

The CMS Tumbler

March
2026

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

Next Meeting:
March 12, 2026
7:00 p.m.

American Legion Hall
25406 97th PI S
Kent, WA

The Program is
A Day On A Dig

The Show & Tell
Theme is a fossil or
artifact you found

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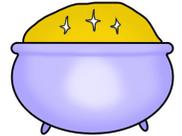
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 Facebook Groups: <https://www.facebook.com/groups/1168207926650075>
 Show Facebook: <https://www.facebook.com/cascadegemandmineralshow>
 Instagram: <https://www.instagram.com/cascaderockclub/>
 YouTube Channel (Please like and subscribe):
https://www.youtube.com/channel/UCaGIJxaWFatV_JjgZRm9ESA

This month remember to wish a
Happy Birthday to

Kayci Evans on March 4
 Christina Lopeman on March 5
 Ariyana Bennett on March 7
 Soraya Deeser on March 7
 Aidan Cerenzie on March 10
 Maloree Marter on March 11
 Linda Nash on March 11
 DaKota Watchie on March 12
 Patrick Dunphy on March 14
 Scott Medlin on March 17
 Ege Polat on March 19
 Matthew Castle on March 20
 Paul Ahnberg on March 22
 Scott Alstead on March 23
 Sadie Waller on March 25
 Gina Lisak on March 28
 Jeramy Peters on March 29
 William Bridges on March 31

and also remember to wish a
 Happy Anniversary to
 Heather & Jeff Leiphan on March 21
 John & Brenda Haworth on March 28 (62 years)



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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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2026 CMS Dues are \$30 per year per family

Pay online, by mail, or at our meetings.

New mailing address:

*Cascade Mineralogical Society
c/o 4762 Whitworth Pl S #P104
Renton, WA 98055*

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

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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**

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

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



March

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

CMS Show Committee Meeting:....Monday, Month 9.....6:30 pm to 7:00 pm
 CMS Board Meeting:.....Monday, Month 9.....7:00 pm to 8:00 pm
 CMS General Meeting:.....2nd Thursday, Month 12.....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



TKAM © 2026

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

CMS Show Committee & Board Meeting Minutes February 9, 2026 by Pete Williams, 2026 Secretary

Attendees: Noelle Barnes, Rich Russell, Kat Koch, Paul Arhnerg, Pete Williams, Roger Danneman, Ananda Cooley, Mike Blanton, Michelle Maidman, Linda Jorza

Show Committee Meeting

Meeting Called to order: 7:07

One third of the vendors have already purchased booths. There are 3 committed demonstrators for the show – faceting, mineral identification, and one still deciding. Due to the distance some of the vendors have to travel the committee approved \$200 stipends if the demonstrator does not sell merchandise or \$100 if they do. The committee also approved Kat to purchase hot guns and other materials for the kids area.

We will again use one of the vendors for help with advertising the show and provide free booths in exchange. Ten thousand flyers were printed and are available for members to pass out.

Noelle, stated a need for people to write letters asking for donations. A better response can be obtained using CMS letterhead with color and using snail mail.

Meeting adjourned at 7:01

CMS Board Meeting

The Board voted on a new logo for the club. Roger reported that the shop construction continues to move along. Saws are working, but cabling equipment is still in work. Roger purchased some materials for the shop for around \$800 for exhaust fans, tools, and PPE. The Board is interested in purchasing a new cabling machine for the shop. Roger and Kat will do more research to find the best value.

The club is now at 115 family memberships. Club member Mike McWilliams will be writing articles for the Tumbler. He is interested in member feedback on his articles.

The programs outlined for the next few months are: February – 2026 field trips by Roger Danneman; March – A Day on a Dig by Maureen Carlisle; April – Rock Bingo; May – Drilling Holes in Rocks by Mike Blanton. The club picnic will in on August 15 at Coulon Park.

Meeting adjourned at 7:56

CMS General Meeting Minutes February 12, 2026

by Pete Williams, 2026 Secretary

Called to Order: 7:16

Several new members to the club were introduced. Flyers for our June 27-28 show are available for members to distribute. We still need someone to represent our club at the Washington State Mineral Council Meetings are usually once a month and are virtual.

Roger reported that some additional work needs to be done for the shop – finish the siding, putting a canopy over the deck, and getting the polishing equipment operational. The Board agreed to purchase a new cabling machine. More research is being done.

