

Place: Arden  
Community Club  
Hall Rd  
Arden, WA



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

## The Panorama Prospector March 2013

### Panorama Gem and Mineral Club February 19, 2013

#### Show Meeting

Bill Allen opened the discussion. The following items have been accomplished:

Advertising - Sylvia Allen, Bruce Hurley  
Door Prizes - Grand Prize - Bill Allen -

Item: Rock Salt Lamp

Vendors have been asked to provide an item for the Hourly Prize Drawing

We have some items left from last year's Show.

Theme: Rocks of Ages

Floor Plan: Bill has the floor plan completed.

Volunteers for Activities:

Wheel of Fortune - Scot Jackson,  
Jerry Novak, and Jerry Hertler

Grab Bags - Arden Fritz, Rita  
Cordrey, and Matt Harbin

Black Light - Bill Allen, Rita  
Cordrey, and Bill Lupton

Silent Auction - Sylvia Allen,  
Becky Dobbs

Gold Panning - Dave Pacquette,  
Luke Pacquette

Knapping - Chuck Prentiss

Food - Matt Harbin and the Spirit Summit

4-H Group

Door - Luci Bristow

Vendor Name Badges - Luci Bristow

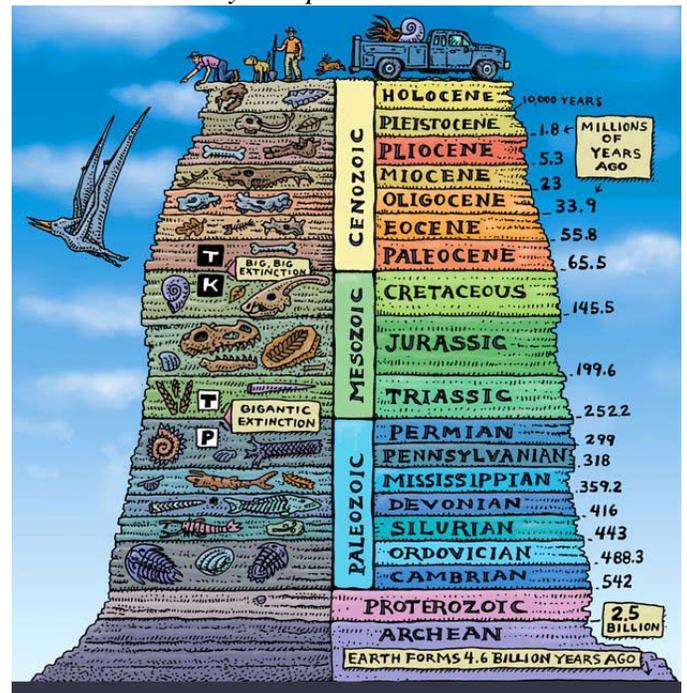
Tickets - Johnie Pitman, Luci Bristow

Road Signs - Matt Harbin, Kay Lupton

Early Morning Snacks: Thursday - Bill Allen;  
Friday - Bill Lupton; Saturday - Bruce Hurley

### Ages of Rock

By Joseph Barreca



[Ages of Rocks Poster by Ray Troll]

Above is a poster depicting the Geologic Time Scale. It illustrates one side the pun used in the title of the upcoming 13<sup>th</sup> annual Rock Show on March 29<sup>th</sup> and 30<sup>th</sup>, Rocks of Ages. Of course Rock of Ages, the familiar title of a spiritual refers to Christ hanging on the cross. Together the two meanings embody an age-old rivalry between religion and science. Indeed, for the scientists who developed this time scale, it was an uphill battle with biblical belief systems to even depict a world older than 6000 years.

While there may be value in espousing one side or the other in that continuing rivalry, there is a lot more value in explaining as far as possible in this short article what the heck is going on in this time scale. To do that, we need to jump into the

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## Meeting Minutes

President Bruce mentioned that the Rock Rollers are having difficulty in obtaining the Fair Grounds for their Show in 2014. A discussion was held in regards to our needs for the next year's Show. It will depend on when the Rock Rollers can establish their Show as there are some problems in balancing the two shows. This problem is in-work. Bill Allen gave the Treasurer's report.

Luci still needs individuals to help at the Door. Please talk with her if you can help.

