

MARCH BIRTHSTONE

The two birthstones for March are aquamarine and bloodstone.



The name *aquamarine* is derived from the Latin word *aqua*, meaning water, and *marina*, meaning *the sea*. This gemstone was believed to protect sailors, as well as to guarantee a safe voyage. The serene color of aquamarine is said to cool the temper, allowing the wearer to remain calm and levelheaded. Its pale, cool color beautifully complements spring and summer wardrobes. Aquamarine is most often light in tone and ranges from greenish blue to blue-green; the color usually is more intense in larger stones. This gemstone is mined mainly in Brazil, but also is found in Nigeria, Madagascar, Zambia, Pakistan, and Mozambique.



The second birthstone for March is *bloodstone*, a dark-green jasper flecked with vivid red spots of iron oxide. This ancient stone was used by the Babylonians to make seals and amulets and was believed to have healing powers — especially for blood disorders. It is sometimes called the *martyr's stone* as legend tells that it was created when drops of Christ's blood stained some jasper at the foot of the cross. Generally found

embedded in rocks or in riverbeds as pebbles, primary sources for this stone are India, Brazil, and Australia.



See more at: <http://www.americangemsociety.org>

2016 MEMBERSHIP DUES ARE DUE

Past due March 31, 2016



Membership Dues Jan. to Dec. 2016: Adult \$15:00, \$5.00 per additional adult at same address, Junior \$5.00, \$5.00 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

MINUTES OF THE FEBRUARY 15, 2016, MONTHLY MEETING

The February meeting was called to order on the 15th at the Clear Lake Park building.

A donation was brought in by Star Hopkins. She brought in two boxes that had belonged to her husband.

We had a visitor, Rodger that found about us on the web.

Charlie made a motion to approve the minutes from last meeting, Jim seconded and the minutes were approved.

We have a field trip this Saturday at Sea Rim State Park. We will meet at 9 am.

For community out reach – Charlie sent out 3 letters to schools for donations. Only two responded, so he chose a new school and is about to send out the letter to them. All three are in the Pasadena area.

Charlie suggested trying to get with a newspaper to get some advertisement on the donation.

We still need a program chair to line up our presentations for our monthly meetings.

Show items

- Security is lined up.
- ATM is still in work, but likely.
- We have the needed supplies for the kids activities
- The florescent box has been fixed – Thanks Bud!
- We have not heard back about borrowing the Houston Club's florescent display

- Volunteer list is circulating for the show
- The floor plan has been finished and proofed, but another set of eyes need to go through
- The post cards have been ordered and are at the mailing label place. Mike will deliver a check to pay the post office fee. 2100 post cards are going out. They should be in folks hands this weekend.
- The brass ticket drum, table cloth and tape are in
- The only item not in are the chains for necklaces.
- Victoria Sanches is no longer at the College of the Main Land. John M is an adjunct professor and is the new contact here. He will pass around the information and offer extra credit for students to come help and volunteer.
- Eddie has walked down the convention center and the digital board is not working. Both sides are out. Maybe we can put up our banner on the fence early.
- We do not have the metal yard signs along this day, but we need to get them out during the show.
- Our digital board adds should start today. We have 2 boards
- Shannon was able to get us a free ad in “The Press”. We need to send them a Thank YOU
- Eddie contacted the Debra Duncan and is hoping to get some advertising
- 2 other possibilities for advertising
 - o Houston press weekly newsletter that goes to 33000 people, for \$75 or higher we can get in the newsletter. The newsletter goes out every Wednesday. The suggestion was made to add in free tickets so we are in the free area as well. We decided to advertise for the \$100 rate for two weeks.
 - o For \$300 we can get a 2x2 add in the ‘preview’ Houston Chronicle. We decided against this.
- Raul will reserve the U-Hall tomorrow.

New business

- April on a Saturday is the event at the San Jacinto monument where we could advertise our club. Not-for profits have a one time charge for signs. This charge is around \$50 to \$60. Eddie and John said they can support this. Eddie will head up sending in the paperwork for this.
- There was a request for “how to sew patches on vets or T-shirts”
- There was a suggestion to have a mini-show to have club members have tables and open to the community.

Respectfully submitted

Trina Willoughby, Secretary

MINUTES OF THE MARCH 7, 2016, BOARD MEETING

The March Board meeting was held on March 7th 2016.

The origin of mineral deposits was selected for the April presentation.

The club will participate in Pasadena library carnival. John V. will go to the locker to get the supplies and represent our club.