Program – 2026 field trips by Roger Danneman. March program – A Day at a Dig. Meeting adjourned at 7:48
Followed by show and tell and the raffle.

Digging It!

by Noelle Barnes, 2026 President

Thanks to everyone who came out for our February club meeting - it was a fun one, with our own Roger Danneman presenting the highlights of our field trips to come for 2026. Several club members brought their impressive best finds from 2025 for show and tell.

Speaking of field trips - our first field trip of the year is in the books, with a mildly snowy day at the Middle Fork of the Nooksack River up by Ol' One Lane Bridge outside of Acme, Washington. The variety of rocks this year was excellent, thanks in part to the winter floods - the river was low, so there were plenty of pieces of dunite, jasper, and colorful quartz for everyone, plus some smaller pieces of jade.

I hope to see you at our next meeting this month, March 12, when former Burke Museum curator Maureen Carlisle will present A Day on a Dig - this will be a great one for big and little kids like. And of course we have our next club field trip March 21 - odds are we'll be going to Swift Creek for Baker Blues, but if the water is too high we'll switch gears and head over to Saddle Mountain for petrified wood.

Happy hunting!



Exploring for New Minerals in Washington State 2025 by Aidan Cerenzie

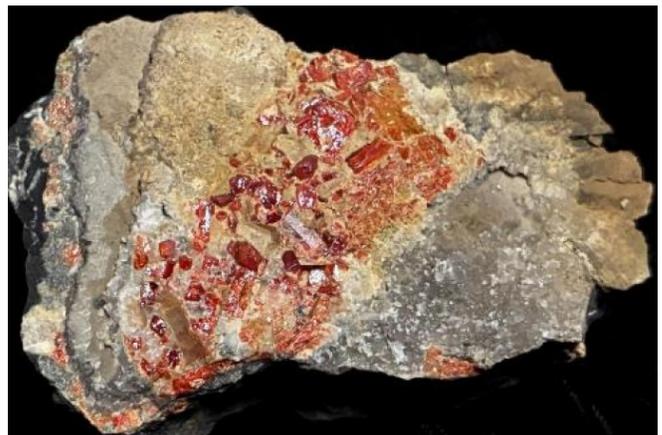
After getting my first car, the goal I set myself for the 2025 mining season is to scope new areas in Washington State. "Mining Season", usually defined by local collectors, refers to warmer seasons, including late spring, summer, and early fall. During this time, temperatures are warmer, water levels are lower, and there's less snow blanketing the mountains. This brings better prospecting, collecting, and comfortable temperatures in the outdoors. My notable exploratory outings are listed in this article.

Green River Gorge

The Green River Gorge near Black Diamond, King County, is known among mineral enthusiasts for its excellent, bright red realgar crystals occurring in veins and breccia rock along the river. Due to a short drive and my driving anxiety, yikes! I focused on this particular area for months before my driving skills improved. During a visit to the Royal Reward Mine, I stumbled across an outcrop in the woods while descending to the mine. The outcrop consisted of coal with thin realgar and calcite seams cutting through. Small realgar crystals were found in the calcite. In some places, the calcite would open up into small fissure vugs carrying micro euhedral calcites. Definitely not the best realgars found in the Green River, but a new occurrence worth mentioning. Before publishing, I spoke with local collectors to confirm that it's a new outcrop for realgar crystals in the Green River.



Micro realgar crystal from an outcrop in the woods near the Royal Reward Mine



Crystalline red realgar associated with calcite on coal from an outcrop in the woods near the Royal Reward Mine



Photo of the Green River looking upstream with surrounding forest and the moon up in the sky.

Devils Canyon

Yet another known location by mineral collectors is the Devil's Canyon Area near Lennox Creek in King County. For decades, breccia zones in Snoqualmie Batholith Granodiorite produced quartz crystals with some being Japan Law Twined. One warm spring day, my dad and I investigated the top of the canyon in hopes of more breccias. Instead, we stumbled across a small pegmatite, and I found a nice feldspar (albite?) crystal in a cobble. We dug away the dirt and roots and opened up a pocket. The pocket produced glassy smoky quartz and more feldspar crystals. When we brought pieces home, I noticed some small orange/yellowish titanite crystals. In the past, we read about scheelite in the area. Upon analysis under short wave UV, I was surprised to see small scheelite crystals!



