BRECCIA

Santa Clara Valley Gem and Mineral Society

Volume 71 Number 5, June 2023

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Events

June 25-25: CFMS Show and Convention in Lodi, CA

June 27: General Membership Meeting will feature a discussion of the May 20 Clear Creek field trip. The Bragging Rights theme is an item related to rock or minerals that is green in color.

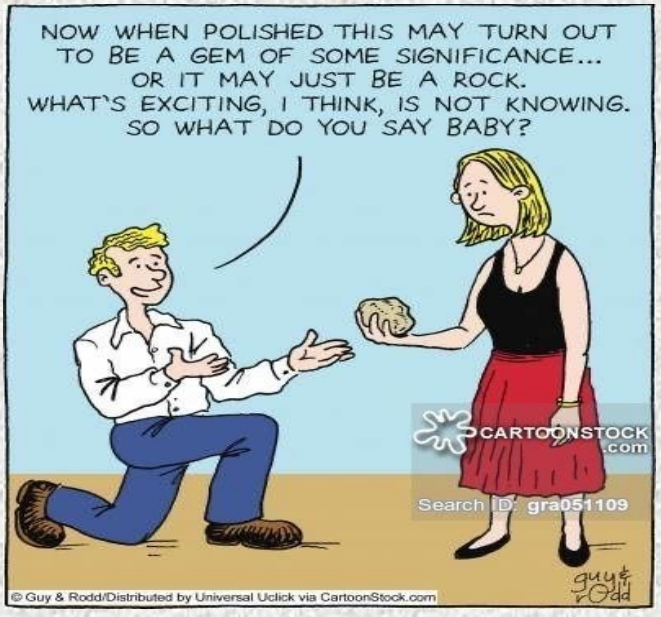
June 29: Board Meeting on Zoom.

July 25: General Membership Meeting will feature a flint knapping demonstration by **Donna Kelly**.

July 26-August 6: SCVGMS will have a booth at the Santa Clara County Fair with displays, demonstrations, and a chance for the public to learn about our organization. The fairgrounds are located at 344 Tully Road, San Jose, CA.

July 27: Board Meeting on Zoom.

See Page 3 for field trip information.



President's Message

Clear Creek Management Area, Paicines CA.

Clear Creek is a historically significant mining and recreational site in the Central Coast section of California. It has a long history as a mining area for asbestos and cinnabar. It was a critical mining resource for the military as well as mining and industry.

Asbestos is used in construction, as an ingredient in walls, floors, ceilings, paint and insulation due to its fire resistance properties. While it was used as a way to reduce health risks due to fire, it was gradually determined to be a health risk for lungs. It is composed of tiny fibers that break down, over time, to produce dust that causes cancer and other life threatening diseases of the lungs.

Cinnabar, more commonly known as mercury, was also heavily mined in the Clear Creek area. It too, was used by the military during and after WWII, but more commonly, it was used in mining for the separation of gold from ore rock. Gold bearing ore would be crushed, heated and treated with mercury which would bind the gold and separate it from the rock. Mercury also presents a great health risk.

Because of both of these mining activities the impact on the Clear Creek area is that it is considered a hazardous environment. That being said, it is also one of the most diverse mineral collecting sites in Central California.

Clear Creek contains over 150 mineral types. One of the premier minerals to be found there is Benitoite, which is the state gemstone of California. This gemstone is found primarily at a single mine located central to the area. Finding Benitoite in the Clear Creek area is a rarity because the gemstone is pretty much limited to the mine location.

One of the more ubiquitous minerals to be found at Clear Creek is Serpentine, which happens to be the state rock of California. Serpentine can be an almost white pale green through black in color. It varies in hardness from 3 -6 on the Mohs scale. It can feel soft and soapy to hard crystalline and black nearly as hard as Jadeite. On the lower end of the scale it is too soft for polishing on grinding wheels. It turns into paste but it is easily carved though it can be brittle. The harder varieties polish up beautifully with granular, crystalline, fibrous, banded and variegated patterns. It can be found everywhere at Clear Creek.

Jadeite can also be found throughout site. The Jadeite at Clear Creek ranges from deep green to black. Nephrite jade which is similar to Jadeite, can also be found there. It is slightly more translucent with dark inclusions, and is a favorite for making cabochons.

One of the most prominent minerals to be found is Plasma Agate. It is composed Chalcedony, Serpentine, Jadeite or Jade, Chromite, Cinnabar and various other minerals, resulting in a broad selection of colors and textures. It is readily polished and a favorite lapidary material. As found at Clear Creek, it is often covered in druzy, a layer of tiny to small quartz crystals, which can be anywhere from slightly translucent to crystal clear.

