

# WASHINGTON AGATE & MINERAL SOCIETY NEWSLETTER

Volume XV ISSUE 9

SEPTEMBER 2012

OLYMPIA WA

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

## REFRESHMENT LIST:

SEPTEMBER - GREG TOLBERT

OCTOBER - MIKE TANAKA

NOVEMBER - JERRY SPRENGEL

DECEMBER - CHRISTMAS PARTY

to alter the nature of crystal growth, probably increasing the number of crystal grains, which then are of smaller size, and so indirectly contributes to their light pink color.

John Sampson White Lapidary Journal October 1991

## BUY...SELL...TRADE

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

**ALL POINTS BULLETIN:** The good news is that over the last 5 or more years, M.J. Huetter has sold off most of the 50 buckets of rock that used to fill his back yard. He's looking to replenish. Any rock or buckets of rock you want to get rid of bring to the September meeting. Recall the old rockhound adage: Don't stick you family with tons of rock when the music stops. Donate before it's too late.

## TREASURY REPORT:

*The checking stands at \$5826.05, plus we own 20 tables and about \$100 in slabs. The latter will get turned into cash at the Castle Rock show in September and the Lacey Fun Fair in May 2013. We sold 152 slabs at the picnic, bringing in \$38.*

## MALACHITE CRYSTAL

Anyone who has seen large single crystals of malachite, which are rare, will remember that they are very dark green in color. Malachite powder (its streak), on the other hand, is very light in color. The dark bands of malachite, therefore, are composed of *relatively* large crystals grains, the medium intensity green bands are intermediate in size, and the light green areas are composed of crystal grains of the approximate size of malachite powder, which is very similar in color.

While crystal grain size is also a factor in the color banding observed in rhodochrosite, it is not the only one. The substitution of other metals, especially calcium, for manganese plays a role as well.

It is the opinion of this author that crystal size is probably what directly determines the color of the bands, just as crystal grain size appears to be the cause of color differences in banded malachite. Calcium and magnesium substitutions are still important, however, because the presence of excessive amounts of these metals in rhodochrosite appears

## HABEAS CORPUS

The prevailing popular theory that an asteroid impact caused mass extinction has the beauty of elegant simplicity and the support of various scientific experts, but some skeptics still hold out. Some argue that the defendant (in this case, the asteroid in question) would be acquitted on a basic legal system premise--the failure to produce a body. If 70 percent of all species on Earth died off over a short period of time, then there should be fossils piled up in sediment from that time. However, bodies have now been produced--ironically, by the equivalent of one of the defendant's own lawyers. Geologist William Zinsmeister of Purdue University, long a skeptic of the asteroid theory, has precisely charted the locations of various fossils relative to the 65 million year old layer of sediment that marks the "K-T" boundary between the Cretaceous and the Tertiary periods. All across Seymour Island, near the tip of the Antarctic Peninsula, Zinsmeister discovered fish fossils just above the iridium-rich K-T layer, indicating sudden death. "It's not a coincidence," he concedes. "These would be the first documented victims of the impact." LAPIDARY JOURNAL SEPTEMBER 1996

## Recycling--The Time Has Come

How do we optimize the rocks and minerals that we have so eagerly collected and lovingly piled up over the years? We want to keep and enjoy our "well pruned" collection but what do we do with the other 500 tons? Gift some to a local school or university. Donate buckets for our club or Federation silent auction tables. Other buckets make good trading stock at shows and tailgate parties. Hungry tumblers always need to be fed. Our shows have insatiable appetites for tumbled stones for kids' grab bags and spinning wheel prizes. And as a last resort: return them back to the wilds!

The first Big step is to decide we're going to do it!

cont page 4.

