The CMS Tumbler

February 2020

Next Meeting:
February 13, 2020
7:00 p.m.

American Legion Hall
25406 97th Pl S
Kent, WA

The Program is
Roger Danneman
about the year's
upcoming field trips

The Show & Tell
Theme is something
you found on a field trip

This month remember to wish a
Happy Birthday to
Maynard Byers on February 2
Daniel Fraser on February 7
Sharim Johnson on February 7
Linda Jorza on February 12
Scott Harris on February 14
Peter Williams on February 18
Yingchu Chuang on February 20
Alan Epley on February 20
Alexa Viejo on February 20
Scott Miles on February 23
John Biggs on February 27
and also remember to wish a
Happy Anniversary to
Steve & Emihiant Sorkness on February 3 (30 years)
Angie & Brian Bayer on February 8 (8 years)
Garry & Kathy Hartzell on February 13 (49 years)
Cheryl & Dale Ehrenheim on February 14 (22 years)

Connect with us!
Website: cascademineralogicalsociety.org
Club Facebook: facebook.com/CasMinSoc/
Show Facebook: facebook.com/cascadegemandmineralshow
Instagram: instagram.com/cascadegemandmineralshow/

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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.

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

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Maple Valley, WA. 98038

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Lake Tapps, WA 98391

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Email preferred.
greenrockdraggin@yahoo.com

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Webmaster Mark Hohn	253-332-3736	showchair@cascademineralogicalsociety.org

2020 CMS Dues are $25 per year per family
Pay online, by mail, or at our meetings.
Mailing Address: Charles Benedict, 25838 W Lk Wilderness Dr SE, Maple Valley WA 98038

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.

Every member of the club should be receiving a copy of the Northwest Newsletter. If you are not receiving a copy contact Mike Blanton in person or by telephone at (425) 271 -8757 or by computer at mblanton41@hotmail.com

