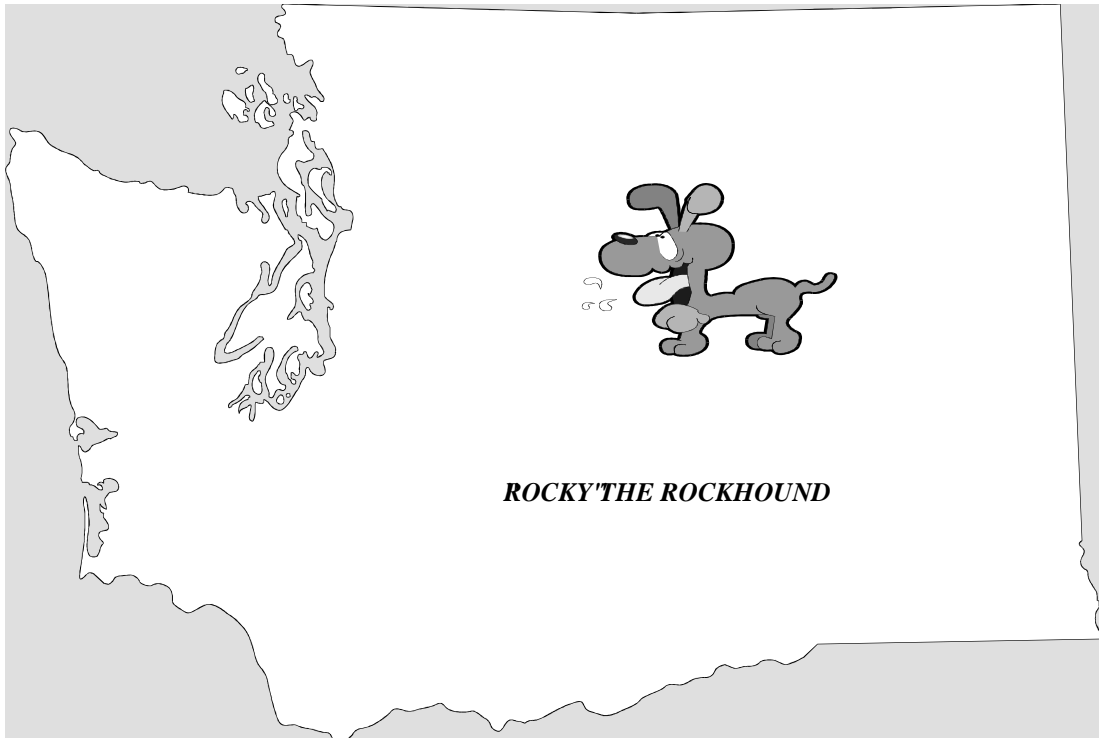

◆ **The Council Reporter** ◆

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**WASHINGTON STATE MINERAL COUNCIL
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Wagonmaster	open		

The West Side Board meets the third Tuesday of each month between Quarterly meetings, unless a meeting is specially called. Usually no meeting in July and December dependent on Board action.

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Westside Board Meeting Minutes 06/16/15

No meeting was held in June since only three of us showed up. I guess everyone was out. Enjoying summer!

Glenn Morita

The Elements Of A Dazzling Fourth of July

The minerals that produce the brilliant colors in fireworks also bring water and electricity to your home, help to produce the vehicles and fuel needed for travel, and have many other every day uses.

Red Fireworks and Strontium—Strontium gives a brilliant red hue to fireworks and to the flares you might be toting in your car in case of roadside emergencies. Strontium is produced most notably from the mineral celestite. Strontium is used in drilling fluids to produce oil and gas; it also strengthens metal castings in airplanes and cars, and makes paints that resist corrosion.

Although strontium is common in the Earth's crust and strontium mineral deposits occur widely in our nation, strontium minerals have not been mined in the United States since 1959. Imports of celestite have increased every year since 2010 and increased dramatically in 2013, with virtually all of the material coming from Mexico.

Blue Fireworks and Copper — Copper turns fireworks a dazzling blue. Copper occurs naturally in the Earth's crust in a variety of forms, most commonly it is found with sulfur as the mineral chalcopyrite. Azurite and malachite are common copper minerals known for their blue and green colors. Copper can also be found as pure “native” copper.

Copper was one of the first metals ever extracted and used by humans; in fact copper tools helped civilization emerge from the Stone Age.

The demand for copper remains strong in the developed world where copper wiring and plumbing bring water and electricity into nearly every home and building. It takes more than 40 pounds of copper to produce a small car, and nearly 100 pounds for luxury and hybrid vehicles.

