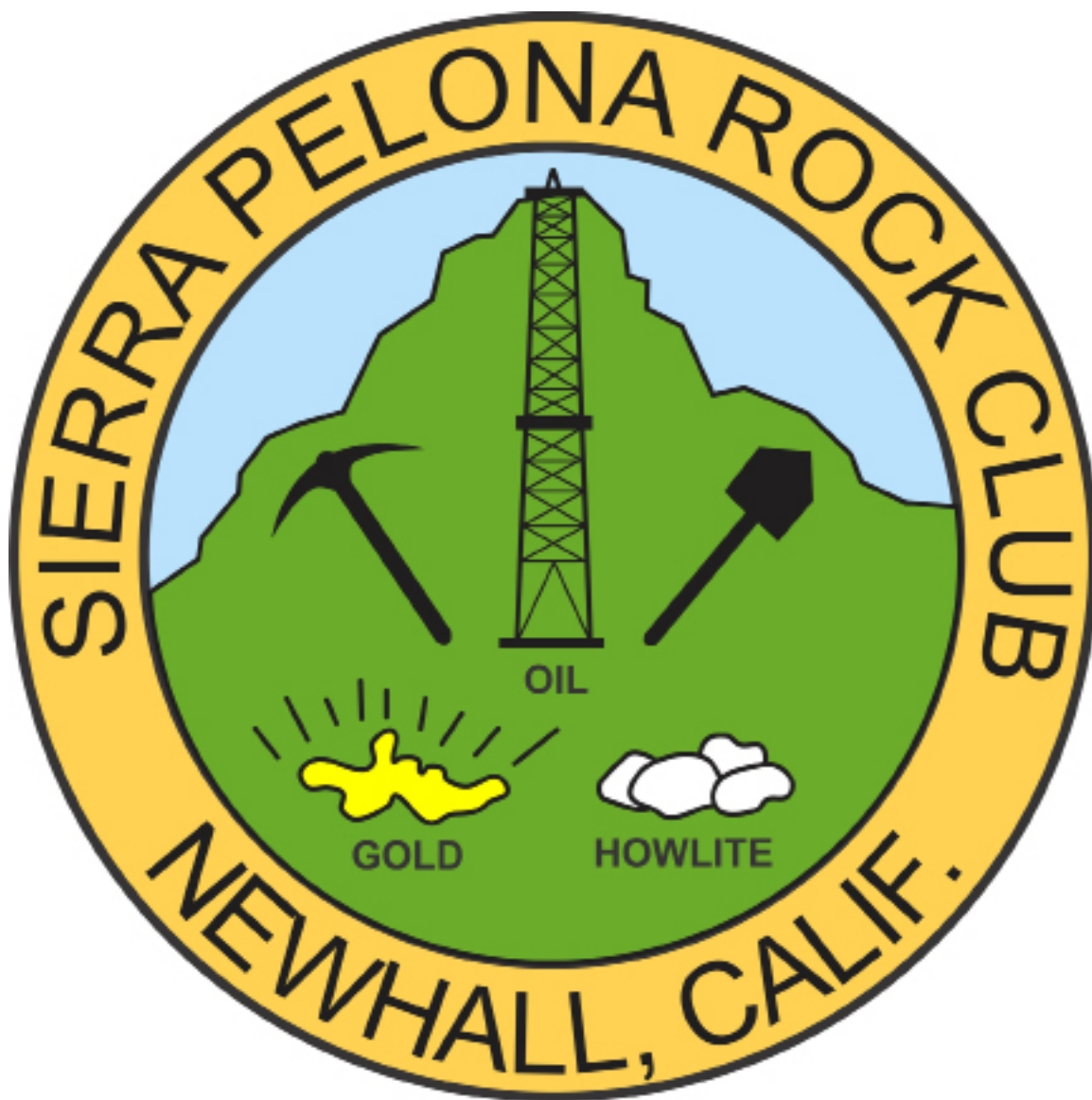


The Sierra Pelona nagram



January 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.



What is Crazy-Lace Agate?

Crazy-lace agate is a banded chalcedony (microcrystalline quartz) that's infused with iron and aluminum and is often brightly colored and complexly patterned. This produces the creamy browns, blacks, greys and golds (and occasional pinks or reds) swirled together in this stone.

