Place: Union Hall Meyers Street Next to Campus Life In Kettle Falls



Time: 7:00 PM Third Tuesday Each Month (Jan.-Nov.)

The Panorama Prospector January 2008

Panorama Gem and Mineral Club Minutes January 15, 2008 By Ginger Pitman

Johnie began the meeting at 7:05. We had 33 members and one guest. Refreshments for next meeting will be handled by Harold and Suzanne.

Sylvia gave a treasurers report and the Nov rock auction monies for the scholarship fund were: \$297.

We were unable to have a Christmas party; now we all have a head start on next years shopping. The names of 26 members and families were given and paid for, so we hope you receive your Northwest Federation Newsletter. In the newsletter is a list of upcoming shows to attend and a Tri-Fed Field trip plus the 2008 NW Fed Show at Ontario, OR. Not listed was Spokane's Rock Rollers show March 14, 15 & 16, and the North Idaho show, June 6.7,& 8 at Coeur D'Alene.

Johnie asked for cases for both Rock Rollers and our own show. We will have 24 cases so please plan on showing your "Rockhounder's Treasures."

A discussion of our scholarship program decided we would not put our money into the Chewelah Community funds. Our thanks to Steve who will present at Kettle Falls, Diane at Colville and Lucy at Chewelah.

Rex has done a lot of work trying to get the field trips lined up as soon as the weather will permit. He has given lots of choices and needs our written responses as to times and your desired sites. Contact Rex by email or regular mail if you didn't get his lists. (rbarrans@centurytel.net) Please complete the sheet for times and places to help Rex out as soon as possible. Even if you don't know all the dates, decide places and Sat or Sun.

Bill Allen as co-chairman of this year's show gave a show committee meeting report. Remember the show meetings are one hour before our regular meetings for Feb and Mar. There is a whole work sheet of jobs for the show; be sure you get your favorite one.

Steve and Rex are looking into microscopes which display on computers and TVs. It was decided to wait to see if the prices would come down a bit.

Sylvia read a letter from CA wanting to know if we could contribute to a classroom collection of minerals and fossils from our area. (continued on Page 2) **Pride Rocks** *By Joe Barreca*



It's a little late to show off Diane Lentz's prize winning rock (aragonite?) from the Pride Rock contest in October. But it is a good time to think about rocks you want to show off for our upcoming show, Rockhounder's Treasures, Friday, March 28th and Saturday March 29th at the Fort Colville Grange. Johnie Pitman is still asking for people who are willing to fill a display box at the show with their own pride rocks. This rock for instance was picked up at the Rock Rollers show in Spokane, which incidentally is coming up on March 14th to 16th.

For prizes at the Pride Rock competition, Johnie gave out (what else) more rocks, including the crystal that Diane is showing off here. Actually, everyone who entered the contest got a chance to pick a prize from the wrapped packages that Johnie brought. So



(more minutes from page 1)

If you want to give a medium size specimen have it labeled and it's location. Silvia will send a box after the next meeting or it can be dropped off at her shop in Chewelah.

Joe Barreca will present a slide show, <u>Crossroads on the</u> <u>Columbia</u>, at the February meeting on the history of Stevens County, with some emphasis on geology and mining.

After break Johnie explained the cutting of rocks for sphere making. He explained how his homemade machine works and turned it on. Questions were mainly about how long to grind a sphere and the grits used. Joe will provide next months program.

Don't forget to buy your raffle tickets for the "his" and "her" rockhammers! Funds go to our scholarships.

Rock Show Minutes:

The theme this year is "Rockhounder's Treasures" The show is Mar 28, 29 with set up at 8 AM on Thurs. the 27th. Hours are from 8:30 to 6 on Fri and 9 to 5 on Sat. Bill Allen will be co- chairman with Johnie this year. There will be 24 cases to fill, so be planning for yours. We hope to be able to get the cases from Rock Rollers right as they are taking down their show on the 16th. It was decided to continue our practice of having the Grange ladies fix lunch for the workers and dealers on Thurs. noon.

Advertising will be done by Sylvia and Steve. They will look in to getting some information up to BC. Diana will coordinate with the schools. Joe will do the flyers.

