

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



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

**The Feb 21st Meeting**

**Starts at 6:00 PM!**

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## The Panorama Prospector

### February 2006

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#### Panorama Gem and Mineral Club Minutes for January 17, 2006

Johnie called an early meeting beginning at 6:00 PM to discuss our upcoming Show. There were 12 of us present. Each major category for the Show was discussed and our members volunteered to do them. Our theme for this year is: Pyrite – “Fool’s Gold”.

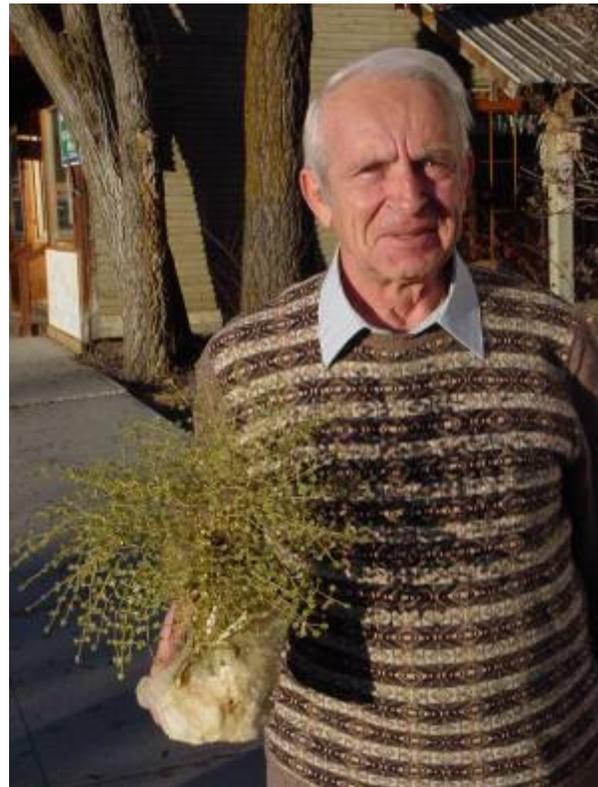
Advertising: Diane Lentz and Sylvia Allen. Joe Barreca will do the flyers and bring a sample to our next meeting. Johnie has made arrangement for use of the Fort Colville Grange Hall. He is working on the floor plan. Wheel of Fortune: Rex Barrans. We will be needing more prizes and maybe some more grab bags. We have a number of them at Keith’s. Johnie heard from all of the dealers except one, and he will call that individual.

Ray Stoddard and Bob Adams will be in charge of the Silent Auction. Johnie will supply the forms. Sylvia Allen brought some door prizes and we will choose the First Prize in our regular meeting. Johnie said that we would, once again, get our display cases from the Rock Rollers club. We are delighted that they are letting us use the cases again. He will need help in getting them. He asked for Demonstrators, and the following individuals will have demonstration tables: Chuck Prentice – Knapping, Bev Bockman – Cabs and maybe Faceting. Bob Bristow – Computer Programs. Johnie – Fluorescent Minerals. Mabel, Margie and Luci will be in charge of Hospitality. Tickets and nametags fall under this category. Johnie has asked that as many as possible be at **Fort Colville Grange Hall on March 30, 2006 at 8:00 AM to help set-up.**

The regular meeting began at 7:10 PM. Steve White said they will be going to Quartzsite again very soon. Johnie will send some money with him to pick up some rings for our Wheel of Fortune. Luci read a joke about being the family dog. Sylvia Allen gave the treasurer’s report. It was moved, seconded and passed that Bev and Bob Bockman continue to represent us at the NW Federation and also continue as our proxy in voting.

