



The monthly newsletter of the Cascade Mineralogical Society, Inc., Kent, Washington

Next Meeting: April 10, 2025 7:00 p.m.

American Legion Hall 25406 97th PI S Kent, WA

The Program is Rock Bingo, more info on page 7

# No Show & Tell

### **Table of Contents**

Young Richard's Almanac	3
Calendar	5
Cartoon	5
Board Minutes	6
General Minutes	6
From the Top of the Rock Pile	6
Stalactites & Stalagmites	8
Young Tumblers News	10
Sea Floor Crop Circles	11
Field Trips	11
Shows	12

Connect with us! Website: https://www.cascademineralogicalsociety.org Club Facebook: https://www.facebook.com/CasMinSoc/ Facebook Groups: https://www.facebook.com/groups/1168207926650075 Show Facebook: https://www.facebook.com/cascadegemandmineralshow Instagram: https://www.instagram.com/cascaderockclub/ YouTube Channel (Please like and subscribe): https://www.youtube.com/channel/UCaGIJxaWFAtV\_JjgZRm9ESA

This month remember to wish a Happy Birthday to Trent Burroughs on April 5 Penny Hohn on April 7 <u>Olivia Hermann on April 8</u> Heather Maran on April 9 Jody Egan on April 10 Chris Norris on April 12 Roxanne Oguri on April 14 Katie Wangelin on April 15 Majorie Medlin on April 17 Dan Dunphy on April 19 Heidi J Hermenet on April 21 Randy Peterson on April 23 Lee Oliver on April 25 Judy Bridges on April 29 and also remember to wish a Happy Anniversary to Lane & Alley Hutton on April 20 Richard & Jennifer Russell on April 23 (31 years) Jessica & Mr. Nash on April 27





Except where otherwise noted, material from The Tumbler may be reprinted for non-commercial purposes, provided that the author(s) and source are acknowledged.

April

For commercial use, the author(s) must be contacted for permission; if no contact information is given, contact them via the editor.

Tips, suggestions, recipes and experiments printed in this newsletter are the experiences and/or opinions of the individuals submitting them. We are not responsible for their authenticity, safety, or reliability. Caution and safety should always be practiced when trying out any new idea.

Membership Mailing Address: c/o Ananda Cooley 300 Lenora Street PMB 6145 Seattle, WA 98121

Keith Alan Morgan, Editor 3802 W Tapps Dr. E Lake Tapps, WA 98391 Postal, or Email, Exchange Bulletins are welcome. Email preferred. greenrockdraggin@yahoo.com The Tumbler

