

The CMS Tumbler

February
2025

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

Next Meeting:
February 13, 2025
7:00 p.m.

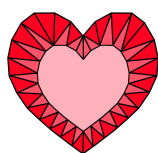
American Legion Hall
25406 97th Pl S
Kent, WA

The Program is Jim
Cerenzie

The Show & Tell
Theme is your favorite
rockhounding find

Connect with us!

Website: <https://www.cascademineralsociety.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

Joshua Dobner on February 3

Jack Petty on February 9

Levi Dobner on February 12

Linda Jorza on February 12

Scott Harris on February 14

Arleaha Werts on February 14

Jae Cites on February 15

Pete Williams on February 18

Maxim Tokmakova on February 22

Scott Miles on February 23

Jeff Leiphan on February 25

and also remember to wish a

Happy Anniversary to

Alyssa & Mr. Hjeltness-Werre on February 2

Angie & Brian Bayer on February 8 (13 years)

Rebecca & Mr. Waller on February 10

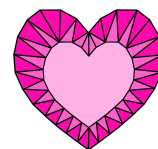


Table of Contents

Calendar.....	5
Cartoon.....	5
Board Minutes.....	6
General Minutes.....	6
From the Top of the Rock Pile.....	6
A Crystal Symphony.....	7
Neanderthal Viruses.....	8
Young Tumblers News.....	10
Member Obituary.....	11
Young Richards' Almanac.....	13
Field Trips.....	15
Shows.....	16



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

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

2025 Elected Officers

President Kat Koch	425-765-5408	president@cascademineralogicalsociety.org
Vice President Noelle Barnes	206-914-0514	geonoelleb@outlook.com
Treasurer Ananda Cooley	206-683-7787	cascademstreasurer@gmail.com
Secretary Pete Williams	425-228-5063	petewill02@gmail.com
Director 1 – At Large Lee Oliver	253-878-2151	loliver4252000@gmail.com
Director 2 - Field Trips Roger Danneman	425-228-8781	roger.danneman@gmail.com
Director 3 – At Large Programs Paul Ahnberg	941-704-2063	runhikebird@icloud.com
Director 4 - At Large Richard Russell	253-736-3693	richru1@yahoo.com
Director 5 - At Large Linda Jorza	206-478-1642	ljorza@gmail.com
Past President Malcolm Wheeler Sr.	253-569-5185	facetguru@aol.com
Show Coordinator		
Federation Representative Michael Blanton	425-271-8757	mblanton41@hotmail.com
Federation Representative Kat Koch	425-765-5408	president@cascademineralogicalsociety.org
Mineral Council Diana Horsfall	425-226-3154	dianahorsfall@comcast.net
Mineral Council Ananda Cooley	206-683-7787	cascademstreasurer@gmail.com

2025 Show Committee Chairs

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 Refurbish Roger Danneman	425-228-8781	Roger.Danneman@gmail.com
Mail Flyers		
Show Treasurer Pete Williams	425-228-5063	petewill02@gmail.com
Show Silent Auction Richard Russell	253-736-3693	richru1@yahoo.com
Pre-Show Raffle Case & Donation Requests Kat Koch	425-765-5408	president@cascademineralogicalsociety.org
Show Display Case Presenters		
Show Event Volunteer Recruiter		
Show Website Kat Koch	425-765-5408	vendorchair@cascademineralogicalsociety.org
Show Vendor Chairman Kat Koch	425-765-5408	vendorchair@cascademineralogicalsociety.org

2025 Committee Chairs

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	425-228-8781	roger.danneman@gmail.com
Shop Reservations – <i>Winter Shop Closed</i>		
Public Relations Kat Koch	425-765-5408	president@cascademineralogicalsociety.org
Refreshment Angie & Brian Bayer	253-569-0245	Text to her number (no email)
Raffle Master Roger Pullen	206-387-3214	Phone calls only. No email or texting.
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 Federation of Mineralogical Societies; the Northwest Federation of Mineralogical Societies; and the Washington State Mineral Council.

Our Club is a Member of these Federations and Associations

AFMS: The AFMS governs our Northwest Federation. <http://amfed.org/index.html>

The bulletins are published quarterly. You can find the news bulletins at <http://amfed.org/news/default.htm>



NFMS: The Northwest Federation is our home federation. To keep up on the goings-on in our own backyard. <http://northwestfederation.org/>

The link for the news bulletins is <http://northwestfederation.org/Newsletters.asp>



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 site. 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

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.

NFMS Needs Your Canceled Postage Stamps

Every year the NFMS collects postage stamps from its member clubs. They have a stamp company that buys them, and in turn, these funds are donated to cancer research. Every year NFMS donates around \$5,000.

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 turns them over to the NFMS at the regional rock and gem show. You can give them to Mike as often as you want throughout the year.

Collecting the stamps is another way we rockhounds give back to our community.



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

JERRYS ROCK AND GEM
 804 WEST VALLEY HWY. KENT, WA. 98032
jerrysrockandgem.com jerrysrockandgem@msn.com

Follow us on Facebook **253-852-0539**

Black Jack's Metal Detectors
 AND MINING EQUIPMENT!

Black Jack's Metal Detectors
 Mining Equipment, Low Pressure Dive, & Rock Shop!
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.



Access CMS Club Instagram page



For quick access, you can scan the following codes.

