



A monthly publication of the Clear Lake Gem & Mineral Society

VOLUME 37 AUGUST 2011 NUMBER 08



Enjoy a rocking vacation

**NEXT MEETING:** July 15, 2011  
**TIME:** 7:30 PM  
**LOCATION:** CLEAR LAKE PARK BUILDING  
 5001 NASA ROAD ONE  
 SEABROOK, TEXAS

**The PROGRAM FOR August...**

Geology DVD - Program Chair-Trina Willoughby and Ed Tindell tells us about the Llano Field Trip

**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.

INSIDE THIS ISSUE	Stoney Statements Spotlight	Editorial
July Minutes 2	 <p>Stoney Statements Salutes Rockhounding. Summer is a good time for visiting one of your favorite far away locations for digging.</p>	<p><b>Meteor Shower</b>            The next meteor shower is the Perseids peak on the night of August 13</p>
The Origin of Fossils 2		<p><b>Members should help on Programs</b>            I have had several inputs from members for presentations on jewelry making and faceting. Now I need some volunteers for assembling a presentation for future club meetings. Volunteers? See Trina!</p>
The Origin of Fossils 3		<p><b>IS YOR NAME NOT ON MY LIST?</b> I am behind on Anniversaries and Birthdays of newer members. If you have not seen your name in the last few months on the right date let me know. Day of Month is fine.</p>
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Being a child at home alone in the summer is a high-risk occupation. If you call your mother at work thirteen times an hour, she can hurt you. ~Erma Bombeck

**Minutes of the Clear Lake Gem and Mineral****July 18, 2011**

Present: President Bob Brock  
Secretary Anna Williams  
David Tjiok  
Lewis Hall  
Jim Wines, son Sam

Due to lack of a quorum, the meeting was canceled. President Bob Brock encourages members to attend the monthly meetings in an effort to keep the club functioning.

The club workshop scheduled for Saturday, October 15 was discussed. Advertise in Leisure Learning and local newspapers. Free to attend, free parking, refreshments provided. RSVP to Anna Williams, 281-486-1866.

Respectfully submitted:  
Anna Williams, Secretary

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## **The Origin of Fossils**

By Bob Cross, CLGMS

*Late Professor Emeritus of Geology, San Jacinto College - North*

### **What are Fossils?**

They are evidence of life that lived in the geologic past. Very few animal or plant remains are preserved as fossils since most organic life is composed of soft parts, which are seldom preserved.

The two main conditions that are almost essential for the preservation of organic remains are:

1. That the organism has hard parts such as Bones, Shells etc.
2. That the remains are covered quickly If remains are not covered quickly scavengers will eat them, rivers or waves may destroy them or Oxygen will decompose them chemically.

One of the best ways to preserve fossils is for a CONCRETION to surround them. Concretions are formed around organic remains after sediments are deposited and there is local cementation of those sediments.

Fossils may be DIRECT or INDIRECT Evidence of past life.

### **A. DIRECT -**

Fossils that are of the DIRECT Evidence type are where the actual remains are involved in some manner.

#### **Unaltered Remains**

1. These are usually the unaltered hard parts such as shells, bones, wood, and coral. They are never very old since chemicals in the ground water usually change them chemically
2. The actual remains of soft parts are rarely preserved since they normally decompose; however:
  - a. Many animals as large as mammoths have been preserved in glacial ice.

- b. Insects enclosed in amber are largely actual remains.
- c. Some remains of animals are found in tar deposits, such as the La Brea deposits.
- d. The oldest actual remains of soft parts are rare dehydrated or mummified remains such as 150 million old dinosaur skin.

