# The Sierra Pelonagram



# **November 2013**

... 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.



On November 9 several club members escorted Cub Scout pack 583 of Castaic to Gem Hill to introduce them to the fun of rock collection. It was a perfect day and a fun time was had by all.

Photos by Dianne Erskine-Helrigel





Welcome New Members Tina White and Jeff Legler!

# **November and December Birthdays**

Frank Humelbaugh Nov 10 Olivia Miseroy Nov. 13 Dianne Southwell Nov. 13 Nancy Hilliard Dec. 1 Morgan Langewisch Dec. 14 Jon Meredith Dec. 15



## Officers:

President – Greg Langewisch Vice-President – Bill Webber Secretary: Heidi Webber Treasurer - Greg Mazourek Federation Director (CFMS/AFMS) – Shep Koss

Chairpersons: Claim - Mike Serino Donation Rock Table - Akiko Strathmann Equipment - Bill Webber Field Trips – Open Historian -Open Hospitality – Evelyn Velie Membership – Janelle Williams On-Line Presence (FB and website) - Larry Holt Pelonagram Publisher, Editor – Heidi Webber Programs - Shep Koss Publicity -Bruce Velie Storage - Vlad Litt 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

Sierra Pelona Rock Club P.O. Box 221256 Newhall, Ca. 91322

Or e-mail: <u>hwebber@pacbell.net</u> Visit the SPRC website <a href="http://www.sierrapelona.">http://www.sierrapelona.</a> com/



#### Hello Fellow Rockhounders!

Well, we had a fantastic October. There was a workshop, field trip (complete with weenie roast) and the best Lombardi's event we've ever had. I would like to thank everyone who helped make it an incredible month, especially those who volunteered their time to come out to help at Lombardi's.

November will be an equally incredible month in many ways. We've already had a group go out to Sharktooth Hill, where they rescued many fine teeth from their earthen tombs. Also, some of us took out a group of Cub Scouts to Gem Hill where they were educated on some of the rocks and minerals that can be found there. All the kids had a great time! Who knows, there could be some future rockhounders there. Still to come, we have our first ever wire wrapping group meeting on Wednesday the 13th, the general meeting on the 19th and a fantastic field trip lined up to Jasper Hill and Green Ash Hills on the 23rd. Whew, it's gonna be a busy November!

Don't forget, we also have the annual Holiday party coming up in December. The club will be providing the main meat dish. But we are counting on the rest of us to bring our own home made delectables to the table. Evelyn is keeping the

potluck list. So, if you haven't already please get in touch with her about what you will be bringing to the feast! Besides the party in December, we will also be having club elections. If you want to be a part of leading the club into 2014, I urge you to contact one of the election committee members

- 1: Bill Webber (<u>wwebber@pacbell.net</u>)
- 2: Bruce Velie (Bvelie@ca.rr.com)
- 3: Omid Aeen (aeensnape@gmail.com)

It's very important that we get a variety of members participate in the running of the club. We really need you to step up and help make this an even better club to be a part of!

All that said, November is going to be a great month for the SPRC. I can't wait to see how everything turns out!

#### **Elections**

an Editorial

In the 5 years I have been a club member, the club has grown enormously. When I joined, I became involved almost immediately, becoming the Editor/Publisher of the Pelonagram. Bill became president although neither of us knew a thing of what was going on and couldn't tell a rock from a mineral. By attending board meetings, we did learn how the club worked and when we took on responsibilities, we had plenty of backup from previous board members. All we had to do was ask.

Why am I telling you this? OK, I see your eyes glazing over—elections, good for you, blah-blah. But elections are about to be held again. We have put out word for anyone who is interested in assuming a board position. So far, only one person has said he would like to take this on. The rest of the board members would love to see someone challenge them, new blood and ideas are always healthy to any organization. At this time, with only one nominee, the remaining board members will probably either trade jobs or remain in their current position.

So I am asking you to think about why you joined the club. Yes, you are interested in rocks, minerals and gems. You are interested in the programs and field trips. Think about what it takes to put this together. Then think, would you be up to it, knowing that the rest of us have your back? Not only are we looking for new board members, we are in need of various committee members. So think about it, and then let your voice be heard. Heidi

#### Sierra Pelona Rock Club

Invites
You and a Guest
To the
SPRC 2013 Potluck Holiday Party
On
December 22 at Noon
At

Placerita Canyon Nature Center 19152 Placerita Canyon Road Newhall, CA

RSVP to Evelyn Velie and also tell her your dish.

The club will provide the meats and all paper goods and cutlery.

This invitation is for club members and one guest per member.

Additional guests are \$5 each.

