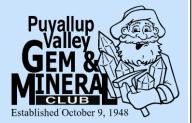
Rock-A-Teer



Newsletter of the Puyallup Valley Gem & Mineral Club

Issue 46

Volume 99

November

2021

THIS ISSUE

President's Perspective P.2 Field Trip Report P.2 Club House Schedule P.3 Club House Report & Field Trip Recap P.4 Membership Renewal P.5 Membership Application P.6 Rocks on Mars P.7-10 Community Supporters P.11 Mineral of the Month P.11 2021 Show and Tell P.12 2021 Officers and Chairs P.13 Word Search P.14 Happy Birthdays P.14

P.O. BOX 134, PUYALLUP, WA 98371 PVGAMC@GMAIL.COM WWW.PUYALLUPVALLEYGEMANDMINERAL CLUB.COM (253) 987-6751

President's Perspective

Tony Johnson

I would like to say THANK YOU to everyone who brought auction items and food for the potluck. The auction was a huge success. We had a wonderful time and everyone had a blast. You really do make this club an amazing group to belong to.

We are going to have the Vote for next year's BOARD OF DIRECTORS and the MAN & WOMAN OF THE YEAR, at the November 12th business meeting. If you haven't already, please email in your nominations to the club email address <u>PVG&MC@gmail.com</u>. We do not have mail in voting or email voting, it has to be <u>in-person</u>, so if you can make it, please come and let us know how you feel by exercising your right as a member.

We will have our BINGO night on November, 26th. This is not a potluck, so make sure you have snacks for yourself. Bring some donated items and the club will provide items as well. The meeting will start at 7:30pm at the regular time and we will go until we are BINGO 'ed out. If you don't want to BINGO, come to socialize.

Field Trip Report

November 20 – Twin Rivers (Joyce)

Meeting place - 10:00Aam Joyce General Store on Hwy 112

Hunting for - Concretions

<u>Tools you need</u> - Rock hammer, shovel, hammer, backpack/bucket for your treasures Access - easy terrain, based on the tides

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

December 11 - Rice Museum

<u>Meeting place</u> - 26385 Northwest Groveland Dr., Hillsboro, OR 97124
 <u>Hunting for</u> - Rock pile for children to prospect a specimen, Looking at museum displays
 <u>Tools you need</u> - Camera if you would like to take pictures
 <u>Access</u> - Wheel chair accessible
 <u>Additional items</u> - lunch/snacks and water, water, water. Dress in layers. Well worth the trip with displays of all kinds of minerals from the northwest

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.

