

The Sierra Pelonagram



February 2020

... 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.

Birthdays

New Members

We wish to extend a Big Welcome to our newest members, Therese Colvin and Alan Pollack. We hope to enjoy your company for many years to come.

February

Brigitte Mazourek
Alan Pollack
John Wheeler
Tina White

March

Ruth Hidalgo
Linda Jenkins
Ed Learn
Evelyn Velie
Bill Webber



How Do Opalised Fossils Form?

Opals are highly sought-after rainbow precious stones that are showcased in jewelry or decorative art.

These are no ordinary fossils (if there is such a thing): these incredible relics are made of solid opal, sometimes with rainbows of shimmering color.

Opal forms in cavities within rocks. If a cavity has formed because a bone, shell or pinecone was buried in the sand or clay that later became the rock, and conditions are right for opal formation, then the opal forms a fossil replica of the original object that was buried. We get opalized fossils of two kinds:

1. Internal details not preserved:

Opal starts as a solution of silica in water. If the silica solution fills an empty space left by a shell, bone etc. that has rotted away – like jelly poured into a mold – it may harden to form an opalized cast of the original object. Most opalized shell fossils are ‘jelly mold’ fossils – the outside shape is beautifully preserved, but the opal inside doesn’t record any of the creature’s internal structure.

2. Internal details preserved:

If the buried organic material hasn’t rotted away and a silica solution soaks into it, when the silica hardens it may form an opal replica of the internal structure of the object. This happens sometimes with wood or bone.

Officers:

President – Bill Webber
Vice-President – Julie Tinoco
Secretary: Heidi Webber
Treasurer –Shana Brunes-Ruiz
Federation Director (CFMS/AFMS) --Evelyn Velie

Chairpersons:

Claim--Linda Jenkins
Donation Rock Table--Akiko Strathmann
Equipment--Bill Webber
Field Trips – Julie Tinoco
Historian -Open
Hospitality – Evelyn Velie
Membership – Heidi Webber
Website-- Larry Holt
Pelonagram Publisher, Editor – Heidi Webber
Programs –Tina White
Publicity –Bruce Velie
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 at:

Sierra Pelona Rock Club

P.O. Box 221256

Newhall, Ca. 91322

Or e-mail: hwebber@pacbell.net

Visit the SPRC website www.sierrapelona.com



President's Message

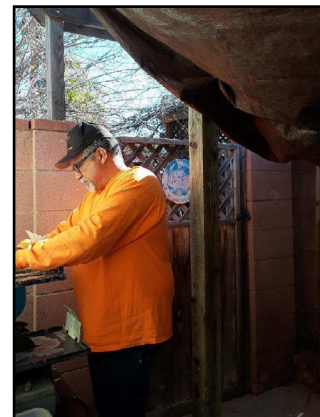
February. It may not seem like it, but in many respects, Spring is here. Trees and shrubs are budding and many bulbs are starting to poke their heads above ground. This is the time of year that is so great for collecting in the desert. While we still are "supposed" to have several inches of rain in the next 6-8 weeks, we can still count on most weekends to be prime for collecting. Julie is working hard to put together field trips for the rest of the year and as soon as things are firmed up, we will be emailing everyone a calendar.

We had a great workshop the first of this month. Around 20 people attended and the day couldn't have been more perfect: sunny and calm. Heidi made an Asian-inspired lunch with dishes hailing from Thailand, Japan and Hawaii. No one left hungry.

We still haven't received all our membership dues and Heidi, as Membership Chair, has emailed the final reminders at the direction of the board. Unfortunately, those members who haven't responded to the emails will be removed from membership as of March 1. So please, if you still wish to remain a member, contact Heidi asap.

That's all the news I have for now. I hope to see you all next Tuesday.

Bill Webber



Ed Learn

SPRC General Meeting Greenbriar Estates Clubhouse January 21, 2020

The meeting was called to order at 7:35pm. Guests were Alan Pollock and Therese Colvin.

Tina White will be taking over T-shirt, hat and pen sales from Trina.

Bill and Heidi will be holding the first workshop of 2020 on February 1.

Bill said that the calendar for the first half of the year should be ready soon. We still have to set field trips, which should happen at the February Board Meeting.

Julie said the January field trip would be to Quartzite.

The meeting was adjourned at 7:50 for Greg Mazurek's presentation on Unnatural Stones.

Respectfully Submitted
Heidi S Webber, Secretary, SPRC

SPRC Board Meeting Greenbriar Estates Clubhouse February 4, 2020

The meeting was called to order at 7:05pm. In attendance were Bruce Velie, Bill and Heidi Webber, Julie Tinoco, Shanna Brunes-Ruiz and Ron Rackliffe.

The January Minutes were presented. Julie moved to accept as written, Bill seconded/ passed.

The January Treasurer's Report was presented. Julie moved to accept as written, Bill seconded/passed.