## LOCAL FIELD TRIPS (PUB. WSMC)

CMS, WMSC = Cascade Mineral Society. Brian Williams (206) 290-2312 email [bwaters2011@gmail.com](mailto:bwaters2011@gmail.com)  
 Ed L = Ed Lehman (425) 334-6282 [wsmced@hotmail.com](mailto: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  
 Maple = Maplewood club: Don Furey 425-348-4827  
 Msvl = Marysville club: Christina Morrissey 425-398-1300  
 Mt. Baker club: Kris Menger 360-366-0576 [kmenter@comcast.net](mailto: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 Tony Johnson 253-863-9238  
 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 = Cliff Matteson (253) 475-8433  
[cliff.conniematteson@gmail.com](mailto:cliff.conniematteson@gmail.com)  
 Longview = Longview club Emmett Johnson 360-636-3491  
 Ashwood Oregon Darrell Friend 541-489-3252, web page [www.ashwoodrockstock.com](http://www.ashwoodrockstock.com)  
 Eking = East King Norma Kikkert, [kev1123@hotmail.com](mailto:kev1123@hotmail.com)  
 WAC - Washington Agate Club  
 Yak = Yakima Rock Club Bill Snell 509-933-2093  
 Whidb = Whidbey Rock Clubs Dick Edwards 360-579-2807  
 BELL = Bellingham Rock Club Brian Hughes 360-671-7330  
 EVR = Everett Rock Club Bob Johnson 425-408-0849  
 NID = North Idaho Diane Rose 208-667-8591  
 PVGM = Puyallup Valley Tony Johnson 253-863-9238  
 Elb = Ellensburg Rock Dave Master (509) 925-3827  
 WAMS = Wa Agate & Mineral Club.  
 Boe = Boeing Rock club Erik Chilson 360-825-3138  
 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. 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.

## UPCOMING SHOWS: 2012

**CLALLAM COUNTY GEM SHOW: SEPT 8-9. VERN BURTON COMMUNITY CENTER, 308 E 8TH STREET PORT ANGELES WA**  
**SWMS SHOW 09/15-16. CASTLE ROCK FAIRGROUNDS.**

## FIELD TRIPS: 2012

**NORTHWEST FEDERATION RETREAT LABOR DAY WEEKEND AT THE HANCOCK FIELD STATION, ANTELOPE OREGON. COST IS \$270 PER PERSON FOR ROOM AND BOARD PLUS AN ADDITIONAL \$45 FOR CLASSES. CLASSES MAY INCLUDE CASTING, CABING, FACETING, SILVERSMITHING AND BEADING. ALSO ON TAB ARE FIELD TRIPS, SPEAKER PRESENTATIONS, AN AUCTION AND "SHOW AND TELL." INFORMATION AT WEB SITE [WWW.AMFED.ORG/NFMS](http://WWW.AMFED.ORG/NFMS)**  
**POWWOW: RED TOP 9/8-9. W FORK TEANAWAY CAMP. GEODES, AGATE, JADE. DIG & LIGHT HARD ROCK.**  
**NW-OP: LITTLE NACHESE 9/15. TO BE DETERMINED. THUNDER EGGS, RHYOLITE. DIG & LIGHT HARD ROCK.**

**MSVL: MILLER RIVER 10/27. HWY 2 MONEY CREEK CAMPGROUND. PICURE JASPER. ROCK HAMMER AND CONTAINER.**

## BRAZILIAN AGATE

Brazilian agate is created from quartz mineral originally formed in bubbles within a volcanic lava bed. When lava is released from within the earth it contains dissolved gasses. As the confining pressure decreases, gas bubbles form in the viscous lava. The bubbles range from marble size to several feet in diameter. Sometimes later, hot hydrothermal water solutions containing dissolved quartz percolate through the lava beds filling the gas bubbles with liquid.

Changes in chemistry and temperatures precipitate the dissolved quartz out of the solution lining the bubble's cavity with extremely fine layers of crypt-crystalline quartz. Crypto-crystalline is defined as being formed of fine crystals. The crystals are so fine, the agate acts as if it is not crystalline. The needles of quartz have minute spaces between them like a sponge.

