



the BEMS Tumbler

March
2010

The monthly newsletter of the **Boeing Employees' Mineralogical Society, Inc.** Seattle, Washington

***Next Meeting:
March 11, 2010
7:00 p.m.***

**Kent Senior Center
600 E Smith St
Kent WA**

Access on
Kennebeck Street

The Program will be
part 2 of the video we
watched in January



*This month remember
to wish a
Happy Birthday to
Brian Beaupain on March 1,
Jeannino Scott on March 1,
Earlene Skinner on March 5,
Shirley Stewart on March 6,
L. W. (Bud) Wollam on March 8,
Rachel Jorren on March 10,
Yoshi Akers on March 13,
Jeff O'Brien on March 19,
Jose Tello on March 19,
Delores Geraldson on March 20,
Brian Waters on March 27,
William Engstrom on March 27,
Alice Swartz on March 28,
David Nelson on March 29,
Jacqueline Pattie on March 31,
and also remember
to wish a
Happy Anniversary to
John & Brenda Haworth
on March 28 (46 years)*



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Tips, suggestions, recipes and experiments printed in this newsletter are the experiences and/or opinions of the individuals submitting them. We are not responsible for their authenticity, safety, or reliability. Caution and safety should always be practiced when trying out any new idea.

When on field trips this organization uses CB Channel 7.

Keith Alan Morgan, Editor

Postal, or Email, Exchange
Bulletins are welcome.
Email preferred.

morgangraphix@yahoo.com

Officers & Directors 2010

President Bill Cook
Vice President Cliff Frome
Treasurer Richard Russell
Secretary Pete Williams
Director Dick Morgan
Director Cheryl Edgar
Past President Bob Pattie
Federation Representative Michael Blanton
Federation Representative Jerry K.F. Chilson
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Mineral Council Bob Pattie
Refreshment Esther McKain
Membership Keith & Dick Morgan
Health & Welfare Carolyn Sealfon
Library Stephanie Jurado-Smith
Video Library Sandy Chilson
Raffle/Display Keith & Dick Morgan
Field Trip Eric Chilson
Field Trip Bill Cook
Tumbler Editor Keith Alan Morgan
Webmaster Keith Alan Morgan
Shop Operations Cheryl Edgar
Shop Instructors:
 Faceting Cliff Frome
 Jewelry Carolyn Sealfon
 Lapidary Dick Morgan

Club eMail address is
morgangraphix@yahoo.com

2010 BEMS Dues are \$15 flat rate Individual, Family, or Retired.

Send or deliver dues to:
Richard Russell

(or pay him at the meeting)

The object of the Society shall be to stimulate interest in the study of the earth sciences, lapidary arts and related subjects.

This Society is affiliated with the *Boeing Company*; the *American Federation of Mineralogical Societies*; the *Northwest Federation of Mineralogical Societies*; and the *Washington State Mineral Council*.

Every member of the club should be receiving a copy of the Northwest Newsletter. If you are not receiving a copy contact Mike Blanton

To get information to the Tumbler via the Internet send it to **morgangraphix@yahoo.com** Please put Tumbler and subject in the Subject Line. The deadline is the 20th of each month, (except December which varies).

The BEMS external website is **<http://www.bemsonline.com>**

Be careful when storing gem materials outdoors. Many colorful pink and purple minerals are faded by intense sunlight. These include rose quartz, amethyst, lepidolite, and fluorite. Fossil specimens may be destroyed outdoors by wetting, freezing and thawing. Many fossils specimens are clay based although there are many that are in sandstone sediment. Common opal, if left in the elements will craze, crack and fall apart.

via Rock Rollers, 5/08; via Rock Chips, 6/07; from The Pick and Dopstick, 1/81



March



SUN	MON	TUE	WED	THUR	FRI	SAT
	1	2 Show Meeting 	3	4	5 Faceting Class	6 East KingCo Show
7 East KingCo Show	8 Board Meeting 	9	10	11 General Meeting 	12 Faceting Class	13 Spokane Show
14 Spokane Show	15	16	17	18	19 Faceting Class	20 Miller River Trip North Seattle Show
21 North Seattle Show	22	23	24	25	26 Faceting Class	27 Colville Show
28	29	30	31			

