

Rockonteur

Volume 28, Issue 11

November 2018



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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PORCELLINITE

Photo by Petr Hyks of rock formed through shock metamorphism, Medlovce, Czech Republic. Find out more about the site here: nature.hyperlink.cz/uh/Medlovicky_lom.htm

Have you ever collected ventifacts, porcellinite or Suiseki? How about B.I.F.s, grape agate, spar or iron crystals?

Bruce Mundt of Cambria, life-long rockhound and long-time friend of the club, will be giving a talk on his favorite out-of-state sites that lie within a one-to-two-day's drive of the Central Coast, with an emphasis on non-lapidary material (rocks and minerals that can be collected "as is", already perfect in either their innate beauty or their ability to inform).

Bruce will be giving away specimens from several of these sites to anyone who is

interested. If time permits, he will also discuss paleo rock art locations of note that lie along the way.

The talk will be geared towards getting you excited about "hitting the road" at the nearest opportunity and enjoying our adventurous hobby to its fullest extent. For those of you who aren't able to head out-of-state anytime soon, Bruce firmly believes that your next treasure is the nearest creek bed or road cut away, and hopes to encourage an expanded interest in all things rock-related.



Santa Lucia Rockhounds (SLR)

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

Website: www.slrockhounds.org

Birthstones

NOV



Topaz and citrine are both known for their calming energies, bringing warmth and fortune to those who wear them.

Ancient texts from the Greek scholar Pliny to the King James Bible referenced topaz, but because of this longstanding confusion, they likely referred to other yellow stones instead.

During the Renaissance in Europe, people believed that topaz could break spells and quell anger. Hindus deemed topaz sacred, believing that a pendant could bring wisdom and longevity to one's life. African shamans also treated the stone as sacred, using it in their healing rituals.

Russia's Ural Mountains became a leading source of topaz in the 19th century. The prized pinkish orange gemstone mined there was named Imperial topaz to honor the Russian czar, and only royals were allowed to own it. Learn more at:

[https://
www.americangemsociety.org/
page/novemberbirthstones](https://www.americangemsociety.org/page/novemberbirthstones)

Words from the President

Fall has arrived and the Harvest is complete. We are blessed with good crops, more rocks to hunt, and an hour of day light to enjoy beautiful sunsets longer in the evening. Looking back at the past months, they have been educational and a good chance to get acquainted and share our interest in earth science.

To keep our club growing strong, healthy and with good leadership and new ideas, we are depending on our membership. Everyone can help by paying your dues on time, volunteer to work in any job you think will be useful, and attend our monthly Board Meetings.

This month's guest speaker will be Bruce Mundt. He attended last months meeting and will be back to capture your minds and share his knowledge and rocks he has collected. Mark your calendar for Cliff and Elethea Brewen's "Tailgate" on Saturday, November 17th, 8am to 2pm. Bring your friends.

You are invited to our December 17th Holiday Dinner from 6 - 9pm at the Culinary Arts Academy in Paso Robles. RSVP is needed for the dinner and Christmas gift exchange. Sign up at our November meeting if you would like to attend.

Thank you for your continued friendship and if you have any ideas or know of a good location we should investigate for a future field trip or guest speaker, please share it with us.

We would like to hear from you.

Be safe, and keep on Rock'n!

- Mary

CLUB MEETINGS & EVENTS

November 5 @ 7pm **Board Meeting**

Rabobank Meeting Room, Templeton

November 19 @ 7pm

General Meeting

Templeton Community Center

Former member Bruce Mundt of Cambria who will be speaking on his favorite collecting places in the West.

December 3 @ 7pm **Board Meeting**

Rabobank Meeting Room, Templeton

NO DECEMBER GENERAL MEETINGS

Holiday Dinner

December 17 from 6 to 9 PM

The menu will include a buffet featuring salmon and tri-tip. Adults will cost \$15 per person and children under 16 will cost \$10 per person. Culinary Arts Academy in Paso Robles. Must RSVP. Bring a gift if you want to play the gift exchange game.

SELLING & BUYING OPPORTUNITY!

Cliff's & Eletha Brewen Tailgate Sale

Saturday, November 17th

Rain or Shine

8:00 a.m. to 2:00 p.m.

(vendor set up 7:00 am)

6384 Monterey Rd, Paso Robles

(go N on Hwy 101 to Welsona Rd., turn right next stop, then turn right on Monterey; first house on left.)

