

The CMS Tumbler

July
2025

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

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

American Legion Hall
25406 97th PI S
Kent, WA

The Program is
Discoveries in Amber

The Show & Tell
Theme is rocks that look
like it has an insect,
animal, or face inside

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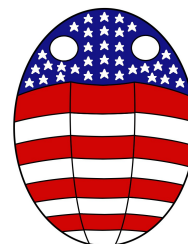
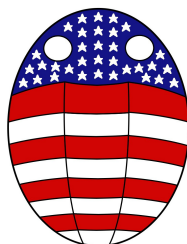
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Website: <https://www.cascademineralsociety.org>
Club Facebook: <https://www.facebook.com/CasMinSoc/>
Facebook Groups: <https://www.facebook.com/groups/1168207926650075>
Show Facebook: <https://www.facebook.com/cascadegemandmineralshow>
Instagram: <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

Michael Godwin on July 1
Mike Blanton on July 2
Christopher Whitney on July 2
Alexia Deeser on July 4
Richard Russell on July 5
Christina Vitellaro on July 5
Noah Dobner on July 7
Kristan Watkins on July 10
Peter Anderson on July 13
Virginia Bird on July 18
Ken Jones on July 20
Ann Sweet on July 23
Ralph Davis on July 24
Mark Albrecht on July 26
Mr. Raney on July 26
Michelle Brown on July 30
Roger Pullen on July 30
Diane Korf on July 31
Brian Oliver on July 31

and also remember to wish a Happy Anniversary to
Nik & Michelle Brown on July 15
Breanna & Price Post on July 16
Gina Manso & Erik Richards on July 28



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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.

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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 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

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.

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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.

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**

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 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

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!

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



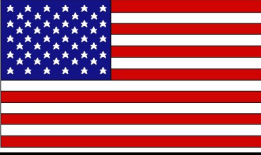
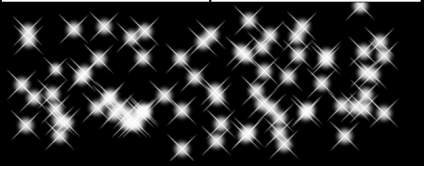
Access our CMSclub website for the latest on meetings and club events



Access CMS Facebook Groups



July

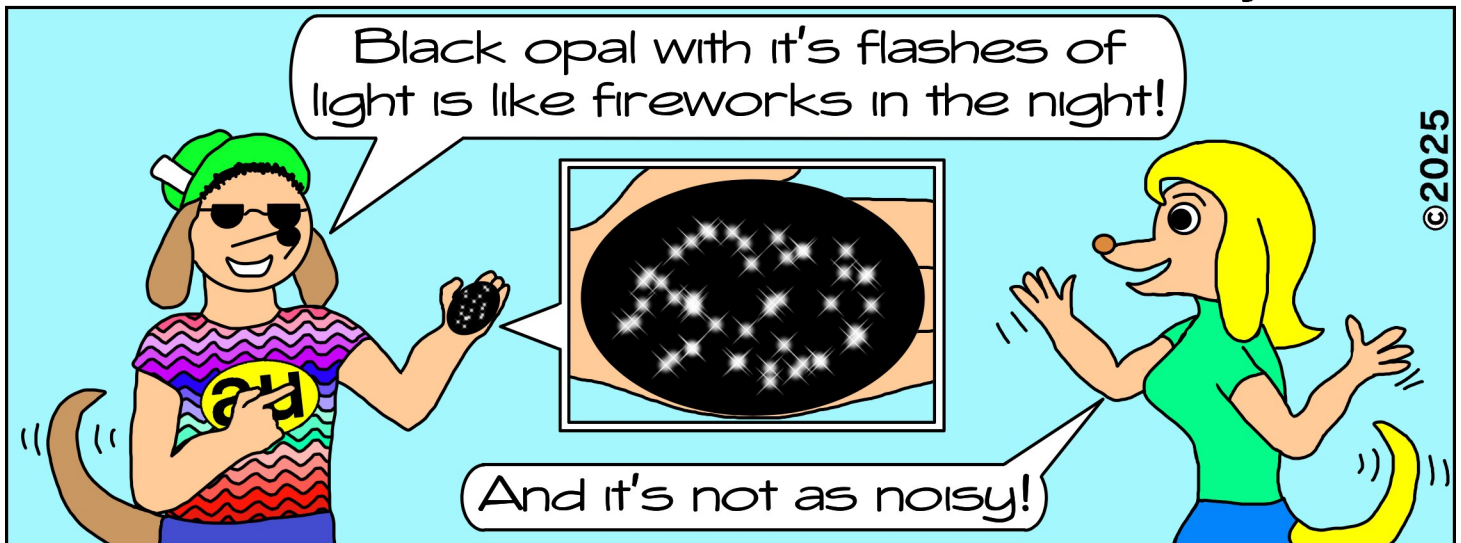
Sun	Mon	Tue	Wed	Thur	Fri	Sat
		1	2	3	4	5
6	7 Board Meeting 7:00 pm	8	9	10 General Meeting 7:00 pm	11	12 <u>Greenwater Trip</u>
13	14	15	16	17	18	19 <u>Crystal Mtn. Trip</u>
20	21	22	23	24	25 WAMS Show	26 WAMS Show
27 WAMS Show	28	29	30	31		

