



# Rockonteur

Volume 30, Issue 9

October 2020



## NAME THAT ROCK

The banner photo (above) changes each month - can you identify what type of rock it is? Answer is on last page but don't peek until you've tried to guess!

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### NOTE FROM EDITOR

We need your input to make this newsletter relevant and interesting. Please submit articles, photos to the editor.

## DOUBLE WHAMMY! We won the Best Club in North America & California

The California Federation of Mineralogical Societies ([CFMS](#)) judged our Club to be the best club in California and awarded it All-American Club status in 2020. CFMS encompasses approximately 150 clubs in California, Nevada and Hawaii.

The 2020 American Federation of Mineralogical Societies ([AFMS](#)) awarded our Club as **#1 Gold** status and judged to be the **BEST** rock and mineral club in North America!





**Santa Lucia Rockhounds** is a non-profit public benefit corporation with the specific purpose to promote the study of mineralogy,

including (but not limited to) the fields of lapidary, metal working, jewelry design and fabrication, geology and conducts field trips for collecting and education. We encourage learning and good citizenship in a congenial atmosphere. We respect both private and public property, and we strive to protect natural resources. Meetings are held during the third Monday of each month, except December, at the Templeton Community Center.

We are a member of the California Federation of Mineralogical Societies (CFMS) and affiliated with the American Federation on Mineralogical Societies (AFMS). Santa Lucia Rockhounds, Inc. is also a member of the American Lands Access Association (ALAA).

**Annual dues** are \$20 for the first adult and \$8 each for every additional member of the same household. Annual dues are payable between August 1 and the third Monday of December, in person at Club meetings or by mail to P.O. Box 1672, Paso Robles, CA 93447.

### **The Rockonteur**

This is the official monthly newsletter of the SLR and an independent publication containing news and information consistent with the mission of SLR and of interests to its members. Circulation is approximately 100 copies per issue.

Member submissions are encouraged and may be sent to the editor. We reserve the right to accept or refuse submissions inconsistent with the objectives and purpose of the SLR. Submissions may be edited as needed without consent. Deadline are due by midnight of the last day of the month but early submissions are highly appreciated and strongly encouraged.

### **Newsletter Editor/Publisher:**

Amy Phillips | [amyphillips18@hotmail.com](mailto:amyphillips18@hotmail.com)

**Website:** [www.slrockhounds.org](http://www.slrockhounds.org)

**Club Email:** [slrockhounds@gmail.com](mailto:slrockhounds@gmail.com)

## **CALLING ALL PARENTS AND JUNIOR ROCKHOUDS!**

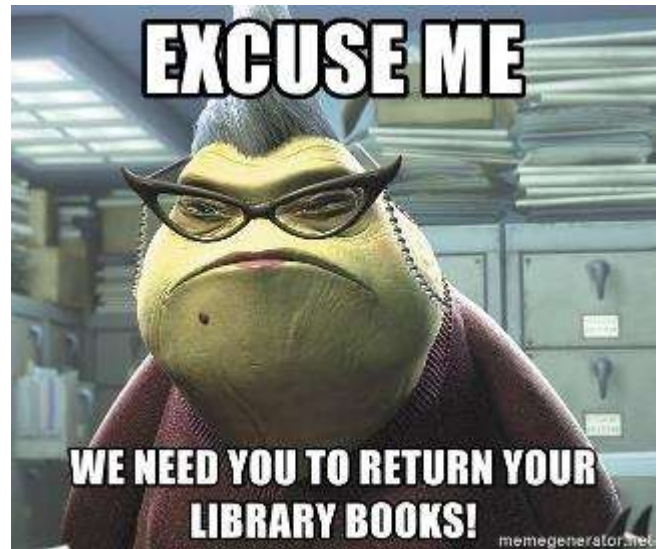
With COVID, graduation of many Juniors to full-fledged Rockhounds and dwindling of attendance, we have to basically start from scratch. Here's some questions for you:

We need to know if you have children, or know of some, that are interested in participating in the Juniors program. To learn about the program: [www.amfed.org/fra/fra\\_badge.htm](http://www.amfed.org/fra/fra_badge.htm)

Meetings will be held via Zoom until State and County COVID-19 guidelines allows for in-person meetings.

We are also proposing to change meeting time from 7-8:30pm to 6-7pm, as we know it's hard to meet so late during a school night. We're also open to other suggestions.