### Page 2 2025 Elected Officers

President Kat Koch Vice President Noelle Barnes Treasurer Ananda Cooley Secretary Pete Williams Director 1 – At Large Lee Oliver Director 2 - Field Trips Roger Danneman Director 3 – At Large Programs Paul Ahnberg Director 4 – At Large Pichard Russell	425-765-5408 206-914-0514 206-683-7787 425-228-5063 253-878-2151 425-228-8781 941-704-2063 253-736-3693	president@cascademineralogicalsociety.org geonoelleb@outlook.com cascademstreasurer@gmail.com petewill02@gmail.com loliver4252000@gmail.com roger.danneman@gmail.com runhikebird@icloud.com richru1@vaboo.com
Director 5 At Large Linda Jorza	206 478 1642	liorza@gmail.com
Past President Malcolm Wheeler Sr	253-569-5185	facetouru@aol.com
Show Coordinator Lee Oliver	253-878-2151	loliver4252000@gmail.com
Postage Stamps Michael Blanton	425-271-8757	mblanton41@hotmail.com
Mineral Council Diana Horsfall	425-226-3154	dianahorsfall@comcast.net
Mineral Council Ananda Cooley	206-683-7787	cascademstreasurer@gmail.com
20	25 Show Committee Ch	nairs
Cascade Coordinator Lee Oliver	253-878-2151	loliver4252000@gmail.com
Cascade Co #2 Michele Maidman	206-395-5270	maidmmm@yahoo.com
Cascade Co #3 Kat Koch	425-765-5408	president@cascademineralogicalsociety.org
Book Display Cases		
Show Display Cases Roger Danneman	425-228-8781	Roger.Danneman@gmail.com
Mail Flyers Michele Maidman	206-395-5270	maidmmm@yahoo.com
Show Treasurer Pete Williams	425-228-5063	petewill02@gmail.com
Show Silent Auction Richard Russell	253-736-3693	richru1@yahoo.com
Show & Raffle Donations Kat Koch Show Volunteer Recruiter	425-765-5408	president@cascademineralogicalsociety.org
Show Website Kat Koch	425-765-5408	vendorchair@cascademineralogicalsociety.org
Show Vendor Chairman Kat Koch	425-765-5408	vendorchair@cascademineralogicalsociety.org
	2025 Committee Chair	S
Club Historian Jim Cerenzie	253-638-1478	jcerenzie@yahoo.com
Donations Kat Koch	425-765-5408	president@cascademineralogicalsociety.org
Field Trip Roger Danneman	425-228-8781	Roger.Danneman@gmail.com
Health & Welfare Bev Williams	425-228-5063	britbev1957@outlook.com
Library Diana Horsfall	425-226-3154	dianahorsfall@comcast.net
Meeting Greeters Angie & Brian Bayer	253-569-0245	angiemc61@msn.com
Meeting Programs Kat Koch	425-765-5408	president@cascademineralogicalsociety.org
Membership Kat Koch	425-765-5408	president@cascademineralogicalsociety.org
Newsletter - Tumbler Editor Keith Alan Morgan	253-316-9935	greenrockdraggin@yahoo.com
Shop Instructors (Temp) Roger Danneman Shop Reservations – <i>Winter Shop Closed</i>	425-228-8781	roger.danneman@gmail.com
Public Relations Kat Koch	425-765-5408	president@cascademineralogicalsociety.org
Refreshment Angie & Brian Bayer Raffle Master Need Volunteer	253-569-0245	Text to her number (no email)
Show & Tell John Cornell	253-335-3617	outhouse2hole@gmail.com
Webmaster Gina Manso	425-281-3502	ginamanso51@gmail.com
Facebook Group Roger Danneman	425-228-8781	Roger.Danneman@gmail.com
Facebook Club Page Gina Manso	425-281-3502	ginamanso51@gmail.com
Instagram Gina Manso	425-281-3502	ginamanso51@gmail.com
All Other Social Media Kat Koch	425-765-5408	president@cascademineralogicalsociety.org

### 2025 CMS Dues are \$30 per year per family

Pay online, by mail, or at our meetings.

New mailing address: Cascade Mineralogical Society, c/o Ananda Cooley, 300 Lenora St. - PMB 6145, Seattle, WA 98121 You can pay your dues via credit card!! We now accept all cards through our website or at the meeting. You can renew your membership or enroll as a new member and pay your dues all in one shot online. You will find it under the "Membership" tab on our website. http://www.cascademineralogicalsociety.org

The object of the Society shall be to stimulate interest in the study of the earth sciences, lapidary arts and related subjects. This Society is affiliated with the American Lands Access Association; and the Washington State Mineral Council.

## Our Club is a Member of these Federations and Associations

ALAA: The American Lands Access Association, Inc. represents the rockhounding interests of 325 gem & mineral clubs/societies in 47 States and the District of Columbia.

The association's purpose is to promote and ensure the rights of amateur fossil and mineral collecting, recreational prospecting, and mining. The use of public and private lands for educational and recreational purposes. They also carry the voice of all amateur collectors and hobbyists to our elected officials, government regulators, and public land managers. http://amlands.org

The front page also has a lot of current news, rockhounding restrictions or lack of, etc. http://amlands.org ALAA also publishes a quarterly newsletter. To keep up on the news and lobby efforts on our behalf, check out http://amlands.org/

*Washington State Mineral Council:* The Washington State Mineral Council is dedicated to the location and conservation of rock and mineral sites of interest to the rockhounds of Washington state. https://mineralcouncil.wordpress.com/

You can find local rock and gems shows and planned field trips. It's a great resource if you want to plan on an outing.

