



BRECCIA

Santa Clara Valley Gem and Mineral Society

Volume 72 Number 1, January 2024

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Events

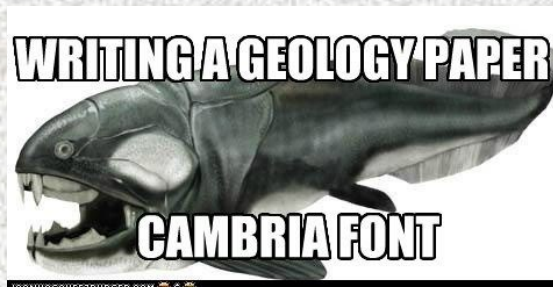
January 23: The General Membership Meeting program is not yet decided. The Bragging Rights theme is “**Bone**”.

January 25: Board Meeting on Zoom.

February 27: The General Membership Meeting.

February 29: Board Meeting on Zoom.

See [Page 5](#) for Field Trips.



Editor's Message

Welcome to the start of a Glowing New Year!

I say "glowing" because our new President, **Jim Herbold**, is a "glowhound" (a rockhound who specializes in rocks that glow under UV light). He has promised us lots of glowing pictures in his messages this year. As a good start, there are 7 in the [messages](#) in this issue.

It's the time of year to start thinking about the 2024 Rock and Gem Show! See more information [here](#) and an application form for a display case [here](#).

Jo Borucki is back with a [Sudoku](#) using the word "Vulcanite" instead of numbers.

Phil Kesten is the author of this month's article on [Emeralds](#). He explains the chemical composition and coloration of emeralds, and why there is an "emerald cut".

[AFMS and Rock & Gem are offering a 61% discount on the magazine](#), and AFMS gets a 15% commission, too.

Please think about contributing something to the Breccia this year; whatever you think others would find interesting. Rock related photos are also appreciated. The deadline for submissions is the Sunday after each General Meeting.

Do you have anything that other members might enjoy?

Deb Runyan, Breccia Editor
editor@scvgms.org, 408-628-7789

Rockhound of the Month

Our rockhound of the month for December is **Michael Paone** because of his important effort in taking care of most of the food at the Installation Dinner.



Sunshine



We wish **Kyle** a speedy recovery from his spider bite and hope to see him at the next meeting.

If you know of anyone needing some sunshine in their lives, please email **Margo Mosher** at margo-mosher@yahoo.com.

WE ARE BACK, WOO HOO!!

March 16, 17, 2024

We would like to invite you to display at our 2024 Gem and Mineral Show.

By Stephen May

This year's show is March 16th and 17th, Saturday and Sunday. Setup is Friday, March 15th at the Santa Clara County Fairgrounds.

The following page is a display case application form.

If you wish to reply by e-mail, please provide me with the following:

- Name
- Phone Number
- I need a case, "YES" / "NO"
- If I already have a case, provide the depth and width
- Exhibit description

Stephen May, C- (408) 306-6782, H- (669) 248-3993, stephenmay0990@gmail.com



SCVGMS Member and Guest Display Case Entry Form

Annual Festival Dates: March 16 & 17, 2024

Case setup on March 15th after noon and case tear-down on March 17 at 5 PM

Name: _____

Address: _____

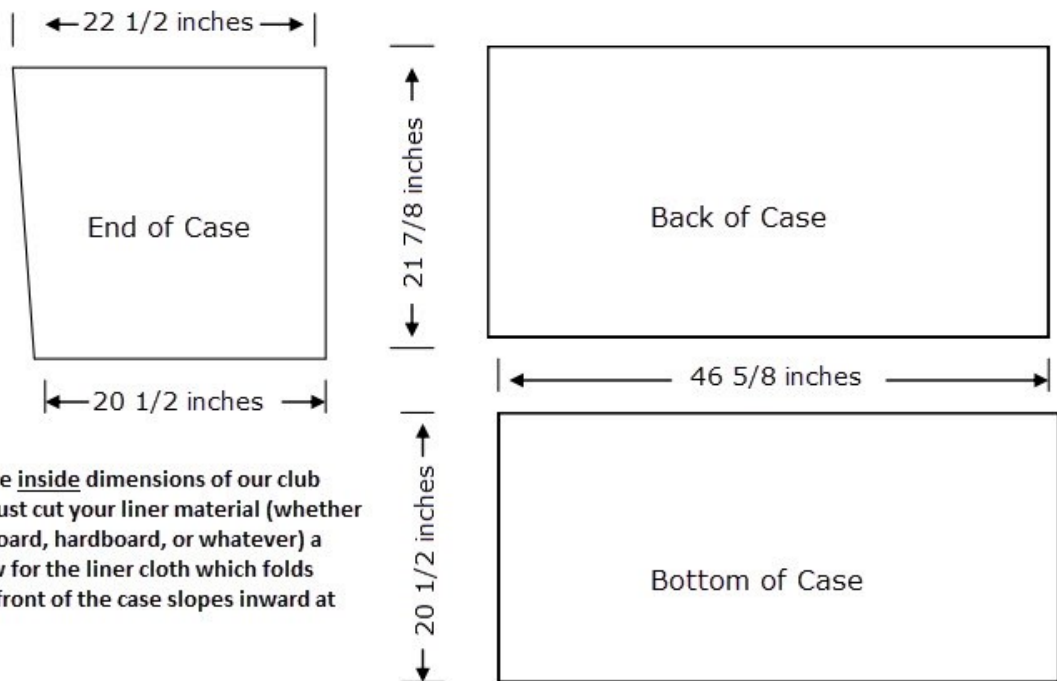
Telephone: _____ Email: _____

I will furnish my own display case ___ Yes, ___ No If yes, Case Depth ___ Case Width ___

I will need to borrow a display case ___ Yes, ___ No If yes, how many cases _____

Exhibit description: _____

Please return the completed form to:



Stephen May, 1092 Candlewood Ave, Sunnyvale, CA 94089

Or

Call or email Stephen May:

C- (408) 306-6782, H- (669) 248-3993, stephenmay0990@gmail.com

Field Trips

Note: Driving times are from Campbell and are approximate.