#### Romancing the Stones

*By Joseph Barreca*



Most of us rock hounds are field hands. We love to run around the countryside and look for treasures. We have mounds of rough stones in our back yards and

dreams of doing something with them. George Diamantis doesn’t waste too much time looking for good stones. He orders them from around the world or buys them at rock shows. He doesn’t waste much space either. He has a tiny rock saw and a combination of grinding wheels on one shaft made by Pixie that is maybe two feet long. The polishing wheel on the end of the Pixie tends to fling stones around the house, so he polishes by hand with an old toothbrush and Lusterite Gem Polishing Powder by Arrowhead Gemcraft, [www.arrowgem.com](http://www.arrowgem.com), (218) 847-7780. Add a few pairs of pliers hanging on the wall by his table and a Dremel with a carbide bit from Wal\*Mart and that’s about all the tools he needs. There is a big

rock saw in back, but it doesn't get much use in the winter. (Pixie pictured below)



With George it's all about the rocks themselves, and there are thousands of them, that he has taken from a rough slab to a finished piece. He invites you to look at them closely and feel the smoothness as he has. Each one has a history, not just with George, but also with the country it came from, and how it was regarded through the centuries. They each have a monetary value too. When you start with a rough piece of Lapis Lazuli from Russia at \$100 to \$200/ oz. and spend hours on each slice, cutting, rounding, grinding, drilling, polishing and mounting, the value compounds rapidly. Opals can cost \$2000, fire agate from Brazil \$175 apiece.

George advises, "Don't think about the money". Each stone has a look, the star in the sapphire, the fire in an opal, the flash of the

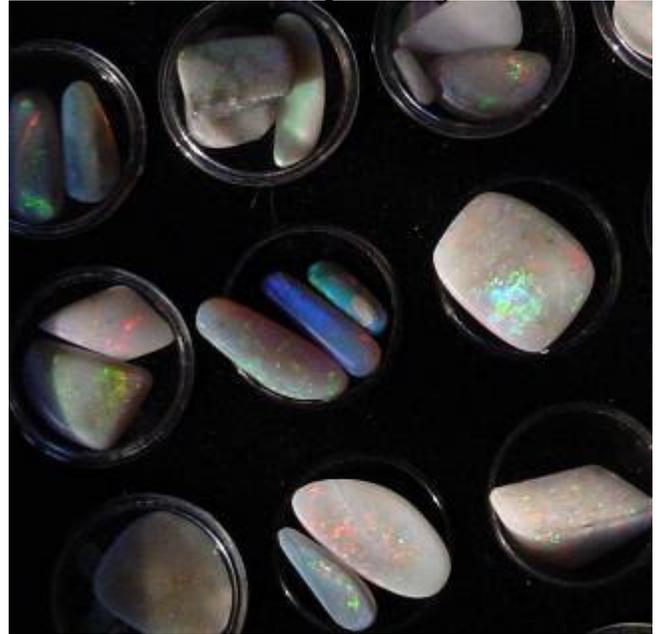


Lapis Lazuli hidden beneath impurities of calcite and pyrite. George lovingly brings out the best in each piece. He knows that that is the way the treasures of the world were made. Red Spinel (above) is the oldest gemstone. It was used to make the crowns of kings. Cleopatra used ground Lapis in her makeup. Tanzanite was discovered in Tanzania in 1967 and is now next to diamonds in value... When he came over to the United States from Greece in 1961, no one knew it existed. But for the last 20 years George has been seeking out the best gems and gemstones in the world and sharing them with everyone.

Here is a little of what I learned talking to him. Rutiled Quartz has needles of titanium



inside that catch the light but are hard to polish without blemishes on the surface. The best have a Champaign color. It is difficult to cut. George uses his little saw with only water as a lubricant. There is no oil to clean up that way.



Opals (above) are his favorite, and they are the trickiest. Too much heat and the fire goes out. Water is their friend. They were born in water. Even a cut and polished opal should be put back in water a few times each year. The colors we cherish in them need to be seen before you can

work the stone. Even taking pictures of them is tricky.

Labradorite (left) is a non-descript blue grey rock from many angles. But it catches the light in waves like a trout rising for a fly in the sunlight. Trying to photograph an array of them on a display board almost makes you dizzy. George wears one around his neck.



George gets his tourmaline from the Stewart mine in California. It comes in all colors and is famous for having varieties that show two colors close to each other such as red and green on the same gem and also varieties that show different colors when seen from different directions. It is also pyroelectric. The first reference to the pyroelectric effect is in writings by Theophrastus in 314 BC, who noted that tourmaline becomes charged when heated.

So it finds a place in electrical devices as well as jewelry.

