

Place: Arden
Community Club
Hall Rd
Arden, WA



Time 7:00 PM
Third Tuesday
April - September
6:00 PM October -
March & August

The Panorama Prospector

February 2017

Minutes 1/17/17

by Tiffany McPherson

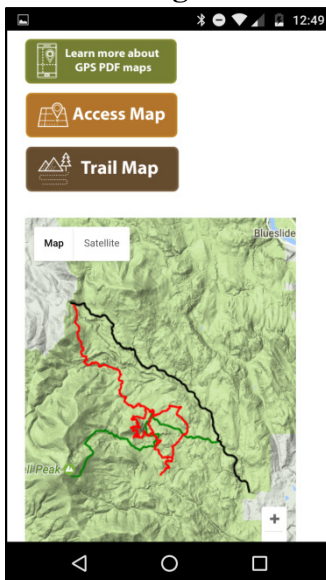
The administrative ranks of the club were MIA at this meeting. (There was a snow storm at home and the annual rock shows were being held in Quartzite and Tucson, Arizona.)

Bill Allen is still looking for more volunteers to fill the display cases at the upcoming Gem and Mineral Show. Several people volunteered but more are needed

Our annual Gem and Mineral Show is March 17th and 18th at the Colville Ag-Trade center. Setup is Thursday, March 16th at 8AM to Noon. Show starts 8:30 AM on Friday the 17th until 6PM. Show time is 9AM to 5PM on Saturday March 18th. We will tear down and clean up the hall after the show.

Sharon Borgford is taking information packets to teachers in Colville. Kids from Kettle Falls and Inchelium are also expected. **There is only one more meeting before the show.** Please attend so we can be prepared.

Sherryl Sinn won the door prize. Joe Barreca gave a presentation on using GPS on your phone to find old mines.

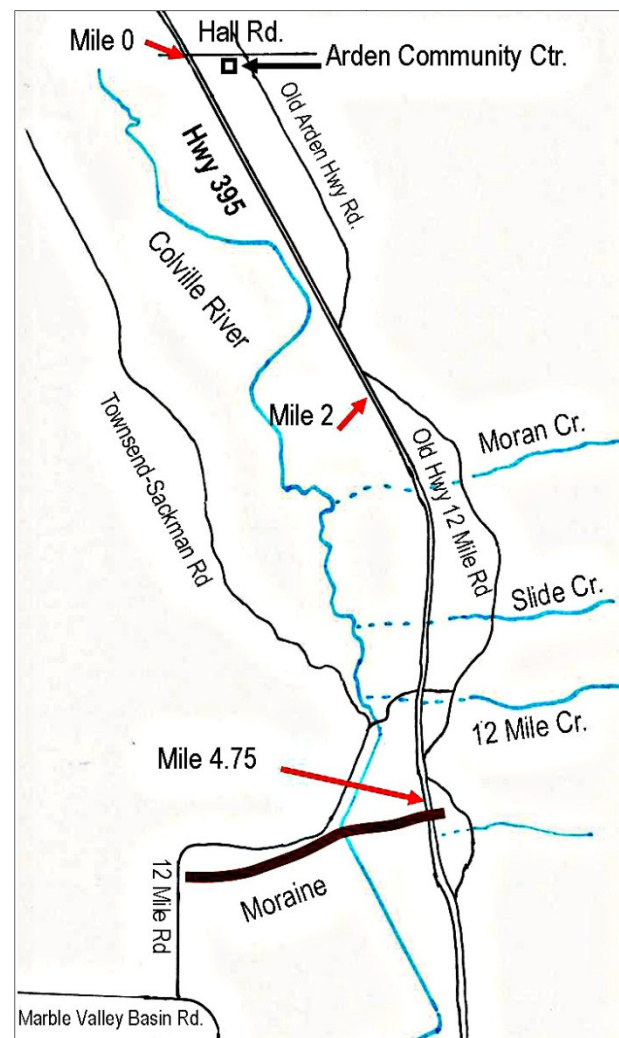


Geology Snapshots - Hwy 395 from Arden to Deer Park

by Sharon Borgford

PART 2

Old Hwy 12 Mile Rd. area and Addy moraine



Our trip mileage log will begin at the junction of Hall Road and Hwy 395. As you travel south on Hwy 395, in about 2 miles you will go up a slight rise. For approximately the next 2.5 miles, you will notice the humpy, undulating terrain on either side of the highway. We are in an area initially occupied

