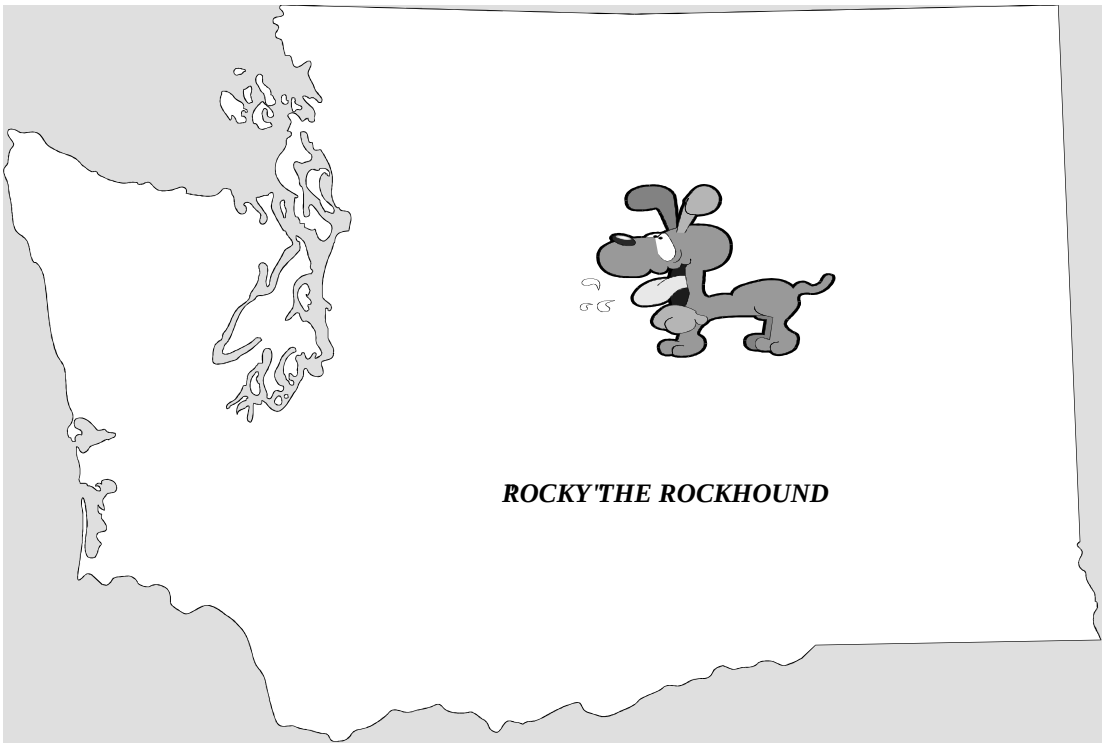
The Council Reporter

Volume 32, Issue 7 *October 2012*



Official Publication of the Washington State Mineral Council

WASHINGTON STATE MINERAL COUNCIL
2012 OFFICERS

OFFICERS

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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 10/16/12

The meeting was opened by Glenn Morita at 7:38pm.

Kathy gave the treasurer's report.

The Wagonmaster was not in attendance but the last two field trips of the year are coming up:

10/27 Happy Thought Creek (Miller River area) for picture jasper

11/10 Blanchard Hill for Stilpnomelane in Quartz

Old business:

Most of the meeting was spent discussing the Snoqualmie Corridor Recreation Planning committee activities. Bob Pattie pointed out that the Natural Resources Conservation Areas (NRCA) lands have provisions for recreational (low-impact recreation) and is not part of the State Trust Lands, State Parks or Fish and Wildlife lands.

Of particular interest are the provisions for "Incidental Rock and Mineral Collecting" with some conditions:

a. Specimens are gathered for personal collection, hand tools, or not tools are used,
b. No blasting occurs,
c. Rocks and minerals are not used for commercial purposes,
d. The specific conservation area site management plan has no additional restrictions determined necessary for its protection

Bob will keep the council appraised of any new developments in the planning committee meetings.

Bob suggested that we provide the NRCA committee with relevant information about our collecting activities. Bob wants to present a high level report to the NRCA committee on the rockhound hobby with data on material collected, frequency of collecting, amount of material collected, etc. That way the NRCA will have a better understanding of the value and impacts of our hobby.