Also check out "Misc. News" for all the latest updates on collecting sites around Washington. https://mineralcouncil.wordpress.com/news-updates/

When the weather is good, they have regular monthly field trips. So take advantage of these great outdoor rockhounding adventures! The field trip details are under "Field Trips" on the left side of the side. Check out the link for additional information for the time and place to meet and the field trip leader.

You can find all this information and a whole lot more about what is happening in our state at https://mineralcouncil.wordpress.com/

# **Rockhounding Code of Ethics**

I will respect both private and public property and will do no collecting on privately owned land without permission from the owner.

I will keep informed on all laws, regulations or rules governing collecting on public lands and will observe them.

I will, to the best of my ability, ascertain the boundary lines of property on which I plan to collect.

I will use no firearms or blasting material in collecting areas.

I will cause no willful damage to property of any kind such as fences, signs, buildings, etc.

I will leave all gates as found.

I will build fires only in designated or safe places and will be certain they are completely extinguished before leaving the area.

I will discard no burning material - matches, cigarettes, etc.

I will fill all excavation holes which may be dangerous to livestock.

I will not contaminate wells, creeks, or other water supplies.

I will cause no willful damage to collecting material and will take home only what I can reasonably use.

I will practice conservation and undertake to utilize fully and well the materials I have collected and will recycle my surplus for the pleasure and benefit of others.

I will support the rockhound project H.E.L.P. (Help Eliminate Litter Please) and will leave all collecting areas devoid of litter, regardless of how found.

I will cooperate with field-trip leaders and those in designated authority in all collecting areas.

I will report to my club or federation officers, Bureau of Land Management or other authorities, any deposit of petrified wood or other materials on public lands which should be protected for the enjoyment of future generations for public educational and scientific purposes.

I will appreciate and protect our heritage of natural resources.

I will observe the "Golden Rule", will use Good Outdoor Manners and will at all times conduct myself in a manner which will add to the stature and Public Image of Rockhounds everywhere.

from the AFMS website

# Young Richard's Almanac by Dick Morgan

As we go through life and reach the period when we really need someone else, many of those we were depending on are missing from our life.

Then you notice, that the nice people at the Senior Center are not just friendly people but are the very people we need at this time. They recognize when you need help and step up to the need. Some may need help themselves but step up to help others with a smile on their faces.

They go out of their way to help you anyway and they always do it with a smile on their face.





### The Tumbler

### Page 4

To get information to the Tumbler via the Internet send it to greenrockdraggin@yahoo.com Please put the word "Tumbler" and subject in the Subject Line. The deadline is the 20th of each month.

### We Need Your Canceled Postage Stamps

Our club is going to continue to collect canceled postage stamps. Even though we are no longer members of the NFMS, we will continue to collect them and turn them over to the NFMS. They have a stamp company that buys them, and these funds are donated to cancer research. Every year NFMS donates around \$2,500.

On letters that you receive, tear the corner with the stamp off. Try to leave about 1/4" of the envelope around the stamp. Be careful not to damage the stamp.

Place the stamps in a plastic baggie and bring them to the meeting. Our member, Mike Blanton, collects the stamps and will turn them over to the NFMS. You can give them to Mike as often as you want throughout the year.



### Don't Forget To Show Your Membership Card At These Retailers



These three retailers are huge supporters of our club. Please seek them out when looking for lapidary items and supplies

Don't forget to show your membership card and receive a 10% discount on most items!

Metal Detect AND MINING EQUIPMENT!

www.BlackJacksMetalDetectors.com Your place for Metal Detecting & Mining Equipment

> 101 Park Ave N, Renton, WA. 98057 Store # 425-430-0290 Direct # 253-961-3095

# SoDo Rocks

Friday thru Sunday 10 am to 4 pm

2700 4th Ave S, Seattle, WA 98121

### New for Members Only – New Texting Service

We are busy and often forget that CMS has an upcoming meeting or event. Therefore, we have a texting service to remind members of CMS meetings and events.

Everyone is automatically entered into this service. You can opt out anytime by responding with STOP.





For quick access, you can scan the following codes.