Lapidary Class Hours:.....Closed until further notice
 Lapidary Shop Hours:.....Closed until further notice

More Field Trip info can be found on Page 9
 More Show info can be found on Page 10

Jewelry Shop Hours:.....Closed until further notice
 Jewelry Casting Hours:.....Closed until further notice
 Jewelry Class Hours.....Closed until further notice

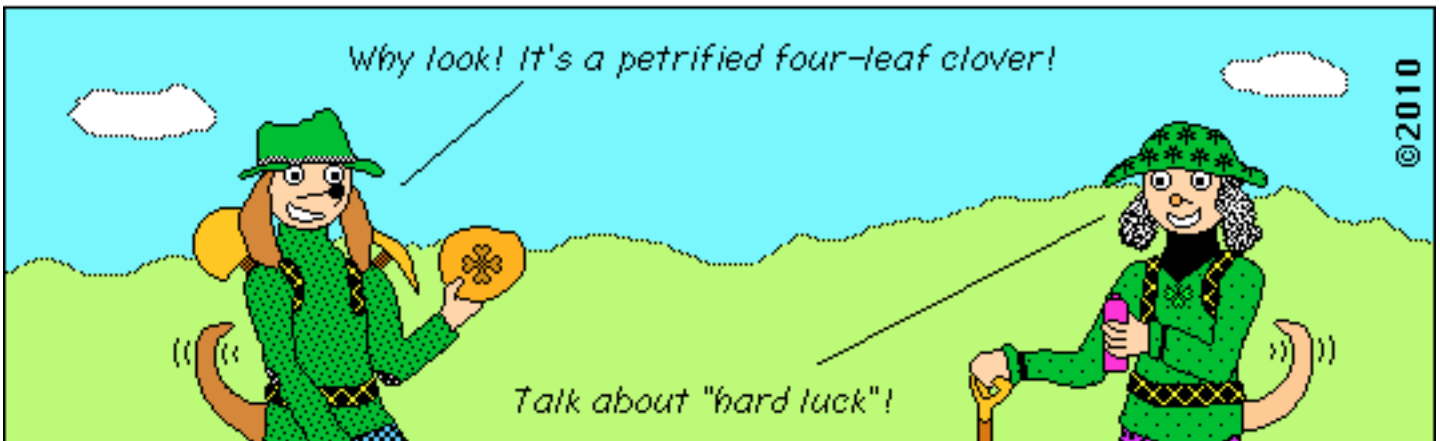
Faceting Class Hours:.....Friday.....4:30 pm to 8:00 pm

South Sound Show Committee Meeting...1st Tuesday.....11 am to 12 pm

BEMS Board Meeting:.....Monday before the General Meeting.....7:00 pm to 8:00 pm
 BEMS General Meeting:.....2nd Thursday.....7:30 pm to 10:00 pm

Mr. and Mrs. Rockhound

by KAM



The Tumbler has received One-Time Rights to publish this cartoon

BEMS Board Meeting Minutes February 8, 2010

by Pete Williams, 2010 Secretary

Meeting called to order at 7:15

Members Attending

President Bill Cook

Vice President Cliff Frome

Secretary Pete Williams

Shop Operations Cheryl Edgar

Federation Mike Blanton

Guest Jacquie Pattie, Pat Morgan

Editor Keith Morgan

Shop Dick Morgan

Health & Welfare Carolyn Sealton

Refreshments Esther McCain

Mineral Council Brian Waters

General information discussed included the announced dates of the South Sound Show of November 13-15 should be November 12-14. Two long-time club members passed away recently. The 2010 field trip report has been published on the Mineral Council website. There are 2 bills in the legislature that could affect rockhounding.

The club is continuing to look for a place to set up a shop. Some members have been exploring Community Colleges. The club will convene a planning committee to prepare a plan that could be presented to colleges, cities, or other locations that may be willing to host our shop. The plan could include what we have to offer, what training or knowledge sharing we could provide, and how we may share with other clubs.

