

Place:
Arden Community Hall
636 Hall Rd
Arden, WA



Club Meetings:
Third Tuesday of the Month
at 6:00PM

The Panorama Prospector

April 2024

PANORAMA GEM AND MINERAL CLUB

Minutes for the March 19, 2024 General Meeting

Lynne called the meeting to order at 6:00 pm

The executive committee will be rescheduled to April.

Scholarship apps have been sent out and due back May 1. Northport High School will receive a special scholarship from a private source that wanted the club to handle the disbursement. It is for anyone going on to higher education.

There were no security issues at the show.

Get names of family helpers at the show so thank you notes can be sent. (Give to Lynne)

Nine of 10 of the \$50 rock boxes sold at the show.

Will there be enough rock for next year's show?

Lots of petrified wood

Need polished rocks for games

Next year do sample boxes with identifiers and streak kit

Show got front page coverage in local newspaper

Betty made new ticket drum system for prize ticket drawings

550 kids did the Treasure Hunt (way to go Sharon!)

Johnie's Jabbers

By Johnie Pitman

Johnie is still recovering from the successful show!

Minutes cont.

Let people know where the nearest ATMs are

Need more hourly door prizes, not enough vendors for the hours covered, may need to buy some

Suggestions from last year results:

Larger front area: opened up both sides

Number cases to make treasure hunt easier: next year

Better items for silent auction: Knocked it out of the park!

Arden Grange did well for meals (especially the biscuits and gravy!)

Two blacklights: long wave and short wave

Share a rock time

Talk to Frank Stratton about show proceeds

April is National Volunteer Recognition Month

By Lynne Calvert

President of the Panorama Gem and Mineral Club

The Panorama Gem and Mineral Club held a spectacular gem show in Colville on the 8th and 9th of March 2024.

I want to celebrate the service of our volunteers who contributed to this year's highly successful event. Thank you...

Johnie and Ginger Pitman – Chairpersons for the annual gem shows.

Roger Calvert

Bob and Linda Bristow

Frank and Sheila Stratton

Kaitlin and Karl Loveall

Hunter McDanel

Jim and Betty Peters

Bill and Anni Sebright

Glynis Hull

Cyndie Doppler

Gena Johnson

Heather Armantrout

Scot Jackson

Greg VanWeerthuizen

Scott, Kelly, Dexter, and Simon Stubbs

Sharon Borgford

Doug Beeker

April Swigert

Barb Cozza

Kevin and Leigh Youngblood

Johnson's Christian School – Carina Going, Amaris

Tallent, Makayla Fairweather

Jim Retzer

Joe Barreca

Kris Davis

Dave, Luke, and Len Paquette

A special thanks to Dean Robinson and Family and our vendors.

Tiger's Eye (A new series)

<https://geologyscience.com/minerals/silicates-minerals/tigers-eye/>

Tiger's Eye is a mineral gemstone that belongs to the quartz family. It is composed primarily of silicon dioxide (SiO₂), the same chemical composition as other varieties of quartz such as amethyst and citrine.

What sets Tiger's Eye apart is its unique optical phenomenon known as chatoyancy. Chatoyancy, also referred to as the cat's eye effect, is a visible band of light that moves across the surface of the stone, resembling the slit-eye of a cat. This effect is caused by the reflection and scattering of light by parallel fibrous inclusions within the stone.

The fibrous inclusions in Tiger's Eye are typically composed of mineral fibers such as crocidolite, which is a form of asbestos. These fibers are naturally occurring and can be found embedded in the quartz. Over time, as the crocidolite is replaced by quartz and other minerals through a process called pseudomorphism, the distinctive chatoyant effect is formed.

