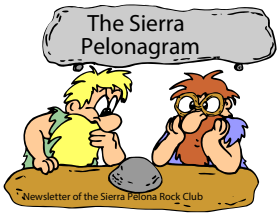
The Sierra Pelonagram

September 2024

... 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.



SPRC BOARD Meeting Minutes
September 3, 2024

The Board meeting via Zoom was called to order at 7:11 p.m. by President Tina White
Note: Advance notice of the meeting to members is given by email.

Elected Officers In attendance:
Tina White, President
Julie Tinoco, Vice President
Maureen Thomas, Secretary
Ed Learn, Treasurer
Absent: Greg Mazourek, Federation Director CFMS/AFMS
Hospitality In Attendance: Heidi Webber

Treasurer's Report:
- The Club is in good shape financially and able to meet its obligations.

Old Business:
- Claim coordinate issues have been resolved per Ed L.
- Banking Account: Tina W. and Ed L. have succeeded in getting their names on the account.
- Heidi W. will send a sample IRA 990EZ form to Ed L. so he can learn what to do for our club. Tina has a CPA friend who may be able to help explain so Tina will check.
- Sales Permit: Last April Tina advised this is in process after reviewing documents Heidi W. provided. She will review the situation.

New Business:
- A workshop at the Webbers will be held on Saturday September 28th
- Depending upon the number of people interested, there may be a field trip to collect pink Halite (salt) at Owens Lake on Oct. 5th. Julie T. will confirm the date with Ruth H. and Larry P.
- On Sept. 14th there will be a beach field trip to Rincon with a stop for lunch possibly at Lure Fish House in Ventura (open for lunch suggestions).
- There is a possible field trip to Ballarat on Oct 12th.
- There is also a possible field trip to Stone Femme in Glendale on December 7th if the proprietors agree to the date. Julie will advise.
- Tina suggested a rock show and tell for our upcoming general meeting on Sept. 17th.
- Ed L. reminded us that the club is still paying $95 a month for rock storage.
- Heidi W. let us know the club is out of tumbled rock but it is needed for the October Gilchrist Farms event. Heidi will put out an email asking members to donate tumble.
- Tina W. will update the T-shirt inventory.

A motion to adjourn was seconded and carried at 8:10 p.m.

Maureen Thomas, Secretary, SPRC

September
Janet Catmull
Cheryl Cogan
Shawn Gierahn
Jenn Jenkins
Margaret Stamboulian
Julie Tinoco

October
Omid Aeen

Officers:
President – Tina White
Vice-President – Julie Tinoco
Secretary: Maureen Thomas
Treasurer –Ed Learn
Federation Director (CFMS/AFMS) --Greg Mazourek

Chairpersons:
Claim--Linda Jenkins
Donation Rock Table--Dianne Wholleben
Equipment--Bill Webber
Field Trips – Julie Tinoco
Historian -Open
Hospitality – Heidi Webber
Membership – Heidi Webber
Website-- Larry Holt
Pelonagram Publisher, Editor – Heidi Webber
Programs –Tina White
Publicity –Open
Sunshine--Yolanda Resnick

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 7:00 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: hwebber50@gmail.com
Visit the SPRC website www.sierrapelona.com

Hey there, SPCRers!

Summer flew by, and now we'll be getting back to our monthly meeting for exchange of information, announcements of fun treks & events, snacks, and general socializing.

Unfortunately, I won't be joining you this next Tuesday the 17th; I'm in northern CA (Arcata) soon to head to Ashland Oregon for a friend's 90th BD party. But you can be sure that on my drive I'll be looking for cool rocks and most likely picking up a few…

Don't forget that the September meeting is our "what I picked up on Summer vacation" meeting, so be sure to bring a favorite or mystery rock so that everyone can check it out and make wild guesses as to its origin.

I'll be thinking of you all on Tuesday evening and look forward to seeing you in October. Enjoy!

~ Tina White, SPRC President

Hollandite Quartz

Hollandite Quartz also known as, Urchin Quartz, is a type of quartz crystal that contains tiny black inclusions of the mineral hollandite. These inclusions resemble tiny stars, giving the quartz its characteristic spiky appearance.

Urchin Quartz, also known as Star Quartz or Hollandite Quartz, is a rare and unique variety of quartz that is characterized by tiny black or dark gray inclusions of the mineral Hollandite. These inclusions, which resemble tiny stars or sea urchins, give the quartz its distinctive appearance. Urchin Quartz typically forms in shades of white, milky white, or creamy white, but it can also exhibit pinkish, reddish, or brownish inclusions.

Hollandite Quartz formations are formed when deposits of Hollandite become trapped within Quartz during its formation. As the Hollandite becomes subjected to high thermal temperatures within the Earth, the Hollandite bursts into star formations within the Quartz. This variety of quartz is very rare.