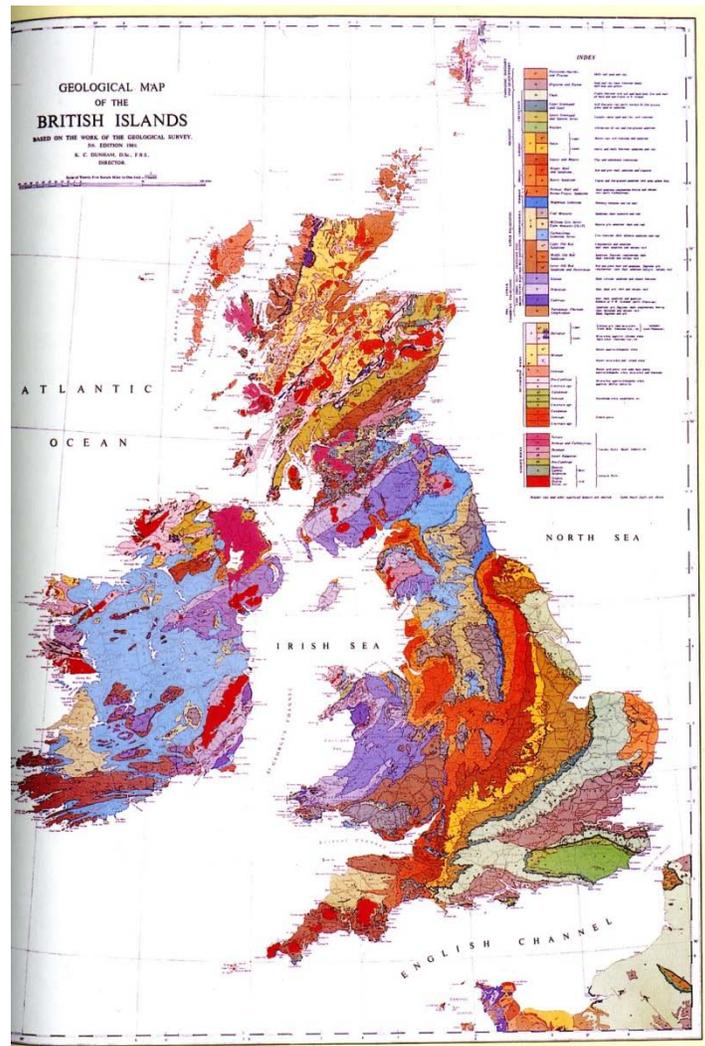
A Hospitality person is needed.

Field Trips – We have been asked to provide information on our favorite field trips at the next meeting to see if the places are still available to hunt. A Field Trip Chairman is needed.

Becky Dobbs has agreed to be our Door Prize Chairman at the Club Meetings. Jerry and Vanita Novak have been our Chairmen for this past year. The Club thanks them for a job well done.

way-back machine and look at the late 1700s and early 1800s when geology was first recognized as a science. This was a time when they were having trouble developing a reliable clock, let alone a calendar for the history of the earth. There was no carbon dating or even speed dating. So they couldn't just pick up a rock and say "This was formed 65.5 million years ago." What they had was the recognition that dirt builds up on top of things so that older stuff is buried deeper in the earth. This was described as early as 11<sup>th</sup> century by **Ibn Sīnā**, a Persian writer. Even earlier **Aristotle** and then later **Leonardo de Vinci**, recognized that fossils were once living things. In the late 17th century, **Nicholas Steno** argued that rock layers (or strata) are laid down in succession, and that each represents a "slice" of time.

**William "Strata" Smith** demonstrated this concept directly with his development of a geologic map of England, "The map that changed the world", in 1815. One of the affects of this map was that it showed the relationship between fossils and the relative depth of beds of coal. This realization had huge economic implications. Another affect was that because the forms of life found in the fossil strata changed Noticeably



from layer to layer, a theory of evolution was the most logical and consistent way to explain it.

[The Map that Changed the World]

Indeed the extinction and development of new species became the defining characteristic of the Geologic Time Scale. Huge extinctions occurred 65.5 million years ago (MYA) and 252 MYA. They determine the largest breaks the scale between the Paleozoic (before 252 MYA) and the Mesozoic and between the Mesozoic and the Cenozoic, 65.5 MYA. Of course scientists could only guess at the age of these events when they were discovered but their order remained.

So what's with all this "zoic", "cene" and "ian" naming? At the time, educated Europeans could write and speak to each other using Latin and Greek, which became the language of science. It actually makes sense once you understand it. So "Cenozoic" has Greek roots that mean "New Life". It depicts the era after the extinction of dinosaurs around 65 MYA and the predominance of mammals and modern fishes, reptiles etc. The extinction is associated with the impact of a

meteor on the Yucatan Peninsula at that time. The Cenozoic extends from 65 MYA to present.

The Paleozoic Era, derived from (from the Greek *palaios* (παλαιός), "old" and *zoe* (ζωή), "life", meaning "ancient life") is the earliest of three geologic eras of the Phanerozoic, "Visible Life" eon. It is predominated by sea life which exploded onto the geologic record at 542 MYA. The most significant evidence of that locally are the Trilobites we find near Metaline Falls. The end of the Paleozoic era is associated with the impact of an object estimated to be 300 kilometers across possibly near Australia or the Falklands.

Sea life predominated in the Paleozoic Era. Fish, reptiles, amphibians and vascular plants existed by the end of the period and the remains of the plants of the "carboniferous period", 359 MYA to 299 MYA form the coal seams we mine today. The two periods within the "Carboniferous Era" are "Mississippian and Pennsylvanian." These names take us on another track of geologic naming conventions, names derived from places. Significant fossils characterizing these periods were found in Mississippi and Pennsylvania, the later including coal.

