

WASHINGTON AGATE & MINERAL SOCIETY NEWSLETTER

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OLYMPIA WA

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

REFRESHMENT LIST:

SEPT – KEITH GREETHAM

OCTOBER - MIKE TANAKA

NOVEMBER – THE HOLMQUISTS

DECEMBER - CHRISTMAS PARTY

BUY...SELL...TRADE

Charley reports plenty of good material is left. Call him at 360-259-3063 and set up an appt. at \$1a pound. (Email is cprice@pacifier.com.)

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 \$8653.01 We have 20 tables and lots of rock.

Natural Glass by Betty McVey Meyers Lapidary Journal

Natural glass is known as obsidian. Early Romans called it *obsianu*; Pliny spelled it *obsidianus*.

Obsidian was formed by rapidly cooling volcanic lava. The chemical composition varies greatly, but it is between 66 to 72 percent silica. Being a natural glass, obsidian has no crystal structure. Therefore, it has no cleavage. Characterized by conchoidal fractures, it can be broken into sharp edged flakes. Thus, it was prized by early man for arrowheads, knives, scrapers, and other weapons and tools. It was also transformed into ornamental and ceremonial objects such as ear ornaments, masks, figurines and mirrors.

Obsidian knives are extremely sharp. The American Federation of Mineralogical Societies reported that Don Crabtree has been involved in recreating Stoneage obsidian knives. He was so confident that he used them on himself for major surgery. Crabtree says obsidian is a thousand times sharper than the platinum blade. The cutting surface is so sharp that it does not bruise the cells and healing is more rapid and scarring is diminished. He feels obsidian surfaces will eventually revolutionize surgery and could be especially useful in plastic cosmetic surgery.

No two obsidian sources contain the same trace elements, so a research team is analyzing obsidian Indian artifacts to trace them back to their volcanic source. They

can retrace ancient Indian trade routes. Artifacts from digs in Campeche and Chiapas, Mexico, have been traced to sources near Mexico City and Guatemala, meaning obsidian was transported 400 to 600 miles by classic and pre-classic Meso American Cultures. Arrowheads from Utah were traced to sources up to 150 miles away.

Normally obsidian is black or gray in color, but also turns up as rainbow, peacock, mahogany, banded, snowflake, iridescent, and even red or blue. Some has a silver or gold sheen, caused by reflections from minute bubbles or inclusions. Purple sheen obsidian, velvet stone, gives the appearance that if it were touched it would feel like soft, plush velvet. Snowflake obsidian is the result of crystals of cristobalite forming in cavities of the molten rock when portions of the lava cooled more slowly. The crystals of chistobalite are white, resembling snowflakes falling through a black night sky. Small obsidian nodules of perlite are called "Apache tears", connected with various legends of shedding tears.

Obsidian is 5 to 5.5 on the Mohs scale, cutting and polishing well for jewelry. The lapidary treatment for this volcanic glass is the same as for artificial glass. Always handle with care. Felt buffs heat too fast, causing fractures. Tin oxide on leather gives a good polish. Snowflake obsidian has two hardnesses, which presents a problem.

Apache tears are usually tumbled and used for baroque style jewelry. Obsidian works best as pendants, bola ties, and brooches; rings and belt buckles take on too much abuse for glass.

Obsidian occurs throughout the world wherever there is volcanic activity. Most volcanic glass ranges in age from Miocene to recent times. Relatively unstable, there is little chance of finding it in older rocks. Obsidian evidently can form very quickly--"in a flash."

Lapidary Journal carried an article "Multimillion Volt Adirondack Obsidian," relating the story of lightning striking a high voltage line in the Adirondacks. Through unusual circumstances it heated the ground rocks to a white hot, molten flowing melting point. Overnight this rock cooled and turned to obsidian,

Most of the obsidian used in jewelry is found in North America, from the states of Washington, Oregon, Wyoming, California, Arizona, Colorado, Nevada, and New Mexico. Iridescent obsidian is found in Oregon. Velvet stone comes from California-Oregon area. One site for finding Apache tears is North central New Mexico near the naturally weathered rock formation called "Tent Rocks."

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LOCAL FIELD TRIPS (PUB. WSMC)

CMS, WSMC = 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 Kikket, 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 = Longview club 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 srrocks@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.

Sept 12-13: POW. Red Top. 8:00 am @ camp (W for M fork jct) (see dues above.) Agate, geodes, jade, jasper.