An inventory will be made of door prizes and prizes for the ring toss and wheel of fortune and reported on next meeting. We decided on a Grand prize of a Dolphin carved into a rock salt light.

There are plenty of jobs and duties yet to fill so hop right in.



Mount Elizabeth



By Joseph Barreca

Andy Becklin discovered the agates and jasper on Mt Elizabeth during the 1970's while hiking cross country from northeast of Curlew to Rose Valley, just west of Curlew Lake. Over 30 years later a little trio of us went back to visit the site.

Mt Elizabeth is the core of an ancient volcano that erupted about 40 million years ago. During the same period, the Knob Hill Gold Mine formed it's famously rich veins of gold in the vents of a volcano 10 miles or so to the south of Mt Elizabeth. The ash from those eruptions trapped leaves, fish, flowers and insects on the bottom of a lake near present-day Knob Hill and left the fossils in the Stone Rose Fossil quarry.

We were not looking for fabulous gold or treasure however, just agates, which are hard enough to find in this country. Charlie Murley and I had tried to find this site earlier in the summer without Andy. There were some complications on the first trip. We got to the top of a volcanic hill but found very few agates or quartz nodules. We missed a turn on the hike back to the car, and after an hour or so of looking, spotted it as a glint in the sunlight on the side of the next hill over.

Charlie and I rounded up Andy for this trip and started up the same back roads through an old homestead that we had the trip before. This time however, we went a little further southeast and parked at the bottom of a trail leading sharply up the mountain. This is not a trip for the rock club. It's a mile or two uphill through some intimidating obstacles. The site itself is on BLM land that is more or less land-locked by some private land. Although a road goes to the spot, it is blocked with boulders, so we hefted packs loaded with tools, extra



clothes (rain threatened), water and food. The hike was worth it just for the views.

We looked down the length of Lake Curlew from the top of a high cliff. Back from the cliff, the road wound over the top of a rise where the ridges of two long escarpments met. The road continued down one of them to a stand of old yellow pine. Years ago the BLM had wanted to log that stand of virgin forest that overlooks the lake. But Andy had organized a group of locals who protested the timber sale, and the BLM backed off.

There were several patches of bare rock at the top of the mountain where the porous basalt had filled back in with chalcedony. Bigger white vugs held chambers of quartz crystals. Smaller ones would pop out whole nodules of agate and quartz. It is pretty much hammer and chisel work, but a small shovel to remove the overburden and a whisk broom or small paint brush to clean off the surface are handy.

The whole area is mineralized in different degrees. There is a seam of a kind of jasper north of the agate beds. It cuts right into the basalt and must have been part of the vent system of the volcano. This was by no means the highest basalt outcrop in the area. Others further back had some similar nodules that we saw on our first trip, but we didn't find a spot as thick with them as this one.

Bob Adams tumbled the nodules for me and they take a nice polish. Ray Stoddard cut a few slabs from the jasper, and it is mixed with some hard translucent parts, soft pockets and holes full of

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crystals. Thanks Bob and Ray! Literally, we just scratched the surface of this rock site. There's no telling what we might of found if we had done a few things differently. I want to try getting in from a higher road, starting a little earlier, and maybe staying a little later.



As we drove away, we stopped to look back at this massive ancient volcano that towers over the Curlew Valley. There are still mysteries aplenty in those old rocks.

> **The Other Clubs** By Joseph Barreca

Okay, call me naïve but I didn't realize that there are a lot of rock clubs out there that are not tied to the American Federation of Mineralogical Societies. The other day I got an email from a group in Western Washington that likes to explore old mines, mostly in the Darrington mining district. It had a link to the McRocks web site <u>www.mcrocks.com</u>. They had a page of rock hounding field trips all over the US. I was surprised to find one for the Merikay Mine up on Calispell Mt.



(which by the way is now closed by Forest Management.) There were also links to the Northwest Chapter of the Friends of Mineralogy, <u>http://www.pnwfm.org/</u>.

In all honesty, the site was not as extensive or up-to-date as our Northwest Federation of Mineralogical Society site or the National one for the AFMS. They do have some very professional speakers at their symposiums and some connections to *The Mineralogical Record* and *Rocks & Minerals* magazines.