The board discussed ways to get more members to bring food for each meeting. One suggestion, used at other clubs, was to look at a block of members alphabetically, request they bring something, and then rotate each month.

The South Sound Science fair is looking for tumbled rocks to hand out to students. Any members who wish to donate can provide to Dick Morgan.

Cliff volunteered to be co-chair of the 2010 South Sound Show.

The board proposed moving up the start time of the general meeting to 7:00 instead of 7:30 since the Kent Senior Center requires the club to be out of the facility by 9:00. The next board meeting will be at Kona Kai or at Panera's if Kona Kai is not open.

Meeting adjourned at 8:07.

Obituaries by Dick Morgan

The roll of members is being trimmed by the deaths of senior members, most of them aided by debilitating diseases. It is with a sad heart that we must report the passing of two more members: Marion Bergland and Les Akers.

Science Fairs by Dick Morgan

This is the time of year for the school science fairs, I have already given a presentation at Sumner Elementary in February which had a large audience. In March I will be giving presentations at Kapowsin Elementary and the Puget Sound area finals at Pacific Lutheran University. These type of presentations attract a lot of interest and many questions are asked by both students and parents.

Could still use polished rocks to give as incentives to the participating youngsters.

Thank you to Cliff Frome, Edward Harrison & Janice Brady for donating rocks to the Science Fairs.

Young Richard's Almanac by Dick Morgan

If at first you don't succeed, get in line.

I have to be young at heart because I sure ain't young in body!

**Shop Talk** by Cheryl Edgar

The irony of calling this "Shop Talk" is not lost on me; after all, our shop is at present languishing in storage (but friendly, secure storage, thanks to Brian Waters). And with the jewelry/faceting/rock shops closed, we can no longer generate the cash-y goodness that would allow us to pay for things like a monthly meeting place, picnics, and the like.

At present we are meeting in the Kent Senior Center. It is a warm, friendly place to get together each month—but we do have to pay for the room. At our February meeting, our Fearless Leader, Bill Cook, invited the BEMS membership at large to sponsor individual meetings. For just \$20, any member can "adopt" a month. Charlotte Churchill offered to sponsor our March gathering, and several other members have graciously stepped forward as well, but we still have lots of wonderful months just waiting to be adopted. Do it to remember a birthday or anniversary (nothing says "love" like a BEMS meeting!), or in honor of a past or present BEMS member. We'll have a sign-up sheet at the next meeting—see you there—and don't forget to say "thanks" to Charlotte!

BEMS General Meeting Minutes February 11, 2010



by Pete Williams, 2010 Secretary

Meeting called to order at 7:20

Minutes approved as written.

Tumbler Editor and Webmaster's Report: Meeting changes will be posted on the web page.

Field Trip Report: The next trip will be to Cherry Creek looking for jasper.

Federation Report: The regional meeting will be held in conjunction with the Portland show.

Mineral Council: The March general meeting is in Ellensburg. A new power line is being built that could potentially go over Saddle Mountain. The state House has a bill coming out of committee that would affect rockhounding. They are looking for ways to raise money that could include fees for parking passes, camping, and group event fees. The fees discussed were \$5 for a one time parking pass and \$200 for a group event of 25 or more people.

Health & Welfare: Les Akers and Marion Bergland passed away recently.

South Sound Show: Cliff volunteered to co-chair the event. The Puyallup club will begin charging rent for the tables and cases to help pay for damage to their equipment. The first payment to the Puyallup Fairgrounds has been made. The committee is looking to add a few more dealers this year. The committee meets the first Tuesday of the month at the Burien Elks Club. The committee can still use additional volunteers.

New Business: The meeting start time for next month will be 7:00 instead of 7:30. Bill asked club members if someone has a house with a large back yard that is willing to host the club's August picnic. Rental fees for various locations have gone up considerably so the club is looking for ways to save. Members who wish to donate \$20 to pay for the general meeting room rental at the Kent Senior Center can provide to Rich.