January 6, Sat: Yuba Goldfields, Timbuctoo, CA - 4-hour drive

Blue Serpentine, and other river rocks; one can also pan for gold.

Sponsored by Nevada Gem & Mineral Society

Contact: John Dolman, land-line (530) 272-3752 Email: john95670@yahoo.com

Please contact ahead of time.

June 7, Fri: Rainbow Ridge Opal Mine, Denio, NV - 9-hour drive, with tolls

3 spots available; up to 3 adults per spot; \$900.00 per spot.

June 13 – 16: Prineville OR, 10-hour drive.

Pow Wow Field Trips.

A 4-day Rock Show and 3 Field Trips, Fri (6/14), Sat (6/15), Sun (6/16). Locations to be announced.

August 3, Sat – 9, Fri: Delta UT, 11.5-hours drive through Reno; 13-hours through Las Vegas

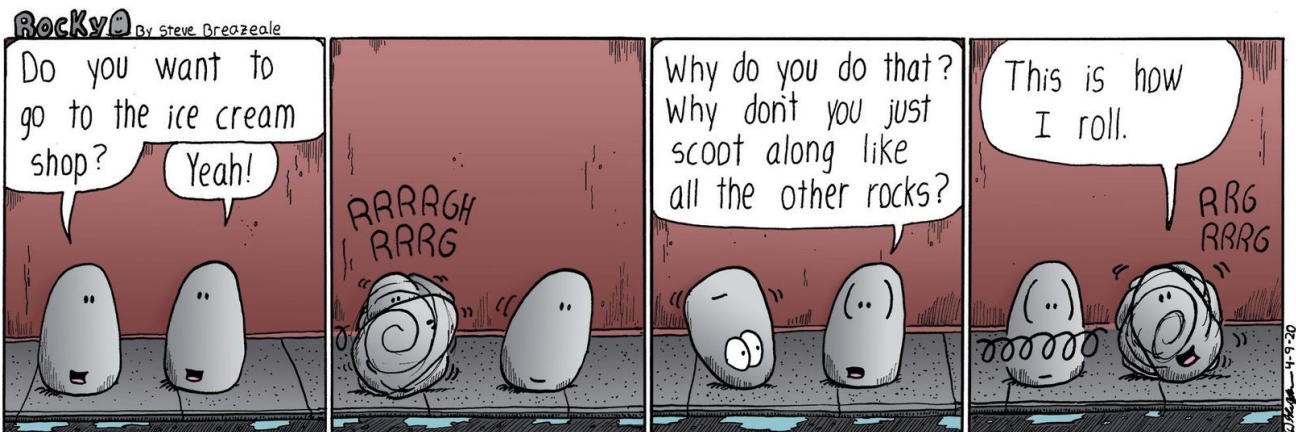
Dugway Geodes; Topaz Mountain Topaz, Bixbyite, and other minerals; Drum Mountain agate; Copper varieties; multi-colored druzy and fine crystals; mine tailings

2 travel days, 5 collecting days. Potentially, Garnet Hill, Ely, NV, on the way home.

Proposed for a time in the future: Ocean View Mine, San Diego Area - 7- to 8-hour drive

Tourmaline and Quartz

Steve Breazeale Comics



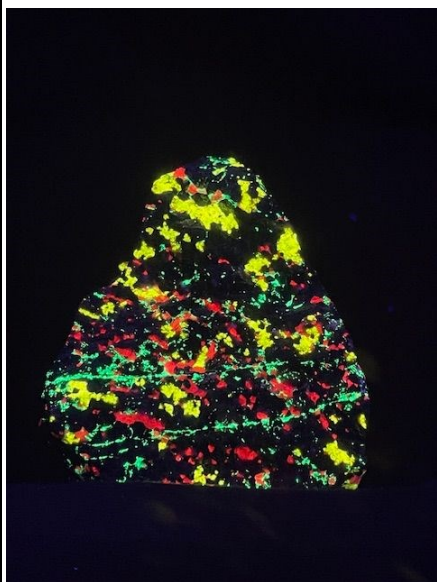
President's Message

December 2023

Hello SCVGMS Members and Friends!

I am writing this short email to wish you all a very happy holiday season. I hope that you are able to spend some quality time with family and friends, that you get to eat some of your favorite holiday foods, that Santa Claus has deemed you to be nice this year, and that you have some free time to indulge in your mineral-related hobbies!

As many of you may already know, I was recently nominated to be the President of the SCVGMS and this was approved at our last General Meeting and Board Meeting. I am looking forward to serving in this role and contributing to the efforts that make the club fun, educational, and engaging. I want to thank all who have preceded me in volunteering with the SCVGMS, and those that have helped me get started in the role.



My next communication will be in the January 2024 Breccia newsletter. In the meantime be safe, stay healthy, and enjoy your holidays!

"Christmas tree ore" from the Franklin Mine, Franklin, NJ. Esperite (yellow under shortwave UV), Willemite (green), and Calcite (red). From the Nelson family collection. **Jim and his wife, Diana Nelson**, served in a number of leadership roles in the Santa Clara Valley Gem & Mineral Society in the 1980's and, along with their son **Ron**, were prolific glowhounds for over 3 decades from the early 1970s through the late 1990s.

All the best to you and yours!

