

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



### **Club Meetings:**

**Third Tuesday of The Month. In A Socially Distanced Format and The Wearing of Appropriate Face Coverings.**

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## **The Panorama Prospector**

September-October 2020

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### **Notes from The President**

*By Sheila Stratton*

Greetings to all! If you were not able to make it to our meeting in September, I want you to know we missed you. It was so good to see fellow club members and we were thankful that due to the smoke, we were able to meet inside the building at Arden Community Center. We sat in our personal chairs in a circle spaced appropriately apart and we wore face masks.

We discussed the need for a nomination committee and the need to replace the Secretary and a Trustee. Johnie Pitman, Barb Cozza, and Cyndie Dobbler volunteered to be the nomination committee. Frank Stratton gave a report on the sale of equipment. Greg Cozza shared about the new Facebook Group Page. It is a private group for members to communicate with each other. Great way to share what you have been doing or have learned recently that would be of interest to other club members. It was brought up by Frank Stratton that updates for the phone book would be available next month.

It was announced that Mark and Deborah Danielson will be leaving the club due to moving south. They will be full-time RV'ing until they locate the place that they want to move to. Also, Gary and Brenda Kroeger-Piper are also moving south. We send our very best wishes to both of these couples and they will be missed!!

We then shared our activities during quarantine and during this summer. It was a fun time and so good to be back together.

I want to give a special thank you to Jim Retzer and Joe Barreca for continuing to produce The Panorama Prospector during COVID quarantine when there was no activity within the club. We are so appreciative for their faithfulness during a difficult time. We look forward to seeing you in October!

### **Columnar Jointing Home Experiment**

*By Sharon Borgford*



*Along Russel Rd., near Mesa, WA*

Here in the northwest, the sight of columns of rock is a common one. Worldwide, their formation from cooling lava has been a matter of curiosity and investigation for decades. Physicists and geologists

have made progress in their studies of the process, and quite a bit of information can now be found.

Some basic observations are: A land-erupted lava flow must first come to a stop, and stay ponded during the cooling process. The lava begins to cool/dry/shrink at the boundary between a surface and the liquid lava. The surface most often is the air above, but also the ground surface below, on the sides of the ponded flow, and sometimes even against the side of a glacier. Cracks form at the surface and continue to "grow" into the interior of the flow until the lava has hardened into rock. Columns form perpendicular to the cooling surface. Not all columns have 6 sides. Each hardened lava flow has a variety of patterns and sequences. Not all flows are basalt, and not all flows form columns. The physics of the process is only beginning to be understood.

Additional general information can be found at:  
<https://askanearthspacescientist.asu.edu/top-question/columnar-jointing>.  
<http://volcano.oregonstate.edu/columnar-jointing>.  
*Roadside Geology of Washington, Miller & Cowan, 2017, pages 265-268, 325(explanation of fanning features).*

Lucas Goehring, one of the scientists working on the subject, has published a recipe for making your own columns using a cornstarch mixture. This is a great project for students or classrooms, or just fun to do yourself. The title of the paper is "Make your own causeway: recipe for corn starch columns" and can be found at [www.lgoehring.com/Starch\\_columns\\_files/columns.pdf](http://www.lgoehring.com/Starch_columns_files/columns.pdf).

Here is a photo of a chunk of my first "batch". I used a rounded glass bowl rather than the straight sided bowl used in the instructions. The result was that some columns also formed perpendicular to the curved sides and affected the straight columns, just as columns do in nature when the lava cools in channels or depressions.



*Our Vice President, Bob Bristow, is in the process of writing a book on his and his wife's life and adventures. He sent the Prospector a reduced version of Chapter 4 "So You Think You Know What It's Like to be a Lookout?" for publication as monthly installments over the next several months. We would like to thank Bob for this entertaining and informative contribution.*

### **So, You Think You Know What It's Like to be a Lookout? (Part I)**

*Following is a reduced version of Chapter 4 in the book being written by Bob Bristow called "A Hobo's Son and an Orphan Girl."*

*By Bob Bristow*

Before leaving for Oregon State University after the first summer working for the Forest Service, I went back to the Ranger who had hired me and asked about work the next summer. The Ranger said, "Sure, there's a lookout position open." I signed up for it, so I would have a job as soon as school was out.



**Figure 1. Spring Butte Lookout**

### ***Fire School***

By the time school was out the next spring, Luci and I were married. The District Dispatcher was manning my lookout, since her lookout was still snowed in. We had to stay with my folks for a week waiting for snow to melt on Paulina Peak.

During most of that week, I was away at Fire School.

