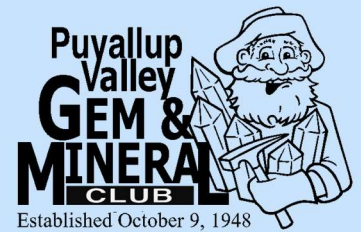


# ROCK-A-TEER



## Newsletter of the Puyallup Valley Gem & Mineral Club

Jillian Higgins

Issue 37

Volume 90

February

2021

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## President's Perspective

Tony Johnson

I want to thank Craig Oda, Jim Christian, Dennis Batchelor, & Jayden S for all their hard work on the club house. It is going to look brand new and I can't wait for everyone to see it when we are allowed to open back up again.

As soon as we are allowed to have a club meeting the first thing on the agenda will be the general election. The current board has agreed to maintain itself until the membership has the chance to meet and elect new officers. Keep your eyes out for upcoming information in the newsletter and in your emails.

**The club is now communicating mostly by email, given that we are not able to hold meetings. If you have not already, please checked your email for information, and update the membership director if you have had a change or added a new email address.**

# Field Trip Report

## February 20 – No Field Trip

No Field Trip Due to weather and access

## March 20 – Damon Point

Meeting place – To Be Announced

Hunting for – Beach Agate, Jasper, Pet Wood, Shells

Tools you need - Rock hammer, shovel, rubber boots, and a backpack/bucket for your treasures

Access - this area is fairly easy to access, will be walking on a beach

Additional items - lunch/snacks and water, water, water. Dress in layers

Please remember that even though we love to meet new people, fieldtrips are a member benefit and part of your membership dues covers you for injury liability.

Though injuries are rare, and we do everything we can to avoid them, we are going out into nature, and uncontrollable environment.

All individuals attending field trips will have to sign a release of liability, and if you are bringing guests, we will try to entice them into join the club by having Membership applications available.

## Field Trip Recap

Dennis Batchelor

Nothing to Report, field trips cancelled by mandate.

## TENTATIVE FEBRUARY 2021 CLUB HOUSE SCHEDULE

DATE	DAY	TIME	ACTIVITY	LOCATION	INSTRUCTOR
1	Monday				
2	Tuesday				
3	Wednesday	10:00AM-2:00PM	Members Workshop	Club House	Dennis Batchelor
		4:00PM-8:00PM	Wire Wrapping	Club House	Tony Johnson
4	Thursday	4:00PM-8:00PM	Members Workshop	Club House	Tony Johnson
5	Friday				
6	Saturday	10:00AM-2:00PM	Members Workshop	Club House	Glen Ripper
7	Sunday				
8	Monday	10:00AM-2:00PM	Members Workshop	Club House	Dennis Batchelor
9	Tuesday	4:00PM-8:00PM	Members Workshop	Club House	Jim Christian
		7:00PM	Club Board Meeting	Fruitland Grange	Jim Christian
10	Wednesday	10:00AM-2:00PM	Members Workshop	Club House	Dennis Batchelor
		4:00PM-8:00PM	Opal Cutting	Club House	Tony Johnson
11	Thursday	4:00PM-8:00PM	Members Workshop	Club House	Tony Johnson
12	Friday	7:30PM	Club Business Meeting	Fruitland Grange	Tony Johnson
13	Saturday	10:00AM-2:00PM	Intarsia	Club House	Tony Johnson
14	Sunday		Floor repair		
15	Monday	10:00AM-2:00PM	Members Workshop	Club House	Dennis Batchelor
		7:00PM-8:00PM	Opal Club Business Meeting	Club House	Tony Johnson
16	Tuesday	4:00PM-8:00PM	Members Workshop	Club House	Jim Christian
17	Wednesday	10:00AM-2:00PM	Members Workshop	Club House	Dennis Batchelor
		4:00PM-8:00PM	Wire Wrapping	Club House	Tony Johnson
18	Thursday	4:00PM-8:00PM	Members Workshop	Club House	Tony Johnson
19	Friday				
20	Saturday	No Field Trip	No Field Trip	Field Trip	Dennis Batchelor
		10:00AM-2:00PM	Silversmithing <b>Beginner Part II</b>	Club House	Jillian Higgins
21	Sunday				
22	Monday	10:00AM-2:00PM	Members Workshop	Club House	Dennis Batchelor
23	Tuesday	4:00PM-8:00PM	Members Workshop	Club House	Jim Christian
24	Wednesday	10:00AM-2:00PM	Members Workshop	Club House	Dennis Batchelor
		4:00PM-8:00PM	Opal Cutting	Club House	Tony Johnson
25	Thursday	4:00PM-8:00PM	Members Workshop	Club House	Tony Johnson
26	Friday	7:30PM	Club Program Night	Club House	Tony Johnson
27	Saturday				
28	Sunday				
Jim Christian (253) 720-9502			Jillian Higgins (253)355-3146	Dennis Batchelor (360) 870-8741	
Tony Johnson (253) 863-9238				Glen Ripper (253) 508-7545	