### **CFMS Shows**

#### November 2013

November 23 - 24: Livermore, CA Livermore Valley Lithophiles The Lithorama 3131 Pacific Avenue, Hours: Sat 10 - 5; Sun 10 - 4

Email: <a href="mailto:linfo@lithophiles.com">linfo@lithophiles.com</a>
WebSite: <a href="mailto:www.lithophiles.com">www.lithophiles.com</a>

#### December 2013

December 13-15:San Bernardino, CA

Orange Belt Mineralogical Society Western Regional Little League Ball Park

6707 Little League Drive Hours: 9 am to Dusk daily Email: kengard@roadrunner.com

Website: <a href="http://OBMSrocks.">http://OBMSrocks.</a>

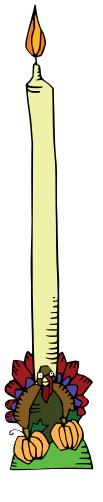
yolasite.com

#### 2014

#### January 2014

January 18 - 19: Exeter, CA Tule Gem & Mineral Society, Visalia Exeter Veterans Memorial Building Highway 65, 324 N Kaweah Avenue

Hours: Sat 10 - 5; Sun 10 - 4 Email: <u>Pepperok@clearwire.net</u> Website: www.tulegem.org





#### A New Club Function

On the eve of Nov 13, 15 or so club members gathered at the clubhouse for the first of what we hope to be many wire-wrapping workshops. A lot of knowledge and fun was exchanged.



#### Sierra Pelona Rock Club

Business Meeting Greenbriar Estates Clubhouse November 5, 2013

The meeting was called to order at 7:05pm. In attendance were Greg Langewisch, Greg Mazourek, Bill and Heidi Webber, Evelyn and Bruce Velie, Roxanne Heagy, Ron Lawrence and Ron Rackliff.

Greg M said that we had the best year ever at Lombardi, financially. We can use more shells, need to buy 1000 Ziplock bags for the wheel and more candy as we ran out. We ended up with plenty of help.

The November field trip will be to Jasper Hill and the Green Ash Hills on November 23 with lunch at Peggy Sue's Café. High-clearance vehicles are recommended. We will be collecting pegmatite materials: Tourmaline, aquamarine and lepidolite.

Bruce said he would like to discuss the elections at the next general meeting. He also said it was a go for our first wire wrapping class to be held at the clubhouse on November 13.

Shep said that he would do the November presentation on pegmatites, primarily tourmaline.

Heidi said we needed to buy more business cards and made a motion to do so. Greg M. seconded, motion passed.

The Greg M motioned the meeting be adjourned, Heidi seconded and the meeting was adjourned at 8:20pm

Respectfully Submitted

Heidi S Webber Secretary, SPRC



#### Sierra Pelona Rock Club

General Meeting Greenbriar Estates Clubhouse October 15, 2013

The meeting was called to order at 7:40pm. 30 members were in attendance (no guests).

The club welcomed new members Tina White and Jeff Legler.

Greg announced another successful workshop with 15 members attending. He said that the Trona Gem-a-Rama was packed and they collected hanksite and halite.

Lombardi's is this coming weekend and we need more help.

The club fieldtrip is to Gem Hill and the North Edwards claim with a weenie roast and more collecting.

The holiday party will be Dec. 22 and is potluck with the club providing turkey and ham. A sign-up sheet is available or contact Evelyn Velie to tell her your contribution. There will also be a White Elephant auction, so bring your money and go through your closets and garage to donate CLEAN and WORKING items for the table

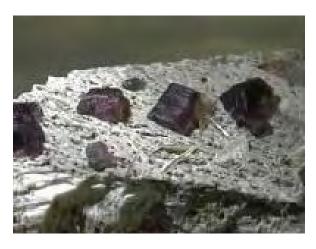
The nominating committee for the upcoming elections are Bruce Velie, Omid Aeen and Bill Webber. Email or call one of them if you wish to run for one of the five board seats. Also, all committee chairs are open for appointment, but you need to let it be known that you are interested.

The large club saw is going to live at Trina and Omid's at this time. Janelle and DJ said they would help Ron L with filtering the used oil so that he can get it out of his shed.

Greg is putting together a trip to Shark Tooth Hill-Ernst Quarry in early November. He needs at least 10 persons to get the good rate.

The club is planning to hold monthly meetings for wire wrapping and jewelry making at the clubhouse. The meeting was adjourned for Stephanie's presentation.

# **Pegmatites**



Pegmatites are extreme igneous rocks that form during the final stage of a magma's crystallization. They are extreme because they contain exceptionally large crystals and they sometimes contain minerals that are rarely found in other types of rocks.

To be called a "pegmatite," a rock should be composed almost entirely of crystals that are at least one centimeter in diameter. The name "pegmatite" has nothing to do with the mineral composition of the rock.

