




A monthly publication of the Clear Lake Gem & Mineral Society

VOLUME 35 May 2009 NUMBER 5

	<p>NEXT MEETING: May 18, 2009</p> <p>TIME: 7:30 PM</p> <p>LOCATION: CLEAR LAKE PARK BUILDING 5001 NASA ROAD ONE SEABROOK, TEXAS</p>
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The PROGRAM FOR May...

The program will be by "Yet to be determined". At press time, the program chairs have yet to acquire a guest speaker for the presentation/program.



SHOW and TELL

Share a report of our latest field trip or your own special dig. Bring in your prize specimens and educate us. Bring us your rockhounding finds and let us see how you did.

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"When a **true** scientist awakes each day, the first thing he or she should do is challenge their assumptions!?"- *Albert Einstein*

MINUTES OF THE CLGMS, April 20, 2009

Bob Brock, CLGMS Vice President called the meeting to order. President Ed Tindell was off at a field trip. After the pledge to the flag, the minutes from the previous month as documented in Stoney Statements were approved. New Member Hina Intiaz was introduced.

Announcements were made for a Fine Mineral Show on May 1-3. The we were remaindered by Dick Rathjen that the next meeting we needed to approve the club officers as corporate officers. A mention was made that the library will be available at next meeting in May.

Door Prizes were awarded to Dick Rathjen, Lesley Gary, Bob Brock, Lewis Hall and David Tjoik.

The original presentation which was to have been hands-on lapidary was a wash out due to lack of preparation. *sigh*

There was no new business or old business so Bob Brock adjourned the meeting early.



Respectfully submitted
Loyce Pennington, Substituting for the Secretary

Hammer Safety - SAFETY FIRST

by Bill Klose, EFMLS Safety chairman March 2000 EFMLS News

Hammers used by rock hounds come in every size, type and construction, and include rock hammers, bricklayer's or mason's hammers, blacksmith's or sledge hammers, machinist's peen hammers, jeweler's hammers, setting hammers, soft face hammers, lead or copper faced hammers, trimmer's and welder's hammer's, as well as a variety of mallets, such as rawhide, rubber, and tinner's. I have even seen napping hammers (a 3 pound high carbon steel hammer with tapering faces used for forming stones during road construction or similar stone work) and railroad track mauls (used for driving railroad spikes). As it is hard to anticipate what a rockhounds "favorite weapon" will be, I though I would present a list of general hammer safety practices followed by the proper use of some of the more common hammer types.

1. Always select the proper type, size, and weight of hammer for the job.
2. Always wear eye protection.
3. Always strike a hammer blow squarely, avoiding glancing blows and over and under strikes. The hammers striking face should be parallel with the surface being struck.
4. When striking a chisel, punch, or wedge, the striking face of the hammer should be 3/8" larger than the struck face of the tool. Both the striking hammers face and the struck face of the tool should be free of oil.
5. Do not strike another hammer with a hammer.
6. Do not strike a harder surface with a hard surface hammer.



7. Never use a hammer with dents, cracks, chips, mushrooming, or excessive wear. Replace the hammer-redressing is not recommended.

8. Replace worn or damaged handles. A qualified individual should replace hammer handles. Most hardware stores will replace hammer handles for a nominal fee. They can also provide a rubber sleeve for sledge hammers, which will prevent handle damage just above the head.

Bricklayer's or mason's hammers are designed for setting or splitting bricks, masonry tile, and concrete blocks. Never use them to strike metal or drive tools such as chisels. The blade of a bricklayer's hammer should be kept sharp by redressing at a 40 degree angle with a bench grinder. Keep the metal cool while grinding by quenching often in water to protect the metals tempering.

Hand drilling hammers are used with chisels, star drills, punches, and hardened nails. Never use common nail (claw) hammers for striking metal, such as chisels, as they are designed for driving unhardened nails and their shape, depth of face, and balance make them unsuitable for this use.

Machinist's peen hammers (ball, cross, or straight) are designed for striking chisels and punches and riveting, straightening and shaping metal.

