The Sierra Pelonagram



March 2011

... 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

This year marks the 52 anniversary of the founding of the club. At our general meeting on March 15 we will celebrate with photos of past events and hopefully a lot of memories from our senior members. Everyone is asked to bring old photos and their memories to share. Since Heidi and I are newbies, along with many others, it promises to be a very interesting evening.

We had a really nice outing to Kramer Corners and Gephart Road last month. The weather was perfect and the "float" was plentiful. We went to 4 or 5 different collecting spots. Those of you who haven't been out with us are really missing a great day, so plan to go with us next time.

Since we don't have a Field Trip Chair and have just been trailing along with Ron and Bonnie on unofficial outings, we won't have a March trip unless someone comes up with an idea. Ron and Bonnie will be out of town.

So until next month, Happy Hunting.

March Birthdays

Roger Gibson Ruth Hidalgo George Lawrence Brenda Litt Evelyn Velie Bill Webber



Officers:

President – Bill Webber Vice-President – Ron Strathmann Secretary: Minutes-Nancy Hilliard Treasurer – Greg Mazourek Federation Director (CFMS/AFMS) – Shep Koss

Chairpersons:

Pelonagram Editor – Heidi Webber
Claim - Mike Serino
Donation Rock Table - Al Brown
Field Trips – Open
Historian - Frank Humelbaugh
Hospitality – Evelyn Velie
Membership – Ron & Akiko Strathmann
Programs – Open
Publicity – Open
Storage - Mike Moreno
Sunshine - Evelyn Velie
Web site – Open

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:

Sierra Pelona Rock Club P.O. Box 221256 Newhall, Ca. 91322 Or E-mail: hwebber@pacbell.net Visit the SPRC website http://www.sierrapelona.com/

SPRC Minutes

Greenhouse Café March 1, 2011

The meeting was called to order at 6:40pm. In attendance were Diane Southwell, Karen Kubota, Evelyn Velie, Mike Serino, Ron and Akiko Strathmann, Bill and Heidi Webber, Greg Mazourek and Ron Lawrence.

In open discussion, it was brought up that K-HITS Radio Station would be a good source of public relations.

Secretary Report: approved.

Treasurers Report: Greg said 10-15 members haven't yet paid their dues. Diane suggested letters be sent to them before they are dropped from the roster. Ron L. said he had sent emails in the last month with no response. Heidi audited the 2010 treasurer reports and all looks well.

The club still has several openings that need to be filled: Publicity Chair, Program Chair, Recording Secretary and Web Master.

Ron L said he and Bonnie will be gone March and most of April and if no one has taken the Field Trip Chair position by then, he will take it back.

March 11-13 is the Stoddard Wells tailgate show. Free admission.

April 2-3 is the Antelope Valley Rock Clubs annual show at Lancaster High School. Our club usually participates as one of our fund raisers. We will try to get a similar position as we did last year. We will also need help in running our booth. As before, we will share the space with Karen and split the booth fee.

California State Mineral Museum in Mariposa wants us to be members again at \$1 per person plus a club donation. Greg will bring the paperwork to the general meeting.

The Bakersfield Show is March 25-27.

At our next general meeting, we will celebrate the clubs' 52^{nd} anniversary. Evelyne will buy a cake and drinks will be brought to the meeting according to the sign-up list. A price limit of \$50 was placed for the cake. Ron said photos will be passed to Greg to put on disc to play during the evening.

Ron L said that Colleen donated a Genie to the club that we were going to let people use. Some of the wheels were replaced with cheap ones and now all need to be replaced. Ron purchased two wheels, with one still waiting. We discussed setting a rental price for future use to help with upkeep. It has also become apparent that some training is needed before loaning (renting) it to club members, since it is very easy to misuse the machine. Greg will work on a policy. In the meantime, the Genie will stay at Ron's place to be used under supervision until we can come up with a good solution. Greg said the wheels at Diamond Pacific are cheaper.

It was also reiterated that the machine is to be used for personal purposes, not cabbing large amounts, in which case the member should buy their own machine. We also discussed a time limit of 1-2 weeks at most for using the Genie. Greg made a motion that we will try to set up training so it can be taken home, but only after proficiency has been demonstrated. Diane seconded and motion passed.

Evelyn said she would like to learn wire-wrapping and Greg said he has her on his list and he limits classes to 5 at a time and he is trying to wait for Shep.