Access our CMS YouTube channel



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



Access CMS Facebook Groups



February

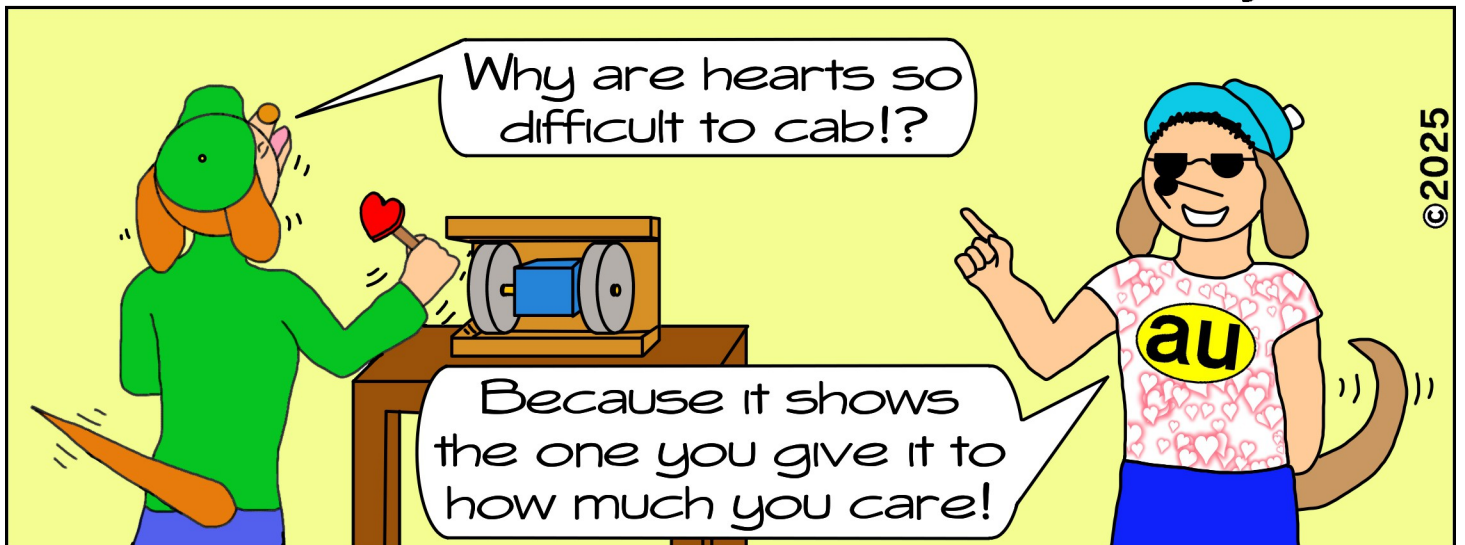
Sun	Mon	Tue	Wed	Thur	Fri	Sat
						1
2	3	4	5	6	7	8
9	10 Board Meeting 7:00 pm	11	12	13 General Meeting 7:00 pm	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	

CMS Show Committee Meeting: ... Monday, February 10.....6:30 pm to 7:00 pm
 CMS Board Meeting:.....Monday, February 10.....7:00 pm to 8:00 pm
 CMS General Meeting:.....2nd Thursday, February 13.....7:00 pm to 9:00 pm

More Field Trip info can be found on Page 15
 More Show info can be found on Page 16

Son of Mr. & Mrs. Rockhound

by KAM



CMS Board Meeting Minutes January 6, 2025

by Pete Williams, 2025 Secretary

Attendees: Kat Koch; Linda Jorza; Pete Williams; Rich Russell; Mike Blanton; Paul Arhnberg; Roger Danneman; Diana Horsfall; Ananda Cooley

Meeting called to order: 7:02

Our club ended the year with 156 family memberships and 309 individuals. Some of the money in the show account has been invested in CDs to earn higher interest. Liability insurance costs for the club will go up a little this year.

Kat ordered 10K flyers for our June Rock and Gem Show because the company offered a large discount. Lee and Michelle will coordinate sending the flyers out to various clubs to have available for their shows. We received a repeat customer discount for renting the gym at the Kent Commons. Kat wrote a procedure for managing the show to help guide show chair Lee and assistant chair Michelle.

The Board discussed the value of keeping membership in the Northwest Federation of Mineralogical Societies (NFMS). After some discussion the Board voted to not renew our membership this year.

The next Gem Faire is the 3rd weekend in March. We will participate again and will need volunteers to participate. Programs for 2025 will include finding minerals, glaciers, fossils, Ellensburg blues, and rock bingo night. More ideas are needed to fill out the yearly meetings. Election of officers will be held at the January meeting.

Roger is building a small shop on his property that our club will be able to use. The discussion was around limiting use to those who volunteer at club activities.

Meeting adjourned at 7:49

CMS General Meeting Minutes Month ?, 2025

by Pete Williams, 2025 Secretary

Called to Order: 7:19

Flyers for our upcoming June rock and gem show were available for members to pick up and distribute. Roger is building a shop on his property that could be completed by May. The Board assessed the value of belonging to the Northwest Federation of Mineralogical Societies (NFMS) and decided not to renew for this year. A sign-up sheet for volunteering for the upcoming March Gem Faire in Puyallup will be available at the next meeting.

The election of officers for 2025 was held. Most officers are on their 2nd year of a 2-year term so only 3 positions were expiring. Officers elected were Noelle Barnes for Vice President, Lee Oliver for Director position 1, and Rich Russell for Director position 4. Ananda agreed to remain as Treasurer until a volunteer comes forward to replace her.