The collecting at Clear Creek can be super easy, walking along the Creek, picking up float, loose smaller rocks of most rock and mineral types, eroded and washed down from the sloping hillsides. These will often be smoothed and semi-polished by tumbling and water. For those willing to work a little harder, a short hike up the hillside can take you closer to the source of some of these rocks and minerals. A little east, digging with a rock hammer, a small shovel, or rake can net larger and less weathered specimens.

Collecting at Clear Creek requires a permit, which can be obtained online from Recreation.gov. If you are driving in, you are required to obtain a vehicle permit as well. The permits are good for 7 days. The vehicle permits cost $5.00; the collecting permits are free.

Your President,
Stephen May

Field Trips

June 12 Monday: Rainbow Ridge, Virgin Valley, Nevada – 8 hour drive, Opal, dig fee is $700.00 for 2 people, 8-hours sorting (trip date changed from June 6)

June 17, 18 Saturday and Sunday: Fallon Nevada
Jasper, Agate, Chalcedony, Agate and Crystal filled Nodules, Petrified Wood, Rhyolite, Banded Rhyolite (4 ½ hour drive time) Last opportunity to hound in this area as it is scheduled to be taken over by the Navy.

August 10-13: Thursday-Sunday Petrified Blue Forest and American Fossil Quarry, Kemmerer, WY
A Co-op field trip sponsored by Sacramento Mineral Society
Contact: **Mike Jones**, Cell 916-477-0890 Email: scienceskoolbus@gmail.com

August 25, 26 Friday and Saturday: Davis Creek, California – 6 ½ hour drive, Obsidian, Rainbow, Pink, Silver, Mahogany, Electric Blue, Needles (Tentative: Trying to arrange Group Permit, with Dept. Forestry)

September 28th through October 1st Topaz Mountain and Dugway Geode Beds, Utah
A Co-op Field Trip sponsored by the Roseville Rock Rollers Gem and Mineral Society
Topaz Crystals, Bixbite (Red Beryl), Pseudobrookite Crystals, Hematite Crystals, and Geodes.
Leader and Contact Information: **Gene Doyle**, CO-OP & Roseville Rock Rollers Field Trip Leader, Text or leave message, Cell: (408) 605-9457, Email: eugene.doyle@sbcglobal.net. or
Jim Barton, CFMS-N, Home: 916-773-0458, Cell: (916) 847-7321, Email: geologist1@surewest.net.

For questions for the above listed field trips unless other wise noted:
Contact Stephen May for details. Email: Stephenmay0990@gmail.com
Phone: 669-248-3993 or 408-306-6782

Membership Dues Are Due.

SCVGMS membership dues are due for the year 2023. **Your dues are essential** to the operation of SCVGMS. They are $5.00 for Junior, $20.00 for an individual, and $30.00 for the household.

Please send your check to **Treasurer, Santa Clara Gem and Mineral Society, Box 54, San Jose, CA 95103-0054 or to Frank Mullaney, 5705 Begonia Drive, San Jose, CA 95124**

Thank you.

Smiles

Lord, give me the coffee to change the things that I can change, and the wine to accept the things that I can't.

If you boil a funny bone, if becomes a laughing stock. That's humerous.

I told my suitcases that there would be no vacation this year. Now I'm dealing with emotional baggage. never use turn signals. It's nobody else's business where I'm going.

Website Links

Your Window to the World of Important Websites

Click on the blue area of whatever site you want to visit!

Link to Our SCVGMS Website: http://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): http://www.amfed.org

California Federation of Mineralogical Societies (CFMS): http://www.cfmsinc.org/

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

SCVGMS Facebook Page: http://www.facebook.com/santaclaravalleygemandmineralsociety

Save the Date — June 23-25, 2023

CFMS SHOW AND CONVENTION
LODI GRAPE FESTIVAL GROUNDS, 413 E. LOCKEFORD ST.,
LODI, CA 95240

Hours: Friday- Saturday 10 AM – 5 PM, Sunday 10 AM – 4 PM

Welcome to Our New Editor, Deb Runyan

This June Breccia is my last one as editor. I have been honored to be the Breccia editor for the last almost seven years. I have become acquainted with many wonderful people and I have learned a lot about writing and about rocks and minerals as I have met this challenge. It is my pleasure to introduce our new editor nominee, Deb Runyan. Editing and publishing the Breccia is a challenging job, and I am sure that she will do it very well. Welcome and a big thank you to you, Deb Runyan for volunteering!

Jo Borucki

Camp Paradise

Week 1: August 20 to August 26th 2023
Week 2: August 27th to September 2nd 2023

Classes – Beginning Faceting, Beginning Lapidary, Advanced Lapidary, Soft stone Carving, Beginning Silversmithing, Intermediate and Advanced Silversmithing, Lost Wax Casting, Beading, PMC-3-clay, Fused Glass, Enamel, Cold Connection, Intarsia. All classes are subject to change. Please Note: Class assignment preference will be given to first time students.