This stone is found exclusively within the area known as Chihuahua, in Northern Mexico. Crazy lace agate is believed to have been created in the cretaceous period, about 65-90 million years ago.

Agate is the most famous chalcedony variety, recognized by its concentric color bands, formed by the remains of iron and manganese. The chemical composition of agate is the same as quartz, but with a different physical structure.

Instead of forming as large crystals, it is composed of tiny fibers and crystals whose shapes give rise to diagrams or drawings that acquire different names: as in this case "agate crazy". This mineral is formed in rock cavities of different types, especially lava.

Most agates occur as nodules in volcanic rocks or ancient lavas, in former cavities produced by volatiles in the original molten mass, which were then filled, wholly or partially, by siliceous matter deposited in regular layers upon the walls.

Agate has also been known to fill veins or cracks in volcanic or altered rock underlain by granitic intrusive masses. Such agates, when cut transversely, exhibit a succession of parallel lines, often of extreme tenuity, giving a banded appearance to the section.

The first deposit on the wall of a cavity, forming the "skin" of the agate, is generally a dark greenish mineral substance, like celadonite, delessite or "green earth", which are rich in iron probably derived from the decomposition of the augite in the enclosing volcanic rock.

Agates can also be found in sedimentary rocks. They need a cavity to form, so they are typically seen in limestone, dolomite, and shale which may have shells, tree branches, or roots in them that later decay away.

Dues are Due!
If you haven't paid your dues yet, please do so asap. Club bills are also due now.



- | | |
|------------------|-------------------|
| January | February |
| Larry Holt | Adam Hamilton |
| Larry Patrich | Brigitte Mazourek |
| Martin Schreiner | Alan Pollack |
| Robin Shane | John Wheeler |
| Austin Williams | Tina White |

Officers:
 President – Bill Webber
 Vice-President – Julie Tinoco
 Secretary: Tina White
 Treasurer –Shana Brunen-Ruiz
 Federation Director (CFMS/AFMS) --Don Cogan

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

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: Currently via Zoom

Contact the Club or the Sierra Pelonagram Editor at:
Sierra Pelona Rock Club
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Newhall, Ca. 91322
 Or e-mail: hwebber50@gmail.com
 Visit the SPRC website www.sierrapelona.com



President's Message

January! The start of a new year. Let's hope it is better for all of us than the last couple of years have been.

As far as club business, we are still on the hunt for a new meeting place. Linda Jenkins has been actively exploring various venues. The rest of us have been keeping our ears open for any potential sites. Until then, we will need to continue with Zoom meetings. Julie is still planning on monthly field trips, those are easy to stay as far apart and the member is comfortable with.

This is also the time that dues are due. Only a few have been paid so far, so if you haven't done so, please get your check in the mail to either Shana's PO Box in Frazier Park or the club PO Box in Newhall. You can also Venmo or Zelle Heidi. I believe Shana also does Venmo. You are considered late if not paid by the February board meeting (first Tuesday) and will be dropped from the roster at the end of February. And Heidi will be emailing you—do you really want that???

So, as we leap into a New Year, I hope all is well with you and we will see you at the meeting next week.

Bill Webber
President, SPRC

SPRC Board Meeting

January 4, 2022

Zoom meeting opened at 7:00 p.m.

Virtual Attendees:

- Heidi Webber
- Bill Webber
- Julie Tinoco
- Tina White
- Don Cogan
- Ron Rackliffe
- Cheryl Cogan

Workshop (Bill)

- Concern over January date given COVID surge
- Outdoors, but space constraints
- Tentatively rescheduled for February 12th

January Field Trip to Quartzsite (Julie)

- Yes: Julie T., Ed L.
- No: Ron R., Tina W.,

February Field Trip (Julie)

- February 19th
- Evelyn V. will be in town

CFMS

- New Board needs to be registered; Tina to go to CFMS site to update
- Ron will send Don materials to provide some history/context at

Don's email dcogan3665@gmail.com

Bank Account: No changes needed

February Meeting:

- Tina won't be there; Heidi will act as Secretary
- Presentation on the Quartzsite Event, incl. PowWow

Potential Member:

- Tina will provide her neighbor with Heidi's email, and vice-versa

Minutes of Previous Board Meeting:

- Approved unanimously

Meeting Adjourned at 7:35 p.m.