The program for next month will be how to do research for mineral collecting by Jim Cerenzie. Jim also has a Youtube channel called Vug Meister that follows his collection of minerals.

Program: 2024 Field Trips and material collected by Roger Danneman.

Meeting adjourned at 8:03 Followed by show and tell and the raffle.

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

2024 is in our rearview mirror. It was a very successful year for our club.

We moved our Cascade Gem Show to June at Kent Commons. It has been an excellent decision for our club. We had the largest attendance since resuming our shows in 2018, with approximately 3,200 visitors!

The proceeds from our two club auctions in 2024 brought in around \$1,800. These funds help to cover our club's largest expense, the liability insurance policy. I expect the premium for 2025 will be near \$3,000.

Our booth at the Puyallup Gem Faire in November was also a success. We handed out nearly 200 club flyers. It is also so much fun to see the kids when they get a polished rock. We are going to have another booth at the March Gem Fair, March 14-16, 2025. Keep an eye out for the sign-up sheet. We will be handing out polished rocks, club brochures, and flyers for our June Cascade Gem Show.

I want to thank everyone who has helped make our club a success this past year, whether you volunteered for something, bought items at the club auctions, went on field trips, or attended our meetings.



Welcome
New Members

Our membership continues to grow every year. It looks like we are going to close out the year with 156 families or just under 300 individuals, which is encouraging. My goal for 2025 is to hit 200 families by the end of the year.

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.

I look forward to seeing everyone at the January 9th meeting. Our Field Trip Leader, Roger, will show us what they found on field trips this past year and what he has planned for 2025.

One last note. When you are doing your estate planning, don't forget our club. We would welcome any type of gift: cash, stock, real estate property, or any other type of asset. We are still striving to have a large indoor shop and meeting area. All gem show proceeds and donations are held in a savings account for this purpose.

2025 Meetings

February 13th - Jim Cerenzie

Our club member, Jim Cerenzie, is going to speak on how he finds long forgotten sites to hunt for rocks and crystals. He has a YouTube channel called the "Vug Meister" where he and his son go rockhounding to these places. If you watch YouTube please support him by subscribing to his channel.

Show 'n Tell: Your favorite rockhounding find. It can be a find from a field trip, your yard, the beach, or a riverbed.



March 13th – Glaciers by Paul Ahnberg

Glaciers, 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.



April 10th – Rock Bingo

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

Each player is to bring 3 wrapped presents. Rocks, minerals, fossils, cabochons, slabs, jewelry, or anything that you think would be a nice gift. Guests do not need to bring any wrapped items.

A Crystal Symphony by Kat Koch

These days, you hear so much about AI. So, I decided to play around with it. I asked ChatGPT to write a poem and a limerick about quartz, and the following is what it created. I thought it was pretty good.

A Crystal Symphony

In earth's deep embrace, you are born,
A gem of clarity, from dusk till dawn.
Quartz, the crystal of ancient lore,
Shimmering beauty, a timeless core.

Translucent shards of ice and light,
A guardian of the moon's soft night.
Your forms are many, hues diverse,
Each prism a fragment of the universe.

Amethyst draped in purple haze,
Rose quartz with its gentle gaze.
Smoky quartz, a shadowed hue,
Citrine, like the sun breaking through.

Within your lattice, secrets lie,
The pulse of ages, the earth's soft sigh.
From sand to crystal, pure and bright,
You hold the world in your quartzite.

A mirror to the soul's own quest,
A silent whisper, the heart's rest.
In every facet, strength you impart,
Quartz, the keeper of nature's heart.

Author AI

Quartz

There once was a quartz crystal bright,
That shimmered and sparkled with light.
Its facets did gleam,
In a soft, radiant beam,
A treasure that's quite the delight!

Author AI

Scientists Discovered 50,000-Year-Old Viruses In Neanderthal DNA That Could Help Explain Their Mysterious Extinction

by Kat Koch

* Neanderthals may have caught the same viruses that cause modern colds, cold sores, and some cancers.

* It's possible ancient humans introduced these unfamiliar viruses to their relatives.

* Understanding these ancient viruses may shed light on Neanderthals' extinction and modern diseases.

Neanderthals may have suffered from some very familiar diseases 50,000 years ago, which could have contributed to their downfall.

Researchers studying ancient Neanderthal DNA found traces of three viruses that cause colds, cold sores, genital warts, and cancer.

Ancient humans might have been the ones who started spreading these bugs, according to the scientists who recently published their work in the peer-reviewed journal "Viruses."

Most Neanderthal experts think the species went extinct due to various causes, from changing climate to low fertility rates to human interactions. Trying to recover from illnesses — especially unfamiliar ones introduced by distant cousins — likely wouldn't have helped.

Poor health from "these types of infections can have a negative impact when you are competing with another species," Marcelo Briones, one of the researchers who found the viruses, told Business Insider via email.

Not only could these ancient viruses contribute to our understanding of Neanderthals' extinction, but they might help us learn more about the modern versions still infecting humans today.

About 54,000 years ago, a small community of Neanderthals lived in Chagyrskaya Cave in Southern Siberia.

Briones and his colleagues studied the sequenced DNA data of two Neanderthals from the cave — an adult male and a boy — to look for evidence of three viruses they thought might have contributed to the species' extinction: adenovirus, herpesvirus, and papillomavirus.

* Neanderthals may have caught the same viruses that cause modern colds, cold sores, and some cancers.

* It's possible ancient humans introduced these unfamiliar viruses to their relatives.

