

The CMS Tumbler

**July
2016**

This publication is an official bulletin of the Cascade Mineralogical Society Inc. (CMS).
(Previously known as the Boeing Employees' Mineralogical Society (BEMS))

**Next Meeting:
July 14, 2016
7:00 p.m.**

**American Legion Hall
25406 97th PI S
Kent, WA**

The Program is All About Rocks by Bob Pattie

The Show & Tell Theme is Display of Club History plus Members show off a favorite rock in their collection. Tell us how you came about obtaining this rock

This month remember
to wish a

Happy Birthday to

Penny Hohn on July 12

Virginia Bird on July 18

Roger Pullen on July 30

and also remember

to wish a

Happy Anniversary to

Lloyd "JR" & Vicki Ruegg on July 1

Leonard & Dorothy Bahr on July 14 (54 years)

Dick & Patricia Morgan on July 14 (54 years)

**Schools out so bring the
kids to the club meeting**

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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.

When on field trips this organization uses CB Channel 7.

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

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2016 CMS Dues are \$30. Send or deliver dues to:
Richard Russell, 14431 SE 254th St., Kent, WA 98042 (or pay him at the meeting)

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.

The CMS external website is <http://www.cascademineralogicalsociety.org>

July

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

Lapidary Shop Hours:.....3rd Tuesday..... 10:30 am to 4:00 pm

Lapidary Shop Hours:.....4th Saturday..... 11:00 am to 5:00 pm

CMS Board Meeting:.....Monday before the General Meeting.....7:00 pm to 8:00 pm

CMS General Meeting:.....2nd Thursday.....7:00 pm to 9:00 pm



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

CMS Board Meeting Minutes June 6, 2016

by Pete Williams, 2016 Secretary

*Members Attending**President Kat Koch**Treasurer Rich Russell**Federation Mike Blanton**Past President Bob Pattie**Vice President Diana Horsfall**Secretary Pete Williams**Mineral Council Jackie Pattie**Director Mark Hohn*

Meeting called to order at 7:09

The club made \$504 from selling buckets of rocks at the show in Bonney Lake. This was much more than last year. There were 14 buckets left. We will probably not need to sell at the show next year. There are still 30 buckets of higher grade material in storage. Club members can buy these for \$15 or we will use these at club auctions. There is also more surplus equipment currently in storage that needs to be sold. Eventually, we would like to stop having to pay for storage by finding a location for a shop with storage space. Also, 2 people paid CMS dues at the show.

Kat has heard some complaints that there are too many items in the club raffle and others have expressed support for the quantity. The board agreed to have 20 items in the raffle. That can be adjusted depending on number of attendees. There will be 2 door prizes for adults and 1 for kids. The board agreed to donate 2 buckets of rock to the NFMS. One will be for the scholarship fund and the other for the silent auction. One bucket will be Saddle Mountain petrified wood and the other will be mixed agate.

The number of visitors to the new website has doubled and there are now more than 30 likes in Facebook. This allows for Facebook to provide statistics. There is also a membership software the board is considering that is free for up to 50 members and then \$20/month for more. This would allow for paying dues on-line and sending out reminders. A concern was expressed that this may be difficult to set up the bank accounts. Mark will develop documentation on what is needed to set up the accounts.

The board discussed and is considering the following: Having a separate membership category for those who live far away, but want to only receive the Tumbler; better defining the definition of a family as that has implications on who pays dues and who is recognized by the NFMS; possibly changing the membership fee structure; and if the club should continue to be part of the Federation. Some concern was expressed on the value received from being a member. Comments were made that the value lies in the political power they can wield and the communications.

There is concern the club does not have enough members to hold a show. Joining with another club may be the way to go. Club business cards are running low. Bob will check with UPS for their price. Kat will look into putting the CMS field trips on the Mineral Council website. A work party will need to be scheduled to set up a frame that was donated to the club and cover with tarps to better protect the club equipment. A potential date is June 19. The club's picnic will be held in August at the Lake Wilderness arboretum. The date is not final yet.

The next meeting will be July 11 at Panera Bread in Kent.

Meeting adjourned at 8:40

Young Richard's Almanac by Dick Morgan

In order to curb theft, garage and yard sales were invented.

If you look hard enough you may see that everyone is an expert in that which they do, although they don't always realize it until someone points it out.

Your life now is the result of how you built your past.

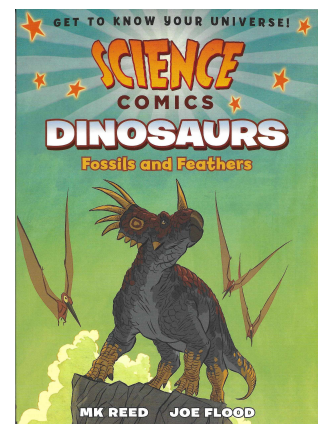
KAM's Book Review

Science Comics Dinosaurs Fossils and Feathers written by MK Reed, drawn by Joe Flood, published by First Second. \$9.99 US, \$10.50 Canada. 124 pages, in color.