Another interesting place to start surfing for rock clubs is the Washington State Department of Natural Resources web site in the geology section. Check out <u>http://www.dnr.wa.gov/geology/clubs.htm</u>. for a list of

clubs in the State and links. Yes. Our club is listed there. Bottom line, we are not alone.

Identifying Minerals By Stephen Fox

As rockhounds, geologists, mineralogists, and former science teachers we are always being handed a rock and are asked "What is this?" And usually it's ourselves that are doing the asking. We all have our usual stock funny answers when we don't know or are not sure what to say (i.e., it's a leaveright, a Dur - darned ugly rock, etc), but the person handing us the rock expects us to have the proper mineralogy of the specimen locked up within our noggins. For those of you who like the challenge of trying to figure out what you have here is a start of how to do just that. Remember that this is just a start, and learning how and when to use these materials will take some time to learn. All of the quotes and resource material that I use comes from the book 'A Field Guide To Rocks and Minerals" by Frederick H Pough. Second Edition, copyright 1955.

Before I get started I would like to quote a passage from this book. "One might argue that the recognition of minerals is considerably more difficult than that of birds or other living creatures. Whereas a bird may be hard to glimpse, it is relatively easy to identify. A mineral is easy to glimpse but often hard to identify. Its proper identification should be made on the basis of some knowledge of mineral 'natural history' and 'ecology,' i.e., the conditions under which it is usually found." ".....because the minerals we find rarely show completely all of their distinctive features, one must resort to chemical tests and blowpipe tests for further information." (From the Editor's Note by R. T. Peterson)

As most of us are rank amateurs at best, just having the simpler tools and reagent of the chemist is all any of us will need. To get started you will want a source for your flame testing. The best piece of equipment is a bunsen burner hooked up to a small propane canister. If you do not have access to either, an alcohol burner, a paraffin candle, or even a cigarette lighter can be used. But still the best is a gas flame. You will

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need a piece of charcoal that is acid and heat resistant with about a quarter inch groove to place your sample in to be tested. Because you use your lungs on the flame you will need a blowpipe. These are of two types. One is a simple curved tube whose tip is held near the edge of the flame pointed



slightly downward. The other is a straight tube. I recommend glass tubes, as they are easier to clean, but metal tubes work just as well. In a pinch a plastic pen casing will work, but if your not careful it will melt.

If you want to crush some of your sample to burn it, you will need a mortar and pestle, and a platinum wire. When you crush a sample you

mix it with liquid chloride or fluoride, put it on your wire (make a loop first), and place it in the flame. The color you get is an indication of your mineral. As an example sodium chloride (salt) will burn bright yellow, potassium chloride will burn violet, and some copper minerals will burn a bright green. Don't mix your chemicals on your wire as you will not get a 'clean' burn.



Some of the other equipment you are going to want for your home lab is a balance and scale for specific gravity or density determinations, forceps for holding certain specimens in a flame, a magnet, an unglazed white tile for streak determination, a set of hardness points or minerals of the Moh's Hardness scale, an ultraviolet light, test tubes (about 12), and a test tube holder. Many minerals will also react to certain chemicals or acids. Some of these you may want include hydrochloric acid (muriatic acid). Buy the minimum quantity you can get and dilute 1 to 2, or 1 to 5 of water. Always use distilled water, and ALWAYS add acid to the water. Nitric acid - same as for hydrochloric acid. Ammonium hydroxide (ammonia)- dilute one to two of water. A calcium chloride solution can be obtained by dissolving calcite in hydrochloric acid. A weak acid that can be somewhat effective is white vinegar and it is relatively cheaper and safer to use than HCl. White vinegar

also works best when heated, but not boiling hot. Many minerals will react quickly when these reagents are put on them (fizz), but some will react much slower.

Some of the dry reagents you may want, mainly for flame tests, are borax, sodium carbonate, salt of phosphorus (may be hard to get), lithium fluoride, sodium fluoride, cobalt nitrate, and potassium iodide. You may also want oxalic acid, a solution of this will clean iron staining off of your minerals. Silver nitrate for flame tests and other reactions. This one you may find too expensive to buy and you won't really use it much, but a small

sample can come in handy. Zinc can be obtained from old battery casings, and finally you will want some tin.