For more information about time, location, lodging, etc., contact:

Camp Paradise Registrar
Glenda Keil

Camp-Paradise-2023-Registration-2

Glenda : 1 (916) 448-8341, gkeil@comcast.net

Federation Report

Mojave BLM Public Commenting

If allowing Rock Collecting is not written into the Mojave Trails National Monument (MTNM) management plan, we loose 1.6 million acres in the California Desert. The public comment period is open now, and comments must be received by June 20th, either by email or regular mail. Comments should be substantive and detailed.
For more information from the BLM, register for the Wednesday 6pm Zoom meeting at:
https://blm.zoomgov.com/webinar/register/WN_b9ygA6C3RNS_gz-OejL4WQ?fs=e&s=cl

Commenting at In-person meetings are May 30 Barstow, May 31 Twentynine Palms, April 1 Needles.
You may submit your comments to Attn: Mojave Trails National Monument Planning c/o
Needles Field Office, 1303
S.U.S. Hwy 95 Needles CA 92363

Comments can also be submitted to BLM_CA_NFO_MTNM_PLANNING@blm.gov or BLM_CA_NFO_MTNM_PLAN@blm.gov.

Please specify the project name (MTNM Plan) in the subject line of your email.

Federation Director: Karen Welder

Bragging Rights

There was no bragging rights contest for May because we had our silent auction instead. The next Bragging Rights will be at the June 27 meeting **and the theme is an item related to rockhounding that is green in color.**

Please email a photo of your green treasure to Alan Achor by 4:00PM on Monday, June 26 to have it included in the contest. Alan's email address is **kayakbb7@gmail.com.**

Alan Achor-Bragging Rights Chairman

Sunshine

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

Member Displays

Please email a photo of the 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.**

Cynthia Porter showed her beautiful Welo Opals from the Denver Show.

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.

Rockhounds of the Month

Our rockhounds of the month are **Tamara Bell** and **Michael Paone** for volunteering for the Installation Dinner. Our Installation Dinner is one of our most enjoyable events of the year, and it's great to see it in good hands. Thank you!

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Information on Shows for 2023

June 3-4, 2023 – Jackson, CA
Amador County Gem & Mineral Society
Gem & Craft Show at Kennedy Mine,
12594 Kennedy Mine Rd., Jackson CA
Hours 10-4
Contact: (916) 698-9853,
mountaingirl@volcano.net
Website: http://amadorgemandmineral.org

June 10-11, 2023 – Escondido, CA
Palomar Gem and Mineral Club
The Convention Center at the California Center for the Arts, 340 N. Escondido, CA
Hours: Sat 10-5, Sun 10-4
Contact: tonifloyd41615@gmail.com
Website: http://palomargem.org

June 17, 2023 – Bellflower, CA
Delvers Gem & Mineral Society
Delvers Parking Lot Sale
14515 Blaine Ave., Bellflower, CA
Hours: 10-4
Website: https://delversgemclub.wordpress.com/

June 23-25, 2023, Lodi, CA
CFMS SHOW AND CONVENTION
Lodi Grape Festival Grounds
413 E. Lockeford St., Lodi, CA
Hours: Fri & Sat 10-5, Sunday 10-4
Contact: rocksbob@sbcglobal.net
Website: https://cfmsinc.org

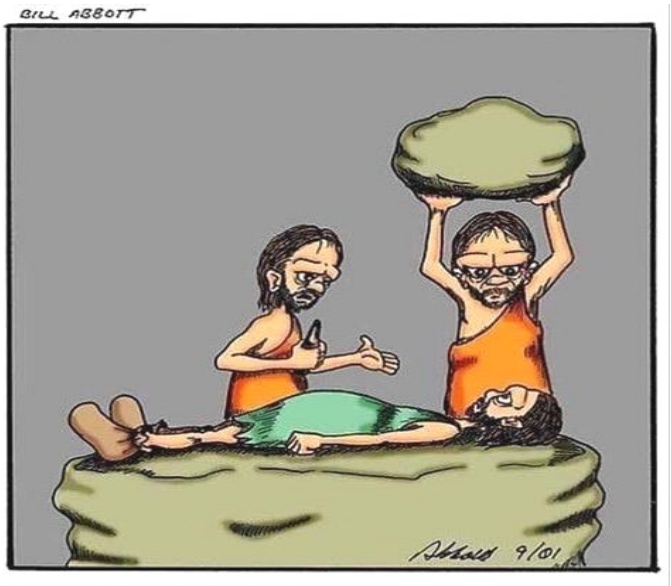
July 8-9, 2023 – Culver City, CA Culver City Gem and Mineral Society Culver City Veteran's Mem Auditorium, 4117 Overland Ave., Culver City, CA
Hours Sat 10-6, Sun 10-5 Contact: lexyhunter@aol.com Website: http://culvercityrocks.org/fiesta/

