Place:
Arden Community Hall
636 Hall Rd
Arden, WA

Club Meetings:

Third Tuesday of the Month at 6:00PM

The Panorama Prospector

June 2023

PANORAMA GEM AND MINERAL CLUB

Minutes of the April 18, 2023 General Meeting

By Glynis Hull, Secretary

President: Lynne Calvert opened the meeting at 6:02 pm.

The club needs to have membership in the Arden Hall to get a discount on the rent each month. Leigh and Kevin volunteered to join for the club.

Lynne talked about items in the NW Federation newsletter including information on the junior rockhound programs, the stamps collection and upcoming gem shows.

From the American Lands Access Association: There is a proposed amendment to the California Desert Conservation Area Plan regarding Mojave Trails National Monument that can impact rockhunting in the area. Jim Retzer gave a history telling us they are looking for a way to shut down the area for offroading but included would be rockhunting and camping. They are looking to get an exemption for rockhunting.

The rock donation was approximately 6 tons of rock. The workers could purchase items while they worked. The club has made about $500 so far.

Field trips: Stonerose on 5/10. 7/8 is the Wild Turkey Mine trip. Scot will lead a trip to the

(cont. on page 4)

And the Winners Are:!

Scholarship recipient Colville High School **Kami Rogers** has been accepted to WSU where she will devote her life to being a special education teacher. Kami has epilepsy and her desire is to help other kids with problems to excel.

Scholarship recipient Jenkins High School **Ella Joyce** has been accepted at WSU and will be majoring in bioengineering. Her ambition is to help people. (Top left)

Scholarship recipient Kettle Falls High School **Isabella Olsen** has been accepted to Western Washington University. She is into earth science and geologic events majoring in biochemistry. She will have a big impact on Washington state. (Bottom left)

Clean Quartz Crystals Overnight!

By Bob Bristow

Note: I wrote this article years ago to put in the newsletter. I then dropped it because Prestone radiator cleaner with oxalic acid became unavailable. I have now updated it with new information.

Soon after getting out of school and moving to Seattle, I began attending rock shows sponsored by various clubs. The display cases presented by the Seattle clubs contained many beautiful rocks and minerals and I was impressed with the members' ability to find such good specimens. However, there were always cases containing quartz and other minerals with limonite-stained crystals. While I was still very young, an old-timer had explained to me how to make those crystals bright and shiny using hot oxalic acid. I asked one of the club members if they used oxalic acid. He said, "Oh, yes! Everyone knows about oxalic acid." I then asked what temperature he had used for the acid. His blank look told me he had used room temperature. I started to tell him about the importance of temperature, but he waved me off and started talking to another visitor. After all, he was an officer in one of the big clubs and I was a young kid.

Figure 1. Amethyst Crystal Cleaned with Prestone Radiator Cleaner

A couple of other times, I tried to make gentle comments about how crystals are cleaned and each time the listener didn't want any advice. Maybe this was the general human resistance to advice, but probably it was due to the listener being embarrassed

by not knowing how to accomplish so simple a task as cleaning specimens. They shouldn't have been embarrassed; cleaning crystals and other mineral specimens is not simple and is not easy. A friend of my father's was a mineralogy professor at one of the Western Washington universities. He was visiting one time when I came by and during a conversation, I mentioned using oxalic acid to clean crystals. He scoffed and said professionals don't use oxalic acid. They use something that cleans much better and doesn't hurt the fragile crystals. I, of course, wanted the formula. He couldn't give it to me. He did say that he knew it contained a chemical that was hard to obtain. So much for what professionals use!

Actually, what the old-timer used for cleaning crystals involved oxalic acid, but with other additives. The best at that time was a type of automotive radiator cleaner. It was the two-part cleaner in the yellow cardboard can made by Prestone. It is no longer available. When it became hard to find, I looked in automotive stores, and when I found some, I would buy out their entire supply. I am still using that stockpile. I asked a store manager why it was no longer available. He said it was due to the usual Government boondoggle. The Prestone can said "Poison." The other cleaners did not. Therefore the EPA made Prestone quit making it. The crazy thing is that all hardware stores carry muriatic acid which is extremely dangerous. The oxalic acid is weak enough to stick your fingers in, but don't try that with muriatic acid! Radiator cleaner is made to remove limonite and other iron oxides. These are also the brown and orange stains on quartz crystals. Therefore, you might try one of the radiator cleaners. If the radiator cleaner doesn't work, you can try a mixture of radiator cleaner and oxalic acid. I understand oxalic acid can be Figure 2. Calcite Cluster Cleaned with Hydrochloric Acid Figure 3. Quartz Cluster with Overgrowth Covering Stains purchased at Home Depot. If you use oxalic acid, it must be used just below boiling or it won't do anything.

