

P. O. BOX 51 SANTA ANA. CA. 92702





SANTA ANA ROCK & MINERAL CLUB

BOARD OF DIRECTORS President Trish Voss 949-631-2314 Vice President Jonathan Magallon 714-887-9513 Secretary Leah Harden-O'Brien 714-963-3708 Treasurer Charlotte Spalding 714 531-4058 Parliamentarian Jim DeMarco 714-963-3708 COMMITTEE CHAIRMEN 714-963-3708 Federation Jim DeMarco Field Trip Mike Anglin 949-348-0808 Hospitality Claudia Sanchez 714 980-0567 Membership Pam Greene 949 548-0752 Jonathan Magallon Program 714-887-9513 Property/shop Don Greene 949 548-0752 Editor Pam Greene 949 548-0752 Email: Pam1.greene@gmail.com SARM EMAIL: sarmclub@gmail.com WEB SITE: http://www.sarmclub.org WEB MASTER" pam1.greene@gmail.com WORK SHOP: At the Greene's (members only) first full weekend of the month 9 am to noon call Pam Greene at 949 548-0752 to request flexible times

CLUB CALENDAR -MAY2016

- MAY NO SCHEDULED WORKSHOPS IN MAY Call for flexible times
- MAY 18 WEDNESDAY 7 PM GENERAL MEETING SILENT AUCTION
- JUNE 4&5 *** SATURDAY & SUNDAY *** WORKSHOP 9:00 AM NOON
- JUNE 15 WEDNESDAY 7 PM GENERAL MEETING WIRE WRAPPING DEMONSTRATION & HANDS ON WORKSHOP

FLEXIBLE WORKSHOP

If you want to use the workshop at times other than the scheduled days, call Pam or Don at (949) 548-0752 to see if we're going to be home. We're pretty flexible. Short notice is fine. If we'll be home you can use it.

May 7 - 8: Searchers Gem & Mineral Society Brookhurst Community Center 2271 W. Crescent Avenue, Anaheim Hours: Sat 10 - 5; Sun 10 - 4:30

	Santa Ana Rock & Mineral P.O. Box 51 Santa Ana, CA 92702
	CLUB PURPOSE The purpose of the Club is to offer an opportunity for those who are interested in rocks, minerals and fossils, to gather at regula meetings, display and examine items of interest in the hobby, t promote and also encourage the art and practice of lapidary, to exchange experiences and ideas, to organize field trips for members and guests, and to promote the general interest in ar knowledge of the hobby.
	MEETING: Visitors are welcome! 7:00 PM, 3rd Wednesday of the month except July & December. WHERE: 10739 Los Jardines West Fountain Valley, Ca 92708
	SARM is a member of CFMS (California Federation of Mineralogical Societies) For more information on shows and events check out their web site at :http://www.cfmsinc.org
	CLUB PUBLICATIONS: All items may be quoted unless otherwise noted, we only ask that credit be given and we'll do the same.
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	DUMB JOKES A city dweller came to a farm and saw a beautiful horse. He decided he had to have the animal. He bar- gained with the farmer and farmer finally sold him the horse. The city man jumped on the horse and said "Giddyup!". The horse didn't budge. The farmer explained, "this is a special kind of horse. He'll only move if you say, 'Praise the Lord!'. To stop him, you have to say 'Amen'." Keeping this in mind, the new owner yelled, "Praise the Lord!", whereupon the horse took off with great speed. Soon horse and rider were headed for a cliff. Just in time the rider remembered to say, "Amen". The horse came to a screeching halt, right at the edge of the cliff. Relieved the rider raised his eyes to heaven and ex- claimed, "Praise the Lord!".

A reassuring voice heard over the intercom of a jet plane: "Ladies and gentlemen, please sit back and relax. This plane is entirely automatic. Automatic pilot, automatic food services, automatic landing devices.

Nothing can go wrong. . . Nothing can go wrong. . . Nothing can go wrong....."



PRESIDENT'S MESSAGE FOR MAY, 2016

Jeff Swanager, CEO of Oceanview Mines LLC, and owner of the Oceanview, Pala Chief and Elizabeth R mines on Chief Mountain, made our April meeting a night to remember. Jeff visually transported us to his mines and technically introduced us to their drilling and blasting practices used in searching for gems. The room was filled with excitement that accelerated when Jeff showed the group spectacular gems from his mines, and he graciously donated a stunning door prize. The group was ready to leave for the mines.

The success of April's meeting was a team effort. Vice President Jonathan Magallon provided a great speaker and with Claudia Sanchez produced a delicious fare. Ray Heslop donated rocks for the opportunity drawing, James Burke actively sold tickets, Pam Greene provided technical support, James De Marco and others set up for the event, and guests that became new members brought the meeting to a successful end. A special thanks goes to our Treasurer Charlotte Spalding and our Secretary, Leah Hardin-O'Brien for the opening and closing details of our club. April's meeting was exciting; come and see what May has to offer.