Glassy smoky quartz crystal from a miarolitic cavity at Devils Canyon



Rare Smoky Quartz Crystal originating from a miarolitic cavity at Devils Canyon.



Bright honey colored titanite crystal originating from a miarolitic cavity at Devils Canyon



Small yellowish glossy scheelite crystal associated with gray smoky quartz, white feldspar and dark chlorite crystals from Devils Canyon

Melakwa Lake

On July 8, 2025, my mom and I hiked the trail to Melakwa Lake. We went up the Denny Creek Trail, passing the world-famous Rockhound Gulch. As we arrived at the lake, I found some exposed vuggy pegmatite in boulders. After collecting samples, I ate lunch and then went swimming. At home, I examined a specimen and noticed a speck glistening in the light. Upon closer inspection under the microscope, I was surprised to see anatase. The anatase is dark and sometimes a little bluish. They're also associated with small euhedral quartz and feldspar crystals. This is likely the second

reported occurrence of blue anatase in Washington, the first being on Silver Peak.

Micro dark anatase in a tiny pegmatite vug from Melakwa



Chinook Pass

On August 11, 2025, I woke up very early and hit the highway leading towards Chinook Pass to explore in beautiful mountain scenery. I started hiking along with Pacific Crest Trail during sunrise and saw the daylight emerge on Mount Rainier. It was among the most beautiful natural scenes I have ever witnessed. As I continued hiking, I enjoyed the beautiful creeks, trees, and flowery meadows along the trail. For my prospecting mission, I wanted to investigate the granite of the Tatoosh Pluton due to miarolitic cavities being reported in literature. I hiked up a talus field below where the geologic map indicated where the pluton was exposed, but to my surprise, there was not a single piece of granite in sight. It appeared to be mostly volcanic and metavolcanic rocks. As I continued my search, I noticed occasional vugs in the boulders. The first vug I remember seeing contained lustrous small green epidote crystals. I hiked further up and found a loose rock around a foot wide, riddled with small quartz pockets. To my complete surprise, I found purplish-bladed crystals, which were the axinites. I broke up the rock, gathered specimens, and headed out. It was a great day to enjoy the mountains.



Spectacular Mount Rainier during early morning as bright daylight emerges on the slope of Mount Rainier.



Purplish bladed axinite crystal from Chinook Pass



Purplish axinite on matrix from Chinook Pass

Heather Pass

My mom enjoys hiking with friends, so they arranged a visit to Maple Pass in the North Cascades. The trail goes above Lake Ann, which caught my interest because Bart Cannon wrote about large microcline crystals in pegmatite. On the hike, I examined some pegmatites along the trail in boulders, but didn't find large microclines. As we reached Heather Pass, I closely examined the rock and noticed some tiny vugs in granite. The mountains were gorgeous as I could see Glacier Peak and Liberty Bell Mountain. After cleaning the samples, I inspected the cavities under the microscope and saw tiny anatase crystals. The anatase crystals average under a millimeter in length



Orange anatase crystal from Heather Pass



Sub Millimeter orange anatase crystals from Heather Pass

More expeditions

I also had numerous "unsuccessful" outings this mining season. Down in the Green River, I found the tramway and cabin but no realgar at the Red Crystal Property on the NW side of the gorge in Section 8 described by (Livingston, V.E. Jnr. (1971). On another day, I explored a spot in section 9 near Kanaskat, mapped by (HOWARD D. GOWER AND ALEXANDER A. WANEK 1963), only finding brecciated calcite and again, no realgar. On August 21st, 2025, I explored the left section of Rockhound Gulch on Denny Mountain, having high hopes of untouched grounds. To my complete surprise, I stumbled across stashed climbing gear with a name tag of a local rockhound. I did find small garnet crystals scattered about, but my main goal was to explore the unexplored. I plan to explore more areas as time moves forward.

References

HOWARD D. GOWER AND ALEXANDER A. WANEK (1963). PRELIMINARY REPORT OF THE CUMBERLAND QUADRANGLE, KING COUNTY.

Edward A. du Bray et. al (2011) *Episodic intrusion, internal differentiation, and hydrothermal alteration of the Miocene Tatoosh intrusive suite south of Mount Rainier, Washington.*

Livingston, V.E. Jnr. (1971) *Geology and Mineral Resources of King County, Washington.* Department of Natural Resources, Division of Mines and Geology, Bulletin No. 63, 200 pages.