The Calendar should be completed soon, there are still details and logistics to sort out. Julie said she would like to take us to the South Cady's for fluorite for the February field trip and if there is time, to do a bit of exploring in the area. The March field trip will be to the Stoddard Wells Tailgate held from March 6-8. They normally have a great local excursion open to everyone.

Membership: Alan Pollack and Therese Colvin were voted in as our newest members. Welcome! After much discussion, the board recognized that many notices were sent out for payment of annual dues. Unpaid members will be dropped as of March 1, 2020.

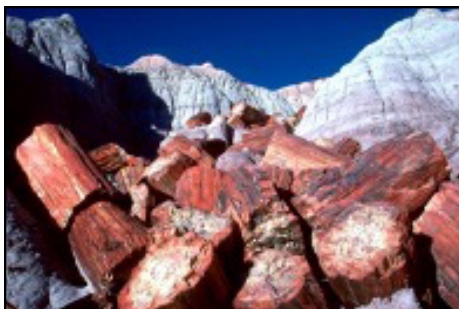
Bill requested funds for equipment maintenance. Heidi moved, Julie seconded/passed.

Bruce said that he was notified by park management that effective immediately no December parties would be allowed for organizations that aren't based in the park. That means us. Options would be Thanksgiving weekend (not good), or we go outside the park like we had planned this year. This situation could change, so stay tuned.

Shanna moved that we adjourn as all business had been completed. Heidi seconded/passed.

Meeting adjourned at 7:58pm

Respectfully submitted
Heidi S Webber, Secretary, SPRC



Photos: Patrick Fuchs
Petrified Forest National Park

How Did Those Petrified Logs Get 'Cut'?

Petrified wood is mostly silica—quartz. The logs are very hard (7.8 on the 1-10 Mohs hardness scale!), but brittle. After petrification, but while the logs were still encased in matrix rock, the logs cracked under stress. As the logs eroded out, from gravity and ice wedging, the cracks widened and segments separated. Silica naturally breaks on a clean angle.

A tree dies, falls over and is buried in a river channel or floodplain, under layers of mud, sand and gravel. In the groundwater table, the tree becomes saturated like a sponge and expands. The water, sand and gravel cut off exposure to oxygen, so the tree doesn't rot. Volcanic ash in the water breaks down, and the silica that was in the ash goes into solution — forming silicic acid, which enters the waterlogged tree and interacts chemically with the wood, altering it to silica and replicating the features of the wood. Over time, you end up with a silica replica of the tree.

Eventually, the log leaves the groundwater table and goes through a process of "dewatering" and recrystallizing, this time as solid quartz. Thus, all of the Triassic logs at Petrified Forest now consist almost entirely of quartz. This process takes much longer — tens of millions of years, according to the fossil record.

But why do so many of the logs appear "cut"? It has to do with how they got to their present location. About 60 million years ago, forces of geology started the uplift of the Colorado Plateau. This area went from deeply buried to being uncovered and raised more than 1 mile above sea level. As a high point, it is continuously eroding away, exposing old rocks and their fossils, such as the petrified logs from the Triassic.

The movement and erosion of the land is what caused the logs to break. And the inner surfaces where they've broken are flat because quartz doesn't break neatly across its crystal faces, so instead it snaps across the log's shortest area — sort of like when you snap a piece of chalk.

These logs are pure quartz, and to cut them would require a diamond saw. Rock shops use these saws to cut log portions and polish them for sale, but at Petrified Forest, this has happened naturally over very long periods of time.

Reference "Geology In" from *Amazing Geologist*, Facebook



Omid, Trina, Ron, Karen, Julie

Quartzite 2020 Field Trip

By Julie Tinoco

SPRC's first field trip of the year was on January 18 and 19 to the PowWow at Quartzite, Arizona. Club members came in throughout the day and we met up when possible to visit, eat, walk around and in some cases make purchases.

On Saturday afternoon the weather was warm and sunny with a cool breeze. Trina and Omid Aeen, Ron and Karen Rackliffe and myself headed to Ehrenberg just north of the Arizona border. We followed the Colorado River on a dirt road a mile or two. The sunset and petrified wood were the goal of the outing. Very little petrified wood and a few agate pieces were found. The sunset was

spectacular and so calming after a long day of shopping!

A large group of us had dinner at the Times 3 Diner in Quartzite. We ended up separating as the group was too big for just one table.

On Sunday, it was another beautiful day. Everyone went our separate ways for breakfast, church and shopping. Martin and Valerie Schreiner, Larry and Cody Patrich, Trina and Omid Aeen and myself met up mid-morning. Martin had gotten directions to one of the mines in Quartzite. We decided to investigate the area. We looked for quartz crystals in the tailings and some nice ones were found. Martin found some Birds-eye rhyolite. A great day was had by all.

The club members went back to the show and made final purchases. Then a meal together before heading back home. It was a wonderful and memorable weekend

Thank you ALL for helping to make Quartzite 2020 so much fun.



Cody Patrich