Access CMS Club Instagram page

Access our CMSclub website for the latest on meetings and club events



Access our CMS YouTube channel







Access CMS Facebook Groups

# April

Sun	Mon	Tue	Wed	Thur	Fri	Sat
		1	2	3	4	5
6	<b>7</b> Board Meeting 7:00 pm	8	9	10 General Meeting 7:00 pm	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30			

CMS Show Committee Meeting:...Monday, April 7.....6:30 pm to 7:00 pm CMS Board Meeting:....Monday, April 7.....7:00 pm to 8:00 pm CMS General Meeting:.....2nd Thursday, April 10.....7:00 pm to 9:00 pm

More Field Trip info can be found on Page 11 More Show info can be found on Page 12



The Tumbler has received One-Time Rights to publish this cartoon

### CMS Show & Board Meeting Minutes March 10, 2025

Canceled.

### CMS General Meeting Minutes March 13, 2025

Called to Order: 7:12

The percentage of club members reading the Tumbler newsletter is fairly low. Those wanting a paper copy mailed to their house can contact Kat. Our club is still collecting postage stamps even though we are no longer members of the Northwest Federation. Contact Ananda if you would like to see details of the club financials.

Two club positions need to be filled. The treasurer position and someone to run the monthly raffle at club meetings. Contact any Board member if interested. The club's liability insurance increased this year.

The April meeting program will be rock bingo. There is no charge, but we are collecting food for the Kent food bank. Please bring 3 wrapped rocks or related material for bingo prizes.

Program: Slide show on 2024 field trips by Roger Danneman.

Meeting adjourned at 8:09 Followed by show and tell and the raffle.

### From the Top of the Rock Pile by Kat Koch, President

Our club booth at the Puyallup Gem Fair went very well from March 14 to 16. Thanks to Noelle and Roger, who organized everything, and the volunteers who manned the booth. We passed out around 350 club flyers.

One last note. We are still striving to have a large indoor shop. All gem show proceeds and donations are held in a savings account for this purpose. Roger is building a facility on his property, and we will need to cover the utilities and rent. We may need

additional space for a combined shop and meeting area. If you know of any space that might be available for a nominal rent plus utilities, please email Kat. She will follow up on checking it out. The club could purchase something if the price is right.

Our Gem Show is almost sold out. We are also getting close to asking for volunteers to cover several jobs. Please seriously consider volunteering. The earnings from the gem show benefit the club and its members.

If you're a new member, we're thrilled to have you join our fantastic rock club! Your presence at our monthly meetings is highly valued, and we encourage you to take the opportunity to introduce yourself. I look forward to meeting you.

Since our membership continues to grow weekly, I hope more members will attend our monthly meetings. The larger our meeting attendance is each month, the easier it will be to book quality speakers. This month, we have our "Rock Bingo." The Kent School District students are on spring break, so bring all the kids,

adults, and guests you can round up. For further details on this meeting, see the meeting schedule elsewhere in this issue. When planning your estate, please consider donating to our club. We welcome gifts of any kind, including cash,

stock, real estate, or other assets. The club will hold all property, and monetary donations will be placed in our savings account to acquire or operate an indoor shop.

# **ATTENTION TREASURER VOLUNTEER!**

At the March meeting a member came up to inquire about volunteering for the Treasurer position.

We parted before I got your contact info.

Would you please call, text, or email Kat? My info is on page 2 of this newsletter.







by Pete Williams, 2025 Secretary

Page 6

### April 10th – Rock Bingo

Kent schools on spring break. So, it is time for our Rock Bingo night for all members, junior members and their friends, your grandkids, and guests. Everyone is guaranteed to be a winner. Rock Bingo is free tonight-a maximum of 3 games per player.

Each player is to bring 3 wrapped presents: rocks, minerals, fossils, cabochons, slabs, jewelry, or anything you think would be a lovely gift. New members and guests do not need to bring presents; plan on joining us for a fun night.

### May 8th - Glaciers by Paul Ahnberg

Glaciers, which are slow-moving rivers of ice, have sculpted mountains and carved valleys throughout Earth's history. They continue to flow and shape landscapes in many places today. But glaciers affect much more than the landscape.

Show 'n Tell: A white, clear mineral or crystal.

### June 12th – Carl Carlson and Food Drive.

Everything you ever wanted to know about Ellensburg Blues: Carl Carlson's family owns the property where his family discovered Ellenburg Blues.