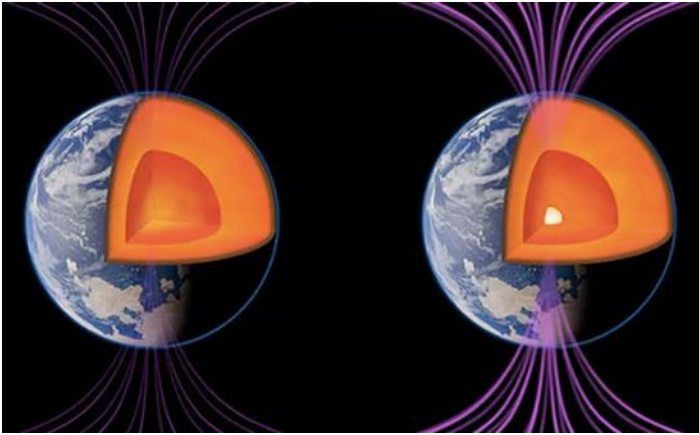
Tiger's Eye often exhibits golden to reddish-brown colors, although variations such as blue and green Tiger's Eye also exist. The stone has a silky luster and a Mohs hardness of around 7, which makes it relatively durable for use in jewelry and other decorative purposes.

In summary, Tiger's Eye is a quartz mineral that displays a chatoyant effect due to the presence of fibrous inclusions. Its unique appearance and rich colors make it a popular choice for gemstone enthusiasts and jewelry designers.



(Jim Retzer's **Rock of the Month** will return next month.)

A Massive Ocean Three Times the Volume of Earth's Surface Oceans Discovered 700 km Below the Surface



Scientists from [Northwestern University](#) in Evanston, Illinois (Go Wildcats!), have discovered an underground reservoir of water three times the size of all Earth's surface oceans combined. This vast underground water supply lies approximately 700 kilometers beneath the Earth's surface. The discovery, part of the quest to understand the origins of Earth's water, reveals a massive ocean hidden within the Earth's mantle, deep below the surface.

Researchers deployed a network of 2,000 seismographs across the United States to unveil this subterranean ocean

This concealed ocean, housed within a blue rock called ringwoodite, challenges our understanding of Earth's water origins. Its size is three times that of all the planet's surface oceans combined. This new revelation not only captivates with its magnitude but also introduces a fresh theory regarding Earth's water cycle. It suggests that instead of arriving via comet impacts, as some theories suggest, Earth's oceans may have gradually seeped out from its core. Steven Jacobsen, a researcher at Northwestern University in Illinois and the study's lead author, states, "This is strong evidence that water on Earth originated from within."

Researchers deployed a network of 2,000 seismographs across the United States to unveil this subterranean ocean, analyzing seismic waves from

over 500 earthquakes. These waves, which traverse through Earth's inner layers, including its core, decelerate when passing through damp rock, indicating the presence of this extensive water reservoir.

The potential presence of water in Earth's mantle, moving between rock grains, could alter our understanding of the planet's water cycle. Jacobsen highlighted the significance of this reservoir, noting that without it, water would be limited to the Earth's surface, possibly only visible on mountain peaks. With this groundbreaking discovery, researchers are eager to collect additional seismic data from around the globe to ascertain the frequency of mantle melting. Their discoveries could transform our comprehension of Earth's water cycle, providing fresh insights into one of the planet's most fundamental processes.

What to do — and not do — in an Earthquake

For several seconds on Friday, millions of people across the eastern United States were caught by surprise.

The [4.8-magnitude earthquake](#) that shook ground from Boston to New York to Baltimore caused East Coasters to face the split-second decision about what to do when the ground is shaking — and showcased their confusion about a phenomenon usually viewed as the West Coast's problem.

Several aftershocks have occurred, and they continue to be likely within the next week, according to the U.S. Geological Survey (USGS).

Here's what to do in an earthquake, according to the USGS, Red Cross and researchers.

If you're indoors:

- **Drop, cover and hold on:** Drop to all fours and take cover under a desk or a table. Hang on to a leg of the furniture with one hand, and cover your neck and head with the other.
- **If you can't get to a table,** crouch against an interior wall and cover your head with both arms.