This Schedule is Subject to Change. Please check the website for updates.

As of the publication of this schedule Pierce County is still in Phase 1 and is prohibited from having gatherings. As soon as we enter into Phase 2 the club house will be allowed to open with limited conditions and we will let you know.

# New Lifetime Members!!!

Please help Puyallup Valley Gem & Mineral Club send a huge congratulations to Larry & Sandy Hoffman for become our club's newest lifetime members.

For those who don't know what a Lifetime Member is, they are individuals within the club who have maintained 20 consecutive years of club membership.

That's right people, **20 years!**

I think it is fair to say that Larry & Sandy are committed to this club and it is because of people like them that we are the incredible organization that we are.

## MEET THE MEMBERS

Name: **Sonora Hauser**

Favorite Quote: "I can be changed by what happens to me but I refuse to be reduced by it." – Mya Angelo

What are your skills/past experience with the rock Club or rock hounding?

All I used to do was pick up rocks and pocket them. The club has changed that into a hobby I love, teaching me skills, cabbing, mineral identification, wire wrapping, and I am looking forward to building on intarsia skills.

What is your favorite rock, mineral or gem?

Turquoise when I started the club, but now Listwanite and Pietersite.

What is your favorite thing to do with rocks, minerals or gems?

Cabbing them and wire wrapping them.

What are your three favorite books/podcasts?

- Clive Cussler Books
- The Arizona Highway magazine
- Garret Romain – Rock & Gem Trails

What is your favorite memory surrounding rockhounding/rocks in general?

One of my first field trips with the club finding black & red agate and Listwanite.

In your opinion, what is the best thing about the Puyallup Valley Gem & Mineral Club?

Definitely the people, how generous the more senior members are in sharing their knowledge, the comradery, and getting together to talk about rocks.

In your opinion, where/how does the club need to improve?

Get over the virus and get back to normal. More communication within other Rock clubs.

What are three (3) things people might not know about you?

- It takes a lot to get me angry, but when I get there it's not pretty.
- I'm a licensed cosmetologist, and I have a partial degree in auto upholstery
- I took a class in small gas engines in high school

What is your greatest accomplishment?

My son.

## Clubhouse report

Tony Johnson

The club house counters now have a new look. Craig Oda helped to install new Formica under the machines to help keep the water from damaging the shelves the cabbng machines sit on. Big thank you to Craig for his help. He made it look easy and really nice looking.

We are just waiting for the governor's approval to open the club house. I know there are many of us who are raring to go, and we will let you know as soon as it is open.

## New Club House Rules

When the clubhouse reopens it will be on a trial basis with specific requirements and conditions which are subject to change and because this is a trial, the clubhouse may again close until future notice.

Requirements and conditions:

- Members must already be qualified to use clubhouse equipment.
- Workshops & classes are limited to 4 members plus the instructor.
- Reservations must be made by using the reservation process.
- Each member is limited to one workshop or class per week.
- Each member must follow the usual sign in and payment process AND sign a Release of Liability and Hold Harmless Agreement EACH TIME the member comes to a workshop or class.
- Face coverings and social distancing are required.
- One person at a time in the saw room(s).