Trish Voss, President



SANTA ANA ROCK AND MINERAL CLUB MINUTES OF THE GENERAL MEMBERS MEETING HELD ON APRIL 20TH, 2016

Meeting called to order at 7:00pm with the Pledge of Allegiance led by VP Jonathan Magallon. In Attendance; 22 members and 1 visitor. Welcome to new members; Richard Coalan, June Huntley, and John & Grace Pape!

CLUB BUSINESS:

HOSPITALITY: Officer Claudia Sanchez and Jonathan Magallon provided refreshments including homemade cereal bars and selection of yogurts.

MINUTES: March minutes approved as printed in April newsletter.

TREASURER'S REPORT: For March took in \$100, spent \$224, balance \$2596.

FEDERATION: Officer Jim DeMarco reports upcoming convention and field trip information available in newsletter.

NEW BUSINESS:

SHOW & CROW: Member James Burke shared rocks including specimens of fossils and malachite also available for purchase. Member Bruce Levine shared a handmade wire wrapped necklace of labradorite. Later in the meeting new members John and Grace Pape shared some of their recent findings from mining trip to Utah.

Break at 7:15 to socialize and enjoy refreshments before activity.

ACTIVITY: VP Jonathan introduced guest speaker Jeff Swanger, CEO of Oceanview Gem Mining Co. at 7:30.

Jeff talked us through his homemade video of the mining process from start to finish, which had to undergo radical changes to the business side after nine-11.

The video showed a detailed firsthand look at;

- Land/locations of digging, how to navigate and tools used. What to look for, spotting the minerals in rocks that hold the most promise.
- Laying the explosives, what it entails and the cost.
- Finding and cleaning gem pockets.
- Detailed pictures of specimens that have been and are found including estimated value. -

Jeff also brought with him to share with us a collection of large fine specimens found, including a huge deeply colored natural Kunzite.

Jeff Swanger graciously not only donated this meetings door prize but also his time and presentation to the club at no charge! Information to reserve a trip to the mine & screen for gems can be found here: www.digforgems.com THANK YOU JEFF!

NEW BUSINESS -continues at 8:10:

NEW PROPOSAL: Changing of the name 'Show and Crow'. Request to all members for suggestions for new name/title, give to secretary at next meeting to be posted and voted on at end of May member meeting. This is a great section of our club for the sharing of information; and material, how it was made, and if possible available for purchase. The Board is looking for new ideas to name this 'show & tell' (without calling it that) and omitting the word 'crow'. Example: Share & Show & Sell.

MEMBERSHIP: A reminder to all members that the responsibility to bring in new members falls on all of us. Think of new ideas to bring up in following meetings. Now available 'business' cards attached to 'invite' cards holding club information for members to give out to prospective new members. Card design/printing donated by Secretary Leah with help putting together from President Trish.

SECRETARY: A request to all members to please bring/ notify/list of any club assets that they have in their possession to be added to inventory. Please turn into secretary at May meeting. Assets include (but not limited to) any paperwork, equipment, and miscellaneous meeting items.

Opportunity drawing: Prizes generously donated by members and tickets sold 3 for \$1 available throughout meeting with winners called at end of meeting.

Door Prize: Generously donated by tonight's speaker Jeff Swanger, fine quartz crystal specimens in rock matrix. Winner: member Pam Greene.

Meeting adjourned at 8:20 pm.

Secretary, Leah Harden-O'Brien



EMERALD-GEMSTONE OF MAY

May's birthstone is the emerald. Emeralds vary in color from light to deep green. An emerald's color comes from the presence of chromium and or vanadium, replacing some of the aluminum in the mineral's structure. The stone can, however, lose its color when heated strongly.

Emerald is of the Beryl family of stones which is short for beryllium aluminum silicate. Members of the beryl family are determined by their color. The finest quality emeralds are green to a slight bluish-green. Other beryls are



blue aquamarine (the March birthstone), red or pink morganatic and yellow golden beryl. It can also be white. Beryl has a hardness of 5.5 to 8. The cleavage is indistinct or in one direction. The crystal form is hexagonal and usually striated lengthwise along the crystal. Unlike other beryls, emeralds often contain inclusions and other flaws. These flaws are not looked on as negative aspects for emerald like they would be for other gemstones. Indeed, these flaws are considered part of the character of the stone and are used to assure the purchaser of a natural stone.



Beryl is found in pegmatites and certain other metamorphic rocks. Emeralds are most frequently found inside a form of shale - a fine grained sedimentary rock. In the United States, emeralds (though not of high quality) can be found in North Carolina. Around the world, they also occur in Zambia, Brazil, Pakistan, Norway, Austria, India, Malagasy and Australia. The finest stones come from Columbia, where they are mined from the calcite veining bituminous limestone at Muzo, Cosauez, and Somondoco, Bogota; these deposits were discovered in the late 1500's. Emeralds were discovered in 1830 in mica schists near Zsverdlovsk, in Russia's Ural Mountains.

Emeralds have been a much cherished gemstone since the ancient Egyptians. To the Egyptians, the green color of emerald stood for fertility and rebirth. They were worn by royalty in Babylon and Egypt. Tools dating back to 1300 B.C., during the reign of Rameses II, have been

found in emerald mines in Egypt. Emeralds have been obtained from the schists of Cleopatra's mines, rediscovered in 1818, in the Sikait - Zubara region of Egypt. Vast quantities were taken from South America during the Spanish conquest but the original mines have since been lost.