* Understanding these ancient viruses may shed light on Neanderthals' extinction and modern diseases.

Neanderthals may have suffered from some very familiar diseases 50,000 years ago, which could have contributed to their downfall.

Researchers studying ancient Neanderthal DNA found traces of three viruses that cause colds, cold sores, genital warts, and cancer.

Ancient humans might have been the ones who started spreading these bugs, according to the scientists who recently published their work in the peer-reviewed journal "Viruses."

Most Neanderthal experts think the species went extinct due to various causes, from changing climate to low fertility rates to human interactions. Trying to recover from illnesses — especially unfamiliar ones introduced by distant cousins — likely wouldn't have helped.

Poor health from "these types of infections can have a negative impact when you are competing with another species," Marcelo Briones, one of the researchers who found the viruses, told Business Insider via email.

Not only could these ancient viruses contribute to our understanding of Neanderthals' extinction, but they might help us learn more about the modern versions still infecting humans today.

About 54,000 years ago, a small community of Neanderthals lived in Chagyrskaya Cave in Southern Siberia.

Briones and his colleagues studied the sequenced DNA data of two Neanderthals from the cave — an adult male and a boy — to look for evidence of three viruses they thought might have contributed to the species' extinction: adenovirus, herpesvirus, and papillomavirus.

The adenovirus can cause respiratory infections like colds or flu, while herpesviruses can cause cold sores or genital warts, depending on the type. Some cancers, like cervical cancer, are linked to the papillomavirus.

This isn't the first time researchers have found inert (no longer infectious) ancient human viruses. A 2021 study documented the discovery of adenovirus in 31,600-year-old human teeth from Siberia.

The adenovirus, herpesvirus, and papillomavirus found in this more recent study are nearly 50,000 years old, according to the researchers — 20,000 years older than the adenovirus found in the Siberian teeth.

That's around the time some experts estimate humans and Neanderthals interbred, between 60,000 and 50,000 years ago. In addition to swapping DNA, humans and Neanderthals probably passed around diseases.

It's not clear if newly introduced viruses would have caused the same symptoms in Neanderthals that they do in present-day humans. While infections likely induced an immune response, it's difficult to tell how severe the resulting illnesses would have been.

One 2016 study suggested interbreeding with Neanderthals may have boosted humans' immunity to previously unknown diseases. However, the Neanderthals may have been less lucky.

"A cold does not have to be fatal to decrease hunting efficiency or reproductive ability," per researchers. With an already small population, getting sick with new illnesses might have contributed to Neanderthals' extinction roughly 40,000 years ago.

What does it mean to have Neanderthal or Denisovan DNA?

Several direct-to-consumer genetic testing companies report how much DNA a person has inherited from prehistoric humans, such as Neanderthals and Denisovans. This information is generally reported as a percentage that



suggests how much DNA an individual has inherited from these ancestors. The percentage of Neanderthal DNA in modern humans is zero or close to zero in people from African populations, and is about 1 to 2 percent in people of European or Asian background. The percentage of Denisovan DNA is highest in the Melanesian population (4 to 6 percent), lower in other Southeast Asian and Pacific Islander populations, and very low or undetectable elsewhere in the world.

Ancient traits stand the test of time.

So, what Neanderthal genes are in humans? The researchers found that Neanderthal DNA is not evenly spread throughout the genome. In fact, some regions lack Neanderthal DNA entirely, suggesting that Neanderthal ancestry in those areas wasn't beneficial for survival. Other regions—particularly those linked to traits such as skin pigmentation, metabolism, and immune function—have higher concentrations of Neanderthal DNA. The researchers discovered that this uneven distribution existed in human genomes more than 40,000 years ago, indicating that some Neanderthal genes provided immediate benefits, such as helping humans adapt to new climates as they migrated out of Africa.

"This shows that natural selection on Neanderthal genetic variants, both beneficial and harmful, acted very rapidly and was likely quite strong," says Benjamin Peter, Dept. of Biology, University of Rochester.

The patterns in the DNA also suggest that interbreeding may not have been entirely random. Instead, factors such as geography or culture may have influenced which groups of humans were more likely to interact with Neanderthals, leading to different amounts of Neanderthal DNA in different populations.

Bibliography: Medline Plus, University of Rochester, Smithsonian's Human Origins.

Chalcedony

What is chalcedony (käl-sěd'n-e)? The name is thought to have come from an ancient seaport, Khalkedon, in Asia Minor, modern day Turkey, where some of the earliest deposits are thought to have been found. In fact, today, chalcedony is the generic name for materials composed of micro-crystalline quartz. Varieties of chalcedony include agate and jasper. Quartz is a mineral composed of silicon and oxygen (SiO₂). Micro-crystalline means the quartz forms in crystals that are so small, that a microscope is needed to see them individually. Other types of quartz have large visible crystals you can see with the naked eye. Chalcedony usually develops at low temperatures in rock cavities and its habit is botryoidal. Chert, a fine-grained sedimentary rock, may contain chalcedony, agate and/or jasper.

Chalcedony has a specific gravity of 2.65, as opposed to say, opal at 1.9-2.3. It is 7 on the Mohs hardness scale. When it breaks, however, it breaks in a smooth, curved surface(s) fracture across thousands of quartz microcrystals. The microcrystalline nature of chalcedony causes the fracture to have a dull waxy luster and, because there is a disturbance at each crystal boundary, much of the light that strikes it is scattered rather than reflected, as with quartz. Broken quartz has a bright, vitreous luster. These are clues to help you tell chalcedony from quartz.