The gigantic extinction at the end of the Permian era, named after the ancient Russian kingdom of Permia, where typical strata of the era were identified, ushered in the Mesozoic or

"Middle Life" era. Which has three parts, the Triassic (named after three layers, red, white and black, of rocks found in Germany), the Jurassic, named after the Jura Mountains within the European Alps, and the Cretaceous, named after



[coccolithophores form calcium carbonate, chalk] the Latin word for chalk and is identified with the limestone deposits around the Mediterranean Sea (think marble). Also the most famous dinosaurs lived during this period including the Tyrannosaurus Rex. (So much for Jurassic Park.)

The Geologic Time Scale aligns with shifts in tectonic plates, climate changes and all other historic events in “deep time”. The relatively short, 12,000 period since the end of the last ice age encompassing most of human history, is barely a blip on this scale. New ages and other subdivisions are constantly being added, but the general outline remains the same and continues to reveal new stories in the rocks of ages.



### **A Jarring Idea**

*By Joseph Barreca*

I have been taking some of my best rocks and putting them in the window for years now. Maybe some of you have done the same. If so you may have noticed that they tend to collect dust, dead insects, spider webs and dirt. You can't just get in there with a vacuum cleaner or zip, there go your precious rocks.

My original brilliant idea was to construct one of those shelves you sometimes see in workshops with jars hanging underneath full of screws, bolts etc. I've had the jars collected for some time but didn't get around to building the shelf. Last week I needed to clean the window sill one way or another and decided to at least put the rocks in the jars and stack them up. The light on them is great. I'll get to the shelf some time...

### **Chips From The Outcrop**

*By Bruce Hurley*

The Spokane Rock Rollers have indeed been locked into the last weekend of March in 2014 for their annual show, and they hope to keep that time slot for the foreseeable future. So, we will adjust our show to mid-March in 2014, which should work out well for all concerned. Thank all

of you for being reasonable and flexible in smoothly making this change.

The Rock Rollers have two spring trips planned which are also on our trip interest list. They are going to the Saddle Mountains on April 20<sup>th</sup> and to Succor Creek in Oregon, May 9-12. Panorama members are welcome to participate. The arrangements are as follows:

**Saddle Mtn. Saturday, April 20** – Meet at 9:00 am at Sprague Lake Westbound Rest Area, or 11:30 at the Mattawa Shell Station on the far side of town.

**Succor Creek. Thursday, May 9** - meet in the evening at camp to choose among possibilities

### **POTENTIAL EXTENDED FIELD TRIPS**

1. Emerald Creek, St. Maries, ID (garnets, fee site)
2. Red Top, near Blewitt Pass, WA (agate, geodes, quartz, amethyst)
3. Lolo Pass, ID Highway 12 on ID/MT border (smoky quartz crystals)
4. Crystal Park SW of Butte/Wise River, MT (crystal quartz)
5. Gem Mountain near Phillipsburg, MT (sapphires, fee site) \*
6. Glass Butte near Riley, OR [W of Burns] (obsidian, cinnabar)
7. Davis Creek, south of Lake View, OR (obsidian, permit required)
8. Virgin Valley, NW corner of NV (opal, fee site) \*
9. Spencer, ID (opal, fee site, closed in 2012) #
10. Clarkia Fossil Bowl near Clarkia, ID (plant fossils, fee site) \*
11. Mica Mountain near Deary, ID (mica, tourmaline, beryl) \*
12. Kemmerer, WY (fossil fish, two fee sites) & Montana sapphires \*
13. Extended trip [one week] to Utah & Nevada; would include Topaz Mountain (topaz, other minerals) & Antelope Springs (trilobites, U-Dig fee site) \*, near Delta, UT; Garnet Hill near Ely, NV (spessartite) & Cottonwood Canyon (ammonites) near Currie Junction, NV

\* Private

for Friday's field trips. 9:30 am Friday- Go out on chosen field trips. 9:30 am Saturday- go to the various Jasper areas. Sunday, May 12 - Pack up and leave camp by 9:30 am and go to Haystack Butte for Jellybean jasper. More information is available for the Succor Creek trip at: <http://www.rockrollers.org/WP/forum/?vasthtmlaction=viewforum&f=2.0> .

The 2013 Panorama show is almost upon us, and I think everyone is excited about our new location. Please keep some of your time free to help out at the show, as whenever an event undergoes a change of venue, unforeseen problems always seem to show up.

Please come to the next meeting prepared to vote for your choices for “day trip” field excursions this summer. This newsletter also includes a list of potential extended field trips for your consideration. Please also come ready to discuss how we need to plan and manage our field trip schedule for the summer. Wear your volunteering shoes, because we need some leaders to help maintain our club’s reputation for

consistently good trips.

# Rocks of Ages Gem and Mineral Show

Free  
13th Annual



## March 29th & 30th Colville Ag and Trade Center

8:30 AM - 6:00 PM Friday March 29th  
9:00 AM - 5:00 PM Saturday March 30th  
Colville Fair Grounds 1 block South of Flour Mill

Wheel of Fortune Jewelry Fossils  
Gold Panning Food  
Gems and Minerals from Around the World Black Light Tunnel  
Silent Auction Door Prizes

(509) 935-8779