Bob will be chair of a new public relations committee to prepare a plan to find space for a club shop. The committee will develop a description of the club, explain our situation, and identify clubs that might be interested in joining us in finding a new shop location. The committee will then bring recommendations to the board for approval. Any location will need to be approved by Boeing Recreation. Members interested in volunteering for this committee should see Bob or another board member.

The South Sound Science Fair is short of sponsors this year due to budget cuts. They could use 300 tumbled rocks. Members can donate and provide to Dick Morgan.

Program: Not shown because the room we had didn't have a TV & DVD player.

Displays:

Ed Laville - Smack'Em Rocks

Thanks For The Support!

The February General Meeting was sponsored by Del Oswald.

The March General Meeting will be sponsored by Charlotte Churchill.

Thank you both!

The Wet Look by Clyde Gilbert

Good old Elmers Glue mixed 50/50 with warm water works wonders at maintaining that "wet look" on all types of materials, including most shells. Just brush it on and let it dry-if it gets dusty or dulled simply soak it in warm water and reapply. Learned this technique from one of my mentors when I wanted to display some petrified wood that looked great when wet but looked like a plain old rock dry.

via Rock Rollers, 1/09; via Blue Agate News, 1/08; original publication unknown

Mineral Identification and Acids by Michele Yamanaka, MWF Junior Activities Chairman

ACID??? That's scary stuff! Yes - it can be. And you should never work with acid without following safety procedures. In fact, no one, no matter how old, should ever work with acid without having someone more experienced there as a supervisor until he/she proves able to follow safe procedures and to demonstrate responsibility and caution.

What is an acid? It is a substance, usually in liquid form, that reacts with something else, causing the hydrogen of the acid to be freed and replaced with a positive ion of the other material. To make it simple: it will make something dissolve and often bubble.

Not all acids are equally dangerous. The safest acid to use is vinegar (acetic acid), and it is available easily.

The other acids are dangerous. An acid easily found, but needing to be handled with care, is muriatic acid, used to maintain swimming pools. It is a weak form of hydrochloric acid (HCL). Sulfuric acid, sulfamic acid (a weak form is used to clean coffee pots and remove calcium), nitric acid and oxalic acid (for iron) are other better known acids.

Continued on next page

WHY TEST WITH ACID? The way some minerals react to acid can help identify the elements in them.

Generally, only certain minerals will show a reaction to acid. This helps you narrow down what your mystery specimen may be. And certain minerals cause the acid to do particular things - a definite clue to what you have. Some minerals only react with a certain acid. Some only react if the acid is hot. For some, adding ammonia or another chemical will cause a second reaction that positively identifies.

Here is a partial list:

<i>Acid</i>	<i>What Happens</i>	<i>Mineral or Element</i>
Vinegar	bubbles (usually slow)	carbonate like calcite, limestone
Muriatic	bubbles fast	carbonate like calcite, limestone, aragonite, malachite, azurite
Muriatic	solution turns green, then add ammonia and it goes blue.	some kind of copper
Muriatic	solution turns blue	some kind of copper
Muriatic	solution turns pink	cobalt mineral present
Muriatic	solution turns yellow	some kind of iron mineral
Muriatic	"rotten egg" smell	a sulphide
Muriatic	choking greenish fumes	a manganese oxide like pyrolusite, manganite, psilomene
Muriatic	a rubbery transparent gel forms on mineral	is a silica gel and forms on zeolites like natrolite, datolite, hemimorphite
Muriatic	white porous or spongy gel-forms on some residue left on mineral	also silica but not zeolites, but also biotite, chrysocolla, rhodonite, serpentine, pectolite

A. Testing Procedure for vinegar: put specimen in cup of vinegar and watch for bubbles.

B. Testing Procedure (not vinegar)

1. Follow safety rules
 - a. Be in well-ventilated area
 - b. Test in glass or porcelain cup or tube
 - c. Have a rinse container with baking soda to neutralize acid.
 - d. Wear acid-resistant gloves
 - e. Wear safety glasses
 - f. Do the tests over an acid-resistant surface
 - g. Gallon of water
2. Do not use a good piece for testing.
3. Try to grind up a small piece into powder or as small as possible.
4. Put in test tube or cup
5. Use eye dropper to add acid to mineral powder.
6. Record what happens.
7. Pour out acid mix into rinse container with baking soda.
8. Rinse cup or tube with water, pouring it into rinse container too.

