# The Sierra Pelonagram



May 2022

. 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.



## **President's Message**

Another season is rapidly coming to an end. In June we will have our annual End of Year Picnic at Meadows Park. There are plans to have a couple of summertime events which will be announced as plans are made. AND exciting news, we may have a meeting place finally! Details are being worked out as I write this. It will be so nice to try to get things back to normal for the club. Thank you, Linda Jenkins, for getting this particular ball rolling. Shanna is working out the insurance requirements, I think that is the last thing. Oh, if it works out, we'll be meeting at the Valencia Campus of COC.

This weekend, Saturday May 14, the club will have a table and some equipment for demonstrating at Placerita Canyon Nature Center's Open House. I hope you come to enjoy all the fun things that are planned. A lot of things for kids and adults alike to do, like milking a wooden cow and making butter and corn husk dolls. There will be quilting demonstrations. The Astronomy Club and the Herpetology Club will be in attendance. And all this is free! There will be a raffle of three Fender guitars that were donated. Buy tickets in the gift shop. So you can see, this will be a great day to do something different.

I hope to see you all Tuesday at (fingers crossed) what may be our final Zoom meeting because of this stupid epidemic.

Susan collects all rocks, not just the ones she wants to use as weapons.

**Officers**:

<u>Chairpersons:</u> Claim--Linda Jenkins

Historian -Open

Website-- Larry Holt

Programs – Tina White Publicity – Open

Sunshine--Linda Jenkins

Sierra Pelona Rock Club

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President – Bill Webber Vice-President – Julie Tinoco Secretary: Tina White

Equipment--Bill Webber Field Trips – Julie Tinoco

Hospitality – Ron Rackliffe Membership – Heidi Webber

Treasurer – Shana Brunes-Ruiz

Federation Director (CFMS/AFMS) -- Don Cogan

Pelonagram Publisher, Editor – Heidi Webber

of each month at: Currently via Zoom

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

Contact the Club or the Sierra Pelonagram Editor at:

Visit the SPRC website <u>www.sierrapelona.com</u>

Donation Rock Table--Dianne Wholleben



May Therese Colvin Lise Meyers

**June** Connie Flores-Reisbeck Akiko Strathmann Heidi Webber Janelle Williams Dianne Wohlleben

# SPRC General Meeting

4/19/22

Meeting opened at 7:07 p.m.

# **Old Business**

Placerita OH 5/14

- Still need folks to cut rock; Ron R. volunteered for that
- Trina hopes to make it; Omid & 4 others are already in
- Martin will be there with his sharks' teeth & coprolite
- Omid has a display case he'll be bringing
- Bill will take equipment (Genie?) over on T or W
- Raffle for Fender guitars

Meeting Place

- Still need one
- Libraries close too early
- Heidi will check with VFW; Trina already had a conversation with them
- Friendly Valley Masons
- Julie has a contact at the Elks' Lodge

CFMS

- May 6 8 at Lancaster Fairgrounds
- Hosted by AVGMS
- Julie leading the FT

# New(ish) Business

Julie on Field Trips

4/23 to Acton

- Agates, "some sort of green rock", chrysocolla @ mine, geodes, bloodstone (Ron R., Trina, Don)
- Those who have been discussed access, what they've found there
- Meeting at Mammoth at 8:00 a.m.

5/7 CFMS Trip

- Leaving at 7 a.m. from the Fairgrounds
- Short trip to the SPRC Claim
- Julie and any others may go to other bloodstone site

Presentation

Tina on Mojave Trails National Monument

- Great update from Ron R., he'd attended tonight's BLM meeting via Zoom
- Background from Sandra C., she was involved with the process early on
- Final Public Workshop: April 21 (9:00 11:00am Pacific)
- o Zoom Link: https://us02web.zoom.us/j/88285394264
- o Phone: 346 248 7799 | Meeting ID: 882 8539 4264

Miscellany

• Lise shared with us about her exploration of the caves at Pisgah Crater

Meeting ended at 8:19 p.m.



