



the BEMS Tumbler

April
2009

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

Next Meeting:
April 9, 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



*This month remember
to wish a
Happy Birthday to*
Shirley Houser on April 1,
Phil Kirschner on April 2,
Robert Calla on April 3,
Debra Jurasek on April 6,
Katherine Wittick on April 8,
Dennis Swenson on April 9,
Joan Keltgen-Lo on April 13,
Barbara Woodward on April 14,
Dennis E. English on April 17,
Thomas Slee on April 17,
Curtis Finckel on April 20,
Virginia Hopkins on April 27,
David VanDyke on April 28.



*and also remember
to wish a*

Happy Anniversary to
Frederick A. & Delores Geraldson on April 1 (4 years),
Phil & Julianne DeLeo on April 12,
Marilyn & Leonard Olsen on April 14 (19 years),
James & Carolyn Speer on April 18 (10 years),
John & Tamara Carter on April 26 (4 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 2009

President Bob Pattie
Vice President Scott Burch
Treasurer Richard Russell
Secretary Pete Williams
Director Bill Cook
Director Dick Morgan
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Federation Representative Jerry K.F. Chilson
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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:
 Casting Joe Poston
 Faceting Cliff Frome
 Jewelry Carolyn Sealfon
 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 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>**

Denim

Did you know that denim iron-on patches make excellent polishing disks? They will adhere to surfaces when ordinary glues will not. Obtain the largest ones you can fit to your wheel disks and cut to fit.

via Golden Spike News, 2/09; via Blue Agate News, 2/08; from Rock Writing, 5/06



April



SUN	MON	TUE	WED	THUR	FRI	SAT
			1 Jewelry Class	2	3 Faceting Class	4
5	6 Lapidary Shop	7 Lapidary Casting Jewelry	8 Jewelry Class	9 General Meeting	10 Faceting Class	11
12	13 Lapidary Shop	14 Lapidary Casting Jewelry	15 Jewelry Class	16	17 Faceting Class	18
19	20 Lapidary Shop	21 Lapidary Casting Jewelry	22 Jewelry Class	23	24 Faceting Class	25
26	27 Lapidary Shop	28 Lapidary Casting Jewelry	29 Jewelry Class	30		

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

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

Jewelry Shop Hours:.....Tuesday.....9:00 am to 6:30 pm
 Jewelry Casting Hours:.....Tuesday.....9:00 am to 6:30 pm (Casting by Appointment)
 Jewelry Class Hours.....Wednesday.....10:00 am to 5:00 pm

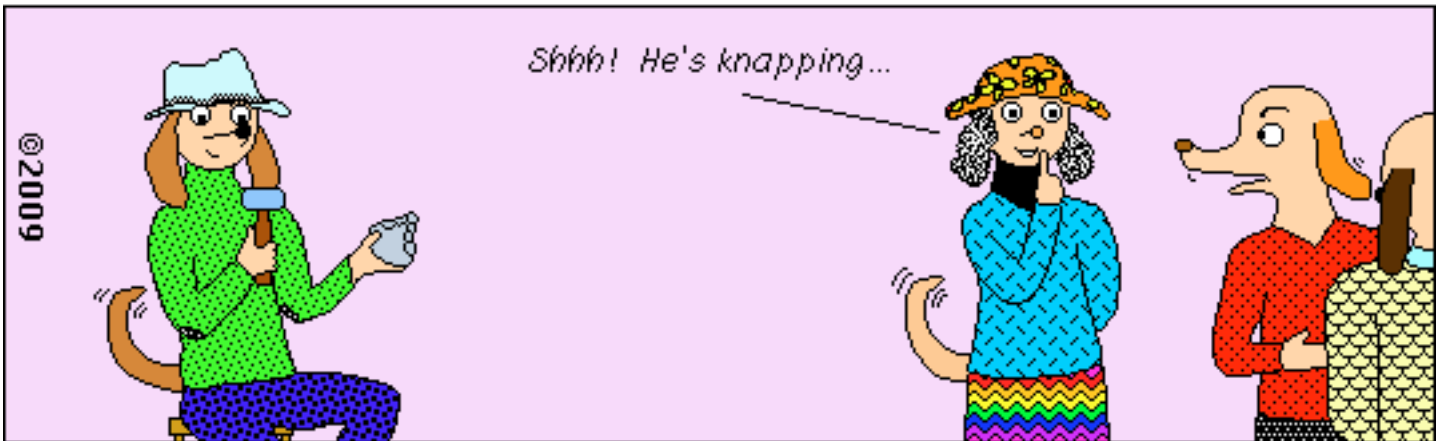
Faceting Class Hours:.....Friday.....4:30 pm to 8:00 pm

