



the BEMS Tumbler

January
2009

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

Next Meeting:
January 8, 2009
7:30 p.m.

**Boeing Recreation
Activity Center**

Room B at
22649 83rd Avenue S.

Just off the Valley
Freeway (Highway 167) North
edge of Kent

The Program was not known at
press time

**Happy New
Year!**



*This month remember to wish a
Happy Birthday to*
Vicky Roy on January 2,
Sandy Chilson on January 4,
Wesley V. Anderson on January 7,
Janet Tanaka on January 7,
Kathleen Angell on January 8,
Joan Arundell on January 10,
Paul Grieve on January 10,
John Haworth on January 13,
Kristin O'Brien on January 16,
Mary Stickman on January 20,
Marion Berglund on January 21,
Eric Miyamoto on January 22,
Wilda McOmber on January 25,
Bob Anderton on January 27,
Bob Bird on January 28,
Janice Brady on January 31,
and
BEMS is 60 years old!



This publication is an official bulletin of the Boeing Employees Mineralogical Society Inc. (BEMS) however, news items and editorial comment herein do not necessarily reflect the views or opinions of the BOEING COMPANY.

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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 2009

President Bob Pattie
Vice President Scott Burch
Treasurer Richard Russell
Secretary Pete Williams
Director Bill Cook
Director Dick Morgan
Past President Malcolm Wheeler, Sr.
Federation Representative Michael Blanton
Federation Representative Jerry K.F. Chilson
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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 Bill Cook
Tumbler Editor Keith Alan Morgan
Webmaster Keith Alan Morgan
Shop Operations Cheryl Edgar
Shop Instructors:
 Casting Joe Poston
 Faceting Cliff Frome
 Jewelry Joe Poston
 Lapidary Dick Morgan

Club eMail address is
morgangraphix@yahoo.com

2009 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 Dick Morgan

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>

Cutting Palm Wood

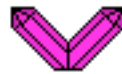
There are three ways to cut palm root, and each will give a different effect. All palm roots seem to have a ring of agate around the eye and a colored center.

1. Cutting down the center gives a striking wood-stained effect, but does not show the eye.
2. Cutting across the center brings out the round eye.
3. Cutting diagonally across the roots produces an elliptical eye effect.

via Breccia, 10/08, via Strata Gems, 7/07; via Lapidarian, 9/05; from Morocks, 6/05



January



| SUN | MON | TUE | WED | THUR | FRI | SAT |
|---------------------|----------------|--------------------------|-----|---------------------|----------------|-----|
| Happy New Year 2009 | | | | New Year's Day | | |
| | Lapidary Class | Board Meeting | | General Meeting | Faceting Class | |
| | Lapidary Class | Lapidary Casting Jewelry | | | Faceting Class | |
| | Lapidary Class | Lapidary Casting Jewelry | | | Faceting Class | |
| | Lapidary Class | Lapidary Casting Jewelry | | | Faceting Class | |

Lapidary Class Hours:.....Monday.....7:00 pm to 9:00 pm
 Lapidary Shop Hours:.....Tuesday.....9:00 am to 6:00 pm

