The Sierra Pelonagram



April 2015

. Member of the California Federation of Mineralogical Society Inc. .

The Sierra Pelona Rock Club is a non-profit organization founded in 1959 with the objective to sponsor activities and promote interest and education in: mineralogy, lapidary, geology, paleontology and related subjects.

April

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Lynn Alexander	April 23
Norma Holt	April 8
Sarita Hyde	April 9
Shep Koss	April 14
Greg Mazourek	April 12
Jaime Pulido	April 13
Yolanda Resnick	April 12
Ron Strathmann	April 11

The Sierra Pelona Rock Club

Would like to welcome new members Sandy White, Therese Edwards, William Edwards, Kathleen Haase, William Haase and Olive Haase.



The Placerita Canyon Nature Center Associates is reaching out to the Sierra Pelona Rock Club to help fill an educational hands-on nature box on geology. They are asking for donations from our members. In need are: two decent-sized samples each of the following rocks and minerals--igneous, metamorphose, sedimentary, quartz, feldspar, limestone, mica. Also, if you have any fossils, that would be great!

This is a great opportunity to help spread the knowledge of our geology. Please let Heidi know as soon as possible if you have a contribution to the geology nature box.





Deb ClemMay 26William HaaseMay 13Greg LangewischMay 24Olivia MiseroyMay 5Mike SerinoMay 26Donna SweetMay 11

Officers:

President – Greg Langewisch Vice-President – Trina Aeen Secretary: Tina White Treasurer – Ron Rackliffe Federation Director (CFMS/AFMS) – Shep Koss

<u>Chairpersons:</u>

Claim--Mike Serino Donation Rock Table--Akiko Strathmann Equipment--Bill Webber Field Trips – Ron Lawrence Historian -Open Hospitality – Tina White Membership – Heidi Webber On-Line Presence (website)-- Larry Holt Pelonagram Publisher, Editor – Heidi Webber Programs – Evelyn Velie Publicity –Bruce Velie Storage--Bill Webber Sunshine--Brigitte Mazourek

The Sierra Pelona Rock Club, is a member of the California and American Federation of Mineralogical Societies, Inc. (CFMS/AFMS). The general club meetings (Open to the public) are at 7:30 PM, on the 3rd Tuesday of each month at:

The Clubhouse of the Greenbrier Mobile Estates EAST 21301 Soledad Canyon Rd Canyon Country, CA 91351

Contact the Club or the Sierra Pelonagram Editor at:

Sierra Pelona Rock Club P.O. Box 221256 Newhall, Ca. 91322 Or e-mail: <u>hwebber@pacbell.net</u> Visit the SPRC website <u>http://www.sierrapelona.</u> com/

Hello Fellow Rock Hounds!



Another month breezes by and we are left with but a collection of memories to mark our passage. March was a fantastic month for our club with many moments worth remembrance.

We had a great general meeting where Shep & Trina provided us with a presentation on Sharktooth Hill. Shep brought out a nice collection of fossils from the area and provided us with a lot of interesting info.

The March field trip was incredible. 16 people joined us to dig fossils out at Sharktooth Hill. I was amazed at the turnout, considering that this was a fee dig. Everyone was excavating, socializing and having a great time. It was wonderful to see the kids out there, sharing in this adventure.

The Spring Gala was a success. We had around 25 people show up to have pizza, play bingo and socialize. Ron L. once again served admirably as the Bingo Master for our club. Big thanks to Bruce, Ron R. and Tina for putting in the leg work to get this party set up. We're planning on having an ice cream social in the summer. I'm sure that will be a blast too.

This has been a fantastic year for the club. We've got some enthusiastic new members join, awesome field trips and special events so far and the awesomeness is just beginning. There is a lot of stuff going on in April. We have our general meeting on the 21st and our field trip to the club's travertine claim on the 25th. In addition to our club events, there is also the Antelope Valley Gem and Mineral Club's Annual show on April 25th & 26th at Lancaster High School. This is one of the best shows you'll find in the area and I highly recommend you stop by. The AV Club members will be leading a field trip to Kramer Junction on Sunday the 26th. You can get additional details on their (or our) FB page.