Bring Rock, or Rock related items to sell from your own table or tailgate. This sale is put on by Santa Lucia Rockhound's member Cliff Brewen. Coffee & donuts will be provided. Any snacks you want to share for the day is welcome. Event is open to public so bring your friends to come and enjoy the day.

OTHER EVENTS

OXNARD GEM & MINERAL SOCIETY SHOW - CALCITE

The Oxnard Performing Arts Center
800 Hobson Way, Oxnard, CA

Nov. 17-18

Oxnardgem.com

EL CAJON VALLEY GEM & MINERAL SOCIETY SHOW

Lakeside Rodeo Grounds

12584 Mapleview St., Lakeside, CA

Nov. 17-18

Sat. 10-5, Sun. 10-4

www.ecvgms.org

Contact Mary Ness (619) 449-0759
or ecvgms@gmail.com

LIVERMORE VALLEY LITHOPHILES GEM & MINERAL SOCIETY SHOW

Lithorama

3131 Pacific Ave., Livermore, CA

Nov. 17-18

Sat. 10-5, Sun. 10-4

lithophiles.com/lithorama.html

Contact Bill Bish (925) 447-1266
or bcbish@lithophiles.com

GEOLOGIC MAPS FOUNDATION GEO-HIKES

GMF has a page using the Meetup application for geo-hikes. If you, or others you know, are interested in these types of events then please join the group so you are alerted about future events (it's free), and please share the info with others.

<https://www.meetup.com/Geo-hikes/>

Upcoming in November are trips to eastern Mojave and Death Valley.

www.geologicmapsfoundation.org



2019 Club Officer Nominees

Election during November Meeting

President
Mary Caparone

Senior Director
Mary Beatty

VP Membership
Cathy Clarke
Assisted by_Karen Hilchey

VP Education
John McCabe

VP Communications
Amy Phillips
Assisted by_Ron Rusconi

Secretary
Rachael Denny

Treasurer
Laurie Wylie

Junior Director
Lisa King

Past President
Tina Clark

PLEASE REMEMBER TO PAY YOUR 2019 DUES!

Application form is available on our web-site: <http://www.slrockhounds.org/join.html>. Mail completed form and check to: Santa Lucia Rockhounds
P.O. Box 1672, Paso Robles CA 93447

OUR 2019 ROCK SHOW

We need two people to take over the People's Choice Awards program for our show's exhibits in April. Please contact Barbara Bilyeu at 805-434-2708, bbilyeu2001@yahoo.com for more information.

2018 CLUB OFFICERS

President
Mary Caparone
805.610.5281
mary@caparone.com

Senior Director
Roberta Hall
805-226-8965

VP Membership
Galen Moyer
805.434.2532
gmoyer281@gmail.com

VP Education
John McCabe
805.464.0528
mccabewest@aol.com

VP Communications
Amy Phillips
805.269.194
amyphillips18@hotmail.com
Co-VP
Communications
Kristie Terry

Secretary
Rachael Denny
805.472-9036
Stormdragon71@netscape.net

Treasurer
Tina Clark
805.305.0246
theclarkfour@sbcglobal.net

Junior Director
Lisa King
805.467.0062
anoldcowhand@gmail.com

Past President
Barbara Bilyeu
805-434-2708
Bbilyeu
2001@yahoo.com

COMMITTEE CHAIRS

Auctioneer
Pete Duckworth

CFMS Director
Wayne Mills

Drawings
Karen Clark

History
Mike Doherty

Hospitality
Julie Cannon
juliasantique@gmail.com
805-610-7644
Brenda Obert
Brendaobert88@gmail.com
805-423-0737

