make up the gravel deposit discussed in this article have an interesting geologic story to tell. As the photographs show, cutting and polishing them has sometimes revealed an attractiveness hidden beneath the surface.

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Old Geezer In Egypt

by John Emerson Member of the Houston Gem & Mineral Society

My wife, Bobbie, and me at the pyramids in Egypt.

hile we were living in Algeria, the boys were in school, and I was working in Algiers, Algeria (1965-67). Bobbie and I took a vacation to visit Egyptian friends living in Alexandria, Egypt. Of course we had to visit the Pyramids and the Sphinx. As you can see, our transportation at the site was quite primitive!



On the same trip we also took a boat trip up the Nile to visit Luxor and the excavations there, including King Tut's tomb—which was open to the public at that time. This was in May, 1967, just a month before the outbreak of the "Six Day War" between Egypt and Israel. Bobbie, the boys, and I had to evacuate from Algiers to our company's office in Holland, since to Algerians, Americans were the same as Israelis. We had to leave all our belongings to be guarded by my driver/translator, Chatita (phonetic spell-

ing—he was able to speak and translate in English, French and Arabic). He carried some of our more valuable belongings, including Bobbie's car, to his father's home in the desert for safe keeping, and he put a notice on our door that "this property is protected by police." When I went back to close out my work, he brought all of our belonging back from the desert for me to ship to Holland. A true friend as well as an employee. I later found out that he was an Algerian Government secret policeman sent to watch me and report on my activities!

HGMS Rankings for AFMS 2011 Bulletin Editors' Contest

by Phyllis George HGMS Newsletter Editor

he AFMS annual show was held in Syracuse, NY in July this year. The Breakfast with the Bulletin Editors and Webmasters was held on Sunday, July 10, and the winners and rankings of all entries were announced. HGMS did quite well (as usual). The entries from HGMS and their rankings are listed below along with their category. Every entry forwarded by the SCFMS ranked in the top three in their category at the SCFMS level of the contest. All the entries listed below will receive certificates, and those who ranked in the top three in their category will receive AFMS plaques.

Name	Category	Rank	Title	Month	
Phyllis George Large Bulletin		6	The Backbender's Gazette	October 2010	
Neal Immega	Advanced Adult Article	5	What a Crocl	July	
				11:	
Karen M. Burns	Adult Article	2	What Price Is the Right Price	April	
				•	
Mary Ann Mitscherling	Adult Poetry	3	Where Shiny Heart Cabs Come From	August	
Noelle Skubal (10 years old)	Junior Poetry	1	An Ode to Back Benders	March	
Steve Blyskal	Feature	3	A Visit with Two Australian Collectors De		
Steve biyskai				71	

Cruisin' the Fossil Freeway - by Kirk Johnson and Ray Troll

A book report by Neal Immega Member of the Houston Gem & Mineral Society



magine this: two middle-aged guys driving around the western USA to visit famous or new fossil localities. Kirk is the curator of fossil plants at the Denver Museum, and Ray is an artist that loves to draw fossils, particularly ancient fish. Wow, this book hits all my hot buttons—driving around and collecting fossils and looking at pictures of fossils drawn from a different perspective. If you are a collector like me, this is what you want to read about and then GO to the same places, or if your significant other is a collector, you need to read this book to understand them. Note to significant others: no matter how bad your person is, after reading this book, you will find that they could be so much worse!

Let's meet Kirk and Ray on the Washington coast where they are finding fossil crabs: http://www.youtube.com/watch?v=U7y6ZTonT8Q

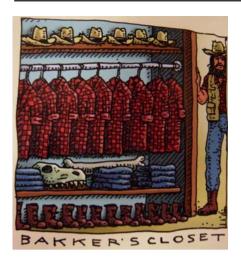
I bet you could find this site. I certainly am going to try.

Or how about Ray singing about Devonian Fish:

http://www.youtube.com/watch?v=g9j0Mq0knDo

Our two unlikely heroes drove to Wyoming and stopped at Casper College. I will let them tell you the rest.

"The Tate Museum at Casper College was our destination for the morning. The few employees and many volunteers of the Tate [known among themselves as "taters"] are a pretty energetic bunch, and the area is caked with fossils, so the museum's basic plan seems to be to dig fossils, display fossils, and have a symposium every June. Ray and I walked into the exhibit hall and bumped into Bill Wahl and Russell Hawley. Meeting Russell and thinking back to Dinopalooza, Ray and I begin to realize that wherever we went, we bumped into people like ourselves, paleonerds. These guys (and most of them are guys) are often lone rangers, one- or two-man dinosaur fan clubs in small towns. It



suddenly occurred to us that we had discovered IPNS or Isolated Paleonerd Syndrome."