This graphic novel (a comic in book form) tells about the history of paleontologists through history and what we knew about dinosaurs through those years.

The art works to convey the story, although some might find it a little cartoony. The story does a good job telling of the various personalities and discoveries through the years, but because of the limited number of pages some people and discoveries may not get as big a focus as some might think they deserve. One nice touch is the listing of what people knew/believed about the Earth at different points in time.

Still it makes for a nice introduction to the history of dinosaur hunters and what we know about dinosaurs.



CMS General Meeting Minutes June 9, 2016

by Pete Williams, 2016 Secretary

Meeting called to order at 7:06 pm. Minutes were approved. Two guests and 1 new member were present.

Tumbler Editor and Webmaster's Report: Keith continues to work on keeping the size of the eTumbler down. More articles are still coming in.

Treasurer's Report: The club did well at the rock show in Puyallup selling buckets. There are still 14 to sell if any members are interested in purchasing for \$15 each. We made \$504 which was much better than last year and we may not need to participate in next year's show.

Shop Reports: A work party is scheduled for June 25 at Bob's house to set up a new donated frame and cover with tarps. This will better protect club equipment. Volunteers are needed to attend.

Library: If members want or are interested in some books call Bob and he can bring to the next meeting.

Field Trip Report: The next club field trip is June 18 at government meadows. The July trip is still in work.

Federation Report: At the club's July meeting Mike will be selling raffle tickets as a fund raiser for the AFMS endowment fund. This fund has allowed the Federation's dues to remain at \$3.50 for around 20 years. Also, Mike will be collecting stamps to provide to the AFMS.

Mineral Council: Additional colored WSMC maps are being printed this week. Bob received notice that there is an Okanogan/Wenatchee motorized vehicle plan being put together. Comments can be provided on June 21 at the Mercer Island community center. The topic will be how to operate with reduced budgets. This area covers the Canadian border to Little Naches. Currently 62% of the area is designated for wilderness. One option is no change and there are 3 others around closing roads.

Health & Welfare: Fred Thompson was unable to attend the meeting due to an injury.

Show Committee: We are still looking for a facility of around 10K sq. ft. available between a Friday to Sunday. Provide any ideas you have to any board member.

Old Business: The website is up and running well. The number of views between March and April doubled with 3X the visitors. There are currently 26 CMS members not counting spouses, partners, and children. The clubs case on petrified wood was on display at the show last weekend.

Program: A video on the Blue Forest of Wyoming.

Meeting Adjourned: 8:17 pm.

The Age Of Trilobites by Mark Nelson, Pasadena Lapidary Society

Known as the "Cambrian Explosion", the Cambrian Period is the first geological time period of the Paleozoic Era (the "time of ancient life"). This period was marked by a dramatic burst of evolutionary changes in life on Earth. In the early Cambrian (520 million years ago), Earth was generally cold but was gradually warming as the glaciers of the late Proterozoic Eon receded. During this time the single supercontinent Rodinia broke apart which increased coastal area. The glacial retreat created more shallow sea environments where life could take hold.

At this point no life yet existed on land. All life was aquatic, and it was in this environment that we see the first trilobites. "What exactly is a trilobite?", you may ask. Distantly related to modern lobsters, scorpions and insects, trilobites were among the earliest arthropods – animals with segmented bodies, jointed legs, and an exoskeleton.

Trilobites had long antennae and flattened bodies with three sections: a head, middle, and tail. But that may have been where their similarities ended and their differences took off. This group of animals evolved some 15,000 species. Trilobites ranged from a few millimeters (less than half an inch) to 58 centimeters (23 inches) long.

The success and disappearance of trilobites illustrate evolution's ups and downs. By learning to crawl or burrow or swim, their first identified fossils are among the fossils of the Atdabanian stage of the Early Cambrian period (521 million years ago). They learned to be both hunters and passive feeders. Trilobites flourished during the Cambrian Period, throughout the lower Paleozoic era, before beginning a drawnout decline to extinction when, during the Devonian, all trilobite orders except the Proetids died out. Trilobites finally disappeared in the mass extinction at the end of the Permian about 250 million years ago.

The trilobites were among the most successful of all early animals, roaming the oceans for over 270 million years.

Many people (myself included before researching this article) are unsure of the pronunciation of the word "Trilobite". According to Cambridge Dictionary Online, it is pronounced "try-low-bite", with the long i as in tricycle.