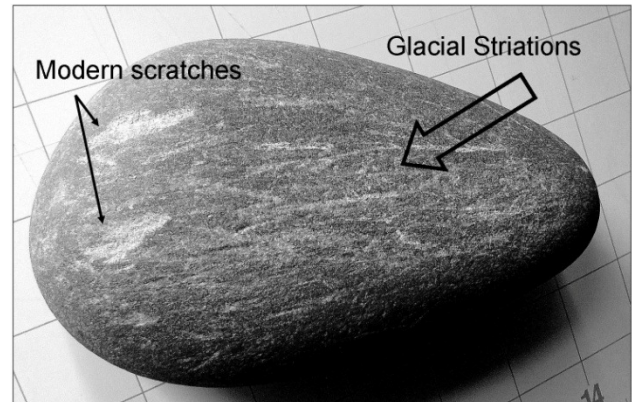
by glacial lakes as the valley glacier retreated, and located "behind" a glacial moraine. The history of this interesting topography is still being studied.

This area also contains outwash deltas of the local creeks. There are 3 creeks that flow from the east towards the Colville River: Moran Creek, (what is now) Slide Creek, and 12 Mile Creek. An article in the May 13, 1893 Colville Republican newspaper describes a major mudslide that traveled down Slide Creek, destroying farms and covering the Spokane and Northern Railroad tracks along the Colville River for several hundred feet. The stream of mud continued to flow for a couple of days. It took several days to clear the tracks and allow the trains through again. A depth of four feet of mud and debris was added to the valley floor as the flow spread out upon reaching this open valley (see map above for Creek location). (*This interesting article can be found in the archives at <http://silveradoexpress.blogspot.com/2015/05/out-of-past.html>.)* The volume of water in these creeks has decreased so much that they no longer flow above ground all the way to the river.



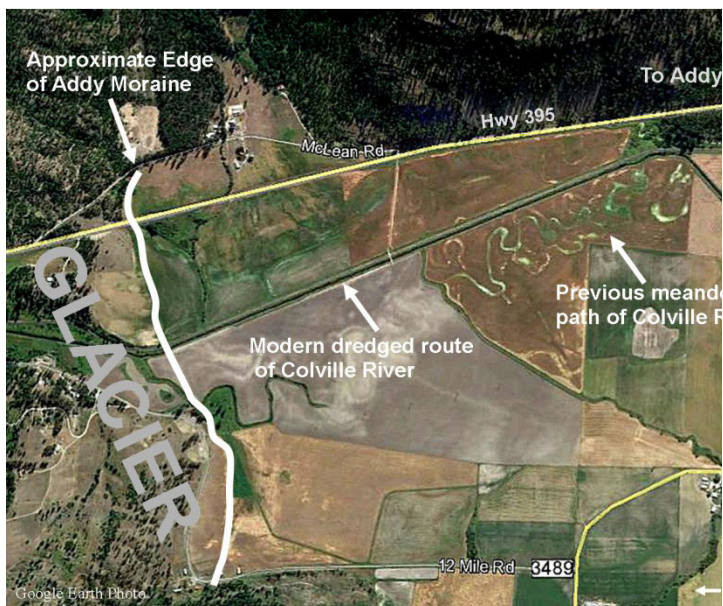
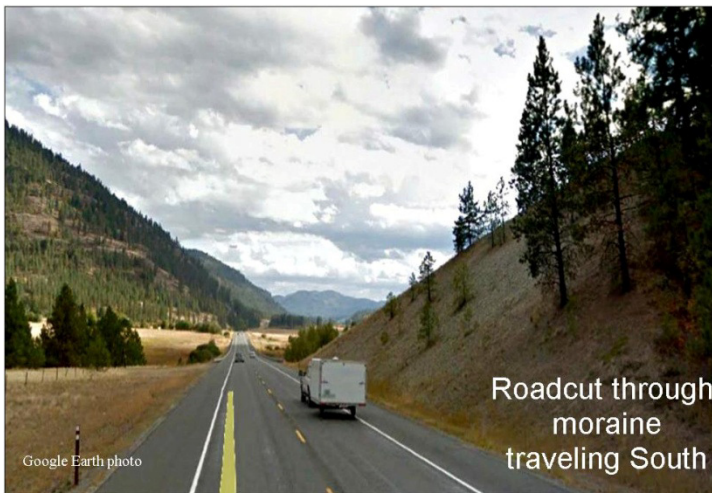
Along the eastern edge of this area is where our farm is located, and we have some firsthand examples of glacial features. These edges of the valley can be the location of glacial lateral moraine material. Glaciers are a conveyor belt for rocks and sediments of all sizes. These can come off the sides (lateral), fronts (terminal or recessional), and be deposited after being carried along the bottom. Moraines are made up of unsorted material that usually has the appearance of having just been dumped there. This material is called glacial "till". This is an ideal place for a rockhound to live, as the

variety of cobbles found is of constant interest. They have often traveled many miles before being deposited here. One of my favorite features to find are glacial striations carved into these small stones - stones that have been scraped along by being imbedded in the glacier. It is impossible to re-create similar smooth grooves with modern tools - the rocks will chip instead. Glacial striations can also be found on a larger scale throughout northern Washington.