Ray wonders how Bob Bakker always is dressed the same and sketches his view of what Bob's closet looks like.

I do not know how this book got past me. It is copyrighted 2007, and you can now get wonderful used copies from Internet bookstores for less than \$10 each. I am going to stock up for Christmas before this report is published and you all start buying up the cheap copies.

HGMS Shows Its Stuff in the West University Place Harris County Public Library

by Neal "I did not know he could read" Immega

must be in the right place because there is a sign above the door saying "T. rex loves West U. Place Park" and little kids are streaming in, escorted by a variety of caregivers, mommies, and one rather lost looking grandfather. Everyone knows I am the speaker because I am carrying a big bone. It does not matter that most of my props are mammalian, just that I am going to talk about dinosaurs and give away shark teeth. It must be summer because it is time for my annual presentation at my local library. It is great to present to children because they are so tolerant of the same story line over and over again, and there are so many of them.



Raptors and Neal mesmerized the children.

Photo in the library by Cynthia Lescalleet,
Features Editor Examiner Newspapers.

For material I just used the things I show during talks at the public schools—dinosaur and whale vertebra, bison and mammoth bones and teeth, shark teeth, and modern shark jaws, and the ever-popular fossil turtle poop (it is impossible to gross out kids, just parents). Inda repeated one of her kids' crafts from a member's night at Houston Museum of Natural Science, and the local paper sent a professional photographer to record the event. We even had a visitor bring in a cut and polished Utah sauropod bone collected by her geologist husband. This was certainly an easy house to play to. If you ever want to do this yourself, come and see me and I will kit you out with the good stuff.



Photos by Inda and Neal Immega

Left: Learning to See

Right: This bone is from a Mammoth and was found in the local Brazos River.



Pterosaur Kid Craft –
Flipbook1.jpg—Flip book of Pterosaur chasing a bug.
Fllipbook2.jpg—Got it!





Field Trip

08-01-11

by Mary Ann Mitscherling Member of the Houston Gem & Mineral Society

aps studied and marked lie all around me. And adventure beckons on every path. On another field trip to sense and be I daydream and I whistle in my bath.

The day finally comes and starts the routine. Landscapes pass serenely out car windows. Then meet-ups with friends are a welcome scene. Busy streets disappear into crop rows.

We all arrive by car upon the land Where if luck be with us, we all will find Treasures with "ohs" and "ahs" and call them grand. Sunburn, scrapes, and bug bites we never mind.

Treasures packed securely, we head for home. I'll dream of rocks, crystals, leaf mold, and bone.

Mineral Section

by Paul Brandes

eptember 7: Typically our first meeting after the summer hiatus, this evening's presentation will be more of a synopsis of each member's summer mineral collecting adventures with plenty of time for short presentations, show and tell, and socializing with other members. Attendees are encouraged to bring in their summer finds (clean or not) to display. Refreshments will be available.

September 21: Quartz Cleaning. Members familiar with quartz cleaning will discuss the methods/equipment they use. While we won't be mixing chemicals, we will show the tools used and discuss the many aspects of this skill. Members with experience cleaning quartz are encouraged to explain how they clean quartz and bring in some before / after specimens. Refreshments will be available.

SCFMS—Pine Country Gem and Mineral Society Will Host the 2012 Show

from SCFMS Newsletter 5/6, 2011

The Pine Country Gem and Mineral Society, Jasper, TX, will host the South Central Federation Show in 2012. The dates are set for August 25–26, 2012. You won't want to miss this show, so mark your calendar for those dates and plan to be there. We will have more information about the festivities as time goes on, and they are being planned at this moment.

HGMS Archeo Group Growing in Numbers

August 4, 2011 by Burton Dworsky Archeology Group Secretary Fifteen Attend Archeology Group Meeting

The Archeology Group held its August 4, 2011 meeting at the HGMS clubhouse with fifteen members present. The meeting was called to order by Vice Chairman Terry Proctor at 7:30 p.m. as Chairman Dr. Garth Clark was ill. Secretary Burton Dworsky moved that the Minutes for the July 7, 2011 meeting be approved as printed in the Backbender's Gazette. The motion was seconded by Bob Moore, and the vote of approval was unanimous.

The Group continued the practice of discussing various archeological news items and information which members had acquired since the last meeting. The discussions are always informative and varied and help members learn of new finds, announcements, techniques, theories, and data relating to the archeological world.

The meeting was opened with the observations of the members that attended the field trip to George Wolf's house to see his collection. Most that went were amazed by not only the scope of fossil artifacts but also by the Native American artifacts in his collection.