Blacksmith's or sledge hammers are designed for striking wood, metal, concrete, or stone, depending on size, weight, and shape. When using a hammer, grip the handle near the end where it is designed for gripping and will give you the best control and impact with the least effort. Watch your hands, shins, and feet. It may be advisable to wear gloves, long sleeve shirts, and high lacing safety shoes to protect from flying debris and sharp shards if the situation warrants it. When storing hammers for a period of time, lightly lubricate metal parts, but wipe any oil or grease from rubber mallets or rubber handle grips to prevent damage to the rubber.

So get out there and hammer up a Storm! Safely!

The RockCollector May 09 Via Cabber Gabber, May 2009

"Sand-Barite Rosette"

From Oklahoma Geological Survey; no author given

The distinctive concretions known in central Oklahoma as "rose rocks" in allusion to their reddish-brown color and general similarity to a rose in full bloom are petal-like clusters of sandy barite crystals. Their rose-like appearance is due to the growth of barite (barium sulfate, BaSO₄) as a cluster of divergence blades. The central Oklahoma rosettes are distinctive because they grew within ancient red sandstone, incorporating quartz sand grains and acquiring the red color of the host rock. These concretions consist of sand and barite in nearly equal proportions and thus are best known to geologists as "sand-barite rosettes", but they also are called "rose rocks", "barite roses", or "petrified roses". Well-formed specimens are highly prized by collectors.

Most sand-barite rosettes are ½ to 4 inches in diameter and consist of 5 to 20 radiating plates, although the largest one known is 17 inches across, 10 inches high, and weighs 125 pounds. They generally occur as isolated individuals scattered through sandstone. Rosettes are harder and more durable than the host rock and weather into positive relief on outcrops. On further weathering they are detached from the rock and occur as individual specimens or are scattered within residual sandy soil. Slow weathering and erosion of the host rock continually expose additional rosettes at the surface.

The sand-barite rosettes of Oklahoma occur mostly in the Garber Sandstone, which was deposited during the Permian Period of Geologic time about 250 million years ago. They are most abundant along the north-south outcrop of the Garber in central Oklahoma, in a narrow belt extending 80 miles between Paul's Valley and Guthrie. The area just east of Norman is particularly renowned for its abundant and well-formed specimens. Although also known from California, Kansas, and Egypt, the rosettes probably have a greater concentration here in Oklahoma than at any other place in the world.

This description is mainly from the following article, which is now out of print: Ham, W. E., and Men-in, C. A., 1944, "Barite in Oklahoma": Oklahoma Geological Survey, Circular 23, 42 pages, 2 figures, 4 plates.

A May HAPPY BIRTHDAY

Glenda Hemperley 12



EMERALD (Greek: smaragdos) it supposedly soothes the eyes, preserves chastity, cures dysentery, prevents epilepsy, drives away evil spirits

May Anniversary includes:

An **anniversary** (from the Latin *anniversarius*, from the words for year and to turn, meaning (re)turning yearly; known in English since c. 1230) is a day that commemorates and/or celebrates a past event that occurred on the same day of the year as the initial event.

An investment in knowledge always pays the best interest. Benjamin Franklin

GOODIE GETTERS...For May



Main Goodies provided by club.

Lapidary Corner (Special request from a new member)**Free Online Gemology Course**

If you're interested in learning about gemology from a scientific (rather than a commercial or artistic) viewpoint, then you might enjoy this website:

<http://www.bwsmigel.info/>.

Included there is a series of lessons developed by Barbara Smigel, PhD, GG, and Emeritus Professor at the College of Southern Nevada. You don't need to register to use the materials contained on the site, however you can opt to register and take the full distance learning, online course for college credit. Web lectures include the following lessons:

Lesson 1: Basic Terms

Lesson 2: Naming and Measuring Gems Lesson

3: Physical Properties of Gems Lesson

4: Optical Properties of Gems Lesson

5: Magnification and What it reveals Lesson

6: Optical Phenomena in Gemstones Lesson

7: Gem Fashioning Lesson

9: Synthetics and Simulants Lesson 1

0: Gem Formation Also included on the site are Web Essays that are one topic, pictorial essays with information on specific rocks and minerals. You can follow a link to "Ask the Teacher" specific questions and actually receive an answer in response. There's also an audio pronunciation guide, and A-Z Survey of Gemstones downloadable as a PowerPoint presentation, and suggested textbooks and reading assignments if you're interested in learning more. Simply visit <http://www.bwsmigel.info/> and check it out!