South sound Show Committee Meeting...1st Wednesday.....11 am to 12 pm

BEMS Board Meeting:.....Monday (10 days prior to 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 monthday, 2009



by Pete Williams, 2009 Secretary

Members Attending

- | | |
|-------------------------------------|---|
| <i>President Bob Pattie</i> | <i>Treasurer Rich Russell</i> |
| <i>Secretary Pete Williams</i> | <i>Editor Keith Morgan</i> |
| <i>Shop Operations Cheryl Edgar</i> | <i>Shop Dick Morgan</i> |
| <i>Mineral Council Brian Waters</i> | <i>Federation Mike Blanton</i> |
| <i>Field Trips Bill Cook</i> | <i>Guests Jackie Pattie, Pat Morgan</i> |

Meeting called to order at 7:10

New Business: New visitor rules will apply to guests. They will need to sign in and wear a visitor badge as well as sign the release and indemnity agreement. A station will be set up to accommodate signing in guests at future meetings.

Regular club meeting room has been reserved for this year's Christmas party.

The DNR is providing volunteer opportunities for maintaining campgrounds or trails. Bob has information.

Questions were raised on how to sponsor associate members. Information will be gathered on how to do this. Also, a question was raised regarding if any members are bonded and if the books are audited. That is not a company requirement. There are controls such as requiring 2 signatures on the checking account and the need for current Boeing employees in key positions. The club is also looking into the extent of insurance coverage for club equipment.

Field Trips: BEMS will be sponsoring 2 trips this year: one to Greenwater and one to Kaneer Flats.

Editor: Keith created 2 emailing lists for BEMS members due to limits on the number of email addresses in an address list imposed by Yahoo. (100 is the limit.)

Programs: Scott developed a list of about a dozen ideas for live demonstrations or presentations at club general meetings.

Meeting adjourned at 8:00.

Joel and Debbie Jurasek's Arizona Rockhound Vacation by Joel Jurasek

In February 09 we headed for Arizona for three weeks of vacation. We visited friends, saw sites, picked up rocks and ate at buffets as much as possible.

We headed for the Tucson shows after being in Laughin, Quartzite and Yuma for a week. Upon entering Tucson we saw motel after motel hosting small shows alongside the freeway. We stayed free at the Indian Casino in our motorhome a few miles east of town. They have free pop and 24 hour security and a great buffet.

The first show I visited was at Electric Park. They had huge log after log of petrified wood and Moroccan fossils and rough from all over the world. My favorite piece was a huge six thousand year old dinosaur bone filled with bright red jasper and a crystal cavity inside of it. There was a 4'x 10' table of one piece of cut petrified log that was my second favorite. I bought many crystals for next to nothing and some fossils at wholesale prices to give to kids..

I also visited the main show held in the convention center. It cost 9 dollars to get in and I would have paid three times that much once I saw what was inside. It was the largest show I have ever been in. It was at least two football fields in size and had minerals from all over the world displayed. It was at least twenty times the size of the Rice Museum

After a couple days in Tucson I was "showed out", I felt I had seen the cream of the shows and visiting every hotel room show would have been mostly more of the same... so we headed to near the Petrified Forest up state to rockhound.

We arrived in the Holbrook area (NE Arizona) and instantly headed to a old gravel road between the towns of Woodruff and Snowflake which we were supposed to find petrified wood on. Sure enough we started to find small pieces everywhere on and next to the roadway. We were in ranch country with not hardly a soul around so when it got dark after a day of collecting, we just pulled alongside of the road and spent the night. We were at 5000 feet and it dipped to 16 degrees with frost on the windows come sun up, I was seeing my breath as the coffee was perking. The sunrise was beautiful.