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

Son of Mr. & Mrs. Rockhound

by KAM



CMS Show Committee & Board Meeting Minutes June 9, 2025

by Pete Williams, 2025 Secretary

Attendees: Kat Koch; Pete Williams; Rich Russell; Mike Blanton; Paul Arhnberg; Diane Horsfall; Noelle Barnes; Lee Oliver; Michelle Maidman; Ananda Cooley; Roger Danneman

Show Committee 7:05

The meeting was spent reviewing the details of the volunteer schedule Roger is managing.

Board Meeting 8:03

There are now 130 family memberships in our club. The shop being built on Roger's property should be weather tight by the time of the show in June. The electrical needs are currently being worked on.

The program for June will involve attendees gathering into teams and working to identify rocks and minerals. The show-and-tell will be something from your collection that you want identified. The July program will be on Amber. Programs are needed for the September and November meetings. In August, the picnic will be on the 16th.

Valley Medical Center has display cases in the lobby that are currently empty. We will explore requesting to put in a display sometime after our show.

Meeting adjourned at 8:32

CMS General Meeting Minutes June 12, 2025

by Pete Williams, 2025 Secretary

Called to Order: 7:26

Our club is doing well financially. Interested members can request a detailed report from Ananda. The Washington State Mineral Council maps are currently being updated. The show is sold out with a waiting list of vendors. Roger will be giving away rocks to all those that volunteer during the show.

The June field trip was last Saturday to Little Naches. There were 25 members going to 3 sites for thunder eggs, Lilypad jasper, and leaf fossils. The next field trips are to Greenwater and Crystal Mountain in July. Hansen Creek is now open.

The July program will be on things found in Amber. Programs are needed for September and November. One of the programs my end up being about obsidian.

Program: Team rock identification.

Meeting adjourned at 8:18. Followed by the program and the raffle.

From Atop the Rock Pile

by Kat Koch, 2025 President

Our show chairman had to resign at the beginning of June, which left me in a difficult position regarding the future of our show. I was unsure about how we would move forward.

I'm pleased to say that our successful 2025 Cascade Gem Show is now behind us, thanks to the tremendous efforts of several key members who stepped up to make it happen.

I cannot express enough gratitude that the club and I owe the following members:

- Noelle Barnes
- Roger Dannenmen
- Michele Maidman
- Rich Russell
- Angie Bayer

You are all fantastic and dedicated club members!
Thank you!

**Upcoming Meetings**July 10th – Amber – The Most Amazing Discoveries Found in Amber

Show 'n Tell: An item that has something trapped inside or a picture rock, thunder egg, or geode that looks like it has an insect, animal, or face inside.



Date Correction – Your President Had a Senior Moment

August 16th – Lake Wilderness Arboretum Picnic (Maple Valley) and Club Auction

Potluck in the Park. Bring your favorite potluck dish, rolls, drinks, dessert, etc. Enjoy a peaceful day in the park, visiting with friends and indulging in some "rock talk."