Eddie is in charge of the San Jacinto battle reenactment event. After the library event the supplies will need to get to Eddie

We will need to choose our budget committee at the next meeting.
Mike will be ordering new checks for treasurer

Show items

- Board members received an email with the draft show report. The team had a few suggestions on the report.
- Most folks seemed to be happy with the show.
- Ticket sales were up from the previous year.
- For next year's show we have a wish for another blow drier for the hands on section. We will probably need less than 10 dollars of paint for next year. We could use the French fry containers for kids to carry their rocks away. Pam volunteered to collect 150 rocks for next year. She will also make new tri-fold signs for the hands on area. The French fry containers and blow drier were approved.
- We need 6-10 new sign bases for next year. Sara will pick up a base when she goes to the locker.
- We need a new florescent box. We will try to look into this for next year.
- We need more volunteers for next year.
- We have paid our deposit for the next two years at the convention center.
- The scout booth will need more donations to give scouts next year
- We need to rebuild the gem mine.
- We would like a way to make it clear that tickets are to be purchased outside.

Respectfully submitted

Trina Willoughby, Secretary

FIRE AGATE



Fire agate, a variety of chalcedony, is a semi-precious natural gemstone discovered so far only in certain areas of central and northern Mexico and the southwestern United States (New Mexico, Arizona and California). Approximately 24-36 million years ago these areas were subjected to massive volcanic activity during the Tertiary Period. The fire agates were formed during this period of volcanism when hot water, saturated with silica and iron oxide, repeatedly filled cracks and bubbles in the surrounding rock.

High Grade Slaughter Mountain Arizona Fire Agate Rough,
Source Maricopa Mining LLC & www.FireAgate.us

Fire agates have beautiful iridescent rainbow colors, similar to opal, with a measurement of hardness on the Mohs scale of between 5 and 7 which reduces the occurrence of scratching when polished gemstones are set in jewelry. The vibrant iridescent rainbow colors found within fire agates, created by the Schiller effect as found in mother-of-pearl, is caused by the alternating silica and iron oxide layers which diffract and allow light to pass and form an interference of colors within the microstructure layering of the stone causing the fire effect for which it is named.



MCFADDEN BEACH FIELD TRIP



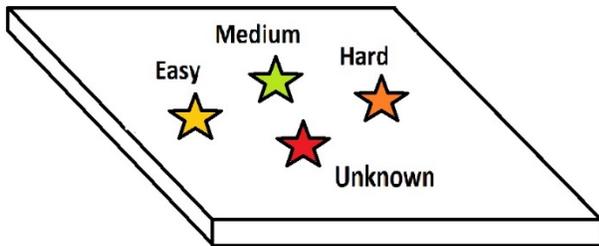
Saturday, February 20, 2016 – Members and visitors who attended were Steve Brownfield, Lewis Hall, Greg McDonald, Maria and Malia Pope, Nancy and Ben Duggar, Corrie Willoughby, Jo Brownfield, Julie Meeks, Becky Kadel, Pam Dudley and family, Ed and Lila Johnson, Nick Cocchia; not pictured: Trina Willoughby, Annabel Brownfield, Jim Edwards, Jerry Newberry and Jim Hawkins.



Siderite filled shrimp burrows.

[BENCH TIPS BY BRAD SMITH](#)

IDENTIFYING UNMARKED SOLDERS



There are plenty of ways to mark your sheet or wire solders, but suppose you forgot to mark them and have a couple that you can't identify. The answer is to compare the melting temperature of the unknowns with that of a known solder. What I do is take a thick scrap of copper or nickel and arrange several solders

on it. Ideally, I would have a sample of easy, medium and hard known solders surrounding the unknown solder. Then I heat the plate from the bottom and watch the order in which the solders melt.

INEXPENSIVE ELECTRIC WAX PEN

You can make your own wax pen from a small soldering iron plugged into a light dimmer switch for heat control. Both components are easily found at Radio Shack, a big hardware store or at Harbor Freight. As an example of the components, see www.harborfreight.com items #43060 and #47887

File the tip of the soldering iron into the shape you prefer or even better get a soldering iron with replaceable tips. Then you can make several tip shapes for different tasks. Set the dimmer control just hot enough to melt the wax without producing any smoke.

A tip design that I find ideal for some work is a length of small gauge wire that lets me reach in around the model to melt some wax. The wire is about 15mm long and 18 or 20 gauge. To conduct heat all the way to the tip, I use Sterling wire and silver solder it into a hole on the end of a copper or brass rod that will fit into the soldering iron.

