



A monthly publication of the Clear Lake Gem & Mineral Society

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NEXT MEETING: August 15, 2016
TIME: 7:30 PM
LOCATION: Clear Lake Park Building
 5001 Nasa Parkway
 Seabrook, Texas

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August Program August Birthstone	1- 2	<p><u>AUGUST MONTHLY MEETING</u></p> <p><u>Cool Minerals We Love</u> By John Caldyne</p> <p>John Caldyne, CLGMS member, will present the August program. John studies mineralogy and lectures on gemstones. He will discuss four minerals – Jasper, Lapis, Rhyolite and Sodalite. He will review their origin, formula make up, and why they look alike, yet are so different. Other gemstones will be on display as well.</p>
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AUGUST BIRTHSTONE



PERIDOT

Peridot is one of the few gemstones that exists in only one color; a distinctive signature lime green. In ancient times it was believed that Peridot was a gift of Mother Nature to celebrate the annual creation of a new world. When presented as a gift, Peridot is said to bring the wearer magical powers and healing properties to protect against nightmares. It is also said to instill power, and influence through the wearing of the gemstone.

Today, most Peridot comes from Arizona but it is also found in China, Myanmar, and Pakistan. Peridot is available in several colors ranging from yellowish green to brown, but the bright lime greens and olive greens are the most desired. If you prefer citrus tones or earth tones, you'll find that Peridot belongs in your jewelry collection.

Peridot gemstones smaller than three carats are very common but gemstones over five carats are rare and therefore have a higher value. Peridot in 10 to 15 carats are even more rare, but provide a big and bold look for an affordable price.

<http://www.wixonjewelers.com/education/gemstones/gemstone-guide>

MINUTES OF THE JULY 18, 2016, MONTHLY MEETING



The July meeting was held on the 18th at the Clear Lake park building. This meeting was started early at 7pm. Two \$1000 scholarships were awarded. Corey Williams accepted his scholarship and told us a little about himself and his studies at San Jacinto/University of Houston. William Kibikas was on the east coast, so his father accepted the scholarship for him and told of his studies.

The rest of the meeting was a workshop to make a copper and bead bracelet. This was taught by Karen Burns. No business meeting was held.

Respectfully submitted:
Trina Willoughby, Secretary



July Monthly Meeting with Karen Burns teaching us all how to make a beaded bracelet.

MINUTES OF THE AUGUST 1, 2016, BOARD MEETING



Opened meeting at 7:26pm.

David Tjiock brought up Trina's question to approve the 3 pocket vests. It was decided to go with 10-XL, 20-L, 15-M, and 5-S

Discussed Hasse Elementary email about loaning them mineral specimens for display. David will get some specimens from The Treasure Chest (Gary's rock shop).

Approved John Caldynes presentation called "Cool minerals we love" covering several minerals including their mineralogy and geology.

Discussed options for improving our fluorescent mineral display. Raul M agreed to contact HGMS member who owns mobile fluorescent mineral display to see about using it for the annual show.

Sara agreed to contact magazines for annual show ads.

Meeting closed at 8:30pm.

Respectfully submitted
Raul Montelongo, President



President Raul Montelongo presenting a scholarship check to recipient Corey Williams who is attending San Jacinto Junior College and planning to attend the University of Houston-Clear Lake.



President Raul Montelongo presenting a scholarship check to the father of recipient William Kibikas, who was out of state. William attends the University of Maryland and is majoring in Geology.



Jasper



Lapis



Rhyolite



Sodalite

TIGER EYE HISTORY & FACTS:

First of all, tiger's eye, tigereye, tiger eye and tiger-eye are all accepted ways to write this name.



Tiger's Eye is a durable quartz composite with the usual quartz hardness of 7. It begins as the fibrous blue mineral called crocidolite, which is comprised of iron & sodium. Most of us know crocidolite as asbestos. The transformation begins when quartz becomes imbedded between the fibers of crocidolite. This process will result in one of two gemstones. A blue stone is called Hawk's Eye or the golden brown stone called Tiger's Eye.

During the process, the asbestos is completely dissolved. But the quartz takes on the fibrous formations and the blue color of crocidolite. This creates the parallel lines within the gem which gives it that ever shifting play of light and movement the stone is so loved for. This is also known as chatoyancy, the gleam that rolls across its surface, much like the eyes of a cat.