So lots going on this month. I hope you can join us for many of these events. I'm sure you'll have a great time and accumulate many memories (and rocks) for your collection.

Greg Langewisch says: "We go a long ways to find the cool rocks we collect. Sometimes its easy to forget that we have some pretty nice material, right in our backyards. Here are three agates that were found in Acton, CA. I like to call them "desk rocks"."



Connie Flores-Reisbeck sent me this article as it could well be of interest to many of our members. Thanks Connie.

April 2015 News from the UCLA Meteorite Gallery

The Meteorite Gallery (Geology room 3697) is open with a docent present every Sunday from 1 till 4 with the exception of the last two Sundays in the calendar year. And it is open every work day from 9 till 4 but without a docent. It is not open Saturdays.

We remind you that our website address is: http://meteorites.ucla.edu/ . There you can find a map of our corner of the UCLA campus and instructions for parking in structure 2.

Our speaker for May will be Professor Kevin McKeegan; the lecture is scheduled for 17 May 2015. His topic is "Capturing the Sun: NASA's Genesis mission".

A carved wooden box with a red lacquer finish from China's Ming Dynasty Period (box c. 1522-1566). Boxes like this were frequently painted with a lacquer containing a cinnabar pigment. Public domain photo by the Los Angeles County Museum of Art.

Cinnabar

Cinnabar: A toxic mercury sulfide mineral. The primary ore of mercury, once used as a pigment.

What is Cinnabar?

Cinnabar is a toxic mercury sulfide mineral with a chemical composition of HgS. It is the only important ore of mercury. It has a bright red color that has caused people to use it as a pigment and carve it into jewelry and ornaments for thousands of years in many parts of the world. Because it is toxic, its pigment and jewelry uses have almost been discontinued.

Geologic Occurrence of Cinnabar

Cinnabar is a hydrothermal mineral that precipitates from ascending hot waters and vapors as they move through fractured rocks. It forms at shallow depths where temperatures are less than about 200 degrees celsius. It usually forms in rocks surrounding geologically recent volcanic activity but can also form near

hot springs and fumaroles.

Cinnabar precipitates as coatings on rock surfaces and as fracture fillings. Less often, cinnabar can be deposited in the pore spaces of sediments. It is usually massive in habit and is rarely found as well-formed crystals. Other sulfide minerals are generally found associated with cinnabar. These can include pyrite, marcasite, realgar and stibnite. Gangue minerals associated with cinnabar include quartz, dolomite, calcite and barite. Small droplets of liquid mercury are sometimes present on or near cinnabar.

Properties of Cinnabar

The most striking property of cinnabar is its red color. Its bright color makes it easy to spot in the field and is a fascination for those who discover it. It has a Mohs hardness of 2 to 2.5 and is very easily ground into a very fine powder. It has a specific gravity of 8.1, which is extremely high for a nonmetallic mineral.

The luster of cinnabar ranges from dull to adamantine. Specimens with a dull luster are usually massive, contain abundant impurities and do not have the brilliant red color of pure cinnabar. Adamantine specimens are usually the rarely-found crystals.

Metacinnabar

Metacinnabar is a polymorph of cinnabar. It has the same chemical composition (HgS) as cinnabar but a different crystal structure. Cinnabar is trigonal, while metacinnabar is isometric. The two minerals should not be confused with one another because metacinnabar has a metallic gray color, a gray-to-black streak and a metallic-to-submetallic luster.

Uses of Cinnabar

Cinnabar is the only important ore of mercury. For thousands of years cinnabar has been mined and heated in a furnace. The mercury escapes as a vapor that can be condensed into liquid mercury.

People began using cinnabar for pigments thousands of years ago in Italy, Greece, Spain, China, Turkey, and the Mayan countries of South America. Through time, people in almost every country where volcanoes are present discovered cinnabar and realized its utility as a pigment. Cinnabar is one of a very small number of minerals that was independently discovered, processed and utilized by ancient people in many parts of the world.