Following our lunch, we will hold a club auction. The club welcomes any donations that members would like to make.

Our Young Tumbler's can also spend their "Rock Bucks" at the auction just like real money. It's a great time to pick up some great bargains.

Ema Eggs or Stones by Kat Koch

The other day I was on the internet reading articles about rocks and minerals. I came across the term Ema or Emma rocks. It piqued my curiosity as I had never heard of them.

Ema Eggs, are also known as window stones, dreamer's crystals, or seer stones, are like nature's answer to a magical looking glass. Sizes range from 3/4" to 2".

The original stones egg shaped quartz stones were from the Ema River in Brazil. They were natural stones that had been tumbled by the river giving them a frosty appearance. They then sliced off one end of the stone and polish the cut end only. It gives them an amazing window to the interior of the stone. The charming thing about these rocks seem to encapsulate both the raw essence of nature and a polished allure.

Over time people started tumble frost polishing all types of stones including labradorite. Then cutting the end off and polishing the cut end. Even though these stones are not from the Ema River they still are selling them as Ema Eggs or Stones.

Historically, these stones have been used for scrying. Scrying, also referred to as "seeing" or "peeping," is a practice rooted in divination and fortune-telling. It involves gazing into a medium, hoping to receive significant messages or visions that could offer personal guidance, prophecy, revelation, or inspiration.

Bibliography: Yellow Tree Company, Wikipedia, Karmic Konnection, Gemrox.



Field Trip Report for June 7th Trip to Little Naches by Roger Danneman

On Sat. June 7th we went to Little Naches for Thunder Eggs, Lily Pad Jasper, and Leaf Fossils. Temperatures were in the low 80's with beautiful blue skies and a nice breeze up on the ridge. Gorgeous scenery going over Chinook Pass. We had 26 people and 16 vehicles on this trip. Very pleasant conditions for digging. We spent 2 1/2 hours at the

Thunder Egg site. Blue chalcedony in various forms, but of course we're mostly looking for full or broken-half thundereggs. After hiking back to the cars we drove on to the Lily Pad site. Easy pickings there. After that we stopped at the mud stone formation for leaf fossils. WA State geology maps peg this as a 35 million year old mudstone. So the carbon imprints and leaf outlines we find embedded in that stone, are that old. A few nice specimens were found. Certainly a fun day.

List of attendees: Jason S. with his son and 2 friends, Jeff C. & partner, Julie & Gina M. & Erik, Kerri-Lynn D. & John, Jarrod D., Scott H., Colin O. and girlfriend, Chris V., Josh D. & Eli, Andrea M., Kelly G., Justin K. & Matthew, John N., Breanna P. & Julie, and of course me.

For July I have 2 outings scheduled – July 12th to Greenwater for the black agate and common opal, and July 19th to Crystal Mtn north of Ellensburg for agate, jasper, and geodes. No trips scheduled for August, but we have our club picnic on August 16th at Lake Wilderness.



Elimia tenera: The Snails in “Turritella Agate” by Dennis Gertenbach, Flatirons Mineral Club

One of our club's field trips in June is to Kemmerer, Wyoming, to collect fossil fish. On the way home, we will stop at the “Turritella agate” site on the Delaney Rim, south of Wamsutter, Wyoming, in Sweetwater County. When these plates of fossil snails are cut parallel to the bedding plane, they reveal beautiful layers of gastropods. These plates of snail fossils are widely sought by rockhounds as “Turritella agate.”

These gastropods are found in the Laney Member of the Green River Formation in southwestern Wyoming, northeastern Utah, and northwestern Colorado, deposited in the ancient freshwater lakes known as Lake Gosiute and Lake Uinta during the Eocene Epoch about 48 million years ago. Today's Delaney Rim runs along the eastern edge of ancient Lake Gosiute.

A Snail with Many Names

“Turritella agate” is a misnomer. These snails are not fossil Turritella. Turritella are marine snails, while these snails lived in freshwater. And “Turritella agate” is not agate, either; it is chalcedony (microcrystalline silica). Agate is banded chalcedony and “Turritella agate” is not banded.