I won the accuracy test. They had a wheel about 10 inches in diameter with a nail driven near one side. They had each student back away until he could no longer tell where the nail was located. I knew my eyesight was sharp. But not as sharp as Luci imagined. If we passed a side street and there was a lady somewhere down it, she was always convinced I had not only spotted the lady, but was admiring her feminine charms!

To graduate we had to find a fire. We were each dropped off along a road that circled the fire at a distance of one to two miles. We were given a compass and a note with a direction and distance as though a lookout had spotted smoke and reported the location in that manner. I plunged into the timber measuring distance by counting my steps. After about a half mile I came to a swamp. I had to turn 90 degrees and measure a distance that I judged would put me past the edge of the swamp. I then measured a distance in the direction of the fire that I guessed would put me beyond the swamp. Then another right turn and back to the original path. When I got to where the fire was supposed to be, I was in a little clearing but there was no fire. I felt very pleased with myself. I had beaten the Forest Service instructor and everyone else. Then I saw another student sitting quietly under a tree. He was one that had gotten out after me, but he still beat me to the fire. I went over

and was talking to him when the instructor showed up to start the fire. The training stopped when a real fire was reported, and we all left to put it out.

### ***The Government Phone System***

Luci and I then went up on the lookout for the summer. You would think that all the days would be essentially the same. No way! We had many adventures. Each day began at 7:00 AM when I would call all the lookouts in the district to make sure they were OK. This was done with a 1920's era telephone. It consisted of a big box with a funnel you would speak into and an earpiece on a cord. You called a particular lookout by using a code of short and long rings controlled by a rotary crank on the side of the box. To check on the health of all the lookouts, I used one long continuous ring. Every lookout reported in each morning except once. I was about to contact the headquarters in Bend so that they could send someone out to see if the lookout had fallen or something when he called and apologized for being late. He said he had to make an emergency trip down to the little shack on the side of the butte.

### ***No Pay from the Government for Luci***

Because I was married, I could be both fireman and lookout since my wife could take over the lookout when I was sent to a fire. She was to be paid during that time as though she was a lookout. Incidentally, my pay had been boosted from that of the previous summer to a whopping \$66 bi-weekly. Up until that time, the lookouts had made pretty good money if they had a six- or seven-day lookout. They got time and a half for everything over 40 hours per week. That pay was too much for the Government, so they changed to a flat rate for all overtime. It amounted to 15% extra for a six-day lookout and 25% for a seven-day lookout, no matter how many hours you actually worked. This meant that I received less for the overtime than for the regular eight-hour days. Another catch was that they kept us up there seven days a week, regardless of the schedule, and then gave us time off whenever it rained. In addition, since we lived in the lookout, the Government subtracted rent from my pay. Luci spent quite a bit of time manning the lookout that summer, but she never got paid for it. Every time I called the District



Ranger, he would say there was a paperwork problem, but it would be fixed. After a year went by, we realized she would never get paid.

### ***The Lookout***

Luci and I settled into the routine of running a lookout. One of the idiosyncrasies was that we could not use the nice new cistern buried below the lookout. The USFS had filled it with their brand-new water pumper. They then discovered that the factory had packed the pump with grease. Enough of this grease was pumped into the cistern to make the water unusable. No problem though, they gave us two five-gallon milk cans and told us how to find a spring located about five miles away.

Figure 1 is a picture of our lookout. The inside of the lookout was about 15 by 15 feet. In the center was the fire-finder. The bed was in the NW corner, and the cook stove was by the entry door. The NE corner was taken up by two radios. The little table was in the SW corner. That allowed a small dresser to be placed in the SE corner. The cooler was a screened-in box under the floor. The outhouse was down the hill about 50 yards. You could drive to this lookout and it actually had a garage. You couldn't park in it, though; it was half-filled with old 1-1/2-volt dry cells. A gas lantern furnished light.

### ***Adventure the First Day***

Our first day on the lookout was a real adventure. Luci tried to get my black and tan coonhound to come up to the lookout. He wasn't going to have anything to do with steps that led 35 feet up into the air. That afternoon, big, black, clouds rolled in and lightning began in the distance. I had been told what to do during a lightning storm. Wait until the storm is a mile away, then go out to the rail and throw the big switch that disconnects the telephone line, unscrew the radio antenna and push it out through a hole in the side of the lookout, and stay away from the fire finder! By the time the nearest lightning strike was within a mile, sparks were beginning to fly in the lookout. I ran out and disconnected the telephone. I then unscrewed the radio antenna co-ax cable and started to push it out with my finger. Bad move! I got one heck of a jolt in my finger. The antenna on the top of the lookout gathered a charge until the voltage became high enough to spark to