August 4, 5 & 6, 2023 – Nipomo, CA Orcutt Mineral Society Nipomo High School,
525 N. Thompson Ave., Nipomo, CA 93444
Hours: Fri. & Sat 10-5, Sun. 10-4
Contact: nipomocowgirl55@yahoo.com
Website: http://www.omsinc.org

August 5-6, 2023 – Roseville, CA Roseville Rock Rollers Gem & Mineral Roebbelen Event Center @the Grounds – Roseville,
700 Event Center Dr., Roseville, CA
Hours: Sat. 10-5, Sun. 10-4
Contact: gloriarosevillerockrollers@gmail.com
Website: https://www.rockrollers.com/index.html

August 19-20, 2023 – Tehachapi, CA
Tehachapi Valley Gem and Mineral Society
500 East "F" Street, Tehachapi, CA
Hours: 9-5
Contact: (661) 972-1117, travis462@outlook.com
Website: https://www.tvgms.orcks

August 26-27, 2023 – Arcadia, CA
Pasadena Lapidary Society
Arcadia Masonic Lodge
50 W. Duarte Rd., Arcadia, CA
Contact: (626) 260-7239
Website: https://pasadenalapidary.



"...and this is Ralph, your anesthesiologist."

Santa Clara Valley Gem and Mineral Society
San Jose, CA

Sedimentary Rocks

Geologists classify rocks as one of three types. Igneous rocks form when hot, molten material from deep within the Earth rises to the surface, cools, and solidifies. Sedimentary rock forms as layers of organic material – dead and decaying plants, trees, and animals – get compressed beneath more and more accumulating layers. And metamorphic rocks are those that start out as one type of rock but over the course of the long time scale of Earth history, change form due to either high pressure, high temperature, or both. In this essay we will address sedimentary rocks.

Imagine a tree growing near a swamp, hundreds of millions of years ago. It dies, falls over into the swamp, and in the millions of years since then, more and more trees grow, die, and fall over into the swamp on top of it. Other biological material – the bodies of organisms living in the water, for example – can also settle down on those layers, as well as non-organic material like dust and grit from the erosion of rocks. As all of those layers accumulate, the ones deeper down get more and more compressed, and eventually become rock. Sedimentary rock. It has been estimated that almost three quarters of Earth's surface is covered by sedimentary rock.

Evidence for layers of sedimentary rock just down below Earth's surface is both convincing and striking. Here's an example: bands of light and dark colors highlight the hundreds of such layers, or strata, that make up a cliff in Quebrada de las Conchos in Argentina (Figure 1a.). (These layers have been exposed by erosion.) And when shifting occurs in the rock on which sedimentary layers have been deposited, it can produce folds and other stunning wavy patterns in the layers. (Figure 1b.)


1a


1b

https://upload.wikimedia.org/wikipedia/commons/1/1e/Rock_Layers_at_Quebrada_de_las_Conchos_-_Salta_Argentina.jpg
https://www.shutterstock.com/image-photo/folded-sedimentary-rock-strata-route-23-1007281024

Figure 1a. Layers of sedimentary rock in this cliff have been exposed by erosion. Figure 1b. Shifting of the rock that underlies layers of sedimentary rock can result in "folds," as in these strata which can be seen along Route 23 in New Jersey.

If you are a rock hound, you are likely interested in sedimentary rocks because of the shapes, colors, and composition they present. Almost any specimen of breccia (Figure 2a.) or conglomerate (Figure 2b.), for example, will be interesting for these reasons.


2a


2b

. a. https://www.thoughtco.com/breccia-rock-4165794 b. https://www.shutterstock.com/image-photo/folded-sedimentary-rock-strata-route-23-1007281024

Figure 2a. A specimen of breccia. Figure 2b. A specimen of conglomerate.

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If you are in the construction business, you are interested in sedimentary rocks because many make excellent building materials. Limestone, for example – limestone is one of the most common sedimentary rocks – is strong and dense, so is an excellent choice for the structure of large buildings. The molecular structure of limestone – a calcium (Ca) atom, a carbon (C) atom, and two oxygen (O) atoms bonded together, that is, $CaCO_2$ – also makes it a good thermal insulator, a benefit when limestone is used in construction. Limestone also has relatively few pores, so it is resistant to fracturing due to thermal expansion and contraction. And as an added bonus, limestone is relatively inexpensive compared to other building materials. Other common sedimentary rocks, such as sandstone and shale, are also frequently used in construction, often as flooring materials.