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

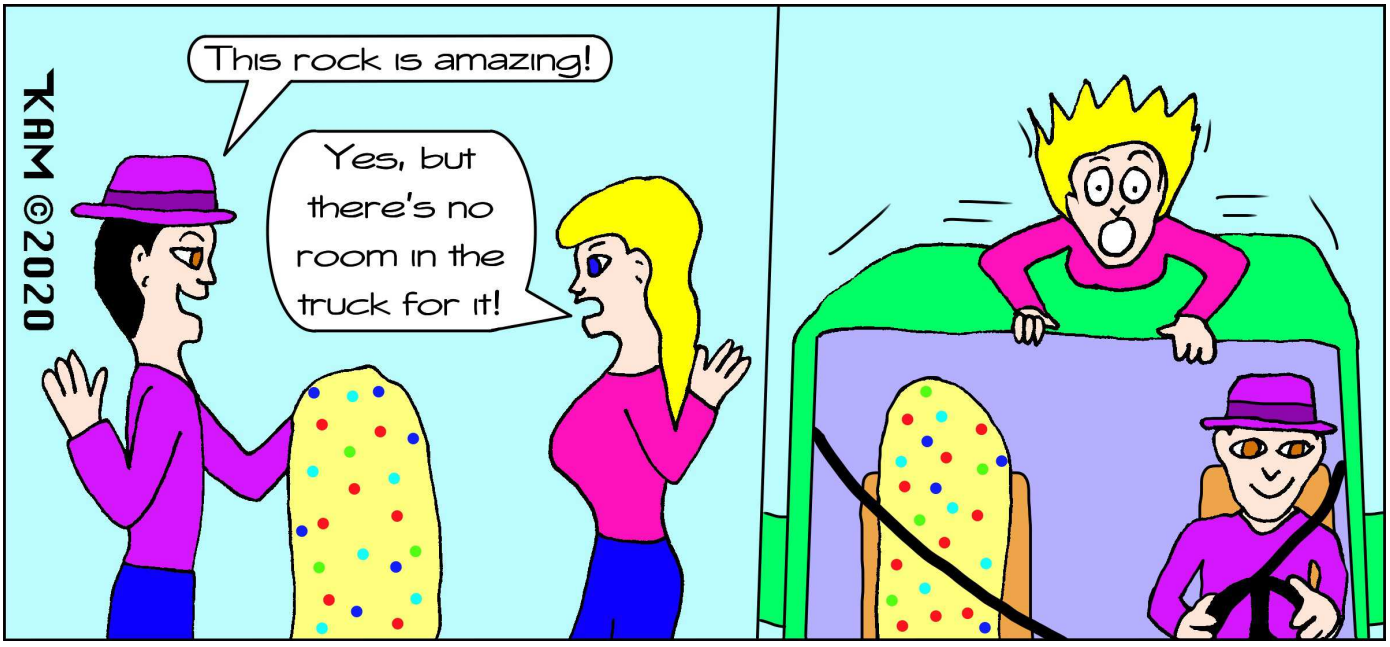
February

Sun	Mon	Tue	Wed	Thur	Fri	Sat
						1
2	3	4	5	6	7	8 Whidbey Island Show
9 Whidbey Island Show	10 Show Meeting 6:30 pm Board 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	29 North Seattle Show

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

Lapidary Class Hours:……By appointment, call to set a time & day for your lesson (425) 226-3154
Lapidary Shop Hours:……Most Tuesdays…… 2:00 pm to 5:00 p, call ahead (425) 226-3154
Lapidary Shop Hours:……3rd Saturday…… by appointment only (call a few days ahead to set time)

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



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

CMS Show Committee and Board Meeting Minutes January 2, 2020

by Charles Benedict

Rock Show Meeting:

Green River has confirmed the show dates of Sat. 9/19 & Sun. 9/20. With Fri. 9/18 for setup.

We have given them a 500.00 deposit to hold the dates.

The walk up hill from even the handicap parking was mentioned several times as an issue last year. GRC has given us a quote of $288.00 for two days of golf cart transportation to the front door. Pending resolution of any liability issues.

A motion was made and passed to buy 5 federation cases from the Puyallup club for $250.00. Kat will negotiate to get the best cases she can but some repairs will likely be needed. The cases will probably be made available to members who want to use them when not in use at the club rock show.

Club Board Meeting:

We will move to a new company to host our websites at a lower price. Preferably the move will be done by late January since Kat is negotiating the change and she will be gone for most of February.

We are going to start making change for our junior members purchasing auction items with rock bucks. It is viewed as an opportunity to teach change making and coin counting to our more junior members.

Charley was authorized to look for alternative liability insurance due to concerns about what is covered, the price, and accuracy of what our agency is telling us.

There are upcoming rock shows in Everett and Whidby Island. Flyers will be available at the regular meeting. Kat will be gone for the months of February, April and June. Merriann will be conducting the meetings. She will even have to cover a February and June Board meetings.

Rodger will talk about field trips at the February meeting. Kat will do wire wrapping in May.

There was some discussion about starting background checks but the board agreed it was not needed at this time baring any new information from the search for alternative liability Insurance.

The board agreed to start a trivia question in the news bulletin every month. We will use a prize for the correct answer from our door prizes.

Our Club is a Member of these Federations and Associations:

AFMS: The AFMS governs our Northwest Federation.

This year's annual meeting is being held at Knoxville Gem, Mineral & Jewelry Rock and Gem Show, October 16-18, 2020 in Knoxville, TN. The host club is Knoxville Gem and Mineral Society. http://www.knoxrocks.org/gem-show/ . If you are vacationing in the area seriously think about attending the show. Federation shows at any level are large and interesting shows.

You can find the most current association news 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 you can find the most current news bulletins at http://northwestfederation.org/Newsletters.asp

The NFMS disparately needs a news bulletin editor. If you have the skills to put together a news bulletin they would love to hear from you. Everyone sends you content, you only need to put it together in the established news letter format. If you would like to volunteer for the position contact Judy Allison at nfmssec@gmail.com or Ronna Watkins at nfmaronna@gmail.com.

They currently don't have a NFMS show scheduled for 2021. Stay tuned as it will happen.

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 purpose of the association 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.

There is info on the website for all club Field Trip Leaders. They ask the Field Trip Leaders to fill out the field trips forms so that they have supporting information ready if they need to protest the closure or restriction of use on rock collecting locations. You can find this info under “Fieldtrips Into” link. http://amlands.org/437345.html

ALAA also publishes a monthly news letter. 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.

You can a their scheduled of “Field Trips for 2020”. There is also a link, “Listing of Local Shows” that covers all the rocks in the northwest area. Under “Misc News” you can find the latest news on access to some of our most popular rock hounding areas.

