Place: Arden Community Club Hall Rd Arden, WA



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

The Panorama Prospector January 2014

Panorama Gem and Mineral Club

December 17, 2013 By Anni Sebright

The business meeting was preceded by a delicious Christmas potluck with 18 members present.

Jerry Novak spoke about the July 31 through August 4, 2014, Multi-Federation field trip gathering in Terry, Montana. Area ranchers will be opening their land allowing digging for dinosaur fossils, Montana Agate, Petrified Wood, Jasper, and other "goodies."

Scott and Bruce also spoke about other possible day and two-day field trips. Some of the "possibles" may take us across the border into British Columbia. Scott welcomes hearing ideas and requests you may have.

The 2014 slate of officers for the Panorama Gem and Mineral Club is as follows: Bruce Hurley, President; Bob Bristow, Vice President; Anni Sebright, Secretary; Johnie Pitman, Treasurer and Becky Hobbs, three year Trustee. There were 18 voting members with a 19th member joining us during the gift exchange.

A short program and Mineral Bingo ended the evening.



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Bats and Rocky Places

Ella Rowan Wildlife Biologist, WDFW



(Editor's note: This is an article from our guest speaker at the January Meeting, Ella Rowan. She is going to talk about bats. I think right off we should have her explain this picture. Hope to see you there.)

How many of you will admit to screaming, arm waving, and running franticly at the site of a bat? Many of us have encountered bats in caves and mines during our hobbies or professional activities, but the age-old adage applies..."they're more afraid of you, than you are of them". You're nearly 10,000 times larger than one of our bats! Unfortunately, people think the information about bats seen in movies or read about in folklore is true, and this has led to terrible treatment of these animals.

Granted, bats have sharp teeth for eating hard insects, but they do not attack people. Less than one out of one thousand bats is estimated to have rabies (a lethal disease), but bats aren't going to

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Minutes from the November 19th Meeting

By Luci Bristow

Bruce opened the meeting with greetings to everyone. We discussed several items one of which was the Field Trip group. Apparently the committee decided to make Bob Bristow Chair. The others members are Jerry Novak, Scott Jackson and Becky Dobbs. They will be meeting to discuss eventual field trips.

Arden presented the list of nominees for the Club's leadership nest year. They are: Bruce Hurley, President; Bob Bristow, Vice President; Ann Sebright as Secretary, and Johnie Pitman as Treasurer. We have a Trustee's position open. The two individuals seeking this position are Eugene Fisher and Becky Dobbs. There will be a vote taken at our next meeting.

Bill Allen talked about the Rock Show for next year. He plans to set-up of the show on March 6, with a start date for the Show of March 7 and 8. All of the vendors have been notified. There will be no outside booths this year.

Johnie gave the Treasurer's report.

We had a very good Scholarship Auction! Thanks to everyone we made some money to help fund our scholarships.

You are all invited to our Rock Club Christmas Dinner to be held on December 17, 2013 at 6:00 PM. If you would like to bring a gift, please limit the amount to \$10.00 per gift. Please mark if the gift is for a man or woman. We are all asked to bring a casserole, or a dish of your favorite to share.

bite you unless you pick them up. Kids and pets sometimes pick up a sick bat they find on the ground, so make sure to vaccinate your pets against rabies and have a talk with your kids about watching wildlife from a distance. Why are bats amazing? Because they have developed some of the most fascinating adaptations and help humanity! Unusual adaptations such as echolocation, flight, torpor, hibernation, and delayed pregnancy have allowed bats to master their niches across the world. They have also contributed to research on sonar, aerodynamics, and human medicine. Most bats can live 10 to 30 years, and we suspect hibernation may be the key to longevity. Bats are estimated to save US farmers alone \$22 billion annually through insect control and the prevention of damaged crops.

Fifteen species of bats live in Washington, all of which consume insects. Each species has different physical adaptations such as the shape of their wings and ears, and the frequency of their echolocation calls which have developed to master catching insect prey in a particular habitat type or manner. Most bats do not reproduce until they're at least one year old, and usually only have 1 pup per year. Pregnancy lasts 2-3 months, with the pups being born during June or July. The pups are nursed for 1-2 months until they can fly, after which they follow their mothers for a few weeks to learn social behaviors, how to forage, echolocate, and find safe roost sites.