But wait! Sedimentary rocks play a far more important role for us than merely as attractive specimens to add to a collection, or as sturdy, low-cost building materials. The fuels we use to power our world – fuels such as coal, natural gas, and petroleum – are either sedimentary rocks themselves or come to use via the layers of sedimentary rock down beneath Earth's surface.

Let's take a step back for a moment. Do you like sweet foods, foods that have sugar in them? Most of us do, and from the perspective of human beings as organisms, we really can't help ourselves in liking sugar. Eating sugar gives us energy.

There are a number of varieties of sugar, but the most common, the kind of sugar you find, say, in little packets in a coffee shop, is sucrose. A sucrose molecule is twelve carbon atoms, twenty-two hydrogen (H) atoms, and eleven oxygen atoms bound together: $C_{12}H_{22}O_{11}$. It takes a whole lot of energy to hold all those atoms together, energy in the form of the bonds that keep the atoms from drifting apart. When those bonds are broken or rearranged, a whole lot of that energy is released. That's the reason we like sugar so much, why some of us crave sugar… we want that energy! Tens of thousands of years ago, our ancestors learned that eating foods with high sugar content gave them the energy they needed to hunt for food, say, or to walk many miles every day.

Our bodies extract energy from sugars through the process known as metabolism. A common metabolic process looks like this:

$$C_{12}H_{22}O_{11} + 12O_2 \rightarrow 12CO_2 + 11H_2O + \text{energy}$$

Just like it takes oxygen to set a piece of paper on fire, it takes oxygen (oxygen gas is O_2) to "burn" sugar. Adding oxygen gas to sucrose allows the metabolic process to proceed, and through that process the carbon, hydrogen, and oxygen atoms in a sucrose molecule get rearranged to form carbon dioxide gas (CO_2) and water (H_2O) molecules. Because the amount of energy required to keep the CO_2 and H_2O molecules bound together is less than the energy required to hold the parent sucrose molecule together, this process results in energy being released. So eat a candy bar… you're ready to go hunt a mastodon. (Or, say, to walk up the stairs in the physics building at the nearby university!)

As an aside, take a look back at the process by which sucrose is rearranged to form carbon dioxide and water. There's water in there, and also carbon. The Greek word for water is *ὕδωρ, or hydor*, from which we get "hydro," a prefix meaning "water" or "related to water." So the molecules that contribute all of that energy to, say, petroleum, are termed "hydrocarbons."

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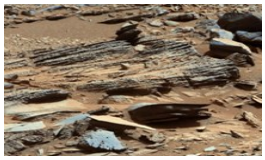
With sugars and energy under our belts, let's return to coal, natural gas, and petroleum. One of the important components of the walls of the cells in green plants is cellulose. The chemical formula of cellulose is $C_{12}H_{10}O_5$. Compare that to the atomic composition of sucrose… cellulose is a sugar! And there are other sugars commonly found in living organisms, for example, glucose and fructose. (Both are $C_{12}H_{10}O_5$, but the arrangements of the atoms in these two sugars are different. And in the interest of full disclosure, note that a sucrose molecule is actually a glucose molecule and a fructose molecule stuck together.)

So. Sugars in the organic material from which sedimentary layers form? There's *energy* in them thar rocks! When the trees and other living organisms toppled over into the swamp hundreds of millions of years ago, they were, in effect, laying down layer upon layer of energy.

Imagine those trees toppling over into the swamp long ago. The pressure on the organic material deepest down – due to the material deposited above it – eventually became enormous, and as the pressure increased, so did the temperature. Under those extreme conditions, the organic material solidified… became rock. A rock we call coal. And that coal, formed from material composed of molecules such as cellulose, has baked into it lots and lots of energy. So when you burn that coal – *combust* that coal – lots of energy is released. Coal is a *fuel*. When the decaying organic material takes a liquid or gaseous form, the molecules like cellulose become petroleum or natural gas. These are also hydrocarbons, holding lots of energy. Often the energy-bearing hydrocarbons in liquid or gaseous form is found, down in the ground, in natural cavities – "reservoirs" – or trapped in the pores of sedimentary rocks such as shale.

(Once upon a time, the author worked at an oil well logging engineer in Southwest Texas, making measurements of oil wells being drilled, to locate hydrocarbon deposits. And yes, down below the surface, sometimes a few hundred feet down, sometimes a few thousand feet, we often found both reservoirs of petroleum and hydrocarbon-bearing shale layers. Always a happy moment for the oil companies drilling those wells!)