Bright red cinnabar crystals on a dolomite matrix. Crystals are about 1.3 centimeters in height, from Hunan, China. Specimen and photo by Arkenstone / www.iRocks.com.

Cinnabar was mined at the volcano, ground into a very fine powder and then mixed with liquids to produce many types of paint. The bright red pigments known as "vermilion" and "Chinese red" were originally made from cinnabar.

Cinnabar has been especially popular for making red lacquer in China. Its use in lacquer has declined because of its toxicity but some use of cinnabar in lacquer continues. Cinnabar has also been used in powdered form for ritual blessings and burials. Powdered cinnabar was used as a cosmetic in many parts of the world for thousands of years. Eventually it was discovered that cinnabar is toxic, and its use in pigments, paints and cosmetics began to decline.

Today most, but not all, items made and sold under the name "cinnabar" have been made with less toxic and nontoxic imitation materials. Antique items made H. Zell, used here under a GNU Free with toxic mineral cinnabar are still found in the marketplace.

Uses of Mercury

Because cinnabar is the only important ore of mercury, the demand for mercury has driven mining activity. Mercury has many uses, but its toxicity has reduced its use in any application where reasonable substitutes can be found. Large amounts of mercury are currently used in the chemical industry in the production of chlorine and caustic soda during the electrolysis of brine.

Mercury was widely used in temperature- and pressure-measuring instruments such as thermometers and barometers. It was often used in gravity switches because it flowed easily as a liquid and conducted electricity. Most of these uses have been discontinued.

Mercury is currently used in some batteries and light bulbs, but their disposal is often regulated. Because it is toxic, it was once widely used to protect seed corn from fungus and to deworm materials used to make felt. It was used in dental amalgam but is being replaced by polymer resins and other materials. In almost all of its use, mercury is being replaced with less toxic and nontoxic substitutes.

Mercury has been widely used in mining to separate gold and silver from ores and stream sediments. Large amounts of mercury were spilled during these operations, and today, mercury used in the 1800s is still being recovered from streams.

Reference Geology.com



Sharktooth Hill March 2015 Field Trip





Massive cinnabar showing its characteristic red color and dull luster. Some contamination by clay. Photograph by Documentation License.

SPRC General Meeting March 16, 2015 Greenbrier Estates Clubhouse

Greg Langewisch called the meeting to order at 7:36 p.m., then led the group in a flag salute. In attendance were 22 members, and 4 guests.

Greg reminded all in attendance that are dues are (over)due; please remit yours soon if you've not already done so!

A quick review of the Club's February field trip to Calico for Silver Lace Onyx and to Onyx Siding (for someth

ing cool with blue in it) went well; 27 people attended, including some members from the Antelope Valley club.

The March Field Trip to Shark Tooth Hill/Ernst Quarries is set for Saturday, 3/21. The cost is \$50 per person; attendees needed to register at the Ernst Quarries website at www.sharktoothhiillproperties.com

Set for March 28th, from 6:00 p.m. – 8:00 p.m., is a Pizza/Bingo/Rock Party. Members and guests may attend for \$5 per person, which will buy pizza, a bingo card, the possibility of prizes, and a rock auction. Please RSVP to Bruce Velie a.s.a.p.

Bill Webber mentioned the May 9th Placerita Canyon Open House; the Club will have a booth there. Guests at tonight's meeting included: Terry & Ruth (she has numerous slides of rocks to share with us at a future meeting); Ron & Erica, and Sarah & a guest prospector.

SPRC's newest member was introduced: Lynn Alexander, welcome!!!

Tina White mentioned the St. Francis Dam events scheduled for 3/28, and encouraged members to attend if they are interested.

Akiko thanked our members for their donations, and asked that we please support the raffle, auction, and best rock contest.

Ron Ratcliffe made another pitch for SPRC tees and hats; only \$7 each.