ground. When I tried to push the antenna out, all that stored up electricity discharged through my finger. After that, I used a pencil with an eraser to push the co-ax out. As the storm got closer, even the hair on our heads was standing up. Spud, my hound, came charging up the stairs he had been afraid of a short time before. Luci jumped on my lap and Spud tried to get on hers. The sparking continued to get worse. Spud crawled under the bed and Luci crawled into the bed and pulled the covers over her head. That left me to sit there and enjoy the fireworks. Within a short time, both Luci and Spud got used to the lightning and would watch it with me. During later storms, I didn't push the co-ax all the way out. I left it where I could still see it from inside the lookout. As a storm approached, there would be a spark with a snap every several seconds. As the storm got closer, the spark frequency would increase. When there was a steady stream of sparks and the clicking had turned into a buzz, I knew that Spring Butte was about to get hit.

After the storm that first day, we waited about a half hour before connecting the telephone line. By that time, we could see a fire over in the Bend District, possibly at the base of Bachelor Peak. (It was then called Bachelor Butte. The "Peak" was added when the ski resort was built.) After connecting the phone, I called headquarters to report the fire we could see. (Normally, I would have called the Dispatcher on Paulina Peak, but she was still snowed out and was using the office at the headquarters.) She answered and said, "Where have you been? We have been trying to reach you for the last hour!" They were afraid that something might have happened to us since we were new and were just a couple of kids. I said I was just following written orders. She said OK, but next time plug the phone back in as soon as the lightning has quit.

### ***Sylvia's Hot Seat***

The Assistant Ranger told me about the time the Dispatcher, Sylvia, did not follow directions and tried to shoot a lightning strike immediately after it hit. As she swung the fire finder, she moved in between the fire finder and the cook stove. There was a large spark that passed from the stove to her rear end and on to the fire finder. She jumped so high she almost cleared the big fire finder!

**Identify the “Rock or Mineral”**  
**Last month’s rock or mineral:**



**Thenardite** - named after the French chemist Louis Jacques Thenard (1777-1826), a professor at the University of Paris – is a sulfate mineral,  $\text{Na}_2\text{SO}_4$  that occurs in arid evaporate environments such as arid dry saline lake deposits. It crystallizes in the orthorhombic system forming yellowish, white, light brown, or gray colored prismatic crystals. In humid conditions it gradually absorbs water and converts to the mineral Mirabilite,  $\text{Na}_2\text{SO}_4 \cdot 10\text{H}_2\text{O}$  but when it loses its water once exposed to air it changes to Thenardite.

It has a MOHS Hardness of 2.5 – 3 and is brittle with a salty taste and is soluble in water.

Soda Dry Lake near Maricopa in Kern County California (Not to be confused with Soda Dry Lake in San Bernardino County, California) is the location of the most Thenardite specimens that have reached the mineral market during the last 30 years (While in college, in the early 1970’s, my friend and I removed and sold many specimens from this location). Thenardite is found by breaking through the surface crust of the lake and gently feeling around in the briny water below. You must be careful and feel around slowly as the crystal edges are sharp and delicate and will cut your hands. To clean the crystals, you can wash them off in a super saturated briny solution of water and salt.

Being a water soluble evaporate mineral, care needs to be taken to keep them in a cool dry location or it the crystal may degrade.

Thenardite fluoresces white in shortwave ultraviolet light and yellow-green in longwave ultraviolet light.

**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/>

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

## A Quick Note from The Editor

*The restrictions put in place because of the Corona Virus have interrupted and changed many of the plans of the club and its members.*

*This has resulted in the cancellation of the club’s activities until further notice. Meetings have somewhat started in a socially distanced format with all members were appropriate face coverings.*

*It is hoped we can resume a somewhat normal schedule of events soon, but until then. stay healthy and safe.*

## Refreshment Schedule for 2020

**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:	Sheila Stratton	skstratton@hotmail.com	509-207-8506
Vice-President:	Bob Bristow	bristow@theofficenet.com r	509-935-4375
Secretary:	Chana McD.	red.begonia@hotmail.com	509-675-0237
Treasurer:	Frank Stratton	frstratton@outlook.com	509-207-8503
Trustee 1:	Jim Peters	jimnbetty17@gmail.com	509-999-9074
Trustee 2:	Gene Fisher	efisher1@hughes.net	509-680-2487
Trustee 3:	Mark Danielson	mickeesmom.dd@gmail.com	509-207-0447

### Committee Chairs

Program Coordinator:	Sheila Stratton	skstratton@hotmail.com	509-207-8506
Hospitality:	Betty Peters	jimnbetty17@gmail.com	509-999-9074
Historian:			
Newsletter:	Jim Retzer	jimrocks@recycledhistory.com	509-738-2503
Show Chair	Johnie Pitman	jpgpitman@outlook.com	509-684-8887