These gastropods (the technical name for snails) were originally described by James Hall in 1845 as *Cerithium tenerum*. Each whorl has a series of parallel ridges. This species has wide variation in surface markings, and some specimens have vertical ridges, too. John Hanley studied this variation in his 1974 doctoral thesis and concluded that this variation was due to environmental conditions, not genetics.

After further study, Charles White renamed this species *Goniobasis tenera* in 1876. However, the genus *Goniobasis* was first described by Isaac Lea in 1862, while the genus *Elimia* was first described by Henry and Arthur Adams in 1854. Once it was realized that *Goniobasis* and *Elimia* were the same genus, *Elimia* became the accepted name because it was described earlier. Now, most paleontologists refer to this species as *Elimia tenera*.

The Lifestyle of Elimia tenera

When visiting the Delaney Rim site, one is struck by the huge number of *Elimia tenera* fossils lying on the ground, both as individual fossils and as plates of snail shells. Did these gastropods accumulate over a short period of time – say tens or hundreds of years – or did it take thousands of years for this many snails to live and die in Lake Gosiute?

To answer this question, one can turn to the several species of *Elimia* still living today. All are small gastropods that live in fresh water, eating periphyton (green algae and diatoms) using their radulas to scrape their food from hard surfaces. All mollusks except bivalves (clams, oysters, and scallops) have a radula, a tongue-like organ with tiny teeth that scrapes and cuts food (Figure 5). So, we can assume that *Elimia tenera* fed on algae, and indeed, fossil stromatolites formed from algae are found within a mile of the site. Also, modern *Elimia* live in large groups quite close to each other. One stream in Tennessee was found to have 900 living snails per square meter. So, it is possible that the bed of *Elimia tenera* on Delaney Rim could have accumulated in a relatively short period of time, or it may have taken thousands of years. Further study is needed to answer this question.

Just how many *Elimia tenera* fossils are there on Delaney Rim? Allmon (2009) estimated that the bed containing the famous “Turritella agate” is probably a maximum of about 40 centimeters (16 inches) thick and extends approximately 50 square kilometers (20 square miles). With a shell density of one shell per cubic centimeter (about 15 shells per cubic inch), there may be about 1 trillion individual fossil shells in just this bed. Considering that there are about 8 billion humans living on earth, that's a lot of snails!

References and Further Reading

Allmon, Warren D. (2009) “The Natural (and Not-So-Natural) History of “Turritella Agate”.” *Rocks and Minerals*, v. 84, n. 2, p. 160-165. <https://static1.squarespace.com/static/5c9f919e94d71a2bab6d18d8/t/5e5d2274f4329b7cebb62/1583161973466/2009+Rocks%26Minerals.pdf>

Hall, J. (1845) “Descriptions of Organic Remains Collected by Captain J. C. Frémont, in the Geographical Survey of Oregon and North California” in Frémont, J. C., *Report of the Exploring Expedition to the Rocky Mountains in the Year 1842, and to Oregon and North California*, Gales and Seaton, Washington, pp. 304-310. <https://www.biodiversitylibrary.org/bibliography/120940>

Hanley, J.H. (1974) *Systematics, Paleoecology, and Biostratigraphy of Non-marine Mollusca from the Green River and Wasatch Formations (Eocene), Southwestern Wyoming and Northwestern Colorado*, Ph.D. Thesis, University of Wyoming, 285 p.

USGS Non-Indigenous Aquatic Species website, “*Elimia livescens*.”

<https://nas.er.usgs.gov/queries/factsheet.aspx?SpeciesID=2233#:~:text=This%20species%20grazes%20on%20periphyton,fish%2C%20ducks%2C%20and%20crayfish.>

via AFMS Newsletter, 6/25; from Flatirons Facets, 5-6/25



Young Tumblers News

Rock Bucks

Just a reminder that all Young Tumblers under 15 can easily earn "Rock Bucks."

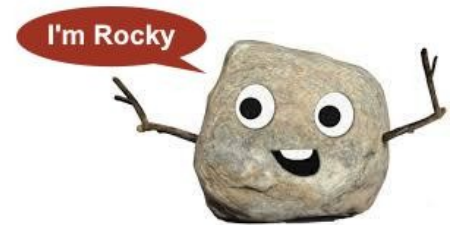
Earn \$3 "Rock Bucks" to attend a meeting.