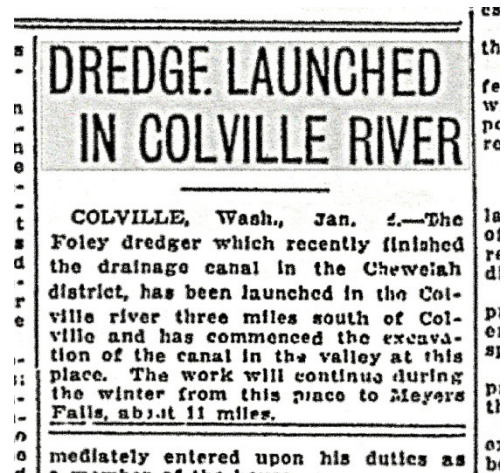
Continuing south, at approximately mile 4.75, the highway cuts through a hill of loose, multi-sized gravel, visible on the west side of Hwy 395 (see next photo). This is a moraine of one of the valley glacier's "last stands". The bedrock creates a narrow passageway in this part of the Colville River valley, and here the glacier stopped for awhile, melting only as fast as it was re-supplied with advancing ice from the North. The longer the front

edge of a glacier stays stationery, the more debris can accumulate, and its face needs to be fairly steep to allow the material coming off of it, or melting out of it, to pile up. This moraine stretches across the whole valley. It is fun to imagine what the glacier looked like at its height while temporarily parked here. While the glacier filled the valley, the Colville River would have flowed south. It did not gain its northward direction until the glaciers had melted out of the valleys, opening the way to the Columbia River.



From the moraine, you descend into a flat portion of the valley, where the Colville River meanders, or at least previously meandered. Though they are hard to see from the highway, a Google Earth view between the town of Addy and the moraine to the

north plainly shows many paths the river has occupied in the past. The river has been dredged and straightened at various times between 1910 and 1958 to control flooding, to accommodate railroad track improvements, and to allow the fertile soil to drain and be available for cropland. Occasional clean up is still done. The following notice appeared in the Spokane Spokesman-Review on Jan. 6, 1911:



The steep rock faces and volumes of fallen talus on the east side of the highway as you approach Addy from the north are Addy quartzite. Next time we will briefly introduce the history of this formation and some of the fossils found near Addy.

References:

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- Bennet, M., Glasser, N., 2009 Glacial Geology, 2nd Edition, Wiley-Blackwell, pg 262.
- Bjornstad, B., Kiver, E., 2012, On the Trail of the Ice Age Floods, The Northern Reaches.
- Hyndman, D.W., Alt, D.D., 1984, Roadside Geology of Washington.
- Hurley, B., written communication, 2017.
- Kahle, S.C., Longpre, C.L., Smith, R.R., Sumioka, S.S., Watkins, A.M., Kresch, D.L., 2003, Water Resources of the Ground-Water System in the Unconsolidated Deposits of the Colville River Watershed, Stevens County, Washington; USGS Water-Resources Investigations Report 03-4128.
- Swartz, W., verbal communication, 2016-17.

All photographs and illustrations by Sharon Borgford unless otherwise noted.
2/13/2017

Rock My World
Gem and Mineral Show
Free
17th Annual



March 17th and 18th
Colville Ag and Trade Center

8:30 AM - 6:00 PM Friday March 17th
 9:00 AM - 5:00 PM Saturday March 18th
 Colville Fair Grounds 317 West Astor, Colville, WA

Wheel of Fortune
Gold Panning
 Gems and Minerals
 from Around the World
Silent Auction
Door Prizes