They also have a monthly news bulletin that keeps you informed of everything the State and Federal governments wants or are doing to the rockhounding areas in the northwest.

You can all this information and a whole lot more at https://mineralcouncil.wordpress.com/

CMS General Meeting Minutes January 9, 2020

Had not arrived by press time.

Regular Meeting Recap – January 9, 2020 by Kat Koch

The topic of our meeting for January was our club member John Cornell and his other talent besides rock collecting or lapidary work.

John does beautiful seed-bead landscapes and portraits. John has been doing his bead work since a teenager. It can take him up to a year to complete some of his works and up to $900 in the cost of beads.

John takes photographs and transfers them to a canvas similar to a needlework canvas. He then has software that matches required bead colors by bead brand. Not all bead brands are consistent in size and color. He presently uses Toho beads.

He gathers all the beads for a single row. Sets the beads in the canvas and then goes back through each bead again. So each row is threaded through the top and bottom. His work is so time intensive and intricate.

It was very interesting how he could take a photograph and turn it into these awesome works of art!

He presently has some of his work on display and for sale at an art gallery in Greenwood.

The Show 'n Tell portion of the meeting was your favorite rock, mineral or lapidary item that you received or bought in 2019. 10 members showed off a wide variety of favorite things.

The meeting was brought to a close with raffle prize drawing.

We Need Loads of Polished Rocks for the Show!!!

Calling all members that tumble. We need approximately 700 to 800 (total) polished rocks for the spinning wheel and a free rock for every child that attends the show. We would like them 1 1/2” to 2” in finished size.

Everyone needs to start tumbling now in order to have enough rocks by show time. If you will tumble for the show the club will furnish the grit for as long as our supply holds out. Contact Bob Pattie for the grit.

Bring finished rocks to the club meeting and give to either Angie or Brian. (They bring the coffee & refreshments to our regular meetings.) Angie is our rock wrangler for these two show needs.

From the Top of the Rock Pile... by Kat Koch, 2020 CMS President

I am busy with planning and writing the website to sell booth space for our 2020 Show. I am also the Bulletin Aids Chair for NFMS this year. It is the busiest time of the year for this position as I am in charge of all the NFMS contest submissions except websites. Thank goodness, this closes our shortly. FYI: There is no conflict of interest as I do not judge any of the entries from our club.

Mike has threatened to tie my hands down in order for me not to volunteer for anything else anywhere. I agree so he doesn't have to worry.

I want to thank everyone in the club for stepping up to fill all the chair positions. Now I need to fill the various volunteer time slots at the show. So please consider to signing up now so you can then mark your calendar and won't have any conflicting commitments.

Mike and I will be going to the Tucson Gem Show this year and then on to San Antonio, Texas to visit Mike's daughter. I will be missing the February Board and Club meeting. VP Merriann Fu will be handling everything while I am gone. I am always in contact via email and my cell number.

See all of you in March.

Member News by Dick Morgan

On January 1st, Pat Morgan fell at home and broke her hip in 3 places. An operation put a steel rod in her right femur held in place with screws. It seems to be healing slowly, but there is no infection occurring. Pat is in a rehabilitation center to reteach her how to walk and climb stairs.

She, like so many in the rehab center, does not want to be there. It seems that many of the patients are disillusioned as they don't have friends or family to talk to. Visiting the rehab center to see Pat daily shows that there is a number of residents that would just love to have visitors just to talk with. I have shown some of my rocks to them and it gets them talking about their tales of looking for rocks and thundereggs when they were younger.

What Is Rockhounding And Why Do We Do It Anyways?

Rockhounding, or amateur geology, is the recreational study and collection of rocks, gems, minerals, or fossils from their natural environments. Rockhounds are the people who cannot pass by a pretty rock without picking it up for a closer look (who can relate? I know I can).

So why do it? (For those that need any convincing)

No experience needed! Rockhounding can be as simple as going down to the nearest creek and finding pretty stones that suit your fancy.

It can fit any budget. Some rockhounds travel the world to collect stones in exotic locales, while others collect near their home.

For kids, rockhounding is a great way to get them interested in geology and the outdoors! Who doesn't love going treasure hunting?