### **Mineral Replacement -**

Three groups of replacement fossils are recognized:

1. **Permineralization** - Mineral matter strengthening of the hard parts by filling in the pore space.
2. **Petrifaction** - The complete replacement of the original organic hard parts by mineral water. Usually the mineral matter is silica or Calcite, Dolomite or Pyrite.
3. **Distillation** - The removal of the volatile materials, mostly water, to preserve a record of the soft parts with the carbon remains. Carbon remains, along with impressions, are the chief record of organic soft parts and therefore they are very important

### **B. INDIRECT -**

Fossils which are INDIRECT Evidence of prehistoric life are:

1. Fossil Molds - Three-dimensional impressions of the inside or outside of organic remains.
2. Fossil Casts - Duplicates of the original remains by filling in the molds with mineral water. Only the outside is duplicated
3. Impressions - Flat impressions formed where and organism lay in the mud.
4. Coprolites - Fecal droppings of organisms. Very important since they indicate food and the environment present.
5. Footprints - Special molds that indicate the animal that made them as well as the animals weight and mode of travel.
6. Tracks and Trails - Of worms and insects indicating presence. of the organism.
7. Borings and Tunnels - General forms of life can be identified as being present from these Casts. These are the earliest evidence of life on land
8. Chemical Remains - Trace fossils that some form of organism was present.

### **C. Very indirect!**

Presence of Organic Carbon Molecule, Organic acids.

Coal is evidence for presence of plants. Petroleum is evidence for the presence of plant or animal life. In addition to telling the details of life in the past and the story of such unique animals as the giant dinosaurs, fossils also tell of past climates.

Colonial corals in Greenland rocks attest to warmer conditions in the past than today, and imprints of fir and spruce in unconsolidated clays near the surface recorded the penetration of glacial cold far to the south Fossils are frequently used to determine the marine or fresh-water origin of rocks.

**Note:** Concretions are often found in shale, sandstone, and limestone. They may be spherical or flattened masses formed around a fossil or some other nucleus. They may be very small or up to several feet in diameter. Concretions are often harder than the enclosing rock and hence are found as they weather out of it.

**An August HAPPY BIRTHDAY**

Bill Robinett	23
Mike Burns	28
Michael Reves	28

**Peridot, also Sardonyx**

(Marital happiness).  
Peridot was called the  
“gem of the sun.” Its  
black-and-white  
alternate, sardonyx,  
symbolizes both the sun  
and the moon

**August Anniversary includes:**

Mike Burns	20
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“Energy and persistence conquer all things.” Benjamin Franklin

**GOODIE GETTERS...For August**

Main Goodies provided by club.

**Lapidary Corner** (Special request from a new member)**How to Cut Obsidian****Author unknown**

**GOLD SHEEN:** To get the most out of mahogany gold sheen obsidian, saw with the bands, as if they were a stack of plates, and you wish to unstuck them. Watch for “fire spots” in gold sheen. It is not plentiful, but opallike colors do sometimes occur in mahogany gold sheen.

**IRIDESCENT:** There are two types of iridescent obsidian. In cutting both correctly, the orientation of the color is most important. One type of obsidian is banded and the color lies in the bands. On the unbanded types of obsidian the surface has to be chipped to find the color. The banded type will have several colors or shades, while the unbanded types will have only one color. Cut the banded material parallel

to the bands to get effect. To get a rainbow effect, cut the stone at an approximately 15-degree angle across the bands.

**RAINBOW**

**OBSIDIAN:** Cut parallel to flow layers. These can be seen by examining fractured surfaces using an overhead single lamp bulb. As [the layers] are not always straight, it may be necessary to turn the stone slightly in the saw. Examine each slab set with either water or saw oil to see if the correct angle has been obtained.

**MIDNIGHT LACE:** Lace-patterned obsidian should be cut across the surface pattern that you desire to reproduce. Although obsidian is comparatively soft, it is still very important to sand away all scratches before going to polish. Some advise that wet sanding be done, since obsidian is heat sensitive and very brittle. For final polish, felt with cerium oxide is the choice. Should you be faceting some particularly gemmy obsidian try cerium oxide on Lucite®, but keep it wet.