Submitted by Tina White, Secretary, SPRC



The Difference Between Rocks and Minerals

A mineral is a solid formation that occurs naturally in the earth while a rock is a solid combination of more than one mineral formation which is also occurring naturally.

A mineral has a unique chemical composition and is necessarily defined by its crystalline structure and shape. On the other hand, since a rock can be composed of several minerals it is classified according to the process of its formation. A rock can also contain organic remains and mineraloids apart from regular mineral formations. There are some rocks that may include just one mineral formation though.

Common Characteristics

Although there may be many differences between rocks and minerals, there are only a few similarities between them. Rocks as well as minerals are found in the Earth's crust. Another similarity between the two is that rocks as well as minerals both have commercial value. Rocks are important for the minerals they contain while minerals are used widely in all areas of the manufacturing industry. Finally, both rocks and minerals serve as raw materials in the industrial process for manufacturing products used for everyday purposes.

Jade: Jadeite and Nephrite

Jade is a mineral, much used in some cultures as jewelry and for ornaments, mostly known for its green varieties, though it appears naturally in other colors as well, notably yellow and white. Jade can refer to either of two different silicate minerals: nephrite (a silicate of calcium and magnesium in the amphibole group of minerals), or jadeite (a silicate of sodium and aluminum in the pyroxene group of minerals).

Jade is well known for its use in East Asian, South Asian, and Southeast Asian art.

Jade also has an important place in Latin America such as Mexico and Guatemala. The use of jade in Mesoamerica for symbolic and ideological ritual was highly influenced by its rarity and value among pre-Columbian-Mesoamerican cultures, such as the Olmec, the Maya, and the various groups in the Valley of Mexico. Although jade artifacts have been created and prized by many Mesoamerican peoples, the Motagua River valley in Guatemala was previously thought to be the sole source of jadeite in the region.

Nephrite and Jadeite

It was not until 1863 that French mineralogist Alexis Damour determined that what was referred to as "jade" could in fact be one of two different minerals, either nephrite or jadeite.

Nephrite consists of a microcrystalline interlocking fibrous matrix of the calcium, magnesium-iron rich amphibole mineral series tremolite (calcium-magnesium)-ferro-actinolite (calcium-magnesium-iron). The middle member of this series with an intermediate composition is called actinolite (the silky fibrous mineral form is one form of asbestos). The higher the iron content, the greener the color. Tremolite occurs in metamorphosed dolomitic limestones and Actinolite in metamorphic greenschists/glaucophane schists.

While nephrite jade possesses mainly grays and greens (and occasionally yellows, browns or whites), jadeite jade, which is rarer, can also contain blacks, reds, pinks and violets. Nephrite jade is an ornamental stone used in carvings, beads, or cabochon cut gemstones. Nephrite is also the official state mineral of Wyoming.

Jadeite is a sodium- and aluminum-rich pyroxene. The more precious kind of jade, this is a microcrystalline interlocking growth of crystals (not a fibrous matrix as nephrite is.) It only occurs in metamorphic rocks.

Both nephrite and jadeite were used from prehistoric periods for hardstone carving. Jadeite has about the same hardness (between 6.0 and 7.0 Mohs hardness) as quartz, while nephrite is slightly softer (6.0 to 6.5) and so can be worked with quartz or garnet sand, and polished with bamboo or even ground jade. However nephrite is tougher and more resistant to breakage. Among the earliest known jade artifacts excavated from prehistoric sites are simple ornaments with bead, button, and tubular shapes. Additionally, jade was used for adze heads, knives, and other weapons, which can be delicately shaped.

As metal-working technologies became available, the beauty of jade made it valuable for ornaments and decorative objects.

Unusual Varieties



By John Hill - Mutton Fat Jade on display at the Hotan Museum

Nephrite can be found in a creamy white form (known in China as "mutton fat" jade) as well as in a variety of light green colors, whereas jadeite shows more color variations, including blue, brown, red, black, dark green, lavender and white. Of the two, jadeite is rarer, documented in fewer than 12 places worldwide. Translucent emerald-green jadeite is the most prized variety, both historically and today. As "quetzal" jade, bright green jadeite from Guatemala was treasured by Mesoamerican cultures, and as "kingfisher" jade, vivid green rocks from Burma became the preferred stone of post-1800 Chinese imperial scholars and rulers. Burma (Myanmar) and Guatemala are the principal sources of modern gem jadeite. In the area of Mogaung in the Myitkyina District of Upper Burma, jadeite formed a layer in the dark-green serpentine, and has been quarried and exported for well over a hundred years. Canada provides the major share of modern lapidary nephrite.