Even though the iron & sodium dissolve, traces of hydrated oxide of iron deposit between the crocidolite and quartz, creating the golden color that is common to Tiger's Eye. How much of this hydrated mineral is deposited will determine how Golden brown, red, green or blue, Tiger's Eye and Hawk's Eye will be. The rarer blue Hawk's Eye will have only the slightest amounts. The varying amounts of hydrated oxide of iron, actually cause several colors and mixes of color. When the color is a greenish gray, it is called cat's-eye quartz. A golden yellow reflection on a brown stone, is called Tiger's Eye. If the stone is blue gray or bluish, it's known as Hawk's Eye. Reddish brown, or mahogany colored stones, are known as bull's-eye or ox-eye.



Up until recently tiger eye has been considered to be pseudomorph but new evidence proves otherwise. It has long been thought that the crocidolite fibers were replaced with quartz much like the replacement that happens in petrified wood. New evidence proves this may not be the case and that quartz and the crocidolite co-exist.

Tiger eye has a fibrous structure and in the lapidary shop must be oriented properly to get the chatoyancy and/or the "cats eye" effect. Cuts must be exactly parallel to the length of the fibers to get the full chatoyancy. If the saw cut is perpendicular, or 90% to the fibers, you end up with a lifeless, dark brown to black stone with no chatoyancy or light play at all. Orientation of cutting is critical to getting good chatoyancy and color out of tiger eye. These fibers in Tiger Eye may be up to about two inches long and very thin. Most are only 0.001 millimeters, or 0.000039 inches in diameter and are not always straight making it even harder at times to cut good chatoyant stones.

TREATMENTS:



In most cases, but not always, red tiger eye is not a natural occurrence. It is usually the result of heating and can be done using the kitchen oven. Here's a basic recipe for heat treating tiger eye.

To protect the tiger-eye from thermal shock during heating, cover slabs of ordinary, gold tiger eye in fine clean silica sand, at least 3" all around the slab.

Place the metal container in a cold oven and increase the temperature by 50 degrees every hour until it reaches 400 degrees. Then turn the oven off and **DO NOT OPEN THE DOOR**. Allow plenty of time for the container to cool all the way through. (If you heat treat tiger eye to sell

BE SURE you let it be known it has been treated, it's only right and it's the law.)

There are natural occurrences that tiger eye can be found with red color. And other known ways have been from brush fires where the deposits are found and also when miners would build fires next to the seams to help crack it up into smaller pieces, remember most of these miners had nothing but hand tools to work with.

Not long after tiger eye was first discovered for lapidary, the world famous Idar-Oberstein lapidaries discovered by using hydrochloric or oxalic acid they could bleach tiger eye to an evenly colored light, translucent yellow. When cut properly they produced "cats eye" stones that look much like the rare variety of chrysoberyl but can be distinguished very easily between the two by gemologists.

Other treatments but not usually done, never by me, but some do it. In pietersite and bighamite stones especially, it is very common to run into pits, cracks, or voids called vugs. These are some-times filled with wax, super glue or opticon in the last steps of

sanding and polishing the stone. I never do any of these treatments but as I said it is and has been done by others.

There are many other types of stones that display a "cats eye" or shimmering chatoyancy. The word "Chatoyant" comes from the French word for "cat" or to glow like a cat's eye. Tigereye is the anniversary gemstone for the 9th year of marriage

Editors Note: Remember tigereye has asbestos, so always use a face mask and/or keep tigereye under water when sanding and polishing.

Article Provided by Top Gems, via The Palomar Gem 2/05 with additions from the internet, Via Chips 'N Splinters 5/16 Via: The Rockhounder June 2016; Via The Glacial Drifter, Vol. 59, No. 07, July 2016

[BENCH TIPS BY BRAD SMITH](#)

SHEET & WIRE STORAGE



The more you work with jewelry, the more problems you have finding the piece of metal you need. My pieces of sheet were generally stored in various plastic bags, and the wire was in separate coils. Few were marked, so it often took me a while to locate that piece of 26 ga fine sheet I bought last year, especially since I usually take my supplies back and forth to classes.