C. Testing Procedure in the field (only useful to check bubbling, not mineral content)

1. Put specimen to be tested on ground.
2. Use eye dropper to remove small amount of acid from glass bottle.
3. Put one drop on surface to be tested.
4. Pour water on specimen to wash off acid.

Sometimes fluorite and calcite will be found in the same location, without nice crystals to help identify the mineral. By testing a small piece with a weak acid like vinegar, or possibly muriatic acid, you can decide which you have by whether it bubbles. Calcite bubbles; fluorite will not (unless the acid is hot).

Often, you may have a guess about what something is, but the acid test can help you narrow it down. For example, you may have a blue-green mineral and think it is a copper ore, but if you don't get the "copper" reaction, it can't be a copper ore. Then you must look at what other minerals appear blue-green.

Your nose can help you in acid testing too. If you smell a "rotten egg" smell during the test, the mineral is some kind of sulphide.

This is just a beginning. You can do further study on acids for identification by using a book like *A Field Guide to Rocks and Minerals*, by Frederick Pough. Have fun and be safe!

via West Seattle Petroglyphs, 1/09; from MWF News, 5/07

To tumble soft material that is hard to polish, start with the second coarsest grit. Fill the tumbler $\frac{3}{4}$ or $\frac{7}{8}$ full so the stones will roll and not fall. About $\frac{1}{4}$ the normal amount of cerium oxide polishes better than the usual polishes.

via Rock Rollers, 2/10; via Glacial Drifter 10/09; from SCRIBE 2008

Dopping Methods by Roger K. Pabian, MWF Lapidary Chair

Dopping is that first problem area. Why doesn't the stone stick to the stick?

The Stick:

Hardwood sticks work best. They don't absorb water quickly. If you use a pine dowel, paint it to slow down water absorption. If the stone comes off of a stick, go to a new, dry stick, as the old one will still have some water in it, and it will pick up some water when the stone pops off. The stick needs not be any longer than the width of the palm of your hand. Think of the stick as an extension of the stone. Hold the stick up high such that your fingers come in contact with the stone. That minimizes vibrations and bouncing by the stone, and the stone will be less likely to fall off of the stick. The dop stick doesn't have to be round. If you are shaping a stone that has a large length to width ratio (greater than about 2:1, such as in a marquise), cut a stick from a lath or rectangular slat of wood such that the stick extends almost to the tips of the stone. There will be no great pressure on the ends of the stone, and that will help prevent the stone from coming off of the stick.

The Wax:

Most lapidary wax is now the 140 degree wax; that is, it melts at 140 degrees, and it is usually dark green. You have to get the wax hot enough that it readily flows, but not runs. Heat the stone, as well as the wax, and the stick. There are fancy dop pots that are available from lapidary supply houses, but I use an old slow cooker base that I picked up at a Goodwill store for \$1.00. I heat the stone on the cooker base. I usually start the wax beforehand to give it time to melt. Heat the stone slowly, dip the end of the stick in the wax, apply the stick to the stone, lift off, and form the wax around the stick with moistened fingers to prevent the wax from sticking to you and burning you. If you use the 170 degree wax, you have to heat it up to 170 degrees otherwise it will not stick any better than the cooler 140 degree wax. Keep in mind that wax for dopping cabochons will not work for dopping stones that are to be faceted.