Source: The RockCollector 5/09 via Rockhound Rambling, 7/2007, via Blue Agate News 3/09

Improved Light Fixture

by John Martin

For all of you using Diamond Pacific Genie or Titan Machines, here is a story you can relate to.

Have you ever been grinding away and had your hand slip and hit the rim of the light fixture? Ouch! Hot! That 75- to 100-watt incandescent light bulb is hot and really using up the electricity. Try to put one of the Compact Fluorescent Bulbs (CFB) in, and they stick out the bottom of the light fixture causing all that light to go everywhere and not on your work. Then after a few days of use, the bulb breaks at the seams from all that vibration. The bulb is dangling from wires, and the rest of the guts are still in the fixture with all that water splashing around.

I have found the best of both worlds. Try one of those small, halogen 35-watt mini flood lamps. It puts a really bright light right on your work, the rim of the light fixture stays cool, and you are only using 35 watts to get better light than the 75-100 incandescent bulb.

When selecting the halogen bulb, there are two sizes: one has a short neck which will fit, but it requires some creative twisting. The other style has a longer neck that makes the installation of the bulb into the fixture a breeze. So when that inefficient 100-watt bulb finally blows out, try a compact halogen spot lamp as a replacement. Your work area will look brighter, and you will be using less energy and running a lot cooler. from BackBender's Gazette 5/09 via CFMS Newsletter 10/2008, via Gem Cutters News 4/2009

Field Trips (2009) by Ed Tindell

Field trip in a BARN:

Barn Sale - 50 year old rock collection

There is a possibility that we are going to sell our ranch in Pipe Creek (near Bandera) and one of the items I do not want to move is my father's 11-ton collection of rocks that he collected from all over the US and Mexico.

We decided to offer a Barn Sale for the different Gem and Mineral Clubs within easy driving distance. Please refer this email to the Clear Lake Club and see if anyone would like to set a date for a 1-day field trip. I am sending this to you since yours was the only email I could find on your website. We would like to have the groups come before the heat gets too uncomfortable .

We are charging \$1 a pound for almost all of the rocks that you pick out. They have been moved out of the barn and sorted by types so it makes for easier selection. (I know, I did not want to move them again but hopefully this will be last time.)

There are bags of Woodward Ranch Agate as well as other Agates and Jaspers, Petrified Woods & Palm from all over . There are too many to mention but my father loved the Needles Peak, Marfa, and points west. He really has some remarkable rocks. We have Peridot in bombs, sand, grit, and crystals.

If you have any interest in a trip to "Daddy's Rock Barn" please email me or call my cell phone.

Thanks,
Gail Bowie
281-923-2211
gbowie13@sbcglobal.net



Thanks,
Ed Tindell
2009 CLGMS Field Trip Coordinator
a.k.a. "The Official Cat Herder"

HINTS AND TIPS

Silver and rubber don't get along very well. Never put a rubber band around sterling silver or you will end up with a permanent stain.

The Cowtown Cutter 1/01 via Mid-Tenn Gem'ers - June/00

Elmer's glue can remove cactus needles from your hide. Cover the area with glue, let dry and then peel it off - needles and glue

Put toothpaste on small burns for a quick pain reliever and burn healer. Works on mosquito bites, too.

The Cowtown Cutter 1/01 via Breccia - 2/97

Did you know that you can re-polish cabs that have become dull from wear without removing them from their mountings? Cut $\frac{1}{4}$ inch diameter soft leather discs and put three of them on a Dremel or screw type mandrel. Use this tool with Linde A or diamond paste and you can work carefully close to the bezel and around prongs.

From The Post Rock via The Thumblicker via The AMMONITE 2/01 and seen in T-TOWN ROCKHOUND 3/01

Endowment Fund Drawing

Prizes for the AFMS Endowment are still arriving. As of April 26 there are thirteen prizes, including the amethyst clock we showed in the

April newsletter, two meteorites, a citrine pendant, a multi-color jadeite pendant, and this beautiful intarsia bolo:



You can see photos of all the prizes and get more details at

www.amfed.org/endow2009.htm

Tickets are \$5 each or 5 for \$20. The SCFMS contact for ordering tickets, and for donating prizes, is:

Bill Pattillo,

619 Wright St,
Robstown TX 78380-3815
bill@rockfoodtable.com

Boron - Minerals and Their Uses

By Betty Jones

This element is not found in its pure state, or native, but only in combination with other minerals such as tourmaline, axinite and datolite.