Other than making reservations, all comments, concerns, etc. are to be directed to Tony John, phone (253) 863-9238 or email at ynotopals@outlook.net

## ASSOCIATIONS DIRECTOR'S REPORT FOR FEBRUARY 2021

**WA STATE MINERAL COUNCIL (WSMC):** <https://mineralcouncil.wordpress.com/>

This is the link to the website which contains the latest/January Newsletter. No notices requiring heightened awareness or responsive action(s) to be taken by Puyallup Valley Gem & Mineral Club at this time. The next meeting was on January 19, 2021. No business was conducted due to only (2) members were in attendance.

**AMERICAN LAND ACCESS ASSOCIATION (ALAA):**

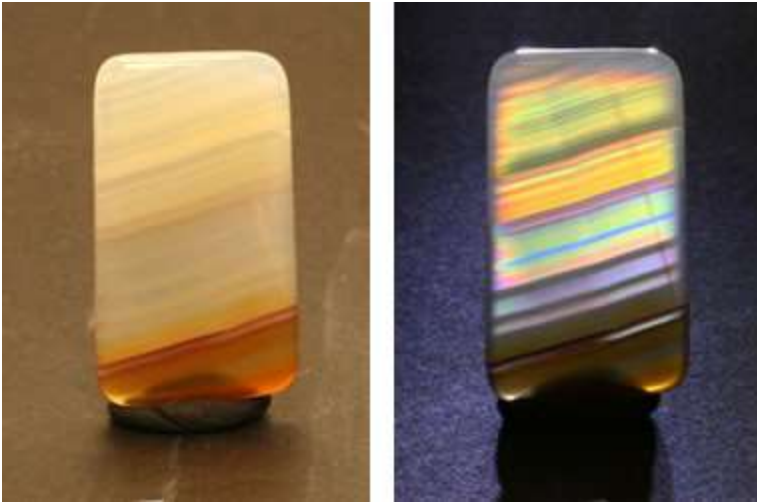
<http://amlands.org/>

This is the link to the website which contains the latest (2020) 4th Quarter Newsletter. No notices requiring heightened awareness or responsive action(s) to be taken by Puyallup Valley Gem & Mineral Club at this time

**-Bill Clark, PVGMC Associations Director 2020+**

# Iris Agate

Iris agate is a finely-banded agate that can produce a rainbow of color from a diffraction grating effect.



**Figure 1:** Two views of a specimen of iris agate. The photo on the left was taken in normal light and displays the color of light reflected from the agate. The photo on the right shows the agate with backlighting. The backlighting reveals the diffraction grating or "iris" effect produced when light passes through the very fine banding of the agate. This specimen is a thin slice of Brazilian agate that measures about 25 mm high, 14 mm wide and 3 mm in thickness.

## What is Iris Agate?

"Iris Agate" is a name used for a finely-banded agate that produces a spectacular display of color when it is cut properly and illuminated from a direction that sends light through its very thin bands. The name "iris agate" is used because one meaning of the word "iris" is "a rainbow-like display of colors."

A specimen of iris agate is shown in the pair of photographs in Figure 1. This specimen is a thin slice of agate that measures about 25 mm high, 14 mm wide and 3 mm in thickness. The agate is very finely banded. The parts of the agate that produce the iris effect are translucent to transparent and have at least 15 to 30 bands per millimeter that are countable under a gemological microscope. Some parts of the agate have a higher density of bands, but they cannot be counted because they are very thin and the agate is milky.

**Rainbow agate:** An enlarged view of the iris agate specimen with backlighting. This view is at a slightly different angle than the backlit view above. It demonstrates that the spectral colors change with the angle of incident light and observation.

## Reflected Light and Backlight Views

The photo on the left side of Figure 1 shows the iris agate specimen under normal illumination. The colors that you see in this photo are mainly colors of light reflected from the surface of the agate.



The photo on the right side of Figure 1 shows the same specimen; however, in this photo the source of light is behind the specimen. The colors that you see in this photo are produced by light that is transmitted through the agate. These colors are very different from the reflected light view and very different from the body color of the agate. They are produced by an optical phenomenon known as diffraction.