August 18, 2015 Westside Board Meeting AGENDA

Opening of Meeting
Treasurer's Report
◇ Kathy Earnst
Committee Reports
◇ Wagonmaster -Ed Lehman
Old Business
New Business
Open Comments

Meeting Calendar for 2015

West side board meetings:
1/20, 2/17, 6/16, 08/18 (new meeting),10/20

At 7:30PM at the
Maplewood Clubhouse
8802 196th St SW, Edmonds

General meetings :
3/21, 5/09, 9/19, 10/31

All general meetings will be held at:

Palace Café
4th & Main
Ellensburg
Meeting @ 9:30 AM

GPS Co-ordinates Needed

The WSMC needs the GPS co-ordinates of any and all of the collecting sites in the state. In an effort to make the map booklets as accurate as possible the Mineral Council is asking for everyone to record GPS readings while on field trips. The data can also be used to help in our fight to keep our collecting areas open.

The Washington State Mineral Council web site has MOVED.

Please update your web browsers to the new URL
<https://mineralcouncil.wordpress.com/>

The move allows the website to use Wordpress without having to upgrade our web hosting account.

The old URL www.mineralcouncil.org will continue to re-direct you to the new location.

WSMC FIELDTRIPS 2015 (Will be updated—see mineralcouncil.org)

Date	Host	Site	Meeting place and time	Material	Tools
01/10	Msvl	Beaver Valley	10:30 @ info Center BeaverValley Rd	Chert & Zeolites	Hard rock tools
01/31	Msvl	Walker Valley	9 @ Big Lake Store	Geodes, Agate nodules	Hard rock tools
02/21	Msvl	Cedar Ponds	9:00 @ 2nd Monroe Jack n Box	Jasper	Dig & Lt hard rock tools
03/07	Msvl	Cherry Creek	9:00 @ Duvall Safeway	Jasper	Dig, Lt hard rock, wading
04/18-19	POW	Saddle Mt Mattawa, WA	8:00 @ Mattawa boat launch	Petrified wood	Dues required \$7.50/each \$15/family
004/25	Msvl	Racehorse Creek	9:00 @ IGA @ Nugents Corner	Fossils	Dig & Lt hard rock tools
05/23	Elb	Saddle Mt	9:00 @ Mattawa Leprechaun Market	Petrified wood	Dig, Lt hard rock
06/15	Spk	Emerald Creek	9:00 @ Emerald Creek Star Garnet Area, Idaho	Star garnet	Tweezers
06/21-24	Spk	McDermitt, NV	Call	Picture jasper, petrified wood, agate, thunder eggs	Lt hard rock
06/25-28	POW	Madras, OR	8:00 @ Fairgrounds see dues above	Petrified wood, agate, jasper, T-Eggs -\$1 #	
07/10-13	HC	Clarkia, Idaho	One day travel each way from Western Washington	Large garnets, quartz crystals	Dig & Lt hard rock tools
07/18	Dar	Darrington	11am @ show, Darrington Grange	Travertine	Lt hard rock tools
08/15-16	NWOS	Greenwater	9:00 @ Enumclaw Ranger Station	Agate, Jasper	Dig, Lt hard rock
09/12-13	POW	Red Top	8:00 @ camp (W fork M fork jct) Dues, see above	Agate, geodes, jade, jasper	
09/26	NWOS	Little Naches	9:00 @ Enumclaw Ranger Station	Thunder-Eggs	Dig, Lt hard rock
10/17	Msvl	Money Creek	9:00 @ Money Creek Camp	Ore, picture Jasper	Lt hard rock, light
11/14	MtBkr	Blanchard Mt	9:00 @ I-5 240 exit gas Station	Stilpnomelane & Chert	Hard rock tool

The Washington State Mineral Council plans guided fieldtrips to collecting sites. Open to member clubs, and the general public. Most trips are free. Included will be Pow Wow trips (must join to go on trips). Host clubs and contact persons will be set up as I gather info. For now, go to mineralcouncil.org for updates, or contact Ed Lehman @ wsmced@hotmail.com , or home (425) 334-6282 cell (425) 760-2786.

Host	Club	Contact info
Dar	Darrington Rock Club	Ed Lehman—wsmced@hotmail.com (425) 334-6282 or (425) 760-2786
Msvl	Marysville R & G Club	Ed Lehman— wsmced@hotmail.com (425) 334-6282 or (425) 760-2786
POW	All Rockhounds Pow Wow Club of America	Larry Vess -vessel3@comcast.net (253) 473-3908
Elb	Ellensburg Rock Club	Steve Townsend—srtrocks@aol.com (509) 933-2236
Spk	Spokane Rock Rollers	Mike Shaw— mikeshawmoose@yahoo.com— (509) 244-8542
NWOS	Northwest Opal Society	Tony Johnson— (253) 863-9238
HC	Hells Canyon Gem Club	Dan Cease—rockmangem@q.com (509) 254-1720

This is just a project in works. Participants please respond with corrections and updates.