It's a great excuse to get out in the fresh air and sunlight, and get some exercise. Hauling sacks of heavy rocks is a great workout.

If you join a local gem club (like CMGC), it's a good way to make friends and connect with the community. The rockhound community tends to be both close-knit and welcoming.

When you're tired of the awesome stones you've collected, or when you need to make room for new ones, you can sell your spares to other collectors, and earn a bit of cash.

via The Clackamette Gem, 1/20; from rockhoundtimes.com

Double Stick Tape by Noel and Deb Runyan

For several years we have been using Scotch double stick tape for working with rocks. We tried museum mounting putty and other types of sticky stuff, but this thick mounting tape is by far the best.

We use it for sticking weights to stone slabs for flat lapping, for sticking cabs back-to-back for tumbling, for mounting pen holder fixtures on writing stone slabs, and for many other uses. It is thick enough to conform to rock surfaces, and holds on very tight. It has a holding strength of about 5 pounds per square inch.

The tape is not soluble in water, so it holds tight in tumblers and flat laps.

You can remove the tape by warming it with hot water or hot air from a hair drier, and then pealing it off by rolling up the edge with finger pressure. We separate lead weights from stone slabs by running a thin dull knife between them.

Other double-stick tapes we've tried do not work as well as the Scotch version. We order it on-line, where it is identified as "Scotch Permanent Outdoor Mounting Tape".

from Breccia, 2/20

You Know You're A Rockhound If…..

Your company asks you not to bring any more rocks to the office until they have time to reinforce the floor.

from Tailings, 2/19

New Evidence When Humans First Came to North America by Kat Koch

I had a writer/author email me a week or so ago asking if I knew anything about the Chinese coming to the Virgin Valley, Nevada about 4,500 years ago? I didn't at the time.

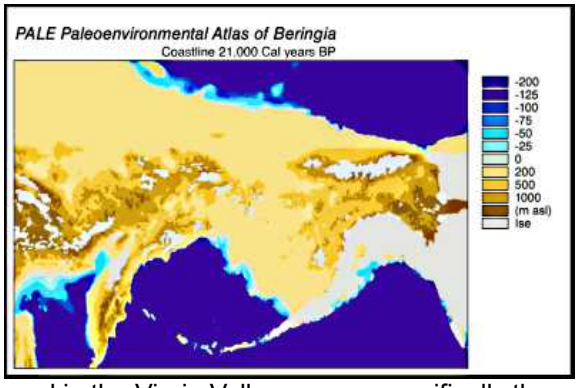
I did a quick internet search and found the Royal Peacock Opal Mine, Virgin Valley, NV mentions this on their website. I have had a life long interest in anthropology and paleontology, so this really piqued my curiosity.

According to the Royal Peacock Mine website “Ancient man visited Virgin Valley more than 10,000 years ago. The 'Last Supper' cave – an archaeological marvel -- is located near the southwestern tip of the valley. The bones and relics of the cave's inhabitants have been carbon dated at 8 to 10 thousand years before Christ. An estimated 4,500 years ago, a Chinese expedition was dispatched to Virgin Valley to mine black fire opals. This was the first recorded instance of opal mining in America.”

The prevailing thought for the past 50 years was the Stone Age hunters crossed the land bridge between eastern Siberia and western Alaska about 13,000 years ago. These were the ancestors of today's Native Americans. Finally spreading across two continents clear to the tip of South America.

This theory just doesn't hold up because in recent years with the advent of DNA testing and the discovery of archaeological sites in North and South America it shows that humans had been on the continent 1,000 to 2,000 before the first supposed migration.

There is now another theory called the “Kelp Highway” which seems to have an more accurate timeline. The Kelp Highway theory feels that as the massive ice sheets melted covering North America humans made it to the continent by foot and boat. They migrated down the Pacific Coast and subsisted on the abundant resources. This idea supports the archaeological sites along the West Coast of North America that date back 14,000 to 15,000 years.



Emerging evidence suggests humans may have arrived in North America at least 20,000 years ago. 5,000 years earlier than previously thought. Research also supports the possibility that settlements of hundreds or thousands of people spread out over the wild lands stretching between North America and Asia.

5,000 to 15,000 years ago the strait and flanking continents were high and dry. That vanished land mass was called Beringia. See image.