Since the quartz fills the cavity from the outside in, the oldest layer is the outside and the youngest is in the center of the agate. The age of the agate is 25-60 million years old. And there is no real way of knowing how long it took to form a single agate, but the time was probably LENGTHY. Since the layers are extremely thin, fractions of a millimeter in thickness, it must have formed slowly. Sometimes one can find a hollow agate with water on the inside; these are called "Enhydors," meaning "with water." This water is most likely millions of years old. After the agate is formed, it still has a sponge-like porosity in the finely layered structure.

The natural coloration in agates are caused primarily by different compounds of iron and manganese. These compounds get into the agate with water born solutions that migrate through the sponge-like porosity of the finely layered agate leaving the beautiful colors and patterns you see.

Brazilian agate is mined from eroded lava beds in the Brazilian plateaus. This agate displays a rainbow of colors primarily derived from iron. The colors are usually reds, browns, and yellows in multilayered bands and plumes.

from *PEBBLES 8/03*

## INTERNET ROCK SITES

1. [www.orerockon.com](http://www.orerockon.com) - Pacific NW field trips, equip buy/sell, misc.
2. [www.wrightsrockshop.com](http://www.wrightsrockshop.com) Has everything.
3. [www.agateswithinclusions.com](http://www.agateswithinclusions.com). The name sums it up.
4. [www.geocities.com/Yosemite/Forest/2031/](http://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](http://www.wyodonor.org) and [www.thermopywy.net/bhbf](http://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.luckystrickemine.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](http://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](http://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/](http://www.fs.fed.us/) - Fees and required permits for access to Federal lands.
15. General interest sites: [www.rockhounds.com](http://www.rockhounds.com), [www.fireagate.com](http://www.fireagate.com), [www.awesomegems.com](http://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.

**None – Picnic**

**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)**

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The Washington Agate & Mineral Society Newsletter is printed and distributed monthly. Material may be reprinted if properly credited. Deadline is the 20th of each month.

**RETURN ADDRESS:**

**WASHINGTON AGATE & MINERAL SOCIETY  
P O BOX 2553  
OLYMPIA WA 98507**

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The second step is to sort: keep for display or lapidary, donate to schools, club auction, or Federation auction, set aside for trading stock, tumbling stock, or to be returned back "home."

As we sort, "best use" will be on our minds. Many stones will scream to be cut. That's OK. Remember, a cut and polished piece is going to bring a lot more at the auction than a rough piece. Besides, it may just turn out to be a keeper.

Speaking of "keepers", the idea is to high-grade our collection and keep what really belongs and what we really think we will want to use in our lapidary activities. The rest can go to one of the "recycle" categories above. Auction material is very valuable source of club revenue. generating income for endowment funds, scholarships, or operating expenses, without having to require general dues increases.

It's a good idea to make up boxes, or flats of trade items as you sort, to have on hand and ready to go when a "tailgate party" or show opportunity presents itself. Labels and locality identifications always enhance specimen value. Help "Newcomer Rockhounds" by offering them items on reasonable terms from the now uncollectible old "classic" locations at your next club rock swap.

Much of your collection makes good tumbling material. Our club goes through three to four hundred pounds of tumbled stones each year, for grab bags, "critters" and spinning wheel prizes.

Returning rocks to the wild is a practical recycling method, especially if you visit the same locality year after year. When I go on a field trip I try to return 2-4 times what I estimate I'll collect. It keeps my focus on only collecting "primo" material and I feel better knowing someone will come across "returns".

Finally, we almost forgot about the recently deceased "Old Bill Bigpile" and his wife Mary's request for "a little help". What we as good club people can do is go out there with a "work party" and sort stuff out and give Mary some advice about what she has to sell. Call a couple of knowledgeable and trustworthy dealers to go out and make their bids on what they are willing to buy. When Mary has completed her sale, two options, or a combination, are suggested. The first, have a club field trip to Mary's for a yard sale. Then, ask Mary to give the remainder to the club and/or Federation as a Memorial Donation.

**MAIL TO:**