**SAFETY TIP:** After obsidian is sawed, be sure to bevel the edges all around on your fine grinding wheel to keep them from flaking and chipping. Wear goggles or glasses at all times. If a small chip of glass (obsidian) got

into your eye, it would be hard to remove as it is transparent and hard to see even with a powerful magnifying glass, and the edges may cut your eye to a great extent before it could be removed.

**FOSSIL CLEANING TIPS****CLEANING LIMESTONE FOSSILS**

Clean limestone fossils with a little Sani-flush in a pail of water. After the fizzing stops, drain and repeat as necessary. Rinse thoroughly when finished. As with any chemical, use caution and protect your eyes. Via The Mountain Gem, and Rocky Review 12/94

**Field Trips (2011)** by Ed Tindell**Rain in West Texas should make for great rockhunting**

Hi Y'all!

The rainy season has finally started out here. We've had small showers in different places for several days. At my house, there has been about 1/10 total, but other folks around the area have noted ¼' or more. This is the first measurable rain since last September.

I'm not sure how much rain, if any, fell on the Walker Ranch. If I get time in the next day or two, I'll probably drive south to check. But even if it hasn't rained there now, it will soon, and the rain will reveal a whole new set of agate nodules that had been hidden in the dust.

The rain has also lowered the temperature quite a bit. Although it's raised the humidity some, the air is still really dry compared to the rest of Texas.

All of this information is intended to make you realize that now is the time to plan your fall rockhunt to the Walker Ranch. If that's not enough, let me add that the last time I went out there, in the middle of June, I found more than 15 lbs. of red and black plume on the top of a hill by the south gate. I've attached photos of the pieces once they came home and were washed. The biggest piece is almost a foot long, and is red botryoidal on one side, with red plume showing on the other side, where it was broken. Some of the smaller pieces are just as spectacular.

Please email me if you're interested in a rockhunt soon. Right now I can lead field trips during the week but not on weekends, and there's the possibility of a weekend hunt in the middle of September.



Thanks,  
Ed Tindell 2010 CLGMS Field Trip Coordinator  
a.k.a. "The Official Cat Herder"

**GPS for Field Trips**

If you just want to get into a site or get back to the truck then any newer 12 channel unit will do. Desirable also would be low power consumption, down-loadable topo maps, and a good back light.

For myself I have invested in several Garmin Rino combo: GPS and Family/General Radio System(FRS/GRS)transceivers, weather band receiver, uploadable topo maps and "polling"—a feature that automatically acquires position data from other members of your party's Rinos and displays them on your screen. (This feature is worth all the money in the world if it is a critical situation as cold numb fingers tend to transpose those manually input waypoints, right?) The FRS/GRS and weather band saves humping extra electronics.

The basic Rino 110 is cheap on ebay and works with the mid and high end Rino 120,130,530 (color) units and makes it easy for every member of the party to carry one. "Group leader" and keep up with all the little warm bodies and at the end of the day overlay everyone's tracks to see if a part of the mountain was left un-walked. I assembled my collection over time on ebay and from pawnshops. The 130/530 have world maps for the GPS plus, FRS/GRS, weather band, altimeters and electronic compass. The Rino 130 is a favorite of GIs in Iraq as they and use it for convoy. Garmin sells maps of the world and these even work with the fishing "blue charts".

For those with a GRS license you can legally use the General Radio System(GRS) settings for those claimed 14+ mile mountain top to mountain top conversations—all at no extra charge—it is built in.

The new Rinos have a touch screen and hopefully a better night light. The menu of cities is all in one not regional so you have to spell through the world database of cities when you want to use the unit as a backup travel GPS. Garmin has a dashboard computer widget that helps you automatically install software upgrades and if your Rino ever goes missing you can report the serial number lost or stolen.

The polling and up/download features along with the radio are the choice for meteorite hunting or Search and Rescue scenarios. Every team can have a Rino and since regular FRS/GRS radios can talk with the Rino—every member can be a part of the radio net.