NOVEMBER 2021 CLUB HOUSE SCHEDULE

DATE	DAY	TIME	ACTIVITY	LOCATION	INSTRUCTOR		
1	Monday	10:00AM-2:00PM	Members Workshop	Club House	Glen Ripper		
2	Tuesday	4:00PM-8:00PM	Members Workshop	Club House	Renera & Ed		
3	Wednesday	10:00AM-2:00PM	Members Workshop	Club House	Dennis Batchelor		
5	weunesuay	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	Glen Ripper		
9	Tuesday	4:00PM-8:00PM	Members Workshop	Club House	Renera & Ed		
9	Tuesuay	7:00PM	Club Board Meeting	Fruitland Grange	Jim Christian		
10	Wednesday	10:00AM-2:00PM	Members Workshop	Club House	Dennis Batchelor		
10	weunesuay	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	Opal Carving	Club House	Craig Oda		
14	Sunday		Floor repair				
15	Monday	10:00AM-2:00PM	Members Workshop	Club House	Glen Ripper		
15	Nonday	7:00PM-8:00PM	Opal Club Business Meeting	Club House	Tony Johnson		
16	Tuesday	4:00PM-8:00PM	Members Workshop	Club House	Renera & Ed		
17	Wednesday	10:00AM-2:00PM	Members Workshop	Club House	Dennis Batchelor		
17	weunesuay	4:00PM-8:00PM	Wire Wrapping	Club House	Tony Johnson		
18	Thursday	4:00PM-8:00PM	Members Workshop	Club House	Tony Johnson		
19	Friday		Air conditioner install.				
20	Saturday	10:00AM-2:00PM	Joyce Twin Rivers	Field Trip	Dennis Batchelor		
20	Saluruay	10:00AM-2:00PM	Members Workshop	Club House	Glen Ripper		
21	Sunday						
22	Monday	10:00AM-2:00PM	Members Workshop	Club House	Glen Ripper		
23	Tuesday	4:00PM-8:00PM	Members Workshop	Club House	Renera & Ed		
24		10:00AM-2:00PM	Members Workshop	Club House	Dennis Batchelor		
24	Wednesday	4:00PM-8:00PM	Opal Cutting	Club House	Tony Johnson		
25	Thursday		CLOSED - THANKSGIVING				
26	Friday	6:00PM	BINGO Night	Club House	Tony Johnson		
27	Saturday	10:00AM-2:00PM	Renera's Basics part 2	Club House	Renera & Joan		
28	Sunday						
29	Monday	10:00AM-2:00PM	Members Workshop	Club House	Glen Ripper		
30	Tuesday	4:00PM-8:00PM	Members Workshop	Club House	Renera & Ed		
		uestions about a	specific class or event, cor	tact the instruct	or		
Dennis		60) 870-8741	Ed Knoll (253) 651-7453		n (253) 863-9238		
	•	4@netscape.com	Jillian Higgins (253)355-3146		r (253) 508-7545		

This schedule is subject to change. Please check the club website for updates.

Clubhouse report

Tony Johnson

I am happy to report that the heater is operational and will hopefully be working for us for a long time. Thank you to Jayden for coming in and helping us get it wired and working.

We have had a string of breakdowns with regards to our large slab saws. I have been working to get them repaired and appreciate all your patience. The 20" has been repaired and will be moved into the club house within the next couple of weeks. I am sourcing a new motor for 16" and will hopefully have that one operational by the end of the month.

Jayden is going to be coming in to rewiring the slab saw room so we will be able to have all 5 saws in there running at the same time, without tripping any breakers.

SUNSHINE REPORT

With everything going on, we have started meeting again, but our attendance at the meetings is still low as members are staying safe. As a group we need to bring to eachother's attention members who need healing thoughts or prayer sent their way.

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

Field Trip Recap

Dennis Batchelor

We had some spectacular weather up at Marblemount, the fall colors were in full swing. The drive up you were blessed with some awesome dragons breath.

We had about 12 hardy folks searching the gravel bars for Listwanite and jade. Everyone got something. There were fish everywhere, the fishermen were getting their share too.

Next field trip is for concretions out by Joyce in November.

ANNUAL MEMBERSHIP DUES: Single - \$20	
[Dues are due October 1 st for the next calendar year and h	
FOR FAMILY MEMBERSHIPS, ALL	INDIVIDUALS MUST LIVE AT THE SAME RESIDENCE
SINGLE RENEWAL	FAMILY RENEWAL
RINT YOUR FIRST AND LAST NAME:	DATE OF BIRTH: / /
	, ETC, BELOW. IF SAME AS LAST YEAR, JUST CIRCLE "SAME" ASE ENTER THE NEW INFORMATION BELOW.
DDRESS: (CIRCLE ONE) SAME OR NEW:	
HONE: (CIRCLE ONE) SAME OR NEW:	
MAIL: (CIRCLE ONE) SAME OR NEW:	
OTHER: (CIRCLE ONE) SAME OR NEW:	
OR FAMILY MEMBERSHIP, CONFIRM/NAME OTHER FA	AMILY MEMBERS BELOW AND CIRCLE 'ADULT' OR 'CHILD' (under 18
Circle one) Adult OR Child	DATE OF BIRTH: / /
Circle one) Adult OR Child	DATE OF BIRTH: / /
Circle one) Adult OR Child	DATE OF BIRTH: / /
Please let the Membership Chairperson k	now as soon as any changes occur in the above information!
Names, addresses and phone numbers are provide	d to the Club Treasurer, Membership Chairperson and Board Members
>>OTHER THAN THE ABOVE, PVG&MC	DOES NOT SHARE YOUR PERSONAL INFORMATION<<
For Expeditied processing mail to: Jillian Higg	e Treasurer or mail to: PVG&MC, P.O. Box 134, Puyallup, WA 98371 jins c/o PVG&MC, 22509 120th St. Ct. E. Bonney Lake, WA 98391
	THE MAIL *** Make checks payable to: PVG&MC *** ill be created for you and be available by email, or mailed upon request.]
As a member of the Puvallun Valley Gem & M	lineral Club, I agree to abide by the rules of the Rock Hounding
	VS of the Puyallup Valley Gem & Mineral Club.
lember's Signature:	Date:

Puyallup Valley Gem & Mineral Club Membership Application

*** PLEASE PRINT LEGIBLY ***	Web Site: http://puyallupvalleygemandmineralclub.com								
ANNUAL MEMBERSHIP DUES: Single - S [Dues are due October 1 st for the next calendar year and									
FOR FAMILY MEMBERSHIPS, ALL I	INDIVIDUALS MUST LIVE AT THE SAME RESIDENCE								
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OR Child Name: First Name -> Last Name ->	DATE OF BIRTH: / /								
dditional Family members? Check here>	nd use an additional Application to add more family members.								
Address:	State: Zip: - -								
Primary Email:	Cell Phone: - <th< td=""></th<>								
Please let the Membership Chairperson know as soon as any changes occur in the above information! Names, addresses and phone numbers are provided to the Club Treasurer, Membership Chairperson and Board Members. >>OTHER THAN THE ABOVE, PVG&MC DOES NOT SHARE YOUR PERSONAL INFORMATION<< Give this completed form and your payment to the Treasurer or mail to: PVG&MC, P.O. Box 134, Puyallup, WA 98371 For Expeditied processing mail to: Jillian Higgins c/o PVG&MC, 22509 120th St. Ct. E. Bonney Lake, WA 98391									
 *** NEVER SEND CASH THROUGH THE MAIL **** Make checks payable to: PVG&MC *** [Upon receipt of this form with payment, a membership card will be created for you and emailed, or mailed upon request.] As a member of the Puyallup Valley Gem & Mineral Club, I agree to abide by the rules of the Rock Hounding Code of Ethics and the BY-LAWS of the Puyallup Valley Gem & Mineral Club. 									
ow did you hear about our Club?									
ember's Signature:	Date:								
Official Use Only: Membership #: Amount: \$ □ Cash □ Check [#]	Card Issue Date:// Roster Entry Date:// Credit Card Receiver's Initials: Email Date://								
я	Created by Universal Document Convert Revised September 4, 2021								

Rocks on Mars

A variety of rock types and sediments have been found on Mars. Many are similar to rocks on Earth.



Mudstone: This photograph, taken by NASA's Mars Rover Curiosity in 2015, shows sedimentary rocks of the Kimberley Formation in Gale Crater. The crater contains thick deposits of finely laminated mudstone that represent finegrained sediments deposited in a standing body of water that persisted for a long period of

time - long enough to allow sediments to accumulate to significant thickness. Image by NASA.