Bill and Heidi had quotes for window decals and business cards. Greg said he didn't think we would need more than 25 decals, which would make a big difference in price. Diane remembered that the last business cards were done by Feathers and they have the setup. Bill and Heidi will check prices with them this month.

Committee Reports:

Membership: No new members.

Publicity: Diane will contact KHITS regarding publicity.

Claim: Ron pulled two more slips. Evelyne found black and red travertine rock. There is more paperwork to be filed—again—on the Diablo Onyx claim. Greg will send a \$10 check to the BLM.

The meeting adjourned about 7:45.

Igneous Rocks

At the most general level, rocks fall into three great categories, and they're pretty simple to tell apart. You won't even need a rock hammer or hand lens, though those are fun to have. Igneous rocks are the first great class.

Origin of Igneous Rocks

Igneous rocks begin as hot, fluid material, and the word "igneous" comes from the Latin for fire. This material may have been *lava* erupted at the Earth's surface, or *magma* (unerupted lava) at shallow depths, or magma in deep bodies (plutons). Rock formed of lava is called *extrusive*, rock from shallow magma is called *intrusive* and rock from deep magma is called *plutonic*.

Igneous rocks form in three main places: where lithospheric plates pull apart at mid-ocean ridges, where plates come together at subduction zones and where continental crust is pushed together, making it thicker and allowing it to heat to melting.

People commonly think of lava and magma as a liquid, like molten metal, but geologists find that magma is usually a mush — a liquid carrying a load of mineral crystals. Magma crystallizes into a collection of minerals, and some crystallize sooner than others. Not just that, but when they crystallize, they leave the remaining liquid with a changed chemical composition. Thus a body of magma, as it cools, evolves, and as it moves through the crust, interacting with other rocks, it evolves further. This makes igneous petrology a very complex field, and this article is only the barest outline.

Igneous Rock Types: Basalt, Granite and More

Igneous rocks are classified by the minerals they contain. The main minerals in igneous rocks are hard, primary ones: <u>feldspar</u>, <u>quartz</u>, <u>amphiboles</u> and <u>pyroxenes</u> (together called "dark minerals" by geologists), and <u>olivine</u> along with the softer mineral <u>mica</u>.

The two best-known igneous rock types are *basalt* and *granite*, which differ in composition. <u>Basalt</u> is the dark, fine-grained stuff of many lava flows and magma intrusions. Its dark minerals are rich in magnesium (Mg) and iron (Fe), hence basalt is called a *mafic* rock. So basalt is mafic and either extrusive or intrusive. <u>Granite</u> is the light, coarse-grained rock formed at depth and exposed after deep erosion. It is rich in feldspar and quartz (silica) and hence is called a *felsic* rock. So granite is felsic and plutonic.

These two categories cover the great majority of igneous rocks. Ordinary people, even ordinary geologists, use the names freely. (Stone dealers call any plutonic rock at all "granite.") But igneous petrologists use many more names. They generally talk about *basaltic* and *granitic* or <u>granitoid</u> rocks among themselves and out in the field, because it takes lab work to determine an exact rock type according to the official classifications. True granite and true basalt are narrow subsets of these categories.

But a few of the less common igneous rock types can be recognized by non-specialists. For instance a dark-colored plutonic mafic rock, the deep version of basalt, is called **gabbro**. A light-colored intrusive or extrusive felsic rock, the shallow version of granite, is called **felsite** or **rhyolite**. And there is a suite of *ultramafic* rocks with even more dark minerals and even less silica than basalt. **Peridotite** is the foremost of those.

Where Igneous Rocks Are Found

The deep sea floor (the oceanic crust) is made of basaltic rocks, with ultramafic rocks underneath. Basalts are also erupted above the Earth's great subduction zones, either in volcanic island arcs or along the edges of continents. However, continental magmas tend to be less basaltic and more granitic.

The continents are the exclusive home of granitic rocks. Nearly everywhere on the continents, no matter what rocks are on the surface, you can drill down and reach granitoid eventually. In general, granitic rocks are less dense than basaltic rocks, and thus the continents actually float higher than the oceanic crust on top of the ultramafic rocks of the Earth's mantle. The behavior and histories of granitic rock bodies are among geology's deepest and most intricate mysteries.