Chalcedony comes in a wide range of colors, commonly white, brown, red, gray, black, orange or yellow. It can occur in a wide range of shapes; it may be banded, or have dendritic, mottled, plume, mossy or other color structures within. Chalcedony is perfect for making tumbled stones.

Bloodstone, aka heliotrope, is the opaque, spotted form of chalcedony. It is found primarily in India.

Carnelian is the translucent, reddish orange form of chalcedony quartz. High quality carnelian comes from England and India. Chrysoprase is the most precious form of chalcedony. It is apple-green due to the presence of nickel. Chrysoprase comes from Australia, Austria, Brazil, Russia and California, USA.

Agate is a translucent to semitransparent variety of microcrystalline quartz, chalcedony. It is distinguished from other forms of chalcedony by the concentric curving, parallel-colored bands that appear inside when cut open. The curves and bands are caused by the presence of various impurities.

Moss agate contains iron and manganese inclusions and makes the stone appear as if it has green vegetation growing in it. NOTE: Onyx (fracture is uneven, has vitreous luster), sard and sardonyx are similar to agate but don't have curved bands; but rather straight bands. Fact: If you have a piece that is semitransparent, and very thin, you can hold it up to the light and see distorted or foggy images through it. If you hold that same piece up to the light and you pass your hand between the material and the light source, your hand will block the light passing through it. However, if you hold up a translucent piece up to the light you will see a small amount of light passing through the edges. Main sources of agate are Brazil, England, Germany, Scotland and Uruguay.

Jasper, colored by iron-oxide, which causes its' red color. It is a variety of the microcrystalline variety of quartz. Jasper comes in shades of brown, grayish blue, red, yellow, green and mixtures of these. Its habit is mammillary.

"Orbicular" jasper has white or gray, eye-shaped patterns surrounded by red jasper. "Ribbon" jasper is striped and used in carvings, cameos and intaglios, which show off its layered structure. Hornstone is a gray variety.

Red jasper occurs in Venezuela and India; various colors occur in the United States especially orbicular variety in California. Red and green ribbon jasper occur in Russia. Jaspers are also found in France and Germany.

via The Council Reporter, 1/25; from MSSC Bulletin, 9/24

Keeping Ivory "Ivory"

Ivory is a natural substance that needs light, so never put it in the dark! If your pieces have started to yellow, take half a lemon and rub it in some salt. Then rub it over the ivory object. The lemon will work on taking away the yellow discoloration.

After the piece is dry, dampen a soft cloth with lukewarm water and rub the ivory to "polish" and dry it.

via Lowcountry Diggings, 11/24; via Gem Cutters News, 11/11; from Pick 'N Pack, 12/09

Young Tumblers News

Agate Types by Keith Alan Morgan

Various types of agate can be found by looking up, down, left, right and diagonal. Have fun!

Q C R A Z Y L A C E F M V S K
 U T A Y T W E J D L A G U N A
 C D L R U I U O P E S H O A R
 I R L P N T G A M F D I W K Q
 T Q E U A E H U N E T B U E I
 I W T G W K L Y L A Z J V S J
 R N I F Q P D I C T W B B K Y
 D R R D L T S I A C A S R I R
 N U R P H A F Y R N V M T N M
 E B U T E I M Q D C A X B O E
 D R T S T D S E L I Z Y N D B
 S I M R I U D F O Y L T H A P
 G A O J W R O K D J A H W S D
 H F S Y E R I F P N S G I U T
 X W S Q R T O D A K L O P B Z

Banded
 Botswana
 Carnelian
 Crazy Lace
 Dendritic
 Fairburn

Fire
 Flame
 Fortification
 Iris
 Laguna
 Montana

Moss
 Plume
 Polka Dot
 Snakeskin
 Tube
 Turritella

Words 101: Lepidolite

Pronounced: le pid' o lite

From the Greek Lepis meaning scale. Lepidolite, a mica group mineral, is usually pink in color and is a source of the element lithium, as well as trace quantities of rubidium and cesium.

from The Agateer, 9/15

Richard Morgan Obituary by Keith Alan Morgan

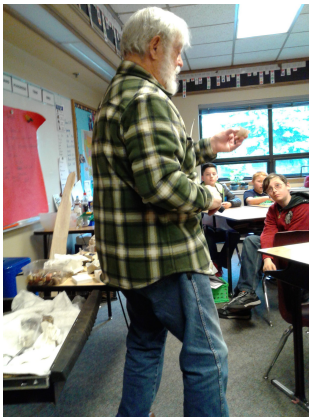


Richard Morgan was born June 29, 1936, on his aunt's property in Lindenhurst, New York in a chicken coop. (Well, it had been a chicken coop converted into a guest house.) Interestingly the house was next door to the place where the love of his life would later grow up. The early part of his life was spent on the family farm in Pemberton, New Jersey, before his parents moved to Washington state and he finished his schooling at Kent-Meridian. He joined Boeing before being drafted into the army where he became part of a repair group in West Germany nicknamed the Jury Rig Outfit since they could get equipment up and running until the proper equipment could be brought in to fix it properly. One day on leave he was visiting his aunt's house when his cousin brought her best friend over and for the gawky, 15-year-old girl it was love at first sight. For Richard it took a few years for Patricia to grow up into the beautiful young lady he later fell in love with and made his wife.