As soon as I had finished my second cup of coffee, I was out dragging sacks of petrified wood and agates I had collected back to the motorhome. This second day of collecting we were getting pickier as we had collected nearly 300 pounds of rock. We found many cab size pieces, a fist size one every hour or so, that was the biggest size. It was not until I was almost done that I realize the road bed was made up of petrified wood mixed with gravel from a local gravel pit. The road had just been graded which exposed many of the fist size pieces. There were many different agates also in abundance.

Driving around the one horse town of Woodruff we saw a couple old houses with three foot fences of solid petrified wood pieces made up over the years which surrounded the whole property.

We decide we had enough rock for this trip and decided to save some for next time. Sure enough I am finding I have several fine pieces as I am beginning to polish them in the shop on Monday nights. It is always fun to see rocks you have collected get polished.

We will return to Arizona next year God willing and if the economy and gas prices hold. We had a wonderful time and I personally thank God for all the wonders of His creation I was able to behold this trip.

The ancient Greeks thought ruby could melt wax if it was impressed on it.

BEMS General Meeting Minutes monthday, 2009



by Pete Williams, 2009 Secretary

Meeting called to order at 7:30

There were 4 guests in attendance.

Minutes approved as written.

Tumbler Editor and Webmaster's Report: Reminder that members who submit articles to the Tumbler receive 6 free raffle tickets. Those who display at the show and tell receive 3 free tickets.

Treasurer's Report: Club is doing fine. Some members have still not paid 2009 dues.

Shop Reports: Dick will be training interested members on how to use the Diamond Demon. The faceting shop has restarted. There is 1 new student and other interested members can sign up on the waiting list. Jewelry classes are doing well. The first class has graduated, the second is underway, and the 3rd and 4th are full. Names are being added to the waiting list.

There was a problem with polishing laps being contaminated. Please remember to read the instructions before using the equipment. The 24 inch saw is still in the process of being repaired.

Library: Some new books were received. Some members are not being timely on returning borrowed videos.

Health & Welfare: Alex Lane was sent a club card.

Federation Report: The mid-year meeting will be in Kennewick in conjunction with their annual show. Any club member can attend the meeting, but only the representative can vote.

Field Trip Report: Next field trip in March 28 at Walker Valley. Meet at the gate at 10:00. Next month there is a trip to Blanchard Hill.

Mineral Council: Next meeting is at the end of the month in Ellensburg. The Gothic Peak site is still not available for collecting.

South Sound Show: Contracts went out to 38 vendors for this year's show. A deposit has been made for the site at the Puyallup fairgrounds. The next meeting is the 1st Wednesday in April. Mike encouraged club members to put up a display case at the show. We need better club participation. Members can also join with another member to set up a display.

Old Business: The club is still working on setting up a process for visitors to receive a temporary badge when visiting.

New Business: The Omnibus public land bill barely failed to pass in the US House on March 10. If passed this bill would severely restrict rockhounding in some areas. The DNR is looking for volunteers to help clean up camp sites or trails. See Bob for details. A farmer in Glendive, Montana has uncovered large quantities of Montana agate. You may contact Helen at 360-825-5248 for more details.

Program: The program was a video on "Modern Marvels: Silver Mines."

Meeting adjourned at 9:02.

Displays:

Bob Bird - clocks, pen base & clock, dinosaur bone

Eric Chilson - material from Walker Valley

Mike Blanton - Petrified Wood

Carolyn Sealton - Jewelry & sculptures made by the lost wax casting method

Ed Laville - Smack'em rocks

John Carter - Walker Valley quartz & calcite, meteorite letter opener, diamond point crystals from Payson, Arizona

Tim Pinkerton - Pin cushion quartz clusters from St. Thomas, Virgin Islands

Cascade School Visit by Bob Pattie

On March 16, 2009, Bob and Jackie Pattie visited the Cascade Elementary School in Renton to discuss rocks and rockhounding and the geology of the State of Washington. Mrs. Greer invited us to speak to the four classes of third grades, about 100 students, in two sessions. This is the second year that we I have visited this school. Bob started with a brief discussion of the geology of the state and the forming of the mountains, including the development of our volcano's.