Organic material plays a big role in the formation of sedimentary rock. The presence of liquid does as well. You don't need both to form layers of sedimentary rocks, but you do need at least one of the two. Which makes the sedimentary rocks show in Figures 3a. and 3b. particularly interesting.

a.  b. 

a. https://geology.com/stories/13/rocks-on-mars/conglomerate-outcrop.jpg b. https://geology.com/stories/13/rocks-on-mars/cross-bedding-outcrop.jpg
Figure 3a. A specimen of conglomerate found on the surface of Mars! Figure 3b. Layers of sedimentary rock found on the surface of Mars!

Yes, these rocks were found by NASA expeditions to Mars. Compare them to rocks formed in similar ways here on Earth (Figures 4a. and 4b.) – it's hard not to conclude that there was once either running or standing water (or both) on Mars. We don't know whether there were, oh, bacteria or fish or who knows what kind life might have been swimming around in that water… but it makes you think!

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http://geologylearn.blogspot.com/2015/03/conglomerate.html b. https://www.geol.umd.edu/~tholtz/G104/lectures/104rox.html
Figure 4a. A specimen of conglomerate… found on the surface of Earth.
Figure 4b. Layers of sedimentary rock… found on the surface of Earth.

One last, fascinating note about layers of sedimentary rock. Drill down into the Earth, and you will cross many layers of sedimentary rock. The first ones you encounter were formed not all that long ago, and the farther down you drill, the farther back in time you go. Go back far enough, more than about sixty-five million years, and you'll find fossils of dinosaurs.

Sixty-five million years ago marks the end of what geologists call the Cretaceous Period and the beginning of the Tertiary Period. The layer of rock that formed on Earth's surface sixty-five million years ago is termed the K-T boundary, "K" from the German word *kreide*, or "chalk" – the rock which formed from this layer is characterized by thick layers of chalky limestone. High concentrations of the radioactive element iridium are found in a layer, a few inches thick, at the K-T boundary. The K-T boundary layer, exposed by uplift and weathering, is visible in Figure 5. as the light-colored band of rock between dark brown layers below and light brown layers above.

http://www..thearmchairexplorer.com/a-images/k-t-boundary01.jpg
Figure 5. The K-T boundary layer, rich in the radioactive element iridium, is visible as the light-colored band between dark brown layers below and light brown layers above.

High concentrations of the iridium? Curious, certainly – iridium is extraordinarily rare in Earth's crust. It is not, however, rare in meteorites. The fact that there is lots of iridium in that K-T boundary layer suggests that it might have formed from the pulverized remains of a meteorite that crashed into the Earth sixty-five million years ago. That pulverized meteorite dust would have been spread all around the globe in Earth's atmosphere before settling down to the surface, eventually to form a layer of sedimentary rock. But up in the atmosphere, encircled the entire globe, that dust would have blocked out the Sun for months, perhaps years. No sun, no food for dinosaurs… no dinosaurs! Although this does not completely explain the extinction of the dinosaurs sixty-five million years ago, it is now an accepted theory.

Sedimentary rocks. If you don't have any, get a specimen of breccia or conglomerate for your collection. And when you hold a piece of sedimentary rock in your hand, or when you drive past a cut-through along a highway and see the folded layers of sedimentary rocks, make sure you think about the trees and plants that grew and then died to help form them.

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

Alaskan Prospector's Farewell

By Jo Borucki

Alaska! Now I ask ya,
If I was truly sane,
Would I prospect there in winter?
I might not come back again.

It's zero there in winter,
Not centigrade, but Fahrenheit.
And it even gets much colder,
In the middle of the night

I've heard that in Alaska
Even polar bears freeze,
"Enough!" they say, " We're heading south.
So step aside now if you please."

"But you're looking mighty tasty,
And I'm missing many meals.
The weather plunged so hasty
That it even froze the seals."

So if I don't come back again,
If you don't see me soon,
Perhaps I'm frozen solid
And may thaw sometime in June

Or I may be warm and cozy
In the stomach of the bear
If you see him, then please greet me
Say "I know you're there somewhere."

Note: It's been cold enough this spring, so that I feel like it is winter in Alaska.

"Cute Polar Bear Cartoon"
cliparts.co

Alaska and Its Minerals

Bill and I spent two weeks in Alaska in March 2012, primarily to see the aurora borealis (northern lights). I loved our time at Coldfoot, a truck stop about half way between Fairbanks and Prudhoe Bay on the Dalton Highway. The Coldfoot restaurant offered excellent food and the motel accommodations were basic but comfortable. Recently I began to wonder about mineral prospecting near Coldfoot, and I bought the Falcon Guide, "Rockhounding Alaska" by Montana Hodges.