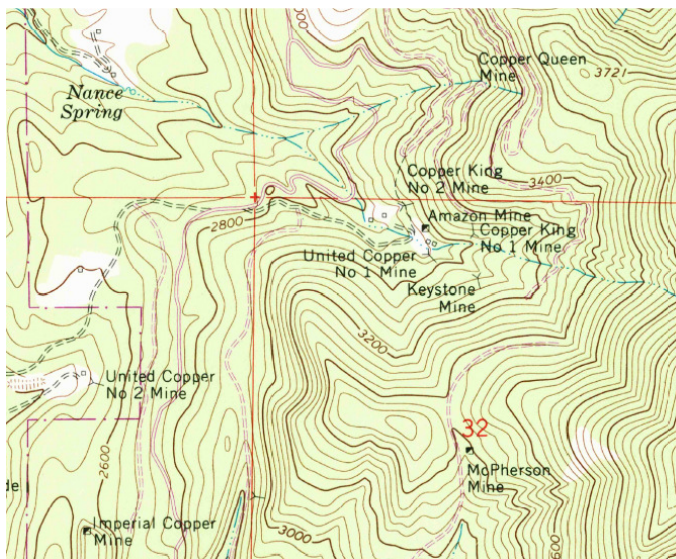
Jewelry
Fossils
Food
Black Light Tunnel

(509) 935-8779

The annual rock show is coming up. You can get ahead in the publicity by going to the website, <http://panoramagem.com/> Click on the poster and you will be able to download a printable file and make as many copies as you like.

Finding Localities that May Be

by Joe Barreca



[Section of the Chewelah Quad map with mines]

While working on the annual update of the Road Atlas of Stevens County I noticed a lot of mine locations that might be of interest to the Club. Trying to figure out which of them are worth investigating takes some effort, but does not involve rocket science or an expensive geographic information system (though I'll admit that helps).

Anyone can download digital quad maps from this government website for free, <https://ngmdb.usgs.gov/maps/topoview/> There are two wonderful things about these maps:

1. They show adits and shafts of old mines
2. You can use an app on your phone to take you right to them.

The downside is that the map does not show what metals and minerals could be around those old mines. To cover that part of the process, you can use the [Geologic Atlas of Stevens County](#). But another book may be an even better source for information on the shafts, tunnels and what was actually produced. [Discovering Washington's Historic Mines, Volume 6](#), by Woodhouse, Jacobson and Pisoni is available on Amazon or through Coffee and Books in the Town Center/ Chase Bank Building in Colville. Virtually every mine on the quads is covered in this book.

But don't stop there. It will be a good idea to check on the ownership of the mine property. Places that are now owned by the Forest Service, the Bureau of Land Management or the State Department of Natural Resources are much less likely to be claimed or fenced off. You can determine land ownership on the [Stevens County Assessor's website](#). There are some caveats on this site. When looking for parcel information you need to use the Internet Explorer Browser and the Microsoft Silverlight plugin. The Chrome Browser does not work. Firefox might. Also read the tutorial pdf on how to do a map search and use the "mapsc" option. Even then, if an area does not have a parcel number on it, the system will show the previous parcel information even though the one you clicked on with no parcel number is government property.

Once you have some mines in mind it is a good idea to download and check the photography on [Google Earth](#) to see if there are visible signs of a mine and what the terrain looks like in general. I'll show a sample of this method in the next newsletter.

Localities That Used To Be - Part II

by Bruce Hurley

Grossularite Garnet – Adelaide Mine, Humboldt County, Nevada

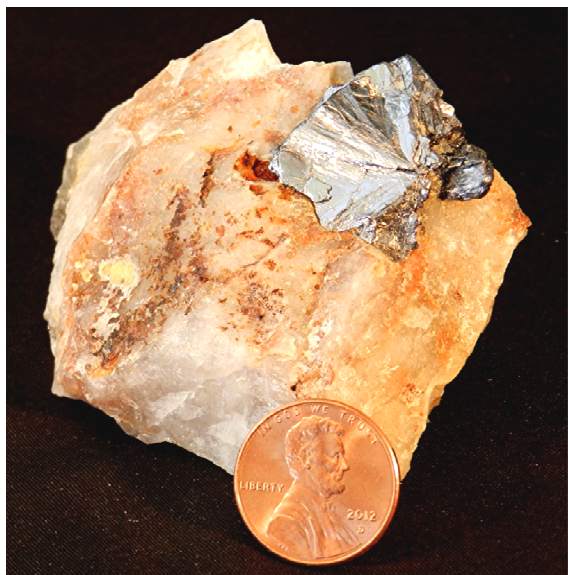
About one hundred years ago, copper was needed in great amounts for shell casings for World War I.

The Adelaide Mine was worked primarily for chalcopyrite (copper-bearing pyrite), but also contained some very attractive grossularite.



Molybdenite – Rock Creek Area, Humboldt, Nevada

Molybdenum metal is an important alloy to harden steel and increase its melting temperature. As a Jet Age metal, “moly” was heavily prospected for across the West, and the molybdenite (molybdenum sulfide) crystals in quartz from this area are striking specimens.