This meeting is also our semi-annual food drive for the Kent Food Bank. Please remember to bring something. The Food Bank has told us they need feminine products and grape or strawberry jelly. People donate loads of peanut butter but never jelly. They also receive very few feminine product donations. Show 'n Tell: Any blue rock, rock, or crystal.





### Safety in Numbers by Ellery Borow, AFMS Safety Chair

Perhaps you have seen this in a nature program? There is a herd of grazing animals out on the savannah. Quietly waiting in the underbrush we see a patient and observant predator watching the herd. Suddenly there is action. The predator charges the grazing animals to secure its lunch. The action continues with the intended prey either escaping or becoming a meal. What are the odds of escaping? Are the odds better if the herd is large? What are the odds if the prey is disabled, a bit slower than the others, or in some other way compromised?

Let us bring that into the here and now. Suppose one's partner goes out to the lapidary shop. After an hour or so the first partner still has not heard any noise from the shop, so they go out to check on the person in the shop. Hopefully the person in the shop is quietly cleaning the equipment and not lying on the floor with a medical issue.

What if a group of people, happily digging in a quarry, has one member decide that they want to wander over the ridge and explore what might be collected there? Who will check on that explorer after an hour or so if no one even knew they had left the group?

In both the above narratives, the person in the shop, and the person doing the exploring, could have perfectly safe outcomes. However, in matters of safety, the number we like is at least two. Having a second person check on the first, having a second person know when the first might be back, having a second person carry the safety supplies when the first one, for some reason or other cannot, all rely on that vital second person to help with the safety of the first.

So how does safety in numbers work?

• No matter the activity, have a check- in schedule.

• If one must venture out alone, make sure there is another person who has the travelers destination and expected time of return.

• If there are multiple paths or trails to the destination, make sure the other person knows which trail is being used.

- Even if back roads are used, some roads are less traveled so let the other person know the route / roads just in
- case.

• If one is venturing alone be prepared with cell phone, safety supplies, a flashlight, food, and water among those supplies.

• Having paper trail maps can be a good idea instead of relying on GPS coordinates, especially in remote areas.

• Know the situation, circumstances, weather, and whatever might influence having a safe outcome, because every activity has its variabilities.

Too often one hears of one person working alone in the woods and a tree falls the wrong way, or the chainsaw kickbacks, or the chain on the tractor slips and a serious injury occurs, all with no one nearby to help. So maybe there are no trees for miles around your area, what then? There may be no trees, but there are those who surf alone, collect alone, swim alone, explore the desert alone, hike mountain trails alone, and so many other activities where having a second



#### Page 8

person could have been there to help in case of emergency.

Oh, in that herd of grazers? All of them escaped safely in that episode.

Please consider keeping the numbers high when engaging in any rock and mineral hobby. Please keep others apprised of your activities to help ensure there will always be safe out-comes. Your safety matters.

from AFMS Newsletter, 3/25

# How Stalactites And Stalagmites Are Formed by Kat Koch, Cascade Mineralogical Society

Stalactites and stalagmites, these natural wonders, form when water, carrying dissolved calcium carbonate (from limestone), drips through cave ceilings and floors. The calcium carbonate precipitates out as the water evaporates or loses carbon dioxide, creating these unique formations.

Here's a more detailed explanation:

The Process:

- Rainwater seeps through the ground and into cracks in limestone rock, dissolving calcium carbonate (calcite), a significant component of limestone.
- This water, now carrying dissolved calcium carbonate, drips through cracks in the cave ceiling and onto the cave floor.
- As the water drips, it comes into contact with the cave's air, and the carbon dioxide that was dissolved in the water is released.
- This release of carbon dioxide causes the calcium carbonate to precipitate out of the water, forming a thin layer of calcite.
- Over time, these thin layers accumulate, forming the icicle-like stalactites hanging from the ceiling and the mound-like stalagmites rising from the floor.

Stalac<u>tites</u>: (Cling <u>tight</u> to the ceiling, forming unique icicle-like structures)

- Stalactites form when water drips from the ceiling and the dissolved minerals precipitate, forming a deposit hanging from the ceiling.
- They often have pointed tips and can grow quite long over time.