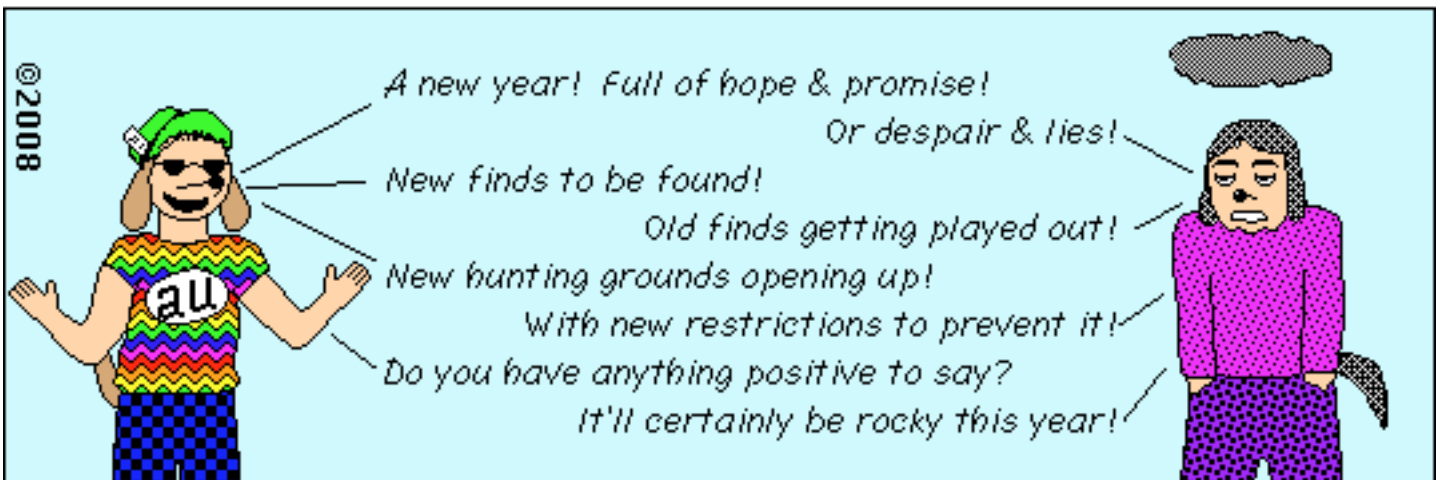
Jewelry Shop Hours:.....Tuesday.....9:00 am to 6:30 pm
 Jewelry Casting Hours:.....Tuesday.....9:00 am to 6:30 pm (Casting Information All Day)

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

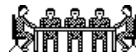
BEMS Board Meeting:.....Tuesday (9 days prior to General Meeting).....7:00 pm to 8:00 pm
 BEMS General Meeting:.....2nd Thursday.....7:30 pm to 10:00 pm

Son of Mr. and Mrs. Rockhound

by KAM



BEMS Board Meeting Minutes December 2, 2008



by Keith Morgan

Members present

President Malcolm Wheeler

Editor Keith Morgan

Library Charlotte Churchill

Mineral Council Bob & Jackie Pattie

Guest Pat Morgan

Treasurer Rich Russell

Director Dick Morgan

Field Trips Bill Cook

Shop Cheryl Edgar

Meeting began at 9:40 AM.

The January Board Meeting was moved to January 6, the Tuesday before the Regular Meeting & the meeting time changed to 7:00 PM. Other Board Meetings during the year will be the Tuesday 9 days before the second Thursday of the month, but the meeting times have been changed to 7 PM.

Donated Equipment: Decided what to do with the and set rules for the use of the equipment donated by Lloyd Gibson.

The GIA equipment is only to be used by authorized persons for classes.

Considered loaning the 6-wheel Genie to club members for three-month periods. The club member would have to be properly trained in the use of it before such a loan.

The rolling casting cabinet would be kept in storage until needed.

A committee would be created to work with Malcolm on using the equipment.

Shop: The lockbox is working well, as more people are paying shop fees.

Given how crowded Monday nights have gotten, will consider a new shop night, to be brought up at the next meeting.

The shop will need a complete cleanup. Need volunteers.

There was a leak from the belt sander that flooded the floor.

South Sound Show: Made money, up from last year. Voted to pay members who stayed overnight.

Picnic: Will try to reserve the same place as last year on the second Sunday in August.

Health & Welfare: We will need a new person for this position.

Upcoming Board Meetings by Keith Morgan

It was decided that the Board Meetings will still be held 9 days before the regularly scheduled General Meetings (except for this January's), although the time will be moved to 7 PM. This 9 days prior situation means that some months will have 2 Board Meetings, while others will have none, so for those who plan to attend our Board Meetings here is the schedule to mark on your calendars.

January 6, February 3, March 3 & 31, May 5, June 2 & 30, August 4, September 1 & 29, November 3, and December 1.

Editor's Note by Keith Morgan

Well, it's that time of year where new officers, & members of the board, should check Page 2 & let me know if I've got the right person & their contact information listed.

Young Richard's Almanac by Dick Morgan

Starting a new year is not like starting over, but is adding goals to guide your life.

Setting goals should not be wishful thinking, but attainable high-level aims.



South Sea Pearl Oysters

The two types of South Sea Pinctada maxima oysters, the silver-lipped and the gold-lipped, produce white, silver and golden pearls. These oysters are huge, up to 12" in diameter when full grown, and produce pearls ranging from 9mm to 20mm in size, which is pretty big, with nacre layers from 2 to 6 mm in thickness, which is pretty thick.