May 3, 2022

## Attendees:

- Heidi W, Bill W. Ron R. Julie T. Don C. Linda J. Tina W. Meeting opened at 7:21 p.m. We will be using the Zoom address of tonight's meeting for future Board and General meetings. (We had a bit of difficulty getting everyone in the same Zoom room, hence the delayed start.) CFMS is this weekend
- o Julie leading Field Trip on Saturday; it's also our Club FT for May
- Don was unaware of Directors Meetings (both on Saturday; new directors meet before the rest). Ron is sending contact infor mation to Don. There is also an Awards Dinner that night, but Don likely won't be able to attend.
   Program:
- o Tina doesn't have any ideas right now; will graze for ideas at CFMS and will share plans after that. Next Workshop: October TBD as June already too hot
- Gilchrist Farms is every weekend in October; we probably won't be able to cover more than two (2) weekends
   June Picnic: Saturday June 18th at Valencia Meadows Park 10/11 until we're done
   Membership:
- o New Member: Natasha Illa' unanimously voted in
- o Tina provided Heidi info on potential member Maureen Thomas
- o **Club and Other Equipment:**
- o Ron R. wants to buy one of the 24" saws; email will go out to see if anyone else is interested. Bids start at \$500.
- o Tina has access to another saw and other equipment; info to be shared after next week

# Meeting Space:

Linda Jenkins has spoken with someone at COC Valencia
There is a room available holds up to 30 people
2 hours for \$60 (billed after the meeting)
2nd floor of Van Hook Building
COC needs Certificate of Insurance, etc. from Shana

Linda will check on parking (\$?), OK to arrive 10 min. early, vaccine/masks requirements

## Summer Field Trip:

Beach most likely

Tina emailed Julie info on Palos Verdes trip taken by Oxnard Club

# Meeting adjourned 8:12 p.m.



Excellent visual created by John Lindquist regarding the Mojave Trails National Monument.

### What is Peridot?



Peridot from the Arizona San Carlos Apache Reservation.

By United States Geological Surevey

Peridot is a gem-quality olivine and a (Mg, Fe)2SiO4 type silicate mineral. The formulation approaches Mg2SiO4 because it is a magnesium-rich olivine (forsterite). The green colors of the gem depend on the structure of the iron contents. It occurs both in volcanic basalt and in pallastic meteorites in silica-deficient rocks. It is one of the two gems that have been observed to form in the rock of the upper mantle rather than in the earth's crust. It's gem-quality is unusual on the earth's surface due to its environmental sensitivity when transporting deep into the mantle.

Peridot is a silicate of magnesium oxide; pure forsterite is colorless, but oxide substitute the green colors of some of the magnesium. Too much iron contributes to an attractive brown colored stone. It is the precious color without heavy yellow or brown distinctions, when it's bright white. This altered barrel cut peridot is the most fine 46,16-carat stone in the National Gem Collection and Pakistan's greatest peridot.

It is one of the few gemstones in one color only: an olive-green. But the size and color of the green ranges from yellow to olive to brownish-gray in the crystal structure, depending upon the iron level of the structure. It may be medium-dark, pure white, in extreme situations, without a secondary yellow or brown mask.

#### Where is Peridot Found?

The olivine, a peridot type, is common to mafic and ultramatic rocks, frequently found in lava and in peridotite mantle xenoliths which carry Lava to the surface but only in a fraction of these environments does gem quality peridot occur.

#### Peridots in Meteorites can also be Detected

It can be differentiated by composition and scale. A volcanically formed peridote typically has higher lithium, nickel and zinc concentrations than those present in meteorites.

Olivine is an abundant mineral, but peridot of gem quality is very unusual on the Earth's surface due to its chemical instability. Olivine is typically classified as small grains and is not painted in a extremely heavy state. The variety that is used mostly to cut peridot diamonds, large forsterite crystals, is uncommon, which means olivines are considered valuable.