In the 1970s, after years of taking night school courses so he could move up in the Boeing company he had time to spend with his family. His son was interested in rocks and minerals so he found the Boeing Employees' Mineralogical Society (our club under its old name) and found he enjoyed the various activities, field trips, lapidary work, talking, and he started teaching others to use the lapidary equipment. He also ran for and held various offices in the club, President, Treasurer, and Secretary and he also won the J. Arthur Risher Award that the club used to give out to members who helped out the club freely.

He ran the raffle at the club meetings for years, and would help move cases for when the club would display in shows. He volunteered to help teach kids about rocks and minerals during open houses, at schools, and at science fairs. He carried rocks in his pockets so he could show off his work and explain how rocks formed.





Rich on his 87th birthday

He loved to talk to people, as he said "God gave us a mouth for two reasons, and you can only eat so much."

His Young Richard's Almanac column started in May 2004 and was named in honor of Benjamin Franklin's Old Richard's Almanac since dad was a lot younger than "Old Richard".

He was the oldest living male on his side of the family and was relatively active and spry, even driving, up until the health problems he had suffered in this last year. He would talk to the various people working at the local Walmart so much that when he was in the hospital they would ask how he was doing. One guy wished him well and when we asked his name, he felt dad wouldn't know who he was. I felt dad was doing something right when someone who didn't think dad would know him was wishing him well. My sister and I visited him and the doctor told us that if they could find a place for him to get dialysis three times a week he could come home, but hours later we got the call that he had passed away on January 17, 2025.

He will be missed.

Editor's Note

For those who liked them there will be some Young Richard's Almanac's for, at least, a few issues. Dad would write down some, then forget to give them to me, or forgot where he put them, and going through his papers I have found a couple already.

Young Richard's Almanac by Dick Morgan

The spread of time I lived I call the Engineering Age, as so many changes were made to existing inventions that made life better.

Rocks And Minerals Magazine Celebrates 100 Years by Johan Maertens

I received the first number of Centennial Volume 100 of the Rocks and Minerals Magazine.

Hundred-year-old, wow!

Publishing on specimen mineralogy, mineral localities, geology and paleontology since 1926.

Rocks and Minerals is a long-standing, popular magazine that caters to mineralogists, geologists, and amateur rock and mineral enthusiasts. Here is an overview of its history:

Founding and Early Years

Rocks and Minerals was first published in 1926, making it one of the oldest continuously published magazines in its niche.

It was originally created as a hobbyist publication focused on collecting rocks, minerals, and gemstones. Early issues included articles on mineral identification, field collecting tips, and lapidary techniques.

Development and Expansion

Over the decades, the magazine expanded its scope to include:

- * Scientific mineralogy and petrology
- * Mining history and geotourism
- * Fossils, gemstones, and related topics

The magazine became an essential resource for both professionals and amateur collectors, providing a bridge between scientific content and accessible material for hobbyists.

Key Partnerships

Rocks and Minerals has established partnerships with major geological and mineralogical organizations over the years. Rocks & Minerals works with the Mineralogical Society of America to bridge the gap between collectors and professional mineralogists, and it is affiliated with the Friends of Mineralogy, the Midwest Federation of Mineralogical and Geological Societies, and the Eastern Federation of Mineralogical and Lapidary Societies.

It is also known for featuring reports and photos from major mineral shows, such as the Tucson Gem and Mineral Show.

Editorial Evolution

The magazine has consistently aimed to balance scholarly contributions with content appealing to enthusiasts.

Its editors have included prominent figures in the field, contributing to its reputation for high-quality, accurate information.

Current Status

Today, Rocks and Minerals is published by Taylor & Francis and remains widely respected within the mineralogical and geological communities.

The magazine is issued bimonthly and features richly illustrated articles on minerals, collecting, geology, and museum displays, as well as book reviews, show calendars, and reports on new mineral discoveries.

Continuing Relevance

Under Marie Huizing's exceptional stewardship, Rocks and Minerals has retained its reputation as a leading publication in the field. By combining scientific rigor with accessible content, the magazine remains relevant nearly a century after its founding. Its enduring success is a testament to the vision and leadership of Huizing, whose contributions have shaped its identity and ensured its legacy.

Rocks & Minerals was one of the 2011 Gold Ink winners, being honored with the Silver Award in the Scientific & Technical Journals category. The awards are presented to printers and publications that demonstrate exceptional quality and execution of products.

Marie Huizing: A Legendary Editor

Marie Huizing has served as the editor-in-chief of Rocks and Minerals for an incredible 48 years (2025), surpassing the founder, Peter Zodac who completed 42 years. Her tenure represents a remarkable continuity in the magazine's leadership.

Under her guidance, the magazine has consistently published high-quality content that appeals to both hobbyists and professionals.

She has overseen the magazine's transition into the modern era, adapting it for a broader audience while maintaining its traditional focus on mineralogy and collecting.



Marie Huizing has been instrumental in curating visually stunning issues, ensuring the inclusion of top-notch photography and well-written articles that celebrate the beauty of minerals and their scientific significance.

She has also fostered strong relationships with contributors, museums, and mineralogical organizations, ensuring the magazine remains a cornerstone of the community.

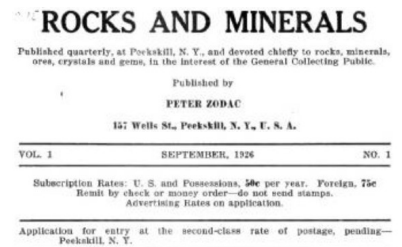
Marie's long-term leadership is a testament to her passion and dedication, making her one of the longest-serving editors in the field of specialized publishing.