Larry Holt let us know that the rocks on the back table were free for the taking – thanks, Larry. Shep Koss and Trina Aeen shared with us a presentation on The Ernst Quarries: some details included:

- Site is part of the Temblor Formation; over 200 mi2
- Mid-Miocene inland sea (approx. 15M years old)

• It is the richest mid-Miocene marine fossil bed on Earth; found here because of rich nutrients flowing off of the proto-Sierra Nevada at that time

- Whale bones & vertebrae are also common finds
- Beds are from inches to 3' deep
- Concretions are common; inside may be nothing, or anything
- Mined since the 1850s; the wagon trail path is still visible
- The property is a National Natural Landmark, owned by SCE
- As a N.M., it is overseen by Bakersfield College
- Samples shared included Hook Tooth Mako teeth, Porpoise tooth root, and Megaladon tooth
- Reminder: Mammal vertebrae are flat; fish vertebrae are concave

The official meeting was adjourned at 8:20 p.m., followed by the rock auction, best rock contest (voting closed at 8:35 p.m.), raffle and refreshments.

SPRC Board Meeting

April 7, 2015

Greenbrier Estates Clubhouse

In the (excused) absence of President Greg Langeswisch, VP Trina Aeen called the meeting to order at 7:03 p.m.; in attendance were Trina Aeen, Omid Aeen, Larry Holt, Ron Ratcliffe, Bill Webber, Heidi Webber, and Tina White.

April Field Trips/Events:

- April 25th Field Trip: to North Edwards Claim & nearby sites; weenie roast; meet at Mammoth time to be determined.
- April 25th 26th Antelope Valley Club Show 10:00 a.m. 5:00 p.m.
- April 26th: Antelope Valley Club Field Trip

We need to let other clubs know that the Onyx Claim is no longer ours; Heidi will ask Shep to notify them through the Federation.

Memberships:

- New members voted in: Sandy White, Therese Edwards & Family
- Heidi will update the Distribution List and share with members
- The cost of dues for children was discussed; no changes pending
- Heidi will have new membership packets for April 21st meeting

May 9th: Placerita Canyon Open House:

- SPRC will have a booth outside 10:00 a.m. 3:00 p.m.
- Demonstrations with grinder, tumbler, polisher, 10" saw with thick blade; we will cut and sell (\$1) geodes
- Trina will bring membership applications that day
- It is believed that the bin o' samples has been found
- Larry will put this info on our website
- Greg will be asked to put it on our Facebook page

Education Outreach:

Tina never heard back from the local elementary school teacher re: presentations to students; she will make another attempt at contact.

Future Events:

Larry wants to put future events & meetings into the calendar.

We are waiting for Greg's annual calendar, but do know...

- May 23rd: Field trip to Clear Creek Plasma Agate site (nr. Coalinga)
- June 13th: Tentative date for Party/BBQ/Picnic
- June 20th 21st: Field trip to San Simeon/Moonstone Beach
- May 2nd: Workshop at the Webber's* for members & their guests
- May 6th: Wire Wrap at Greenbrier Clubhouse (Bruce to reserve)

The need for safety equipment (i.e. safety glasses) was identified; Heidi will make sure some are available at the next workshop. Attendees will also sign waivers for future events.

New Business:

Bill asked if the Club can provide samples for an exhibit at the Placerita Nature Center; Heidi will ask for contributions using the membership list.

Five new members were voted in: Sandy White, William Edwards, Therese Edwards and her children Kathleen Haase, William Haase and Olive Haase. Welcome to the club.

Treasurer's Report:

Bingo & Pizza event net \$146; 25 folks people attended The meeting was adjourned at 8:09 p.m.



Once again, the club will have a table at the Placerita Canyon Nature Center's Open House. This year we will be on the steps going into the center and will have a polisher, tumbler and saw so the public can see us in action. This is also a successful fund raiser for the club. The date is May 9, Mother's Day Weekend. We need volunteers to come out to help man the table and demonstrate club equipment. Please come on out to work the table and enjoy the day. There is a whole lot going on—see you there!