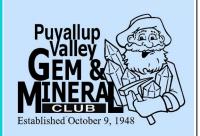
# ROCK-A-TEER



# Newsletter of the Puyallup Valley Gem & Mineral Club

Jillian Higgins

Issue 43

Volume 96

August

2021

#### THIS ISSUE

President's Perspective P.2

Field Trip Report P.2

Tentative Club House Schedule P.3

Thomas Melvin Slee Obituary P.4-5

Meet the Member: Becky Conwell P.5

Club House Report & Club House Rules P.6

Club Show Report P.6

Green Diamonds P.7-11

Community Supporters P.12

From the Bench P.13

Sunshine Report P.13

Mineral of the Month P.13

2020 Show and Tell P.14

2020 Officers and Chairs P.15

Word Search P.16

Happy Birthdays P.16

P.O. BOX 134, PUYALLUP, WA 98371 PVG WWW.PUYALLUPVALLEYGEMANDMINERAL CLUB.COM

PVGAMC@GMAIL.COM

(253) 987-6751

#### President's Perspective

#### Tony Johnson

We have a whole lot going on this month. Mike and LaVon Siperek are having their annual sale at the club house August 4<sup>th</sup> – 8<sup>th</sup> from 9:00am – 5:00pm. The club Show in the Woods is August 13<sup>th</sup> – 15<sup>th</sup>. The club annual overnight field trip is August 21<sup>st</sup> – 22<sup>nd</sup>. And the annual club picnic & tailgate is August 28<sup>th</sup>. Please see more information about each event below and check your email.

The WA State Fair in Puyallup is coming up in September and things have changed. They are not allowing booths for clubs and organizations, but we are allowed to have a display case and of course the competition cases. To have your work displayed in the club case, you need to have your pieces to Tony by August 28<sup>th</sup> (the day of the club picnic). For the competition, you will need to have your pieces dropped off at the fair Friday, August 20 & Saturday, August 21<sup>st</sup> from 11:00 – 4:00 or Sunday, August 22<sup>nd</sup> from 12:00 – 6:00. Please see competition details located on the fair website for more information.

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

#### August 21 & 22 Overnight - Greenwater

This fieldtrip is with the Washington State Mineral Council - overnight camp out & pot luck Meeting place - 9:00AM at the Enumclaw Ranger Station for those not camping out Hunting for - Jasper, Agate, Petrified wood, common opal

<u>Tools you need</u> - Rock hammer, shovel, pry bar, hammer, chisel and a backpack/bucket for your treasures

Access - this area is fairly easy to access

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

#### September 18 - Little Naches

Meeting place - 9:00AM on Hwy 410 at Forest Rd 19, mile marker 92

Hunting for - Jasper, Agate, Petrified wood, Thundereggs

<u>Tools you need</u> - **Rock hammer**, shovel, **pry bar**, hammer, **chisel**, treasure scoop, waders, and a backpack/bucket for your treasures

Access - moderate terrain, 1/2 mile hike to thunderegg site

<u>Additional items</u> - lunch/snacks and water, water, water. Dress in layers. Be prepared for ticks/mosquitoes

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.