Library
Barbara Bilyeu

Merchandise
David Nelson

Museum
Barbara Bilyeu

Newsletter Editor/
Publisher
Amy Phillips

Program
Coordinator
Gene Bilyeu

Rock & Gem Show
Chairs
Tina Clark
Kim Noyes
805-610-0603
kimnoyes@gmail.com

DANGEROUS DUST **IT'S THE LAPIDARY HOBBY'S FORGOTTEN HAZARD.**

*Excerpt of story and photo
by Douglas Hamilton. Submitted by Wayne Mills.*

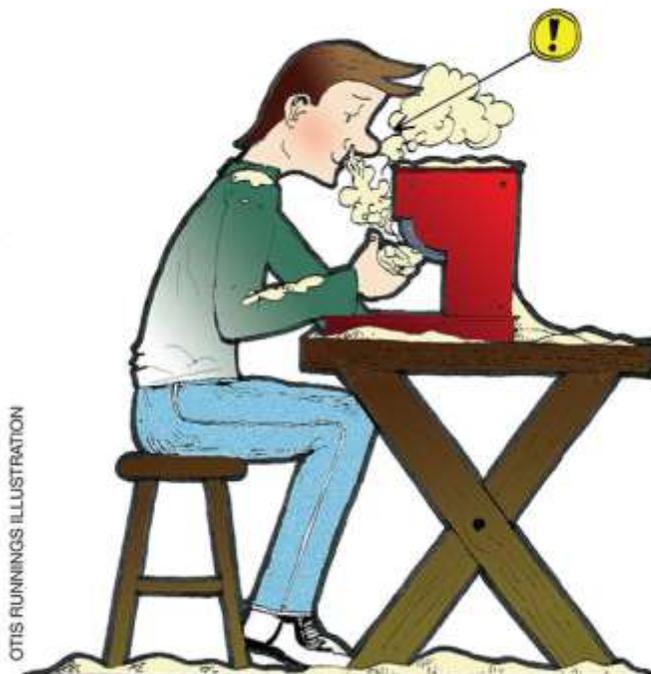
When I first became interested in lapidary work, it seemed the perfect hobby. Today's equipment is simple, relatively cheap, and very high tech. Working material is easy to find, as rocks are about the most abundant material on the planet.

The hobby itself is rewarding and exhilarating. And there is little danger of personal injury from runaway saws, faceting machines, or polishers, as the cutting edges are relatively dull and forgiving.

So after 30 years of procrastination, I finally decided to go for it, and purchased a brand-new rock saw and grinder/polisher. Wow, did I have fun! For that first few months of cutting and grinding, I was in seventh heaven.

All those lovely rocks I had lusted after for so long were finally put under my polishing wheel: lapis, agate, jasper, tiger's-eye, malachite, turquoise, chrysocolla and quartz. But I soon began to experience a nasty and completely unexpected cavalcade of health problems: coughing, hoarseness, difficulty clearing my throat, breathlessness, and a dull ache in the pit of my lungs.

Of course, I had always worn safety glasses with side protection, as recommended in every manual, but a mask seemed a cumber-



some hindrance. As the situation worsened, I tried several dust masks, but there was little improvement. It was time to do a little research, so I hit the books and started talking to fellow rockhounds. It was a revelation.

Rock dust from lapidary work turns out to be more than just a nuisance; it can be deadly.

A single heavy dose can cause crippling lifelong problems. It attacks the lungs in a variety of ways: First, by coating the inner lining and blocking the transmission of oxygen into the bloodstream. Second, tiny sharp fragments slice and cut into the alveoli, which coat the inner lining of the lungs, causing irritation and inflammation. Fresh dust seems to be more harmful because the sharp edges have not had a chance to be softened by moisture. Some forms of rock dust are quite poisonous in and of themselves. Whether it is inhaled, ingested, or contacted by exposed skin, the effect can be injurious to your health.

Finish reading the story here:

<http://www.rockngem.com/dangerous-dust/>



Malachite and chrysocolla dust is quite toxic (45% to 70% CuO), and should not be breathed, ingested, or left on skin surfaces.

CRATER THAT KILLED THE DINOSAURS REVEALS HOW BROKEN ROCKS CAN FLOW LIKE LIQUID



Story by Purdue University. Submitted by Rhonda Cooper.

Sixty-six million years ago, an asteroid the size of a small city smashed into the earth. This impact, the one that would lead to the end of the dinosaurs, left a scar several miles underground and more than 115 miles wide.

Chicxulub, which lies underneath the Yucatán Peninsula of Mexico, is the best-preserved large impact crater on Earth, although it's buried underneath a half mile of rocks. It's also the only crater on the planet with a mountainous ring of smashed rocks inside its outer rim, called a peak ring. How these features form has long been debated, but a new study in *Nature* shows they're a product of extremely strong vibrations in the Earth that let rock flow like liquid for a crucial few minutes after the impact.

When an asteroid crashes into the earth, it leaves a bowl-shaped pit, just like you'd expect. But it doesn't just leave a dent. If the asteroid is big enough, the resulting crater can be more than 20 miles deep, at which point it becomes unstable and collapses.