- **Move away from windows.** Stay away from chandeliers, ceiling fans, fireplaces, bookcases and dressers — steer clear of any heavy objects that could fall onto you. “The main source of injuries during earthquakes is from things falling or from windows breaking,” said Timothy Bechtel, a geosciences professor at Franklin and Marshall College.
- **If you’re in bed,** stay there and cover your head and neck with pillows, the American Red Cross recommends. Leave the bed only if you’re underneath a light or fan fixture, Bechtel said.
- **If you have a baby,** drop to all fours with the child under you and move under furniture, Bechtel advised. Cover the baby with your body, and cover yourself with a desk or table.
- **For older children,** Bechtel said, “it might not be a bad idea to do a quick earthquake drill so they know how to drop and cover.”

If you’re outdoors:

- **Move into an open area.** Get as far away as possible from power lines and buildings. Windows, awnings and other fixtures can fall from buildings. “Best would be to go in the middle of an open parking lot or lawn and wait for the shaking to be over,” said Manoochehr Shirzaei, a geophysics professor at Virginia Tech.
- **Watch for people and cars.** If there’s no danger of colliding with others, move as fast as possible, Shirzaei advised. You can also crawl to avoid falling. In a big city like New York, an intersection may be the safest place to stand, but only if you won’t run into moving traffic, Bechtel said.
- **Don’t go outside** if you’re in a building unless there is immediate danger. “Very often we have injuries happening during people rushing out of buildings,” Shirzaei said.

If you’re driving:

- **Stop safely.** Move out of traffic if possible, but don’t stop under trees, streetlights, power lines or signs, the USGS advises. Stay in your car until the quake stops.
- **If you’re on a bridge or overpass,** continue driving until you’re off, the USGS says. Individual bridges may have signs providing earthquake directions. If you’re driving along a cliff, don’t stop, Bechtel said, because rockslides can occur.

No fatalities or major injuries were reported after Friday’s earthquake, whose epicenter was in northern New Jersey. No significant damage was reported, and major transit systems were not damaged. The area has experienced several aftershocks, including a 3.8-magnitude quake Friday evening and smaller ones early Saturday morning. As of Saturday, the USGS predicted about a 60 percent chance of at least one aftershock of a magnitude of 3 or higher.

Should the East Coast expect earthquakes?

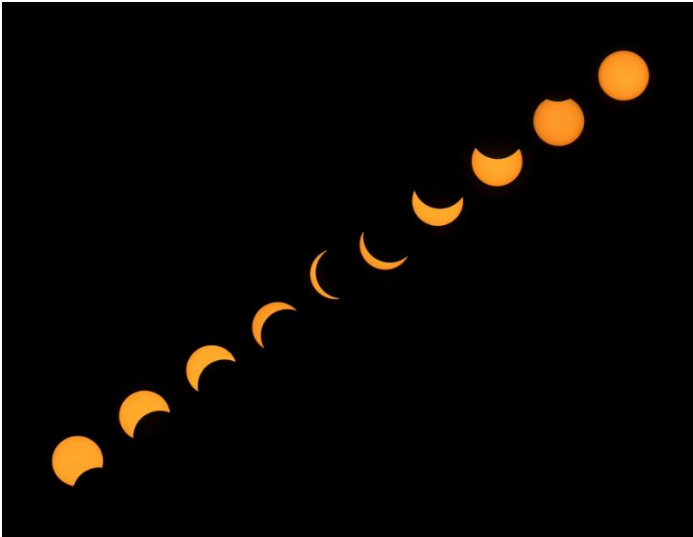
Though earthquakes above 3 magnitude are less common on the East Coast, the region regularly feels small quakes and, less frequently, larger ones, according to the USGS. Because of the geology east of the Rocky Mountains, earthquakes are felt across much larger areas — up to 10 times larger than the area in which an earthquake of similar strength would be felt on the West Coast, according to the USGS.

Those that happen in the east, such as Friday’s and a larger 2011 temblor in Virginia, tend not to cause much damage, Bechtel said, meaning residents shouldn’t worry.

