The Sierra Pelonagram

February 2016

... 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.

Workshop

The quarterly workshop this past weekend was a great success. 18 members attended. The day was almost perfect, except for some high winds. But the temperature was great and it was nice and sunny. Great for a workshop, not so much for a rainless mid-February. Heidi produced a soup bar with several different homemade soups, breads and deserts. Everyone left with a full belly and pretty rocks! If you couldn't make it this time, try to make it next time. It is a fun time of working, learning and visiting.

Wire Wrapping

A group of SPRC members got together for the quarterly wire wrapping session to wrap their treasures that were made the previous Saturday at the workshop. We all worked hard, gossiped and learned methods to make the most of our new treasures. A big thanks go to Trina and Omid Aeen and Sandy White for getting us off on the right foot!

Birthdays

February

Roxanne Heagy
Margie Krug
Brigitte Mazourek
Tina White

March

Alex Applegate
Luis Busso
Ruth Hildalgo
Shannon Peters
Evelyn Velie
Bill Webber

Officers:

President – Ron Rackliffe
Vice-President – Trina Aeen
Secretary: Tina White
Treasurer –Sandy White
Federation Director (CFMS/AFMS) --Open

Chairpersons:

Claim--Mike Serino
Donation Rock Table--Ron and Akiko Strathmann
Equipment--Bill Webber
Field Trips – Greg Langwisch
Historian -Open
Hospitality – Tina White
Membership – Heidi Webber
On-Line Presence (website)-- Larry Holt
Pelonagram Publisher, Editor – Heidi Webber
Programs –Open
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:
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Or e-mail: hwebber@pacbell.net
Visit the SPRC website www.sierrapelona.com

SPRC Business Meeting
Greenbrier Mobile Estates Clubhouse
February 2, 2016

The meeting was called to order at 7:10pm. Present were Ron Rackliffe, Trina Aeen, Ron Lawrence and Sandy White. Tina White wasn't present so Sandy took the minutes.

No old business.

Ron R presented three new applicants for membership. First were Frank and Kay Denson. She has been to at least two meetings. They were both voted in. The third applicant was Perry Goldberg. No one knew who he is or has seen him at a meeting. No vote was taken until we know more about him.

Larry Holt wants pictures of field trips emailed to him so they can be posted on the club website.

Ron R wants to be able to post on our Facebook page as well as send email from SPRC. He is going to follow up with Heidi and Greg L.

Evelyn volunteered to be our CFMS representative. Ron R to present this at the General Meeting as this is an elected office and to make sure there will be no objections.

The Open House at Placerita Nature Center was brought up as we should be preparing. Ron R to ask Heidi. (Yes, we will be there—Heidi)

The workshop is still on. Email to be sent out to RSVP to Heidi.

Wire wrapping to follow on Wednesday, Feb. 10. Ron L has secured the room from 7-9pm.

Ron R wants a calendar of field trips, so that upcoming field trips can be posted on the website. He'll get together with Greg L.

Pizza and Bingo party has been set for 4/2 from 12-3pm. The room has been booked by Ron L.

A discussion was made in favor of a beach trip over summer break.

A garage sale to sell off some extra equipment Ron R has in his garage is set for 3/5/2016 from 9am-2pm.

Discussion was brought up again about programs. Trina volunteered to get some info on this months' trip for Ballarat and Sheep Springs.

Finances were discussed and there is nothing to report. Heidi will audit last years' records.