A tip from a friend helped me organize everything. I bought an expanding file folder from the office supplies store (the kind that has 13 slots and a folding cover) and marked the tabs for each gauge of metal I use. Then I marked all my pieces of sheet with their gauge, put them in plastic bags, marked the gauge on the bag, and popped them into the folder. I usually store coils of wire loose in the folder, but they can also be bagged if you prefer. I use one tab for bezel wire and one for the odd, miscellaneous items.

The resulting folder is really convenient when I want to take my metal out to a class or workshop, and it's colorful enough for me to easily find in the clutter of the shop!

LITTLE BALLS



I often use little balls of silver and gold as accent pieces on my designs. They can be made as needed from pieces of scrap. Cut the scrap into little pieces, put them on a solder pad and melt them with a torch. Then throw the balls into a small cup of pickle.

If you need to make all the balls the same size, you need the same amount of metal to melt each time. The best way to do that is to clip equal lengths of wire.

But there's an easier way to get a good supply of balls. Some casting grain comes in near perfect ball form. Just grab your tweezers and pick out the ones you need. When you need larger quantities of balls, pour the casting grain out onto a baking pan, tilt the pan a bit, and let all the round pieces roll to the bottom. Bag the good ones, and pour the rest back into your bag for casting. Balls can be sorted into different sizes using multiple screens.

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



[PARIA MOUNTAINS, UTAH](#)



The Paria Mountains' 18 miles from Kanab, Utah in Hwy 89. Paria Wilderness, Utah, USA. These mountains are found beside a dirt road that connects to Highway 89 just before the Paria River. Hwy 89 takes you from Kanab Utah to Page Arizona. The side of the mountains have spectacular colors (better than the Grand Canyon, Bryce, the Painted Desert, the slot canyons and even White Pocket) due to their encrusted minerals like iron oxides, manganese, cobalt and others that geologists describe. Visit [Amazing Geologist](#) for more.

Gritty Greetings, July, 2016



Members are always encouraged to bring a report of their latest field trip or of your own special dig. Bring in your prize specimens and educate us. Show us you rock hounding finds.

SCFMS and MEMBER CLUB GEM SHOWS			
Aug 13-14 2016 Baton Rouge, LA Baton Rouge GMS Lamar Dixon Expo Cen. Gonzales, LA	August 20-21, 2016 Bossier City, LA Ark-La-Tex G&MS Bossier City Civic Center	August 27-28, 2016 Pine Country G&MS Events Center Jasper, TX	October 8-9, 2016 Temple, TX Tri-City G&MS Mayborn Civic Center
October 21-23, 2016 Austin, TX Austin G&MS Palmer Events Center	October 29-30, 2016 Glen Rose, TX Paleo. Soc. Of Austin Somervell Expo Center Hwy 67	November 5-6, 2016 Amarillo, TX Golden Spread G&MS Amarillo Civic Center Exhibition Hall	November 6-7, 2016 Midland, TX Midland G&MS Midland Center
November 11-13, 2016 Humble, TX Houston G&MS Humble Civic Center 8233 Will Clayton Pkway	November 29-30, 2016, Paleontological Soc. Of Austin Old Settlers Park Hwy 29 E Round Rock, TX	January 14-15, 2017 Fredericksburg, TX Fredericksburg Rock hounds Lady Bird Johnson Municipal Park	January 27-29, 2017 Tyler, TX East TEXAS G&M Show Rose Garden Center
February 18-19, 2017 Georgetown, TX Williamson Co. G&MS San Gabriel Park	February 25-26, 2017 Plainview, TX Hi-Plains G&MS Ollie Liner Center	Feb 25-26, 2017 Pasadena, TX Clear Lake G&MS Pasadena Convention Center	March 04-05, 2017 Big Spring, TX Big Spring Prospectors Club Howard Co. Fair Barn
March 4-5, 2017 Robstown, TX Gulf Coast G&MS Regional Fairgrounds	March 11-12, 2017 Southwest G&MS San Antonio Event Cen. 811 Meadow Leaf Dr. San Antonio, Texas	April 08-09, 2017 Abilene, TX Central Texas G&MS Abilene Civic Center North 6th & Pine	April 15-16, 2017 Alpine, TX Chihuahua G&MS Alpine Civic Center
SCFMS November 10-12, 2017 Humble, TX Houston G&MS Humble Civic Center 8233 Will Clayton Pkwy			

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	WWW 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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