Starting when they are 24 months old and half-grown, South Sea oysters can accept one bead at a time (the nucleus of a cultured pearl-to-be), with the finished pearl harvested two years later. Each oyster can produce up to 3 cultured pearls during its lifetime.

via Pegmatite, 2/07; from <http://www.pearl-guide.com/south-sea-pearls.shtml>

BEMS Christmas Party December 14, 2008

by Keith Morgan

Unfortunately no one was taking notes so I'm doing this from memory.

Meeting started by President Malcolm Wheeler.

Minutes printed in the Tumbler approved as written.

South Sound Show: We made money. Volunteers & committee members were given thank you cards & gifts of gratitude.

Shop: Mention was made of a new class night.

Awards: Malcolm created the President's Choice Award & gave the first two to Cheryl Edgar & Bill Cook for their hard work for the club. The J. Arthur Risher Award went to Keith Morgan.

Officers & Board Members: Those stepping down were thanked & the new officers were welcomed.

Eating: It was delicious.

The meeting adjourned around 3 PM.

What Have I Just Collected? by Theodore J. Reith, Safety Chair

I have been a rock and mineral collector for more than three decades now. Being a Chemical Engineer, I've typically been more interested in a specimen's chemistry than its geology, though I plan to grow my knowledge of the latter. This is a most wonderful hobby, though all of us must be aware of the potential hazards that some minerals could represent.

This was most apparent to me in an acquisition made when still relatively new to the hobby. A vendor offered a very nice specimen of a rather gemmy, yellow and red crystal matrix from Utah, which I had not seen previously at several dozen Shows. What a great new collection addition! The card identified the specimen as Orpiment and Realgar. As the vendor was quite busy at that time, I did not inquire as to the chemical composition of these minerals.

At home, my research quickly identified this specimen as two arsenic sulfides, chemically As₂S₃ and As₂S₂. Arsenic is an obvious hazard word for most of us. A bit more checking of the Material Safety Data Sheet (MSDS)* showed it to have

- a Health rating of 4 (defined specifically as "Life threatening, major or permanent damage may result from single or repeated overexposures.")
- to be listed by DOT as a Class B poison ("presumed to present a serious threat to health during transportation")
- to produce Hydrogen Sulfide (H₂S) when contacted with water, a known respiratory hazard with its own Health rating of 4.

If a sample has a Health rating of 3 or 4 on the MSDS (or 2, if you're extra cautious), then you need to do some homework on safe handling.

The lesson to learn - know what you're collecting, in order to include necessary safety considerations for the specific material. The first step would be to discuss the specimen with the vendor (I've found many to be well informed), or a knowledgeable person at the collection site. Certainly use all available reference materials. If you have Internet access, there are a multitude of safety information sources if you know the chemical composition of your specimen. Google can certainly be your friend in this search. The MSDS, noted above, is a fine information source even though designed for industrial users of chemicals.

So, what did I do with my colorful, but hazardous specimen? It's clearly marked as to the arsenic content. Handlers, including myself, will use non-cloth gloves or wash hands thoroughly after admiring the crystals, especially prior to eating. Younger children may look, but not touch. And, from that point on, this writer knows what is being added to his collection!

* A material safety data sheet (MSDS) is a form containing data regarding the properties of a particular substance. An important component of workplace safety, it is intended to provide workers and emergency personnel with procedures for handling or working with that substance in a safe manner.

from AFMS Newsletter, 11/08

Orienting Obsidian by Jim Small, Small Wonders Lapidary

Orienting obsidian depends on what type of obsidian and what you are doing with it. If you are polishing flats, the best way to orient rainbow sheen obsidian is 10-15 degrees off the plane of the parallel bands. If you are cabbing it, cut it exactly parallel to the bands. Gold sheen is always cut parallel to the bands or the effect is lost or diminished. Fire obsidian sometimes loses its fire sheen when cut parallel and should be cut after careful examination of the best angles for viewing the fire which is actually in between bands. Other types of obsidian look different when cut at different angles to the bands; midnight lace is one such example, where you should experiment until you find the "look" that pleases you.