Most pegmatites have a composition that is similar to granite with abundant quartz, feldspar and mica. These are sometimes called "granite pegmatites" to indicate their mineralogical composition. However, compositions such as "gabbro pegmatite," "syenite pegmatite" and any other plutonic

rock name combined with "pegmatite" are possible.

Pegmatites are sometimes sources of valuable minerals such as spodumene (an ore of lithium) and beryl (an ore of beryllium) that are rarely found in economic amounts in other types of rocks. They also can be a source of gemstones. Some of the world's best tourmaline, aquamarine and topaz deposits have been found in pegmatites.

#### The Rock with Large Crystals

Large crystals in igneous rocks are usually attributed to a slow rate of crystallization. However, with pegmatites, large crystals are attributed to low-viscosity fluids that allow ions to be very mobile.

During the early stages of magma's crystallization, the melt usually contains a significant amount of dissolved water and other volatiles such as chlorine, fluorine and carbon dioxide. Water is not removed from the melt during the early crystallization process, so its concentration in the melt grows as crystallization progresses. Eventually there is an overabundance of water and pockets of water separate from the melt.

These pockets of superheated water are extremely rich in dissolved ions. The ions in the water are much more mobile than ions in the melt. This allows them to move about freely and form crystals rapidly. This is why crystals of a pegmatite grow so large.

The extreme conditions of crystallization sometimes produce crystals that are several meters in length and weigh over one ton. For example: a large crystal of spodumene at the Etta Mine in South Dakota was 42 feet long, 5 feet in diameter and yielded 90 tons of spodumene!

#### Activity at the Margins of a Batholith

Pegmatites form from waters that separate from a magma in the late stages of crystallization; this activity often occurs in small pockets along the margins of a batholith. Pegmatite can also form in fractures that develop on the margins of the batholith. This is how "pegmatite dikes" are formed.

Because these dikes and pockets are small in size, the mining operations that exploit them are also small. The mining of pegmatites might be done in an underground operation that follows a dike or exploits a small pocket. It can also be done at an outcrop where the pegmatite is easily discovered by people. Pegmatites usually do not support large mining operations that employ dozens of workers and have continuous activity of many years.

#### **Rare Minerals in Large Crystals**

In the early stages of crystallization, the ions that form high-temperature minerals are depleted from the melt. Rare ions that do not participate in the crystallization of common rock-forming minerals become concentrated in the melt and in the excluded water. These ions can form the rare minerals that are often found in pegmatites. Examples are small ions such as lithium and beryllium that form spodumene and beryl; or large ions such as tantalum, columbium and niobium that form minerals such as tantalite, columbite and niobite. Rare elements concentrated in large crystals make pegmatite a potential source of valuable ore.

#### **Uses of Pegmatite**

Pegmatite rock has limited use as an architectural stone. However, pegmatite deposits often contain gemstones, industrial minerals and rare minerals.

#### Architectural Stone

Pegmatite rock has very few uses. Occasionally it is encountered in a dimension stone quarry that produces granite for architectural use. If the pegmatite is sound and attractive, it might be cut into slabs and polished for building facing, countertops, tile or other decorative stone products and sold commercially as a "granite."

#### Gemstone Mining

Some of the world's best gemstone mines are in pegmatites. Gemstones found in pegmatite include: amazonite, apatite, aquamarine, beryl, chrysoberyl, emerald, garnet, kunzite, lepidolite, spodumene, topaz, tourmaline, zircon and many others. Large crystals of excellent quality material are often found in pegmatite.

#### Rare Minerals

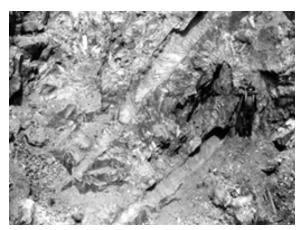
Pegmatite is the host rock for many rare mineral deposits. These minerals can be commercial sources of: beryllium, bismuth, boron, cesium, columbium, lithium, molybdenum, niobium, tantalum, tin, titanium, tungsten and many other elements. In most cases the mining operations are very small, employing less than a dozen people. If the mine contains nice crystals, the minerals are often more valuable as mineral specimens and faceting rough than being sold as an ore.

#### *Industrial Minerals*

Pegmatite is often mined for industrial minerals. Large sheets of mica are mined from pegmatite. These are used to make components for electronic devices, retardation plates, circuit boards, optical filters, detector windows and many other products. Feldspar is another mineral frequently mined from pegmatite. It is used as a primary ingredient for making glass and ceramics. It is also used as filler in many products. *Contributor: Hobart King* 



Lepidolite Crystals on Feldspar Himalaya Mine, Mesa Grande, CA



Molds of giant spodumene crystals at the Etta Mines, Black Hills, Pennington County, South Dakota. Note miner at right center for scale. USGS photo.