In recognition of her contributions to the literature of the Earth Sciences, Marie Huizing received the Cincinnati Mineral Society Educational Foundation Award in 1978, and was presented the Carnegie Mineralogical Award for 1995 and the Mineralogical Society of America Distinguished Public Service Award in 2007.

Thank you also to current Executive editors; Carl Francis, Peter Megaw, John Rakovan and Malcolm Southwood to Marie's husband Terry, who worked for Rocks and Minerals Magazine prior to Marie and never stopped his amazing support and to many more volunteers for 100 years of Rocks and Minerals Magazine.

Founder Peter Zodac wrote 100 years ago: The success of "Rocks & Minerals" depends on YOU (as subscriber).

from The Quarry, 1/25



The idea of publishing a magazine devoted to minerals was first suggested to me thru the large number of letters I received from collectors and would-be collectors who desired information on the subject, methods in analyzing minerals, hints on making a collection, and so forth. So many letters did I receive and so keen was their interest, that I was oftentimes swamped with correspondence. As a solution, I finally decided a magazine on minerals would be just the thing.

Before attempting a publication of this sort, I first sent out circulars informing collectors of my plan. That my idea met with approval, is well typified by the large number of replies received from collectors all over America, who not only sent in subscriptions and heartily endorsing my move, but even offered to assist me by "boosting" the magazine with special articles, new subscriptions and advertisements. I trust, therefore, that "Rocks and Minerals" will be favorably received and generously supported, by each and every collector.

There are hundreds of thousands of collectors, of all kinds in America, only a small number, possibly a thousand or so, are real mineral collectors. This is chiefly due to the difficulty a beginner has in learning about the subject. The purpose of this magazine is to give, in a non-technical way, enough information to interest a beginner in the collecting of minerals, and to instill in him a desire to know more about them. In order to achieve this aim, and to better serve our subscribers, we cordially invite you to assist us with articles on mines, minerals, gems, localities, and other interesting topics, so as to make this magazine, worth-while.

The success of "Rocks and Minerals" depends upon YOU!!!

Criticism of this magazine or articles are welcome.

Why So Many Silicate Minerals?

Many, if not most, minerals of interest to lapidaries are of a class known as silicates. All of these minerals have as their basic structure what is called the oxygen-silicon tetrahedron, a combination of four oxygen atoms surrounding a central silicon atom – SiO₄. This little cluster of atoms forms a three-sided pyramid, and plus the base, a four sided solid. Hence its name 'tetrahedron' - four-sided solid. Silicate minerals are common because oxygen (47%) and silicon (28%) compose most of the earth's crust. But, this is only part of the story. What makes the oxygen-silicon tetrahedron especially interesting is its ability to polymerize – to chemically bind to the next adjacent O-Si tetrahedra. Most of the polymers we are familiar with are based on carbon – nylon, polyethylene, dacron, etc. Life on earth owes its existence to the ability of carbon atoms to combine with other carbon atoms, producing all the complex compounds that make up living organisms. Atoms with four electrons in their outer shells have this ability, but especially so with carbon and silicon. Science fiction writers often hypothesis that if there is extra terrestrial life it is most likely based on carbon. But if it is not carbon-based, the next most likely candidate would be silicon-based life.

The polymerization of oxygen-silicon tetrahedra produces more than a thousand different minerals. In quartz, one of the most common silicate minerals, every oxygen atom is shared between two adjacent tetrahedra, so that the total number of oxygen atoms is double the number of silicon atoms, giving the familiar formula for quartz – SiO₂. Other polymerization schemes produce long single chains of tetrahedra, or double chains, or sheets, or rings, etc. The silicate minerals are usually divided into subclasses based on these polymerization patterns, so we have

- Nesosilicates* (single tetrahedra)
- Sorosilicates* (double tetrahedra)
- Inosilicates* (single and double chains)
- Cyclosilicates* (rings)
- Phyllosilicates* (sheets)
- Tectosilicates* (frameworks)

from The Agateer, 3/08

Words 101

The following words all sound rather similar, but refer to quite different ideas.

Silicon – is the name of an element, atomic number 14

Silicate – is the name of a class of minerals

Silicone – is a rubbery compound frequently in cosmetic surgery, caulking windows, etc.

From the silicate classes above, the prefixes translate as:

Nesosilicates = 'island' silicates

Sorosilicates = 'group' silicates

Inosilicates = 'thread' or 'chain' silicates

Cyclosilicates = 'ring' silicates

Phyllosilicates = 'sheet' or 'leaf' silicates

Tectosilicates = 'build' or 'framework' silicates

from The Agateer, 3/08

You might be a rockhound if . . . you color co-ordinate your clothes and shoes to match your gemstone pendants.
from The Geode, 11/24

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>).

February 22 *Cascade Mineralogical Society - Mt. Baker area* - Meet at Ol One Lane Bridge on the middle fork of the Nooksack River - *Dunite, Olivine* - Dunite is a "jade like" green rock. It's prevalent in the river rock and easy to collect. Primarily comprised of olivine. We do not have to get in the water to find it. Roger Danneman (roger.danneman@gmail.com; 425-228-8781 or 425-757-3506 cell).