Realgar – Getchell Mine, Humboldt County, Nevada

The Getchell Mine was likely the first true “no see-um” (low-grade, very high tonnage) gold deposit to

be mined. But in the early 20th Century, the gold was “refined” by roasting the realgar-rich (arsenic sulfide) ore, at least until the sheep downwind began to die from feeding on arsenic-tainted grass. The Getchell then became inactive until the bulk-tonnage gold rush of the 1980’s, and those friendly with the caretaker could get in to collect, if they followed the rules. Someone eventually re-assayed the arsenic-rich zone, and soon after more environmentally-friendly recovery methods allowed the mine to again produce gold and silver.

Stibnite – White Caps Mine, Nye County, Nevada

The White Caps Mine near Manhattan, Nevada, first produced gold and silver in 1911, along with the by-products mercury and arsenic. The White Caps hosted fine specimens of stibnite and realgar. It was possible to find ore dump specimens of stibnite in calcite veins until the early 1980s, when the White Caps was once again mined for gold and silver. This last mining was by open pit, which encompassed both the old underground workings and the dumps.



Membership Dues:

\$20.00 per household per year is due to the club Treasurer

Johnie Pitman (address below) on the third Tuesday of November for regular members.

Webpage: <http://panoramagem.com/>

Contact: Bruce Hurley, President, 509-413-2768.

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).

Last Meeting Before the Rock Show

The monthly club meetings at the Arden Community Center will begin at 6 PM.

We re-up our membership dues in November to keep in sync with the Northwest Federation of Mineralogical Societies newsletter subscriptions. If you have not paid dues for 2017, you may stop getting this newsletter.

Program "Volcano" a video.

Paleontological Resources Preservation Rule

The proposed rule would address the management, collection, and curation of paleontological resources on or from Federal lands administered by the Department of the Interior using scientific principles and expertise, including collection in accordance with permits; curation in an approved repository; and maintenance of confidentiality of specific locality data.

The Paleontological Resources Preservation Act authorizes civil and criminal penalties for illegal collecting, damaging, otherwise altering or defacing, or selling paleontological resources, and the proposed rule further details the processes related to the civil penalties, including hearing requests and appeals of the violation of the amount of the civil penalties.

Discussion of PRPR

As drafted these regulations are either so impractical or vaguely defined as to create a detrimental impact on the amateur collecting of fossils on public lands. They create a spider web of bureaucratic red tape which will stifle future research into invertebrate and plant fossils. Had these regulations been in place for the last 100 years, thousands of new species discovered by amateurs and hobby collectors would never have been contributed to science. Innumerable elementary school students across the country would not have received educational programs from local fossil lovers and perhaps been given their first fossil. Many paleontologists in America would not have had their interests kindled by the thrill of discovery.

from: <https://www.savefossilcollecting.org/> (with some spelling and grammar corrections.)

Panorama Gem and Mineral Club: Organizational Chart

Officers:			
President:	Bruce Hurley	10617 W. Lakeside Lane, Nine Mile Falls, WA 99026	509-413-2768
Vice-President:	Bob Bristow	PO Box 1165; 2567 Mud Lake Rd. Chewelah WA 99109	509-935-4375
Secretary:	Anni Sebright	POB 293, Clayton, WA 99110	509-276-2693
Treasurer:	Johnie Pitman	701 B Williams Lake Rd, Colville, WA 99114	509-684-8887
Trustee 2:	Gene Fisher	295 Gold Creek Loop Rd, Colville, WA 99114	509-684-8546
Trustee 3:	Bill Allen	2633 Highline Rd, Chewelah, WA 99109	935-8779, 936-2446
Trustee 1:	Sherryl Sinn	725 S. Chester, Colville, WA 99114	
Committee Chairs			
Program Coordinator:	Bev Bockman	1750 N Havichur Loop, Post Falls, ID 83854	208-773-5384
Hospitality:	Debora Danielson	1365 Arthur Ct, Kettle Falls, WA 99141	509-960-1535
Club Shop:	Gene Fisher	295 Gold Creek Loop Rd, Colville, WA 99114	509-684-8546
Historian:	Carol Price	PO Box 77, Laurier, WA 99146	509-684-2857
Newsletter:	Joseph Barreca	2109 Hwy 25 South, Kettle Falls, WA 99141	509-738-6155
Show Chair	Bill Allen	2633 Highline Rd, Chewelah, WA 99109	935-8779, 936-2446