## Fun Stone Folk Lore

Here's some fun folk lore about stone and minerals often used in jewelry making.

**Agate** - Powers include strength, courage, longevity, gardening, love, healing, and protection. Worn on the arm or carried while gardening, the agate increases fertility and ensures a bountiful harvest. (variety of colors)

**Amber** - This is actually fossilized tree sap, not a stone. Its powers include luck, healing, strength, protection, and love. Amber is believed to give magicians more power, and it symbolizes life since insects and other small animals that were caught in it for all time can often be found in it. (golden yellow to brown)

**Amethyst** - Makes the wearer gentle and amiable. Its powers include: dreams, overcoming alcoholism, healing, psychism, peace, love, protection against thieves, courage, and happiness. (purple)

**Aventurine** - Worn to strengthen the eyes, stimulate creativity, and enhance intelligence. Its powers include: mental powers, eyesight, gambling, money, peace, healing, and luck. (green)

**Carnelian** - Worn on the hand in ancient Egypt to still anger, jealousy, envy, and hatred. It also promotes peace and harmony, and dispels depression. Its powers include: protection, peace, eloquence, healing, courage, and sexual energy. (deep red or orange)

**Citrine** - Its powers include anti-nightmares, protection, and psychism. It is worn at night to remove fear, prevent nightmares, and to ensure a good night's sleep. It also facilitates psychic awareness. (yellow)

**Crystal Quartz** - Its powers include healing, protection, and psychism. It is symbolic of the intellect of human beings. It was called the "glass of heaven" by the American Indians. (usually clear, but also comes in a variety of colors)



**Fluorite** - Works with the conscious mind, and is useful for straightening out thoughts, and reducing emotional involvement in a situation in order to gain a more accurate perspective. It strengthens the wearer's analytical mind. (purple)

**Garnet** - Its powers include healing, protection, and strength. A healing stone, it is often worn to relieve skin conditions, especially inflammations. It also regulates heart and blood. In the past, garnets were exchanged between parting friends to symbolize their affection, and to ensure they meet again. (deep red)

**Hematite** - Believed to be powerful in drawing illness from the body. Also said to make the wearer alert and ensure sexual impulse. (silvery gray)

**Jade** - Jade is an ancient love-attracting stone. Wearing the stone is believed to help kidney, heart, and stomach problems. The Chinese believed jade prolonged life. (green and yellow)

**Jasper** - Its powers include healing, protection, health, and beauty. American Indians used it in rain ceremonies. Worn to promote mental processes and restrain dangerous desires. (red, brown, green)

**Limestone** - Sometimes referred to as a fossil stone, limestone is made up of an accumulation of fossils, because it contains the remains of ancient sea creatures. It is believed to have the powers of protection and longevity. (off white though sometimes dyed different colors)

**Malachite** - Its powers include: power, protection, love, peace, and business success. Worn to detect impending danger, and breaks into pieces when danger approaches. It is the traveler's guardian stone. (shades of green)

**Obsidian** - Its powers include protection and peace. It is made of lava that cooled so fast, the minerals contained inside did not have time to form, so it is a naturally occurring glass. (streaks of black, gray, & white)

**Onyx** - Its powers include protection. It was often worn in ancient battles to protect against danger. (black, green)

**Pearls** - Cultured or Freshwater Pearls have the powers of love, money, protection, and luck. Pearls were dedicated by the Romans to Isis and they were worn to obtain her favor. In early Chinese myths, pearls fell from the sky when dragons fought among the clouds. (white, pink, beige)

**Peridot** - Its powers include protection, health, wealth, and sleep. Used to attract love and calm anger. It also soothes nerves, and dispels negative emotion. (green)

**Rhodonite** - Worn to calm, and cast off doubt, confusion, and incoherency. (reddish stone, w/veins of black)

**Rose Quartz** - Believed to attract love. Promotes peace, happiness, and fidelity in established relationships. (light pink)