The New Jersey earthquake “was almost as big as it can get” for the region, Shirzaei said.

“The likelihood of having a larger earthquake on the East Coast is very, very small. From a scientific perspective, it’s almost near zero,” he said. “So you don’t need to panic.” (Except on the west coast!)

See You Again in 2044!



While unseen on the west coast the April 8 eclipse made a big hit across the eastern U.S. I watched it on the Science Channel, which showed the progress of the eclipse across several locations in the nation. Having seen a full eclipse before I have to say it is an incredible experience as the animals go quiet and dusk sets in. Seeing the corona of the sun in real time is a treat few get to partake of. I feel blessed I got to see the one I did; many of us will not be around for the next eclipse in the U.S. in 2044.

A ‘Mind-blowing’ Experience

Totality has the paradoxical quality of hiding the sun but also revealing its nature — what it is, what it’s made of, how it works.

 Lynne Calvert is with Roger J L Calvert.
2d · 

We are in the center of the path of totality and had to step off the path to make way for a stampede.

   14

2 comments

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For Toby Dittrich, a physics professor at Portland Community College, the eclipse isn’t about the pictures of an occluded sun —he chose the outskirts of a small Mexican town because it was at the center of the eclipse shadow, providing about 4 minutes and 30 seconds of totality, enough to understand our universe like never before.

Dittrich was planning to run one of the most famous astronomical experiments in history — one that proved Albert Einstein’s theory of general relativity. It showed how our massive sun bends starlight around it, showing that space-time must be curved instead.

Equipped with 13 high-resolution telescopes with cameras deployed across Mexico and Texas, Dittrich’s 2024 team could collect millions of data points that would offer a much sharper picture of this elusive forbidden zone than ever before: They expected to image 200,000 stars.

The four telescopes Dittrich had set up in El Salto got plenty of star data. It will take time to see how many of those were in the forbidden zone, but preliminary results look promising.

Membership Dues:

\$20.00 per household per year is due to the club Treasurer Frank Stratton on the third Tuesday of November for regular members. Dues can also be sent to: Panorama Gem and Mineral Club c/o Johnie Pitman, 701 B Williams Lake Rd, Colville, WA 991114.

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

Facebook Group: [Panorama Gem & Mineral Club](#)

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).

A Quick Note from The Editor (Glynis)

We had a great show! If you have a special show story to share, contribute to OUR newsletter! Send ideas for articles, internet finds, jokes, pictures, adventure stories, science articles or your own articles to me. gghull@comcast.net



The new love in my life, Guinevere!

Refreshment Schedule for 2023

Last names that begin with the letters posted bring refreshments for that month

January – H, I, J
 February – K, L, M
 March – N, O, P
 April – Q, R, S, T
 May – W, A, B, C
 June –D, E, F, G
 July – H, I, J
 August – Club Picnic
 September – K, L, M
 October – N, O, P
 November - D, E, F, G
 December – Christmas Party

Panorama Gem and Mineral Club: Organizational Chart

Officers

President:	Lynne Calvert	lynnecalvert501@gmail.com	559-906-5923
Vice-President:	Bob Bristow	bristow71@outlook.com	509-935-4375
Secretary:	Glynis Hull	gghull@comcast.net	509-981-9714
Treasurer:	Frank Stratton	frstratton@outlook.com	509-207-8503
Trustee 1:	Kevin Youngblood	squaredeal.lic@live.com	509-680-0207
Trustee 2:	Jim Peters	jimnbetty17@gmail.com	509-992-6921
Trustee 3:	Cyndi Doppler		509-216-5473

Committee Chairs

Program Coordinator:	Sheila Stratton	skstratton11@gmail.com	509-207-8506
Hospitality:	Betty Peters	jimnbetty17@gmail.com	509-992-6921
Historian:	Sheila Stratton	skstratton11@gmail.com	509-207-8506
Newsletter:	Glynis Hull	gghull@comcast.net	509-981-9714
Show Chair	Johnie Pitman	jgpitman@outlook.com	509-684-8887