You can earn an additional \$5 in "Rock Bucks" if you bring something for Show 'n Tell and tell us about your item.

The "Rock Bucks" can be spent like real money at our meetings or club auctions.

You can save your "Rock Bucks" during the year and spend them just like cash on auction items you would like, or you can buy raffle tickets at our monthly meeting.

Join us at our meetings and build your rock-buying piggy bank!



What did the diamond say to it's friend, copper?
Nothing, silly... minerals don't talc.

from Northwest Newsletter, 4/25

Which rock group is made up of four men who cannot sing?
Mount Rushmore

from Northwest Newsletter, 12/24

While we think of ankylosaurs using their club-like tails against attacking predators, evidence shows they also used them in fights amongst themselves.

Safety - A Hair-Raising Ordeal by Erin Irwin, Lubbock GMS, SCFMS Juniors Chair

We've all seen the safety rules posted around the club shops. Most of us tend to overlook them - until someone speaks up. That's usually when we roll up our sleeves, tie back our hair, and maybe dig around for a pair of safety glasses. At home, though, I know many of us let our guard down even more. I'm definitely guilty of that.

A few weeks ago, we were using a bench grinder and a Dremel at home. No one was wearing safety glasses, and no one had their hair pulled back. One thing people rarely talk about is the importance of posture and body positioning when working with machinery. It can make all the difference.

My 15-year-old son, who's been taught proper safety protocols and has used many machines without issue, had a scary experience that day. In a split second, his hair got caught in the spinning mechanism. He shouted, and while I rushed to unplug the machine, he managed to shut it off himself. Thankfully, the only thing he lost was a lot of hair - not his scalp. Still, for a teenage boy, losing that much hair was a big deal. He was angry and swore he'd never touch the machines again.

I hope with time he'll reconsider and get back to making cabs - something he's genuinely talented at. But one thing is for sure: we won't be taking safety for granted again.

from AFMS Newsletter, 6/25

Quartz by Jessica Himple

Quartz is one of the most abundant and versatile minerals on Earth, composed primarily of silicon dioxide (SiO₂). Its history dates back thousands of years, with ancient civilizations like the Egyptians, Greeks, and Romans using it for various purposes, from jewelry and carvings to early lenses. Quartz is known for its hardness, ranking 7 on the Mohs scale, making it a durable material that resists weathering. It's found in a wide range of environments, from igneous to sedimentary rocks, and comes in many varieties, including amethyst, citrine, rose quartz, and smoky quartz. The mineral's piezoelectric properties—its ability to generate an electrical charge under mechanical stress—were discovered in the 1880s and have since been harnessed in modern technology, including watches, radios, and other electronic devices.

Beyond its practical uses, quartz has played a significant role in various industries throughout history. For example, ancient civilizations used quartz to make tools, such as sharp-edged arrowheads and knives, due to its hardness and durability. Quartz was also integral to the development of timekeeping, as the first quartz clock was invented in the 1920s. This clock revolutionized timekeeping with its unprecedented accuracy, leading to the widespread use of quartz crystals in modern clocks and watches. Another interesting fact about quartz is its role in the production of glass, as it is a key raw material in the manufacture of high-quality glass and ceramics. Quartz crystals can grow into large, well-formed specimens, with some of the largest being discovered in Brazil and Arkansas. Whether admired for its beauty, appreciated for its durability, or utilized in technology, quartz continues to be a mineral of immense importance and fascination.

from Northwest Newsletter, 9/24

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>).