Cannon, Bart (1975) *Minerals of Washington. Cordilleran, Mercer Island, WA.*

Oldest Star Dust Found by Kat Koch

A CM2 Carbonaceous chondrite meteorite fell in Murchison, Australia, on September 28, 1969, between 10:45 and 11:00 am. A large shower of stones peppered the town with over 220 pounds of meteorites. This was a spectacular fall, as it is a rare type, and a large amount fell. The Murchison meteorite contains tiny presolar grains—minuscule particles formed in the atmospheres of dying stars before our Sun existed. The star dust embedded in the meteorite is estimated to be 7 billion years old.

These ancient grains, primarily composed of silicon carbide, were preserved in the meteorite because it originated from an asteroid that remained largely unchanged since the early solar system. Unlike Earth rocks, which have been

altered by geological processes, the Murchison meteorite acted as a time capsule, protecting the stardust from heat and transformation.

The discovery supports the theory of a "stellar baby boom" around 7 billion years ago, when a surge in star formation produced these grains. Most grains date to 4.6 to 4.9 billion years ago, but some are up to 3 billion years older than the Sun. The grains were identified using advanced techniques such as laser ablation and cosmic-ray exposure analysis.

The Murchison meteorite is also famously pungent—its ground fragments emit a smell likened to rotten peanut butter, due to volatile organic compounds. This unique aroma, along with its ancient stardust, makes it one of the most scientifically valuable meteorites ever studied.

Bibliography: GeologyIn, Live Science, NBC News, MeteoriteGuy.



Really? You Don't Look That Old by Kat Koch

Acasta Gneiss Complex is a geological formation located in the Northwest Territories, Canada, along the western margin of the Slave Craton, approximately 186 miles north of Yellowknife. It is renowned for containing the oldest known preserved rocks on Earth, including zircon crystals dated to 4.03 billion years old, making it a key site for understanding the formation of the early Earth crust.

The complex spans over 5,000 mi², though only about 19 mi² has been mapped in detail due to extensive Pleistocene glacial cover. It consists of a heterogeneous mix of tonalitic, granodioritic, and granitic gneisses, along with minor mafic and ultramafic rocks, formed through repeated episodes of magmatism, metamorphism, and deformation from the Hadean to the Archean eons.

Studies using detrital zircons from glacial sediments suggest that while the majority of the unmapped region consists of 3.37-billion-year-old granitoids, rocks as old as 3.95 billion years may exist near its inferred eastern boundary. The complex records over a billion years of magmatic and tectonic activity, including multiple intrusions and metamorphic events, and provides critical insights into the evolution of Earth's early continental crust.

Bibliography: Wikipedia, Science Springs, Weblex.Canada, YouTube, Science Direct.



Be Cautious of Covellite's Allure by Angel Doran

Covellite has long been prized for its brilliant indigo luster and striking iridescence. Sourced primarily from Butte, Montana, its deep blues and purples make it a favorite among both lapidaries and collectors. But behind that mesmerizing sheen lies a toxic truth that few discuss: cutting covellite could be cutting corners on safety.

As part of an undergraduate research project at Missouri State University, I tested all of my covellite specimens using a handheld X-ray fluorescence (XRF) spectrometer. The results were unsettling. Out of seven samples from Butte, five contained elevated levels of mercury, arsenic, lead, cadmium, or even uranium.

These aren't just trace amounts. One specimen, for example, contained an astonishing 1280 ppm of gold, enough to raise eyebrows in a prospector's dream, but came with a nightmare of companions: 2100 ppm of mercury, 920 ppm of arsenic, and 610 ppm of uranium. It's a potent reminder that beauty and value don't always walk hand-in-hand with safety.

That particular rock was stunning. The kind of piece that makes you think, "This would look incredible polished." But that impulse is exactly what I want readers to reconsider.

Covellite itself is copper sulfide (CuS), which is already hazardous when powdered or inhaled. However, the risks multiply when covellite hosts a variety of toxic contaminants. Mercury vapor, arsenic dust, and uranium fines are nothing to dismiss. These elements pose real risks to the respiratory and nervous systems, especially when released during lapidary work.

