

**Place:**  
Arden Community Hall  
636 Hall Rd  
Arden, WA



**Third Tuesday of the Month**  
**Time:**  
April – September  
7:00 p.m.  
October – March & August  
6:00 p.m.

## **The Panorama Prospector**

February 2019

### **PANORAMA GEM AND MINERAL CLUB**

#### **Minutes of the January 15, 2019 Meeting**

By Sheila Stratton

The first meeting of the New Year was opened by President Rick at 6:00 p.m. A warm welcome was given to all attending. New and returning members attending were: Don Wolfe, Greg and Barbara Cozza, Jim and Barbara Nance, and Don and Suzan Andrew.

Vice President Report: Bob gave a cheerful greeting to all and brought up an issue about mining. Secretary Sheila Stratton asked for members to let her know if they would like to switch their pin-style badge holder for one with a clip. Treasurer Frank Stratton gave the financial report and let the members know that there was an address list on back table for anyone that needed to make updates for a new phone/address book. He also let the members know that the address book is for members only and is not to be used on any social media or the web.

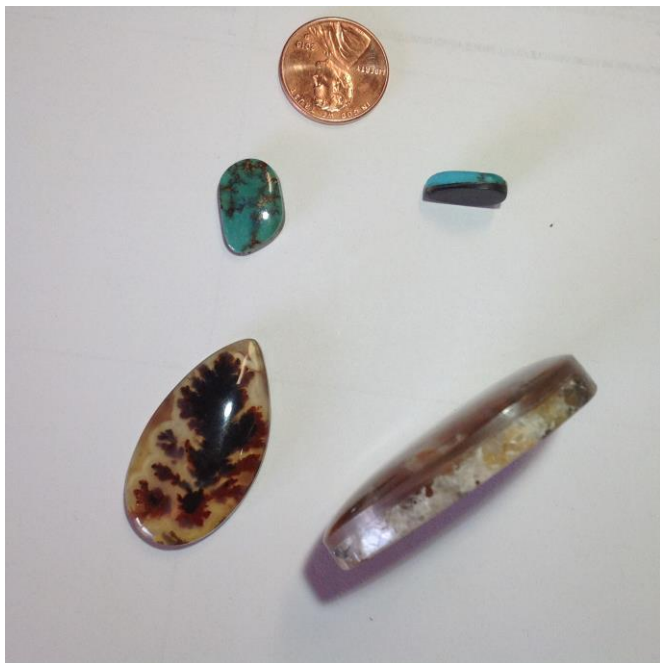
Rick reminded people about the silent auction and to be sure and get their bids written down. He also brought up the bylaws were given out in November for the club members' review and needed to be approved. A motion to approve was made by Johnie Pitman and seconded by Bob Bristow. The motion was passed.

*Continued Page 5*

### **Doublets and Triplets**

By Ginger Pitman

This article is an attempt to explain what they are and why they are useful in making a stone into jewelry or for display.



A doublet is adding a second layer, either cap or backing to the gemstone that you want to make into something useful. An example is, many of the turquoise settings used in jewelry has a basanite backing to give more strength against breaking and to use less turquoise in the setting. That is, if you have a turquoise nugget instead of grinding off one side to make it fit into a silver bezel you could cut it in half and put a backing on both pieces giving you two stones. Another example is some plume agates have

the plumes so bunched together that it is best to cut the agate thin to isolate the best plumes and then put a quartz cap on the top to give it enough thickness to mount in a setting and give it more strength against breaking. Any time a quartz cap is used it needs to be optical grade so that it doesn't interfere with the view of the agate. Most intarsia projects need a strong backing to give it more strength. Intarsia will be discussed in another article.



A triplet is adding both a cap and a backing to the gemstone. Most Spencer opal (opal from Spencer Idaho) needs both a dark backing and a Quartz cap because it practically always is in very thin layers. Some Australian opal only needs a quartz cap to protect it from scratching. Some agate may need to have a quartz cap and backing if it is to be used for a necklace that may get turned over when it's worn.

I have some information on the how-to accomplish these that I can copy and hand out if you are interested. The instructions are too lengthy for the newsletter.