- July 12** *Cascade Mineralogical Society - **Greenwater** - Agate, Jasper*
 Difficulty Rating 2. This site is next to where we park, but is a dig. Black/tan agate, jasper, and opal is found here.
Roger Danneman roger.danneman@gmail.com; 425-757-3506 (texts ok)
- July 19** *Cascade Mineralogical Society - **Crystal Mountain** north of Ellensburg - Agate, Jasper, Crystal, Geodes*
 Difficulty Rating 3. Multiple areas here for collecting, but one primary dig site. Rough road.
Roger Danneman roger.danneman@gmail.com; 425-757-3506 (texts ok)
- July 26** *Marysville Rock Club - **Lake Wenatchee** - Meet before 9 am at rest stop just West of Lake Wenatchee*
 Hwy 2 - Garnets - Bring shovel, screen container for Garnets
Nique Wicks nwhoppyfrog41@gmail.com Or (509) 670-0630

Where Did It Go? by Matthew Lybanon, MAGS Editor, Memphis Archeological & Geological Society

Around 3.5 billion years ago, scientists think water was abundantly flowing across Mars' surface. Prevailing theories suggest that Mars was once covered in a major liquid water system of oceans, rivers, and lakes, which presupposes a thick atmosphere that could maintain temperatures at which liquid water could exist.

If this is true, where did the atmosphere go? As detailed in a new paper (reference below), the vast majority of the planet's atmosphere might be trapped in sedimentary rocks lining the Red Planet's surface. Recent rover missions detected reduced organic carbon in Martian rocks.

The scientists focused on a clay mineral called smectite, which can trap huge amounts of carbon. Here on Earth, the mineral was likely the result of tectonic activity and responsible for sucking up and storing huge amounts of carbon dioxide, allowing the planet's surface to cool over time.

Smectites (from the Greek word *smectos*, meaning soap), also called swelling clays, are expansive hydroxyl aluminosilicates containing 2:1 layer clay mineral. These clay minerals exhibit high surface area and high absorbing ability contributed by their thin layer structure and small particle size. Bentonite is soft clay formed as the result of volcanic ash weathering. It is a soft clayey rock containing Smectite group minerals in abundance.

Due to the abundance of smectite clays on Mars, the scientists suggested that much of the Red Planet's early atmosphere could have been sucked up this way as well. According to their calculations, roughly 80 percent of the carbon dioxide of Mars' ancient atmosphere could be trapped inside carbon-based organic compounds. They speculate that this carbon could be extracted and turned into rocket fuel, facilitating future trips to and from the distant planet.

Ref: Joshua Murray, Oliver Jagoutz, Olivine alteration and the loss of Mars' early atmospheric carbon. Sci. Adv. 10, eadm8443(2024). DOI:10.1126/sciadv.adm8443

