

WASHINGTON AGATE & MINERAL SOCIETY NEWSLETTER

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OLYMPIA WA

WEBSITE: [HTTP://WWW.WAMSOLYMPIA.WORDPRESS.COM](http://www.wamsolympia.wordpress.com)

REFRESHMENT LIST:

SEPTEMBER – ROBERT LAMBERT

OCTOBER - JIM PRUSKE

NOVEMBER – THE HOLMQUISTS

DECEMBER - CHRISTMAS PARTY

BUY...SELL...TRADE

Free show case: Contact Keith Greetham 352-8909 or Bill Greetham 253-431-3571.

This column is offered free to WAMS members to buy, sell or trade equipment or material related to rocks or minerals. See below.

TREASURY REPORT: *The bank account stands at \$9605.24 We have 20 tables and lots of rock. Purchased 2400 slabs at \$600 from member of Shelton rock club. At the Maple Tree sale in August purchased \$300 of cut agate, big pieces. Finally, Keith Greetham donated 20 buckets of rock. We should be well stocked for the next few years.*

Bob Jackson trip to Tiger MT for amber. \$20, a bargain. Contact Rachel for details: Greengeology@gmail.com

From Wikipedia:

A mineral is a naturally occurring solid with a definite chemical composition and a specific crystalline structure. A rock is an aggregate of one or more minerals. (A rock may also include organic remains and mineraloids.) Some rocks are predominantly composed of just one mineral. For example, limestone is a sedimentary rock composed almost entirely of the mineral calcite.

Other rocks contain many minerals, and the specific minerals in a rock can vary widely. Some minerals, like quartz, mica or feldspar are common, while others have been found in only one or two locations worldwide. The vast majority of the rocks of the Earth's crust consist of quartz, feldspar, mica, chlorite, kaolin, calcite, epidote, olivine, augite, hornblende, magnetite, hematite, limonite and a few other minerals. Over half of the mineral species known are so rare that they have only

been found in a handful of samples, and many are known from only one or two small grains.

Commercially valuable minerals and rocks are referred to as industrial minerals. Rocks from which minerals are mined for economic purposes are referred to as ores (the rocks and minerals that remain, after the desired mineral has been separated from the ore, are referred to as *tailings*).

Fossils (from Latin *fossus*, literally "having been dug up") are the preserved remains or traces of animals, plants, and other organisms from the remote past. The totality of fossils, both discovered and undiscovered, and their placement in **fossiliferous** (fossil-containing) rock formations and sedimentary layers (strata) is known as the *fossil record*. The study of fossils across geological time, how they were formed, and the evolutionary relationships between taxa (phylogeny) are some of the most important functions of the science of paleontology.

Fossils are typically distinguished by minimum age, most often the arbitrary date of 10,000 years ago. Hence, fossils range in age from the youngest at the start of the Holocene Epoch to the oldest from the Archaean Eon several billion years old. The observations that certain fossils were associated with certain rock strata led early geologists to recognize a geological timescale in the 19th century. The development of radiometric dating techniques in the early 20th century allowed geologists to determine the numerical or "*absolute*" age of the various strata and thereby the included fossils.

Like extant organisms, fossils vary in size from microscopic, such as single bacterial cells only one micrometer in diameter, to gigantic, such as dinosaurs and trees many meters long and weighing many tons. A fossil normally preserves only a portion of the deceased organism, usually that portion that was partially mineralized during life, such as the bones and teeth of vertebrates, or the chitinous exoskeletons of invertebrates. Preservation of soft tissues is exquisitely rare in the fossil record. Fossils may also consist of the marks left behind by the organism while it was alive, such as the footprint or feces (coprolites) of a reptile. These types of fossil are called trace fossils (or *ichnofossils*), as opposed to *body fossils*. Finally, past life leaves some markers that cannot be seen but can be detected in the form of biochemical signals; these are known as *chemofossils* or *biomarkers*.