via Breccia, 10/08, via the Yahoo Lapidary List, from Gem Cutters News, 11/06

Musical Stones by Bonnie Wood

In some sculpting, an artist taps a stone lightly with a hammer to see if it's "true". If it emits a dull tone, it has faults running through it that will crack it apart when you work on it. A clear ring, one that hangs in the air a moment, means it's true, has integrity, and, most importantly, will hold up under repeated blows.

via Rocky Trails, 12/08; via Rockhound Special, 10/08; from Jasper's Jargon, 3/01

J. Arthur Risher Award

At the December Christmas Party the 2008 J. Arthur Risher Service Award winner was announced - - - Keith Morgan. For his willingness to pitch in & help out when needed.

This prestigious award is to permanently honor a member of BEMS who, through his, or her, actions as a rockhound and a Club member, has embodied those principles that have been responsible for the continued success of BEMS. Selection of the recipient is done by the elected BEMS Officers, using the following criteria:

1. Club Loyalty

shall appreciate and be cognizant of the efforts of officers and other club members who act in behalf of the club.

2. Leadership

shall inspire others to action when the need arises.

3. Initiative

shall undertake tasks voluntarily that will be of aid to the club and its members.

4. Character

shall behave in a friendly manner toward old and new acquaintances alike.

5. Eligibility

must be a BEMS member who has not received the award previously or been a club officer during the year in question.

The J. Arthur Risher award winner maintains the perpetual trophy (with his or her name on it) for one year. At the next Christmas party the perpetual trophy is exchanged for a plaque which becomes the property of the awardee.

The first award was made in 1963. Since its inception the following BEMS members have been honored in this way:

| | | |
|-------------------------|-----------------------|--------------------------|
| 1963 Raymond Crow | 1979 Fred Thompson | 1995 Les Brooks |
| 1964 Duard Jacobson | 1980 Bob Pattie | 1996 Charlotte Churchill |
| 1965 Charlotte Grossman | 1981 Richard Morgan | 1997 Steve Mackey |
| 1966 J. Arthur Risher | 1982 Leonard Bahr | 1998 James Etwiler |
| 1967 Norman Steele | 1983 Ed Gerhard | 1999 Elliott Woodward |
| 1968 Donald Mellinger | 1984 Will Messer | 2000 Joe Poston |
| 1969 Pat Crow | 1985 Everett Atkeson | 2001 Tod Stevens |
| 1970 Charles McOmber | 1986 Vera Gelbach | 2002 Sue Neill |
| 1971 Vernon Mann | 1987 Dick Straley | 2003 Pete Williams |
| 1972 Marion Barbee | 1988 Jackie Pattie | 2004 Dick Morgan |
| 1973 Emmet Gallagher | 1989 Jim Mayhall | 2005 Bob Pattie |
| 1974 Walter Swift | 1990 John Haworth | 2006 Esther McKain |
| 1975 Wilma Gaede | 1991 Silvan Lidovitch | 2007 Paul Stewart |
| 1976 Madelyn Mann | 1992 Leslie Anderson | 2008 Keith Morgan |
| 1977 Betty Swift | 1993 James Fleming | |
| 1978 Martin Squires | 1994 Herman Gelbach | |

That so many of the listed awardees who are still living are also active in the club is an indication that the honor was given advisedly.

Oh Say Can You See? by Don Monroe, AFMS Safety Chair

Many, many of us do not see as well as we would like or as well as we once could. All of these vision problems are not the result of aging. In some cases, other factors play a part in creating the problem.

Pre-teens and older teenagers may have sustained eye injuries while at play due to flying objects or missiles such as a shot from an air rifle. I well remember being hit in the eye with the "ball" from a sweet-gum tree. My cousin could really throw well for a girl. Yes, it was very painful and it took several days to heal. A small amount of permanent damage resulted in what the doctor called a "floater" which is in my eye to this day.

Excessive exposure to bright sunlight has a long-term effect on our eyes. This exposure can result in cataracts and other eye damage. Sun glasses that reduce UV exposure can help.

Are we properly concerned with the lighting that we rely on when we read, write or do close work?

The latest information I received from my ophthalmologist indicates that all of us will have cataracts as we age. These will show up as yellowing in the eye and, for the most part, surgery will not be required. Good lighting will assist us minimizing this effect.