# AUGUST 2021 CLUB HOUSE SCHEDULE

<b>DATE</b>	DAY	TIME	ACTIVITY	LOCATION	INSTRUCTOR
1	Sunday				
2	Monday	10:00AM-2:00PM	Members Workshop	Club House	Glen Ripper
3	Tuesday	4:00PM-8:00PM	Members Workshop	Club House	Renera & Ed
4	Wednesday	10:00AM-2:00PM	Members Workshop	Club House	Dennis Batchelor
	vvednesday	4:00PM-8:00PM	Wire Wrapping	Club House	Tony Johnson
5	Thursday	4:00PM-8:00PM	Members Workshop	Club House	Tony Johnson
6	Friday				
7	Saturday	10:00AM-2:00PM	Members Workshop	Club House	Glen Ripper
8	Sunday				
9	Monday	10:00AM-2:00PM	Members Workshop	Club House	Glen Ripper
10	Tuesday	4:00PM-8:00PM	Members Workshop	Club House	Renera & Ed
10		7:00PM	Club Board Meeting	Fruitland Grange	Jim Christian
11	Madaaday	10:00AM-2:00PM	Members Workshop	Club House	Dennis Batchelor
''	Wednesday	4:00PM-8:00PM	Opal Cutting	Club House	Tony Johnson
12	Thursday	4:00PM-8:00PM	Members Workshop	Club House	Tony Johnson
13	Friday	7:30PM	Club Business Meeting	Fruitland Grange	Tony Johnson
14	Saturday	Clubhouse Closed	"Rock & Gems in the Trees"		
15	Sunday				
16	_	10:00AM-2:00PM	Members Workshop	Club House	Glen Ripper
16	Monday	7:00PM-8:00PM	Opal Club Business Meet.	Club House	Tony Johnson
17	Tuesday	4:00PM-8:00PM	Members Workshop	Club House	Renera & Ed
10	Madaaday	10:00AM-2:00PM	Members Workshop	Club House	Dennis Batchelor
18	Wednesday	4:00PM-8:00PM	Wire Wrapping	Club House	Tony Johnson
19	Thursday	4:00PM-8:00PM	Members Workshop	Club House	Tony Johnson
20	Friday				
21	Saturday	10:00AM-2:00PM	Greenwater - Overnight	Field Trip	Dennis Batchelor
21		10:00AM-2:00PM	Members Workshop	Club House	Glen Ripper
22	Sunday	10:00AM-2:00PM	Greenwater - Overnight	Field Trip	Dennis Batchelor
23	Monday	10:00AM-2:00PM	Members Workshop	Club House	Glen Ripper
24	Tuesday	4:00PM-8:00PM	Members Workshop	Club House	Renera & Ed
25	Wednesday	10:00AM-2:00PM	Members Workshop	Club House	Dennis Batchelor
25		4:00PM-8:00PM	Opal Cutting	Club House	Tony Johnson
26	Thursday	4:00PM-8:00PM	Members Workshop	Club House	Tony Johnson
27	Friday				
28	Saturday	10:00AM-2:00PM	Picnic & Tailgate Party	Club House	Tony Johnson
29	Sunday				, ,
30	Monday	10:00AM-2:00PM	Members Workshop	Club House	Glen Ripper
31	Tuesday	4:00PM-8:00PM	Members Workshop	Club House	Renera & Ed
For questions about a specific class or event, contact the instructor					
Dennis Batchelor (360) 870-8741					
Renera Barnes rsb1224@netscape.com  Jillian Higgins (253)355-3146  Glen Ripper (253) 508-7545					
This Schedule is Subject to Change. Please check the website for updates.					

# Siperek Annual Rock Sale August 4<sup>th</sup> – 8<sup>th</sup> from 9:00am – 5:00pm

Come support Lifetime members Mike and LaVon Siperek at their annual rock sale held at the club house. They will be selling material from all over the world, including rare or hard to find pieces. Large selection from rough, slabs, preforms, and finished cabs, as well as jewelry, tumbled stones, fossils and a whole lot more. Please park in the neighbors Christmas Tree farm and walk over to the upper field for the larger items like rough and buckets, or under the covered RV parking for more finished gemstones, jewelry and slabs. Hope to see you there, but beat you to the amazing deals.

#### The 2<sup>nd</sup> Annual Show in the Woods

Jillian Higgins

The clubs 2<sup>nd</sup> Annual Show in the Woods is coming up August 13<sup>th</sup>, 14<sup>th</sup>, and 15<sup>th</sup>.

We will again be having Carl Carlson at our show as a special guest. He will be selling rough material, display pieces, and more finished items, as well as spreading his vast knowledge regarding Ellensburg Blue Agate and geology at large.

His schedule is:

Friday, August 13<sup>th</sup> from 10:00am – 3:00pm Saturday, August 14<sup>th</sup> from 10:00am – 3:00pm Sunday, August 15<sup>th</sup> from 10:00am – 3:00pm

Please come support our vendors and the club by checking out the show.