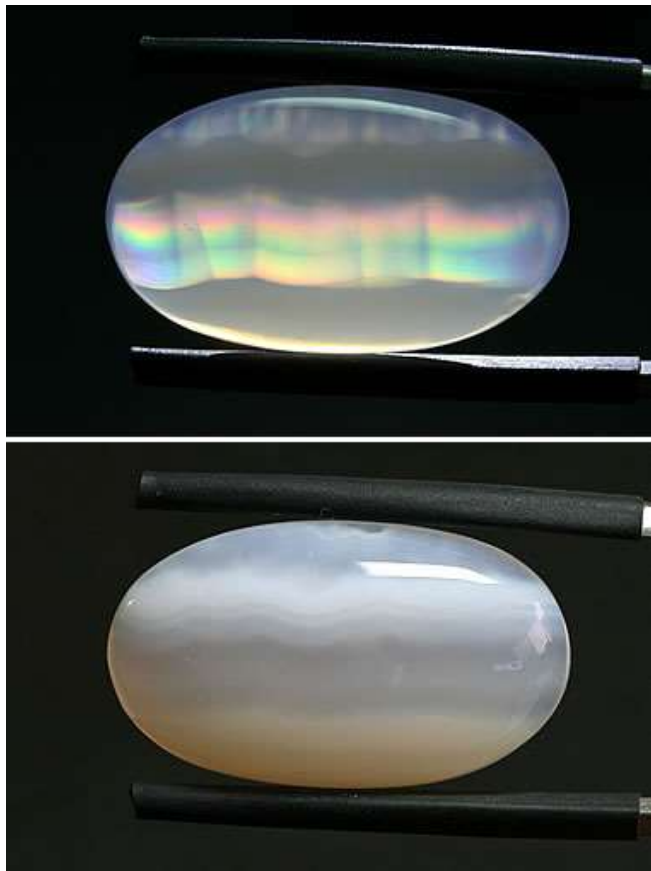
When light strikes the agate, it encounters the edges of the tiny bands. These bands disrupt the flow of light, and the rays of light take many separate paths through the thin bands of the agate. The bands act as a natural diffraction grating that diffracts the light and produces a display of spectral colors.

**Observing iris agate:** To observe or photograph iris agate, the stone must be between the observer's eye and a strong light source. The illumination must come from behind the stone. For this reason, iris agate is not a good material for many jewelries uses. It would not work in a ring or a pin. Very thin slices of agate could be used as dangle earrings; however, they would only exhibit the iris effect when the observer is looking at the earrings and the person wearing them is between the observer and a strong light source.



## How to Cut, Observe and Display Iris Agate

Most agates will not produce an iris effect. Candidates are those that are very finely banded and nearly transparent. They must be sliced so that the sawn surface is perpendicular to the banding of the agate. The thinner they are sliced, the stronger the spectral colors. (Our slice, at 3 millimeters, is thicker than optimal and shows higher order colors instead of primary colors.) The surface of the agate should be brightly polished to allow the easy entry of light without the scattering caused by an unpolished surface. To observe the iris effect, the agate must be positioned between the observer and a light source with the rays of light striking the surface of the agate perpendicular to the polished surface. At that angle a maximum amount of light will enter the agate.



Iris agates can be placed on a display stand or dangled on a string in front of a sunny window. They can be mounted in a display case with backlighting. Some people display iris agate in jewelry. The requirement for backlighting prohibits a good spectral display in a ring, pin or brooch. The stone must be suspended to have a light source and observer on opposite sides of the stone. The best jewelry use is in earrings.

**Iris agate cabochon:** The two photos above show an iris agate cabochon in transmitted (top) and reflected (bottom) light. In reflected light it looks like a plain white agate with a

few cloudy but translucent bands. However, in transmitted light it has a nice display of "iris color" traversing its length. This specimen is approximately 23 mm x 13 mm x 5 mm in size and was made from agate found in Indonesia.

## Unappreciated Iris Agate

Specimens of iris agate are not often seen in museums and mineral shows. However, they are probably much more common than most people realize. Most agate slabs are cut too thick to produce a strong iris effect (the thinner the slab, the stronger the colors), and many thinly-sliced agates are not observed in a way that reveals the iris effect. So, if you have some thinly-banded agate that is translucent to transparent, you could cut a thin slice to see if there is a rainbow inside.