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"Bench Tips for Jewelry Making" and "Broom Casting for Creative Jewelry" are available on Amazon.

[MINERALS AND ROCKS](#)

A **mineral** is a naturally occurring substance, representable by a chemical formula that is usually solid and inorganic, and has a crystal structure. It is different from rock, which can be an aggregate of minerals or non-minerals and does not have a specific chemical composition. The exact definition of a mineral is under debate, especially with respect to the requirement a valid species be abiogenic, and to a lesser extent with regard to it having an ordered atomic structure.^[citation needed] The study of minerals is called mineralogy.



There are over 5,300 known mineral species; over 5,070 of these have been approved by the International Mineralogical Association (IMA). The silicate minerals compose over 90% of the Earth's crust. The diversity and abundance of mineral species is controlled by the Earth's chemistry. Silicon and oxygen constitute approximately 75% of the Earth's crust, which translates directly into the predominance of silicate minerals. Minerals are distinguished by various chemical and physical properties. Differences in chemical composition and crystal structure distinguish various species, and these properties in turn are influenced by the mineral's geological environment of formation. Changes in the temperature, pressure, or bulk composition of

a rock mass cause changes in its minerals.

Minerals can be described by various physical properties which relate to their chemical structure and composition. Common distinguishing characteristics include crystal structure and habit, hardness, lustre, diaphaneity, colour, streak, tenacity, cleavage, fracture, parting, and specific gravity. More specific tests for minerals include magnetism, taste or smell, radioactivity and reaction to acid.

Minerals are classified by key chemical constituents; the two dominant systems are the Dana classification and the Strunz classification. The silicate class of minerals is subdivided into six subclasses by the degree of polymerization in the chemical structure. All silicate minerals have a base unit of a $[\text{SiO}_4]^{4-}$ silica tetrahedron—that is, a silicon cation coordinated by four oxygen anions, which gives the shape of a tetrahedron. These tetrahedra can be polymerized to give the subclasses: orthosilicates (no polymerization, thus single tetrahedra), disilicates (two tetrahedra bonded together), cyclosilicates (rings of tetrahedra), inosilicates (chains of tetrahedra), phyllosilicates (sheets of tetrahedra), and tectosilicates (three-dimensional network of tetrahedra). Other important mineral groups include the native elements, sulfides, oxides, halides, carbonates, sulfates, and phosphates.

<https://en.wikipedia.org/wiki/Mineral>



In geology, **rock** or **stone** is a naturally occurring solid aggregate of one or more minerals or mineraloids. For example, the common rock granite is a combination of the quartz, feldspar and biotite minerals. The Earth's outer solid layer, the lithosphere, is made of rock.

Rocks have been used by mankind throughout history. From the Stone Age, rocks have been used for tools. The minerals and metals found in rocks have been essential to human civilization.^[1]

Three major groups of rocks are defined: igneous, sedimentary, and metamorphic. The scientific study of rocks is called petrology, which is an essential component of geology.

[https://en.wikipedia.org/wiki/Rock_\(geology\)](https://en.wikipedia.org/wiki/Rock_(geology))

VISIT TO WACO MAMMOTH NATIONAL MONUMENT AND WACO PIT FIELD TRIP

We are planning a field trip to Waco Pit near Waco, TX, on Saturday, April 30.

This is Del Rio Formation, Cretaceous Epoch. You can find some shark teeth, small echinoids, micro ammonites, occasional starfish, nautilus hoods, fish bones, and miscellaneous other invertebrates.

The Waco Mammoth National Monument is a paleontological site and museum in Waco, Texas, where fossils of twenty-four Columbian mammoths and other mammals from the Pleistocene Epoch have been uncovered.

We will meet at the Waco Mammoth National Monument at 9:00 a.m. Saturday, April 30. After the tour, we will drive to the Waco Pit. Time permitting, we also plan to visit Oglesby and search for turritella. This could be Saturday afternoon or Sunday morning.

We are camping at Airport Park, 4600 Skeet Eason Rd, Waco, TX 76708.

What to bring? Sack Lunch, water, extra shoes, socks, rubber boots (sometimes the pit gets very muddy), plastic bags for collection of specimens.

Please RSVP – Annabel Brownfield, 281-486-1866, annabel.brownfield@gmail.com.