#### **CLUBHOUSE REPORT**

Tony Johnson

The clubhouse schedule this month is pretty busy with non-typical closures and activities. Please check the calendar and your email for details.

We are getting really busy now that summer is in full swing. Remember to sign up early to reserve your preferred date and class. With all the heat, we know some have been concerned, but we are using the A/C inside he club house and the cabbing room has been staying nice and cool. Sadly the same cannot be said for the trim saw room, but we are keeping the window open in the hope the breeze will bring some needed relief.

# Field Trip Recap

#### **Dennis Batchelor**

We will be keeping an eye out on the fire danger. Right now there will be no open camp fires, however, we will still be cooking our spaghetti dinner on a propane cooker, as well as breakfast Sunday morning. We will be meeting the non-campers or late arrivals at the Enumclaw ranger station and leave for the campsite at 10 am sharp both Saturday and Sunday mornings. As with all mountain sites, dress for weather changes and be prepared for ticks and mosquitoes. Material to be found is Jasper, common opal, agate, and petrified wood.

#### GREENWATER OVERNIGHT FIELD TRIP

We are having our annual overnight field trip. Just some quick reminders that if you are planning on attending, but not spending the night, Dennis will meet you at the Enumclaw ranger station at 9:00am both mornings.

For those spending the night, we will be having Tony's World Famous Campfire Spaghetti. The club will provide the main fair and Drinks, but we ask you bring side dishes to go with the Spaghetti and any specialty deserts you might have. Tony will also be making us breakfast of pancakes, eggs and bacon (or sausage). We would appreciate any additions to breakfast (otherwise we will be having leftovers, haha). We are hoping to have a campfire with the possibility of smores, but may have to save that for next year if the fire danger is too great to allow for open flames.

The most important thing to remember is to **bring lots of water**, and your own lunches for both days and a winning attitude! Good luck rockhounds.

## PICNIC, POTLUCK, AND TAILGATE

Jillian Higgins

The club Picnic will be held Saturday, August 28<sup>th</sup> with food drop off starting at 11:00am, eating to commence at noon, and tailgate to follow after everyone is full. The club will be providing hotdogs, hamburgers, and drinks. We are asking that the membership brings whatever potluck item they like.

For those who are tailgating, we will be parking in the upper field, remembering to get as close to each other as is safe so there is room for everyone who wants to vend. We ask that everyone else park at the neighbors Christmas Tree farm lot and walk over since the normal club house parking lot will be full of food and chairs.

# Hemimorphite

A zinc silicate mineral and a minor ore of zinc.

Article by: Hobart M. King, PhD, RPG



Blue Hemimorphite: Botryoidal hemimorphite crystals with a spectacular blue color completely coating the walls of a pocket. Specimen from the Wenshan Mine, Dulong ore field, Wenshan Autonomous Prefecture, Yunnan Province, China. The specimen measures 12.4 x 6.8 x 3.1 centimeters. Specimen and photo by Arkenstone / www.iRocks.com.

## What Is Hemimorphite?

Hemimorphite is a <u>zinc</u> silicate <u>mineral</u> with a chemical composition of  $Zn_4Si_2O_7(OH)_2*H_2O$ . It contains up to 54% zinc by weight and is a minor ore of zinc. Hemimorphite is a common secondary mineral found in the weathered <u>rocks</u> above and around zinc deposits.

Most hemimorphite is white, gray, colorless, or brown. Rare specimens with nice crystals and spectacular yellow, bluish green, or bright blue colors are popular with mineral collectors. It is also cut into **cabochons** and beads for **gemstone** collectors and jewelry.

Hemimorphite Crystals on Limestone: Brown crystals of hemimorphite encrusting limestone from the Granby Field, Tri-State District, Newton County, Missouri. The specimen measures 7.2 x 6.6 x 2.5 centimeters. Specimen and photo by Arkenstone / www.iRocks.com.

# Origin of the Name Hemimorphite

The word *hemimorphic* is an adjective used to describe a crystal that has terminations of different shapes at the end of its primary crystallographic axis. Adolph Kenngott knew that hemimorphite was one of just a few minerals that produced hemimorphic crystals. That inspired him to use the name *hemimorphite* in 1853.