Safe roost sites are critical for bats, and disturbance may lead to the death of these animals through abandonment of their pups, loss of optimal sites, or the burning of valuable fat reserves. Most bats in the northern US hibernate during winter, and require very specific microclimates. They often have to travel long distances to find ideal caves, mines, cliff crevices, trees, or other structures. All hibernating species slow their metabolism, and drop their temperature, heart and respiration rates. By slowing their metabolisms and remaining cold, they can live off their fat reserves for many months. If bats are disturbed by noise, light, predators, diseases, climate changes or other factors, they will arouse to try to protect themselves. Bats enter hibernation with enough fat to arouse every few weeks to urinate, defecate, sleep, and perform physiological processes, but any additional unplanned arousals will cause them to use up their fat and they will die of starvation before spring and their insect prey return.



Bats with fungus on their muzzles.

A new disease known as White-nose Syndrome (WNS) has killed over 7 million bats in eastern North America since 2006, although there is no indication that WNS affects humans or other

animal species. The disease has spread as far west as Oklahoma, and as far north as Canada (as of December 2013), and is named after the whitish fuzzy fungus (*Pseudogymnoascus destructans*; *Pd*) that tends to grow on bat's muzzles, wings and ears during winter hibernation and causes the disease. The fungus is a cold-loving fungi, but can survive extremely hot and dry temperatures and humidity levels too. Humans may accidentally introduce the fungus and disease to new locations, and research has shown:

- The fungus was likely brought to the United States on a human that had recently been in a European cave. The fungus is a native species in Europe, but an introduced species in North America.
- Bats can contract the fungus from the environment, so if people or bats bring the fungus to a new location, they can cause infection in bats.
- Spores of the fungus can attach to clothing and gear, and can be airborne in infected caves; therefore, can be carried to new locations by humans.

If we continue to lose as much as 100% of bats at each infected hibernaculum, we will see significant population declines and possible extinctions of entire species. Bats usually only have one pup per year, so it would take a very long time to rebuild their populations (if possible at all). We need to do all we can to prevent Pd/WNS from infecting new caves and mines, as well as new bat species.

How can we help bats? There are many ways!

- Do not enter caves where bats are hibernating during the winter months.
- Do not disturb bat colonies during the summer months.
- ◆ Follow the decontamination protocols established by the US Fish and Wildlife Service to clean your clothing and gear after each cave/mine you visit. Check for updates to the protocol often.

- Do not use clothing, boots, or any gear in WA, if they have been used in states or provinces where WNS has been found.
- ♦ Notify the US Fish and Wildlife Service and the state's Department of Fish and Wildlife immediately if you see bats exhibiting any unusual fungal growth, or unusual behaviors (such as flying outside of hibernacula during freezing temperatures), or appear sick in some other way.
- Notify your states' Department of Fish and Wildlife any time you discover hibernacula or other large roosts (more than 10 bats).
- Conduct humane exclusion from building roosts when necessary. The timing and methods are critical to prevent entombing bats and their pups in the building.

Great link for more information:

Bat Conservation International http://www.batcon.org/

Chips Off The Outcrop

By Bruce Hurley

Our November scholarship auction is always an enjoyable event, and this years' auction was a memorable one, indeed. Both the variety and quality of the donations provided were exceptional, and so many items were donated that we were unable to get through them all at the meeting. I would like to thank the many folks who donated materials for this worthy cause. I know the college-bound Stevens County students who receive scholarships from our club are always very grateful for this support.

Those donations we were unable to get to during the November meeting will be added to future monthly silent auctions. Money raised from these auctions helps to support other ongoing club activities.

The time between Thanksgiving and Christmas is always too busy, and most people need a break sometime in between, just to do something else for a while. I certainly do. Looking at the calendar last week, it dawned on me that our show is only three months away. If you are like me (hopefully not), everything seems

to take longer than you expected, so I decided to start working on what I want to do for a show display case and how to put it together. If you want a quick Holidays diversion, you might want to start that process soon, too. Time gets away fast, in the New Year.