So why don't more people know? Part of the problem is that these specimens look harmless, and most vendors can't test for toxins. Many assume that standard lapidary safety procedures are good enough. And while it's true that any rock cutting should be done with proper ventilation and protection, the presence of radioactive and heavy metal contaminants raises the bar for what qualifies as "safe enough."

As I dug deeper into this issue, I reached out to sellers of Butte covellite online. Reactions varied. One vendor pointed out that "all rocks are hazardous when cut," which is true to a degree. But not all rocks contain lead levels 140 times the safety threshold, or mercury concentrations high enough to make a thermometer blush.

Some of these vendors are selling covellite slabs that could be destined for cabochons, and eventually for jewelry worn against the skin.

What You Can Do

If you already own covellite:

- Handle rough pieces with care
- Never dry-cut or grind without a respirator and water containment
- Consider displaying instead of cutting

If you sell specimens:

- Test before selling, or include a disclaimer about potential hazards
- Inform customers about safe handling

And if you're like me, you might feel compelled to buy up every hazardous specimen you find, not to hoard it, but to keep it out of harm's way.

The real shock wasn't just how high the toxic element levels were, it was how common this material is in the lapidary world. Covellite isn't a rare curiosity gathering dust in a museum case. It's cut, polished, sold, and displayed by hobbyists and professionals alike. Which raises a much bigger question: how many of our favorite minerals hide dangerous secrets beneath their shimmer and shine?

via The Quarry, 2/26; via MWF Newsletter, 2/26; from Chert Chatter, 6/25

Pyrite and Flint: The Minerals that Kept Us Warm by Claire Christensen

Recently, the oldest evidence of intentional fire-making was discovered in eastern England. The find is 400,000 years old, a staggering 350,000 years older than the previous oldest evidence. Two key minerals were used to confirm the discovery — flint and pyrite. Flint is a sedimentary cryptocrystalline form of quartz, which means its crystal structure is barely visible even under microscope. It is hard, but brittle, making it a popular material choice in the Stone Age. It is formed in nodules within sedimentary rocks like chalks and limestones, and often found washed out into streams or on beaches. The exact formation process for flint is unclear, but the prevailing theory suggests that silica-rich material seeped into existing cavities in the rock and solidified during diagenesis, which is the chemical and physical change caused by interactions between rock and water. The source of the silica is also unclear, but it may have come from siliceous sea sponges, which have an endoskeleton made of silica.

Flint (and other conchoidal stones such as chert and obsidian) was absolutely vital in humanity's progression into the Stone Age. Early peoples would use a hard stone or piece of antler to strategically break off pieces of the flint in a process called knapping. The sharpened flint could be shaped into a variety of tools, such as knives and axes. Evidence of flintknapping dates to the Paleolithic Era, which began more than three million years ago, and continued into the Neolithic Era (10,000 to 2,000 BCE).

The other mineral found at the site, pyrite, does not have as storied a history as flint, but it was nevertheless a key ingredient in harnessing fire. Pyrite is an iron sulfide, and the most abundant sulfide mineral. Its name comes from the Greek *pyritēs lithos*, meaning "stone that strikes fire". In Ancient Rome, Pliny the Elder described several rocks that would create sparks when struck, including one that appeared brassy — this likely refers to pyrite specifically. Pyrite was used in early firearms during the sixteenth and seventeenth centuries, and is still used today in the production of sulfuric acid and in some lithium batteries. The discovery of the fire-making site was announced on December 10, 2025. The site is located in Barnham, near Cambridge in England. The first clue was discolored clay, and chemical analysis showed regular heating to over 1200 degrees Fahrenheit. The most important clue, however, was two small pieces of iron pyrite found amongst the various burned items at the site. The researchers were able to determine that the pyrite had been transported to Barnham because not a single other piece had been found in 36 years of field work in that region.

The use of flint is obvious — early peoples had been using it in various ways for at least two million years before this site was created — but the use of pyrite is remarkable, as it indicates Neanderthals had moved on from simply

maintaining naturally started fires. The ability to use fire consistently allowed for cooking, warmth, and safety from predators. One has to wonder at the reaction of the first Neanderthal to strike their flint tool against a shiny metallic rock, only for it to create the flames they had been so carefully collecting for centuries prior.