Stalag<u>mites</u>: (You <u>might</u> trip over them as they grow upwards from the cave floor)

Stalagmites are a mineral formation that grows upwards from the floor of a

 Statagrittes are a mineral formation that grows upwards from the noor cave, formed by mineral deposits from dripping water.
 They often have rounded or flattened tips.

Columns:

- If stalactites and stalagmites grow towards each other from opposite sides, they can eventually meet, forming a column that adds to the unique beauty of cave formations.
- Other Cave Formations:

• Other cave formations besides stalactites and stalagmites include flowstone (sheet-like deposits) and soda straws (hollow, thin stalactites).

Factors Affecting Growth:

- The rate of cave formation (speleothems) growth, a testament to the intricate balance of nature, depends on factors such as rainfall, temperature outside the cave, and the amount of carbon dioxide in the soil.
- The shapes of speleothems are determined by how the water enters the cave (dripping, seeping, or splashing) and how the water stands or flows after entering the cave.
- The color of speleothems is determined by their mineral content. Pure calcite is white or colorless, while iron and other minerals can add shades of red, orange, and black.

Dating Stalactites and Stalagmites

• While cave visitors admire stalactites and stalagmites for their beauty, colors, and fantastical shapes, scientists are more interested in their concentric growth rings, which are similar to those of trees. This sequence of growth rings is visible when stalagmites and stalactites are cut in cross-sections and polished.

• With the new ability to "read" these growth rings, stalactites, and stalagmites are revealing their ages and providing additional insight into the geological and climatic conditions that existed when they formed.

• Due to variations in seasonal and drought cycles that control the abundance of surface water, growth rates are often uneven and erratic. Maximum growth occurs during peak surface water availability in rainy seasons, periods of snowmelt, or wet climatic cycles. However, when water is in short supply or unavailable, growth rings may not develop at all.

• Stalagmites, with their faster growth rate and thicker, more distinct growth rings, hold greater scientific value than stalactites. When water drips onto a stalagmite, the impact instantly 'degasses' the water, sharply reducing







acidity, accelerating the precipitation of calcium carbonate, and creating large, well-defined growth rings. This unique feature makes stalagmites a key focus of scientific research.

• Researchers now employ a newer, far more accurate radiometric dating technique. With radiometric dating, they can achieve an accuracy of just a few hundred years.

Bibliography: US National Park Service, Kids Discover,Rock and Gem Magazine, Live Science, NOAA Ocean Exploration



### Aquamarine in Folklore

It was believed that aquamarine would protect sailors and guaran-tee a safe voyage; its serene blue color would invoke calming properties of the sea, help to cool tempers and allow the wearer to remain calm and levelheaded. People in the Middle Ages believed that wearing aquamarine would prevent them from being poisoned. Ancient medicines were made from aquamarine powder to help cure a variety of infections, eye ailments, and allergic reactions.

Aquamarine was a popular stone with healers, mystics, shamans, and prophets; people believed it enhanced their paranormal abilities and aided in the occurrence of epiphanies.

Aquamarine Overview

The serenely colored aquamarine invokes the tranquility of its namesake, the sea. In fact, the name "aquamarine" is derived from the Latin word aqua, meaning water, and marina, meaning the sea.

Aquamarine is most often light in tone and ranges from greenish blue to blue-green. The color is usually more intense in larger stones, and darker blue stones are very valuable. This gemstone is mined mainly in Brazil, but it is also found in Nigeria, Madagascar, Zambia, Pakistan, and Mozambique.

Like emeralds, this gemstone is a variety of a mineral called beryl. Large gemstones have been found all over the world, including one gemstone found in Brazil that weighed over 240 pounds. Aquamarine grows in large, six-sided crystals that can be up to a foot long. This makes it a great gemstone to be cut and polished in larger carats for bold statement jewelry pieces.

via The Council Reporter, 3/25; from SCVMS Breccia, 03/25

Historically, pearls have been used as an adornment for centuries. They were one of the favorite gem materials of the Roman Empire; later in Tudor England, the 1 500s were known as the pearl age. Pearls are unique as they are the only gems from living sea creatures and require no faceting or polishing to reveal their natural beauty. In the early 1 900s, the first successful commercial culturing of round saltwater pearls began. Since the 1920s, cultured pearls have almost completely replaced natural pearls in the market. via CMS Tumbler, 10/15; from The Slate, 5/15

# Young Tumblers News

# **Obsidian Types by Keith Alan Morgan**

Some of the different types of obsidian that you can find.