Known as a borosilicate, boron, like salt, has become essential to man. The borates - minerals containing boron - occur in two main ways:

1. As deposits from volcanic sources and from hot springs in volcanic areas e.g. borax and sassoline.
2. From the drying up of enclosed bodies of sea water e.g. boracite such as is formed at Stussfurt, Germany in the saline residues, and is also formed in the "playas" or dried up shallow lake deposits of the western USA.

There are about sixty minerals that contain boron but very few that occur in enough quantity to be used commercially. These few are borax, kernite, ulexite and colemanite. Borates are of two types. The primary type is anhydrous (without water) and develops in igneous and metamorphic environments where it is rare, but stable.

The second type is hydrous (having water content) and develops in sedimentary rocks at the bottom of the lakes and "playas" in desert regions. Many of these minerals are soluble in water and have been preserved only because of the dry environment in which they develop.

Borax, when found in its natural state, is impure because of the inclusions of mud which give it a grey color, but if it is dissolved in water and then recrystallized, the crystals are transparent or white, for the mud is left behind.

The hydrous crystals of the second group are brittle and soft, white or colorless, whereas the anhydrous ones are dark in color, harder and heavy.

BORAX Na₂B₄O₇ 10H₂O (Tincal)

Borax is a hydrous sodium borate which forms as an evaporate in the muds at the bottom of saline lakes, usually together with halite, ulexite and kernite. Crystals are monoclinic and prismatic. It also occurs in lumps and masses. It is white in color, sometimes with tints of blue-green or grey. The fracture is conchoidal and it has a sweet alkaline taste. Crystals are monoclinic and prismatic.

As the salt lakes dry up and the borax loses water, it becomes white and eventually is changed into tinalconite. It is interesting to note that most of the specimens in museums that are labeled borax are, in fact, tinalconite. (Na₂B₄O₇ 5H₂O.) Note the water content is halved. Borax is named from the Arabic "*buraq*."

KERNITE Na₂B₄O₇ 4H₂O

Anhydrous sodium borate kernite is white, colorless or grey, with a dull vitreous luster and becomes powdery when exposed to air. It has perfect cleavage in two directions, forming long needles. Fracture is splintery, crystals monoclinic. It is harder than borax and gypsum. It is only found in evaporate sedimentary rocks, usually associated with ulexite and colemanite. Kernite is very similar to borax but has less water content. It is not as soluble as borax in water, but it dissolves well in hot water, thus it can be purified, as can borax, by being dissolved and allowed to recrystallize. However the product will be borax, not kernite!

Kernite is named for Kern county California where good specimens can be found in the Kramer borate district.

COLEMANITE OLEMANITE $Ca_2B_8O_{11} \cdot 5H_2O$

A hydrous calcium borate, this mineral usually occurs in evaporate deposits of sedimentary rocks associated with ulexite and borax. Crystals are monoclinic short prismatic. Colorless, white, greyish or yellowish, it is harder than borax, ulexite, or kernite, its hardness being 4 to 4½. Luster is vitreous to adamantine, and the fracture is hackly. Colemanite resembles calcite and some other spars in appearance but lab tests can easily distinguish them. It is found in the rocks of tertiary age in San Bernardino, Los Angeles, Kern and Inyo counties of California, where it appears in nodules in the clay and in beds 50 feet thick which rest on rhyolite. The mineral is only slightly soluble in water. Colemanite was named for William T. Coleman in whose mine it was first found.

ULEXITE $NaCaB_6O_8 \cdot 8H_2O$

A hydrous sodium calcium borate, ulexite is rarely found in crystal form, but in nodules or rounded masses which, when broken open show splintery loosely packed white fibers. These nodules have been given the name of “cotton balls” which they resemble. Ulexite has a hardness of 4-4 ½ . Its crystals are monoclinic, silky, white, colorless, grayish or yellowish and vitreous.