Regular eye examinations and corrective lenses must become a way of life for us if we are going to safeguard our sight. I personally do not see any pleasure in standing on a street corner with a white cane and a tin cup or having our grandchildren read for us because we can't see.

Orienting Labradorite, and Spectrolite by Jim Small, Small Wonders Lapidary

Here is a procedure for orienting labradorite/spectrolite. It will also do a credible job with moonstone. With most sunstone (India and upstate New York), orientation is simpler because you will just orient for the schiller (metallic flecks).

1. Get a student desk lamp; what we used to call a high-intensity lamp. They usually have a switch for two brightnesses, and they always have clear glass bulbs (this is important).

2. Fix a high shelf where you can put your lamp, so that you can adjust the arm to have the beam of light shine straight down onto a flat surface which needs to be no higher than thigh-high. A stool or flat-top crate will work fine.

3. Get a tin, like one of the tins which Danish butter cookies come in; it should be anywhere from 8" or 9" in diameter up to 12" in diameter, and between 2" and 3" deep. Fill this tin about $\frac{3}{4}$ full with sand or fresh kitty-litter or any other finely granular material.

4. Get a really good quality waterproof marker. It should be at least 6" long, and ought to have a relatively fine (no more than $\frac{1}{8}$ " point. Roundnose markers work fine as long as they haven't been squished by pressing too hard.

5. Stand on the opposite side of the stool/crate from the shelf with the lamp. Adjust your stance and the lamp so that you can look straight down on the middle of the tin while the lamp shines its beam straight down above the top of your head, without your head occluding the beam.

6. Place a piece of mono-crystalline labradorite in the granular material in the tin, so that at least $\frac{2}{3}$ of it is above the supporting grains. If you have polycrystalline pieces of labradorite, you either have to cut them apart along the crystal boundaries or go for the largest, showiest crystal and trash the others.

7. Slowly rotate the labradorite until you see a flash of color; once you locate a flash, slowly spin the piece until you have the very brightest flash showing right on top. After you have the brightest surface centered, rest your permanent marker on the top edge of the tin, and drag it slowly around the piece, leaving a mark all of the way around. This mark should be parallel to the top flash.

8. Slice your crystal parallel to the mark to cut slabs which will produce finished cabs with a broad color flash over their top surface. Some labradorite will behave like moonstone and have the capability of producing a floating eye in a cut cab. To test whether your stone has this capability, take the following additional steps.

9. Place the stone on its side, so that the marker line is straight up toward your eye. Slowly rotate the stone, keeping the line in vertical orientation. When you see another flash (it will be distinctly weaker than the broad flash which you already marked), test its location by slowly revolving the stone from left to right or vice versa until you have the best flash firmly centered on the top of the stone. It should be somewhere on the first line; if it isn't, start over from the beginning.

10. After the second flash is firmly centered, draw another line in the same fashion as the first one. The two lines will not meet at the 90 degree angle, but nearly so.

11. Slice the crystal parallel to the second line to produce a floating eye in your finished stone.

Now to make things really interesting, there is some labradorite from Labrador that not only has labradorescence, but it also has schiller. In effect, it is labradorite/sunstone. If you have any of this material, you will see the small metallic flecks show up when you do the first orientation. If you have this material, don't bother to look for the floating eye because the schiller is much more rare as an optical phenomenon.

You can get into really fancy tricks with the orientation if you want to, like having pendant stones that flash only when they are hanging on someone. Labradorite is not recommended as a ring stone, nor as bracelet stone: it is much too soft and tender for anything that rugged. Also, since it is a feldspar, it has perfect cleavage in two directions; a sharp rap will cleave it.

via Breccia, 10/08, via the Yahoo Lapidary List, from Gem Cutters News, 11/06

"Enhydros" Terminology That's All Wet by Julian C. Gray

Mineral dealers at rock shows will occasionally offer specimens labeled enhydros for sale. What they are selling are typically quartz crystals with liquid inclusions. Within the liquid is a tiny bubble, and if you tip the crystal back and forth the bubble will move. The dealers will often circle the bubble, and if you cannot find the bubble, the dealer will spend a lot of time searching with you. Most require that you use a magnifier. So what are these things?