Х	V	S	Ρ	Ι	D	Ε	R	W	Ε	В	R	Т	U	М
Y	А	Η	G	Q	D	R	В	В	Ν	А	А	J	Ι	В
В	F	Ρ	U	М	Ρ	Κ	Ι	Ν	Ε	U	Ρ	D	Ρ	Η
R	Х	J	А	D	J	Х	S	А	Ε	V	Ν	Y	S	S
Ο	G	V	G	С	Q	Κ	Ρ	Η	R	Ι	Κ	Η	Ν	F
W	М	W	Ρ	Κ	Η	W	U	L	G	С	Х	V	Ο	J
Ν	А	J	D	С	Ο	Ε	Κ	Η	Y	М	J	Κ	M	Ν
G	Η	Х	А	В	S	Х	Т	С	Т	Q	F	G	F	Ε
L	Ο	U	Ν	E	С	L	Ε	E	Ο	Р	L	S	L	Ε
W	G	Ι	F	Κ	А	U	V	D	А	С	Ε	Х	А	Η
Т	А	Η	G	С	Ε	Κ	L	U	Κ	R	А	Ζ	Κ	S
R	Ν	Ε	Ε	Η	S	R	Ε	V	L	Ι	S	Ε	Ε	D
V	Y	Х	S	L	G	J	V	Х	L	V	F	U	Ρ	L
D	D	V	U	В	L	А	С	Κ	Ρ	V	Ν	М	Q	0
J	С	Ζ	Ε	М	А	L	F	А	М	E	Ε	Ε	R	G

Apache Tears Black Brown Flame Gold Sheen Green Mahogany Midnight Lace Peacock Pumpkin Rainbow Silver Sheen Snowflake Spiderweb Velvet

What did the dinosaur use to cut wood? A dino-saw.

How do geologists like to relax? In rocking chairs, of course. from Crack the News, 3/25

### Field Trips

The club or clubs sponsoring the field trips are shown in italics. When known I have listed a phone number and contact person for each sponsoring club below the listed trips. If you are not a member of the sponsoring club, you should phone and ask permission to go on their field trip.

Some information from the Washington State Mineral Council webpage (https://mineralcouncil.wordpress.com).

- <u>April 12</u> Pow Wow Rock Club - Saddle Mountain - Meet before 8 am Boat launch SW of Mattawa - <u>Petrified wood</u> - Bring digging & light hard rock tools or just pick up smaller pieces Larry Vess vessel3755@gmail.com or (253)473-3908
- <u>April 19</u> Cascade Mineralogical Society - Saddle Mountain - <u>Petrified Wood, Opal</u> Difficulty Rating 2. Road is rough and this is a dig, but dig site is next to parking. Petrified wood is agatized and/or opalized. We also usually go to the Beverly Diatomaceous Earth mine for Diatom Opal which is an easy pick.

Roger Danneman roger.danneman@gmail.com; 425-757-3506 (texts ok)

### Crop Circles On The Seafloor? by Kat Koch, Cascade Mineralogical Society



#### 7-ft in diameter!

In 1995, divers noticed a beautiful, strange circular pattern on the seafloor off Japan's coast; soon after, more circles were discovered nearby. Some likened these formations to "underwater crop circles." The geometric formations mysteriously came and went, and for more than a decade, nobody knew what made them.

Finally, the creator of these remarkable formations was found: a newly discovered species of white spotted pufferfish, *Torquigener albomaculosus*. Further studies showed that these small pufferfish make ornate circles to attract mates. Males laboriously flap their fins as they swim along the seafloor, resulting in disrupted sediment and amazing circular patterns. Although the fish are only about 5 inches long, their formations measure about 7 feet in diameter!