Stone Crafters Needed



The small piece in this picture is a massage tool that William Thompson would like copied. If you want to take on a rock-on-antler crafting project contact wthompson@plix.com.

Spheres Come Round Again



[Scott Jackson's collection of rock spheres.]

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One of my first articles in this newsletter, nine years ago this month, was about making round rocks. It described the tools and techniques that Johnie Pitman uses to make rock spheres. It is still avaliable on our website in the Newsletter section for 2005. I think it is safe to say that our current rock-shop curator, Scott Jackson, has gone to even further extreems making rock spheres. He sent 140 of them to sell at Quartzite, Arizona. The competition from Chinese-made spheres limited his sales to 5. This makes a point that you can't do this for money, but you can do it for love of rocks and the distinction of having a very revealing specimen of a local rock to display.



The one above caught my eye last year. At first I thought Scott had snuck an industrial-size ball bearing into the collection. In fact, it is pyrite from the Big Iron Mine discussed in the November Issue. Let me tell you, it is one heavy rock. Almost 4" in diameter and polished like a mirror, it reflects everything within sight in one tight ball and adds it's own twist to it.

It also breaks one of Scott's primary rules about what makes a good sphere. Solid color doesn't cut it. He wants to see shapes, lines and colors in a sphere.



[A sphere made of picture Jasper.]

You can't say he is wrong about that. One trouble with that maxim is that colorful rocks are not often hard enough and free of cracks and holds enough to make a good sphere.

You really get to know a rock in the process. Starting with a rock that you have squared off with a rock saw into a cube, you make cuts on the corners until you have 20 more cuts to make until it has 26 sides. From there you need to spend a lot of time at a grinding wheel bringing down those corners even more until it is round enough to go through a series of grindings on a set of triple grinding cups.

You can speed up the process a with a hand grinder outfitted with a water emitter. But this tends to be extremely messy throwing gritty water in every direction. You need protective clothing and a mask, a place to work – preferably outside and a comfortable temperature - preferably in the summer. All this time the rock is often dull and dirty. It takes persistance and imagination to follow this through to the end.



[One of Scott's triple cup grinding setups.]

The size of Scott's spheres range from 1 1/2" to over 6". Each size needs unique sets of grinding cups of the right size. Too small and the rock won't rotate, to large and it won't grind to an even diameter. If there are softer and harder parts in the specimen it can become oblong and out of shape. Scott makes his own grinding cups out of pipe bushings ranging from 1" up to 4". He grinds down the wide end and embeds pads that hold the grit in each one. The slow-rotating motors need to be aligned and water dripped on the sphere as they work it down.

Not only do you need to watch that the sphere is grinding correctly, you need to watch that the motors are not heating up. They usually

run for a half hour on and then cool for a half hour off. As in any grinding operation, you start with larger grit and work down to very fine grit. Scott actually does the final polishes on a separate setup in his house.



When the job is done right, as in this piece of African Queen, you can see into the translucent parts of the rock and follow the grain and pattern in evey direction. Each rock is a little world unto itself. This technique honors the rock by bringing out it's whole complexity. Scott admits that it is "a pain in the butt" to make them. But it also must be a little addicting since he has gone to such lengths to pursue it.

You really get to know your rocks. Agate polishes up well because it is so hard. Barite will also take a polish and has surprising swirls and colors. Jasper becomes 3-dimensional and even pyrite is transformed from a crystaline face to massive flows of molten color.



Membership Dues:

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

Webpage: www.panoramagem.com

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

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).

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& Get Ready for the Shows

This coming meeting will feature a presentation on bats by Wildlife Biologist Ella Rowan at 7:15. We need bats and the bats need us. She will explain.

Before the regular meeting, Bill Allen will hold a rock show meeting at 6:00. The rock show will set up on March 6th and run March 7th and 8th. As usual we will need all the help we can get.



This newsletter is published by the Panorama Gem and Mineral Club. Editor: Joe Barreca, 509-738-6255, joe.barreca@gmail.com.

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