**Cat's eye scapolite:** The stone on the left is a 10 x 7 millimeter oval with a very coarse silk. The silk can be seen in the stone as linear bands of black inclusions that cross the stone from left to right. The cat's-eye forms at right angles to the silk. The stone on the right is a 12 x 9 millimeter oval with a coarse silk. The silk has just the right spacing to serve as a diffraction grating and produce a beautiful display of iridescent color. Iris effect cabochons could be used as ring stones but the iris effect would only be observed when the stone is between the observer and a strong source of light that enters the stone at a low

angle. Next time you find a cabochon with coarse silk suspended in clear material, hit it with a beam of low-angle light.

## Iris Cabochons

Sometimes cabochons with a coarse silk can produce an iris effect under proper illumination. The [scapolite](#) on the right side of the photo has a very coarse silk of included minerals with a very clear material between the silk fibers. The cabochon produces a cat's-eye under high-angle illumination. When the stone is between the observer and a source of low-angle illumination, rays of light enter the stone and are diffracted by the coarse silk to produce a bright display of spectral colors.

Author: [Hobart M. King](#), Ph.D.



## COMMUNITY SUPPORTERS

	<p style="text-align: center;"><b>South Hill RV Sales</b></p> <p style="text-align: center;">Offering the highest rated starter, midline, and high end towable and RV's at the lowest prices which has made us a top volume dealer in Washington state.</p> <p style="text-align: center;">12414 Meridian East, Puyallup 98373 253-435-7751 or 866-435-7751 www.southhillrv.com</p>
	<p style="text-align: center;"><b>Rice Museum of Rocks &amp; Minerals</b></p> <p style="text-align: center;">To engage, inspire, and educate generations on the splendor and complexity of our Earth.</p> <p style="text-align: center;">26385 NW Groveland Dr., Hillsboro, OR 97124 503-647-2418 Info@ricenorthwestmuseum.org www.ricenorthwestmuseum.org</p>
<p style="text-align: center;"><b>H &amp; I Lapidary</b></p>	<p style="text-align: center;">Amber, Jewelry, Beads, Findings, Gemstones, Slabs, Rough Material, Fossils, and Aussie items.</p> <p style="text-align: center;">Mike and LaVon Siperek (253) 531-7294 4203 E 99<sup>th</sup> Street, Tacoma, WA 98446 Yankees_Diesel@comcast.net</p>

## SUNSHINE REPORT

With everything going on, we have not had a chance to meet as a group and bring to eachother's attention members who need healing thoughts or prayer sent their way.

Tom Slee has sadly passed away due to complications from his stroke a year ago. Information regarding his funeral will be coming as it is made available.  
Nichole Davis has been hospitalized, please send prayers.

If you know of anyone else who needs to be recognized in next months Sunshine Report , please email or call either  
Tony Johnson at [ynotopals@outlook.com](mailto:ynotopals@outlook.com) (253) 863-9238 or  
Jillian Higgins at [J.Y.Higgins@gmail.com](mailto:J.Y.Higgins@gmail.com) (253) 355-3146

## FROM THE BENCH

Can you turn a stone into a cabochon without a cabbing machine?

Absolutely! People have been making cabochons for thousands of years, long before we had modern cabbing equipment. How did they do it?

With different grit sands and then with sandpaper as technology progressed. Often the process was started by either knapping the stone into the rough shape the designer wants or carved with hand tools made of harder stone, copper or even diamond bits. From the rough shape, using sand or sandpaper and water, the rough edges were worn down until the desired shape was achieved. If you have a softer stone, like turquoise or opal, you can do the same thing! It just takes patience and a deft hand.

## MINERAL OF THE MONTH



What do you think this is? I bet it is probably the most recognized stone globally. As you have probably already determined, the stone is Amethyst. It comes in many shades, forms, and combinations with other minerals.

One of the things I don't think most people know is that Amethyst is a type of quartz. Most believe it is a stand alone mineral with its own special properties, but it is in fact a trapezohedral shaped crystal that gets its color from irradiated iron deposits as well as some other trace minerals. It comes every color of purple from light lavender to deep deep purple. It also comes in every variety of transparency from cloudy with inclusions to crystal clear.