Prior to Kenngott's use of the name, hemimorphite and smithsonite were both called "calamine". In 1962 the International Mineralogical Association chose to use the name hemimorphite for the mineral. [1]

# Geologic Occurrence of Hemimorphite

Most hemimorphite is found in the rocks above and surrounding zinc deposits. Here, primary zinc ores such as **sphalerite** were altered to produce hemimorphite as a weathering product, or secondary mineral. Some hemimorphite is also formed where zinc-bearing rocks were subjected to metasomatism.

Hemimorphite can occur as crusts that replaced primary sulfide minerals, crusts of crystals that covered the surfaces of fractures and cavities, or massive to granular aggregates of crystals that fill cavities and replace host rocks. The crystals that produce spectacular mineral specimens are often the last-to-form crystals that grow unobstructed, outward into a subsurface cavity.

Physical Properties of Hemimorphite			
Chemical Classification	Silicate		
Color	Usually white, brown, gray, or colorless. Sometimes displays spectacular blue, greenish blue, or green colors.  Beautiful color and interesting crystal habits make hemimorphite popular with mineral collectors.		
Streak	White		
Luster	Vitreous to pearly		
Diaphaneity	Translucent to semi-transparent		
Cleavage	Perfect on {110}, poor on {101}. Brittle with uneven fracture.		
<b>Mohs Hardness</b>	4 1/2 to 5		
<b>Specific Gravity</b>	3.4 to 3.5		
Diagnostic Properties	Crystal habit, hardness, specific gravity		
Chemical Composition	$Zn_4Si_2O_7(OH)_2*H_2O$		
Crystal System	Orthorhombic		
Uses	An ore of zinc. Specimens are popular with mineral collectors. Sometimes cut into gems for collectors.		

#### **Physical Properties of Hemimorphite**

If you attend a mineral show or visit a museum, you will see hemimorphite specimens with beautiful crystals and in spectacular colors. Most hemimorphite has an unremarkable appearance. It usually occurs in a massive or granular habit and is white, gray, colorless or brown in color.

Individual crystals, when distinguishable, can be prismatic, tabular and asymetric. When hemimorphite crystals grows into an unfilled cavity they often develop into a botryoidal habit or into a druse that covers the walls of the cavity. Associated minerals include: smithsonite, sphalerite, cerussite, anglesite, and galena.

Diagnostic properties in hand specimens are its crystal habit, hardness, specific gravity, and its effervescence with cold hydrochloric acid.



**Blue Hemimorphite Cabochons:** Two cabochons of hemimorphite with a wonderful blue color. The triangular cab measures 18 x 16 millimeters, and the small oval cab measures 11 x 8 millimeters.

#### Gemology

Hemimorphite is a favorite collector **gem** because it occurs in a range of spectacular colors. Some collectors seek out specimens that will cover the full range of hemimorphite's colors.

Hemimorphite should be used cautiously in jewelry. It has a Mohs hardness of only 4 ½ to 5, so it will be quickly abraded if worn in a ring or bracelet. It is brittle and has perfect cleavage, so it will break easily upon impact.

Because hemimorphite is fragile, its use in jewelry is best limited to earrings, pins, pendants, and other pieces that are unlikely to experience impact or abrasion. When stored, hemimorphite jewelry should be placed in cushioned boxes, bags, or jewelry box compartments where two pieces of jewelry will not rub against one another.

Specimens with spectacular colors can cause excitement. The Gemological Institute of America's lab received a translucent electric blue cabochon of 5.61 carats with a request to perform a Paraiba **tourmaline** origin report. The gem exhibited some properties that were consistent with Paraiba tourmaline, but testing revealed that it was hemimorphite with a Paraiba-like color. [2]

# Hemimorphite vs Smithsonite

Although hemimorphite and smithsonite are different minerals with different chemical compositions and crystal structures, they have frequently been confused - especially when only simple tools were available and the specimens could not be subjected to destructive testing. Often a single specimen will be an intergrown mixture of hemimorphite and smithsonite. Until the mid-to-late 1800s, the name "calamine" was used for both minerals.