"For a while, the broken rock behaves as a fluid," said Jay Melosh, a professor of earth, atmospheric and planetary sciences at Purdue University. "There have been a lot of theories proposed about what mechanism allows this fluidization to happen, and now we know it's really strong vibrations shaking the rock constantly enough to allow it to flow."

This mechanism, known as "acoustic fluidization," is the process that allows the ring of mountains in the crater's center to rise within minutes of the asteroid's strike. (This idea was first proposed by Melosh in 1979). Craters are essentially the same on all the terrestrial planets (Earth, Mercury, Venus, Mars and our moon), but they're hard to study in space for obvious reasons: We can't look at them

with the same detail we can on Earth.

The Chicxulub crater isn't easily accessible by traditional standards either; it's been buried throughout the last 66 million years. So the International Ocean Discovery Program (a group within the International Continental Scientific Drilling Program), did the only thing they could—they dug. The team drilled a core roughly six inches in diameter and a mile into the Earth, collecting rock that was shattered and partly melted by the impact that wiped out the dinosaurs.

In examining fracture zones and patterns in the core, the international research team found an evolution in the vibration sequence that would allow debris to flow.

"These findings help us understand how impact craters collapse and how large masses of rock behave in a fluid-like manner in other circumstances, such as landslides and earthquakes," Melosh said. "Towns have been wiped out by enormous landslides, where people thought they were safe but then discovered that rock will flow like liquid when some disturbance sets a big enough mass in motion."

The extinction of the dinosaurs itself was probably not directly affected by the crater's internal collapse—other, external effects of the impact did them in, Melosh said. Regardless, it's important to understand the consequences of a large asteroid strike on Earth. Because cratering is the same on all the terrestrial planets, these findings also validate the mechanics of impacts everywhere in the solar system.

More information: et al, Rock fluidization during peak-ring formation of large impact structures, *Nature* (2018). DOI: [10.1038/s41586-018-0607-z](https://doi.org/10.1038/s41586-018-0607-z)

OCTOBER 8, 2018

BOARD MEETING MINUTES

Present: Mary Caparone, President; John McCabe, VP Education; Galen Moyer, VP Membership; Tina Clark, Treasurer; Roberta Hall, Sr. Director; Lisa King, Jr. Director; Kristie Terry, co-VP Communications; Barbara Bilyeu, Past President; Gene Bilyeu, Programs; Kim Noyes, Show Chairman; Mary Beatty, guest. Absent, Rachael Denny, Secretary, filled in for by Barbara Bilyeu.

The meeting was called to order at 7:04 PM, followed by the flag salute. Mary routed copies of the AFMS bulletin notifying members that our club members received several awards which will be given at the general meeting. Galen Moyer was honored as our club's Rockhound of the Year by the California Federation (CMFS) in the October AFMS newsletter.

Galen Moyer of the Santa Lucia Rockhounds has a special talent; cutting and polishing rocks, working the Gravel Pit at our yearly Show and greeting new members at our Club Meetings. He serves on our Board of Officers, as Vice President of Membership and Host our Annual Lapidary Day Picnic at his home. On field trips, he will share his truck and trailer to help people who need a helping hand to haul our precious discoveries back to our cars. He is one in a million and the Santa Lucia Rockhounds are very proud to know him and call him a friend in rocks. Submitted by Mary Caparone, President

Laurie Pudwell and Jim Mills were honored in May for the AFMS newsletter competition.

- Adult newsletter articles, advanced: 10th Place Did You Know? Jim Mills, Author Santa Lucia Rockhounds Laurie Pudwell, Editor (CFMS)
- New Editors: 1st Place Rockonteur Santa Lucia Rockhounds Laurie Pudwell, Editor (CFMS)

Nominating Committee Report: Mary an-

nounced the nominees recruited so far for officers for 2019. Still needed are: President; co-Secretary to fill in when Rachael Denny cannot attend; Senior Director; and VP of Communications. Current Board members will be available to assist new office-holders with their duties. There was additional discussion to consider a new position which would serve as a president-in-training, in order to facilitate resolution of the problem we have every year trying to recruit a new president. No decision was reached at this time.

Picnic/Auction Report: Over 90 people attended this event at Galen Moyer's home and everyone seems to have had a good time. Thanks to everyone who helped make this a success. After expenses, the event made around \$1100 from the auction and plant sales. A card will be sent to John Hollenbeck for his help with the BBQ.