I have used a number of containers for heating acid-water solutions. A handy one is an old glass coffee maker. Put the rock to be cleaned in the glass pot, add enough water to cover the specimen, then add about one teaspoon of acid. Here is an important step. Place some Saran wrap over the pot and use a rubber band to hold it in place. Before turning the heater on, use your finger to push down the center of the Saran wrap. This will allow the steam that condenses on the wrap to run down to the center and back into the water. Otherwise, you will have the smell of hot acid in the house. Figure 1 shows a quartz crystal cleaned in a coffee maker. It originally had stains that could not be removed by normal cleaning. I now use something that is very handy for larger specimens. It is an old crock-pot. Put the specimen(s) in the bottom of the pot, cover with water, then add about a tablespoon of acid. Be sure to replace the crockpot lid to trap the acid vapor.

Figure 2. Calcite Cluster Cleaned with Hydrochloric Acid

After the crystals are clean, let them cool slowly so as to not cause them to crack with a thermal shock. Pouring the used acid into a pail and adding baking soda can make it safe to dispose. Actually, the oxalic acid is very mild. I don't hesitate to stick my hands in it as long as it is cold. Quartz crystals with limonite stain can be cleaned overnight. However, if the crystals are in cluster form, it may be hard to remove material between the crystals. You can help remove this material by swirling the water around the crystals during the heating. (This is easy with the coffee maker, hard with the crockpot.) A toothbrush and dental pick are also handy. Often the material between the crystals is softened by the acid but still won't come out. For these tough ones, I heat them in

acid, let them cool, scrape off all I can get, then put them back in the acid for another cycle.

Figure 3. Quartz Cluster with Overgrowth Covering Stains

I have been talking about quartz crystals. How about other minerals? Two fragile crystals that are commonly collected are calcite and zeolites. These should first be cleaned with plain water and soap. After that you have to make a decision as to whether you want to take a chance on damaging the specimen with further cleaning. I have not found a good way to clean zeolites. They are even soluble in water. However, there is a good way to clean some calcite crystals using a method pioneered by Lanny Ream. In this method, you first tie a string around the calcite specimen. You then prepare two buckets, one with straight hydrochloric acid and the other with fresh water. Holding the string, you dip the crystals into the acid. The specimen will immediately be covered with foam. Leave it in the acid for a second or two, then lift it out and dip it into the fresh water. You can change a dull, dirty crystal surface to one that is bright and shiny. (Be sure the water is ready before starting the cleaning!) If you can't get straight hydrochloric acid, you can use Muriatic acid. It is a mixture of 1/3 hydrochloric acid and 2/3 water. Figure 2 is a large specimen of calcite. It was originally a dirty brown. The faces are now bright and shiny after spraying the cluster with hydrochloric acid and a rinse of fresh water from a garden hose. A plastic spray bottle was used to hold the acid for spraying.

I had an interesting experience using oxalic acid one day. I was using the oxalic acid to eat away the calcite enclosing some garnet crystals. This was a longer process than using hydrochloric acid, but I was all set up for using oxalic acid and I wasn't in a hurry. I would let the calcite soak in the hot oxalic acid overnight, then replace the depleted acid the next day. On one of these cycles, I let the specimen cool before putting in new acid. When I picked the specimen out of the water, I knew something strange had happened. Little needles stuck into my hands. After I dried it, I found the surface was covered by thousands of small, clear, sharp calcite crystals. I found this so interesting that I never finished extracting the garnets. I kept the specimen as a sample of how easy it is to make some crystals! For those interested in crystallography, the process worked like this: The hot acid dissolved calcite until all of the acid was depleted. Hot acid can contain more calcite ions than cold acid. Therefore, when the acid cooled, it could not hold the all the ions and they crystallized as new crystals on the surface of the old calcite. Some specimens simply cannot be cleaned. Figure 3 is a cluster of quartz form Snoqualmie Pass. A layer of quartz covers the original crystal surfaces protecting the muck on those surfaces from any cleaner.

(cont. on page 4)

Prineville area and beyond starting June 14. Contact Scot for details. The LaFarge trip (trilobites) will be later in the year.

June 10 will be the trailer workday. Meet at the fairgrounds at 9am with gloves and water.

Glynis did the "Share a Rock" and no one knows what it is.

Johnie said the scholarship awardees were decided and will be given their awards at school assemblies.

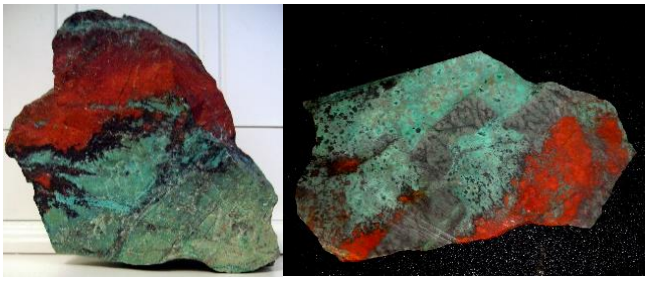
Bob talked about true onyx v. chalcedony.

Sheila has a stone from Calico CA that she wanted help identifying.