Bob asks that each club field trip co-ordinator or officer provide the following information be forwarded to him for this report:

a. Number of collecting trips in 2012
b. Number of trips to the same site
c. Average number of attendees
d. Material collected
e. Average amount of material collected per person

November 3, 2012
Combined Board Meeting
AGENDA

Pres. Opening of Meeting
Treasurer's Report
◊ Kathy Earnst
Committee Reports
◊ Wagonmaster
Old Business
New Business
Open Comments
Adjourn

Meeting Calendar for 2012

West side board meetings:
1/17, 2/21, 4/17, 6/19, 10/16

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

General meetings :
3/31, 5/5, 9/22, 11/3

All general meetings will be held at:

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

The information can be general in terms of collecting sites and material. For instance agate and jasper can be lumped together, minerals can be a general category, petrified wood and bog can be considered one category, etc.

Please forward this information to Bob Pattie ASAP as the final NRCA meeting is in late November. Bob' e-mail address is: **bobpattie@comcast.net**

The Nominating Committee is scheduled to deliver their report at the November meeting in Ellensburg.

Growth Forms Of Quartz

by Beth Heesacker

This installment will cover the growth forms of quartz. These are the crystals that are imperfect and distorted. That does not mean that they are any less beautiful but in most cases as even

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more beautiful and interesting. And a crystal ball is NOT a growth Form.

Split Growth - sprouting and artichoke
If a crystal widens as it grows until the tips split. This is called a split growth. One type of these has daughter crystals growing on its side and is called a sprouting crystal. These side crystals point slightly outward. The other type is the artichoke in which the crystals subdivide so that they look like sheaths surrounding a central crystal. Since these are so similar there of course will be transitions and mixtures found.

Cathedral Growth
This growth is similar except that the side crystals are parallel to the central crystal.

Bent Growth
Some crystals are stressed so that they break or are displaced. These fractures heal and if it happens multiple times the crystal will look bent.

Cactus Growth
A growth of second generation crystals grow on the faces of this type of crystal and point away from the central crystal.

Corroded Growth
Rising temperatures, etching solutions or higher pressure can partially dissolve the crystal. Sometimes these surfaces heal which can give interesting crystal shapes. Sometimes just the surface is etched and becomes dull or the edges are rounded.

Elestial Growth
This growth seems to be a collection of forms with a particular look. Small crystals grow on the top of the main crystal as a continuation of that main crystal. It is a multiple scepter crystal.

Faden Growth
These crystals form in cracks that slowly widen. The crystal is attached to both walls and the crystal breaks but regrows so it is again one crystal. This gives what is called a Faden Line down the center made of liquid and glass inclusions.

Gwindel Growth
This crystal looks like it has grown sideways to form a platy or flat crystal shape. It is not straight but twisted and bent. The growth rotates around and axis either right handed or left handed.

Interference in Growth
Sometimes the crystal runs out of room to grow or crystals of other minerals get in the way of a quartz crystal growth. Sometimes these other minerals dissolve away and leave what looks like pitting on the quartz crystal.

Needle Growth
These crystals are very elongated and narrow like a needle.

Crystal Perimorph
In this instance one mineral grows and then is covered by quartz. The first mineral then dissolves and leaves its shape in the quartz.

Phantom Growth
A quartz crystal grows, then stops, another type of mineral growth covers all or part of the quartz crystal and then the quartz begins to grow again. When you look at the crystal the other mineral outlines the inner crystal.

Pseudomorph Growth
This growth occurs when one crystal replaces another but keeps the shape of the first. The quartz fills in a cavity where another mineral dissolves out. In this image on the right is a gypsum rose. On the left is a pseudomorph of quartz after selenite taking that same shape.

Rainbow or Iris Growth
Cracks sometimes form and the light refracts off of them breaking the light like a prism. In another form it seems like Brazil Twin layers cause the prism effect.

Scepter Growth
When a second quartz crystal grows on top of the original and is larger than (or smaller, or offset from) the lower crystal it takes the shape of a scepter. This second crystal is an outgrowth of the first crystal. There can be multiple stack scepters.