The emerald of the ancients probably referred to a number of distinct species of green stones; the one mentioned in the Old Testament probably was carbuncle garnet. Superstitions abound concerning the emerald. It supposedly preserves chastity, cures dysentery, prevents epilepsy, and drives away evil spirits. Emerald heals relationship with Father. Balances the heart and stabilizes the personality. Improves meditation. Helps one develop eloquence and calms the mind. It totally rejects evil and brings abundance, growth, peace and harmony. It is said that if a person held an emerald under the tongue, he or she could see the future. It could also ward off evil spells and make one's memory stronger. During the Roman Empire, it was thought that staring at emeralds could soothe tired eyes. Legend has it that the Roman Emperor Nero used to watch the gladiator fights through an emerald, as he found the green color calming.





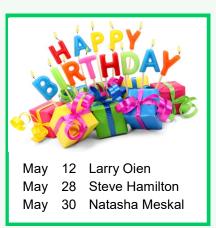
The rulers of India were passionate about the green gem which was supposed to bring good luck. One of the most unique artifacts from India is the exquisite Moghul Emerald (also spelled Mughal or Mogal). Dating from 1695, during the reign of Emperor Aurangzeb, The Moghul Emerald is a 247.80 correct accurate gem which were

217.80 carat square gem which was carved on both sides. The front side features an elegant Arabic script with a Shi'a Muslim prayer invocation. On the reverse is a naturalistic floral carving design of a rosette surrounded by poppies. As the Moghul rulers were Sunni Muslim, the carved emerald talisman is not thought to have belonged to the

Emperor himself, but rather to one of his officers.

Most Emeralds are faceted into a shape named after them, the "emerald Cut', but are also cut into pear and oval shapes

Emeralds are a delight to have but be prepared to pay a pretty price if you want one of high quality. Your friends would be green with envy for sure!



UPCOMING CLUB SHOWS & EVENTS

May 7 - 8: ANAHEIM, CA Searchers Gem & Mineral Society Brookhurst Community Center 2271 W. Crescent Avenue Hours: Sat 10 - 5; Sun 10 - 4:30

May 7 - 8: JACKSON, CA Amador County Gem & Mineral Society Kennedy Mine 12594 Kennedy Mine Rd (off Hwys 49/88) Hours: 10 – 4 daily

> May 7 - 8: RENO, NV Reno Gem & Mineral Society Reno Livestock Event Center 1350 North Wells Avenue Hours: Sat 10 - 5; Sun 10 - 4

May 13 - 15: YUCAIPA, CA Yucaipa Valley Gem & Mineral Society Yucaipa Music & Arts Festival Adams St. & Yucaipa Blvd Hours: Fri 6 - 9; Sat 11 - 10,







May 13 - 15: SANTA ANA, CA West Coast Gem and Mineral Show Holiday Inn- 2726 S. Grand Ave., Santa Ana -intersection of Grand and Dyer.

June 3 - 5: LA HABRA, CA North Orange County Gem & Mineral Society La Habra Community Center 101 W. La Habra Blvd. Hours: Fri 5 - 8; Sat 10 - 6; Sun 10 - 5

> June 4 - 5: GLENDORA, CA Glendora Gems & Mineral Society Goddard Middle School 859 E. Sierra Madre Avenue Hours: Sat. 10 - 5; Sun 10 - 4

June 25 - 26: CULVER CITY, CA Culver City Rock & Mineral Club Veterans Memorial Auditorium 4117 Overland Blvd (@Culver Blvd, Near the 405 & 10 Freeways) Hours: Sat 10 - 6; Sun 10 - 5

GENERAL MEETING

Wednesday, May 18, 2016

Our program for the evening will be a Silent Auction. This is one of our most requested programs. Anyone can bring something to put on the auction tables. If you have some rocks, or rock related items you'd like to donate for the auction, (or even some non rock related items that you think some-



one would like) remember to bring them. We always have a lot of fun at these auctions, and your contributions will make it even better. It's a great opportunity to get some wonderful specimens at a fantastic price, while helping the club at the same time.

Bidding starts at 25 cents and goes up by 25 cents or more. Check your bids often, because someone will put a bid on top of yours!! When the timer rings, check the items you bid on, and if your name is the last on the list collect your items and bid sheets, and see the club treasurer.

We often have visitors for the Silent Auction so remember to greet strangers and make them feel welcome. We want to make a good first impression.



WORKSHOP

The warm weather in April brought members out for a flexible workshop, Jim Burke working on the cabbing machine, and Don Greene helping Briggitte Mulholland getting set up on the All-In-One. It's good to see more members taking advantage of the flexible hours for the workshop. We'll be gone for most of May, but call and you may catch us home.



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 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. Redish 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 property 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 do it. In pietersite and bighamite stones especially, it is very common to run into pits, cracks, or voids called vugs. These are sometimes 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 eve.

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 2/2005 with additions from the internet