Jim Herbold

January Breccia Prez Message

Greeting and Happy New Year SCVGMS Members and Friends!

I hope that you had a wonderful holiday season with your family, friends, and mineral specimens. Now that the New Year has arrived I am sure many of us have thought about what we want to do by way of goals and resolutions. Hobbies can be a great foundation for new year resolutions—they allow you to

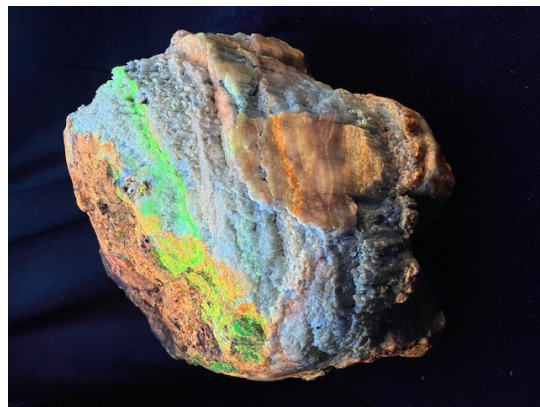
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explore, to be creative, to drive toward intellectual depth, and to connect with and interact with like-minded people. If any of these things are valuable to you, perhaps it's not too late to consider how your involvement with the SCVGMS can fit into your new year resolutions in these ways!



Two generations of Calcite (red and white under shortwave UV) with minor Hyalite Opal (green): Eclipse Mine, near Lone Pine, CA



Multiple generations of Calcite (tan, orange, and blue under shortwave UV) and Hyalite Opal (green): Swansea Mine, near Lone Pine, CA

One of my goals for 2024 is to share my passion for geology and mineralogy with others, and I like to do that through pictures. Each month when I write these Breccia messages, I will try to include recent pictures from my phone camera. Here are two pictures from a collecting trip I made with several friends to the Eclipse and Swansea Mines in Inyo County in December, 2023.

Late last year when I was nominated to be President I began to chat with a variety of people who have been deeply involved with the Club over time. I want to hear their perspectives and ideas on how to make the Club fun, engaging, and valuable. I heard many recurring themes and I will be trying to take them to heart this year, and I will continue to ask more people to have these deeper conversations with me. Thanks to all of you with whom I have spoken, for both your time with me but more importantly your significant efforts with the Club. I am sure that every president before me has mentioned in some way that the SCVGMS really is the sum of everybody's efforts with it, and you all have proven this to me.

As President I will do my best to be a great communicator. I will be increasing the number of short messages and reminders about our meetings and activities. Your feedback and ideas are always welcome, so if you ever want to talk about or share anything related to the Club, you can send me an email at president@scvgms.org.

Our monthly meetings are held on the fourth Tuesday of each month. Please consider joining us in person as frequently as you can. Efforts are already underway to fill the calendar with interesting and engaging presentations. We also want to double down on Member Displays in meetings—they are the best informal and effort-lite way to share recent acquisitions, creations, and related stories. We have

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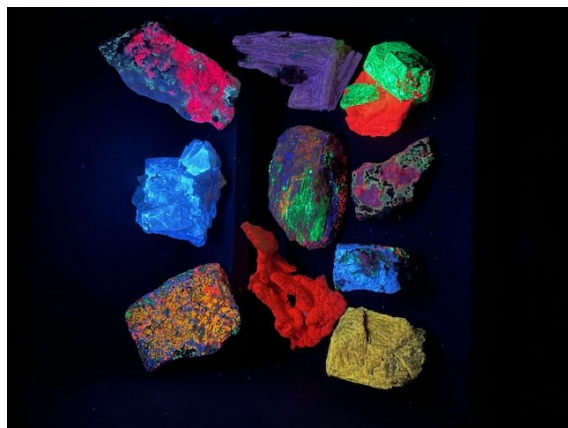
also decided to try a new activity—the **SCVGMS Rock Swap**. I will announce more details about this when we kick off the first instance, probably in February or March. We will set up an area with tables at the General Meeting where you can bring rocks and minerals to sell, trade, or give away. And alas, this event will allow you to go home with a rock or two in your pocket, which is always exciting! I personally know that there are a few flats of minerals in my garage that would be perfect to bring to this event. I'm hoping that this event increases meeting attendance and makes our meetings more fun and engaging.



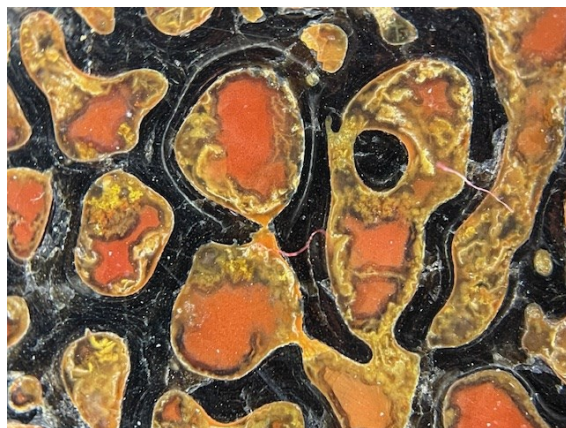
Opal that sits next to my computer monitor from South Wollo Zone, Amhara Region, Ethiopia



Acicular Cinnabar on Quartz (200X magnification): Culver-Baer Mine, Sonoma County, CA.



My new miniature fluorescent case with 35 watt shortwave lamp.



Agatized Dinosaur Bone Fossil under 200X magnification - note the Agate fortifications that fill the bone cells and the black Trabeculae (cell-wall webbing).