The clearer the crystal and the darker the color the more desirable the stone and the more likely it is to be cut into a faceted gemstone. These stones are usually set into jewelry pieces and the benefit of Amethyst is that because it is a form of quartz, the source stones can be extremely large in comparison to other gemstones.

Amethyst can be found all over the world and can be collected in too many places to list. Some of the best sources of large Amethyst crystal geodes are found in Mexico and especially large ones come from Brazil.

The name Amethyst comes from the Greek amethystos meaning "Not Intoxicate". It was believed that wearing Amethyst could keep you from becoming intoxicated. Sadly, Green Quartz, also called Green Amethyst is not actually a type of Amethyst. It was miss-labeled but before it could be corrected, the naming stuck.



## 2021 SHOW & TELL THEMES and PROGRAM NIGHT EVENTS

MEETING	DATE	SHOW & TELL THEME	PROGRAM NIGHT EVENT
January - 1st Meeting	January 8, 2021	Tiger's Eye or <b>any field trip finds</b>	
January - 2nd Meeting	January 22, 2021	Lace or <b>any field trip finds</b>	To Be Announced
February - 1st Meeting	February 12, 2021	Heart shaped or <b>any field trip finds</b>	
February - 2nd Meeting	February 26, 2021	Red, Pink, & Purple or <b>any field trip finds</b>	To Be Announced
March - 1st Meeting	March 12, 2021	"Sham" rocks or <b>any field trip finds</b>	
March - 2nd Meeting	March 26, 2021	Green or <b>any field trip finds</b>	To Be Announced
April - 1st Meeting	April 9, 2021	April Fools Gold or <b>any field trip finds</b>	
April - 2nd Meeting	April 23, 2021	<b>No Show &amp; Tell</b>	Auction/Potluck
May - 1st Meeting	May 14, 2021	Flower rocks or <b>any field trip finds</b>	
May - 2nd Meeting	May 28, 2021	<b>No Show &amp; Tell</b>	To Be Announced
June - 1st Meeting	June 11, 2021	Fancy Slabs & Fossils + <b>any field trip finds</b>	
June - 2nd Meeting	June 25, 2021	<b>No Show &amp; Tell</b>	Tailgate Party @ Grange Parking Lot
July - 1st Meeting	July 9, 2021	Red, White, & Blue or <b>any field trip finds</b>	
July - 2nd Meeting	July 23, 2021	<b>No Show &amp; Tell</b>	To Be Announced
August - 1st Meeting	August 13, 2021	Carnelians + <b>any field trip finds</b>	
August - 2nd Meeting	<b>Saturday</b> August 28, 2021	<b>No Show &amp; Tell</b>	Picnic & Tailgate Party at club house on Saturday
September - 1st Meeting	September 10, 2021	Crystals + <b>any field trip finds</b>	
September - 2nd Meeting	September 24, 2021	<b>No Show &amp; Tell</b>	Mini Lapidary Demonstrations
October - 1st Meeting	October 8, 2021	Wood + <b>any field trip finds</b>	
October - 2nd Meeting	October 22, 2021	<b>No Show &amp; Tell</b>	Auction/Potluck
November - 1st Meeting	November 12, 2021	Thundereggs & Geodes + <b>any field trip finds</b>	
November - 2nd Meeting	November 26, 2021	<b>No Show &amp; Tell</b>	BINGO Night
December - 1st Meeting	<b>Saturday</b> December 11, 2021	<b>No Show &amp; Tell</b>	Holiday Banquet/Officer Installation on Saturday
December - 2nd Meeting	No Meeting	<b>No Show &amp; Tell</b>	

## 2021 Elected Officers - Carry Over Until Election

Title	Name	Phone	Email
President:	Tony Johnson	(253)863-9238	ynotopals@outlook.net
Vice President:	Jim Christian	(253)720-9502	Jimchristian_205@hotmail.com
Secretary:	Teresa Rodrick	(253)531-4062	gtrodi@comcast.net
Treasurer:	Jillian Higgins	(253)355-3146	J.Y.Higgins@gmail.com
Association Director:	Bill Clark	(360)893-6919	clarkwa@comcast.net
1 Year Director:	Glen Ripper	(253)508-7545	glen311944@yahoo.com
2 Year Director:	Patti Dailey-Shives	(253)678-0029	pattidailey28@gmail.com
1 Year Trustee:	Glenn Rodrick	(253)531-4062	gtrodi@comcast.net
2 Year Trustee:	Dennis Batchelor	(360)870-8741	hobbyhorse51@gmail.com