Source: About.com/geology

Next Month: Sedimentary Rocks

Igneous Rock Textures

Tell the three types of igneous rocks apart by their texture, starting with the size of the mineral grains. Extrusive rocks cool quickly (over periods of seconds to months) and have invisible or very small grains, or an <u>aphanitic texture</u>. Intrusive rocks cool more slowly (over thousands of years) and have small to medium-sized grains. Plutonic rocks cool over millions of years, deep underground, and can have grains as large as pebbles — even a meter across. Both intrusive and plutonic rocks have phaneritic texture.

Because they solidified from a fluid state, igneous rocks tend to have an <u>equigranular texture</u>, a uniform fabric without layers, and the mineral grains are packed together tightly. Think of the texture of a piece of bread as a similar example.

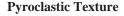
In many igneous rocks, large mineral crystals "float" in a fine-grained groundmass. The large grains are called *phenocrysts*, and a rock with phenocrysts is called a <u>porphyry</u>; that is, it has a <u>porphyritic texture</u>. Phenocrysts are minerals that solidified earlier than the rest of the rock, and they are important clues to the rock's history.

Some extrusive rocks have distinctive textures. <u>Obsidian</u>, formed when lava hardens quickly, has a <u>glassy texture</u>. <u>Pumice</u> and <u>scoria</u> are volcanic froth, puffed up by millions of gas bubbles giving them a <u>vesicular texture</u>. <u>Tuff</u> is a rock made entirely of volcanic ash, fallen from the air or avalanched down a volcano's sides. It has a <u>pyroclastic texture</u>. And <u>pillow lava</u> is a lumpy formation created by extruding lava underwater.



Aphanitic Texture

Aphanitic ("AY-fa-NIT-ic") rocks have mineral grains that are mostly too small to be seen with the naked eye or a hand lens, like this <u>rhyolite</u>.



Rocks with pyroclastic ("PY-ro-CLAS-tic") texture are made of pieces of volcanic material created in an explosive eruption, like this welded tuff.





Glassy Texture

Glassy (or hyaline or vitreous) rocks have no or almost no grains at all, as in this quickly chilled <u>pahoehoe</u> basalt or in <u>obsidian</u>.

Spinifex Texture

Spinifex texture, found only in komatiite, consists of large crisscrossing platy crystals of olivine. Spinifex is a spiny Australian grass.





Phaneritic Texture

Phaneritic ("FAN-a-RIT-ic") rocks have mineral grains that are large enough to be seen with the naked eye or a hand lens, like this granite.

Equigranular Texture

Rocks with equigranular ("EC-wi-GRANular") texture have mineral grains that are generally the same size, like this granite.

Poikilitic Texture

Poikilitic ("POIK-i-LIT-ic") texture is one in which large crystals, like this feldspar grain, contain small grains of other minerals scattered inside them.





Porphyritic Texture

Rocks with porphyritic ("POR-fi-RIT-ic") texture like this <u>andesite</u> have larger mineral grains, or phenocrysts ("FEEN-o-crists"), in a matrix of smaller grains.

Vesicular Texture

Rocks with vesicular ("ve-SICular") texture are full of bubbles. It always indicates a volcanic rock, like this scoria.





Ametrine is a mixture of amethyst and citrine. Partially it occurs to be purple and partially orange-yellow. It is typically given a rectangular shape with a 50-50 pairing of amethyst and citrine. So, with ametrine one can have the color of two gems for the price of only one.

Ametrine is very popular among the artistic cutters and carvers. They play with its colors, creating landscapes in the stone. Sometimes, the artists give a checkerboard pattern to the top, which increases the light reflection.

Ametrine is durable and is suited for a variety of jewelry uses. The sizes and shapes are also available in abundance and the color contrast is mainly pronounced in sizes over seven carats. Taking into account of its availability from a single mine, it is not so expensive.

There is only one mine in the world from where the stone is sourced. It is Bolivia's Anahi Mine named after Anahi princess from the Ayoreos tribe who was married to a Spanish conquistador and the Anahi Mine was given as dowry. The mine became famous in the seventeenth century.

Andalusite

A hard silicate of alumina in rhombic crystals of a colour varying from pink to violet. More rarely, it may be red or green. Its main quality is its exceptional fire.