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Another important goal for the Club, a forever goal really, is to attract new members. We will be making a concerted effort at our Annual Show in March to digitally collect contact information of attendees so that we can invite them to our meetings (opt-in only of course!). And you can contribute to this goal of increasing membership by inviting friends and family to our general meetings. Also, the Board wants to recruit someone into a formal role of Social Media Coordinator. If you are savvy with platforms like Facebook, Instagram, Reddit, Meetup, TikTok, Discord, and/or whatever other places you can find to attract geology- and mineral-interested people in the area and are willing to help with this, please let me know.

We have several key initiatives in 2024, many are recurring and some are new. The Club will soon be providing grants to three qualified students in the area to help them defray the costs of their education. The Annual Show at the Fairgrounds is coming quickly in March. The Donation Receiving Committee (DRC) has been busy and sales will be coming soon. We have several Committee Positions to fill, and of course we need to groom volunteering and involvement across the Club. We have set up a By-Laws Review Committee to familiarize ourselves with the goals and mechanics specified in our Constitution and to ensure that everything within meets the needs of a modern and vibrant mineral society. We are also going to set up an Investment Committee that will be looking for ways we can deploy modest amounts of capital to drive membership, meet Club goals, and find fun and valuable initiatives. If you want to volunteer to be involved in any of these things, please reach out to me directly.

So here's to a great 2024 for you personally and for the Santa Clara Valley Gem & Mineral Society. I hope to see you soon!

Jim Herbold
SCVGMS President

Bragging Rights

This month's Bragging Rights theme is "**Bone**".

Please text a photo of your Bone treasure to **Cesar Nuñez**, 408-561-8815, by 4:00PM on Monday, **January 22** to have it included in the contest.

Cesar Nuñez-Bragging Rights Chairman

Punishment

Why was the rock unprogressive?
Because it was stuck in the Stonehenge.

Member Displays



Jim Herbold talked about a piece of fossilized wave ripple from a shallow Paleozoic sea floor. Found at the Swansea Mine complex in Inyo County, CA.



Stephen May brought a bucket of rocks for the Silent Auction. It included some that look just like Brazilian Agate.

Please email a photo of any items that you wish to display to [Michele Smith](#) by the Sunday before the general meeting, so that the people who attend the meeting on Zoom rather than in person can view your items. Please bring your items with you to the Cabana Club, if you are attending the meeting.

Don't know what to display? Any type of rock, mineral, or fossil (identified or not), your latest project, information on a field trip, ideas for a display case, or anything to do with rocks is appreciated. Sharing items helps to educate all who are attending. Show off what you love, so that we can enjoy it with you.

November's Silent Auction



There were lots of great rocks and other things to buy at the Silent Auction.

It looked like most people went home with some great finds!

Precious Gems—Emeralds

By Prof. Philip R. Kesten, Ph.D.

Got rocks in your pocket? Yes, you do—and if not in your pocket, perhaps hanging from a chain around your neck, or from a bracelet on your wrist, or set into a ring. The gemstones in your jewelry, both precious and semi-precious gemstones, are rocks. When you see them for sale in a store or on website they are usually fancied up—an expert known as a “lapidarist” will have cut many smooth sides (facets) into the gemstone and polished it before it finds its way into, say, jewelry. In this essay we will take a look at emeralds, one of four gems considered precious. We have explored diamonds, sapphires, and rubies—the other three of those “big four” precious gems—in other essays.

Before we get started... In the interest of telling no tales, most people no longer divide the gem world into “precious” stones and “semi-precious” stones. One reason is that although the four stones that had been considered precious are rare, there are other gems rarer than some of these. The other reason is that although the big four gems are quite pricey—high-quality, faceted diamonds, for example, can sell for hundreds of thousands of dollars per carat—certain other gemstones carry price tags almost as high. But for our purposes, we’ll stick to the somewhat artificial precious / semi-precious division.

Emeralds are green, usually deep green, in color. Recall that although diamonds are often white (or clear, or transparent), they can be found in a whole rainbow of colors. (Yes, there are red, orange, yellow, green, blue, and indigo (purple) diamonds, as well as black, brown, and gray diamonds.) And recall that although we tend to think of sapphires as blue, these gems are also found in other colors. But emeralds are always green. Why? Because it is that deep, intense green color that defines an emerald.

The chemical composition of an emerald is $\text{Be}_3\text{Al}_2\text{Si}_6\text{O}_{18}$. Beryllium, aluminum, silicon, and oxygen atoms, bound together... beryllium aluminum silicate. If the first part of an emerald’s chemical name looks like “beryl” to you... good eye! Yes, the chemical composition of the mineral beryl is $\text{Be}_3\text{Al}_2\text{Si}_6\text{O}_{18}$, exactly the same as emerald. In other words, emerald is beryl. Or more precisely, emerald is beryllium aluminum silicate, just with trace amounts of chromium or vanadium, and sometimes iron, mixed in. It is those impurities that impart to the stone the deep green color that defines an emerald. Of course, beryllium aluminum silicates of other colors can be found—they are just not as rare as the deep green variety. Bixbite, for example, is beryllium aluminum silicate with trace amounts of atoms of the element manganese. Bixbite is red. (Don’t confuse bixbite with bixbyite, a black or gray, non-translucent mineral. Bixbyite is a manganese iron oxide mineral, $(\text{Mn},\text{Fe})_2\text{O}_3$.) Mix trace amounts of atoms of the element magnesium with beryllium aluminum silicate and you have morganite, which is light pink in color. Other varieties of beryllium aluminum silicate include blue-green aquamarine and yellow heliodor, both of which get their color from trace amounts of iron.