How Hollandite Quartz is Formed:

The exact formation process of Urchin Hollandite Quartz is still being studied by geologists, but it is believed to arise from a combination of factors, including:

Hydrothermal Conditions: Urchin Quartz is often found in hydrothermal veins, which are fractures in rocks that have been filled with hot, mineral-rich fluids. These fluids provide the necessary conditions for quartz crystals to grow and form.

Inclusions of Hollandite: Hollandite, the mineral that forms the tiny inclusions in Urchin Quartz, is typically found in association with quartz in hydrothermal veins. The Hollandite becomes trapped within the growing quartz crystals, giving them their distinctive appearance.

Specific Chemical Environment: The presence of certain chemicals in the hydrothermal fluids, such as barium or manganese, may influence the incorporation of Hollandite inclusions into the quartz crystals.

Hollandite:

Hollandite is a manganese oxide mineral with a chemical formula of Ba(Mn4+6Mn3+2)O16. It is a black to silvery-grey mineral with a metallic luster. Hollandite is a member of the hollandite supergroup, which includes a variety of manganese oxide minerals with similar structures. Hollandite is a relatively rare mineral, and it is found in a variety of geological settings, including hydrothermal veins, manganese deposits, and contact metamorphic rocks.

Hollandite Quartz Uses:

Jewelry: Urchin Quartz is a popular gemstone and is often cut into cabochons or beads and used in necklaces, earrings, bracelets, and rings.

Carvings and decorative objects: Urchin Quartz is sometimes used in carvings and other decorative objects.

In conclusion, hollandite quartz represents a fascinating example of a gemstone whose unique visual properties arise from the interplay of distinct mineral inclusions and specific geological processes. Its rarity and captivating appearance make it a valuable addition to any gemstone collection.

Reference: GeologyIn.com

A map of Zealandia.
Photo by: GNS Science

Lost Continent of Zealandia Revealed in Detailed New Map

Zealandia, considered the Earth's eighth continent, was mostly lost to the sea. Geologists say they've now mapped the entire nearly two million square miles of the underwater land mass.

A small international team of geologists and seismologists has created a newly refined map of Zealandia using data obtained from dredged rock samples recovered from the ocean floor. They report details in the journal Tectonics.

Prior research has suggested that approximately 83 million years ago, the supercontinent Gondwana was pulled apart by geological forces, resulting in the beginnings of the continents that exist today. It also resulted in the creation of another continent that is now submerged. That continent, called Zealandia, is believed to be approximately 94% under the sea—the remaining 6% make up New Zealand and surrounding islands.

Because it is submerged beneath the ocean, Zealandia is not nearly as well studied as the conventional continents, resulting in inconsistencies in its presumed form and structure. In this new effort, the research team sought to refine existing maps of Zealandia by studying collections of rocks and sediment samples brought up from the ocean bed, most of which came from drilling sites—others came from the shores of islands in the area.

The team then studied the samples as part of a secondary study that involved analyzing seismic data for the region. They then created a more refined map of the whole 5 Mkm2 Zealandia continent.

Study of the rock samples showed geologic patterns in West Antarctica that hinted at the possibility of a subduction zone near the Campbell Plateau off the west coast of New Zealand. The researchers did not find magnetic anomalies in that area, however, which argues against theories surrounding a strike-slip in the Campbell Fault.

They suggest instead that the Campbell Magnetic Anomaly System resulted from stretching of Gondwana as it was being torn apart. That stretching, they further propose, eventually led to a break, which resulted in the creation of ocean floor that makes up the lower parts of the Zealandia continent.

The newly refined map shows not only the location of the magmatic arc axis of the Zealandia continent but other major geological features as well.

An analysis of their chemical makeup, along with other geological clues, revealed similarities in patterns with geology in West Antarctica, suggesting a subduction of Zealandia's edge up to a quarter of a billion years ago, across what's now the Campbell Plateau off New Zealand's west coast.

Subduction is when two edges of Earth's crust push against one another forcing one edge down into Earth's mantle. But contrary to previous suggestions, magnetic anomalies found in the same region are not related to this event.

This removes "the original argument for a strike-slip "Campbell Fault," Tulloch and team explain in their paper. "Zealandia and Antarctica are both substantially internally deformed."

Instead, they propose, the Campbell Magnetic Anomaly System arose from extensive stretching between different parts of Gondwana that eventually snapped apart to create Zealandia's surrounding sea floors.

First the combined areas of Zealandia/West Antarctica and Antarctica/Australia cracked, allowing the Tasman sea to rush in about 83 million years ago.

Next, during the Late Cretaceous around 79 million years ago, Zealandia and West Antarctica ripped away creating the Pacific ocean.

How Zealandia's crust managed to stretch so thin before breaking away, has long puzzled geologists. Similar thinness is also apparent in West Antarctica.

Tulloch and colleagues found evidence that the stretching direction varied by up to 65 degrees between 100 to 80 million years ago. They think this may have allowed the extensive thinning of the continental crust.

Together these findings create a solid foundation for a more detailed analysis for this strange stretching of the earth.

The above article is based on Materials provided by GNS Science.