Hemimorphite Crystal Cluster: A fan-shaped spray of colorless hemimorphite crystals in a radial habit. Specimen is from the Ojuela Mine, Mapimi, Durango, Mexico, and measures 2.8 x 2.4 x 1.0 centimeters. Specimen and photo by Arkenstone / www.iRocks.com.

#### **Crystal Habit**

Hemimorphite exhibits a variety of <u>crystal habits</u>, including prismatic, tabular, and botryoidal. The crystals are often blade shaped and grow in clusters. These clusters can form a fan-like spray of blade-shaped crystals; a cockscomb similar to <u>marcasite</u>; or, tightly intergrown, radiating clusters that produce a botryoidal habit.



A few properties can help prevent confusion. Hemimorphite has a lower specific gravity (3.4 to 3.5) than smithsonite (4.3 to 4.5). Hemimorphite will not react with <a href="https://hydrochloric.acid">hydrochloric.acid</a>, but smithsonite will effervesce in contact with cold hydrochloric acid - but remember that the two minerals are often intergrown in a single specimen. Hemimorphite has perfect cleavage in one direction, but smithsonite has perfect cleavage in two directions which meet to form rhombic shapes.

#### **COMMUNITY SUPPORTERS**



#### South Hill RV Sales

Offering the highest rated starter, midline, and high end towables and RV's 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

To engage, inspire, and educate generations on the splendor and complexity of our Earth.

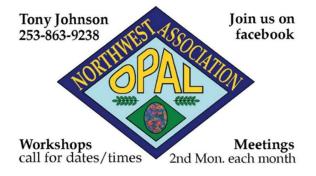
26385 NW Groveland Dr., Hillsboro, OR 97124 503-647-2418

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<sup>th</sup> Street, Tacoma, WA 98446 Yankees\_Diesel@comcast.net



#### FROM THE BENCH

## Alternative Pickling Solution

Sometimes Pickling Solution can be a little daunting with it's radioactive yellow/green color and it's eye watering fumes. If you are like me and are sometimes looking for a less harsh chemical alternative, I would suggest you try pH Down, which is a product for regulating pool PH that can be found at the hardware store.

It is just as effective at removing firescale and cleaning dirty metal, but is not as harsh and can be pored down your drain, **UNLESS**, you are working with copper. Follow safety guidelines with regard to the disposal of copper enriched solutions.

Heat the pH Down solution in your crockpot the same was as pickle, and neutralize it with backing soda, but expect the same results.

As a side note, pH Down is also a great way to adjust the pH of your garden soil. For those of us who like to play in the dirt, sprinkle a little pH down into the soil if the pH is too high and watch the levels lower to the proper pH.

## **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.

We are sad to announce the passing of Jan Nicoles, lifetime member of the club. More information regarding Jan, her husband Jim Nicoles, and their contributions to the club will be coming in the near future. No services are scheduled at this time.

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

# 2021 SHOW & TELL THEMES and PROGRAM NIGHT EVENTS

MEETING	DATE	SHOW & TELL THEME	PROGRAM NIGHT EVENT
January - 1st Meeting		Tiger's Eye or any field trip finds	
January - 2nd Meeting	January 22, 2021	Lace or any field trip finds	To Be Announced
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	•	To Be Announced
March - 1st Meeting	March 12, 2021		
March - 2nd Meeting	March 26, 2021	Green or any field trip finds	To Be Announced
April - 1st Meeting	April 9, 2021	April Fools Gold or any field trip finds	
April - 2nd Meeting	April 23, 2021	No Show & Tell	Auction/Potluck
May - 1st Meeting	May 14, 2021	Flower rocks or any field trip finds	
May - 2nd Meeting	May 28, 2021	No Show & Tell	To Be Announced
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	To Be Announced
August - 1st Meeting		Carnelians + any field trip finds	
August - 2nd Meeting	Saturday August 28, 2021		Picnic & Tailgate Party at club house on Saturday
September - 1st Meeting		Crystals + any field trip finds	
September - 2nd Meeting	September 24, 2021	No Show & Tell	Mini Lapidary Demonstrations
October - 1st Meeting		Wood + any field trip finds	A # /D - 41 1.
October - 2nd Meeting	October 22, 2021	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	Saturday December 11, 2021	No Show & Tell	Holiday Banquet/Officer Installation on Saturday
December - 2nd Meeting	No Meeting	No Show & Tell	