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(If you're wondering why beryl is green and emeralds are green, yet most specimens of beryl are not emeralds—a beryl, for one thing, costs way less than an emerald by weight—well, you're asking a good question! Experts actually don't agree on what makes one stone an expensive emerald and another stone a less-expensive beryl, and there are some gemologists who would call any green beryllium aluminum silicate an emerald. But the most common way these minerals are differentiated is that the color of green beryl is far lighter than the deep green of an emerald. And if you're wondering how light is “far lighter”... don't ask! Experts tend to disagree on this.)

Just to pull it all together, pure beryllium aluminum silicate, that is, pure beryl, is colorless. It is the trace amounts of atoms of certain elements, in addition to beryllium, aluminum, silicon, and oxygen, that impart color—a variety of colors—to beryl. But while other precious gemstones can be found in a variety of colors, emeralds are always deep green... because any variety of beryllium aluminum silicate that is not deep green is simply not called an emerald!

Emeralds form when molten lava cools and solidifies. As the liquid rock flows up through cracks or veins in surrounding rock—rock such as limestone or granite—crystals can form as the molten lava cools. When that lava contains sufficient quantities of atoms of beryllium, of aluminum, of silicon, and of oxygen (the raw materials of which beryllium aluminum silicate is composed) the crystals that form will likely be crystals of beryl. Mix in the right trace elements—chromium and/or vanadium and perhaps some iron—and, hazzah, you've got crystals of emerald.

Emerald has been valued as a gemstone for thousands of years. More than 2,000 years ago, for example, the deep green emerald was a favorite stone of Cleopatra, the Egyptian queen who ruled from 51 to 30 BC. Some emerald crystals in matrix found in one of the Egyptian mines are shown in Figure 1. (The mines that produced Cleopatra's gemstones may have actually been active thousands of years before she came on the scene.) Unfortunately, any emeralds actually owned by Cleopatra have been lost to antiquity.



Figure 1. Raw emerald crystals found in an Egyptian mine that was once a source of gemstones procured for Queen Cleopatra.

<https://egyptianstreets.com/2022/03/19/egypt-an-ancient-source-for-the-emerald-jewel/>

Although emerald is relatively resistant to scratches—it sits at between 7 and 8 on the Mohs hardness scale; for reference one of the hardest minerals we know is diamond, at 10 on that scale—emerald is both brittle and usually riddled with cracks and fissures. For these reasons, although emeralds have

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been cut—faceted—into many shapes over the centuries, most common is the so-called “emerald cut.” An emerald cut stone has rectangular facets cut in a step-like pattern, with wedge-shaped corners that connect the long facets. (See Figure 2.) Cutting an emerald in this way tends to reduce the chance that corners or edges of the brittle stone will break as the gemstone is shaped. As a side note, gemstones *other* than emeralds are sometimes also faceted into this same “emerald cut” shape. But although emerald cut stones—diamonds, for example—are striking when set into a ring or a necklace, the relationship of each facet to the other facets in such a stone results in the cut gemstone having far less “fire”—it doesn’t sparkle as much. This is not particularly desirable, given that diamonds are more highly prized when they sparkle and shimmer, and when they flash reds and blues and yellows as they catch the light in just the right way.

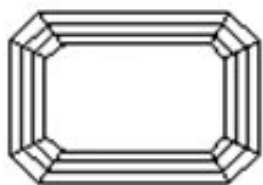


Figure 2. The arrangement of facets of an “emerald cut” stone.
(Created by prk.)

So yes, emeralds are prized as gemstones. But not all of the emerald, and not all of the beryl, that comes out of the ground, is of gem quality. Indeed, because emeralds are likely to have more flaws than other gemstones, and also likely to have more inclusions, emeralds brought up from most mines around the world will not end up in a piece of jewelry. Are these emeralds not valuable, then? No! Low quality emeralds, and, more generally, low quality beryl, is an important source of beryllium. Beryllium is a high-strength, lightweight metal, and for that reason, and especially because it is also highly resistant to corrosion, beryllium is used in a wide variety of industrial applications. Beryllium is found, for example, in electronic components and electrical equipment. Alloys that contain beryllium, for example an alloy of copper together with beryllium, are used to make bushings and bearings in equipment that has moving parts. And because beryllium doesn’t melt except when temperatures reach well over 2,000 °F, it is used in the construction of nuclear reactors.

You should consider adding an emerald to your collection. Rough emeralds, that is, emeralds that have not been faceted, can be found for sale relatively inexpensively on the Web. (I just found some nice ones online for under five dollars.) Yes, a cut and faceted emerald will likely cost a bit more than that. But you don’t want one of those anyway—you want a stone that looks the way nature made it!

Prof. Philip R. Kesten, Ph.D., Department of Physics, Santa Clara University

Punishment, Part 2







The rockhound was found guilty in a quartz of law.

There's no halfway with a rockhound—It's all ore nothing.

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The proposed Monument includes the Wiley Wells District which contains the Hauser Geode Beds (See Map) and several other Geode Collecting Sites. If the legislation passes it could have an impact on Recreational Rockhounding. However in the proposed legislation is a paragraph on allowable recreational activities within the Monument boundaries, Paragraph (4) Recreation states:

“The Secretary shall continue to authorize, maintain, and enhance recreation in the Monument, including, but not limited to, camping, hiking, backpacking, sightseeing, nature study, horseback riding, hunting, hang gliding, climbing, mountain biking and motorized recreation on authorized routes, and the noncommercial collecting of rocks, minerals, and semi-precious gemstones, so long as such recreational use is consistent with the purposes specified in section 4(b), this section, other applicable law (including regulations), applicable management plans, and input from the Commission regarding potential impacts to culturally sensitive sites and resources.”