**Serpentine** - Seals made of serpentine were carried in ancient Assyria so the gods and goddess would send double blessings. Worn around the neck by nursing women to regulate their milk supply. Guards against poisonous creatures. (milky colored)

**Sodalite** - Its powers include healing, peace, meditation, and wisdom. Used to heal emotionally related diseases or those caused by stress, nervousness, anger or fear. Worn to relax the body and mind. (blue)

**Tiger's-Eye** - Its powers include money, protection, courage, energy, and luck. Roman soldiers wore tiger's-eye for protection in battle. (streaks of brown, black, and gold)

**Topaz** - Believed to protect and heal the wearer, help with weight loss, and bring money & love. (light blue)

**Turquoise** - Its powers include: protection, courage, money, love, friendship, healing, and luck. Placed in Native American tombs to guard the dead. Some tied turquoise to bows to ensure accurate shots. (shades of blues and greens)



**Gold** - Its powers include: healing, protection, wisdom, money, and success. When worn it promotes your personal power.

**Silver** - Its powers include: love, psychism, dreams, peace, protection, travel, and money. It is the Moon's metal. Silver is the metal of emotions, the psychic mind, love, and healing.

**Peru Beads** - The beads we import from Peru are hand-painted by artesanos in the Andean Village of Pisac, near Cuzco, Peru. Native clay is formed into various shapes and sizes, painted, and baked in primitive wood fired kilns. Afterwards, the beads are glazed. Ceramic beads carry on a tradition that dates back to Inca times when crafts people were highly respected members of Inca society.

**Bone Skull Beads** - These are Mullah or Tibetan prayer beads. The monks use them when meditating on their own mortality.

SCFMS and MEMBER CLUB GEM SHOWS			
Aug. 20 - 21 BOSSIER CITY, LA Ark-La-Tex G&MS Bossier City Civic Ctr.	Aug. 27 - 28 JASPER, TX Pine Country G&MS Events Ctr.	Sep. 03 - 04 ARLINGTON, TX Arlington G&MS Arlington Conv. Ctr	Oct. 08 - 09 TEMPLE, TX Tri-City G&MS Mayborn Civic Ctr
Oct. 14 - 16 VICTORIA, TX Victoria G&MS Community Ctr. 2905 E. North St.	Oct. 21 - 23 AUSTIN, TX Austin G&MS Palmer Event Ctr.	Oct. 22 - 23 DENISON, TX Texoma Rockhounds Denison Senior Ctr.	Oct. 29 - 30 GLEN ROSE, TX Paleo. Soc. of Austin Somervell Expo Ctr. Hwy 67

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.  
 August 15, 2011, Clear Lake Park Building  
 5001 NASA Road One, Seabrook, Texas



Member of:

**Next Annual Show**  
 February Feb 25-26, 2012  
 Pasadena Convention Center

CLGMS is on the Web:  
<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

2011 OFFICERS:	President	Bob Brock	281-338-2252
	Vice President	Ed Tindell	281-930-0698
	Secretary	Annabel Williams	
	Treasurer	Loyce Pennington	281 481-1591
	Program Director	Trina Willoughby	
	Board of Directors:	Trina Willoughby	Lester Gary
		Cheryl Tindell	David Tjiok
	Newsletter Editor	Al Pennington	281 481-1591

Annual Show 2012.....	Al Pennington	Library.....	Lester Gary
Const & bylaws.....	Dick Rathjen	Membership.....	Mike Flannigan
Community Benefits.....	Nancy Dugger	Publisher.....	Mike Flannigan
Historian.....	David Tjiok	Refreshments.....	David Tjiok

Membership Dues Jan. to Dec. 2011: 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 2011 – 11326 Sagetrail Houston, TX 77089-4418**  
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**Deadline for September Issue is August 28, 2011**