Sources for this article include the Smithsonian Natural History Museum, Wikipedia and Live Science.

from Rockhound Ramblings, 2/16

An erratic is a rock transported from its origin by a glacier/iceberg & deposited by melting of the ice.

from USGS Twitter, 6/17/16

A Note from the President's Desk . . .

by Kat Koch, 2016 CMS President

On the July 14th meeting Bob Pattie will give his fantastic talk on rocks and it is a great program not only for adults but also for children and young adults. It's not only visual but also hands on so the children will really enjoy it.

So bring your kids, your kid's friends, your friend's kids and grand kids. Boy Scout Troops, Girl Scout Troops, Camp Fire Girls and Home Schooler's are all welcome. So mark your calendar and their calendars now. Let's see loads of kids at our July 14th!

At the July Show 'n Tell we are going to have a CMS Club history display. July is the 60th anniversary of our newsletter. Members bring a favorite rock in your collection and tell us why its your favorite and how you came about obtaining it.

At the July and August meetings I am going to have the sign-up sheet to volunteer at the Rock Club table at the Puyallup Fair. The Fair runs from Sept. 2nd to Sept. 25th and will be closed on Tuesdays. Hours that need help: Mon, Weds, Thurs and Fri 10am to 9pm, Sat and Sun 9am to 10pm. Closed Tuesday. Time slots are 3 hours each 10am to 1pm, 1pm to 4pm, 4pm to 7pm and 7pm to 9pm or 10pm on weekends.

Your job will be talk about rock clubs, the meetings, the fun in rock collecting, hobbies related to rocks & gems and urge people to join CMS or Puyallup (depends on where the visitor lives). There will also be printed material on the table and free polished rocks to pass out.

Check your calendars now to see which day and time you want to volunteer. As compensation for volunteering you get FREE Fair admission and parking for yourself and family.

Sign-up early at our July meeting to make sure you get the day and time that best fits your schedule.

We will also need lots of polished rocks to handout to the children. Last year 1,000 rocks (medium size) were given away. The Fair is running longer this year so the table will need approximately twice as many polished rocks. If you have any to donate please let me know and bring them to the July and August meetings.

This is a great opportunity to get new members for our Club. So let's all volunteer at least one 3 hours time slot.

Wanna Know How To Make Clear Ice? by Camper English – Whisky Advocate

Making clear ice is not as simple as boiling the water before freezing (an old wives tale). It doesn't have much of an effect on ice clarity.

Water tends to form an ordered lattice when it freezes, and as it begins to do so it pushes trapped impurities and air away from the direction it is freezing. In a typical ice tray, cold air surrounds each cube and it freezes from the outside in, trapping cloudy, air-rich ice in the center of the cube. Directional freezing limits the direction of freezing to one side of the cube, so that it pushes trapped air toward the other end rather than into the middle.

The simplest way to take advantage of directional freezing is to fill an insulated container (Styrofoam) with water (forget the aeration) and leave the top off. Water will freeze from top down, thanks the insulated sides and bottom. The ice will be clear until the last third or so of it.

from The Agatizer, 4/16

Get out that box of slabs you plan to use "someday" and blow off the dust. Pick out six and trim to 4" squares. Round the corners and bevel the edges so the squares will have smooth edges. Polish the best side. Back the other side with self-stick felt. The thickness of the slabs does not have to be the same. You now have a set of six unique coasters in a variety of colors and patterns.

via Washington Agate & Mineral Society Newsletter, 2/16; from Ore-bits, 3/96

Catoptromancy is what the Greeks called trying to predict the future using mirrors or crystals.

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 trips have fees to non club members, so they can be a day member, and be covered under club insurance. The usual fee is \$.50 a day.

Information from the Washington State Mineral Council webpage (<http://www.mineralcouncil.org>).

July 16 *All Rockhounds PowWow Club – Sweetwater* – Meet at 10:00 am at the Darrington Show (Grange) -
Travertine – Bring digging & hard rock tools
Larry Vess - vessel3755@gmail.com (253) 473-3908

What is Turquoise? by Bea Dietz

The most simple's way to explain would be...volcanos erupted, mountains collapsed and wind, rain and air pulverized rocks to make dust. That dust settled in protected areas and created layers. Rain washed iron or copper particles over the dust and infused the dust with metals. These layers became Turquoise.

Is Turquoise really a rock? To me it is. The reality is that Turquoise is very soft when in the ground and breaks very easy during the mining process To mine very large pieces is a dream and does not happen very often. The largest piece ever mined weighed 180 pounds, the largest piece I ever saw weighed 5.5 pound.