February 22 *Marysville Rock Club - Cedar Ponds* – Meet before 9 am at Sultan Park, 1 mile hike on road - *Jasper & fossils* - Bring digging & light hard rock tools
Nique Wicks nwhopyfrog41@gmail.com Or (509) 670-0630

Safety Matters – Critter Safety by Ellery Borow, AFMS Safety Chair

By critters, I mean those furry four-footed family members and fabulous friends, our beloved dogs and cats. Numerous folks bring critters along on their rock and mineral adventures. While critters cannot tell a xenocryst from a phenocryst (and truth be told neither can I), they can be great companions during our travels.

Sometimes our critters remain behind at the campsite, sometimes they accompany us to the site of the dig. In either case certain provisions should be addressed for our critter's care and well being.

Critters pretty much need the same things we do – food, water, sleep, rest, shelter from harsh environments, not too much heat or cold, and just a bit (or a lot in the case of some critters) of tender loving care. Oh, as a point of clarification, I have seen instances of critters being left in hot cars and trucks on hot sunny days with a window just barely cracked open – this is not the "shelter" mentioned above. The interiors of vehicles, even with the window cracked open a bit get mighty hot mighty quickly on a sunny day. How hot? Well, try wearing a fur coat in a hot car with no breeze and you will very quickly find out just how hot it gets. If you don't like such heat, your critter won't either.

Rockhounds take care of their rock hounds, rock birds, rock cats and rock critters of every size and type, however, sometimes our rock passions can get the better of us. Please remember that during the heat of passion with a big crystal pocket discovery, during the heat of anticipation with finding that great collecting locality, during the heat of excitement with that new club field trip, or simply with the heat of the day, our four footed rock hounds and rock cats (not the dancers from Radio City Music Hall) deserve, just like us, protection from the heat of the day. Whether a critter accompanies us to the dig site or remains behind at the camp site, they need protection from the sun and plenty of water. Also please keep in mind that your critter's shade in the morning will often be in a different location when you return in the afternoon. And note that water dishes and bowls can sometimes be overturned by a critter's travels and tether/lead movements.

Critters are pretty much bothered by the same things we are – ticks, nuisance insects, snake bites, walking on sharp rocks (just try walking barefooted over crushed rock and you'll feel what paws and pads have to deal with, without benefit of footwear.) Speaking of paws and foot pads and heat, please take note of the high temperatures reached by asphalt pavement in the hot sun. Footwear protects our feet from hot pavement, but our critters are barefoot. Also please note areas with broken glass, scraps of metal, thorn bushes, and sharp quartz slivers. Please take note of what dangers your critters might face while walking to the dig site. People much prefer not to get lost. Critters, well not so much. If your critters roam free, please make sure they come when called and are not prone to go off on a merry rabbit, deer, turkey or porcupine or whatever chase.

Other things come to mind for critter safety – make sure your critter's lead won't get tangled and prevent him from reaching much need water or shade. There are folks who are deathly afraid of dogs and cats; please be respectful of other's concerns. Have your critters meds with you on trips and travels. Check your critter for ticks. Again, keep them out of hot cars. Mind that critters can be predators ... and prey. Please make sure your critters get plenty of attention, but I suspect that requisite attention will be no problem at all.

Critters can make excellent companions on rock hunting trips. Please make their adventure's as enjoyable as yours. Think safe and be safe, both for you and your critter's sakes.

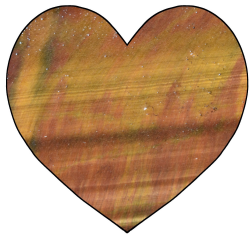
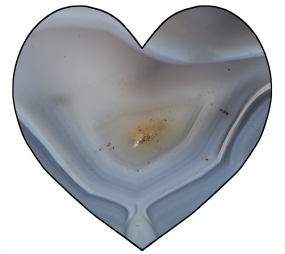
from AFMS Newsletter, 10/14

Garnets by Ron Graichen

There are several different garnets that vary from one another in the elements they contain. They are all silicates which means they contain silica (quartz is pure silica). Garnets have somewhat different formulas of elements combined with silica.

The most common garnet contains ferrous iron and aluminum. Other garnets contain magnesium, calcium, manganese, ferric iron and chromium. Colors vary with composition, the most common being red or brown. They may be yellow or green. Red garnets occur in metamorphic rocks formed under heat and pressure. Other colored garnets are "hydrothermal", meaning they form in metal deposits and in some volcanic processes.

via CMS Tumbler, 10/15; via Washington Agate & Mineral Society Newsletter, 10/15; from Carny Hound Newsletter



Happy Valentine's Day!

Shows

February 8: Saturday 9: am – 3:00 pm
Everett Rock & Gem Club, Rockhounds Downsizing & Estate Sale
Everett United Church of Christ*
2624 Rockefeller Ave
Downtown Everett, WA

***Important Notice:**

This facility is used as a "Homeless Cold Weather Shelter", if temperature drops below 35 degrees. You can call 425-977-9686 on Friday, February 7th, to confirm if shelter is going to be open or closed. If the shelter opens up, this sale will be cancelled, and rescheduled for later.

February 22 & 23: Saturday 10 am – 6 pm; Sunday 10 am – 5 pm
Idaho Gem Club, 85th Annual Gem & Mineral Show
Expo Building 'South Wing'
5610 Glenwood
Boise, Idaho

February 22 & 23: Saturday 10 am - 4 pm; Sunday 10 am - 4 pm
Maple Ridge, BC Lapidary Club, Annual Show
Albion Community Centre
104 Ave & 240 St.
Maple Ridge, British Columbia

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.