Membership: Galen reported on new member applications. There was discussion around the organization of meetings to allow children to go home early but not miss the drawing, which occurs at the end of the program during the social time. That led to additional discussion of the increasing size of the Junior Rockhound program and the possibility that we may need to start looking for a larger meeting facility for our monthly meetings. Churches which rent out their facilities was a suggestion.

Education: John McCabe said he needs help getting information on the Juniors who attend his meetings. He also needs help in class. Mary Beatty offered to help him.

Junior Director: Lisa King gave a brief report on her experiences at Camp Paradise, which will appear in the *Rockonteur*.

Senior Director: Roberta Hall and other have

(Continued on page 9)

been exploring the purchase of new light-weight tables to replace the old heavy ones we have sold. After our needs were clarified, Tina Clark offered to purchase the tables and Gene Bilyeu offered to pick them up and deliver them to the storage unit, with the help of Galen Moyer.

Minutes from the September 4 Board meeting were approved with corrections, Galen Moyer making the motion and John McCabe giving the second.

Treasurer: Tina Clark gave the Treasurer's report, noting that no income had yet been posted for the month since we did not have a general meeting and she had just received income from the picnic and membership renewals.

Show Report: Kim Noyes received the Show Manual, created in great detail by Tina Clark. Tina has a second copy. This is a document which should be updated each year to keep it current to pass on to future show coordinators. Kim asked for help from the Board in identifying people who would be willing to help with the show. At present he is looking for someone to serve as Volunteer Coordinator and someone to help him. There was discussion on when to have Show Committee meetings, but no decision was made.

CFMS: CFMS Director Wayne Mills has ordered the pins which will be presented at the December meeting to officers for 2018.

Programs: Gene Bilyeu announced that the speaker for the October meeting will be Wayne Mills who will talk on his experiences collecting in Brazil. Our November speaker will be former member and friend of the club Bruce Mundt, who will do a program on his favorite collecting locations in the West.

Museum: We need people to represent our club in our exhibit area at the Pioneer Museum on Pioneer Day, October 13 beginning at

noon after the parade.

Field trips: Undetermined at this time.

December meeting: The Board voted to hold the annual December dinner meeting and installation of officers at the Culinary Arts Academy on Monday, December 17. John McCabe made the motion and Tina Clark gave the second. Mary has already spoken to the facility and the dinner will cost \$20 including tax per person, with the club covering part of the cost which will result in a charge of \$15 per adult and \$10 for children under 16. This will now go to the Membership for a vote at the October meeting. The menu has yet to be determined. Mary will bring a sign-up sheet to the next few meetings.

Tailgate: Mary announced that Cliff and Elthea Brewen will have their annual tailgate event at their home on Saturday, November 17. This is not a club event, but club members and the public are welcome.

The meeting adjourned at 9:00 PM.

Submitted by Barbara Bilyeu, filling in for Rachael Denny.



De Agostini Picture Library/Getty Images

The most valuable color of natural topaz is red. It is so rare that less than 1% of all gem-grade topaz rough exhibits this shade. Learn more: <https://www.thesprucecrafts.com/topaz-facts-2042991>

OCTOBER 15, 2018

GENERAL MEETING MINUTES

The meeting was called to order at 7:05 PM by President Mary Caparone, who led the Pledge of Allegiance. This was followed by the badge check and singing to birthday and anniversary rockhounds for October.

Awards: CFMS Director Wayne Mills presented awards to Laurie Pudwell (1st Place CFMS and AFMS awards for new newsletter editor) and Jim Mills (CFMS 1st Place and AFMS 10th Place Adult Advanced Article "Did You Know?"). Following this was a presentation to Galen Moyer as our club's Rockhound of the Year.

Junior Rockhounds: John McCabe requested information from parents of Juniors who have not yet been officially enrolled in the Junior Rockhounds of America. He also presented Junior Rockhounds certificates to three of the Juniors. Following this, the Juniors adjourned to the kitchen for their session on safety with fluorescent minerals.

Visitors were welcomed.

Nominations: Mary asked for volunteers for next year's Board positions which have not yet been filled. We still need nominees for President, Secretary and co-Vice President of Communications, to assist Amy. Vice President of Membership nominees are Kathy Clarke and Karen Hilchey who would share the position; Treasurer nominee is Laurie Wiley; Junior Director nominee is Lisa King; Senior Director nominee is Mary Beatty; Vice President of Education nominee is John McCabe. Election for Board positions will be at the November meeting. We still need people to step up!!