Sources:

Archaeologists Find Oldest Evidence of Fire-Making, Carl Zimmer, The New York Times; <https://shorturl.at/58m2y>

Blazing a Trail, Nick Ashton and Rob Davis; <https://shorturl.at/Lxph9>

Earliest Evidence of Making Fire, Rob Davis et al.; <https://shorturl.at/BmNhT>

Flint, Ohio DNR; <https://shorturl.at/7eETO>

Flint and Pyrite: Fire-Making Minerals, Rock & Gem, <https://shorturl.at/lxMRu>

Pyrite; <https://www.mindat.org/min-3314.html>

from Rocky Trails, 1/26

The Importance of Good Footwear by Kathryn Larson

Good footwear is important. There is nothing worse than when your feet hurt. It can affect your mood and your health. Poor fitting shoes can even affect your posture. The effects of poor footwear can be long-lasting. In my younger years I wore shoes without support which led to plantar fasciitis and painful bone spurs and took years to correct.

Our feet endure tremendous pressure throughout the day, bearing the weight of our body with each step. Shoes that lack appropriate support or are ill-fitting can lead to a range of issues, including:

- Bunions, corns, and calluses caused by friction or pressure
- Plantar fasciitis resulting from inadequate arch support
- Heel spurs
- Ingrown toenails and blisters
- Stress fractures and tendonitis

Properly designed footwear helps distribute weight evenly, supports natural foot mechanics, and reduces the risk of such injuries.

Find good quality hiking boots that have a proper fit and support.

Cushioning and shock absorption will minimize the impact of walking reducing stress on your joints and muscles.

Breathability will allow air circulation to help prevent moisture buildup.

Good footwear is crucial for overall health, not just foot health. Proper shoes provide essential support, cushioning, and stability, reducing strain on your feet, ankles, knees, and hips. This can prevent injuries, improve posture, and even positively impact conditions like diabetes and arthritis.

Remember wear good shoes on your field trips.

from Northwest Newsletter, 8/25

Hematite by Jessica Himple

Hematite, an iron oxide mineral, is a favorite among collectors for its striking metallic luster and wide variety of crystal habits. While it commonly appears as earthy, reddish-brown masses, the most desirable specimens display mirror-like, steel-gray crystals. These brilliant, tabular crystals often occur in clusters or rosettes, sometimes referred to as "iron roses," making them especially prized. Hematite forms in sedimentary, metamorphic, and igneous environments, with notable localities including Minas Gerais in Brazil, Elba Island in Italy, and the iron mines of Michigan in the United States.

Historically, hematite was one of the earliest ores mined for iron, dating back thousands of years. Its name comes from the Greek word haima, meaning "blood," due to the red streak the mineral leaves when scratched. Ancient peoples also used hematite as a pigment in cave paintings and early artwork. During the 19th and 20th centuries, hematite was a critical industrial resource, fueling the steel industry and global development. Today, while it remains an important ore of iron, collectors seek hematite for its brilliant metallic surfaces and well-formed crystals, which often accompany quartz and other minerals.

For collectors, hematite offers both beauty and durability. Its high density and metallic gleam make it an eye-catching display piece, while the variety of crystal habits, ranging from botryoidal formations to sharp hexagonal plates, adds diversity to any collection. Some of the finest specimens feature hematite with golden rutile inclusions or association with red jasper, creating visually stunning combinations. Whether admired for its role in human history or its dazzling crystal forms, hematite is a must-have for serious mineral enthusiasts.

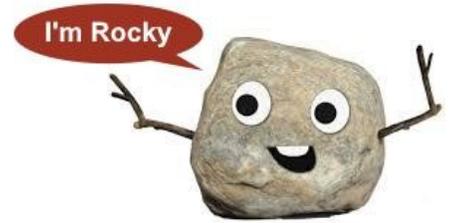
from Northwest Newsletter, 8/25

Clear Creek Jade by Jim Fox

The classification of jade includes two different forms: Jadeite and Nephrite. The two different types are sometimes hard to differentiate but they have different specific gravities and, under a microscope, different crystalline forms. This stone is a jadeite and was found in Clear Creek, San Benito County, CA. The jade found in this area is usually a "brecciated" jade that contains not only a pretty green jadeite but also a highly prized "mutton fat" white jadeite. As you can note it will take a good polish.

The primary use of jade is ornamental with the highest valued stones being a beautiful bright translucent green.
via The Council Reporter, 1/26; from SCVGMS, 11-12/25

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!