Terry Proctor informed the group that a knapper from Dallas would be available in the future at either the General meeting or the Archeology meeting. Following up on this thread there was a discussion on the where, when, and how of getting presenters for the Archeology Group meetings. There were several ideas and contacts presented for future follow up. Terry reported that he had talked with Neal Immega, and the Archeology Group could take a tour of the Ukrainian exhibit at the Houston Museum of Natural Science on a Sunday afternoon, starting at 12:00 noon, at a reduced fee. Members will consider this, and such a tour may be planned shortly.

A discussion of some legal issues surrounding the collection of artifacts was also held. Members discussed that while it was both necessary and desirable to protect national sites from commercial exploitation, present laws of the U.S. Government virtually prohibit the collection of common fossils and artifacts by small collectors on the federal lands that make up a large part of the Western United States. Present laws provide that even items that no museum or scientific endeavor would want or collect, if collected by citizens—even unknowingly—could subject such persons to prosecution. This probably includes collecting things such as a common fossil shark's tooth. It was pointed out that a shark may produce 40,000 teeth in a lifetime (per Dr. Sinibaldi's book on page 113), on a Florida Beach or a bison tooth or bone on our local beaches. Therefore, should picking up a shark's tooth on a beach be made an offense subjecting one to a breach of Federal law?

Terry Proctor also reminded all present that the deal for \$2 off subscriptions to *Archeology Magazine* is still good. He had also procured at a discounted price of \$30.00

several copies of Dr. Robert Sinibaldi's book *What Fossils Can Tell You* and offered them for sale to members of the group, who quickly purchased what he brought. Since others wanted the book, Terry will order more to deliver in the future.

Everyone was also reminded that the vote for the Archeology Group to become a Section will be held at the General Meeting on Tuesday August 23 at the HGMS clubhouse and that everyone should strive to be there for the vote.

Lastly it was decided due to the current heat wave to postpone the McFaddin Beach field trip originally scheduled for Saturday August 20 to Saturday September 17.

Show and Tell offered up much to look at. First, Ray Kizer presented a stone hammer head that his father had collected as a youth in Scotland, SD. Bill Moore brought some crudely knapped stones he collected from Reno, NV area. Since the stones were of a softer rock and crude, it was speculated that they were "practice" pieces. Bob Moore and his wife Nancy brought a case of extremely interesting arrowheads from around the world including Roman, Medieval Italy, the Americas, and the Far East. Nancy also had a musical instrument similar to a whistle that was in the shape of a bird from the Americas. Jon Hart brought two more of his exquisite cases of arrowheads and a vessel from the Caddo culture in Arkansas that he pieced together from broken fragments. Tom Schwartz also shared some petrified wood and an arrowhead from Lake Somerville, TX.

Mike Dawkins moved to adjourn, and it was seconded by Ray Kizer at 9:00 p.m., and the vote was unanimous.

In attendance at the meeting were Mike Dawkins, Douglas Dodds, Burton Dworsky, Jon Hart, Ray Kizer, Tony Ma, Bill Moore, Bob Moore, Nancy Engelhardt-Moore, Deidre Prince, Terry Proctor, Peter Ragusa, Tom Schwartz, Lisa Schwartz and Rod Underwood.



Points from all over the World from Bob Moore and wife, Nancy Engelhardt-Moore.



From left to right Nancy Engelhardt-Moore, Bob Moore listen as Jon Hart explains about the vessel from the Caddo culture that he pieced back together.



From left to right Bob Moore, Jon Hart, Tom Schwartz, Mike Dawkins, Burton Dworsky, Ray Kizer, Tony Ma, Rod Underwood and Peter Ragusa.

Archeo Group Has Great Field Trip to George Wolf's Home and Collection

by Terry Proctor

n Saturday, July 23, 2011, the Archeology Group had a field trip to the home of George Wolf in Pasadena to see his amazing collection of fossils, shells, and American Indian artifacts. Because of limited space, there were two tours scheduled for 8 to 10 maximum members to see the collections.

Six members made the first tour from 9:00 a.m. to noon. Those in this group to see George Wolf's extensive collections were Nancy Fischer, Deidre Prince, Burton Dworsky, Bill Moore, Vanessa Parker, and Steve Woodfin. Steve is a new HGMS member from League City.

Six members also made the second tour from 1:00 p.m. to 4:00 p.m. Those present for this tour were Jon Hart, Douglas Dodds (a new HGMS member), Ana Mercado, and her two daughters Myranda and Mariana, and Terry Proctor.