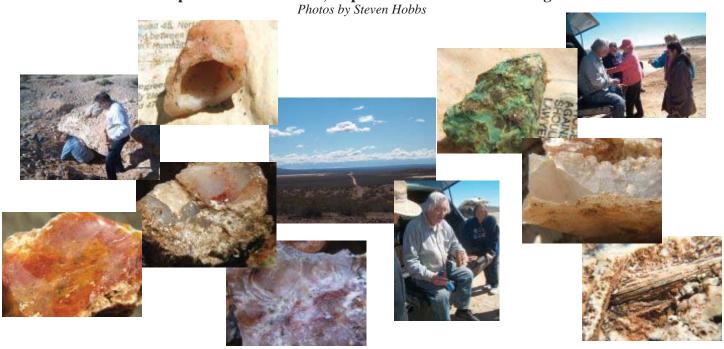
If you are thinking of buying andalusite, you should choose a specimen in its original shape, flawless and of as deep a hue as possible. The price of this stone rises steadily, but never in leaps and bounds.



It is found in Brazil, Ceylon and Madagascar and is mostly used for the creation of exclusive jewelry for a clientele of connoisseurs.

	Name	Moh's	Specific Gravity	<u>Structure</u>	<u>Cleavage</u>	Refractive Index	<u>Double</u>	<u>Disp.</u>	<u>Pleochro</u>	<u>Fluorescence</u>
	Andalusite	7.5	3.12-3.18	Orthorhombic	Imperfect	1.641-1.648	-0.007	0.016	Strong	Weak
Reference: Mineralzone.com									•	

Our trip to Kramer Corners, Gephart Road and Surrounding Areas



CFMS Gatherings

March 11-13 - VICTORVILLE, CA

Victorville Valley Gem & Mineral Society Tailgate at Verde Antique Quarry

(Stoddard Well)

Bell Mountain/Stoddard Well exit from

I-15

Hours: 8-5 daily

Brett Ward (760) 954-4323 Email: <u>Bretts88@verizon.net</u> Website: <u>www.vvgmc.org</u> March 12-13 - TURLOCK, CA

Mother Lode Mineral Society

Turlock Fairgrounds 900 N. Broadway

Hours: Sat. 10-6; Sun. 10-5

Bud & Terry McMillin (209) 524-3494

Email: <u>Bud.mcmillin.b7y@statefarm.com</u> Website: <u>www.turlockgemshow.com</u>

March 12-13 - SAN MARINO, CA

Pasadena Lapidary Society San Marino Masonic Center 3130 Huntington Drive Hours: Sat. 10-6; Sun. 10-4

Joe & Marcia Goetz (626) 260-7239

Email: joenmar1@verizon.net

March 12-13 - SALINAS (Spreckels),

Salinas Valley Rock & Gem Club

Veteran's Hall

5th & Llano Streets, Spreckels

Hours: 10-5 daily

Karen Jones (831) 678-0337 Email: KenKaren0337@att.net

March 17-20 - SAN BERNADINO, CA

Orange Belt Mineral Society Tailgate Little League Western Region

Headquarters

6707 Little League Drive

Hours: Thu 12-5, Fri 9-6, Sat 9-6, Sun 9-3

Ann Teuscher, (909) 297 6652 Email: amansfield@live.com

Website: <u>www.obmsrocks.webs.com</u>

March 19-20 - ESCONDIDO, CA

Palomar Gem & Mineral Club Orfila Vinevards

13455 San Pasqual Road

Hours: Sat. 9-5; Sun. 10-4

Michael Nelson, (760) 580-5902, (760)

741-7369 (cell)

Email: manelson1@cox.net
Website: www.palomargem.org
March 26-27 - ANGELS CAMP, CA

Calaveras Gem & Mineral Society Calaveras Co. Fairgrounds (Frog Town

USA)

Hwy 49 in Angels Camp Hours: Sat. 9-5; Sun. 9-4 Tak Iwata (209) 928-5579 Email: Tak2me@msn.com

Website: www.calaverasgemandmineral.

org

March 26-27 - ROSEVILLE, CA

Roseville Rock Rollers

Roseville (Placer Co.) Fairgrounds 800 All American City Blvd. Hours: Sat. 10-5; Sun. 10-4

Glori Marie (530) 367-2262

Email: gloriarosevillerockrollers@gmail.

com

Website: www.rockrollers.com
March 26-27 - TORRANCE, CA

South Bay Lapidary & Mineral Society

Ken Miller Recreational Center

3341 Torrance Blvd.

Hours: Sat. 10-5; Sun. 10-4

Craig & Kathy Polliard (310) 533-4931

Email: kipolliard@yahoo.com

APRIL

April 2-3 - LEMOORE, CA

Lemoore Gem and Mineral Society

Trinity Hall

470 Champion Street Hours: 10-6 daily

Judy Pereira (559) 924-4052



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