I have not been able to find anything more specific on the remains found in the Virgin Valley area or specifically the Royal Peacock Opal Mine. I have found the following information on the Chinese possibly being in the Americas 3,500 years ago or longer.

We have all heard the rhyme “in 1492 Columbus sailed the ocean blue” and discovered the Americas. More recently we have been told that the Vikings made it to Newfoundland around 1,000 AD.

Trade was taking place between East Asia and the New World hundreds of years before 1492. Archaeologists have made the suggestion following the discovery of a series of bronze artifacts found at the 'Rising Whale' site in Cape Espenberg, Alaska. They found what they believe to be a bronze and leather buckle and a bronze whistle, dating to around A.D. 600. The latest discovery of bronze artifacts backs up earlier evidence for trade between Alaska and other civilizations prior to 1492.

Bronze-working had not been developed at this time in Alaska and researchers instead believe the artifacts were created in China, Korea or Yakutia.

LiveScience reports: This is a group of people who lived on both sides of the Bering Strait and used skin boats and harpoons to hunt whales.

John Ruskamp, Senior Research Analyst for Epigraphic Research, Napierville, Illinois, discovered unusual markings while walking in the Petroglyph National Monument in Albuquerque, New Mexico. Mr. Ruskamp believes some of the petroglyphs were made by ancient people from Asia that were present in the Americas around 1,300 BC, This is nearly 2,800 years before 1492.

Mr. Ruskamp says: “These ancient Chinese writings in North America cannot be fake, for the markings are very old as are the style of the scripts. The pattern of the finds suggests more of an expedition than settlement.” He also notes the carvings have undergone significant levels of weathering.

He feels the scripts are written in the Shang script which disappeared from use around the fall of the Shang empire in 1046 BC

and were only rediscovered and deciphered in 1899 in China. Taken together this suggests the carvings are unlikely to be fakes.

Mr Ruskamp said: “Although only half of the symbols found on the large boulder in Albuquerque, New Mexico have been identified and confirmed as Chinese scripts, when the four central pictogram-glyphs of this message - Jie, Da, Quan, and Xian - are read in the traditional Chinese manner from right to left we learn about a respectful man honoring a superior with the sacrificial offering of a dog.”

I would like to note Mr Ruskamp has written a book and an academic paper on the topic. It has been over 5 years since he put forth his ideas on the origins and meanings of some of the petroglyphs and it's becoming an viable and acceptable theory.

Confirming research on Ruskemps theory have several researchers feeling the findings of his study confirm that ancient Chinese people were exploring and positively interacting with the Native peoples over 4,100 years ago.”

*Smithsonian Magazine (www.smithsonianmag.com), Royal Peacock Opal Mine (*www.royalpeacock.com*), DailyMail.co.uk: Did China Discover America?, LiveScience, AsiaticEchoes.org, Wikipedia.org Pictures are available under Wikipedia's “Wikimedia Commons”: You are free to Share - copy and redistribute the material in any medium or format, Adapt - remix, transform, and build upon the material for any purpose, even commercially.*

Rare Mirabilite Formations Found On Great Salt Lake Shoreline by Kat Koch

On stateparks.utah.gov and gelogoy.utah.gov websites they have an article on the four rare formations have been found on the south shore of the Great Salt Lake. Park Rangers and Geologists first noticed them in October 2019. The Park Rangers reached out to the Utah Geological Survey for their help. After investigating they found that the mounds are Glauber's salt, also known as “mirabilite”.

Mirabilite mounds are rare and have never before been documented at the Great Salt Lake. They have only been found at a few locations around the world – primarily in the Arctic.

It has been determined that the mirabilite is coming from warm, high salinity sulfate rich springs. These mounds are visible only when the lake level falls below an elevation of 4194 feet. A closer inspection of the mounds revealed that they are a built-up collection of crystallized terraces, similar in appearance to the travertine rimstone and dam terraces that form at Mammoth Hot Springs in Yellowstone National Park.

These mounds are being studied as they could possibly yield insight into salt structures found on Mars. The formations will disappear quickly as the temperatures rise and/or the water level rises.

My son, Dave Koch, being a professional photographer, heard about these mounds/formations in the local newspaper and on the TV. He packed up his camera equipment and went on a hunt for these formations. He not only founds the mounds noted but a lot more of them. He quickly notified the researchers he had found additional mounds. Attached are some of the photos he took of these formations. He told me waded out into the water to get good pictures. The water level around these mounds is presently about 10” deep.