First of all, they are fluid inclusions, not enhydros, and they are also much more common than you might imagine. I will define both, but here is how fluid inclusions form. Minerals grow by adding elements to the surfaces, edges, and corners. Quartz crystals grow in many environments, but they commonly form by growth out of a hydro thermal solution - hot ground water containing dissolved silica. Growth rates and mechanisms are complex subjects, and some scientists spend years on this single area of research. It is enough for our purposes here to know that different parts of a single crystal or crystal face can grow at different rates. When this happens, microscopic pits develop in the crystal faces. They become vessels for our bubble bearing liquid. Think of the hopper-shaped halite of copper crystals that you've seen or those deep cavities on the faces of some Brazilian quartz. As the crystal grows larger, the next layer or several layers of crystal growth can cover these pits, trapping the liquid within the crystal in the process. Now the fun begins!

When a liquid is heated it expands; when it cools, it contracts. Solids like quartz also expand and contract, but to a much smaller rate. An everyday example of expanding and contracting liquids is the liquid in a glass thermometer. The glass in the thermometer also expands and contracts, just not nearly as much as the mercury or colored alcohol in the tube. When our quartz

crystal is finished crystallizing, it cools down (and so does the liquid in the inclusion). The cooling liquid contracts and may pull away from the sides of its quartz container forming a vapor bubble.

Scientists call these trapped liquids and their bubbles fluid inclusions. They are quite common and very fascinating. The white color of milky quartz is due to thousands or perhaps millions of microscopic fluid inclusions. Gemologists see inclusions when they look at certain gemstones (emerald is a good example) with a microscope. The liquid is not always water. A common fluid in ore forming processes is salty water. Hot water can dissolve a lot more salt than cold water and inclusions trap this hot salt water. When the salt water cools and contracts, it too forms a bubble. But another interesting thing happens; because the water has cooled down it can no longer hold as much salt as it did when it was hot. The salt begins to crystallize out as a halite crystal within the fluid, which in turn is trapped in the quartz crystal. Imagine peering into a microscope and seeing an inclusion with a tiny vapor bubble and microscopic halite crystals.

Enhydros are scientific curiosities; fluid inclusions are a scientific research tool. It's sort of like the fluid equivalent of the difference between a rock and a mineral. It is incorrect to label a mineral with a fluid inclusion as enhydros. A label calling attention to the fact that a mineral bears fluid inclusions is correct and should even increase the value of a specimen because of the scientific value and unique circumstances under which these are formed. Now get busy changing those labels!

Enhydros: References:

Bates, R.L., and Jackson, J.A., 1987, *Glossary of Geological Terms Third Edition: American Geological Institute, Alexandria, VA, p.788*

Matsui, E., Salati, E., Marinin, O.J., 1974, *CIH and 180/160 ratios in water contained in geodes from the basaltic province of Rio Grande del sul, Brazil: Geological Society of America Bulletin, V. 85, p577-580.*

Roedder, E., 1962, "Ancient fluids in crystals" *Scientific American, Vol. 207, p38-47.*

Roedder, E., 1972, *The composition of fluid inclusions: U.S. Geological Survey Professional Paper 440. jj.164p*

Roedder, E. 1984, *Fluid Inclusions: Mineralogical Society of America Reviews in Mineralogy Vol. 12, 646p.*

via Breccia, 11/08; via Gem and Mineral Journal, 6/04, from The Rock, 5/04

Fossil Identification by Debbie Bunn, Fossils for Fun Society

Diagnostic points for fossils:

Teeth: Enamel preserves very well and is distinctly shiny. It is rarely preserved as a cast of an impression. Ivory shows crosshatching.

Wood: The presence of grain and/or cell structure is needed. A lot of "wood" is just "probably wood". Bark is very rarely preserved.

Bones: Full of holes in 3-D. Irregular holes, not dots. If petrified, bones clink against your teeth. They should match known bones in the body - scapula, toe bone, etc.

Leaves: veins should be visible. Be suspicious of discolorations along a crack. There should be some depth to the leaf, not just a surface feature.

In general fossils should look like a known something. You should be able to find a picture, or other people should recognize it. Be conservative, it is not a fossil until you prove it is a fossil.

Know your "false fossils" - dendrites, Mojave agate/bone, "petrified Chihuahuas". Soft tissue only preserves in very special circumstances.