LOCAL FIELD TRIPS (PUB. WSMC)

CMS, WMSC = Cascade Mineral Society. Brian Williams (206) 290-2312 email bwaters2011@gmail.com
 Ed L = Ed Lehman (425) 334-6282
wsmced@hotmail.com
 WSMC = Washington State Mineral Council, use Ed above.
 BC Wagon masters: Clair Belzer 604-946-8656
 Kit = Kitsap Rock club: Tony Schackmann 360-372-2777
 LkSd = Lakeside Gem & Mineral club. Andy Johnson 509-546-1950
 Dar = Darrington Rock Club. Ed Lehman (see above)
 Maple = Maplewood club: Don Furey 425-348-4827
 Msvl = Marysville club: Ed Lehman 425-334-6282
 Mt. Baker club: Kris Menger 360-927-0994
kmenter@comcast.net
 East King = East King Co, Norma Kicket, 206-612-3113
 N.W.R. = NW Rockies & MT Baker clubs: Kathy Earnst 360-856-0588 or Ed Lehman 425-334-6282
 Pvgm = Puyallup Rock Club.
 Bellv = Bellevue, Bruce Himko, 425-957-1284
 Skagit = Skagit Rock Club: Vi Jones 360-424-8340
 Pebb = Whidbey Pebble Pushers: Dick Edwards 360-579-2807
 Pow Wow club = Larry Vess – vessel3@comcast.net 253-473-3908, Cliff Matteson (253) 475-8433
cliff.conniematteson@gmail.com
 Longview = Emmett Johnson 360-636-3491
 Ashwood Oregon Darrell Friend 541-489-3252, web page www.ashwoodrockstock.com
 Eking = East King Norma Kikkert, kev1123@hotmail.com
 WAC - Washington Agate Club
 Yak = Yakima Rock Club Jerry Wichstrom 509-653-2787
jewtmew@aol.com
 Whidb = Whidbey Rock Clubs Dick Edwards 360-579-2807
 BELL = Bellingham Rock Club Brian Hughes 360-671-7330
 EVR = Everett Rock Club Brad Johnson 206-403-3073
 NID = North Idaho Diane Rose 208-667-8591
 Elb = Ellensburg Rock Steve Townsend
srtrocks@aol.com 509-244-8542
 NWOS – Northwest Opal Society. Tony Johnson - 253-863-9238
 WAMS = Wa Agate & Mineral Club.
 Boe = Boeing Rock club.
 Swms = SWest WA Mineral Society Dave Roth 360-295-3567
 W Sea = West Seattle Rock Club Brian Waters 206-290-

2312

Always call the club rep to confirm all trip data.
 The Washington State Mineral Council plans guided fieldtrips to collecting sites. Open to member clubs and the general public. Most trips are free. (Our club is a member of the Mineral Council.)Included will be PowWow trips. (Must joint 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 at wsmced@hotmail.com, home (425-334-6282) or cell (425-760-2786). 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. Pow Wow requires membership \$3 each a year. WSMC 6100 Road trip rider fee is \$8 to help offset the \$65 vehicle access permit we must purchase. Some trips have no charge.

FIELD TRIPS: Mineral Council.

9/10-11 POW Teanaway. 8 am Teanaway camp. Geodes, agate, jade. Dig and Hard rock.
 9/24 NWOS Little Naches. 9 am Enumclaw Ranger Station. Thundereggs and Lilypad Jade. Dig/Hard rock.

10/15 Msvl Money Creek. 9 am Money Creek camp gorund. Oregon and Picture Jasper. Dig and Hard rock.

11/19 Mt Baker club. Blanchard Hill. 9 am I5 exit 240 gas station. Dalmation Stone. Hard rock.