Amethyst, a violet crystal we have all seen is most valuable in the darkest hues. George values Brazilian Amethyst from Pao d'Arco. I found one described as a "Flawless cushion with deep reddish violet color, like transparent velvet.



Finest amethyst we have for color and lack of zoning. Cut from our rough in 1982. 31.92 carats 35/ct." It was valued at \$1115. Varieties from Siberia and Africa can also garner top dollars.

Our club has found peridot in with the quartz near the Monitor Mine (October 2004). It is one of the few gems that comes in just one color, green. The depth of green depends on how much iron is contained in the crystal structure, and varies from yellow-green to olive to brownish green. Peridot is also often referred to as "poor man's emerald". It has been found in meteorites. You can find it at George's house in the leaves of jewel trees that have golden wire for their branches and crystals for their base. (See picture on front page.) The best comes from Cambodia, Viet Nam and Sri Lanka.



I learned that zircon is a rare hard precious gem close to diamonds in quality and value. I had it confused with cubic zirconia (left) a mineral that is extremely rare in nature but is widely synthesized for use as a

diamond simulant. The synthesized material is hard, optically flawless and usually colorless, but may be made in a variety of different colors. The natural color of zircon varies between colorless, yellow-golden, red, brown or green.

There is a lot to learn from George Diamantis. He has agreed to help put a "Gem of the Month" article in this newsletter. I'm not going to fit them all in this article. We are lucky to have him bring his wares to our meetings. Next time you get a chance, pick one up, look at it closely and feel it. That's what it's all about.

(Minutes continued from page 1)

The Spokane Rock Rollers' Show is March 10, 11 and 12. Their theme is: "Quartz – A Universal Mineral."

A Show budget was discussed. It was moved, seconded and passed that we set aside \$1,500.00 as a budget for this year's Show.

Sylvia Allen's door prizes were discussed. It was moved, seconded and passed that we have:

- Grand Prize – Elephant
- 2<sup>nd</sup> Prize – Malachite Bear
- Plus other prizes

Chuck Prentice announced meetings and trips of the Rockhound PowWow Club of America. He will bring further information in the form of flyers to our next meeting. Thanks, Chuck.

We welcomed new member Deborah Hendricks of Valley. We're happy you joined us!

After break, Johnie gave a presentation on cabbing. His main interest was what you need to know **before** you start cabbing. What an excellent presentation. It was well received. Thanks, Johnie.

The meeting was adjourned at 9:15 PM.

*Luci Bristow*



**Fluorite - George Diamantis Collection**



## Rhyolite Adventures

By Bob Bristow

I was at a dead run with the baying of my hound in the distance urging me on. I had dropped Luci off at her mother's home in Redmond, Oregon, gathered up my black and tan coon hound "Spud" and headed out to Powell Butte to hunt for cats (bob cats and cougars). Powell Butte is a series of large hills, some with "mesa" tops where the lava beds have been pushed up over a fault. The sides of the buttes have sandy volcanic ash with juniper trees and sagebrush. I had spent a lot of time exploring this country with Archie Mustard while we were both in high school in Redmond. After letting Spud out, I had started climbing into the hills looking for arrowheads, rattlesnakes, game tracks, and rocks. Soon, my dog jumped something and we were off. I could see by the tracks that he was after a large bobcat and his baying said he had the cat in sight. The cat ran diagonally up the foothills and across a number of small dry stream courses. The only way to get one of these big cats with a single dog was to push the cat hard enough that he would climb a tree. If the cat didn't tree, he and the dog would run at 30 mph for at least five miles. After running for about a mile, I was rounding the head of one of the small stream courses and there it was! Bedrock had been recently exposed by the rain from a flash flood. The bedrock was lava (rhyolite) that was covered by three to four inch bumps. Other hunters had probably seen these bumps but didn't give them a second thought. However, any good prospector would have instantly recognized them as thundereggs. I stopped, but only for an instant, and then continued after the bobcat. This is an example of luck. But even with luck, you have to recognize what you are seeing.

Rhyolite with thundereggs is another form of lava. Basalt is dark-colored while rhyolite is light (but from a distance, it can look dark like basalt when weathered). Rhyolite is commonly porphyritic with phenocrysts of quartz, sanidine and plagioclase feldspar and rarely biotite mica. Since rhyolite is mostly silica (quartz), it is often associated with very nice agate-type collectables in addition to thundereggs.