Aurora Borealis
Wiseman, Alaska
Photo by
Jack Reakoff

The guidebook says that you can write an entire book on prospecting along the Dalton Highway, and of course, what everyone would like to find is gold. Alaska's gold rush began in 1899 with fortune hunters flocking to areas such as the area at first called Slate Creek but later christened Coldfoot where winter nighttime temperatures are below zero with the coldest temperature on record being a minus 82 degrees Fahrenheit. As winter began, the prospectors got cold feet and fled southward, and so Coldfoot got its name. But it was a mere minus 30 degrees Fahrenheit when we were there, shivering at midnight wearing everything we owned, hoping to see and photograph the northern lights. However, when I tried to take pictures, my camera lens froze shut.

The Dalton Highway, which is a gravel road, begins near Livengood about an hour north of Fairbanks and continues on to Prudhoe Bay and is considered to be the most dangerous highway in Alaska because of its twists and turns and the many trucks that speed on it, but there are gold mining sites from just north of Livengood to a hundred or so miles north of Coldfoot.

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Coldfoot is about 250 miles north of Livengood and has the only accommodations until you drive all the way to Prudhoe Bay and the town of Deadhorse, but better chances for gold are found a few miles north where some impressive gold nuggets, 146 and 137 ounces, have been found near Wiseman, a small mining community about 16 miles north of Coldfoot along the middle fork Koyukuk River. In addition to gold, the Dalton Highway area offers areas of where you can collect fossil and minerals such as jasper, quartz, chert, stibnite, pyrite, and chalcopyrite.

If you decide to prospect for minerals or go gold-panning, educate yourself first by reading "Rockhounding Alaska", referenced at the beginning of this article, "Where to Prospect for Gold in Alaska without Getting Shot" by Ron Wendt and the Bureau of Land Management's Dalton Highway: Recreational Mineral Collection brochure. Consider a tour group or guides to help you find gold-panning sites.

There is no prospecting or gold-panning in the area in the winter, from mid September until mid June, but a trip to Coldfoot with a tour group is a fascinating experience. Bill and I went with Road Scholar in March 2012. We stayed a week or so at Coldfoot where we enjoyed the northern lights, went dog sledding, and walked along the Alaskan Pipeline. Ours was a real adventure, but I have always wondered what it would be to prospect for gold and other minerals in Alaska. Perhaps some summer, you will find your adventure in the Coldfoot area at the sites along the Dalton Highway looking for gold and other minerals, being a rockhound in Alaska.

By Jo Borucki, April 24, 2023

Dog Sled Ride
Photo by Coldfoot Guide

Coldfoot Motel 2012
Photo by Jo Borucki

Membership Meeting Minutes
May 23, 2023

Call to Order - 7:47pm
Pledge of Allegiance
Welcome to First Silent Auction.
Program for the evening is Silent Auction, administered by Michele Smith.
The Vice Corner (Michele Smith): Cordial behavior for the silent auction.
New Members (Cynthia Porter): **Diane Maez** (Rock Hound father), **Kiam Choo** (Cutting and Polishing, Collecting. Field Trips), and **Tamara Bell** (Collecting, Silver Smithing, Fossils, Stringing Beads, Geology, Minerals, and Field Trips)
Member Displays: Cynthia Porter showed her Welo Opals from the Denver Show.
Jobs that require volunteers or that have been filled:
- Ice Cream Social (August): Volunteer: Cal Hansen (call to remind on week before)
- Editor nominee: Deb Runyan
- Board Member nominee: Michelle Powers
- Fairgrounds Booth Chair Michele Smith with Frank Mullaney as liaison to the Fairgrounds and Margo Mosher as Volunteer coordinator
- Show Chairman for 2024: Volunteer - OPEN
- Snacks for June through October: OPEN

Correspondence (Frank Mullaney):
Field Trips (Stephen May): Updates
June 12th: (2 slot only), Note the date change. Rainbow Ridge, Virgin Valley, Nevada – 8 hour drive, Opal, fee dig $700.00 – 2 people 8-hours sorting
June 17, 18: Fallon Nevada – Jasper, Agate, Chalcedony, Agate and Crystal filled Nodules, Petrified Wood, Rhyolite, Banded Rhyolite (4 ½ hour drive time) Last opportunity to hound in this area as it is scheduled to be taken over by the Navy.
June 23-25: 2023 - CFMS Show and Convention, Lodi Grape Festival Grounds, 413 E Lockeford St. Hours: Friday and Saturday 10 AM – 5 PM, Sunday 10 AM – 4 PM
August 25, 26: Trying to arrange Group Permit, with Dept. Forestry speaker.
Davis Creek, California – 6 ½ hour drive, Obsidian, Rainbow, Pink, Silver, Mahogany, Electric Blue, Needle
Rockhound of the Month: Tamara Bell, and Michael Paone, for volunteering for the Installation Dinner.
Bragging Rights for the month of June 27: The theme is an item related to rockhounding that is green in color.
Hospitality: Introduce Guests: 32 Members and 4 Guests in attendance. Guests: Jason Chen and the Baker family.
Sunshine: Margo Mosher.: Congratulations to Ian May who is graduating from San Jose State on May 25th.
Federation Report (Karen Welder): The information is on page 5: "Federation Report"

Meeting adjourned at 9:05 PM.