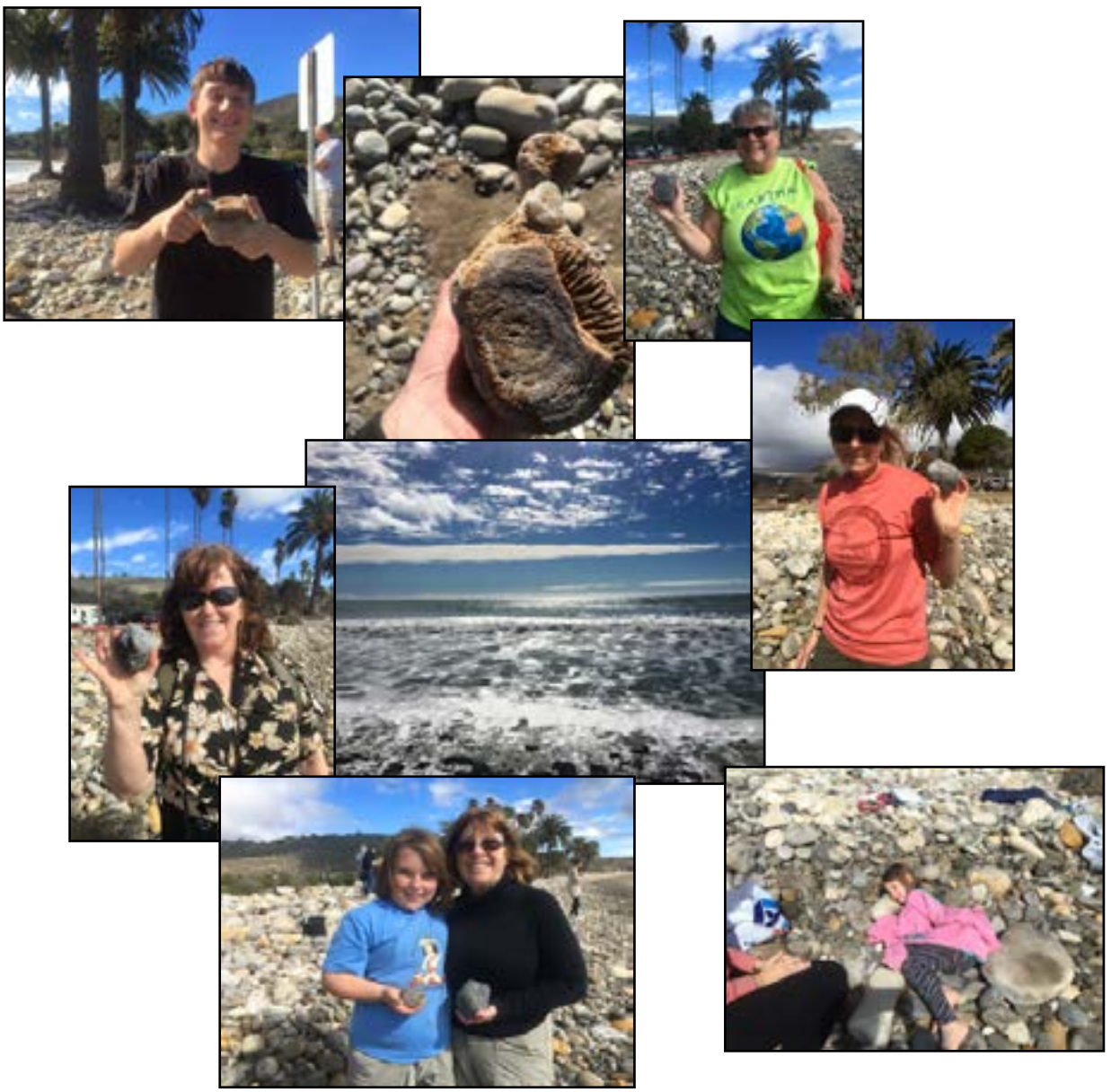
The meeting was adjourned at 8:10pm.

Respectfully Submitted

Sandy White for Tina White

Refugio and Rincon Beach Field Trip

It was a beautiful and productive day on the January field trip to Refugio Beach. Whale bone and vertebrae were found along with just some pretty rocks. After a long day of collecting, a late lunch at El Pescador in Santa Paula.
Photos by Trina Aeen



Geodes

A Very Cool Rock Formation

Geodes are like the Tootsie Roll Pop of the geology world because underneath the hard exterior lies a surprise center!

Hollow Rocks

So, let's start at the beginning: how do you get a hollow rock with lots of sparkling crystals inside? First you need a hollow rock. Geodes start their lives as a hollow bubble inside a layer of rock. The bubble could be from air inside explosive volcanic rock or it could come from the hollow remains of animal burrows or tree roots.