## 2021 Committee Chairs

Title	Name	Phone	Email
Club house Coordinator	Tony Johnson	(253)863-9238	ynotopals@outlook.net
Club Show Coordinator	Jim Christian	(253)720-9502	Jimchristian_205@hotmail.com
Field Trips Coordinator	Dennis Batchelor	(360)870-8741	hobbyhorse51@gmail.com
Web Master	Jillian Higgins	(253)355-3146	J.Y.Higgins@gmail.com
Editor/Communications	Jillian Higgins	(253)355-3146	J.Y.Higgins@gmail.com
Membership	Jillian Higgins	(253)355-3146	J.Y.Higgins@gmail.com
Sunshine	Tony Johnson	(253)863-9238	ynotopals@outlook.net
Newsletter	Jillian Higgins	(253)355-3146	J.Y.Higgins@gmail.com
Mineral Council	Tony Johnson	(253)863-9238	ynotopals@outlook.net
Historian	Nicole Payne	(253)208-9802	pudnikki@yahoo.com



**WASHINGTON STATE MINERAL COUNCIL**

The Puyallup Valley Gem & Mineral Club is a member of the American Lands Access Association and the Washington State Mineral Council. You can find more information about the ALAA at: [amlands.org](http://amlands.org) or the WA Mineral Council at: [mineralcouncil@zoho.com](mailto:mineralcouncil@zoho.com)

# HAPPY BIRTHDAY

**February 2021**

Lloyd Poehler – 5<sup>th</sup>  
 Emily Hochstrasser – 11<sup>th</sup>  
 Timothy Perry – 15<sup>th</sup>  
 Brett Lawrence – 21<sup>st</sup>



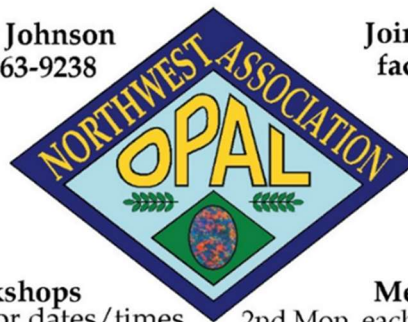
## THE RARE, THE UNUSUAL, THE EXOTIC III

P H O S P H O P H Y L L I T E Q N  
 R Z D U R T R Y P H Y L L I T E Z  
 O E E S P E C T O L I T E B P E O  
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 A E T I L A T N A T O N A G N A M

- |                |                      |                     |
|----------------|----------------------|---------------------|
| 1. ADAMITE     | 10. GREENOCKITE      | 19. OLIGOCLASE      |
| 2. ANATASE     | 11. HORNBLLENDE      | 20. PHOSPHOPHYLLITE |
| 3. ANGLESITE   | 12. LITHIOPHILITE    | 21. PROUSTITE       |
| 4. ARAGONITE   | 13. LUDLAMITE        | 22. STAUROLITE      |
| 5. AUGELITE    | 14. MANGANOCALCITE   | 23. SULFUR          |
| 6. BOLEITE     | 15. MANGANOTANTALITE | 24. TRYPHYLLITE     |
| 7. DESCLOIZITE | 16. MILARITE         | 25. WHEWELLITE      |
| 8. EKANITE     | 17. NEPHELINE        | 26. ZECTZERITE      |
| 9. GADOLINITE  | 18. PECTOLITE        |                     |

Tony Johnson  
 253-863-9238

Join us on  
 facebook



Workshops  
 call for dates/times

Meetings  
 2nd Mon. each month

# ROCK-A-TEER

Newsletter of Puyallup Valley Gem & Mineral Club

P.O. Box 134

Puyallup, WA 98371

<http://puyallupvalleygemandmineralclub.com>