Please email responses to [amyphillips18@hotmail.com](mailto:amyphillips18@hotmail.com) and [runrungran-ny@gmail.com](mailto:runrungran-ny@gmail.com).



Ha, ha! Seriously, if you have any materials checked out from the club library, could you please contact me to arrange to get them returned? I can meet you somewhere, or pick them up at your house, or whatever works for each of us. I know that they can be put aside and forgotten during this stressful time and can easily get lost. Please contact me at 805-434-2708 or [bbilyeu2001@yahoo.com](mailto:bbilyeu2001@yahoo.com).

Thanks! Barbara Bilyeu, Librarian

# PRESIDENT'S MESSAGE

I hope this message finds each of you in good stead and not merely surviving, but rather thriving and living the dream in the quarantine. I'm hanging in there myself.

On that note, I hope you are finding a balance in these disrupted and disruptive times; that you are getting out as often as possible and/or attends these rather frequent rock sales that have become kind of a thing this year in lieu of monthly meetings and rock shows.

Speaking of rock shows, we need to start thinking about what kind of show we wish to put on next year. It most definitely will not be like our past shows at the fairgrounds as the fairgrounds informed us would be the case in 2021. If we can't get a sweetheart deal from them then we won't be able to make the number work doing a show there per their outdoor and socially-distanced requirement. What is our Plan B? Back the park down the street if that is even possible? A tailgate event at someone's property or at a venue parking lot for cheap? There are many options but I want you all to start brainstormed and give the board your feedback.

In other news, I sent an email earlier this with the slate of 2021 board members for which require your vote:

President ~ Lisa King

Vice President for Membership ~ Kathy Clarke assisted by Karen Hilchey

Vice President for Education ~ Alice Rodriguez

Vice President for Communications ~ Don Barton

Senior Director ~ Laurie Wylie

Junior Director ~ Caleb Willis

Treasurer ~ Tina Russell

Secretary ~ Jacque Hughes

Past President ~ Kim Noyes

At the present time, we have 23 YAYs to 0 Nays approving this slate of board members. Thanks to those of you who have participated but we'd like to get more votes so if you have not yet done so please respond to the aforementioned email or email the club at [slrockhounds@gmail.com](mailto:slrockhounds@gmail.com).

Your 2021 club membership dues are due NOW! We need you to re-up. If you can wrangle any new

members that would also be appreciated. The forms for both returning members and new members (they are different) can be found at this page of our club website: <https://slrockhounds.org/join.html>

By one metric, the Santa Lucia Rockhounds is the very best rockhounding club in the United States. About a year ago, our very own Mark Nelson started compiling a myriad of details and materials regarding the varied and many aspects and facets of our club to include in our 2019 CFMS (California Federation of Mineralogical Societies) club yearbook competition. As you all may recall, his work won the CFMS statewide competition for best club yearbook for both 2018 AND 2019 and by that metric suggests we are the best club in California two years running. I do believe this go-around was the first year we enrolled in the AFMS (American Federation of Mineralogical Societies) club yearbook competition and we won #1 Gold status and judged the BEST rockhounding club in the whole United States! In the November edition of this newsletter there will be an entire write-up on this replete with photos.

In club member news, James King is doing better but has a long way to go according to Lisa King. Kathy Clarke continues her successful recovery from her stroke earlier this year and continues to effectively serve as our Vice President for Membership. Past president Richard Smithen's grandson (and club member) Slade had surgery late yesterday for thyroid cancer that had spread to an adjacent lymph node. Both were removed and he is headed home from Stanford today. Please keep praying/sending good thoughts & well-wishes to both the King's and the Smitten Clan.

We will be holding our monthly board meeting via Zoom on Monday evening November 2nd starting at 7 p.m. I will set up a meeting beforehand and send out a club-wide email invitation replete with link into said meeting for those who wish to check in with us and observe the fascinating intricacies of managing a club.

On Monday evening, November 16th at 7 p.m. our very own Aaron Miller will be presenting a program on the Creston Meteorite Fall of October 23, 2015, which fell not too far from where he lives. This presentation will be via Zoom and a club-wide email invite will be sent closer to the time. Please join us if you can.

Rock on, ya'!!!