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	





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: mineralcouncil@zoho.com

# HAPPY BIRTHDAY

# August 2021

David Cowell – 4th Erika Joslin - 8th Joan Engel – 9<sup>th</sup> Rowan Higgins – 10<sup>th</sup> Randy Summers - 10th Emmett Wolf – 11th Ethan Wolf – 11th Terri Gerard – 13th John Engel – 15<sup>th</sup> Joan Lockyer - 16th Julie Murray – 16th Shirley Harmon – 20<sup>th</sup> Teresa Rodrick – 20th Wyatt Cowan – 22<sup>nd</sup> Faith Preston - 22nd Michael

Stevenson – 24<sup>th</sup>
John Bellows – 26<sup>th</sup>
Dana James – 26<sup>th</sup>
Debbie Bickford – 29<sup>th</sup>
Sunshine Chase – 29<sup>th</sup>
Haddie Giles – 31<sup>st</sup>
Kegan McVey – 31<sup>st</sup>

#### GEMS AROUND THE WORLD

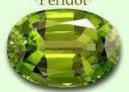
D R Ε S Н Α Ρ L U Α Р Ρ Η Ι R Ε F R G 0 D Α Ν В U R Ι Т Ε L Ε Ν Ρ S U  $\mathbf{E}$ Т Т K Ε S 0 0 Ε В M G L Α Χ Y В U R Ρ Ε S Ε Ρ S Т Ρ Α Ι C Α Ε Q Μ Α L Τ Τ F Ε U V Α Μ Ν Η D Α Ι Ν Ι R L С Т Τ C Η R Ι Ι Ζ W R K Υ Ι 0 Ι L Т Τ Ρ S R V L W Ι Ν I Ν Ε В Ι R G Ε D D Т Ρ Ε U Α J Ν 0 D Ι C Ε Τ Ν Т Ι Ζ C S F Ε Q Ε 0 K Η Ι R 0 Ν М Ι R 0 D Ι Y F Ν Η Α D Т Ε L G 0 Μ Ν Η Т Χ D Α Q Α W G Ν L S Т D K Ε Υ Ν Т V Т S Υ Η Т Ε В R 0 Τ, Ν Μ Α Z C Α U Α Ι R Ε Ν Ι R Α Μ Α U Q Α F Ρ Τ S G Α 0 Т Ν V Υ Η R Α Τ, M Τ. В 0 Ε Т Ι Ι F Η Ζ D  $\mathbf{E}$ Τ T. 0 G IJ M Ε S Ι Ν Ε Т Ι Ν Ε D Ι Η Ρ Α N  $\Box$ D

- AMAZONITE
   AMETHYST
- 3. ANDESINE
- 4. AQUAMARINE
- 5. BERYL
- 6. CITRINE
- 7. DANBURITE8. DEMANTOID
- O. DEMANIOID
- 9. DIAMOND
- 10. DIOPSIDE

- 11. EMERALD
- 12. GARNET
- 13. HEMATITE
- 14. HIDDENITE
- 15. IOLITE
- 16. JADEITE
- 17. KUNZITE
- 18. KYANITE
- 19. LAPIS
- 20. NEPHRITE

- 21. PERIDOT
- 22. RUBY
- 23. SAPPHIRE
- 24. SPINEL
- 25. SUGILITE
- 26. TANZANITE
- 27. TOPAZ
- 28. TOURMALINE
- 29. TURQUOISE
- 30. ZIRCON





Symbolizing dignity, fame, and prosperity. Peridots have been used in jewellerly through the ages to achieve peace and success, and to attract love and good fortune. Hawaiians believe the traces of peridot found in volcanic ash are the tears of the volcano goddess, Pels.

#### **Colors of Peridot**













# **ROCK-A-TEER**

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