The Northwest Federation of Mineralogical Societies puts on a workshop each year and offers classes on many lapidary skills including doublets and triplets. It's always the week after Labor Day and is located at the Hancock Field Station which

is halfway between Antelope and Fossil in central Oregon. The facilities are owned by the Oregon Museum of Science and Industries (OMSI). The retreat also offers classes in lapidary, faceting, silver smiting, intarsia, wire wrapping, beading, and casting. For more information check out the NFMS web site: <http://northwestfederation.org/>

## Clean Quartz Crystals Overnight!

By Bob Bristow

*The following article describes the use of chemical agents to clean crystals. Great care should be taken when any chemical agents are used. Use only in well-ventilated areas and avoid contact with you skin. Eye protection is also recommended. Be sure to read all warnings associated with the chemicals and follow the manufacturers Safety Precautions. (Editor)*

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 brown-stained crystals. While I was still very young, an old-timer had explained to me how to make those crystals bright and shiny. 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.

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.



**Figure 1** - Amethyst Crystal Cleaned with Prestone Radiator Cleaner

Actually, the trick the old timer taught me for cleaning crystals involves oxalic acid, but with other additives. This cleaning material is a type of automotive radiator cleaner. It is the two-part cleaner in the yellow cardboard can made by Prestone. It is becoming hard to find and when I see it in an automotive store, I buy out their entire supply. The real trick is in using the right temperature. It must be just below boiling. At room temperature, you can soak crystals for months without a thin limonite stain being removed. At boiling, it can be removed in minutes. I have used a number of containers for heating the acid-water solution. A handy one is an old glass coffee maker. Put the rock to be cleaned in the glass pot, add about one teaspoon of acid, and then add enough water to cover the specimen. Now, 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 oxalic 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, and then add about a tablespoon of acid. Be sure to replace the crock-pot 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 acid into a pail and adding the backing soda from the other end of the Prestone container can safely dispose of the used acid. 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, there 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 crock-pot.) 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.

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 now 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 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 from Snoqualmie Pass. A layer of quartz covers the original crystal surfaces protecting the muck on those surfaces from any cleaner.



**Figure 3 - Quartz Cluster with Overgrowth Covering Stains**

Epilog: Two-part Prestone radiator cleaner is no longer available, at least in Washington State. According to the auto parts dealer, it is due to Prestone putting the word "Poison" on the container. The State or Federal EPA will not let them sell it. It is much less dangerous than Muriatic acid, but Muriatic acid does not say "Poison." However, there are other radiator cleaners available. One of these should be better than plain oxalic acid because they are formulated to remove the same type of stains we have on rocks. I am also sure these cleaners also require heat!

### **Rick's Ramblings**

#### **Some Words From The Club President**

By: Rick McDougald

Dave Paquette will be presenting the Program for our February 2019 meeting. Thank you, Dave!

Our Show Chairman this year, Johnie Pitman, has been gathering door prizes. Thank you, Johnie!

Every year the Show Vendors are asked to donate something for a door prize. Many thanks for the recent donations from Sylvia Allen and from a good friend of Scot Jackson's: so many hand-made stone necklaces!

**Show News - JOBS AVAILABLE:**

- 2 Volunteers are needed for the Silent Auction/Ring Toss.
- We always need another hand at the front desk. Contact Sheila Stratton.
- We will still need another person to help out with the Black Light Cave.
- (It's a mystery - will we get new game this year?)
- Joe Barreca has printed 75 full- and 80 quarter-sized Posters that will be available at our Feb. meeting. He uses waterproof ink on high-bright paper. They will wrinkle if wet, but not bleed.
- Reserve your display case for the show. We still have a few left - e-mail or call Rick McD.

Mid-January, Gene Fisher, Johnie Pitman, and I paid some attention to the trailer that's being housed at the N.E. WA. Fairgrounds.

**The Panorama Prospector Deadline:** Try to send in your newsletter submission 2 weeks before the meeting. I know that sometimes things happen close to our monthly meeting dates, but many of our members agree that it would really be good to get our newsletter to the members 1 week before the monthly meeting.