Skeletal Growth
When the edges grow faster than the faces then you have skeleton quartz. The edges stick out like the frame on a picture. These growth forms seem to be caused by rapid falling pressures and temperatures.

Star Growth
Small, equal sized crystals sometimes grow outward from a common center forming spheres that are star shaped. Of course as with all things in nature, there are many combinations of the above growth patterns that can yield more interesting shapes. Then you throw in the effects of changes in temperature, pressure, and chemistry while the crystal is growing can lead to all kinds of fantastic and wonderful possibilities. Please visit the website www.quartzpage.de to see many more examples and other forms.

Information summarized from the website www.quartzpage.de

from CMS eTumbler 10/12, Clackamette Gem, 9/12

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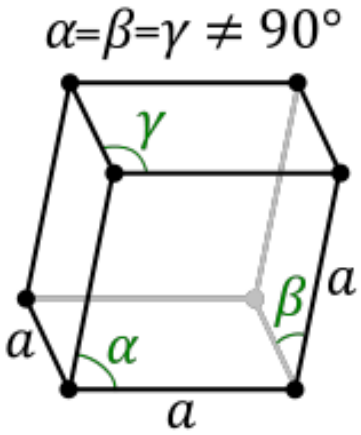
Hematite (Fe_2O_3)

Hematite is the mineral form of iron (III) oxide (Fe_2O_3), one of several iron oxides. Hematite crystallizes in the rhombohedral system, and it has the same crystal structure as ilmenite and corundum. Hematite and ilmenite form a complete solid solution at temperatures above 950 °C.



Hematite is colored black to steel or silver-gray, brown to reddish brown, or red. It is mined as the main ore of iron. Varieties include kidney ore, martite (pseudomorphs after magnetite), iron rose and specularite (specular hematite). While the forms of hematite vary, they all have a rust-red streak. Hematite is harder than pure iron, but much more brittle. Maghemite is a hematite- and magnetite related oxide mineral.

Huge deposits of hematite are found in banded iron formations. Grey hematite is typically found in places where there has been standing water or mineral hot springs, such as those in Yellowstone National Park in the United States. The mineral can precipitate out of water and collect in layers at the bottom of a lake, spring, or other standing water. The discovery of grey hematite on Mars fuels speculation about water and life on the red planet. Hematite can also occur without water, however, usually as the result of volcanic activity.

Opportunity Rover found that the soil at Meridiani Planum was very similar to the soil at Gusev crater and Ares Vallis; however in many places at Meridiani the soil was covered with round, hard, gray spherules that were named “blueberries.” These blueberries were found to be composed almost entirely of the mineral hematite. It was decided that the spectra signal spotted from orbit by Mars Odyssey was produced by these spherules. After further study it was decided that the blueberries were concretions formed in the ground by water. Over time, these concretions weathered from what was overlying rock, and then became concentrated on the surface as a lag deposit. The concentration of spherules in bedrock could have produced the observed blueberry covering from the weathering of as little as one meter of rock. Most of the soil consisted of olivine basalt sands that did not come from the local rocks. The sand may have been transported from somewhere else.

The name hematite is derived from the Greek word for blood αἷμα haima because hematite can be red, as in rouge, a powdered form of hematite. The color of hematite lends it well in use as a pigment.. The English name of the stone is derived from Middle French: Hématite Pierre, which was imported from Latin: Lapis Hæmatites, which originated from Ancient Greek: αἱματίτης λίθος (haimatitēs lithos, “blood-red stone”).

Ochre is a clay that is colored by varying amounts of hematite, varying between 20% and 70%. Red ochre contains unhydrated hematite, whereas yellow ochre contains hydrated hematite ($Fe_2O_3 \cdot H_2O$). The principal use of ochre is for tinting with a permanent color.

The powdery mineral was first used 164,000 years ago by the Pinnacle-Point man obviously for social differentiation. Hematite residues are also found in old graveyards from 80,000 years ago. Near Rydno in Poland and Lovas in Hungary, paleolithic red chalk mines have been found that are from 5000 BC, belonging to the Linear Pottery culture at the Upper Rhine.