Dave Koch has given permission for any rock club affiliated with the AFMS to reproduce the photos. For commercial use of the photos contact dkoch@davekochphoto.com. Any information or articles on stateparks.utah.gov and gelogoy.utah.gov websites are free to use, condense and/or reprint.

Young Tumbler's Page

Here is a big challenge for all you young rock hounds. Write a 6 line poem about your favorite rock, mineral, fossil or your collections. Read it to the club at the March meeting and earn $10 Rock Bucks.

Remember to save your Rock Bucks up for the August picnic auction. You can then buy yourself some awesome items.

What is your poem about? _____

Poem Name _____

_____

_____

_____

_____

_____

_____

Match the Mineral by Anne Fitzgerald

Can you match a clue on the left to a mineral in the column on the right?

Spice tavern	*Graphite*
Policeman	*Aquamarine*
Howling evening	*Garnet*
Pleasant	*Calcite*
Statistician war	*Copper*
To short a few	*Cinnabar*
What you'll need to eat a treat	*Gneiss*
State location	*Wulfenite*
Water veteran	*Gypsum*
Fish trapper	*Apatite*

Answers on page 10

from Crack 'n Cab, 4/19

Geo Lexis Puzzle by Anne Fitzgerald

Can you match a clue on the left to a mineral, gem, or rock in the column on the right?

Beach Rock	*Boron*
Two Pints Plus	*Malachite*
To Be Tedious	*Arsenic*
South American Eve	*Quartz*
Fire Starting Santa	*Sandstone*
To Post A Flying Toy	*Amazonite*

Answers on page 10

from Crack 'n Cab, 6/19

Unrhymable

Orange and Silver have no rhyming words in the English language.

Answers to Match the Mineral

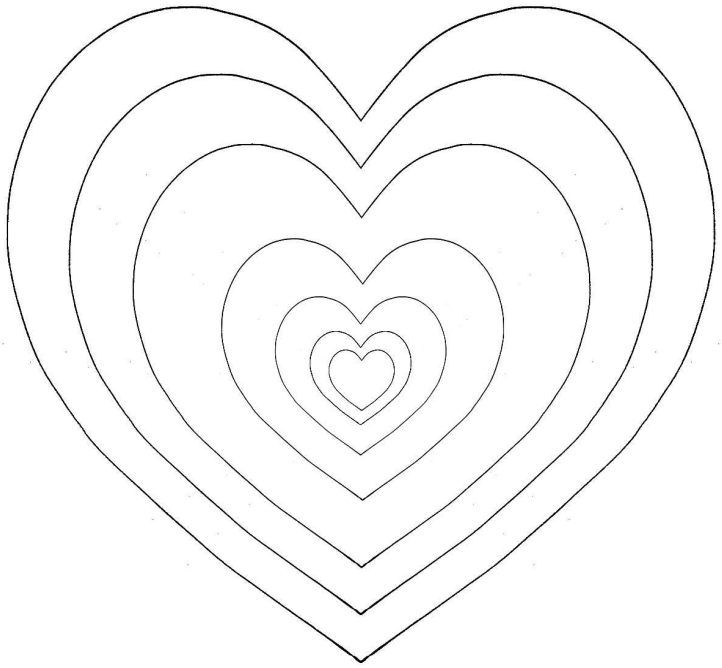
Spice tavern = Cinnabar
Policeman = Copper
Howling evening = Wulfenite
Pleasant = Gneiss
Statistician war = Graphite
To short a few = Gypsum
What you'll need to eat a treat = Apatite
State location = Calcite
Water veteran = Aquamarine
Fish trapper = Garnet

from Crack ‘n Cab, 4/19

Answers to Geo Lexis Puzzle

Beach Rock = Sandstone
Two Pints Plus = Quartz
To Be Tedious = Boron
South American Eve = Amazonite
Fire Starting Santa = Arsenic
To Post a Flying Toy = Malachite

from Crack ‘n Cab, 6/19



Elemental Copper by Dave Jacobson

This month we will take a look at one of the native elements, copper (Cu), which is the mineral in it's native metallic form. Native copper will commonly form in volcanic basalt by the reaction of copper bearing solutions with the iron oxide minerals in the basalt. It also forms in hydrothermal replacement deposits and by chemical processes in the oxidation zone of sulfide deposits. Some native copper can usually be found in copper mining areas. Other associated minerals are silver, calcite, malachite and other copper minerals. A specimen containing bother native copper and silver is called a "half breed". Some of the finest specimens in the USA come from the Keweenaw Peninsula in Michigan. Other notable occurrences in the USA include Arizona and New Jersey.