# VOTE for new board members

Send your CONCUR or NON-CONCUR votes to the Club email by **November 27**:  
[srockhounds@gmail.com](mailto:srockhounds@gmail.com)

## 2021-2022 OFFICERS

President  
Lisa King

Secretary  
Jacque Hughes

Senior Director  
Laurie Wylie

Treasurer  
Tina Russell

VPs Membership  
Kathy Clarke  
Assisted by  
Karen Hilchey

Junior Director  
Caleb Willis

VP Education  
Alice Alvarado

Past President  
Kim Noyes

VP Communica-  
tions  
Don Barton

There are two vacancies. If interested,  
Email for details: [srockhounds@gmail.com](mailto:srockhounds@gmail.com)

## COMMITTEE CHAIRS

Auctioneer  
Pete Duckworth  
805-467-3413  
Jasperjunkie1  
@yahoo.com

Library/Museum  
Barbara Bilyeu  
805-434-2708  
bbilyeu2001  
@yahoo.com

CFMS Director  
Wayne Mills  
805-481-3495  
wwmills50  
@hotmail.com

Merchandise  
David Nelson  
805-434-2708  
Bbilyeu2001

Drawings  
Deb Mecham

Newsletter Editor/  
Junior Rockhounds  
Coordinator  
Amy Phillips

Field Trips  
Richard Smithen  
(805) 440-1496

Program  
Coordinator  
**VACANT**

Historian  
Mark Nelson  
mnelsonair@aol.com

Rock & Gem Show  
Chair  
Kim Noyes  
805-610-0603  
Kimnoyes  
@gmail.com

Hospitality  
**VACANT**

Message from Lisa King, Senior director of Santa Lucia rockhounds

My husband, James and I, would like to thank all of the rockhounds who participated in the: "Go Fund Me" listing on the "Native Sons of the Golden West" Webpage. Thank you for your gracious donations.

For those of you who are unaware of what happened. In the fall of 2019, James started having episodes of collapsing without any warning. This became worse and worse through the holiday season and the beginning of 2020. After collapsing at his doctors office, on February, 24th, he was hospitalized. By February 28th, he had become almost totally paralyzed. No longer having use of his legs or right arm and his left arm was following suit. His right eye, was weeping uncontrollably And his left eye and cheek were drooping. At this point he was transferred from Sierra Vista hospital in San Luis Obispo to UCSF in San Francisco. He was diagnosed with an auto immune disorder called Guillain Barre syndrome. The two people I've talked to who have experienced this themselves, have told me that it takes a year to recover and in most cases not completely.

Update: James, is doing rather well, despite some minor mis-diagnosis and not getting proper medication right away. I feel that he's lost a couple of months of healing but, he is coming along. Lying on his back in bed, he can now raise his legs (one at a time) and bend his knees. He can sit up. He can raise his arms and bend at the elbow and wrist. We are still awaiting healing in the hands and feet. Hands and feet have the most nerves of the body so, they take the longest to heal. He is in good spirits and looking forward to rockhounding again.

Once again, thank you, to all who helped us out.

# Rockhounds Out & About



Send the newsletter editor photos of your adventures:  
[amyphillips18@hotmail.com](mailto:amyphillips18@hotmail.com)

## Planet Mine Trip - photos from our website "Show & Tell" section

Photos and story by Barbara Bilyeu



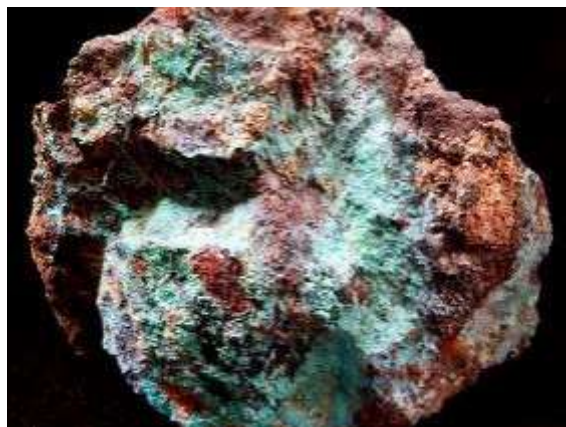
On our way home from Quartzsite in January 2014, club members Galen Moyer, Bob Baker, Gene Bilyeu and I took a detour, following up on a tip from Orcutt club member Wes Lingerfelt. We diverted from the paved road NE of Parker, Arizona, and followed the sometimes sketchy dirt and gravel roads according to our map, arriving eventually at a very interesting and colorful location.