George has thousands of shark's teeth, hundreds if not thousands of Native American points (commonly called arrow heads) as well as other artifacts, and so many fossils that he has to throw out some which are not good enough for his collection.

Wolf has been collecting for many years and got his two sons so addicted to it that one son, George Jr., has written several books on fossils and artifacts. He is also an avid collector. The other son David does fossil preparation and sells fossils.

On Saturday, August 20, 2011 the Archeology Group will take their next field trip and again go to McFaddin Beach.



Myranda, Mariana and Ana Mercado



Jon Hart, George Wolf and Douglas Dodds



Douglas Dodds, Jon Hart, and George Wolf

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

Rolling Mills

by Ed Clay

et us speak about Rolling Mills. The Dictionary definition is "A machine used for rolling metal."

Most are hand crank. Some of the more expensive ones can be equipped with a motor to provide the effort to shape the metal.

As the definition says, it is used to take metal—in our case copper, brass, silver, gold, even platinum—and to reduce its thicknesses in some manner.

It does so using the factor of metal ductility and malleability with pressure applied through parallel rollers. These can be adjusted in respect to each other, in a fashion to make thick metal thinner in small increments at a time.

The Rolling Mill located in the classroom facility of the Houston Gem & Mineral clubhouse is a good quality Rolling Mill Machine. It is hand crank, has capabilities to roll flat stock or sheet as well as bar, rod, and square wire stock. It has a set of V- surfaced rollers to allow this. This Mill has two sets of larger rollers, one for the flat stock, the other the V- surfaced rollers. There is also a small side set of mini rollers. These will allow suitable-sized square or round stock wire to be made into half-round cross-sectioned stock

The best teaching is hands-on, guided by an experienced worker in Rolling Mill practices. But to explain the pattern, the stock should be annealed before starting. Heat is applied to ease tensions that metals can accumulate at the molecular level when bent, hammered, or thinned through the application of force by hands and tools.

As the stock is worked in the rolling mill, force is of course applied to change its shape or thickness, so every so often it must be reannealed. Failure to do so continues to harden the metal to the point of it becoming brittle.

This process of shaping (thinning) the metal and annealing it continues until the dimensions needed for the current project are reached, allowing for necessary cleanup filing, sanding, and polishing.

In the annealing process, the metal is heated until it is red hot—near the melting point. Then usually after a few seconds it is placed in a solution of a mild acid to remove some of the scale and other effects of heat. It should be rinsed after the pickling(the mild acid bath) to remove the acid, and then dried.

The metal the mill is made of is prone to corrosion if allowed to get wet. We at the clubhouse use petroleum-based sprays to prevent moisture from attacking the mill.

General Meeting Minutes

July 26, 2011 by Sarah Metsa HGMS Secretary

Visitors: We had a new member, Lynette, who signed up for the club at InterGem earlier this month. She is in the medical field and shared that she "loves rocks and body parts!"

Prior Month General Meeting Minutes: Karen Burns moved that the June General Meeting minutes be accepted as published. Shirley Smalley seconded, and the motion passed unanimously.

Treasurer Report: Rodney Linehan was not in attendance, but Steve Blyskal reported that the club is solvent and in good condition.

Program: Ray Kizer shared a slide program called "Jade: Stone of Heaven." He visited Quebec City, Quebec and was able to photograph a private and fantastic jade collection. Photographs showed a collection which spans primitive Neolithic artifacts from British Columbia and New Zealand through intricate carvings of the Hongshan Culture (5000–3000 BC) and Ming dynasties to modern day examples.

Officer, Committee, and Section Reports

Daylight Section: The Val Link riveting program is quite interesting and successful.

Faceting Section: The July meeting was a very informative hands-on presentation by Wayne Barnett showing how to "preform" a stone in preparation for faceting.

Paleo Section: Terry Brawner gave a demonstration on fake fossils. The August program will be given by Neal Immega about the evolution of birds.

Lapidary Section: Ed Clay gave a gemstone carving demonstration.

Mineral Section: We provided a demonstration of the care and repair of water guns used to clean minerals. The third Wednesday in August will be a mineral cleaning presentation by expert cleaner John Fender.

Archeology Group: Reminder was made that the August General Meeting will include a vote to make Archeology an official section.

Youth Section: They have started to get their rocks together for the show and are spending a lot of time in the shop.

Education Committee: There will be a PMC class starting in August. Also Charlie Fredregill will be teaching an intermediate metalsmithing class beginning in August, and Val Link will be teaching a metal folding class beginning on September 10, 2011.

Shop Report: One grinder and one diamond saw are being repaired. Everything else is in good shape.