**Hidden Treasures**  
**Gem and Mineral Show**  
 Free  
 19th Annual  
**March 8th and 9th**  
**Colville Ag and Trade Center**  
 8:30 AM - 6:00 PM Friday March 8th  
 9:00 AM - 5:00 PM Saturday March 9th  
 Colville Fair Grounds 317 West Astor, Colville, WA  
**Wheel of Fortune** **Jewelry** **Fossils**  
**Gold Panning** **Food**  
 Gems and Minerals from Around the World **Back Yard Tunnels**  
 Silent Auction **Door Prizes**  
 (509) 684-8887

**Meeting Minutes**

*Continued From Page 1*

A show report was given by this year's Show Chairman, Johnie Pitman. The show is going to be titled "Hidden Treasures" and will be held on March 8<sup>th</sup> & 9<sup>th</sup>, 2019. Thursday, March 7<sup>th</sup> will be set-up day (lunch provided). Doors will be open at 7:30 a.m. for set-up. Johnie and Rick passed out a list of jobs or duties that are needed to be performed for the show. They went down the list and asked for volunteers for the various jobs of preparing and running of the show. A suggestion was made about having a hands-on display of rocks that would be identified and where they are found. A discussion took place about having a larger variety of games for the children. Sharon brought up that, at the next meeting, she will have a sample of the new Treasure Book for the children. Also, see Sharon if you can help her meet the buses and pass out the books. Scott also asked for anyone interested in helping him with the Wheel of Fortune to please contact him.

Refreshments were served; Silent Auction was held; and drawing of door prize was held.

Rick provided a very informative program of videos from CWU Professor Nick Zentner called "Nick on the Rocks." These were videos about fascinating features and history of the geology in Washington State.

The following are the 5 minute segments that we watched:

- Yakima River Canyon
- Mt Rainier's Osceola MudFlow
- Mount Stuart - From Mexico?
- Lake Chelan — Battle of the Ice Sheets
- Giant Lava Flows
- Columns of Basalt Lava
- Bridge of the Gods Landslide
- Ancient Cascades Volcanoes

(A special thank you to Rick for coming in to the Arden Community Center and learning the DVD/VCR/TV system so that our programs will go smoothly.)

## 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/>

**Contact:** Rick McDougald, President, [pres-pgmc@hotmail.com](mailto:pres-pgmc@hotmail.com)

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).

I would like to thank everyone submitted articles for this newsletter. I now have a backlog of articles I am looking forward to using in our upcoming newsletters. Because of the amount of articles I received this month I will have to delay the series on setting up a lapidary workshop/area until next month.

If you have any particular interest you would like to see articles on, feel free to contact me at [jimrocks@recycledhistory.com](mailto:jimrocks@recycledhistory.com) or let me know at our next meeting on **19, February 2019**.

## Refreshment Schedule for 2019

**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:	Rick McDougald	<a href="mailto:pres-pgmc@hotmail.com">pres-pgmc@hotmail.com</a>	509-675-0237
Vice-President:	Bob Bristow	<a href="mailto:bristow@theofficenet.com">bristow@theofficenet.com</a>	509-935-4375
Secretary:	Sheila Stratton	<a href="mailto:skstratton11@gmail.com">skstratton11@gmail.com</a>	909-228-0546
Treasurer:	Frank Stratton	<a href="mailto:frstratton@outlook.com">frstratton@outlook.com</a>	509-207-8503
Trustee 1:	Sherryl Sinn	<a href="mailto:sherrylsinn@gmail.com">sherrylsinn@gmail.com</a>	509-207-8506
Trustee 2:	Dennis Gibbens	<a href="mailto:dddgibbens@yahoo.com">dddgibbens@yahoo.com</a>	509-684-3532
Trustee 3:	Jim Peters	<a href="mailto:jimNbetty17@gmail.com">jimNbetty17@gmail.com</a>	509-9372238

### Committee Chairs

Program Coordinator:			
Hospitality:	Sherryl Sinn	<a href="mailto:sherrylsinn@gmail.com">sherrylsinn@gmail.com</a>	509-684-6093
Club Shop:	Gene Fisher	295 Gold Creek Loop Rd, Colville, WA 99114	509-684-8546
Historian:			
Newsletter:	Jim Retzer	<a href="mailto:Jimrocks@recycledhistory.com">Jimrocks@recycledhistory.com</a>	509-738-2503
Show Chair	Johnie Pitman	<a href="mailto:jgpitman@wildblue.net">jgpitman@wildblue.net</a>	509-684-8887