Sandstone: This

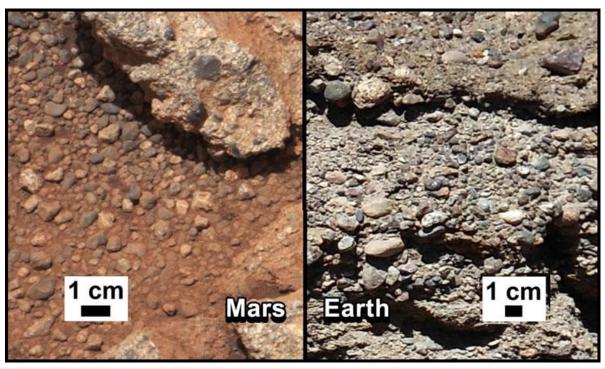
photograph was taken by NASA's Mars Rover Curiosity on August 27, 2015 using its mast camera. It shows an outcrop of cross-bedded sandstone on the lower slope of Mars' Mount Sharp. The crossbedding is very similar to the wind-blown sand outcrops commonly found in the U.S. Southwest. NASA directly compared this image to an **outcrop of** the Navajo Sandstone in Utah. Image by NASA.





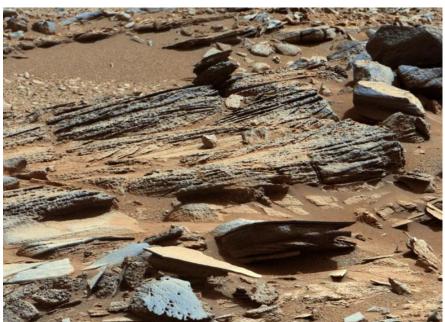
Shale: This photograph was taken by NASA's Mars Rover Curiosity in 2012 using its mast camera. It shows a portion of an outcrop inside the Gale Crater. This view shows an area about one meter wide. The color has been balanced to make the scene look as if it were on Earth. Visible in this image are <u>rocks</u> that are very similar to the <u>shales</u> found on Earth. They are fine-grained, thinly layered and fissile (meaning they easily break into thin sheets). Rocks on Earth that break this way are usually made up of clay minerals or mica grains that settled out of an aqueous suspension. Their plate-shaped grains deposited on the bottom in a parallel orientation. This gives the rock the ability to be split into thin layers. Clay minerals are known to be abundant on Mars, so it is likely that these rocks are composed of clay minerals.

Martian impact craters are a great place to observe rocks because the impact blasted a hole in the planet's surface with outcrops exposed in the crater walls. In this scene, large amounts of fine-grained sediments can be seen covering the ground. Sediments on the surface of Mars are a product of millions of years of asteroid impacts and mechanical weathering. They are reworked by the wind today, and in the past, they were moved, deposited, and reworked by flowing water. Image by NASA. Enlarge image. [1]

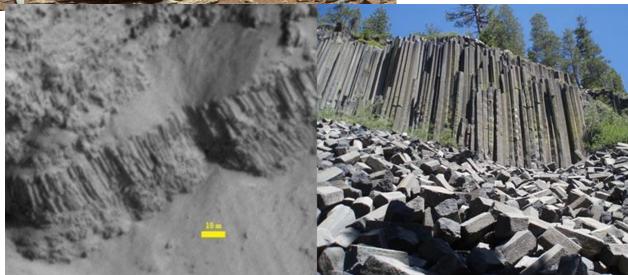


Conglomerate: The photograph on the left was taken by NASA's Mars Rover Curiosity in 2012 using its mast camera. It shows a portion of an outcrop of a rock similar to the <u>conglomerates</u> found on Earth. The pebbles below the rock are clasts that have been weathered from the rock. The photo on the right is a conglomerate outcrop from Earth to show similarity.

The presence of conglomerate and sandstones on Mars is evidence of moving water. Wind is not strong enough to pick up pebbles over one centimeter in diameter and carry them along in the current. The pebbles in this rock show a high level of rounding which implies a significant distance of transport. The red color is thought to be iron staining, which is nearly ubiquitous on Mars and gives it the name "Red Planet." The "cement" that binds the particles in these rocks could be a sulfate mineral. Image by NASA.