The day was stormy, and I confess, I had misgivings when the road signs said to beware of flash floods as we were driving up what looked like a dry wash! Eventually we found the site and parked along the road, which was very obviously in the vicinity of former mining activity.

The dark clouds and light drizzle brought out the colors in the rocks which were a feast for the eyes. The guys scattered each in their own direction, and there was glorious turquoise color everywhere. What we were seeing was not turquoise, but chrysocolla which is an associated mineral found with copper, iron, silver and gold, all of which were produced at this mine.

The mine was discovered in 1863 and worked until 1917, and contains thousands of feet of underground workings. No, we did NOT enter any of the shafts, the nearest of which were fenced off for safety when we were there.

After gathering what we wanted in specimens, Galen and Gene rigged a litter with a strap and a pole to carry out a big one Galen had found that had a beautiful botryoidal vug. It was slippery going in the rain! We were glad to get back into our trucks and head out for paved roads once again, admiring the scenery along the way.



# CRYSTALS COULD GROW UP TO A YARD PER DAY IN SOME COOLING MAGMAS

From Rice University 10/6/20 Press Release



Brazilian emeralds in a quartz-pegmatite matrix. (Photo courtesy of Madereugeneandrew/Wikimedia Commons)

Rome wasn't built in a day, but some of Earth's finest gemstones were, according to new research from Rice University.

Aquamarine, emerald, garnet, zircon and topaz are but a few of the crystalline minerals found mostly in pegmatites, veinlike formations that commonly contain both large crystals and hard-to-find elements like tantalum and niobium. Another common find is lithium, a vital component of electric car batteries.

"This is one step towards understanding how Earth concentrates lithium in certain places and minerals," said Rice graduate student Patrick Phelps, co-author of a study published online in *Nature Communications*. "If we can understand the basics of pegmatite growth rates, it's one step in the direction of understanding the whole picture of how and where they form."

Pegmatites are formed when rising magma cools inside Earth, and they feature some of Earth's largest crystals. South Dakota's Etta mine, for example, features log-sized crystals of lithium-rich spodumene, including one 42 feet in length in weighing an estimated 37 tons. The research by Phelps, Rice's Cin-Ty Lee and Southern California geologist Douglas Morton attempts to answer a question that has long vexed mineralogists: How can such large crystals be in pegmatites?

"In magmatic minerals, crystal size is traditionally linked to cooling time," said Lee, Rice's Harry Carothers Wiess Professor of Geology and chair of the Department of Earth, Environmental and Planetary Sciences at Rice. "The idea is that large crystals take time to grow."

Magma that cools rapidly, like rock in erupted lavas, contains microscopic crystals, for example. But the same magma, if cooled over tens of thousands of years, might feature centimeter-sized crystals, Lee said.

"Pegmatites cool relatively quickly, sometimes in just a few years, and yet they feature some of the largest crystals on Earth," he said. "The big question is really, 'How can that be?'"

When Phelps began the research, his most immediate questions were about how to formulate a set of measurements that would allow him, Lee and Morton to answer the big question.

"It was more a question of, 'Can we figure out how fast they actually grow?'" Phelps said. "Can we use trace elements -- elements that don't belong in quartz crystals -- to figure out the growth rate?"

It took more than three years, a field trip to gather sample crystals from a pegmatite mine in Southern California, hundreds of lab measurements to precisely map the chemical composition of the samples and a deep dive into some 50-year-old materials science papers to create a mathematical model that could transform the chemical profiles into crystal growth rates.

"We examined crystals that were half an inch wide and over an inch long," Phelps said. "We showed those grew in a matter of hours, and there is nothing to suggest the physics would be different in larger crystals that measure a meter or more in length. Based on what we found, larger crystals like that could grow in a matter of days."

Pegmatites form where pieces of Earth's crust are drawn down and recycled in the planet's molten mantle. Any water that's trapped in the crust becomes part of the melt, and as the melt rises and cools, it gives rise to many kinds of minerals. Each forms and precipitates out of the melt at a characteristic temperature and pressure. But the water remains, making up a progressively higher percentage of the cooling melt.