In the mood for love? When the circles are finished, the females come to inspect them. If they like what they see, they reproduce

with the males, said Hiroshi Kawase, the Coastal Branch of Natural History Museum and Institute curator in Chiba, Japan. But nobody knows exactly what the females are looking for in these circles or what traits they find desirable. Pufferfish mating involves females laying eggs in the sediments in the center of the circles, and then the males fertilize them externally. Then, the females vanish, and the males stay for another six days, perhaps to guard the eggs, the study noted.

But this new pufferfish's geometric patterns have three features never seen before. First, they involve radially aligned ridges and valleys outside the nest site. Second, the male decorates these ridges with fragments of shells. Third, the male gathers fine sediments to give the resulting formation a distinctive look and coloring.

Males of some species of cichlids (a type of fish) are known to construct crater-shaped mounds that females visit to have their eggs fertilized. For example, male featherfin cichlids in Africa's Lake Tanganyika build small bowls out of the sand and display them to females before mating there, according to a University of Texas at Austin researcher.





Bibliography: Reeflex, Daily Mail, Washington Post.

### Shows

<u>April 5:</u> Saturday 9:00 am – 3:00 pm Rockhounds Downsizing & Estate Sale Everett United Church of Christ 2624 Rockefeller Ave Downtown Everett, WA

<u>April 5 & 6:</u> Saturday & Sunday 10 am – 5 pm Maplewood Rock and Gem Club, Annual Spring Rock and Mineral Sale Maplewood Clubhouse 8802 196th St SW Edmonds, WA

<u>April 11 - 13:</u> Friday 10 am – 6 pm; Saturday 10 am – 5 pm; Sunday 10 am – 4 pm BC Rock and Gem Show Treasures of the Earth Gold, Silver & Copper Explored Chilliwack Heritage Park 44140 Luckakuck Way Chilliwack, British Columbia, Canada

<u>April 25 - 27:</u> Friday 10 am – 4 pm; Saturday 10 am – 5 pm; Sunday 10 am - 4 pm Yakima Rock & Mineral Club, 62nd Parade of Gems Central Washington State Fair Ground Modern Living Building 1301 South Fair Avenue Yakima ,WA

<u>April 26 & 27:</u> Saturday 10 am – 5 pm; Sunday 10 am – 4 pm Lakeside Gem & Mineral Club, 28th Annual Rock & Mineral Show Benton Franklin County Fairgrounds Building 2 1500 S. Oak St, Kennewick, WA

> <u>April 26 & 27:</u> Saturday & Sunday 10 am – 5 pm West Seattle Rock Club, 57th Annual Rock Show Alki Masonic Temple 4736 40th Ave. SW. Seattle, WA

#### Moonstone

It was given its name by the Roman natural historian Pliny, who wrote that moonstone's appearance altered with the phases of the moon — a belief that held until well after the sixteenth century. A phenomenal gemstone, moonstones show a floating play of light (called adularescence) and sometimes show either a multirayed star or a cat's eye. Considered a sacred stone in India, moonstones often are displayed on a background of yellow (a sacred color) and are believed to encapsulate within the stone a spirit whose purpose is to bring good fortune. Part of the family of minerals called feldspar, moonstone occurs in many igneous and metamorphic rocks and comes in a variety of colors such as green, blue, peach, and champagne. The most prized moonstones are from Sri Lanka; India, Australia, the United States, Mayanmar, and Madagascar are also sources.

via CMS Tumbler, 10/15; from The Slate, 5/15

A Rockhound is the only person who is happy when down in the dumps. via CMS Tumbler, 9/15; via Golden Spike News, 6/15; via the Rock Buster News, 6/15; from Rock Buster News, 2/77

CONTENT DISCLAIMER: This publication is provided "as is" without warranty of any kind, either express or implied, including, but not limited to, fitness for a particular purpose; the technical data was derived from other sources, and the author has no way of knowing their accuracy.

This publication could contain technical inaccuracies or typographical errors. Changes are periodically added to the information herein; these changes will be incorporated in future revisions of this publication. The author, editor, or the Cascade Mineralogical Society shall not be liable for any incident or consequential damages, lost profits or data, or any indirect damages caused by using this publication's information.