Native copper is in the isometric crystal system although individual crystals are rare. When crystallized the shapes are usually cubes and octahedrons. It is usually found in masses, wires, dendrites and other arborescent or branching forms. Sometimes recognizable crystal faces are visible on the outer surfaces of massive native copper.

Color is typical copper coloring with some specimens tarnished in varying shades, primarily green. It has a metallic luster. Streak is reddish copper. Hardness is 2.5 to 3. Specific gravity is 8.9+. Native copper is ductile which means it can be beaten pounded and shaped.

Native copper is a minor copper ore since it is rarely found in large enough quantities to make it worth mining. Other copper ores are more economic to mine and refine in producing copper. I speculate that in the early days of mining history native copper was more important ore of copper than it is now. Native copper is primarily used as a mineral specimen.

Copper takes it's name from the Greek Kyprios, referring to the Island of Cyprus, a site of ancient copper mining.

I used the following reference materials in preparing this article. Field Guide To Rocks And Minerals by Frederick H. Pough. Mineralogy For Amateurs by John Sinkankus. Simon & Schusters Guide to Rocks And Minerals. The Audubon Society Field Guide To North American Rocks and Minerals. Amethyst Galleries Mineral Gallery on the internet (address http://mineral.galleries.com).

from The Quarry, 1/20; via Canaveral Moonstone, 12/19

The Birthstone Story

Birthstones have existed for many cultures with their own calendars throughout history, including mentions in the Bible about the Breastplate of Aaron and the foundation stones of the new Jerusalem. The birthstones most of us know were made official by Jewelers of America in 1912, and tanzanite for December was added by the American Gem Trade Association in 2002. Whatever their origin, birthstones are now widely known as a thoughtful, personal gifts for men, women, and children.

from Golden Spike News, 11/19

Why Rockhound?

The term “rockhound” was given to geologists who would sniff rocks trying to find oil deposits.

CMS Field Trips 2020 by Roger Danneman

Here are the dates and locales of our 2020 CMS Field Trips.

Details are on the CMS Web Page under Field Trips tab (https://www.cascademineralogicalsociety.org/) and will also be published in the Tumbler and Facebook Group Page as each trip gets closer (https://www.facebook.com/groups/1168207926650075/).

E-mail notifications are available to those who sign up for them using the Subscribe boxes on the CMS Web Page Field Trips tab.

March 21st Field Trip to Baker Lake / Swift Creek
April 18th Field Trip To Saddle Mtn
May 16th Field Trip to First Creek
June 13th Field Trip to Redtop
July 18th Field Trip To Greenwater
Aug TBD (9th?) Picnic at Lake Wilderness
Sept 12th Field Trip to Little Naches
Sept 19-20th CMS Rock & Gem Show
Oct 17th Field Trip to Crystal Mtn (Teanaway)

Field Trip Guide is Roger Danneman Contact info: roger.danneman@gmail.com; 425-228-8781 (home) or 425-757-3506 (cell).

Also, Ed Lehman of the Washington State Mineral Council has a full schedule of great trips for 2020. The link can be found on the CMS Web Page Field Trips tab.

Llovisnando Opal

For in them you shall see the living fire of the ruby, the glorious purple of the amethyst, the sea-green of the emerald, all glittering together in an incredible mixture of light.
- Roman Pliny the Elder on Opal, 1st Century AD

In general when we hear —opal we think Australia, but there are a few areas in Mexico that produce some of the finest opal with play-of-color on the planet. The exceptional ones also include another dimension of color. When all the components align, a full spectrum of color dances from within the heart of the gem and jumps out of the stone three-dimensionally, almost floating above the surface. The local Mexican miners called the light-and-color dance —floating light or llovisnando.