Old Business

Art Smith Fund and Auction: Steve Blyskal reported that we have had some very nice items donated to the auction. He and Sigrid Stewart are in the process of photographing everything, and the pictures will be posted to our Web site in August. Also the excess monies from soda funds will be given to the Art Smith Fund.

New Member Orientation: This will be held on Saturday August 13, 2011 and will include a shop and facility tour as well as brief introductions from each Section and President Steve Blyskal. (Secretary's Note: At the August 2, 2010 Board Meeting, the date for the New Member Orientation was moved to September 13, 2011 at 1:30 p.m. for a cooler time after summer vacation.)

New Business

Dunn Southwest Board Member: Terry Proctor is currently a member of the Dunn Southwest Board, and he has done a very good job as a representative of HGMS. However he would like to have another member take over this responsibility. Neal Immega advised that he would attend the upcoming meeting in Terry's stead, but he does not want to become a permanent member of the Dunn Southwest Board.

Drawing: Pete Stassi won some mineral specimens.

Show and Tell: Max Washburn showed a portion of his jade collection. A showcase item was an enormous section of black jade from Nevada. MaryAnn Mitscherling found a castoff piece of rock in the shop and made it into a pretty cabochon which she passed around.

Adjourn: Pete Stassi moved and MaryAnn Mitscherling seconded that the meeting be adjourned. The motion passed unanimously. The meeting adjourned at 9:27 p.m.

Board of Director's Meeting Minutes

August 2, 2011 by Sarah Metsa HGMS Secretary

	President – Steve Blyskal	Х	Beading Rep – Jillynn Hailes
Х	1 st Vice President – Ray Kizer	Х	Faceting Rep – Gary Tober
Х	2 nd Vice President – Beverly Mace		Lapidary Rep – Phyllis George
X	Treasurer – Rodney Linehan		Mineral Rep – Sigrid Stewart
X	Secretary – Sarah Metsa	Х	Paleontology Rep –Terry Brawner
X	Past President – Terry Proctor	Х	Day Light Rep – Nancy Fischer

/he meeting was called to order at 7:36 p.m. with a quorum of seven members present.

Previous Month Board of Directors Meeting Minutes: The minutes of the July 5, 2011 Board Meeting were published in the August 2011 BBG. Gary Tober moved to approve the minutes of the previous meeting as published. Terry Brawner seconded the motion, and it carried unanimously.

Treasurer's Report: Treasurer Rodney Linehan was present. He advised that the check to pay for the show billboards has been sent. He provided an update on each bank account, and he reported that HGMS is in good financial condition.

Officer, Committees, and Section Reports

Beading Section: Jillynn Hailes reported that July attendance was a little low. The project for the next meeting is posted on the Web site as usual.

Daylight Section: Val Link's riveting program is wrapping up, and everyone has really enjoyed it.

Faceting Section: The August meeting will be about orienting and cutting directional rough. This is posted on the Web site for more information.

Lapidary Section: There was no representative available for the Lapidary Section, but it was reported that the wheels and blades have all been cleaned up.

Mineral Section: There was no representative available for the Mineral Section, but the visit and mineral cleaning presentation from John Fender will be held on August 17. This is posted on the Web site for more information

Paleo Section: The August program "The Evolution of Birds" will be given by Neal Immega. Also, there is a field trip planned to the TXI quarry in Midlothian, Texas. This will be on Saturday October 29 from noon to 2 p.m. This is being held during FossilMania in Glen Rose. Anyone planning to go must sign up for the field trip. There were 25 spaces available, but they have all been filled. Mike Dawkins (mdawkins_2000@yahoo.com) also has a waiting list started.

Archaeology Group: The August 23 General Meeting will include a vote on making the Archeology Group into a full section. The July visit to George Wolf's home was very interesting and successful. And another field trip is planned to McFadden Beach on Saturday August 20; contact Terry Proctor for information about this trip.

Education Committee: Current classes are on the Web site. There is a metal folding class by Val Link, a Jewelry Fabrication Lite class by Charlie Fredregill, and a PMC Class by Kathy Konkel. Contact the Education Chair to sign up (*Secretary's Note: Since the Board meeting, it has become necessary to have Wayne Barnett take over the duties of Education Chair in lieu of Brian Honsinger . Please contact Wayne Barnett for class information.)*

Old Business

Orientation for New Members: Due to summer vacations and the heat and to allow for more planning time, it was decided that the orientation should be moved to September 10.

Roof Repair: The original roof repair estimate that was made by Jorge Soriano was for approximately \$550.00 and had been approved by the Board in 2010. Terry Proctor will be following up with Jorge to secure a copy of his license and insurance, and then if the cost has not changed dramatically, Terry will authorize the repairs immediately.