Thanks, Ed

Copper is also essential in modern electronics.

The developing world now accounts for most of global copper consumption growth. China accounts for about 40% of global consumption, up from only about 20% in 2005.

The USGS recently estimated that the Earth still contains enough copper to support the projected growth in demand beyond 2050, given current technology and economics. Recycling will be an important source of future copper supplies.

Green Fireworks and Barium—Barium nitrate and chlorate produce bright green fireworks.

Barium is a metallic element that is not found in nature in its native form. It occurs principally as the mineral barite (barium sulfate), and its dominant use is in oil well drilling fluids. Barite is also used in making paints, plastic, and rubber. Your car's brakes, paint primer, and rubber mudflaps might contain barite. Ultrapure barite is used as a contrast medium in medical x-rays.

The United States imports about 75 percent of the barite it uses, and more than 85 percent of those imports come from China. The world is estimated to contain 2 billion metric tons of barite; of that total, the United States has an estimated 300 million metric tons.

Barium is geologically abundant, but future supplies may be disrupted in the short term by social, environmental, political and economic factors resulting from heavy reliance on limited sources.

Golden Sparks and Iron—Iron filings produce the golden sparks that shower out of a main fireworks explosion. Iron is one of the most abundant elements on Earth, but it does not occur naturally in the Earth's crust in native form (Fe). It is found only in ores, principally hematite (Fe₂O₃) and magnetite (Fe₃O₄). By definition, steel is iron with a small amount of carbon. Heat and carbon are used to remove oxygen from iron ore to produce metallic iron required to make steel.

Thousands of products are made of steel. In some applications no other materials are suitable, such as steel framing for large buildings, because of strength requirements. Iron and steel are central to supporting industrial economies worldwide.

U.S. resources are estimated to be about 27 billion tons of iron contained within 110 billion tons of iron ore. World

resources are estimated to exceed 230 billion tons of iron contained within greater than 800 billion tons of crude ore.

Bright Flashes and Aluminum—Bright flashes and loud bangs in fireworks come from aluminum powder. Aluminum is the second most abundant metallic element in the Earth's crust after silicon, yet it is a comparatively new industrial metal that has been produced in commercial quantities for just over 100 years.

Measured either in quantity or value, aluminum's use exceeds that of any other metal except iron, and it is important in virtually all segments of the world economy. Some of the many uses for aluminum are in transportation (automobiles, airplanes, trucks, railcars, marine vessels, etc.), packaging (cans, foil, etc.), construction (windows, doors, siding, etc.), consumer durables (appliances, cooking utensils, etc.), electrical transmission lines, machinery, and many other applications.

Aluminum recovery from scrap (recycling) has become an important component of the aluminum industry.

Other firework facts—Yellow fireworks result when sodium nitrate burns. The largest deposits of natural sodium nitrate are found in sedimentary rocks in the Atacama Desert of South America. Sodium nitrate is also used to produce fertilizer.

Other firework colors can be made by mixing elements; strontium and sodium produce brilliant orange; titanium, zirconium, and magnesium alloys make silvery white; copper and strontium make lavender.

Minerals that add color to fireworks and make the July 4 festive also benefit us in our everyday lives.

Via CMS eTumbler, 07/15, from USGS website, 7/3/14.

MINERAL MYTHS AND MEANINGS

by Dave Wester

Throughout the ages, man has held a deeper belief of gems and minerals, considering them to bring luck or associating them with health or life facts. When you think about it, there's probably a grain of truth to some of these myths because minerals, gems, and rocks are made up of the same compositions as the human body. If you've taken a chemistry class you'll know this to be true. This column presents a gem or mineral myth (or meaning) each month so that you can become better acquainted with some of



the more diverse properties of those rocks we love to collect.

This month we talk about Agate. This is such a broad mineral that I thought a little more background on this treasured rock would be interesting.

AGATE

Agate is a microcrystalline variety of quartz (silica), chiefly chalcedony, characterized by its fineness of grain and brightness of color. Although agates may be found in various kinds of rock, they are classically associated with volcanic rocks but can be common in certain metamorphic rocks. Colorful agates and other chalcedonies were obtained over 3,000 years ago from the Achates River, now called Dirillo, in Sicily. The stone was given its name by



Theophrastus, a Greek philosopher and naturalist, who discovered the stone along the shore line of the river Achates sometime between the 4th and 3rd centuries BC. Agate is one of the most common materials used in the art of hardstone carving, and has been recovered at a number of ancient sites, indicating its widespread use in the ancient world. Most agates occur as nodules in volcanic rocks or ancient lavas where they represent cavities originally produced by the disengagement of volatiles in the molten mass which were then filled by siliceous matter deposited in regular layers upon the walls. Such agates, when cut transversely, exhibit a succession of parallel lines giving a banded appearance to the section. Such stones are known as banded agate, ribbon agate and striped agate.



ter deposited in regular layers upon the walls. Such agates, when cut transversely, exhibit a succession of parallel lines giving a banded appearance to the section. Such stones are known as banded agate, ribbon agate and striped agate.