Rich deposits of hematite have been found on the island of Elba that have been mined since the time of the Etruscans. Ancient Italian slag heaps were re-smelted using modern techniques during both world wars.

Pinnacle Point 13B and its implications for modern behavior

At PP13B (South Africa) the evidence for symbolic behavior comes in the form of scrapped and ground ochre (a naturally occurring bright red rock) that may have been used to form a pigment for body painting. This is similar to more complex ochre utilization known from Blombos Cave slightly further to the west at roughly 70,000 years ago. These discoveries contradict the classical hypothesis that the modern behavior merged only 40,000 years ago and was reached through a "large cultural leap". The harsh climate and reduced food resources may have been why people moved to the shore at Pinnacle Point, where they could eat marine creatures like shellfish, whale, and seal.

(Continued on page 6)

LIST OF WSMC FIELD TRIPS FOR 2012

The WSMC sponsors field trips through various rock clubs in the state. These trips offer the general public as well as the experienced rockhound the opportunity to collect a wide variety of materials from agate and jasper to crystals and fossils. Experienced guides familiar with the sites are on-hand to help find good quality material. Check with the local clubs in your area for further information. ***AREAS CURRENTLY CLOSED TO COLLECTING: LUCAS CREEK, ADNA, DIATOM PITS (FRENCHMAN HILLS).*** **No motorized vehicles allowed: Green Mountain (Kalama) and First Creek.**

Check out the trip info, and tool listings at: mineralcouncil.org. **Updated: November 14, 2011**

Date	Host	Site	Meet @	Material	Tools
10/27	Msvl	**Happy Thought Crk**	9:00 @ Hwy 2, Money Creek Campgrnd	**Picture Jasper**	Rock Hammer & Container
11/10	MtBk	**Blanchard Hill**	9:00 @ I-5 exit 240, Gas Mart	**Stilpnomelane in Quartz**	Hard rock tools

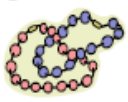
(* Deposit must be received no later than 30 days before trip date to reserve spot; deposit fully refundable.) Participants must be age 16 or older; no children or pets, please; maximum of 40 participants so get your reservations in early!)

ALWAYS CALL TO CONFIRM TRIP DATES AND DETAILS!!— SEE BELOW

Abbreviation	Host	Contact	E-mail
Evt	Everett Rock & Gem Club	Brad Johnson (206) 403-3073	cavemanrocks@yahoo.com
LkSd	Lakeside Gem & Min Club	Andy Johnson (509) 546-1950	cbagates@hotmail.com
Msvl	Marysville Rock Club	Ed Lehman (425) 334-6282	wsmced@hotmail.com
Msvl-Wasco trip		Stu & Kathy Earnst (360) 856-0588 27871 Minkler Rd, Sedro Woolley, WA 98284	earnstkk@comcast.net
MtBk	Mt Baker Rock Club	Kris Menger (360) 927-0994	kmenger@ comcast.net
Nw Op	NW Opal Association	Tony Johnson (253) 863-9238	ynotbandit@earthlink.net
Pow-Wow	All Rockhounds Club	Cliff Matteson (253) 475-8433	cliff.conniematteson@gmail.com
Spkn	Rock Rollers of Spokane	Mike Shaw (509) 251-1574	mikeshawmoose@yahoo.com
WSea	West Seattle Rock & Gem Club	Brian Waters (206) 290-2312	bwaterss2011@gmail.com
Yak	Yakima Rock & Min Club	Jerry Wichstrom (509) 653-2787	jewtmew@aol.com

Trips are open to all. Most 2 day trips include Sat potluck, Sun free breakfast, tailgating, swap, and horse shoes. Small fee required for Pow Wow and Madras trips. FOR MORE INFORMATION contact Ed Lehman at *wsmced@hotmail.com* or (425) 334-6282. Or see mineralcouncil.org

SKAGIT ROCK & GEM CLUB
PRESENTS
"Treasures of the Earth"
A GEM, MINERAL, FOSSIL, & JEWELRY SHOW
November 10 & 11, 2012
Saturday 9-5 Sunday 10-5
FREE ADMISSION
Hourly Door Prizes

Dealers
Demonstrations
Food
Children's Activities
Sedro Woolley Community Center
720 State Street

(Continued from page 5)

Credit goes to Wikipedia for photographic and written content on fluorite, hematite and anthropology.