Editor's Note: Need Young Tumblers Submissions

I've been having trouble coming up with stuff for the Young Tumblers News page, so I am open to submissions.

Part of the problem is not knowing what our Young Tumblers want.

Are there topics you want or not want? _____

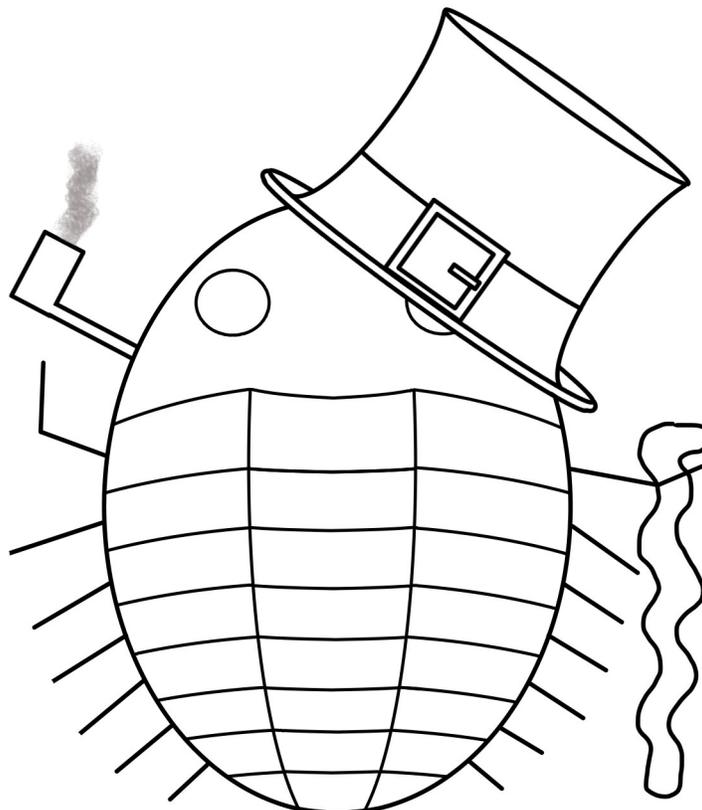
Are word searches or coloring pages fun for you? _____

Does any Young Tumbler want to try writing articles? How you got into rockhounding? What do you like about rockhounding? Maybe an article on a rock trip you were on? Was there a rockhound project that you made or helped with? A rockhounding related book you read and what you thought about it?

I like the idea of this page, but I've been having trouble coming up with content for it, and coming up with a last-minute Word Search or Coloring Page for it takes some of the fun out of putting together the newsletter (and it is fun).

So I need help for this page to survive. Thank you.

March Coloring Trilobite



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>).

- March 21** *Cascade Mineralogical Society - Baker Lake / Swift Creek - Agate, Gneiss, Jasper (or Saddle Mountain petrified wood)* - Difficulty Rating 3. Steep short trail down to river. Need waders to collect in stream and to cross stream. Agates are found in gravel deposits where stream is flowing. 1/2 mile walk down to Baker Lake gravel beds where agates are found.
Roger Danneman – CMS Field Trips Guide (roger.danneman@gmail.com; 425-757-3506 texts preferred)
- March 22** *Marysville Rock & Gem Club – Skykomish - Picture Jasper* – Need rock hammer, wading boots
Nique Wicks nwhopyfrog41@gmail.com (509) 670-0630

Barite by Jessica Himple

Barite, or barium sulfate (BaSO₄), is a staple of mineral collections thanks to its impressive crystal forms, wide range of colors, and remarkable density. Despite its often delicate, bladed crystals and pastel hues (white, blue, yellow, and even vibrant orange) barite is surprisingly heavy, a trait that frequently surprises new collectors. Specimens commonly form striking rose-like clusters or plate-like stacks, sometimes called "desert roses" when combined with sand. Notable barite localities include Morocco, England's Cumbria region, Colorado's Stoneham pocket, and the Elmwood Mine in Tennessee.

Historically, barite has been an essential industrial mineral, most notably used as a weighting agent in drilling mud for oil and gas exploration due to its high density. Its name is derived from the Greek barys, meaning "heavy," reflecting this defining characteristic. Barite has also been used in paints, medical imaging, and even in early forms of fireworks. While its commercial uses are significant, it is the mineral's aesthetic appeal, especially its brilliant transparency and dramatic crystal clusters, that has elevated it to collector status worldwide.

