The Sierra Pelonagram



March 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.



Orbicular Granite

Orbicular granite (also known as orbicular rock or orbiculite) is an uncommon plutonic rock type which is usually granitic in composition. These rocks have a unique appearance due to orbicules - concentrically layered, spheroidal structures, probably formed through nucleation around a grain in a cooling magma chamber. Almost one third of known orbicular rock occurrences are from Finland. The occurrences are usually very small.

The orbicules are formed by crystallization from a fluid-rich supercooled dioritic magma nucleated on seed crystals. The orbicules appear to have settled under gravity while each was still a skeletal mesh of crystals, since the orbicules are frequently deformed or molded against one another.

The accumulation of orbicules depletes the magma in mafic elements, and increases the silica and fluid content, and the granite nature of the matrix. Biotite flakes cut primary crystals and are thought to be secondary.

Reference: Amazing Geologist, Facebook



Birthdays

March Ruth Hidalgo Linda Jenkins Ed Learn Bruce Velie Bill Webber

April Lynn Alexander Gerardo Guzman Joaquin Guzman Greg Mazourek Yolanda Resnick Michael Shane Michael Wertz



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 <u>www.sierrapelona.com</u>



President's Message

Here it is March and the country is in a bit of a crisis with the Covid-19 virus creating illness and havoc throughout the nation. Here in Santa Clarita at this time are three verified cases. The effect is significant—empty store shelves of just about any kind of food and sanitary item, high amounts of stress and fear, schools closed for several weeks, and pretty much any public meeting canceled. This would include our monthly general meetings. While we were discussing canceling the March meeting, the property managers closed all access to the clubhouse where we meet. This was a wise choice for them, since it is in a senior park, a segment of the population that is extremely vulnerable to Covid-19. We can't say if we will be able to have an April meeting either, things are so up in the air. It is all going to be played by ear.

This is new territory for all of us, so please try to be patient with your friends, family and neighbors. We will keep you informed as much as possible, as soon as possible, of any future events. Being a creature of habit, I hope everything returns to normal, and soon! So take care and stay healthy!

Bill Webber SPRC President



Welcome to the SPRC Goldie Crockett May you be with us for many years and make many new friends!



Sierra Pelona Rock Club Board Meeting March 3, 2020 Greenbriar Estates Clubhouse

Sierra Pelona Rock Club General Meeting February 18, 2020 Greenbriar Estates Clubhouse

The meeting was called to order at 7:40pm. We had one guest, Goldie Crockett. New members Alan Pollack and Theresa Colvin were given their membership packets and welcomed to the club.

Julie Tinoco said that she was willing to take a group back to the Cady's to look for fluorite. It will not be an official club trip. She will do an email for those who are interested. This month's field trip will be Stoddard Wells Tailgate. Most people will just meet there on their own. The Antelope Valley Gem and Mineral club also leads a nice field trip early on Saturday, March 14, so be sure to be there early. You can get detail on their website, or Google Stoddard Wells Tailgate show.

The meeting was adjourned at 8 for Tina White's program on fluorite.

Respectfully Submitted

Heidi S Webber Secretary, SPRC The meeting was called to order at 7:15pm. Bill and Heidi Webber, Evelyn Velie and Julie Tinoco were in attendance.

Treasurer's Report: Shana was in Oregon helping her mother and submitted the report via email. Heidi motioned we accept the report pending changes. Julie seconded, passed.

Field Trips: Julie said the March field trip will be the Stoddard Wells Tailgate show and their field trip for those who want on March 13-15. March 28 will be an unofficial field trip to look for fluorite again. RSVP will be mandatory for carpooling at any point. Some people drive to the area, but carpool on the dirt road which requires higher-clearance vehicles and she needs to know if there will be enough space for those who need to carpool. All-wheel drive is OK for this road, 4-wheel is better. April 18—we are still deciding on a turquoise field trip. The one to Nevada is very expensive with no guarantee of gathering much more than chips. May 30, a trip to Cambria for moonstone. June 6 will be the next workshop at Bill and Heidi's and June 20 will be the end of the season picnic. July and August the club is off because of the weather. There may be a spontaneous dinner or trip, the members will be notified.