Bob then showed a number of pieces of Petrified Wood, our state gem, and let the students handle the various samples, both rough and finished. Then went through a number of other samples, including agates, jaspers, thunder eggs, fossils, soapstone (talc), and finished jewelry.

The students then were able to look at the sample on their way to a bucket of Petrified Wood where the students could select a piece to take home; the material was supplied by the Boeing Rock Club.

The students had many questions and when the class had more questions they have less time to look at the samples, and then the questions never stop until they were leaving out the door of the room. When I finished the two sessions, the students and teacher presented me with a large card which they sign, thanking me for the presentations and reminder me that I was on their calendar for next year, during their study of rocks.

Polymnite refers to stones that contain dendrites & black lines that resemble rivers, marshes & ponds.

From Atop The Rock Pile



By Bob Pattie, 2009 BEMS President

The weather this past month has not been friendly to us, in terms of going out and doing a little digging. It seems that we had snow on the ground many mornings here in the Puget Sound area and I haven't ventured up in the mountains. I think it is time for us to be looking at our tools to be sure they are cleaned up, containers are in good shape, our first aid kits are re-stocked, and that we have looked over our maps to be sure we have the latest information. Visiting a couple of local shows and talking to members of other clubs can be a good source of new collecting sites and/or trading a few collecting sites secrets. I have found in the past that there are very few secret collection sites, but many sites that don't have maps or much information on actual location. When people have given me a particular secret site and I go looking for the site, I find a number of cars and many people collecting in this secret site, it seems to be a secret for a few. I think we should share our collecting sites so many people can enjoy, before it is closed down for all collecting.

Young Richard's Almanac by Dick Morgan

Why should taxpayer-funded earmark riders on bills be allowed when they are mostly there to keep politicians in office? If they are allowed shouldn't the politicians getting the benefit be taxed?

100% Safe! by Theodore J. Rieth, Safety Chair

Interesting title, isn't it? Bet you never thought you could be 100% safe from anything, did you? Well, you can be almost perfectly safe in at least one aspect of this great hobby!

I'll borrow a topic from OSHA and my employer (before retirement) - ZES, or Zero Energy State. Here's the info: <OSHA regulation 1910.147> defines the unexpected movement or release of mechanical, electrical, hydraulic, pneumatic, chemical, or thermal energy as "hazardous". While this energy is vital to the operation of a facility, it must be properly controlled and isolated to help prevent its unexpected release during equipment maintenance. Establishing a "zero energy state" is the best method of controlling hazardous electrical energy.

What does this mean to you? Many of us may process our specimens in some fashion after collection. We'll use saws, sanders, polishers, faceters, and a myriad of other electrical devices in our processing. What would happen if a piece of equipment started when we didn't expect it to start? Saws can do obvious damage. Other rotating equipment may create a nasty abrasion. Any equipment with a pinch point (a drive belt going around a pulley, for example) that could draw in a finger or a part of clothing into it may cause an injury.

The answer - require more than one event for that equipment to be started.

Most of us will simply turn off the switch on a device when done, or when taking a break. That's fairly safe if the switch is on the equipment, and reasonably protected against accidental operation. If the device is on an extension cord and plugged into a switch-controlled outlet somewhat removed from the device, then it's much less safe.

The easy way to do this is to turn off the power switch AND unplug the tool. If the switch is accidentally engaged, nothing will happen because it's under zero energy. To be extra, super safe, also turn off the breaker controlling the equipment, such that it will require 3 events to happen before device operation (breaker on, plug in, switch on). In a manufacturing setting, one would disable the power source and lock it out with a personal, unique locking tag to absolutely create a safe environment.