Collectors value barite specimens for their variety and visual impact. Transparent blue crystals from Colorado, clusters from Tennessee, and bright orange blades from Morocco each bring a distinct personality to a display case. Barite often forms alongside fluorite, calcite, and galena, creating visually impressive combinations that further enhance its desirability. Although fragile, well-formed barite crystals make for striking centerpiece specimens, earning the mineral a lasting place among the classics of the mineral-collecting world.

from Northwest Newsletter, 12/25

Jade in Washington State by Clara Hochstein

In the Cascade Mountains, a hidden treasure lies waiting to be discovered. Nephrite jade emerges marked and polished by its journey. This journey takes millions of years and can differ depending on its location on Earth. Nephrite jade in Washington is formed in a four-step process. It starts with oceanic plates colliding with the North American continent. It continues with mantle uplift, a process that transfers condensing minerals into the crust. Then the rocks are hydrated, turning into serpentinite. The serpentinite is altered, forming minerals like nephrite jade.

There are two main types of natural jade: nephrite and jadeite. Key differences include the mineral hardness, color (jadeite comes in more vibrant colors, nephrite taking on softer shades) and elements of composition. Jadeite is a much firmer, tougher mineral (6.5 - 7 on the Mohs scale) while nephrite is comparatively softer and more delicate (6 – 6.5 on the Mohs scale). Jadeite can be found in an array of colors including imperial green, while nephrite can range from a light apple green to a dark emerald green. Jadeite is mainly made of sodium and aluminum, while nephrite is rich in calcium and magnesium.

In conclusion, the nephrite jade in Washington state is a result of an impressive geological timeline, and the four-step formation of natural jade, including plate collisions. While both nephrite and jadeite are forms of natural jade, they have key differences that make them each distinct.

from Rocky Trails, 11/25

Condor Agate

Condor agate was first found in Argentina and brought to market in 1993 by Luis de los Santos. These agates feature vibrant bands and are highly valued by collectors and jewelry makers. The specimen shown above displays striking dark banding with a light center that contrasts beautifully. The rhyolite matrix adds the perfect finishing touch. It was sourced from the only vein type deposit located in the San Rafael Department (Mendoza Province, Argentina). Being relatively young (30 – 52 million years old), Condor agate is mostly free of fractures and may exhibit green fluorescence under short wave UV light.

Luis de los Santos named this discovery 'Condor Agate' to honor the Andean condors that glide over the region near San Rafael, Mendoza Province in Argentina. Luis and his former wife, Ana de los Santos, operate the agate mine and oversee the business.
from The Council Reporter, 1/26

Shows

March 7 & 8: Saturday 10 am - 6 pm; Sunday 10 am - 5 pm
East KingCo Club, Annual Rock and Gem Show Pickering Barn
1730 10th Ave NW
Issaquah, WA

March 13 - 14: Friday 9 am - 6 pm; Saturday 9 am - 5 pm
Panorama Gem and Mineral Club, Annual Show
Stevens County Fairground
Ag and Trade Center
317 West Astor
Colville, WA

March 13 - 14: Friday, Saturday & Sunday 10 am - 5 pm
Tualatin Valley Gem Club, 67th Annual Rock and Mineral Show
Forest Grove National Guard Amory
2950 Taylor Way
Forest Grove Oregon

March 14 & 15: Saturday & Sunday 10 am - 5 pm
North Seattle Lapidary & Mineral Club, 70th Annual Rock and Gem Show
Crown Hill Center
9250 14th Ave NW
Seattle, WA

March 21 & 22: Saturday 9 - 5; Sunday 10 - 5
Hellgate Mineral Society, 2026 NFMS Show
Hilton Garden Inn
3720 North Reserve St.
Missoula, Montana

March 28 & 29: Saturday 10 am - 6 pm; Sunday 10 am - 5 pm
Mt. Baker Rock & Gem Club, 64th Annual Rock and Gem Show
Ferndale Pavilion
2007 Cherry Street
Ferndale, Washington

March 28 & 29: Saturday 9 am — 5 pm; Sunday 10 am — 4 pm
Clallam County Gem And Mineral Association, Spring Show
Vern Burton Community Center
308 East 4th Street
Port Angeles WA