Youth Section Shop Days: It was decided that reminders about Youth Section days should be sent out occasionally, reminding everyone that the during the first and third Saturdays each month—between 10 a.m. and noon— the meeting room facilities and the grinding wheels in the lapidary shop belong to the Youth Section. The other shop equipment (EXCEPT THE GRINDING WHEELS), the middle class room, jewelry shop, and Paleo prep room are still open to members during the morning.

Shop Orientation Class: Different issues were discussed regarding content and goals, but no final decisions were made. It will be revisited at a later date.

New Business

Giveaways for General Meetings: It was brought up that while we have giveaways available for door prizes, they are not always easy to find. So a collection of them will be stored in the office to ensure availability and ease of access.

New Projector: The projector has poor color quality, and the discussion considered whether a new one should be planned for in the near future. The cost of a new projector is about \$600, with the light bulbs alone running around \$150. It was determined that a new projector is not currently in the budget, but when the light bulb on this one burns out, it may be more logical to purchase an entirely new projector. The issue will be raised again when the bulb burns out.

HGMS Earth Science/Jewelry Arts Scholarship: An application for the scholarship was turned in by Chase Jennings at the July General Meeting. The application and the applicant's qualifications were discussed, however due to President Steve Blyskal being unavailable at this meeting, a full vote to award the scholarship was impossible. However, the tuition deadline for the applicant's school is before the next Board meeting. With this in mind, Nancy Fischer moved and Terry Proctor seconded that upon Steve's review and approval of the application, the scholarship should be awarded to Chase Jennings. The motion carried unanimously.

Air Conditioning Issues in Libraries: The air temperature in the library is not sufficiently cool to properly preserve the books. Gary Tober moved and Jillynn Hailes seconded that Gary would ask John Mitscherling to look at the HVAC unit and its ducting to determine what would be necessary to resolve the issue and to approve the work should the repairs be relatively easy and inexpensive. The motion passed unanimously.

Dunn Southwest Board Representative: Terry Proctor advised that he will be on the Dunn Southwest Board for the next year. He provided to the HGMS Board a very thorough and detailed accounting of the most recent DS board meeting.

Adjourn: Nancy Fischer moved and Terry Proctor seconded that the meeting be adjourned. The motion passed unanimously. The meeting adjourned at 9:15 p.m.

Sneed, Edmund D., and Folk, Robert L., 1958, Pebbles in the Lower Colorado River, Texas: A study in particle morphogenesis, Journal of Geology 66, no. 2, p. 114-150.

Spearing, Darwin, 1991, Roadside Geology of Texas: Missoula, Montana, Mountain Press Publishing Company.



Old Geezer In Egypt

by John Emerson Member of the Houston Gem & Mineral Society

My wife, Bobbie, and me at the pyramids in Egypt.

hile we were living in Algeria, the boys were in school, and I was working in Algiers, Algeria (1965-67). Bobbie and I took a vacation to visit Egyptian friends living in Alexandria, Egypt. Of course we had to visit the Pyramids and the Sphinx. As you can see, our transportation at the site was quite primitive!



On the same trip we also took a boat trip up the Nile to visit Luxor and the excavations there, including King Tut's tomb—which was open to the public at that time. This was in May, 1967, just a month before the outbreak of the "Six Day War" between Egypt and Israel. Bobbie, the boys, and I had to evacuate from Algiers to our company's office in Holland, since to Algerians, Americans were the same as Israelis. We had to leave all our belongings to be guarded by my driver/translator, Chatita (phonetic spell-

SCFMS Safety During Summer Storms

by Owen Martin AFMS/SCFMS Safety Chair

Safety Article reprinted with permission from CCS Corporation (where Owen works as a Safety Specialist).

Being Safe During Summer Storms

long with all the hot weather that is hitting us, it can also bring those intense summer storms that can include not only rain but thunder, lightning, hail, and in the worst case situations, tornados. These types of storms seem to form in what seems like just a short period of time and last from just a few minutes to a few hours. All across the country most weather forecasts have storm warnings as a standard part of their daily reporting process.



Depending on where you are working, pay-

ing attention to the weather forecasts can become a very important of your day being safe or not. Protecting yourself, your fellow workers, equipment, and any other structures at the worksite is sometimes not the easiest process, as these storms sometimes are so quick to happen, so some preparation and knowledge of what to do in the case of these storms happening is always important. Bolts of lightning can carry more than one million volts of electricity. These bolts of lightning can cause considerable damage and injury, both directly and indirectly. Personal injury is obvious when there is actual physical contact with lightning, but tall trees can also attract lightning and then can channel an electrical charge through its root system to a worksite trailer/facility and damage wiring, appliances, or other electrical devices.