It is found in evaporate deposits in sedimentary rocks and in association with ulexite and borax, colmanite, kernite and calcite. Ulexite aggregate, when cut and polished at right angles to the length of the crystals shows an interesting phenomenon. If the specimen is placed on printing, the words underneath will be reproduced exactly on the upper surface of the sample, so ulexite has come to be known as the “television stone.” Ulexite takes its name from George Ludwig Ulex, a German chemist.

Glossary:

- 1) vitreous – glassy
- 2) adamantine - hard like a diamond

References: Hurlburt, Cornelius S., Jr., Minerals and Man Man. Published by Thames and Hudson, London 1969
 Read, H.H., F.R.S. Rutley’s Elements of Mineralogy Mineralogy, 26th ed. Pub. Thomas Murby & Co., London

From THE ROCKCOLLECTOR – May, 2004 via Shin-Skinner News, 12/03

Know Your Rocks

LEAVERITE: Also known as Dropite, Junkite and Crudite, This type of rock should be discarded immediately. It constitutes 90% of most rocks. This includes Sourgrape Agate and Mutilated Quartz.

SACK ROCK: This is material that is stuffed into a sack but falls from the top as the bearer struggles back to the car. If taken home, it will be tossed into a corner and forgotten.

WONDER ROCK: You always wonder why you brought it home and where you found it.

BRAGGIN’ ROCK: Also called Pocket or Eating Rock. This material is licked, rubbed, spit upon and fondled until it assumes a near polish and is frequently passed around for admiration.

@#%x+ ROCK: A large, heavy, possibly angular rock, that falls on your foot as soon as you have removed your hiking boots.

From – The RockCollector 5/08 via The Conglomerate - 08/98 via Calgary Lapidary Journal, 5/08

SCFMS and MEMBER CLUB GEM SHOWS			
MAY 16-17 LUBBOCK, TX LUBBOCK GEM & MIN. SOC. Lubbock Civic Center	MAY 23-24 FORT WORTH, TX FORT WORTH GEM & MIN. SOC. Will Rogers Memorial Center	AUGUST 08-09 BATON ROUGE, LA BATON ROUGE G & M S Fraternal Order of Police	AUGUST 15-16 BOSSIER CITY, LA ARK-LA-TEX G & M S Bossier City Civic Center
AUGUST 22-23 JASPER, TX PINE COUNTRY G & M S VFW Hall,			

STONEY STATEMENTS
 Clear Lake Gem and Mineral Society, Inc
 PO BOX 891533
 Houston, Texas 77289

(Postage)

Meeting 3rd Monday of the Month – 7:30 P.M.
 May 18, 2009, Clear Lake Park Building
 5001 NASA Road One, Seabrook, Texas



Member of:

Next Annual Show
 February 27 & 28, 2010
 Pasadena Convention Center



CLGMS is on the Web: (new location)
<http://www.clgms.org>

Clear Lake Gem and Mineral Society, Inc

MEMBER: American Federation of Mineralogical Societies and South Central Federation of Mineral Societies

PURPOSE: To promote education and popular interest in the various earth sciences; in particular in those hobbies dealing with the art of lapidaries and the earth sciences of minerals, fossils and their associated fields

2009 OFFICERS:	President	Ed Tindell	281-930-0698
	Vice President	Bob Brock	281-338-2252
	Secretary	Annabel Williams	
	Treasurer	Loyce Pennington	281 481-1591
	Program Director	Trina Willoughby	Lesley Gary
	Board of Directors:	Trina Willoughby	Troy Nordyke
		Cheryl Tindell	David Tjiok
	Newsletter Editor	Al Pennington	281 481-1591

Annual Show 2010.....	Al Pennington	Library.....	Lester Gary
Const & bylaws.....	Dick Rathjen	Membership.....	Mike Flannigan
Community Benefits.....	Open	Publisher.....	Mike Flannigan
Historian.....	David Tjiok	Refreshments.....	David Tjiok

Membership Dues Jan. to Dec. 2009: Adult \$10:00, \$5.00 per additional adult at same address, Junior \$5.00, \$2.50 per member with adult at same address, Family Dues \$20.00 (4+) at same address. Send Dues to CLGMS, PO BOX 891533, Houston, TX, 77289

Granvil A. "Al" Pennington, Editor 2009 – 11326 Sagetrail Houston, TX 77089-4418

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