Sept 26: NWOS. Little Naches. 9:00 am Enumclaw Ranger Station. Thundereggs. Dig, Lit hard rock.

10/17: MSVL. Money Creek. 9 am @ Money Creek Camp. Ore, picture jasper. Lt hard rock, light.

11/14: MtBkr. Blanchard Mt. 9Am @ I-5 240 exit, gs station. Stilpnomelane & chert. Hard rock tool.

UPCOMING SHOWS: 2015

Sept 9/19-9/20: Southern Washington Mineralogical Society. Castle Rock Fairgrounds. A Street & Cowlitz River, Castle Rock WA 98611

EVERY YEAR, THE PACIFIC NORTHWEST CHAPTER OF THE FRIENDS OF MINERALOGY (SEE WEBSITE FOR FURTHER DETAILS) HOLDS ITS ANNUAL MINERAL SHOW AND SYMPOSIUM AT THE RED LION MOTEL IN KELSO WA. THIS YEAR OCTOBER 9-11. THEME: MINERALS OF THE NORTHEAST UNITED STATES AND FLUORESCENT MINERALS. SELECTED DEALERS WILL BE SELLING MINERAL SPECIMENS. ALTHOUGH THERE IS A FEE TO ATTEND THE SYMPOSIUM PRESENTATIONS AND MEAL FUNCTIONS, ALL OTHER EVENTS AND ACTIVITIES ARE FREE AND OPEN TO THE PUBLIC. FRIDAY 5PM – 10 PM. SATURDAY 9AM – 10 PM. SUNDAY 9AM – 11:30 AM.

Oct 9-11: Portland Regional. Washington County Fair Complex. 873 NE 34th Ave Hillsboro OR 97124

Oct 10-11: Marysville Rock Club. Totem Middle School. 7th Street and State Ave, Marysville WA

Oct 17-18: Hatrockhounds. Hermiston Conference Center. Highway 395 South, Hermiston OR

Oct 24-25: Clackamette Mineral and Gem Club. Clackamas County Fairgrounds, 694 NE 4th Ave, Canby OR 97013

Oct 24-25: Bellevue Rock Club. Vasa Park, 3560 West Lake Sammamish Blvd SE, Bellevue WA

Nov 7-8: Maplewood Rock Club. Maplewood R&G Clubhouse, 8802 196th St 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.wyodinator.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

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:

PRES Charlie Price 259-3063
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RETURN ADDRESS:

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P O BOX 2553
OLYMPIA WA 98507**

Minutes for AUGUST 4, 2015

NONE – ANOTHER GREAT PICNIC.

Respectfully submitted by Acting Secretary M.J. Huetter.

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Fulgurites are a type of natural glass which are of no interest to the lapidary but find space on the shelf of the mineral collector. Fulgurites are better known as "petrified lightning." They are tubes of fused sand which formed from the intense heat set up when a lightning flash struck and entered wet sand. They are tube-like with a smooth glassy interior and a rough, sandy, but slightly glazed exterior. They may be quite long, possibly over five feet. These are hard to obtain since they are very fragile when first dug from the sand. After drying and weathering, they become more durable. Small pieces are much more common, up to four inches in circumference.

ACID: BE CAREFUL

Acid is often used by mineral collectors, lapidaries, and jewelry makers. Although some acids are more dangerous than others, it pays to treat all acids with respect and follow safety rules. The exception is vinegar--acetic acid--which can be used quite safely in many ways as a household solution.

Acid is usually used in solution. The cardinal rule is to add acid slowly to the water. The reverse is hazardous, as there is more of a likelihood of splashing. Use glass or ceramic containers with tight-fitting covers.

When working with acid, be sure to have adequate ventilation. If an acid solution is to be heated, do so slowly in a Pyrex container, preferably on an electric burner or hot plate at a low setting. A gas is more likely to crack the container. Some acids must be heated outdoors, so read the directions of whatever acid you are using. Always wear protective gloves when working with acid: protective goggles are advisable for some techniques.

Should you accidentally get acid on your skin, wash immediately with running water, then follow with a solution of bicarbonate of soda. A box of soda should always be nearby during any acid procedure. Nitric acid, hydrochloric acid, and sulfuric acid are extremely corrosive. Beginners should have an experienced partner when working with these. Always store the acids tightly in a safe place, well out of the reach of children. Lapidary Journal February 1999

MAIL TO: