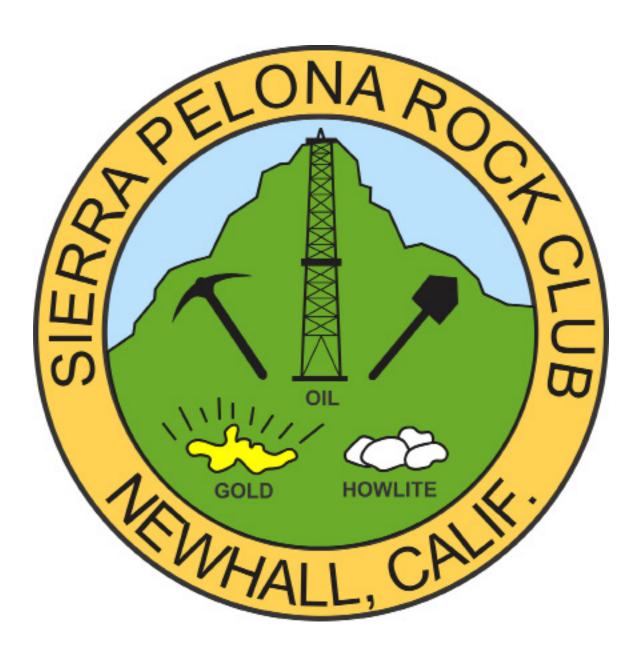
# The Sierra Pelonagram



March 2025

... 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.



The Docent Enrichment Program Went on the Sierra Pelona Rock Club February Field Trip

By Heidi Webber

Ruthanne Murthy, a docent in Charge of the Docent Enrichment program at Placereita Canyon Nature Center, asked me if the rock club I belong to (and has a table at our Open House each year) could do something for her Docent Enrichment program in February. I responded with an invitation to our monthly field trip to go on a collecting expedition to the desert to collect jasper, agates and other goodies.

On February 22nd, Barbra Marxmiller, Lori Wolfe and Brieanne Kelly, along with Brieanne's husband and daughter, met with members of the Sierra Pelona Rock Club for their desert adventure.

The club went to Lavic Siding, which is on Interstate 40 not far from Barstow. The first site was full of beautiful red jasper, just lying on the ground waiting to be picked up. There were also lava bombs found everywhere you turned. After about an hour, we moved a couple miles up the road to another site where a lot of butterscotch-colored jasper could be found in addition to the red jasper. A little later we moved a few hundred yards up the road looking for moss agate, which is kind of hard to find, but is in the area. By about 2:30, we were done.

It was such a beautiful day out, around 73 with a cool breeze. The roads were flat and accessible so we didn't need to worry about driving safely. In the end, we all came home loaded down with rocks and great memories—which is always the point!





## March

Ruth Hidalgo Jo Johnson-Dyer Ed Learn Maureen Thomas Bill Webber

# April

Lynne Alexander Greg Mazourek Yolanda Resnick Andy Schubert

GEM SHO' SCHEDUL	TIAR THAT / U/O
<b>7-9</b> MAR. 2025	STODDARD WELLS TAILGATE 9AM-5PM VYGMC TAILGATE APPLE VALLEY, CA.
<b>2-6</b> APRIL 2025	JOSHUA TREE GEM SHOW SPACE 312 94M-5PM 2601 SUNFAIR ROAD SUN 94M-4PM JOSHUA TREE, CA. 92252
<b>5</b> APRIL 2025	LAKE ELSINORE GEM SHOW  10AM-4PM 32097 CORYDON ROAD LAKE ELSINGRE, CA, 92530
<b>11-13</b> APRIL 2025	
10-11 MAY 2025	ANTELOPE VALLEY GEM SHOW 251W AVENUE H. SIN VIAMA POTE OF A DISTRE

## Officers:

President – Tina White Vice-President – Julie Tinoco Secretary: Heidi Webber Treasurer – Ed Learn

Federation Director (CFMS/AFMS) -- Greg Mazourek

# **Chairpersons:**

Donation Rock Table--Dianne Wholleben

Equipment--Bill Webber Field Trips – Julie Tinoco Co-chair Field Trips--Jo Lasky 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

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#### President's Message

Hey, where did February go? Time is passing quickly, since I last wrote we've been having fun on field trips and rock shows! I'm told the late February trip to the Lavic area was a lot of fun and there were great things found, and the Stovepipe Wells show was busy with lots of vendors. Members Martin & Valorie were there selling some amazing specimens, Julie went on the field trip and collected some tri-color marble. And I didn't spend too much \$! I hope everyone else who attended had a great time.

I'll be out of town for our next meeting and the scheduled workshop, but I'm sure you'll all have a wonderful time together and create some beautiful things at the Webbers. I will miss all of you, and Heidi's cooking!

See you in April ~ Tina White, SPRC President

# Sierra Pelona Rock Club General Meeting

February 18, 2025 Greenbriar Estates Clubhouse

The meeting was called to order at 7:10pm. 16 members were in attendance, and two guests.

Tina welcomed our guests, Janelle and Kevin Low.

Ed Learn, said all is well with the treasury.

Heidi Webber reminded everyone that Dues are Due and non-paid members will be dropped the end of February.

There was discussion about pending legislation and the Hauser Geode Beds. Consensus seems to be up in the air as to whether it is now illegal to collect or if we can collect until parameters are formally adopted. Julie said that she isn't comfortable bringing a group out and possibly being ticketed. She said if you want to go on your own and take the chance, go soon in her opinion.

Tina forgot to bring the club t-shirts and hats for sale and apologized.

#### New Business:

Estate Rocks: The club collected over a ton of rocks from the Tujunga rock estate. A tax letter was issued. A person on behalf of a previous member of the club, Richard Carlson, has contacted Tina as Richard talking about liquidating his rock collection. Updates to follow. Tina is asking for someone who is willing to repair and clean for club use a 24" saw that is at Iulie's home.

Tina has a bunch of rock-related books that she thinks we can sell at Gilchrist or maybe use as prizes?

Tina has suggested we include in the Pelonagram focus on various rock shop owners and maybe classes they offer.

Julie, Field Trip Chair: Possible Pisca Crater trip. Stoddard Wells is Friday-Sunday, March 7-9. They always have a field trip on Saturday, which will be our club field trip for March. March 22 will be the workshop at Bill and Heidi's home from 10-? Heidi will fix lunch for \$5. She will email the group with directions and details.

Tina proceeded with the program on Lavic Siding and Pisca Crater.

The next Geneal Meeting will be March 18.

Respectfully Submitted Heidi Webber, Secretary, SPRC



March Field Trip

The SPRC field trip for March 22 was to Lavic Siding. This month we invited docents from Placerita Canyon Nature Center to join us. Five people from Placerita came and had a great time. 17 people in all were on the trip, which was a fantastically beautiful day, perfect temperatures with a nice breeze. We first went to Lavic Site A and then a bit down the road to Hector Hills. It was a wonderful day all around!



#### CHUCKWALLA NATIONAL MONUMENT and ROCKHOUNDING

By Ruth Hidalgo

There is a ton of misinformation going around due to the Chuckwalla National Monument having been declared by Proclamation last month. This is understandable as the Hauser Geodes beds, Chuckwalla, and all the Wiley Well's collecting spots are within the boundaries of the monument.

#### Know that:

1) Nothing changes with respect to recreational rock and mineral collecting until a Management Plan is created. That plan will replace the existing management plans in place for the public lands within the boundary of the new monument.

Mining is affected now in that upon proclamation, no new mining claims can be made. As with the Mojave Trails National Monument, existing claims will remain unchanged.

There is some provision in the Proclamation for areas to be closed in the interim for Native American ceremonies and to protect artifacts.

2) The existing MOU with the CFMS and BLM DOES NOT protect the Hauser Beds from being closed to collecting in the Management Plan for the Chuckwalla National Monument. It can be useful in arguing that they should stay open, but it holds no water over formal land management plans.

A VERY FIRST FOR RECREATIONAL ROCKHOUNDING, THE PROCLMATION SPECIFIES RECREATIONAL ROCKHOUNDING AS A RESCOUCE AND THAT THE HOBBY BE ALLOWED IN THE MANAGEMENT PLAN.

"Protecting the Chuckwalla region will preserve an important spiritual, cultural, prehistoric, and historic legacy and protect places inscribed with history for future generations; maintain a diverse array of natural and scientific resources; and help ensure that the prehistoric, historic, and scientific resources and values of the region endure for the benefit of all Americans. As described above, the region contains numerous objects of historic and scientific interest, and it provides exceptional outdoor recreational opportunities, including hiking, camping, backpacking,

rockhounding, sightseeing, nature study, birding, horseback riding, hunting, climbing, mountain biking, and motorized recreation, all of which are important to the travel- and tourism-based economy of the region."

The Proclamation for the Chuckwalla National Monument can be found at https://www.govinfo.gov/app/details/DCPD-202500054

I have no doubt Rockhounds have Linda Castro from Cal Wild to thank for the Proclamation specifically specifying recreational rockhounding be considered for inclusion in the Management plan. Linda is a fierce proponent for the Chuckwalla National Monumentz. She has supported recreational rockhounding the Mojave Trails National Monument as well. Her goal when pushing for Chuckwalla National Monument to be declared by Proclamation was to avoid the problems that arose with the management planning for Mojave Trails and recreational rockhounding.

While no monument would certainly be much better for our hobby, if they are going to be pushed, we have to appreciate the work of those that support our hobby being involved.

The Proclamation protects many resources, and conflicts definitely exist that will affect where and how the management plan may allow collecting. IT IS IMPORTANT that all rockhounds and Clubs stay involved in the management planning process and take part when given the opportunity to speak up.

#### Gallium: Metal That Melts In Your Hands



#### What is Gallium

Gallium is a soft, silvery metal that is in the post-transition metals category on the periodic table, symbolized by Ga with an atomic number of 31. It is not found in its free elemental form in nature, but rather as a trace element in various minerals like bauxite and sphalerite. Gallium can be extracted as a byproduct during the refining of other metals, such as aluminum and zinc.

Very pure gallium metal has a silvery color and its solid metal fractures conchoidally like glass. Gallium liquid expands by 3.1% when it solidifies; therefore, it should not be stored in glass or metal containers because the container may rupture when the gallium changes state.

Gallium shares the higher-density liquid state with a short list of other materials that includes water, silicon, germanium, antimony, bismuth, and plutonium.

The melting point of gallium, at 302.9146 K (29.7646 °C, 85.5763 °F), is just above room temperature, and is approximately the same as the average summer daytime temperatures in Earth's mid-latitudes.

The melting point of gallium allows it to melt in the human hand, and then refreeze if removed. The liquid metal has a strong tendency to supercool below its melting point/freezing point.

#### **Properties of Gallium**

Appearance: Silvery-blue metallic solid.

Melting Point: 29.76 °C (85.57 °F) - it can melt in your hand.

Boiling Point: 2,204 °C (3,999 °F).

Density: 5.91 grams per cubic centimeter at room temperature.

Hardness: Soft enough to be cut with a knife.

Thermal Expansion: Gallium expands when it solidifies, unlike most metals.

#### **Chemical Properties of Gallium**

Reactivity with Acids and Alkalis: Gallium reacts with both acids and alkalis, forming gallium salts. It is amphoteric, meaning it can react with acids and bases alike.

Oxidation States: The common oxidation states of gallium are +3 and +1, with the +3 state being more stable.

Reaction with Air: Gallium does not react rapidly with oxygen in the air at room temperature. It forms a protective oxide layer that prevents further oxidation.

Solubility: Gallium is insoluble in water but dissolves in hydrochloric acid, forming gallium chloride.

Gallium is one of the four non-radioactive metals (along with caesium, rubidium, and mercury) that are liquid at or near typical room temperatures. Of these, gallium is unique for being neither highly reactive like rubidium and caesium, nor highly toxic like mercury, making it suitable for use in metal-in-glass high-temperature thermometers.

Gallium does not crystallize in any of the simple crystal structures. The stable phase under normal conditions is orthorhombic with 8 atoms in the conventional unit cell. Within a unit cell, each atom has only one nearest neighbor (at a distance of 244 pm).

Gallium does not exist as a free element in the Earth's crust, and the few high-content minerals, such as gallite (CuGaS2), are too rare to serve as a primary source.

Gallium metal, a unique element, can change its state from solid to liquid and back again at relatively low temperatures.

#### Uses of Gallium

Semiconductors and Electronics: Gallium is widely used in the production of semiconductors, such as gallium arsenide (GaAs) and gallium nitride (GaN), which are crucial for making light-emitting diodes (LEDs), solar panels, and high-speed electronics.

Thermometers and Thermostats: Gallium has a low melting point (around 29.76 °C or 85.57 °F), allowing it to be used in high-temperature thermometers as a non-toxic alternative to mercury.

Medical Applications: Gallium isotopes are used in medical imaging and as a therapeutic agent to treat certain cancers and inflammatory conditions.

Alloys: Gallium is used to create low-melting-point alloys, such as galinstan (gallium, indium, and tin), which are used in thermometers and cooling systems.

Solar Cells: Gallium arsenide-based solar cells are used in space applications due to their high efficiency and durability.

LEDs and Laser Diodes: Gallium compounds are crucial for producing blue and violet LEDs, laser diodes, and other optoelectronic devices.

#### **Facts About Gallium**

Amphoteric Nature: Can act as both an acid and a base in reactions.

Discovery: It was discovered by the French chemist Paul-Émile Lecoq de Boisbaudran in 1875 through spectroscopy.

Named After France: The name "Gallium" comes from the Latin word "Gallia," meaning France.

Non-toxic and Non-hazardous Metal: Unlike other metals like mercury, gallium is non-toxic, though it can stain the skin.

Supercooling Property: Gallium can remain in the liquid state below its freezing point if cooled carefully, a property known as supercooling.

How To Melt Gallium: Simply place the piece of gallium in the palm of your hand and let the warmth of your body heat do the work! Gallium's unique properties and versatility make it valuable in various high-tech industries, from electronics to medicine. *Reference: GeologyIn.com* 

# **SPRC Board Meeting**

March 4, 2025 Zoom

Meeting called to order at &:12pm.

In attendance were Jo Lasky, Heidi Webber, Tina White and Julie Tinoco. Absent were Greg Mazourek and Ed Learn. A quorum was met.

Board Meeting Minutes for February: Julie motioned to approve the February meeting. Tina seconded and motion passed.

Treasurers Report: Ed is unable to attend. He emailed the report. All is well. Tina moved to accept, Julie seconded and motion passed.

Membership: We lost about 6 members this year, and gained about the same number over the year. We tend to stay steady at about 45 members.

Rock Saw: Ed and Elff are interested in cleaning up the 24" saw.

The February field trip was a huge success. There were 16 people in attendance. So many compliments. Placerita Docents are asking if there could be another trip they are invited to.

Robin Shane sent Heidi a packet of field trips she went on when she belonged to another club for Julie to check out as potential trip destinations.

Julie: Field Trip for March: Stoddard Wells, March 7-9. Field trip is at 9, Julie suggested be there by 8 or 8:30 Saturday morning. Need very high profile, like a 4-wheel drive truck. Julie can take 3 other passengers. This is considered the March Field Trip. Workshop: March 22 from 10-3? At Bill and Heidi Webber's home. This is for members only.

Membership Meeting: Tina will be out of country so Julie will be in charge of the meeting. She will ask Greg Mazourek to do a program. Jo asked that we let her know what is decided so she can put the information on the FaceBook page.

Pisgah Crater: It's starting to get hot as Tina was there last weekend. It feels like a great next year field trip.

Caim: March 29, we will go to the claim for a cleanup and maybe some collecting. Club will provide lunches. RSVP and details to follow.

Meeting was adjourned at 8:08pm Heidi moved; Julie seconded. Motion passed.

Next board meeting is April 1, 2025

Respectfully Submitted Heidi Webber, Secretary, SPRC