In the formation of an ordinary agate, it is probable that waters containing silica in solution— derived, perhaps, from the decomposition of some of the silicates in the lava itself— percolated through the rock and deposited a siliceous coating on the interior of the vapor vesicles. Variations in the character of the solution or in the conditions of deposition may cause a corresponding variation in the successive layers, so that bands of chalcedony often alternate with layers of crystalline quartz.

Agates are thought to guard against the biting of scorpions or serpents (remember that next time you're in the Oregon desert). Additionally they're believed to soothe the mind, drive away contagion and promote eloquence. In olden times, they were thought to secure the favor of princes (remember that ladies).

Agate is also believed to prevent insomnia and ensure pleasant dreams and to enhance personal courage. This mineral is believed to provide a calming influence, improves perception and concentration, and helps to develop and increase one's analytical talents.

via The Petrified digest April-May/15, via West Seattle Petroglyphs, 01/15, via Rocky Trails, 1/10



Local Area Shows for 2015

July 2015 24th 9am—6pm 25th 9am—6pm 26th 9am—5pm	Washington Agate and Mineral Society	Rock and Gem show during Oregon Trail Days	Parkside Elementary School 301 Central Avenue E (corner of Central Avenue and Stage St. South) Tenino WA 98589
July/August 2015 31st 10pm—5pm 1st 10am—5pm 2nd 10am—4pm	Far West Lapidary & Gem Society	53rd Annual Gem and Mineral Show \$1 adults, 12 & under free w/ Adult	North Bend Community Center 2222 N. Broadway North Bend, OR
July 2015 24th 9am—6pm 25th 9am—6pm 26th 9am—5pm	Washington Agate and Mineral Society	Rock and Gem show during Oregon Trail Days	Parkside Elementary School 301 Central Avenue E (corner of Central Avenue and Stage St. South) Tenino WA 98589
August 2015 8th 9am—5pm 9th 10am—5pm	Maplewood Rock and Gem Club	Annual Rock and Mineral Sale	Maplewood Rock and Gem Clubhouse 8802 196th ST SW Edmonds WA
August 2015 14th 10am—9pm 15th 10am—9pm 16th 10am—6pm	Port Townsend Rock Club	Annual Rock, Gem, & Mineral Show in conjunction with the Jefferson County Fair	Jefferson County Fairgrounds 4907 Landers Street Port Townsend WA 98368
August 2015 15th 9am—5pm	Shelton Rock and Mineral Society	6th Annual Tailgate Rock Sale and Swap Meet Tailgate space \$15	Shelton Soccer Park 2102 E Johns Prairie Rd Shelton, WA To register contact Susan @ 360-275- 9432 or SRMS242@yahoo.com
September 2015 12th 10am - 5pm 13th 10am - 5pm	Marcus Whitman Gem and Mineral Society	Annual Gem and Mineral show \$2 adults, 12 & under free w/ Adult	Walla Walla County Fairgrounds Community Center Building 363 Orchard St., Walla Walla WA
September 2015 12th 9am - 6pm 13th 10am - 4pm	Clallam County Gem and Mineral Association	Annual show	Vern Burton Community Center 308 East 4th Street Port Angeles WA
September 2015 19th 10am - 5pm 20th 10am - 4pm	Southern Washington Mineralogical Society	50th Annual show	Castle Rock Fairgrounds A Street 120 Fair Lane Castle Rock, WA
October 2015 9th 10am - 6pm 10th 10am - 6pm 11th 10am—5pm	Portland Regional Rock and Gem Show	35th Annual	Washington County Fair Complex 873 NE 34th AVE Hillsboro, OR
October 2015 10h 10am - 5pm 11th 10am—5pm	Marysville Rock and Gem club	41st Rocktoberfest	Totem Middle School Cafeteria 7th Street and State Avenue Marysville WA
October 2015 17th 9am - 5pm 18th 10am - 4pm	Hatrockhounds Gem & Mineral Society	Natures Treasures Under Foot \$3	Hermiston Conference Center 415 S. Hwy. 395 Hermiston, OR
October 2015 17th 10am - 6pm 18th 10am - 5pm	Hell's Canyon Gem Club	49th Annual Show Gemstones, Carvings, & Jewelry From Around The World	Nez Perce County Fair Building 1229 Burrell Avenue Lewiston ID

Westside Board Meeting
August 18, 2015
7:30 PM

Maplewood Clubhouse
8802 196th St SW
Edmonds

COUNCIL REPORTER, Monthly publication of The
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27871 Minkler Road
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