Jade on display in Jade City, British Columbia, Canada



Jade Pendant, Hetian Mutton Fat Nephrite, 18th/19th Century

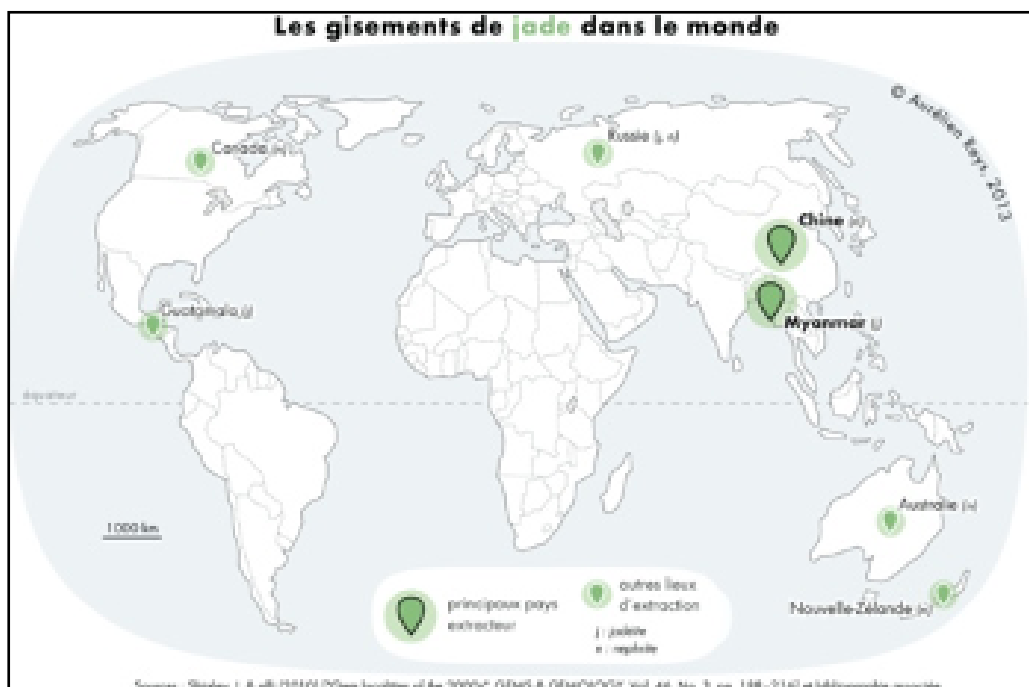
Enhancement

Jade may be enhanced (sometimes called "stabilized"). Some merchants will refer to these as grades, but degree of enhancement is different from color and texture quality. In other words, Type A jadeite is not enhanced but can have poor color and texture. There are three main methods of enhancement, sometimes referred to as the ABC Treatment System:

- Type A jadeite has not been treated in any way except surface waxing.
- Type B treatment involves exposing a promising but stained piece of jadeite to chemical bleaches and/or acids and impregnating it with a clear polymer resin. This results in a significant improvement of transparency and colour of the material. Currently, infrared spectroscopy is the most accurate test for the detection of polymer in jadeite.
- Type C jade has been artificially stained or dyed. The effects are somewhat uncontrollable and may result in a dull brown. In any case, translucency is usually lost.
- B+C jade is a combination of B and C: it has been both impregnated and artificially stained.
- Type D jade refers to a composite stone such as a doublet comprising a jade top with a plastic backing.



Unworked Jade
CC BY-SA 3.0, <https://commons.wikimedia.org/w/index.php?curid=139195>



Main Jade-Producing Countries



Jadeite pectoral from the Mayan Classic period (195 mm or 7.7 in high)
By John Hill



Dagger with jade hilt, India, 17th–18th century.
by Marie-Lan Nguyen



Nephrite from Wyoming