UPCOMING SHOWS: 2016

September 17-18: The Southern WA Mineralogical Society. Castle Rock Fairgrounds 120 Fair Lane, SW Corner of Highway 411 and Cowlitz River Castle Rock WA

October 1-2: Marysville Rock Club. Totem Middle School Gym 7th Street and State Ave, Marysville WA

October 22-23: Clackamette Mineral and Gem Club Clackamas County Fairgrounds 694 NE 4th Ave Canby OR 97013

October 22-23: Bellevue Rock Club. Vasa Park, 3560 West Lake Sammamish Parkway SE, Bellevue WA

November 12-13: Skagit Rock Club. Sedro Woolley Comm Center, 703 Pacific Street Sedro Woolley WA

November 12-13: Maplewood Rock and Gem Club 8802 196th Street SW, Edmonds WA

December 10-11: Maplewood Rock and Gem Club. 8802 196th Street SW, Edmonds WA

INTERNET ROCK SITES

1. www.orerockon.com - Pacific NW field trips, equip buy/sell, misc.
2. www.wrightsrockshop.com Has everything.
3. www.agateswithinclusions.com. The name sums it up.
4. www.geocities.com/Yosemite/Forest/2031/ . Terry's Oregon Rock Page has info on Oregon collecting.
5. Information on collecting in Eastern Oregon during the Madras Pow Wow: Write Eula Dillard, 145 E. 179th, Spanaway WA 98387 or call 253-847-2755.
6. www.wyodonor.org and www.thermopywy.net/bhbf for dinosaur excavation trips.
7. <http://mineral.galleries.com/minerals/byname.htm>
Part of Amethyst Galleries, Inc.'s web site, this is a listing of all the minerals in that company's (extremely extensive) database. More than a mere list, however, each entry is linked to its own page, giving info. such as the mineral's chemical composition, history, physical characteristics, and so on.
8. <http://www.goodearth.com/virtcave.html> The virtual cave site offers a directory of all caves in the US that are open to the public.
9. <http://www.luckystrikemine.com> Info from Prineville, OR rock dig site.
10. <http://www.the.gemshop.com>. The Gem Shop in Cedarburg, Wisconsin hold claims to central Oregon rock sites.
11. www.rockhounds.com This is a great site! Every aspect of rockhounding is addressed or it gives you a link.
12. www.stonetrails.com/ORlocs/ORlocs.htm Oregon rock sites Replace OR with WA...you'll get Washington sites.
13. <http://www.kinglseynorth.com>. **Buy grit in bulk.**
14. www.fs.fed.us/ - Fees and required permits for access to Federal lands.
15. General interest sites: www.rockhounds.com, www.fireagate.com, www.awesomegems.com
16. Be sure to go to our website (See top of Page 1). There are numerous links to other sites.
17. WEBSITES FOR DINO LOVERS
<http://dsc.discovery.com> Look for games and videos
<http://www.paleoportal.org>
<http://www.msnbc.msn.com> Look for technology and science.
<http://www.geo.ucalgary.ca>
<http://www.scienceschoolhouse.com>
18. <http://www.jescoproducts.com> **Buy grit in bulk**

OFFICIAL BLM REGULATIONS REGARDING COLLECTING:

You can collect a reasonable amount of rocks and minerals from BLM lands, but a permit or fee may be needed if you exceed certain amounts as described below. Note that the collecting limits for petrified wood are slightly different.

A REASONABLE DAILY COLLECTING AMOUNT

No BLM permit or fee required.

- fits in a car trunk or is a partial pickup truck load and,
- weighs less than 250 pounds

- and the material is not for commercial use.

(For petrified wood see below)

MORE THAN A REASONABLE DAILY AMOUNT

Requires a permit and fee from BLM.

- is a full pickup truck load or,
- involves more than one trip (or partial load) and,
- weighs more than 250 pounds
- or the material is for commercial use,
- or explosives or power equipment is used.

PETRIFIED WOOD:

Collecting petrified wood is free up to 25 pounds per day, plus one piece, but no more than 250 pounds per year. Pooling of quotas among two or more people to obtain pieces over 250 pounds is prohibited. A permit is needed for amounts over these limits.

AMERICAN FEDERATION OF MINERALOGICAL SOCIETIES

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 and rules governing collection on private 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 materials in collection areas.

I will cause no willful damage to property of any kind, such as fences, signs, building, etc.

I will leave all gates as found.

I will build fires only in designated or safe places. I make sure they are completely extinguished before leaving the area.