Membership: Heidi presented a membership application from Goldie Crockett. Goldie attended the February General Meeting and field trip with great excitement. Her application for membership passed unanimously. Welcome Goldie.

CFMS: Evelyne said the Lodi Conference was June 27-29. She has raffle tickets if someone wants to buy them. She will bring them to the May meeting.

The meeting was adjourned at 8:12pm with Heidi making the motion, Julie seconding.

Respectfully Submitted

Heidi S Webber, Secretary, SPRC



A tangled mass of articulated fish fossils uncovered in North Dakota. The site appears to date to the day 66 million years ago when a meteor hit Earth, killing nearly all life on the planet. Credit...Robert DePalma/University of Kansas

The Day a Meteor Hit the Earth

Fossil Site Reveals Day That Meteor Hit Earth and, Maybe, Wiped Out Dinosaurs

Sixty-six million years ago, a giant meteor slammed into earth off the coast of modern-day Mexico. Firestorms incinerated the landscape for miles around. Even creatures thousands of miles away were doomed on that fateful day, if not by fire and brimstone, then by mega-earthquakes and waves of unimaginable size.

Now, scientists have unearthed a remarkable trove of fossils that appear to date from the very day of the impact. The burial site consists of more than four feet of sediments and organic remains that were dumped in North Dakota almost instantly and transformed into rock over the eons. It evidently captures, in unparalleled detail, the reper-

cussions of the giant doomsday rock that cleared the way for the evolution of mammals, including the primates known as humans.

When the meteor smashed into waters near what is now Mexico's Yucatán

Peninsula, it left a giant crater known as Chicxulub and prompted upheavals thousands of miles away, including what is now North Dakota. Within hours and perhaps minutes of the titanic collision, sea creatures were swept inland by tsunamis and earthquakes, tossed together and deposited with a diverse array of landlocked life, including trees, flowers and vanished types of freshwater fish.

The jumble was swiftly entombed, and exquisitely preserved. Permeating the deposit were tiny spheres of clay and glass, known as tektites, which formed as molten rock, ejected by the impact, showered from the sky.



Tektites, raining into the water, clogged the gills of fish, which were then killed by surges

of water. The water could have traveled up from the Gulf of Mexico through an inland sea that cut through North America at the time. Cataclysmic waves from the impact — which produced the equivalent of a magnitude 10 or 11 earthquake — sloshed water out of distant lakes and seas and up their connected river channels.

In the deposit, an ancient freshwater pond was discovered whose occupants had been quickly cemented together by waves of sediment and debris. The fossils include sturgeon and six-foot-long paddlefish, their scales intact but their bodies ripped and smashed; marine mollusks; leaves and tree fronds, and the burned trunks of trees. The fish carcasses were not bloated, decayed, or scavenged, suggesting



A partially exposed, perfectly preserved 66-million-year-old fish fossil. Credit...Robert DePalma/University of Kansas

that they were buried quickly — and that few animals were left alive after the cataclysm to come digging.

The fossil deposit also teems with tektites, tiny glass beads that are the telltale fallout of planetary-scale impacts. Fifty percent of the fossilized fish were found with tektites in their gills, as if the fish had inhaled the material. Also recovered were tektites trapped in amber. Their chemical composition was unchanged in 66 million years, and it closely matched the unique chemical signature of other tektites associated with the Chicxulub event.

The top layer of the fossil bed was found to be rich in iridium. Iridium, a precious metal belonging to the platinum group of elements, is more abundant in meteorites than in terrestrial rocks.

The Chicxulub impact and the global disaster it wrought are sometimes held up as the death stroke for the dinosaurs. But many scientists argue that an array of other factors, including volcanic eruptions and climatic disruptions, contributed to the demise of the giant reptiles.

Also unearthed were broken teeth and bones, including hatchling remains, of almost every dinosaur group. A dinosaur egg containing an embryo and other remains, which suggested that dinosaurs and major reptiles were probably not staggering into extinction on that fateful day.

Reference:: By William J. Broad and Kenneth Chang, March 29, 2019 The New York Times