The color of Turquoise depends on the metal content of the host rock and the surrounding rock. Generally speaking, the higher the amount of copper in the host rock the bluer the Turquoise. As more iron is in the host rock, the greener the Turquoise. The colors can be deep sea blue known as "Persian Blue" found in Iran or the lighter blue like "Baby Blue" from Turkey. The USA produces a light blue Turquoise in Arizona out of the "Sleeping Beauty Mine" and we also have the "Fox Mine" in Nevada with a black Matrix and "Bad Boys of Cripple Creek" with a green Turquoise and it is the hardest Turquoise in the USA. It measures 6.7 to 7.7 on the Moah's scale.

How can you tell where the Turquoise is mined from? The matrix will tell you. The fine lines or deposits in the Turquoise will tell you.

Coarse black linesChina, Africa.

Finer black linesColorado, Nevada, South America.

Brown Lines or brown mass..... Nevada, Colorado.

White or silver lines.....Iran, Turkey (Silver Lace).

"White Lace" is very rare in Colorado, but it has been found.

China has a bad reputation in the Turquoise world.

When shopping for Turquoise you will have different price brackets to shop from. Untreated, natural Turquoise is the most expensive Turquoise. Only 10% of all jewelry is made with untreated Turquoise. Enhanced Turquoise is infused with liquid quartz. Stabilized Turquoise is covered with epoxy, heated with high temperatures and covered with wax. Reconstructed Turquoise is pulverized and mixed with other stones, than made into a paste. Heated and dyed into the color of Turquoise and sold as the real thing.

via Greater Cincinnati Lapidary and Faceting Society Newsletter, 2/16; from Canaveral Moonstone, 1/16

A new form of carbon has been discovered . So what does that have to do with the lapidary industry? It seems it glows in the dark and is stronger than a diamond. It is called Q-carbon. Its properties make it ideal for many applications from electronic displays to abrasive coatings on instruments and tools to biomedical sensors. It may also offer a quick inexpensive easy way to manufacture diamonds. Scientists from North Carolina State zapped carbon with a laser, then let it melt. As it cooled, it became a new material. Using it may be tricky.

from MGSCV Petrograph, 2/16

Shows

July 15 – 17: Friday & Saturday 10 am - 5 pm; Sunday 10 am - 4 pm
Lower Umpqua Gem & Lapidary Society, *Treasures from the Earth Rock and Gem Show*
Reedsport Community Building, 415 Winchester Avenue, Reedsport, Oregon

July 16 & 17: Saturday & Sunday 10 am - 5 pm
Darrington Rock & Gem Club, *Rock and Gem Show and Sale*
Manford Grange, 1265 Railroad Avenue (behind IGA), Darrington, WA

July 22 – 24: Friday & Saturday 9 am – 6 pm; Sunday 9 am – 5 pm
Washington Agate and Mineral Society, *Rock and Gem show during Tenino Oregon Trail Days*
Parkside Elementary School, 301 Central Avenue E (corner of Central Avenue and Stage St. South)
Tenino WA

July 23: Saturday 10 am – 4 pm
Everett Rock & Gem Club, *Gigantic Rockhound Estate Sale*
Everett United Church of Christ
2624 Rockefeller Ave.
Everett, WA

July 29 – 31: Friday & Saturday 10 am – 6 pm; Sunday 10 am – 4 pm
Willamette Agate and Mineral Society, *AFMS and NFMS meetings*
Linn County Expo Center
Albany, Oregon

Where To Buy Wire by Garry Mahan

Here are the sources I use. There are many more places to buy wire, but these have proven to be good sources:

Gold and silver: Rio Grande (www.riogrande.com) is where I buy my goldfilled and silver wire. You can also get it at www.brandywinejewelrysupply.com.

Bronze: You can buy round or square bronze wire from Rio Grande, but not half-round bronze. Half-round bronze wire can be purchased from wirejewelrybootcamp.com.

Craft wire: This is copper, brass, etc. & is very inexpensive. Joanne's, Michael's, etc. carry this. You can also so get craft wire from www.parawire.com or www.brandywinejewelrysupply.com.

What size and type of wire to get:

When in doubt, buy 21GA, dead soft. You can use this size for just about anything.

For doing groove-wraps I normally use round wire, 20GA or 21GA. I buy the softest wire I can get (dead soft) when possible. For doing a quality stone I always use gold-filled or silver wire. For practice wraps you should use craft wire.

Always use half-round (20 or 21 GA) for the bindings, whether you are using round or square for the main wrap. You probably won't be able to find half-round wire that is dead soft, so just get the softest you can find.

from Washington Agate & Mineral Society Newsletter, 3/16

You can download USGS topographical maps for free? See <http://nationalmap.gov/ustopo>

from The Quarry, 3/16

<http://www.virtualmuseumofgeology.com>

from Rocky Trails, 3/16