December Meeting: The membership voted to approve the plan to hold the December meeting at the Culinary Arts Academy in Paso Robles, as we have done in the past. It will be held on Monday, December 17 from 6 to 9 PM. The menu will include a buffet featuring

salmon and tri-tip. Adults will cost \$15 per person and children under 16 will cost \$10 per person. At least 30 people need to sign up, additions and cancellations will be accepted up to a week before the event. More than 20 people raised their hands, and there was a sign-up sheet on the refreshments table.

Cliff and Elethea's Tailgate was announced to be held at their home on November 17 from 8 AM to 2 PM. Sellers should come around 7 to set up. There will be advertising to the general public.

Membership: Galen Moyer announced that renewals are due, and the deadline is November. Lisa King reported approximately 67 people in attendance at the meeting.

Treasurer: Tina Clark reported that the BBQ/Club Picnic and Demonstration day event netted \$931.26. She also reported that eight 8-ft. heavy-duty vinyl tables had been purchased from Home Depot to replace the old ones that had been sold. We still have money budgeted for a few more, but they were not immediately available.

Silent Auction: Pete announced that there was gold panning equipment on the table for the auction, as well as another piece of equipment in a box on the floor.

Brag Table: Lisa King showed her creations from Camp Paradise, and David Nelson and Kim Noyes also had items on the Brag Table.

Drawing: Tina announced that someone is needed to run the drawing next year.

Program: Wayne Mills presented a program on his mineral tour of Brazil back in 2009. He also had a very nicely-made exhibit case set up to display specimens from his trip. After the program, next month's speaker Bruce Mundt gave a short preview of what he will

talk about. He also had a small table set up to show some of the rocks he will be talking about and giving samples of at our November meeting.

Show Chairman: Kim Noyes plans to hold Show Committee meetings on the 4th Monday of the month. A location has not been announced. He would like to talk to show volunteers after tonight's meeting is concluded. He also announced the Cambria Gem and Mineral show on October 27 and 28.

Kathy Clarke and Karen Hilchey just arrived from the big Gemorama at Searles Lake near Ridgecrest (Trona), and had beautiful pink halite specimens and other minerals to show.

The meeting adjourned at 8:24 PM for refreshments and socializing.

Submitted by Barbara Bilyeu, filling in for Secretary Rachael Denny.

DIGITAL GOLD RUSH DEPENDS ON TRADITIONAL GOLD

How Cryptocurrencies Rely on
Mineral Commodities



Graphics cards like this one rely on the platinum group metals. (Credit: By VIA Gallery from Hsintien, Taiwan - VIA eH1 DX10 Graphics Card - Angle w/Fan, CC BY 2.0, <https://commons.wikimedia.org/w/index.php?curid=38934163>)

Read full story here:

<https://www.usgs.gov/news/digital-gold-rush-depends-traditional-gold>

Types of Rock Art: Petroglyphs and Pictographs

Article by: Hobart M. King, Ph.D., RPG

A petroglyph is an image that is carved into a rock. This "carving" can produce a visible indentation in the rock, or it can simply be the scratching away of a weathered surface to reveal unweathered material of a different color below. A pictograph is a drawing or painting that is created on a rock. Because they are merely a surface coating, pictographs tend to be less durable than petroglyphs. The ones that survive are most often found in caves, rock shelters, and areas with dry climates. Read complete story here:

<https://geology.com/articles/petroglyphs.shtml>



Petroglyphs on sandstone at Newspaper Rock in southwestern Utah. Image copyright iStockphoto / Jeremy Edwards.



P.O. Box 1672

Paso Robles, CA 93447

ACTUALLY, IT'S A FOSSIL

Depicted on the cover is "a crinoid fossil, also known as a sea lily, is from the Holzmaden Shale in Germany, which boasts some of the best-preserved fossils ever documented...The feathery crown spans 20.8 inches across and the jagged shale slab measures 5.48 feet high. Pyrite is evident at the outer areas of the crown and the majority of the specimen is has been replaced with calcite." For more info: <https://www.fossilrealm.com/collections/crinoid-fossils-for-sale/products/huge-crinoid-from-holzmaden-seirocrinus-subangularis>. No endorsement implied - for info only.