For your field testing equipment you will want to take along a small magnet, jeweler's loop, unglazed white tile (for those all important streaks), hardness points, and a small bottle of hydrochloric acid (or white vinegar). For your hardness points you can use a finger nail (2), copper penny (about 2.5-3), iron nail (4-5), and a piece of quartz (hardness of 7).



If you do decide to start your own mini lab, start slow and build up. You can start by purchasing equipment and chemicals at your local hardware store, drugstore, and grocery store (vinegar, salt,

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Rock ar	nd Mineral Test Kit		

Storage: White Hydrochloric Acid, Laboratory, Solution, 3.0 \$7.00 M, 500 mL Bottle	12 V 0300	WARD'S Rock and Mineral Test Kit	\$8.75		
970 V 3806 Laboratory, Solution, 3.0 \$7.00	Storage: White				
	970 V 3806 🖬	Laboratory, Solution, 3.0	\$7.00		

(An ad in Ward's online catalog)

sodium carbonate). You can also go to your local



high school and ask if they have any old science catalogs (NASCA, Wards, etc) that you could have. You can also go online to school, chemistry, and lab suppliers to get all that you need. Next time I'll write about how to do a flame test. It's almost as fun as stomping around our back yard.

Membership Dues:

\$15.00 per **household** per year is due to the club Treasurer (Sylvia Allen see below) on the third Tuesday of November for regular members.

Webpage: www.mapmet.com/rocks

Contact: Johnie Pitman, President, 509 684 8887.

We, **The Panorama Gem and Mineral Club**, are a multifaceted 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).

Columbia River Rock and Mineral Shop

Marcus, WA Stephen Fox - Owner (509) 684-2136 SFoxII@wildblue.net



Mineral Identification Mineral/Mine Locations

Bristow Enterprises PO Box 1165 Chewelah, WA 99109 Bristow@theofficenet.com www.minrls.com

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The newsletter is arriving a little late this month. With no Christmas Party due to bad weather, there was not much to say last month and we are now on a schedule where the newsletter follows the meeting so we can post field trips. Speaking of which, be sure to tell Rex Barrans (contact info below) where we should go to collect rocks this year.

Also remember to attend the Feb 19th meeting for the slide show, <u>Crossroads on the</u> <u>Columbia</u> about local history and geology.



Panorama Gem and Mineral Club: Organizational Chart **Officers:** Johnie Pitman 701 B Williams Lake Rd, Colville, WA 99114 684-8887 President: 738-2195 Vice-President: Steve White 1337 Boise Rd, Kettle Falls, WA 99141 935-4375 Luci Bristow PO Box 1165, Chewelah, WA 99109 Secretary: 2633 Highline Rd, Chewelah, WA 99109 935-4388 Sylvia Allen Treasurer: 2782 Sand Canyon, Chewelah, WA 99109 935-8427 Warren Buell Trustee 1: 1269 Peachcrest Rd, Kettle Falls, WA 99141 738-6413 Trustee 2: Joyce Dawson PO Box 1165, Chewelah, WA 99109 935-4375 Trustee 3: Bob Bristow **Committee Chairs** Bev Bockman 208-773-5384 Program Coordinator: 1750 N Havichur Loop, Post Falls, ID 83854 2621 Pleasant Valley Rd 738-4578 Hospitality: Juanita Novak Field Trips: 556 Douglas Falls Rd., Colville, WA 99114 Dianne Lentz 684-4925 rbarrans@centurytel.net PO Box 348, Chewelah, WA 99109 935-8461 Rex Barrans Librarian: Ruth Ross 750 N Lincoln, # 6, Colville, WA 99114 193 Duboise Rd, Colville, WA 99114 Public Relations: Angela Ward PO Box 77, Laurier, WA 99146 684-2857 Historian: Carol Price Newsletter: Joseph Barreca 2109 Hwy 25 South, Kettle Falls, WA 99141 738-6155 Show Chair Diane Lentz 556 Douglas Falls Rd., Colville, WA 99114 684-4925