However, there are some other conditions which may make Recreational Rockhounding a thing of the past. There are outside activities and activist groups pushing that if the legislation fails to pass congress that the President use the Executive Order to Create the monument which would most likely not include the ability to continue Recreational Rockhounding. To make things worse, there are actions in progress in which the entire proposed Monument area of 700,000 acres will become an expansion of the Joshua Tree National Park, where there is No Removal of any Natural Resources for any reason, except by government agencies The collecting of Geodes will be no more.

What can be done by Recreational Rockhounds to preserve the sites for continued collecting now and for future generations? Become a Rockhound Activist! Read the proposed Legislation (<https://www.govtrack.us/congress/bills/118/hr5660>), Contact/write your elected officials and let them know your position on the legislation. Contact the BLM and get their information on the Monument and ask that Recreational Rockhounding be included in the Monument Management Plan. Attend any meetings pertaining to the Monument, search the internet for any information on the monument legislation. Most of all make your voice heard and make the united voice of the Rockhounds across America be heard. If you remain a pacifist, you may lose your right to be a Recreational Rockhound.

Some links of interest:

<https://www.calwild.org/the-proposed-chuckwalla-national-monument-makes-major-advances/>

<https://protectchuckwalla.org/chuckwallavision/>

<https://www.mdlt.org/advocacy/protect-ca-deserts>

<https://protectchuckwalla.org/>

<https://www.mercurynews.com/2022/10/31/joshua-tree-national-park-could-get-new-neighbor-a-national-monument/>

<https://www.mountaintripper.com/new-desert-monument-proposed-near-joshua-tree/>



January 2024 CO-OP News

The CO-OP "Field Trip Chairman's Association" has elected its officers for 2024. Gina Malcolm President, Gene Doyle VP, Misty Watson Secretary and Janet Steigerwald Treasure. Misty Watson as Field Trip Coordinator and Historian. New Associate Director Kevin Kirschman MLMS. Thank you for your time and efforts to bring great field trips to our Societies! We are looking for a Webmaster to help finish up our new website and maintain the site. Please contact Misty at mistywat-sonc21@hotmail.com if you or someone you know would like to help.

We have voted to have the 3 remaining Camp Paradise scholarships awarded this year. We have now given out scholarships to all the original CO-OP societies in support of Camp Paradise. These 3 are the final ones. They are awarded to Calaveras Gem & Mineral Society, Stockton Lapidary & Mineral Club and Mother Lode Mineral Society.

We are working on getting a database of over 600+- field trip locations set up as electronic documents and a file system for access. The Field Trip Coordinator will be responsible for requests and sending the field trip leaders the files on the locations they wish to visit. Stay tuned!

Our CO-OP society members hosted 11 field trips in 2023. Thank you to the field trip leaders for hosting them! We look forward to many more trips in 2024 making new friends, finding new locations and having fun! We are celebrating 52 years of hosting great trips!

We are looking forward to hosting our Seminar Meeting at the Sacramento County Extension Building 4145 Branch Center Rd. Sacramento CA. SUNDAY March 3rd, the day will be different than our usual Saturday as no Saturdays are available. The location is free, and the room is much larger. Open to all CO-OP member society members. We hope to have more society members attend our meeting. We will be holding our annual "Live Auction" for our fund raiser. We had a record-breaking auction last year! Thank you to our Donors and Bidders! Our host society will be Calaveras Gem & Mineral Society. Stay tuned for more information!

Smile

Where do bad rainbows go?

Prism

It's a light sentence, and gives them time to reflect.

Website Links

Your Window to the World of Important Websites

Click on any links below for sites you want to visit!

Link to Our SCVGMS Website: <https://www.scvgms.org/>

Note: After you click on the above link, if you want to see the Breccia and other news items, scroll down and click on "Download", shown under the Newsletter option.

The American Federation of Mineralogical Societies (AFMS): <https://www.amfed.org>

California Federation of Mineralogical Societies (CFMS): <https://www.cfmsinc.org/>

To access the news from the **American Lands Access Association:** www.amlands.org

SCVGMS Facebook Page: <https://www.facebook.com/santaclaravalleygemandmineralsociety>

Free Stuff from Mini Miners Monthly

If you know some young rockhounds, this website contains free files to download:

<http://www.diamonddanpublications.net/free-stuff-from-mini-miners-monthly.html>

Sample Issues from 2020 for you to enjoy!

April, May, June and July 2020 PDF files.

Mineral Specimen Numbers Sheet

A sheet of (small) numbers to print. Cut them out and glue one number on each of your mineral specimens.

Mineral Specimen Labels

A sheet of 18 Mineral Specimen Labels. Print them out, write your mineral information on each (mineral name and locality), carefully cut them out and use them with your specimens. (This is a standard quality PDF.)

Do you want customized Mineral Specimen Labels with YOUR NAME, your choice of border, your choice of font, and your choice background mineral art? For only \$5, we will create for you a file of mineral labels that you can use to properly label every specimen in your collection.

Mineral "Go Fish" Cards

A full-color set of cards for you to play a fun game of "Go Fish." You can also turn them face down on the table and try to match the minerals.