Our featured gemstone for June 2008 is by some standards one of the best from the Magdalena mining district in Jalisco, Mexico. A true spectacle of llovisnando: you can actually spin it around in your hands and interact with the play-of-color. A magical blend of optics and color in a tangible jewel. This 22.47-carat opal exhibits a icy-blue body with a play-of-color that meanders through all the shades of the rainbow. Each color a pure neon hue playing in formations like brush strokes and flowing bands.

The Geography of Mexican Opal

The two main mining areas in Mexico that produce these precious opals are Querétaro and Magdalena, situated in central Mexico, northwest of Mexico City and Guadalajara respectively. These historical deposits have been coveted by the native families for over a hundred years. They consistently produce oranges, reds, and blues with little or no play-of-color, while sporadically producing the wild, full spectrum patterns of color seen in the rare opals. In August of 1984 a local newspaper in the Querétaro mining district declared La Muerte de una Mina: the death of the Iris Mine.

After many changes of ownership and a lack of funds, the final detonations at the Iris Mine were sparked and all but the rubble remains. They did, however, find the end-all-be-all jewel in the final blast, and the death of the mine ensued. They named the spectacular nodule —Colibrí, or hummingbird. The Iris Mine might be dead, but the Querétaro and Magdalena mining districts roll on into the future. However, the miners say they are lucky to find a few truly spectacular opals over a year of mining.

The Geology of Llovisnando

The opals crystallize in a hydro-thermal system where the hydrous silica gels get trapped and concentrated in cavities and fractures within rhyolitic lava flows. This unique geologic process then —freezes the opal melt from the high temperature solutions that begin at around 160°C. The opals often have one- and two-phase inclusions with trapped remnants of aqueous liquids, water vapor, carbon dioxide, and sodium chloride from the original solution. The Querétaro district is one of the only significant sources of gem-quality —fire opal to originate from an igneous or rhyolitic source. The Magdalena district has a similar geology, producing exceptional fire opals and, in rare cases, —water and llovisnando opals as well. Australian opals, on the other hand, form at low temperatures from circulating groundwater in sedimentary-type environments.

The Future of Fire and Water

Pala has started a relationship with one of the mining families from the Magdalena district to start selling opals, from small finer pieces to exceptional llovisnando varieties. So hopefully we will be able to offer a nice selection of fire and water opals with play-of-color. Lines of communication have also been started in regards to Pala actually offering our expertise in mining. The deposit has historically been an open pit, but there may be ways to go underground to chase the rich ore veins. The partnership could be a very interesting way to bring more spectacular fire opal to the American market and beyond.

via West Seattle Petroglyphs, 1/20; via Maplewood News, 7/08; via Gem News; from Pala International, 6/07 [www.palagems.com]

Shows

February 8 & 9: Saturday 9 am - 5 pm; Sunday 9 am – 4 pm
Whidbey Island Gem Club, *55th Annual Sweetheart of Gems Show*
Oak Harbor Senior Center
51 SE. Jerome Street
Oak Harbor, WA

February 29 & March 01: Saturday 10 am – 5 pm; Sunday 10 am – 5 pm
North Seattle Lapidary & Mineral Club, *66th Annual Rock and Gem Show*
Crown Hill Center
9250 14th Ave NW
Seattle, WA 98117

Bloodstone, called Heliotrope in Biblical times, is a variety of quartz, a warm green chalcedony or jasper, delicately flecked with vivid red spots. Although bloodstone seems a solid green material, it is actually filled with many minute green mossy 'growths', the mineral chlorite, with the small bright red spots, hematite, intermixed. Bloodstone has a hardness of 7 on the Mohs scale and depending on the color pattern and whether it is set in gold or silver, may command prices much like turquoise.

Medieval folks believed that the Bloodstone received its coloring from Christ's own blood, falling upon a green jasper stone at the foot of the Cross. The early Christian Church named this St Stephen's Stone. These stones were greatly prized by the Crusaders as a sort of talisman against the enemy. The early Egyptian and Babylonians used bloodstone to make durable seals and intaglios for wear. The stone was believed to control and stop bleeding, call thunder and lightening with heavy rain, give power over demons and evil spirits, and make the wearer invisible.

"No hope had they of crevice where to hide or heliotrope to charm them out of view", according to Dante, speaking of the dammed on the way to eternal darkness. In The Decameron, Boccaccio stated "The other stone is heliotrope, which renders those who have it invisible".

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