Identify the "Rock or Mineral"

By Jim Retzer

Last month's rock or mineral:

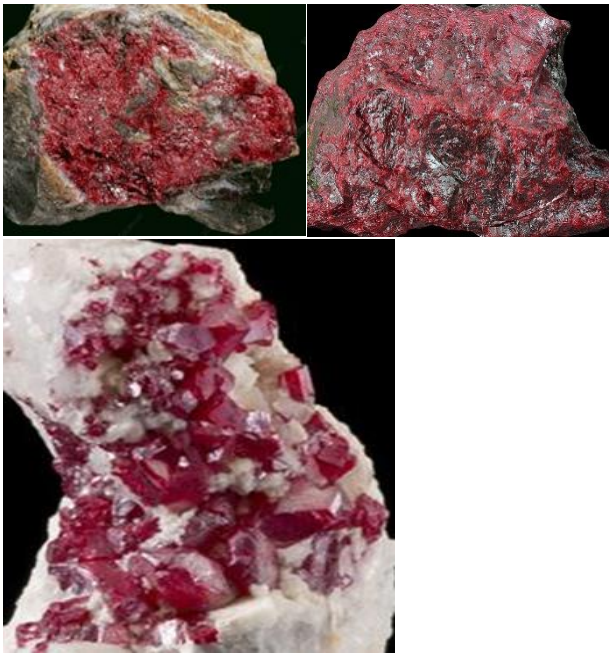


Sonoran Sunrise – Also known as Sonora Sunset, Chrysocolla Cuprite, Sonoran Sunrise, Sonoran Sunset, and Sonoran Jasper. The use of the name "Sonoran Sunset Jasper" or any other combination with the word "Jasper" is incorrect. This material is not a Jasper. This material is a combination of blues, reds, and blacks, that are similar to sunrises and sunsets in the desert. The colors are from a combination of Chrysocolla, Cuprite and iron or the mineral tenorite.

Sonoran Sunrise is made up of a combination of chrysocolla, giving it its blue and aqua tones; Cuprite, providing the reds; and iron or the mineral tenorite giving it its black color. It comes from the Milpillas Mine in Sonora, Mexico. This mine is unlike other copper mines which are open pits. In the case of the Milpillas Mine it is a series of drifts and shafts dug through an area covered by hundreds of feet of gravel. The mining started there in 2006 but by 2011 most of the mine's material had been extracted. This short operation run has resulted in the scarcity of this material leading to its higher cost.

Even though it has been around since 2006 many people are still unfamiliar with it, this results in the wide range of prices for the material. Some Sonoran Sunrise can still be found at reasonable prices, but this is getting harder to find. If you are looking for an interesting material to use for jewelry that has the potential for increases in value this is one that should be looked at.

This month's rock or mineral:



Membership Dues:

$20.00 per **household** per year is due to the club Treasurer Frank Stratton on the third Tuesday of November for regular members. Dues can also be sent to: Panorama Gem and Mineral Club c/o Johnie Pitman, 701 B Williams Lake Rd, Colville, WA 991114.

Webpage: http://panoramagem.com/

Facebook Group: Panorama Gem & Mineral Club

We**, The Panorama Gem and Mineral Club**, are a multi-faceted group of mineral-minded people. Our proud members include some real gems, a few fossils, and even some diamonds in the rough. A few have lost some of their marbles, but they know where to get more! A few need to polish their coordination because they are always tumbling! And some are miners who use the "silver pick" as their tool of choice! It should be crystal clear, that we all enjoy this unique conglomeration and above all else we strive to **HAVE FUN.** And we never throw stones (away).

A Quick Note from The Editor (Glynis)

Next month: Back to Yellowstone. We are always looking for newsletter inputs from our members. If you have an idea for an article, please forward it to gghull@comcast.net. If you don't want to write a whole article, send me pictures with a brief note about them and I'll be happy to put them in this newsletter. Remember, "a picture is worth a thousand words"!

Refreshment Schedule for 2023

Last names that begin with the letters posted bring refreshments for that month

January – N, O, P
February – Q, R, S, T
March – W, A, B, C
April – D, E, F, G
May – H, I, J
June –K, L, M
July – N, O, P
August – Club Picnic
September – Q, R, S, T
October – W, A, B, C
November - D, E, F, G
December – Christmas Party

Panorama Gem and Mineral Club: Organizational Chart

Officers

President:	Lynne Calvert	lynnecalvert501@gmail.com	559-906-5923
Vice-President:	Bob Bristow	bristow71@outlook.com	509-935-4375
Secretary:	Glynis Hull	gghull@comcast.net	509-981-9714
Treasurer:	Frank Stratton	frstratton@outlook.com	509-207-8503
Trustee 1:	Scot Jackson	free2rockhound@yahoo.com	509-680-4896
Trustee 2:	Jim Peters	jimnbetty17@gmail.com	509-992-6921
Trustee 3:	Cyndi Doppler		509-216-5473

Committee Chairs

Program Coordinator:	Sheila Stratton	skstratton@hotmail.com	509-207-8506
Hospitality:	Betty Peters	jimnbetty17@gmail.com	509-992-6921
Historian:	Sheila Stratton	skstratton@hotmail.com	509-207-8506
Newsletter:	Glynis Hull	gghull@comcast.net	509-981-9714
Show Chair	Johnie Pitman	jgpitman@outlook.com	509-684-8887