Respectfully submitted,
Cynthia Porter-secretary

Board Meeting
May 25, 2023

Meeting called to order at: 7:43

Roll call: Noel Runyan (Board), Deb Runyan (Board), Jim Fox (Board), Missy Fox (Board), Rick Kennedy (Board), Paul Kidman (Alt Fed Dir), Stephen May (Pres), Frank Mullaney (Treasurer), Cynthia Porter (Sec), Michele Smith (Vice Pres), Dean Welder (Parliamentarian), Karen Welder (Fed Dir),

Absent: Rick Kennedy, Stephen May, Karen Welder, Paul Kidman, Jo Borucki

Reading of the Minutes from April 27th board meeting (Cynthia Porter)

Correspondence: (Frank Mullaney): None to report

New Members: (Cynthia Porter) One new member to vote on Phil Kesten (Frank Mullaney/Cynthia Porter) Approved

Treasurers Report: (Frank Mullaney) Approval for the SCVGMS to pay up to $500 to Donna Kelly to support the Santa Clara County Fair Show if Santa Clara County does not pay her $500 fee in full.

$100 to Donna Kelly to show Flint Knapping at the July meeting (Already approved)

Approval for Ruth Bailey CFMS trophy up to $150 (Michele Smith/ Dean Welder) Approved

Approval Schultz CFMS Jewelry Trophy up to $150 (Michele Smith/Dean Welder) Approved

2024 Gem and Mineral show to preorder tickets on our web site:

Currently Pursuing PayPal as a lead possibility for presale tickets on our website. Team to research payment methods and have detailed information including ticket price for next board meeting so we can vote on it. PayPal likely to charge 2% plus .49 per transaction on the website. (Dean Welder/Frank Mullaney)

Treasures report Approved

Committee Reports:

Federation – (Karen Welder) None to report Dean will be attending

Field Trips – (Stephen May) See Membership Meeting Minutes

Old Business:

Founders Day Picnic – Jim Herbold, Sign-up sheet to help September 16th

New Business:

Student awards update. We met our commitment and Professor Jonathan Miller has determined that no further action should be taken to present the 2 additional scholarships for this year. Would like to have one student each day for the Santa Clara Fair Show with their earthquake liquefaction machine. Could we consider stipend for participating students?

Upcoming Programs:

June- Discussion of Clear Creek field trip
July-Donna Kelly Flint Knapping
August- Ice Cream Social
September-Founders Day Picnic September 16th
October-?
November- Silent Auction
December- Installation Dinner

Next Board meeting is June 29th

Meeting adjourned: 8:26 pm Noel Runyan**:**

Respectfully submitted, Cynthia Porter-secretary

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:
http://www.facebook.com/santaclaravalleygemandmineralsociety

SCVGMS ELECTED OFFICERS

President: Stephen May	(408)306-6782
Vice President: Michele Smith	(408)374-1897
Secretary: Cynthia Porter	(408)978-5848
Treasurer: Frank Mullaney	(408)691-2656
Editor: Deb Runyan	(408)866-7564
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
Michelle Powers	(408)694-8686
Noel Runyan	(408)866-7564
Rick Kennedy	(408)529-9690

Parliamentarian: Dean Welder (408)353-2675

SCVGMS COMMITTEE HEADS

Bragging Rights Chair: Alan Achor
Donation Receiving Committee Chair: Michele Smith
Show Chairpersons 2024:
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

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 7:15 followed by the meeting at 7:45 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. T**he Next General Meeting is on June 27 at 7:45 at the Cabana Club and also available on Zoom. The Next Board Meeting is at 7:30 on June 29 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 ten times annually. **The deadline for all articles is the Sunday after the general meeting. For this June issue only the Breccia editor is Jo Borucki** who may be contacted by email at **joborucki@yahoo.com** or by phone at (408)245-2881. **After this June issue is distributed, the editor is Deb Runyan** who may be contacted by email at **deb.runyan408@gmail.com** and by phone at (408)866-7564. The Breccia is proofread by Pat Speece and by Sonia Dyer. Exchange bulletins may be emailed to deb.runyan408@gmail.com . Permission to copy is freely granted to American Federation of Mineralogical Societies (AFMS) affiliated clubs when proper credit is given.