Super Glue And Roofing Nails:

If you are dopping small stones, an easier method than using wax, is to use super glue and roofing nails. Set the stone in a base of modeling clay, and get it level. Put a drop of super glue on the back of the stone and then attach a roofing nail to it. Hold the stone in a pin vise. To remove the stone, heat the nail with your alcohol lamp. It will drop off in a couple of minutes.

via Golden Spike News, 4/09; from GCLFS Newsletter, 2/09

Black And Light Opal

Black opals are the most prized of all opals. They range in price from under \$50 each to over \$1 million for rare collectors gems. Black opals are highly sought after because of their beauty - particularly red stones, which command the highest prices. Black opal is, in fact, not black but beautifully colored on a very dark (or black) background. The brighter and sharper the colors, the more valuable the stone. Occasionally, bright black opals will also display rare patterns. These are regarded as collectors' gems. Nearly all the world's black opal comes from one location - Lightning Ridge in New South Wales, Australia.

Light opal comprises the majority of precious opal and comes from many areas, although currently most light opals found in Coober Pedy and Mintabis in South Australia. Light opal can display all the colors of the spectrum on a light or pale background. The terms red fire, orange fire and green fire refer to the dominant color in the stone, and multi-fire suggests a stone which has most colors without any particular color being prominent. Light crystal opal describes those stones which have a degree of transparency together with a sharpness of diffracted colors.

Factors Determining the Value of Opal

The following criteria, along with the laws of supply and demand, are important when determining the value of an opal:

Brilliance: The degree of brightness is of paramount importance. An opal cannot be valuable without this attribute. A gem which glows but is average in all other respects will still command a high price, whereas a dull stone with a very good pattern will only bring an average price.

Pattern: Good patterns of diffracted colors, when combined with brilliance, have an enormous impact on the value of the stone. Pinfire and small patterns are less desirable than broad patterns or large flashes. Distinct patterns such as rolling flash, straw pattern, Chinese writing, ribbon, and harlequin are very rare and considered collectors' items.

Body Color: With black opal, the degree of darkness in the body color must be taken into consideration. The "blacker" the body color, the more valuable the gem.

Transparency: Light opal is more desirable when it has a degree of transparency. If lively, brilliant colors are present in crystal opals, they are more highly prized.

Reference: The Black Ridge Opal Mine [Australia] "Shop Notes"

via Rock Rollers, 2/10; via Smoke Signals, 2/96; from News of San Diego Lapidary Society, 11/93

Cleaning Up Your Safety Goggles

If your soft plastic safety goggles are scratched or foggy, try toothpaste with only a little elbow grease. It really works.

from Rock Rollers, 2/10

Having Fun: Highlighting Earth Resources for Kids by Jim Brace-Thompson, AFMS Junior Activities Chair

At some of the shows I attended in 2008, I entered a display entitled “The Earth Resources Challenge!” In it, I had 16 rocks and minerals numbered and arranged in 4 rows on the bottom of the case and 16 everyday products, each given a letter of the alphabet, from A to P, arranged in 4 rows pinned to the back of the case. Outside the case, I had a quiz and pencils for folks to match the mineral to the everyday object that was made from it. Kids who completed the quiz were awarded a free tumble-polished stone from a “Pirate’s Treasure Chest.”

This has proven to be a popular display, and I’ve had clubs ask if I could list the “ingredients” I used so that they might make one of their own. Here goes: kaolinite and a ceramic mug; copper nuggets and a section of plumbing pipe or pennies; crystals (quartz, aquamarine, tourmaline, peridot) and faceted gemstones; hematite and steel nails; galena and a lead fishing weight; coal and a model of a factory with a smoke stack (purchased at a model train store); talc and talcum powder; sulfur and matches; bauxite and an aluminum can; halite and salt; a borate mineral and laundry detergent; cinnabar and a mercury thermometer (these are hard to find nowadays!); pumice and Lava brand soap; fluorite and fluoride toothpaste; limestone and a photo of a building made from limestone blocks; and garnets and sandpaper.

I encourage all clubs to put together a collection like this because it can serve as a valuable educational resource. If you’re using the AFMS/FRA badge program with your pebble pups and junior members, such a collection will help your club’s kids earn their Earth Resources badge. In addition, the collection comes in handy if your club helps Boy Scouts or Girl Scouts earn their earth sciences merit badges or loops. And it’s a fun, informative display for school presentations.