In the ancient world, mining of peridot, called topazios then, on St. John's Island and Zabargad Island in the Red Sea began about 300 B.C.

The principal source of peridot olivine today is the San Carlos Apache Indian Reservation in Arizona. It is also mined at another location in Arizona, and in Arkansas, Hawaii, Nevada, and New Mexico at Kilbourne Hole, in the US; and in Australia, Brazil, China, Egypt, Kenya, Mexico, Myanmar (Burma), Norway, Pakistan, Saudi Arabia, South Africa, Sri Lanka, and Tanzania.

Its crystals have been collected from some pallasite meteorites. These gems are given the name Moldavite to differentiate their origin. The most commonly studied pallasitic peridot belongs to the Indonesian Jeppara meteorite, but others exist such as the Brenham, Esquel, Fukang, and Imilac meteorites.



Peridot olivine with minor pyroxene, on vesicular basalt.

Photo By Pyrope





#### What Is Petoskey Stone, and Where Can You Find It?

Petoskey stone is a rock and a fossil, often pebble-shaped, that is composed of a fossilized rugose coral, Hexagonaria percarinata.

#### Why is it called the Petoskey Stone?

The name Petoskey Stone likely came about because it was found and sold as a souvenir from the Petoskey area. The name Petoskey appears to have originated late in the 18th century. Its roots stem from an Ottawa Indian legend. In 1965, Petoskey stone was named the state stone of Michigan.

#### How was the Petoskey Stone Formed?

So, what is a Petoskey stone? It is a fossil colonial coral that lived in the warm Michigan seas during the Devonian time around 350 million years ago. The name Hexagonaria (meaning six sides) percarinata was designated by Dr. Edwin Stumm in 1969 because of his extensive knowledge of fossils. This type of fossil is found only in the rock strata called the Gravel Point Formation. This formation is part of the Traverse Group of the Devonian Age.

The stones were formed as a result of glaciation, in which sheets of ice plucked stones from the bedrock, grinding off their rough edges and depositing them in the northwestern (and some in the northeastern) portion of Michigan's lower peninsula. In those same areas of Michigan, complete fossilized coral colony heads can be found in the source rocks for the Petoskey stones. This is why Petoskey stones can be found in gravel pits and along beaches far from the Petoskey area.

During the Devonian time, Michigan was quite different. Geographically, what is now Michigan was near the equator. A warm shallow sea covered the State. This warm, sunny sea was an ideal habitat for marine life. A Devonian reef had sheltered clams, cephalopods, corals, crinoids, trilobites, fish, and many other life forms.

The soft living tissue of the coral was called a polyp. At the center of this was the area where food was taken in, or the mouth. This dark spot, or eye, has been filled with mud of silt that petrified after falling into the openings. Surrounding the openings were tentacles that were used for gathering food and drawing it into the mouth. The living coral that turned into the Petoskey stone thrived on plankton that lived in the warm sea.

Calcite, silica and other minerals have replaced the first elements of each cell. Each separate chamber, then, on each Petoskey stone, was a member of a thriving colony of living corals. For that reason, the Petoskey stone is called a colony coral.

#### Where Can You Find the Petoskey Stone?

Petoskey stones can be found on various beaches and inland locations in Michigan, with many of the most popular being those surrounding Petoskey and Charlevoix. The movement of the frozen lake ice acting on the shore during the winters is thought to turn over stones at the shore of Lake Michigan, exposing new Petoskey stones at the water's edge each spring. Petoskey Stones are also commonly found in Iowa, Indiana, Illinois, Ohio, New York, Canada, Germany, England, and even Asia.

The best time to find the Petoskey stones is early spring after the ice on Grand Traverse Bay has melted along the shore. Each year as the ice is broken up and the winds push the ice in different directions, it pushes a new crop of Petoskey stones towards the shores. *Source: Wikipedia* 