Cross bedding: This is another photograph taken by NASA's Mars Rover Curiosity in 2012 using its mast camera in the Gale Crater. It shows a portion of an outcrop with a sedimentary structure similar to the cross-bedded sandstones found on Earth. When a **sedimentary rock** that was deposited in nearly horizontal layers has internal layering that is inclined at a different angle, the structure is known as "cross bedding." The large-scale layering in these rocks is inclined to the left; however, the smaller internal layers are inclined at various angles. Multiple angles of cross bedding reveal that the direction of wind or water flow changed over time. Image by NASA.



Columnar basalt: The image on the left was taken from above by the Mars Reconnaissance Orbiter near Marte Vallis. It shows an outcrop of a <u>basalt</u> flow with columnar jointing. The image on the right is a National Park Service photo of the most famous example of columnar jointing on Earth. It is of a basalt flow that outcrops in the Devil's Post Pile National Monument in California. Images by NASA and the National Park Service. [4]



Meteorite: This is a photo of the "Heat Shield Rock," the first <u>meteorite</u> ever discovered on the surface of another planet. It is a baseball-size <u>iron-nickel</u> <u>meteorite</u> discovered by NASA's Mars Exploration Rover Opportunity in 2005. Opportunity used a spectrophotometer to determine its composition. Image by NASA. <u>More meteorites from Mars</u>. [5]

Scoria: This image shows a field strewn with pieces of a volcanic rock that are very similar to the scoria found on Earth. The rock in the foreground of the image is about 18 inches across and was found by the Spirit Rover. The rock has a rough surface and vesicles like scoria. Image by NASA. [6]





sand ripples. This is just one out of an enormous field of dunes. Image by NASA

Sand dunes: This satellite image acquired by NASA's Mars Reconnaissance Orbiter in July 2015 shows a sand dune moving over a highly fractured bedrock surface that has been broken by physical stress and temperature change. The leading surface of the sand dune is covered with

COMMUNITY SUPPORTERS

SALES Family Owned & Operated	South Hill RV Sales Offering the highest rated starter, midline, and high end towables and RVs at the lowest prices which has made us a top volume dealer in Washington state. 12414 Meridian East, Puyallup 98373 253-435-7751 or 866-435-7751 www.southhillrv.com
RICE MUSEUM OF ROCKS & MINERALS	Rice Museum of Rocks & Minerals To engage, inspire, and educate generations on the splendor and complexity of our Earth. 26385 NW Groveland Dr., Hillsboro, OR 97124 503-647-2418 Info@ricenorthwestmuseum.org www.ricenorthwestmuseum.org
H & I Lapidary	Amber, Jewelry, Beads, Findings, Gemstones, Slabs, Rough Material, Fossils, and Aussie items. Mike and LaVon Siperek (253) 531-7294 4203 E 99 th Street, Tacoma, WA 98446 Yankees_Diesel@comcast.net

MINERAL OF THE MONTH



Do you know someone with a November birthday? If you do, you might recognize this gemstone as the official birthstone of the month of November. It is Topaz of cource, and this particular stone comes in many different colors. Yellow colored Topaz, also called Citrine, has been the birthstone for many years, but Blue topaz, also called London topaz has blazed on the sceen over the last decade or more.

As you can see by the picture on the right, Topaz has a wide range of colors. Most are modified colors, such as

the London Blue which is heat treated, or Mystic Topaz which is treated with Titanium to get that crazy purple/green color, but it can be pink and blue as well. Pink and Red topaz are naturally occuring, but are increadbly rare, only really found in Brazil. They get their color from chromium, but tend to be somewhat smaller with more impurities than other pink stones like tourmaline, so are not widely dristributed. We of course have the very limited Champaine topaz found in Utah, and if you are looking for a fun digging experience, I would recombend planning a dig. All Topaz is subject to bleaching in the sun, so be sure to store your Topaz away from the sun.