The minerals and products I included in my display are just a few of many possibilities. To get still more, turn to the web site of the Mineral Information Institute, or the MII, at www.mii.org. Hit the “For Teachers” tab at the top of the page, then scroll down to “Packets for Download” and click on “Everyday Uses of Minerals - Our Dig a Little Deeper Series” Teacher Packet #3. To the left will be a series of ready-made packets with info and activities of all sorts to illustrate to kids the mineral sources of many everyday objects.

One MII packet I especially like is “How Many Minerals Does it Take to Make a Light Bulb?” Well, per the MII sheet, the bulb is soft glass made from silica, trona, lime, coal, and salt. The filament is made from tungsten. The lead-in-wires are made of copper and nickel. Tie wires are made of molybdenum. Wires contained in the glass stem press are made of a combination of a nickel-iron alloy core and a copper sleeve. The fuse is made of nickel, manganese, copper and/or silicon alloys. Support wires are made of molybdenum. The button and button rod are glass, made of the same minerals as the bulb, plus lead. The heat deflector is made of aluminum (from bauxite ore). The base is made of brass (copper + zinc) or aluminum. And finally, the bulb is filled with a gas that’s usually a mixture of nitrogen and argon. All this in a little light bulb. Who woulda thunk it?

So to dramatically illustrate to kids just how many minerals go into their everyday life, you can prepare a full collection and display as I described above, or you can look no further than a single light bulb! It’s a bright idea for educating while, as always, having fun!

from AFMS Newsletter, 4/09

This Old Thing?

The diamond in your ring is undoubtedly older than the gold that holds it. How old is it? Geochemists working in Kimberly, South Africa, believe that diamonds may be more than 3 billion years old. According to a diamond trade journal in Antwerp, Belgium, researchers dated diamonds from the DeBeers Consolidated Mines by dating the included garnets. The garnets formed at the same time as the diamonds and contain trace amounts of radioactive isotopes. Calculations of age can be made based on the ratios of the radioisotopes and their decay products. Diamonds require temperatures above 1,200°C and pressures typical of depths of 150 miles below the earth’s surface to form. The diamonds are mined from ancient magma called kimberlite, but it is not known whether they formed from the cooling rock or were picked up as the magma rose from deep inside the earth.

via Golden Spike News, 4/09; via Drywasher’s Gazette, 1/98, via Rocky Review, 4/94; from Isothermal Newsletter

The anteater has no teeth so it swallows ants whole. Imbedded in the thick muscular walls of its stomach are tiny pebbles it has collected, which serve to grind up the hard bodies of the insects. Diamonds and gold nuggets have been found in the gizzards of chickens used for the same purpose. The alligator swallows rocks for a different reason: to provide ballast to keep him on an even keel in the water. The sea otter uses rocks to crush shellfish on his chest while he floats serenely on his back.

via Rock Rollers, 5/08; via Rock Chip Reporter, 3/08; from Gems of the Rogue

In working with dark colored moss agate, like the black Montana variety, small pits may sometimes appear on the finished, polished surface. The light colored polishing powders like tin oxide and cerium oxide often pack into these pits and removal is difficult. The white spots detract from the stone’s appearance. A small drop of India Ink touched on the white pit and rubbed over the stone with a cloth works wonders.

via Rock Rollers, 2/10; via The Petrified Digest 9/09; from HyGrader, 2/89

Field Trips

The club or clubs sponsoring the field trips are shown in italics. When known I have listed a phone number and contact person for each sponsoring club below the listed trips. If you are not a member of the sponsoring club, you should phone and ask permission to go on their field trip.

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.

Information from the Washington State Mineral Council webpage (<http://www.mineralcouncil.org>).

March 20 *Everett Rock & Gem Club - Miller River* - Meet at 9:00 am at Hwy 2 Skykomish - Picture Jasper - Need crack hammer & container
Bob Johnson (425) 408-0849 bobinevrt@hotmail.com

Cinnabar

Cinnabar is the only common mineral of mercury and the chief ore. It is a mercury sulfide. It is also the only commercial source, though it has been produced artificially. Cinnabar is a lovely bright red in color when fresh but may fade to a dull gray when exposed to sunlight. The mineral is sometimes mistaken for realgar but has a silvery luster that realgar does not show.