Information on Shows

January 5-7, 2024 — Mesa, AZ

Flagg Mineral Foundation

Mesa Community College

1833 W. Southern Avenue, NE Corner of Dobson Road and US 60

Hours: Daily 9-5

Contact: Dana Slaughter, dsminerals@aol.com

Website: <https://flaggmineralfoundation.org/home/flagg-gem-and-mineral-show/>

January 17-21, 2024 — Quartzsite, AZ

Quartzsite Improvement Association

225 E Ironwood

Hours: Daily 9-5

Contact: Nancy Nichols, (928) 927-6325,
Powwow@qiaarizona.org

January 20-21, 2024 — Exeter, CA

Tule Gem and Mineral Society

Exeter Veterans Memorial Building

324 N. Kaweah Ave.

Hours: Sat 10-5, Sun 10-4

Contact: (559) 802-6029,
bandgbing@aol.com

Website: <http://www.tulegem.com>

January 24-February 4, 2024 — Tucson, AZ

JOGS Tucson Gem & Jewelry Show

Tucson Expo Center

750 E Irvington Rd

Hours: Daily 10-5, Sun. 10-4

Contact: Yelena Masenko, (213) 629-3030,
advertising@jogsshow.com

Website: <https://jogsshow.com/>

February 17-18, 2024 — Antioch, CA

Antioch Lapidary Club

Contra Costa County Fairgrounds

1201 West 10th St.

Hours: Sat 10-5, Sun 10-5

Contact: (925) 457-1859, (510) 693-9075,
roccosgee1@yahoo.com,
kellyplumb900@yahoo.com

Website: <https://antiochlapidaryclub.com/>

February 24-25, 2024 — Vallejo, CA

Vallejo Gem and Mineral Society

Solano County Fairgrounds

McCormack Hall,

900 Fairgrounds Dr.

Hours: Sat and Sun 10– 5

Contact: (415) 254-1506,
dduhonvgms@gmail.com

Website: <https://vjgems.co>

March 2-3, 2024 — Ventura, CA

Ventura Gem & Mineral Society

Ventura Co. Fairgrounds

10 W. Harbor Blvd.

Hours: Sat 10-5, Sun 10-4

Contact: (805) 312-8467, info@vgms.org
Website: <https://www.vgms.org/>

March 16-17, 2024 — San Jose, CA

SCVGMS Annual Show

Santa Clara County Fairgrounds

344 Tully Rd.

Free Parking!

Hours: Sat and Sun 10-5

Contact: 408-265-1422

Website: www.scvgms.org or facebook.com/santaclaravalleygemandmineralsociety

March 23-24, 2024 — Angeles Camp, CA

Calaveras Gem and Mineral Society
2465 Gun Club Rd.

Hours: Sat 10–5, Sun 10–4

Contact: (209) 736-4892, dbrooks49@att.net

Website: <https://calaverasgemandmineral.net/>

April 13-14, 2024 — Mariposa, CA

Mariposa Gem and Mineral Club
Mariposa County Fairgrounds, 5007 Fairgrounds Rd.

Hours: Sat 10–5, Sun 10–4

Website: <https://mariposagemclub.org>

April 13-14, 2024 — Placerville, CA

El Dorado County Mineral and Gem Society
El Dorado County Fairgrounds

Hours: Sat 10–5, Sun 10–4 PM

Contact: (530) 676-2472, office@edcmgs.org

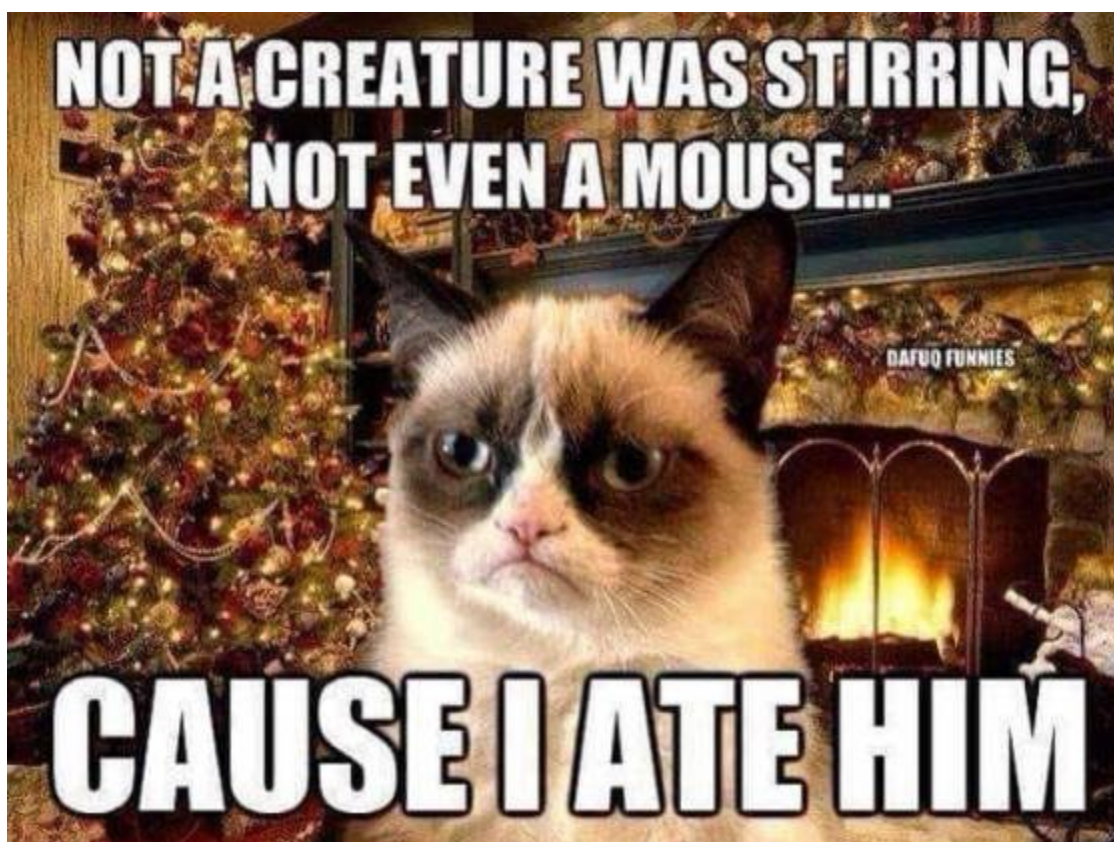
Website: <https://edcmgs.org>

May 4-5, 2024 — Lancaster, CA

Antelope Valley Gem & Mineral Club
2551 W. Ave. H

Hours: Sat 10–5, Sun 10–4

Contact: marylandoriele@gmail.com



Vulcanite Sudoku Puzzle

By Jo Borucki

Vulcanite was first found in 1961 at the Mammoth Good Hope Mine near what is now the ghost town of Vulcan, Colorado. It is a copper mineral that is very soft with a hardness on the Mohs Hardness Scale between 1 and 2. It has a metallic luster and a bronze yellow tint. Its crystal shape is orthorhombic. In my reading, I do not find a commercial usage for it.