When setting up a worksite trailer, office, decontamination site, washroom, or other type, always ensure the following:

- Ensure that all trailers have been properly grounded.
- ➤ If possible, try to locate trailers away from tall trees or hydro / telephone poles-
- > Set trailers up in a dry area where water will not collect or run into / through the area.
- ➤ Install the appropriate surge protectors on all appliances (microwave, fridges, water coolers, etc.) and other electrical devices (computers, printers, fax machines, etc.) Note that surge protectors are not a 100% guarantee for protectors.

tion against lightning, but they do greatly reduce the chance of contact.

Now that you have taken the precautions to ensure that any site trailers have been safeguarded, what should you do to properly protect yourself in the event of actually finding yourself in a thunder and lightning storm? It is always best to try and find shelter indoors, and then remember to:

- Stay away from the trailer's doors and windows. Ensure that doors and windows are secure.
- Where applicable, avoid standing on or near bare concrete walls or floors.
- If and where possible stay in an "inside room," one which does not have an outside wall.
- Unplug all electrical appliances (microwave oven, fridges, water cooler, etc.) in the trailer turn-off all other electrical devices (computers, printers, battery charger, etc.)
- Do not use water faucets or other plumbing facilities / devices.
- Do not use a hard-wired (land-line) telephone line. The leading cause of personal injury in lightning storms is contact through the telephone lines. Lightning can easily follow telephone or hydro lines. A cell phone is safe to use.
- Battery powered devices (walkie-talkies, radios, etc.) are not affected by lightning.

Then wait a minimum of **30 minutes** after the last lightning flash before returning outside. A greater occurrence of people being struck by lightning takes place after they believed the storm has ended rather than during the actual high point of the storm.

The 30 - 30 Rule

If you are outdoors, a simple guideline that you should use to help you know when to find safety, is what is known as the 30 - 30 rule.

- Take shelter when you have counted less than **30 seconds** between a lightning flash and the actual crack of thunder.
- Wait a minimum of **30 minutes** after the last lightning flash before returning outside. A greater occurrence of people being struck by lightning takes place after they believed that the storm has ended rather than during the actual high point of the storm. What should you do if you find yourself outside / outdoors and have no available means of shelter? Then you should follow these rules:
- Remove footwear with steel-toes.
- Avoid being near metal objects like fences, poles, equipment, etc.
- Also avoid being near water, no matter what size even puddles.

- Stay away from trees or other tall objects, as electricity can easily travel from that object to things located around it. Do not go under trees just to stay dry.
- If you have a hard-topped vehicle, stay inside of it, but do not touch anything that is metal. Park away from power lines or trees that may collapse on you. Roll up your vehicle's windows and keep your hands on your body.
- If you do not have a vehicle, seek shelter in a ditch, valley, or lowest part of the area you are in. Crouch or lie down as low as you can to ground level. In a wooded area seek shelter by smaller trees or bushes.

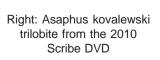
If you ever find someone who has been struck by lightning, remember that they have received an electrical shock and should be treated as such. They do not carry an electrical charge and can safely be touched and given standard first-aid treatment for electrical shock. You should immediately call emergency services (911) and start the mouth-to-mouth / CPR process if the injured person is not breathing.

Some real facts on lightning and thunder:

- The odds on getting struck by lightning is 1 in 606,944, and of being killed is 1 in 2 million.
- Southern Manitoba has the greatest occurrence of nocturnal lightning in all of North America.
- Annually, lightning strikes the CN Tower about 75 times and the Empire State Building about 23 times.
- Lightning is the greatest source of forest fires.
- Thunder can only be heard about 12 miles away under good quiet outdoor conditions.
- Lightning bolts are extremely hot, with temperatures reaching 30,000–50,000 deg. Fahrenheit.

Remember To Always Keep Your Eye on the Weather!!!

As Always, Have a Safe Week, and always be aware of what's happening around you when working outdoors or when travelling.





Trivia Vug & Shop Tips

from R.J. Harris

Master Spermologist CPRMC

Editor's Note: Spermologist: One who collects facts and trivia

from Rock Buster News 8/2011

/wenty-four-karat gold is not pure gold; there is a small amount of copper in it. Absolutely pure gold is so soft that it can be molded with the hands.

Leaded crystal glass is not crystal. Glass consists of atoms and molecules in a jumble, not in the well-patterned order that defines a crystal.

The crocodile does not chew its food, but swallows it whole. It carries several pounds of small stones in its stomach to aid in grinding up and digesting what it eats.