Cinnabar crystallizes in hexagonal systems and is usually found as a coating which is sometimes crystalline and sometimes earthy. It is also found in sedimentary rocks. Cinnabar occurs usually near volcanoes or hot springs. It is associated with pyrite, marcasite, copper sulfide, stibnite, gold, opal, quartz, and calcite.

Cinnabar can be heated and caused to deposit drops of pure mercury on the cold surfaces of an open test tube. Old Time miners used to do this in elementary stills and would sell the mercury thus obtained. This, however, is a very dangerous thing to do as the fumes are very poisonous and should not be inhaled.

Mercury has many uses besides the common one in thermometers. It is used for gold processing, preparing drugs, in scientific machines, and in ammunition.

Cinnabar occurs in Russia, Yugoslavia, Czechoslovakia, Bavaria, and Mexico. Perhaps the finest crystals come from Hunan Province in China where it occurs in fine, deep red, translucent crystals in Quartz. These are also quite commonly twinned. In the United States, California is the leading source of cinnabar. Other sources are Nevada, Utah, Oregon, and Texas.

via Breccia, 12/05; via Moroks 10/05, from The Agatizer 2/69

AFMS 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 or rules governing collecting on public 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 material in collecting areas.

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

I will leave all gates as found.

I will build fires only in designated or safe places and will be certain they are completely extinguished before leaving the area.

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

I will practice conservation and undertake to utilize fully and well the materials I have collected and will recycle my surplus for the pleasure and benefit of others.

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

I will cooperate with field-trip leaders and those in designated authority in all collecting areas.

I will report to my club or federation officers, Bureau of Land Management or other authorities, any deposit of petrified wood or other materials on public lands which should be protected for the enjoyment of future generations for public educational and scientific purposes.

I will appreciate and protect our heritage of natural resources.

I will observe the "Golden Rule", will use Good Outdoor Manners and will at all times conduct myself in a manner which will add to the stature and Public Image of Rockhounds everywhere.



Shows



March 6 & 7: 10 am - 5 pm
East KingCo Rock Club, Annual show
 Pickering Barn
 1730 10th Ave. NW
 Issaquah, WA

March 6 & 7: Saturday 9 am - 5 pm; Sunday 10 am - 4 pm
Rock & Arrowhead Club, Annual Show "Thundereggs and Geodes"
 Klamath County Fairgrounds
 3531 S. 6th St.
 Klamath Fall, Oregon

March 12-14: Friday & Saturday 10 am - 6 pm; Sunday 10 am - 5 pm
Rock Rollers Club, "Earth Treasures"
 Spokane County Fair & Expo Center
 N. 604 Havana, at Broadway
 Spokane, WA

March 12-14: Friday 9 am - 5 pm; Saturday & Sunday 10 am - 5 pm
Tualatin Valley Gem Club, 52st Annual Show "Back Again in 2010"
 Washington Co., Fairplex
 873NW 34th Ave
 Hillsboro, Oregon

March 20 & 21: 10 am - 5 pm
North Seattle Lapidary & Mineral Club, 56th Annual Show
 Lake City Community Center, 12531 28th Ave. NE, Seattle, WA

March 26 & 27: Friday 8:30 am - 6 pm; Saturday 9 am - 5 pm
Panorama Gem & Mineral Club, 10th annual show
 Fort Colville Grange Hall
 157 Hwy. 20 E.
 Colville, WA

March 27 & 28: Saturday 10 am - 6 pm; Sunday 10 am - 4 pm
Sweet Home Rock & Mineral Society, 62nd Annual Rock & Gem Show
 Sweet Home High School Activity Gym
 1641 Long St.
 Sweet Home, Oregon



Internet Addresses



American Federation of Mineralogical Societies
<http://www.amfed.org>

United States Geological Survey
<http://www.usgs.gov>

Fossils For Kids
<http://www.fossilsforkids.com>

<http://www.statefossils.com>

<http://geology.com/>