<https://maps.google.com/maps/ms?msid=214173209449396905977.0004b6b1506edde4597f0&msa=0&ll=31.600935,-97.213554&spn=0.0071,0.015643>
<http://www.thefossilforum.com/index.php?/topic/46027-lake-waco-research-area/>



SCFMS and MEMBER CLUB GEM SHOWS

<p>March 5-6, 2016 Big Spring, TX Big Spring Prospectors Club Howard Co. Fair Barn</p>	<p>March 5-6, 2016 Robstown, TX Gulf Coast G&MS Regional Fairgrounds</p>	<p>March 12-13, 2016 Live Oak, TX (San Antonio) Southwest G&MS Live Oak Civic Center 8101 Pat Booker RD</p>	<p>Mar 10 – 13, Deming, NM, Deming G&MS, SWNM Fairgrounds,thedgms @ gmail.com, www.thedgms.com</p>
<p>Mar 18 – 20, Albuquerque, NM, Alb. G&MC, Expo NM State Fairgrounds, paulhlava@q.com, www.agmc.info</p>	<p>Apr 1 – 2, Ada, OK, Ada GM&FC, Pontotoc Cnty Agri-Plex, okieed42@windstream.n et,</p>	<p>April 09-12, 2016 Abilene, TX Central Texas G&MS Abilene Civic Center North 6th & Pine</p>	<p>April 15-17, 2016 Alpine, TX Chihuahua G&MS Alpine Civic Center</p>
<p>Apr 30 – May 1, Waco, TX, Waco G&MC, Extraco Event Center, www.wacogemandmineral. org</p>	<p>May 7 – 8, Lubbock, TX, Lubbock G&MS and the SCFMS Show and Convention, http://www.lubbockgemandmineral.org/57th-annual-show</p>	<p>May 21-22, 2016 DeRidder, LA DeRidder G&MS Beaugard Parish Fairgrounds 506 West Drive</p>	<p>May 28-29, 2016 Fort Worth, TX Fort Worth G&MS Will Rogers Mem. Center</p>
<p>Aug 13-14 2016 Baton Rouge, LA Baton Rouge GMS Marriot Hotel</p>	<p>August 20-21, 2016 Bossier City, LA Ark-La-Tex G&MS Bossier City Civic Center</p>	<p>August 27-28, 2016 Gem & Mineral Show Jasper, TX Pine Country G&MS Events Center</p>	<p>September 17-18, 2016 Dallas, TX Dallas G&MS Restiol Expo Cen. Mesquite, TX</p>
<p>October 8-9, 2016 Temple, TX Tri-City G&MS Mayborn Civic Cen.</p>	<p>Fort Worth, TX Cowtown Gem, Min. & Glass Society</p>	<p>October 29-30, 2016 Glen Rose, TX Paleo. Soc. Of Austin Somervell Expo Center Hwy 67</p>	<p>November 5-6, 2016 Amarillo, TX Golden Spread G&MS Amarillo Civic Center Exhibition Hall</p>
<p>November 11-13, 2016 Humble, TX Houston G&MS Humble Civic Center 8233 Will Clayton Pkwy</p>	<p>SCFMS November 10-12, 2017 Humble, TX Houston G&MS Humble Civic Center 8233 Will Clayton Pkwy</p>		

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.
 Clear Lake Park Building
 5001 NASA Parkway, Seabrook, Texas



Member of:

Next Annual Show
 February 27-28, 2016
 Pasadena Convention Center

CLGMS is on the Web:
<http://www.clgms.org>



American Federation of Mineral Societies

South Central Federation of Mineral Societies

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.

2015 OFFICERS:	President	Raul Montelongo	
	Vice President	David Tjiok	
	Secretary	Trina Willoughby	
	Treasurer	Mike Flannigan	
	Program Director	vacant	
	Board of Directors:	Shannon Oliver	Sara Chelette
		Bob Brock	Jim Edwards
Sandra Christiansen		vacant	
Newsletter Editor	Annabel Brownfield		

Annual Show 2016	Sara Chelette	Library.....	Vacant
Constitution & Bylaws.....	Sara Chelette	Membership.....	Victoria Faulkner
Community Benefits.....	Vacant	WW System Admin.....	Mike Flannigan
Historian.....	David Tjiok	Refreshments.....	David Tjiok
Publicity.....	Eddie Dove	Education/Field Trips.....	Annabel Brownfield

Membership Dues Jan. to Dec. 2016: Adult \$15:00, \$5.00 per additional adult at same address, Junior \$5.00, \$5.00 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

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