A Sudoku puzzle can be made using letters instead of numbers as long as the word chosen is nine letters long where each letter is distinct. Give this puzzle a try if you are a Sudoku fan or even if you are not. These are the rules:

Rule 1: Each row must contain the letters VULCANITE without repetitions.

Rule 2: Each column must contain the letters VULCANITE without repetitions.

Rule 3: There are nine blocks; 3 down and 3 across and the letters VULCANITE can each only occur once in each block.

Rule 4: Every block, row, and column must have every letter in VULCANITE, and no letter should occur more than once.

Hint: If you are used to solving traditional Sudoku puzzles, it may help to think of each letter as a number where V=1, U=2, L=3, C=4, A=5. N=6, I=7, T=8, and E=9.

V	C							A
L		U	A		N		V	
	T		L			C		
A				N	I			E
	E		T		U		L	
U			V	L				C
		V			C		E	
	L		E		A	U		I
T							C	N

Answers to Vulcanite Sudoku Puzzle

V	C	N	U	E	T	L	I	A
L	I	U	A	C	N	E	V	T
E	T	A	L	I	V	C	N	U
A	V	L	C	N	I	T	U	E
C	E	I	T	A	U	N	L	Y
U	N	T	V	L	E	I	A	C
I	U	V	N	T	C	A	E	L
N	L	C	E	V	A	U	T	I
T	A	E	I	U	L	V	C	N

Smiles

Why don't scientists trust atoms?
Because they make up everything.

Why do political candidates bring ladders?
To take their campaigns to the next level.

Why did God create economists?
To make weather forecasters look good.

Sometimes, when I look at my children, I say to myself, "Lillian, you should have
Remained a virgin."

- Lillian Carter (mother of Jimmy Carter)

One good turn gets most of the blanket.

SCVGMS ELECTED OFFICERS

President: Jim Herbold, 650-743-3254
Vice President: Bruce Poehlman, 818-912-1866
Secretary: Cynthia Porter, 408-978-5848
Treasurer: Frank Mullaney, 408-691-2656
Editor: Deb Runyan, 408-628-7789
Federation Director: Karen Welder, 408-353-2675
Alternate Fed. Director: Paul Kidman, 408-356-4995

Board Members at Large

Jim Fox, 408-356-7711
Missy Fox, 408-356-7711
Stephen May, 408-306-6782
Noel Runyan, 408-866-7564
Michele Smith, 408-374-1897
Parliamentarian: Dean Welder, 408-353-2675

SCVGMS COMMITTEE HEADS

Bragging Rights Chair: Cesar Nuñez
Donation Receiving Committee Chair: Michele Smith
Show Chairpersons 2024: TBD
Fairgrounds Booth Chair: Michele Smith
Fairgrounds Liaison: Frank Mullaney
Fairgrounds Volunteer Coordinator: Margo Mosher
Field Trip Coordinator: Stephen May
Founder's Day Picnic Chairman: Jim Herbold
Founder's Day Raffle: TBD
Founder's Day Bingo: TBD
Hospitality: TBD
Installation Dinner: Tamara Bell, and Michael Paone
Member Displays: Rick Kennedy
Refreshments: TBD
Silent Auction: TBD
Sunshine: Margo Mosher
Trophies: Frank Mullaney
Librarian: Deb Runyan

Santa Clara Valley Gem and Mineral Society

P.O. Box 54, San Jose, CA 95103-0054

Website: www.scvgms.org

Email: info@scvgms.org

Phone Number 408-265-1422

Like us on Facebook:

<https://www.facebook.com/santaclaravalleygemandmineralsociety>

An Invitation

This society is pleased to invite guests to attend general meetings, study groups, and field trips. **General meetings are held the fourth Tuesday of every month with meet and greet time beginning at 7:00 followed by the meeting at 7:30 PM at 100 Belwood Gateway (the Cabana Club), Los Gatos, CA 95032.** Belwood Gateway is just south of Blossom Hill Road between Leigh Avenue and Harwood Road. **The Next General Meeting is on January 23 at 7:30 at the Cabana Club and also available on Zoom.** The Next Board Meeting is at 7:30 on **January 25** on Zoom.

Our Society's Purpose: The inculcation of a love of rocks and minerals by the furtherance of members' interests in the earth sciences and by education in all facets of related educational activities with the promotion of good fellowship, proper ethics, and conduct.

Our Membership Requirements: Attendance at two general meetings within twelve months.

This society is a member of the California Federation of Mineralogical Societies (CFMS) and is affiliated with the American Federation of Mineralogical Societies (AFMS).

Our Newsletter, the Breccia, is published 11 times annually. The deadline for all articles is the Sunday after each general meeting. The Breccia editor is Deb Runyan who may be contacted by email at Deb4Rocks@gmail.com and by phone at 408-628-7789. The Breccia is proofread by Noel Runyan, Pat Speece and Sonia Dyer.

Exchange bulletins may be emailed to Deb4Rocks@gmail.com. Permission to copy is freely granted to American Federation of Mineralogical Societies (AFMS) affiliated clubs when proper credit is given.