Hematite Healing Properties

Hematite grounds and protects us. It strengthens our connection with the earth, making us feel safe and secure. It endows us with courage, strength, endurance and vitality. A "stone for the mind", Hematite stimulates concentration and focus, enhancing memory and original thought.

Via Maplewood Rock& Gem Club newsletter 03/12

Dues are due

Local Area Shows for 2012/2013

November 2012 9th 10am—5pm 10th 10am—5pm 11th 10am—4pm	South Sound Gem, Opal & Mineral Show The Northwest Opal Assoc and Cascade Mineralogical Society	8th annual show	Puyallup Fairgrounds Expo Hall Meridian St. S. and 9th Ave. SW Puyallup, WA
November 2012 10th 9am—5pm 11th 10am—5pm	Skagit Rock & Gem Club	Treasures of the Earth	Sedro Woolley Community Center 720 State St Sedro Woolley, WA
November 2012 10th 9am—5pm 11th 10am—4pm	Maplewood Rock And Gem Club	61st Annual Fall show	Maplewood clubhouse 8802 196th St SW Edmonds, WA
November 2012 17th 10am—5pm 18th 10am - 5pm	Kitsap Mineral and Gem Society	Fall Festival of Gems	President's Hall Kitsap County Fairgrounds 1200 NW Fairgrounds Rd. Bremerton, WA 98311
February 2013 10th 9am—5pm 11th 9am—4pm	Whidbey Island Gem Club	48th Annual Sweetheart of Gems Show	Oak Harbor Senior Center 51 SE. Jerome Street Oak Harbor, WA
February 2013 15th 5pm—8pm 16th 10am—4pm 17th 10am—4pm	North Lincoln Agate Society	Rock Out at the Beach	Lincoln City Cultural Center 540 NE Hwy. 101 Lincoln City, OR
February 2013 24th 10am - 6pm 25th 10am - 5pm	Idaho Gem & Mineral Club	Annual Gem And Mineral Show	Expo Idaho Fairgrounds 5610 Glenwood & Chinden Boise, Idaho
March 2013 2nd 10am - 6pm 3rd 10am - 5pm	East KingCo Club	Annual Rock and Gem Show	Pickering Barn 1730 10th Ave NW Issaquah, WA
March 2013 8th 10am - 6pm 9th 10am - 6pm 10th 10am - 6pm	Tualatin Valley Gem Club	Annual Show	Washington County FairPlex 873 NE 34th Ave. Hillsboro, OR.
March 2013 9th 9am - 5pm 10th 10am - 4pm	Rock & Arrowhead Club	27th Annual Show "Crystals" $1.00 Donation Children Free	Klamath County Fairgrounds 3531 S. 6th St. Klamath Fall, OR. 97603
March 2013 9th 9am - 5pm 10th 9am - 5pm	Magic Valley Gem Club	62nd Annual Show	Twin Falls Co., Fairgrounds 215 Fair Ave., Filer, ID
March 2013 30th 10am - 6pm 31st 10am - 5pm	Sweet Home Rock & Mineral Society	65th Annual Rock & Mineral Show	Sweet Home High School Activity Gym handicap parking 1641 Long St. Sweet Home, OR
April 2013 19th 9am—6pm 20th 10am—6pm 21st 10am –4:30pm	Willamette Agate and Mineral Society	58th Annual show	Polk County Fairgrounds 520 S Hwy 99 (Pacific Hy) - 10 miles west of Salem Rickreall, Oregon
April 2013 20th 10am - 6pm 21st 10am - 4pm	Yakima Rock & Mineral Club	52nd Annual Parade of Gems Adults $3.50, Students $2.00 Under12 free w/adult	Washington National Guard Armory 2501 Airport Lane Yakima, WA
April 2013 27th 10am—5pm 28th 10am –5pm	West Seattle Rock Club	46nd Annual Rock Show	Alki Masonic Temple 4736 40th Ave. SW. (W Seattle), WA

Combined Board Meeting
November 3, 2012
9:30 AM

Palace Café
4th & Main
Ellensburg

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