Fossils are found almost always in sedimentary rock. So know your matrix. Fossils may be found in the heart of a concretion, but not geodes or thundereggs. Fern fossils do not occur in the middle of agate. Moss agate is not a fossil. Neither is "chicken track"!

via Breccia, 10/08, via The Rollin' Rock, 8/05; from Dinny's Doin's, 9/02

Polishing Chalcedony Roses by Ted Robles

My wife and I had collected a lot of small chalcedony roses at the foot of the Cady Mountains. They were wind-polished, but that was all; I thought I would try an experiment. I put them into the 1/2 gallon Lortone tumbler, with tin oxide and very little water. I let them go for two weeks, picking the thing up occasionally and shaking it to see if the stones were still moving, thinking to add water if they stopped, but they never did.

After two weeks of polishing without grinding, I took them out — my test piece looked good, so I washed them all. After drying, they were the most incredibly beautiful chalcedony roses I had ever seen! I think the old-fashioned ways are sometimes the best, and the polish without grinding is the neatest trick I ever came up with! In chalcedony roses, especially, carborundum gets into the small seams, and you can't get it out. Try the stunt — you might be amazed.

via Pegmatite, 9/06; via The Tektite, 2/01; from Lapidary Digest at <http://www.lapidarydigest.com>

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 BC Wagonmasters webpage (<http://www.lapidary.bc.ca/trips.html>).

January 11 *BC Wagonmasters - Yale Bar - Jade, Serpentine, Sillimanite, Jasper, Agate* - Meeting at the Bridal Falls Coffee Shop at 9:00 AM. This will be a Fraser River gravel bar trip, so the appropriate tools are a rock hammer, squirt bottle, and something to carry your finds! For clothing, dress warm, in layers, with the expectation of rain, and wind. Good hiking boots are strongly suggested for walking over the rocky gravel bars. A thermos of your favorite warm beverage is also a good idea. As this is the winter time, we may get snowed out, so if it's snowing, stay home. If there is no snow we will probably go to Yale bar, or perhaps a downstream bar if the Yale bar is covered

Harley Waterson 604-590-3289

Pyrite by Ron Graichen

Pyrite is fool's gold, and it is very common. Most metallic ore deposits are pyretic, and some non-metal ores also contain the mineral. Pyrite is merely a combination of iron and sulfur. In a few cases, it is a poor ore for iron production.

Many mineral collections have beautiful crystalline specimens. Pyrite is brass-yellow and occasionally displays a bluish or purplish iridescence on crystal faces. Crush a small piece and the result is black. It is heavy and unusually hard for a metallic sulfide of which there are many. Crystals are commonly striated cubes or pyramids (octahedrons) and some have pentagon faces.

Chalcopyrite is similar, containing 35% copper. It does not often display crystals and never cubes. It is more golden, softer and crushes to a greenish-black color. Chalcopyrite almost always is associated with pyrite where the contrast in character can readily be seen. Both are sulfides meaning they are metals combined with sulfur.

via West Seattle Petroglyphs, 9/08; from Carny Hound, 8/08

“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.

Revised July 7, 1999 at the AFMS Annual Meeting

from <http://www.amfed.org>



Quartzsite Shows

January 1 - 31

Desert Gardens

South of I-15 at Exit 17

Quartzsite, Arizona

January 2 - 11

Tyson Wells Rock & Gem Show

Southwest corner of I-15 & Hwy 95

Quartzsite, Arizona

January 21 - 25

Quartzsite Pow Wow

Q.I.A. Bldg & grounds

235 E. Ironwood Dr.

Quartzsite, Arizona



Internet Addresses

Stinsen's Gemcutting

<http://www.gemservice.com/>

Lisbet Thoresen (contains articles about ancient gems)

<http://www.lthoresen.com/>

All About Gemstones

http://www.khulsey.com/jewelry/kh_jewelry_info.html

Professional Jeweler

<http://www.professionaljeweler.com/>

Lizzadro Museum of Lapidary Art

<http://www.lizzadromuseum.org/>

Silver Shake

<http://www.silvershake.com/>

Fusion Beads

<http://www.fusionbeads.com/>

Olympic Rocks

<http://www.olympicrocks.com/>

Ann Biederman, 22k jewelry

<http://www.anni22k.com/>