Shop Tips:

via Rock Buster News 8/2011

When the lapidary saw needs to have the tub cleaned, filter all of the oil through about four or five grocery bags. The oil will be clean and reusable. The oil never wears out. It is also very expensive. Each time you clean the lapidary saw, reverse the blade. You'll have longer blade life as each side wears evenly.

from The Pineywoods Rooter July 2006, via Shin Skinner News, Feb. 2007

TAKE CARE OF THE MOTOR in Your Slab Saw. If you have a slab saw that really works, and it has a separate feed motor other than your main motor, and if it is mounted on the front of your saw, try this tip:

Try raising the front of the saw by putting a piece of 2 x 4 under the front legs. What this does is reduce the side pull pressure on your feed motor. For example, my slab saw has a front feed motor, and over time I have had to replace my feed motor about six times. What happens is the gears in the motor will not hold up to the side-pull pressure of your saw. By raising the front of your saw, this allows your rock saw vise to move toward your blade much easier. This works on table mount saws also. This also helps other saws such as your Highland Park as it reduces pressure on your feed system. If you try this, you will find that your saw will also use less cutting fluid.

by Dick Peterson, in Rock Chips, June, 2006, via Gem cutters News, Jan., 2007

DOP POTS - DOP WAX: Don't leave your dop pot on continuously because the SHELLAC in the dop wax will dissipate and your stones will fly off the dop stick. Turn it off when not in use.

from Rock Collector, Feb., 2007, via Shin Skinner News, Feb. 2007



John Mitscherling and Nancy Fischer 7/15/2011



Cabs by John Mitscherling

Amethyst and fossils

Photos by Mary Ann Mitscherling



Show Time 2011

August 27-28	Jasper, TX	Pine Country Gem & Mineral Society The Event Center, 6258 Hwy. 190W Lonnie Stalsby, (409) 382-5314
September 3-4	Arlington, TX	Arlington Gem & Mineral Society Arlington Convention Center 1200 Ballpark Way; Jack Spinks, jlspinks@sbcglobal.net; www.agemclub.org
September 3-4	Denison, TX	Texoma Rockhounds Denison Senior Center
October 8-9	Temple, TX	Tri-City Gem & Mineral Society Mayborn Convention Center 3303 N. 3rd St. Chip Burnette, (254) 630-3573 burnette@aceweb.com
October 8-9	Fort Worth, TX	LMRA Stone Steppers Lockheed Martin Recreation Association 3400 Bryant Irvin Rd. Steve Shearin, (817) 733-5368 steve.l.shearin@lmco.com
October 13-15	Mount Ida, AR	25th Annual Quartz Crystal Digging Contest Montgomery County Fairgrounds Maureen Walther, Mt. Ida Ch. of Commerce 870 867-2723; www.mountidachamber.com director@mountidachamber.com
October 14-16	Victoria, TX	Victoria Gem & Mineral Society Community Center, 2905 E. North St.
October 21-23	Austin, TX	Austin Gem & Mineral Society Palmer Events Center 900 Barton Springs Rd. Susan Postlethwait, www.gemcapers.com showchariman@austingemandmineral.org
October 29-30	Glen Rose, TX	Paleo Society of Austin Somervell Expo Center, Hwy. 67
November 5-6	Amarillo, TX	Golden Spread Gem & Mineral Society
		Amarillo Civic Center, Exhibition Hall
November 11-13	Humble, TX	Humble Civic Center, 8233 Will Clayton Pkwy. 5 miles east of Bush Intercontinental Airport 1 mile east of Hwy. 59; www.hgms.org Chris&Theresa Peek; ladyt682@hotmail.com

2011	11 September				2011	
Sun	Mon	Tue	Wed	Thu	Fri	Sat
				1 7:30 Archaeology Group	2	3 10–5 Shop Open 10–12 Youth Section
4	5	6 7:30 Board Meeting	7 7:30 Mineral Section 10-5 Shop Open	8	9	10 10–5 Shop Open
11	12 1:00 Day Light Section	13 7:30 Show Committee	14 7:30 Faceting Section 10-5 Shop Open	15	16	17 10-5 Shop Open 10-12 Youth Section 1:30 Beading Section
18	19 7:30 Lapidary Section	20 7:30 Paleo Section	21 7:30 Mineral Section 10-5 Shop Open	22	23	24 10–5 Shop Open
25	26	27 7:30 General Meeting	28 10-5 Shop Open	29	30	

2011	011 October				2011	
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23 / 30	24 31	25 7:30 General Meeting	26 10-5 Shop Open	27	28	29

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2010 - 1st (Large)

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