"Eventually, you get so much water left over that it becomes more of a water-dominated fluid than a melt-dominated fluid," Phelps said. "The leftover elements in this watery mixture can now move around a lot faster. Chemical diffusion rates are much faster in fluids and the fluids tend to flow more quickly. So when a crystal starts forming, elements can get to it faster, which means it can grow faster."

Crystals are ordered arrangement of atoms. They form when atoms naturally fall into that arranged pattern based on their chemical properties and energy levels. For example, in the mine where Phelps collected his quartz samples, many crystals had formed in what appeared to be cracks that had opened while the pegmatite was still forming.

Finish reading the story at [Press Release](#)

**PRESENT:** Kim Noyes, President; Lisa King, Senior Director; Caleb Willis, Junior Director; Tina Clark, Past President; Tina Russell, Treasurer; Don Barton, VP Communications; Kathy Clarke, VP Membership and Jacque Hughes, Secretary.

Kim Noyes, President, called the board meeting to order at 7:01 pm via Zoom app. A motion was made by Tina Clark to accept last month's board meeting minutes, with Tina Russell seconding the motion. Minutes approved.

**PRESIDENT REPORT:** The nominating committee includes Amy Phillips, Don Barton, and Kim Noyes. It has been a challenge to recruit for our two empty board positions. The storage area continues to be organized, though the heat has temporarily halted progress and will continue when the weather cools.

**TREASURER REPORT:** Balances of the CD and checking account were reported. Checks were written for NCI, McDaniel's insurance and the Zoom app has been paid for 3 months.

**MEMBERSHIP REPORT:** Since the last board meeting, 26 more renewal forms have been received, for a total of 46. Kim has some potential new members and renewals

and will make sure they receive the membership forms.

## **SENIOR DIRECTOR**

**REPORT:** Lisa will continue to work on the inventory list when she is able.

## **JUNIOR DIRECTOR**

**REPORT:** Caleb shared a video of his lapidary shop. He has been working on items that will be donated to the club for the silent auction and the monthly meeting raffles in the future.

## **COMMUNICATIONS**

**REPORT:** The webmaster questioned whether we still need the members only section. Apparently, it involves a lengthy process to keep it up to date. He will continue to keep it but was concerned that if something happened and he could no longer do it, it may be a problem for another webmaster. The board agrees that this is an important section that needs to continue.

**NEW/OLD BUSINESS:** Discussed several possible program speakers that could do a Zoom/PowerPoint presentation for the October and November general zoom meetings. Several announcements should be done to help ensure more member participation.

Since there will be no end of

year party this year, the question of how to proceed with the installation of new board members was discussed. Tina Clark suggested that the slate of officers should be published in the November newsletter, before the November general meeting is held in accordance with our club bylaws. At that time, whoever participates in that meeting will vote. Ordinarily at the December party, the current officers are given pins from CFMS and in lieu of this, they can be mailed instead.

Since Tina Clark will not be part of the board next year, the replacement zoom host will be Kim Noyes and he will work with Tina to learn the process. He will take over that duty at the December meeting.

MEETING ADJOURNED AT 8:31 PM.

## 2021 CFMS BULLETIN CONTEST

There are 11 categories we can submit entries to showcase our Club and individual skills such as adult and junior articles or poetry. More info: [www.amfed.org/editor/BEAC/contest.htm](http://www.amfed.org/editor/BEAC/contest.htm). Contact our Club Communications VP for a consolidated Club entry: [dsbarton@charter.net](mailto:dsbarton@charter.net).

## RESOURCES FOR YOU

Did you know that our website has a resources page full of links to information that can help you learn about new skills or improve existing ones? Check it out!



P.O. Box 1672  
Paso Robles, CA

## TOPAZ

Topaz is one of the hardest naturally occurring minerals (Mohs hardness of 8) and is the hardest of any silicate mineral. This hardness combined with its usual transparency and variety of colors means that it has acquired wide use in jewelry as a cut gemstone as well as for intaglios and other gemstone carvings.

Topaz grows as a crystal mineral in various granite rocks, and in lava flows.

Learn more: <http://justfunfacts.com/interesting-facts-about-topaz/>

Watch video: <https://yhoo.it/2Hvdmnu>

*Cover photo of topaz from Chamachhu, Haramosh Mounts, Skardu, Baltistan, Pakistan  
by Parent Gery. Posted on Wikipedia.*