I will discard no burning materials--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 damage to collecting material and will take home only what I can reasonably use.

I will support the Rockhound Project H.E.L.P. (Help Eliminate Litter Please) and will leave all collecting areas devoid of litter, regardless or how found.

I will cooperate with Field Trip Leaders and those in designated authority in all collection areas.

WASHINGTON AGATE & MINERAL SOCIETY

Mailing address: P O Box 2553 Olympia WA 98507-2553

WAMS meets the first Tuesday of each month, 7:00 p.m., at the First Baptist Church of Lacey, 4702 22nd (corner of College St. and 22nd)

Officers:

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Deadline is the 20th of each month.

MINUTES FOR AUGUST 2: PICNIC!

Fairburn Agate – SD State Gemstone

(An excerpt from

<http://www.northern.edu/natsource/EARTH/Fairbu1.htm>)

What Is A Fairburn Agate? Agates, in nodules and geodes, are some of the most popular varieties of silica. Agate forms under sedimentary conditions. Agates consist of alternating layers of fibrous chalcedony with circular to semicircular layers, patterns, or bands like rings of targets. These layers may be composed of different thicknesses and colors. The layers are usually concentric and parallel to the walls of the rock cavity in which they are deposited. Fairburn agates are formed in this way. Fairburn agates are noted for their strikingly contrasted, thin bands of wonderful natural colors (Sanborn, 1976).

Roberts and Rapp (1965) state that the color patterns are generally yellowish-brown with narrow opaque white bands, or dark red with white bands. However, another beautiful combination shows salmon-pink bands alternating with white bands. Other colors included in these agates are black, yellow, grayish-blue and milky pink.

Where Are They Found? These agates were originally named after a prolific locality 10 miles east of Fairburn, South Dakota, in the southern Black Hills area.

According to Roberts and Rapp (1965), Fairburn agates occur in a broad elliptical belt extending from Creston in Pennington County, South Dakota, to near Orella in Sioux County, Nebraska, with the maximum width approaching 15 miles near Red Shirt, South Dakota. According to Fritzsche (S.D. School of Mines and Technology, personal communication, 1993), the area is more restricted. The Fairburn agate fields cover thousands of acres of very stony land and most of it is rugged terrain, well decorated with cactus, weeds, and cedar trees (Zeitner, 1964). Fairburn agates may be collected around the Fairburn area where they are scattered on the ground surface. There is no company that collects and markets Fairburn agates.

What Is The Value Of Agate? The Fairburn agate was designated as South Dakota's state gemstone on February 11, 1966. The S.D Department of Environment and Natural Resources (DENR) does not keep statistics on the Fairburn agate. In the literature, Fairburn agates are reported as quite scarce, and highly prized by collectors (Campbell and Roberts, 1985). The price of a Fairburn agate ranges up to \$150, depending on the size and quality of the geode (Eric Fritzsche, Geology Museum, South Dakota School of Mines and Technology, personal communication, July, 1993). As with other agates, a larger Fairburn agate is not necessarily a better-quality agate. Agates are primarily used as decorative pieces, as mineral specimens, and in lapidary work.

What Regulations Apply To Collecting Agates?

Common sense dictates that safety should be the first consideration. If a rock is hit with a hammer, safety glasses should be worn. Watch out for other individuals and for falling rocks. New legislation states that no more than one square meter of land may be disturbed by people collecting for their own enjoyment. In general, permission must be received before any samples are collected from privately owned land, and no collecting is allowed on state or federal lands. For example, collecting is not allowed at Custer State Park. Small samples may be collected along South Dakota's roads and highways after permission has been granted from the nearest Regional Department of Transportation (DOT) office. The DOT's concern is that rock removal may hasten erosion and road cut instability. Permission must be granted from tribal authorities before collecting begins on Indian lands. Collecting is currently allowed on Bureau of Land Management land, in the Buffalo Gap National Grasslands, and in the Black Hills National Forest. The Buffalo Gap National Grasslands has a designated area northeast of the town of Fairburn to promote agate collecting.