What About The Crystals?

When these rocks form from air bubbles inside of volcanic rock it is pretty easy to picture. Think about the small air bubbles you see in pumice. Now, imagine just one of those bubbles completely surrounded by black or red volcanic rock. As rain pelts down on the hot bubble, the chemicals in the rock are slowly released into the water. Some of the water soaks through the hard, rocky outside of the bubble and is trapped for a moment on the inside. As the mineral-rich water moves on through the bubble, tiny crystals are left behind, clinging to the sides of the bubble. Millions of years pass while this in and out flow of water gradually builds crystals inside the empty space. The crystal formations might become large single crystals or tightly packed micro-crystals, so small that you can't even distinguish one from another.

An Animal's Home

Let's check out the development of our animal burrow bubble… Long after the animal has moved on or the tree has died and its roots have rotted away, the sediments that surrounded the hollow are being covered up by layers and layers of sediment hundreds of feet thick. Eventually the weight of these layers has caused the sediments to turn into rock: sedimentary rock. Just like our volcanic bubble, this animal burrow bubble is host to mineral-filled water flowing in and out through the hollow space. And just like the volcanic bubble, a wide variety of crystals are taking shape inside the animal's former home.

Time Marches On

Fast forward to modern times. The water-soaked land where our bubbles began has become a vast desert where wind howls and the sun beats down. The ground, covered by rocks and scrubby brush yields up unusually shaped rocks. Today, you've found a good field of them and have three nearly-round specimens to crack open when you get home.

All Geodes Are Not Created Equal

The first one is quite hollow but for a nice layer of medium-sized blue crystals. These dugway geodes have bands of blue and pink. The geode at the left and the one at the top of the page are both dugways from Utah. The colors come from the different minerals that flowed through the bubble so many millions of years ago. Another specimen is nearly solid all the way through. The microcrystals have formed wide bands of different colors and the tiny opening at the center has a thin ring of pointed crystals. Yet another is completely filled with solid rings of browns, reds and pinks. So, you've really found two geodes and one nodule. Nodule is the name for these round forms when they are filled solid.

They Come In Colors

As each specimen offers up a different interior, you wonder, "What causes all the colors?" So you head to the computer and you've arrived at this page, so I'll need to tell you.

Trace Elements

Remember the mineral-rich waters that flowed through the bubbles forming crystals inside? There is a variety of elements that can be present in mineral water. It would all depend on the type of rocks the water passed over and through on its way to the geode. Rocks contain iron, magnesium, sulfur or a host of other elements.

Now, think about the variation that can occur in terms of saturation amounts of the different minerals. You can imagine that the different rocks forming from all these variations could be limitless. But there is some consistency that makes it easier for us.

Quartz, Calcite, Or What?

Most geodes have interiors made of either quartz or calcite. Quartz crystals are silicates. Silicates are the most common mineral in the crust of the earth. Over 90% of the minerals present in earth's crust are silicates. With this said, you can imagine that silicates are a pretty big group with lots of variation in terms of specific chemical composition.

Calcite's main ingredient is calcium carbonate CaCO2: dissolved calcium and carbon with some of the oxygen from the water thrown in.

Small variations Can Make A Big Difference

Now, add in a trace of iron or magnesium or copper and, voila, you have color variation. Magnesium traces in calcite forms a nice pink dolomite layer, while magnesium in silicate accounts for the purples of amethyst.

Heat Can Change It

Now if your geode was close to a lot of heat, that could change the color, too. An amethyst that gets a lot of heat loses its purple color and becomes a soft yellow or citrine. You can see why there are so many color possibilities.

A Day In The Life

So, that little geode you're holding has had quite a journey getting to your hand. Treasure it for its beauty, but also for its history and the complex composition of minerals that made it. You're holding millions of years of work in your hand…enjoy touching the miracle of our earth's creation.

Reference: www.rocksandminerals4u.com//Printed by permission