I continued on after the cat for about a half-mile, to the top of a pass between two of the buttes. I could still hear Spud baying about a mile

away down on the juniper flats to the east of the buttes. The cat didn't tree. After the sound of the baying disappeared in the distance, I headed back down the west side of Powell Butte. Being exhausted, I headed straight for the car and bypassed the thunderegg bed. By the time I reached the car, Spud was back beside me. About two years later, I went back to get some of those eggs. I searched at the head of all the gullies in the area, but no bedrock was showing. A summer thunderstorm had washed sand into the gully with the eggs and covered up all signs of eggs and rhyolite.

- 1) **Thunder Eggs.** Thunder eggs are the best known of the rhyolite gems. Thunder egg



Typical Thunderegg Bed  
(Photo is of an egg bed above  
Succor Cr, Oregon)

deposits are scattered over all of central and eastern Oregon and in a number of locations in Idaho, NM and Arizona so the chance of finding new deposits is good. They are also found in rhyolite ash. A keen eye is the best way to find a new egg deposit. The figure shows

eggs in a typical deposit. (To the novice, the outside of an egg looks like a geode or just a round rock. If you examine a number of them closely, you will be able to identify markings and colors that will identify them as eggs without cutting. In fact, the markings are so special, you can even tell where an egg came from.) To find a new thunder egg deposit, try the following:

- a) Start at a known thunder egg location and work out into the outlying hills to look for additional deposits.
  - b) Look for small bits of broken shells or pieces of quartz. Often a whole egg can be spotted. If you find one, you will undoubtedly find many more.
  - c) Note the color and texture of the outside of thunder eggs. Watch for this same texture and color in rock outcroppings. These outcroppings often signal the existence of a nearby egg bed.
- 2) **Plume agate.** Plume agate is also well known as a gem associated with rhyolite lava. The plume agate of Graveyard Point in Oregon is world famous. To find new plume agate deposits:
- a) Much plume agate is found as float in areas where it is difficult to find bedrock.
  - b) Watch for float. Where bedrock is not too deep, follow the plume agate fragments to bedrock and try to locate the veins and ledges from which they weathered out.
  - c) In well picked-over areas where large pieces of float are no longer available, look under trees or bushes. Drag your rock hammer through the debris under the tree or bush and if it hits anything hard, check it out.
- 3) **Picture jasper.** Picture jasper is also scattered across the eastern half of Oregon and up into Washington. Large deposits of jasper are usually found by miners with backhoes digging in areas with plentiful surface float. When looking for picture jasper:
- a) Start at an old picture jasper mine and look in the surrounding hills.
  - b) Good jasper can often be found in washes through the desert and as float on hillsides and even in sandy bottoms.
  - c) Streambeds are often productive, especially after a summer thunderstorm brings a small flood.
- 4) **Petrified Wood.** Petrified wood can be found associated with rhyolite lavas and with rhyolite tuff (volcanic ash). Finding petrified wood in rhyolite is identical to finding it in basalt. (A future article will go into detail for finding wood in basalt.)

Minerals found in rhyolite include:

adularia	chalcedony
mica	sanidine
alkali	feldspar
christobalite	opal
topaz	anorthoclase
hematite	orthoclase
tridymite	biotite
hornblende	pseudobrookite
bixbyite	kirschsteinite
quartz	buergerite
magnetite	riebeckite



**Mineral Identification**  
**Mineral/Mine Locations**

**Bristow Enterprises**

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

# Free

# 6th Annual Rock Show

Theme:  
Fools' Gold-  
Pyrite

## March 31st and April 1st

## Fort Colville Grange Hall

8:30 AM - 6:00 PM Friday March 31st  
 9:00 AM - 5:00 PM Saturday April 1st  
 1 mile East of Junction of US 395 and Hwy 20 Colville, WA

Wheel of Fortune

Gold Panning

Gems and Minerals  
from Around the World

Silent Auction  
Beer Prizes

Jewelry

Fossils

Field Maps

FOOD

(509) 684-8887