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 any field trip finds	
January - 2nd Meeting		Lace or any field trip finds	No Meeting
February - 1st Meeting	February 12, 2021	Heart shapped or any field trip finds Red, Pink, & Purple or any field	
February - 2nd Meeting	February 26, 2021	· · · · · ·	No Meeting
March - 1st Meeting	March 12, 2021	"Sham" rocks or any field trip finds	
March - 2nd Meeting	March 26, 2021	Green or any field trip finds	Carl Carlson
April - 1st Meeting	April 9, 2021		
April - 2nd Meeting	April 23, 2021	No Show & Tell	No Meeting
May - 1st Meeting		Flower rocks or any field trip finds	
May - 2nd Meeting	May 28, 2021	No Show & Tell	Auction/Potluck
June - 1st Meeting	June 11, 2021	Fancy Slabs & Fossils + any field trip finds	
June - 2nd Meeting	June 25, 2021	No Show & Tell	Tailgate Party @ Grange Parking Lot
July - 1st Meeting	July 9, 2021		
July - 2nd Meeting	July 23, 2021	No Show & Tell	Jerry's Rock Shop
August - 1st Meeting August - 2nd Meeting	August 13, 2021 Saturday August 28, 2021		Picnic & Tailgate Party at club house on Saturday
September - 1st Meeting	September 10, 2021	Crystals + any field trip finds	
September - 2nd Meeting	September 24, 2021		Jerry's Rock Shop
October - 1st Meeting October - 2nd Meeting	October 8, 2021 October 22, 2021	Wood + any field trip finds No Show & Tell	Auction/Potluck
November - 1st Meeting	November 12, 2021		
November - 2nd Meeting	November 26, 2021	No Show & Tell	BINGO Night
December - 1st Meeting December - 2nd Meeting	Saturday December 11, 2021 No Meeting	No Show & Tell No Show & Tell	Holiday Banquet/Officer Installation on Saturday

2021 Elected Officers										
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:	Faith Preston	(360)440-8309	faithyjade@gmail.com							
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 Com	mittee Cha	airs							
Title	Name	Phone	Email							
Club house Coordinator	Tony Johnson	(253)863-9238	ynotopals@outlook.net							
Club Show Coordinator	Tony Johnson	(253)863-9238	ynotopals@outlook.net							
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										

Historian



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 or the WA Mineral Council at:

WASHINGTON STATE MINERAL COUNCIL

Weighington Statu

al Cosmell

HAPPY BIRTHDAY

November 2021

Zoey Billie – 1st Brent Tackett – 1st Anna Lewis – 2nd Jeff Hochstrasser - 2nd David Jewell - 2nd Autumn Warren – 2nd Aya Saito Held – 4th Felecia Love – 4th Pepper Baughman – 5th Kryste Kubik – 5th Cynthia Pusker – 5th Corynne Sperry – 5th Sheila Gerlach – 7th Richard Pew – 7th Kim Sirianni – 7th Brenda Brandon – 10th Patty Milligan – 10th Daren Foster – 11th Mike McCann – 12th Dennis Batchelor – 13th Allison Gates - 13th Sam Sakura – 13th Rory McLean – 14th Jan Nix – 14th Bob Ballou – 16th Lydan Churchill – 16th Maci McCann – 17th Colleen Donahue – 20th Sage Osterling – 21st Mel Urschel – 21st Rachel Redling-Nelson – 22nd Katja Whelan – 22nd Micah Bills – 23rd Brielle Herrman – 23rd Darcy Love - 23rd Lyla Seneca – 24th John G. Huber – 25th Kristine Herrman – 27th Deb Warren – 27th Jayden Schilling – 28th Ben McNiel – 29th Caiden Coubertier - 30th

		MINERALS A			٩R	OUND THE G			GI	GLOBE						
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ROCK-A-TEER

Newsletter of Puyallup Valley Gem & Mineral Club P.O. Box 134 Puyallup, WA 98371