from MAGS Rockhound News, 1/25; via AFMS Newsletter, 2/25

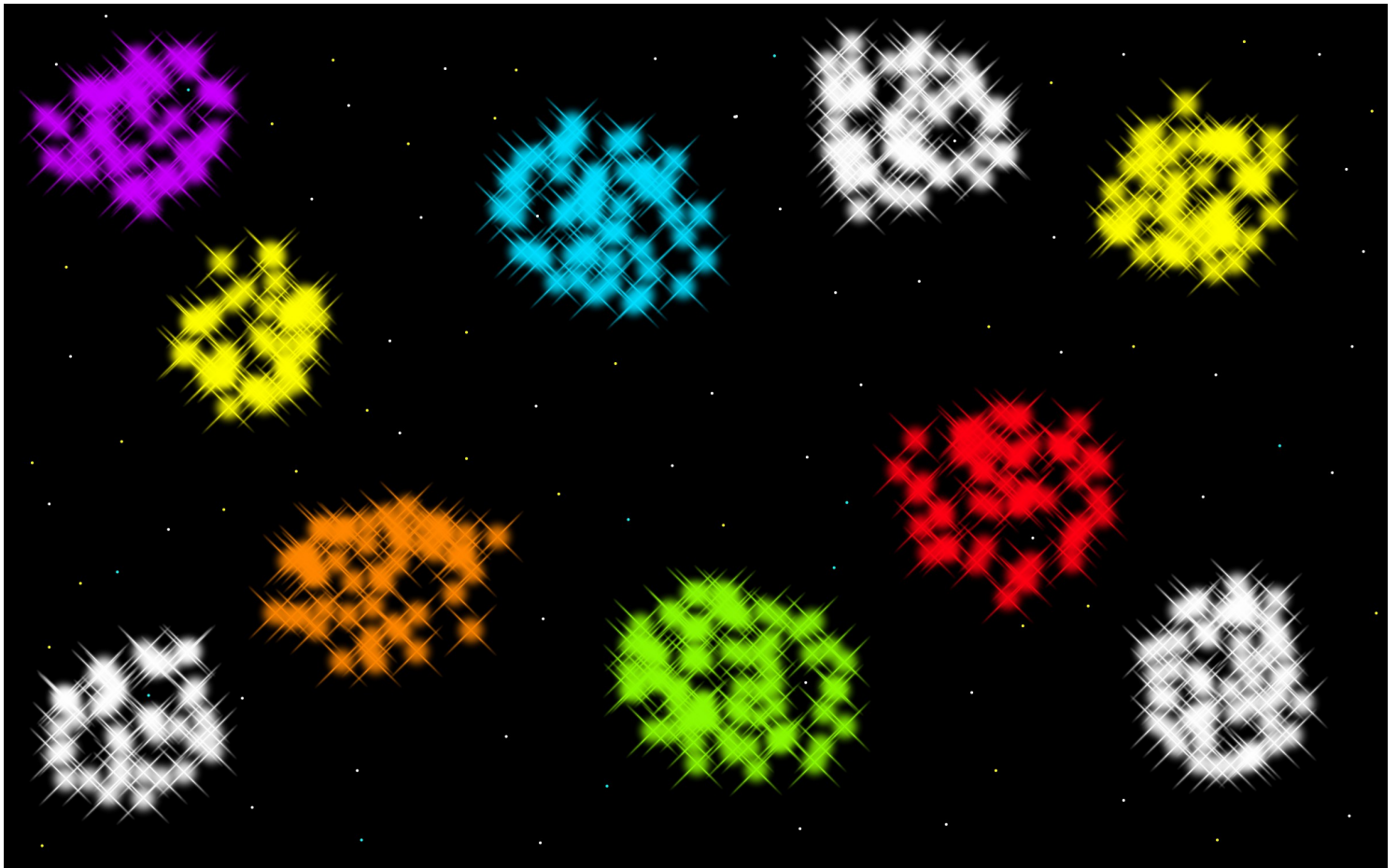
Halite by Jessica Himple

Halite, commonly known as rock salt, is more than just a kitchen staple—it is also a fascinating mineral prized by collectors for its perfect cubic crystal structure and vibrant color variations. Typically found in evaporite deposits where ancient lakes and seas have dried up, halite forms stunning, transparent to translucent crystals, often tinged pink, purple, green, or blue due to trapped impurities or radiation exposure. Some of the finest collectible specimens come from the salt mines of Poland, Germany, and the United States, where large, well-formed crystals are carefully extracted and preserved for display. Unlike many minerals, halite is highly soluble in water, meaning collectors must take special care to protect their specimens from humidity and handling.

Historically, halite has been one of the most valuable minerals in human civilization, shaping trade and commerce for thousands of years. While its primary use was for food preservation and seasoning, natural salt crystals have also fascinated scholars and collectors for centuries. Ancient salt mines, such as those in Poland's Wieliczka Salt Mine, have yielded beautiful halite formations, some of which have been carved into sculptures and even entire underground chapels. Modern mineral collectors seek out halite not just for its aesthetic appeal but also for its unique geological formation process, often displaying it alongside other evaporite minerals like gypsum and sylvite.

For mineral collectors, halite presents both an opportunity and a challenge. While its striking cubic formations make it a visually appealing addition to any collection, its softness and water solubility require careful storage—often in airtight containers or display cases with desiccants to prevent moisture damage. Collectors particularly prize specimens with rare color zoning, hopper growth patterns, or exceptionally large crystal clusters. Whether admired for its scientific properties, historical significance, or sheer beauty, halite remains a unique and rewarding mineral for enthusiasts around the world.

from Northwest Newsletter, 2/25



Show

July 25 - 27: Friday & Saturday 9 am - 6 pm; Sunday 9 am - 5 pm
Washington Agate and Mineral Society, *2025 Rock & Gem Rendezvous*
Tenino City Park
300 Park Ave W
Tenino WA