One final point - many fairly modern devices have guards, which provide a barrier to pinch or danger points. The guard over saw blades, which protect you from the rotating blade, but pivot out of the way as the specimen is cut, is a good example of guarding. If your devices are not guarded, it would be advisable to find a commercial guard, create a home-made one, or at minimum provide a brightly colored warning near the danger point.

via West Seattle Petroglyphs, 3/09; from AFMS Newsletter 2/09

2009 South Sound Science Fair by Dick Morgan

The South Sound Science Fair for the schools in the south sound, classes from kindergarten through 12th grade, was held at the Pacific Lutheran University. I had been invited as a presenter on geology and to display my rocks, minerals and fossils. It was a great time as there were around 650 students with projects to be judged. With many of the students, and their siblings, and their parents, asking questions, it was a very busy time. Pat and I had a very enjoyable time answering questions and explaining facts about the display.

It was once believed that the fire in an opal was because of a demon inside the stone.

Famous Petrified Forests by Dick Young

Our petrified forests are generally of three types. The first type has been showered and completely covered by volcanic ash leaving the trees standing in an upright position. The Petrified Forest of Yellowstone National Park is an example of this type. The trees are standing in their original state where they grew many millions of years ago. The forest of Yellowstone covers more than 40 square miles which is the largest area known. Another unusual feature of the Yellowstone Petrified Forest is that many thousands of fossilized leaves, needles, cones, and seeds of over one hundred different kinds of trees and shrubs have been found there. It is the only place in the world where twenty-seven successive layers of petrified forms can be seen.

The story behind Yellowstone Petrified Forest is that an old volcano began to erupt and continued for some twenty years. Mineral-bearing waters had begun to petrify the once living forest. In the span of a couple of years, a new forest began to appear and grew for the next five hundred years. Then the old volcano erupted again. The process reoccurred twenty-seven times as twenty-seven distinct layers of buried forest have been exposed in the fossil forest on the south side of Laramie River Valley. An example of a well preserved stump can be seen a few feet from the highway along "The Petrified Road." Along two-thirds of the way up on the eastern edge is a group of upright standing trunks of unusual beauty and size just as they grew many millions of years ago. The largest of these petrified stumps is a redwood over five feet in diameter and believed to be approximately one thousand years old when buried by volcanic debris.

A second type of petrified forest is believed to be the result of logs jamming at the mouth of a river, sinking into the mud, and becoming petrified. The Petrified Forest of Arizona is an example of this type. Driftwood may be deposited on the shore by the winds. Generally fossil wood which at one time was driftwood does not have bark. The fact may account for the lack of bark on the wood in Arizona.

The Arizona forests are between one hundred and two hundred million years old. One stone log, twenty feet wide and forty feet thick, flung across a ravine forms a natural bridge - the famed Agate Bridge.

The Arizona forests are composed of different forests varying in coloring. The Rainbow Forest is a multiplicity of colors, the Blue Forest is mostly carbonized sections, and the Black Forest is brilliantly black. Many logs are white, some almost transparent, and make up the Second Forest, while the Third Forest displays large specimens as long as one hundred sixty feet.

The fossil wood is of three general types.

1. Jasperized wood predominantly bright red, some translucent, and variegated with a riot of colorless.
2. Small amounts of bright red wood are found, often with areas of nearly colorless quartz.
3. Section of dark or nearly black wood.

The opalized wood forests of central Washington run a close second to the famed forests of Arizona. An outstanding feature in Washington is that the only fossilized ginkgo trees known in the world are found there. The well known Ginkgo Petrified Forest is of the driftwood type, of the ten thousand fossilized trees in this forest; only six have been identified as Ginkgo trees. The Ginkgo is one of our oldest and most primitive types of trees, a direct ancestor of our modern tree, and is remarkable in that it has survived through millions of years while other species have died out.

Nevada boasts of the largest petrified tree known in the world. It is fourteen feet in diameter and nearly three hundred feet long. Another distinction in Nevada is that the woods of Virgin Valley are fully opalized with the "fire" of the fire opal.

A third type is that of scattered woods may be covered in some manner, to become solidified later. For instance, rising water in a lake may completely cover a forest and protect it from decay. Later on petrification may preserve the trees permanently. Some of the woods in California, Nevada, Oregon, and central Washington have this origin.

via Breccia, 10/08, from Music City Rockette, 2/02; from Gem Cutters News, 11/05

Laws Of The Natural Universe

Law of the Workshop: Any tool, when dropped, will roll to the least accessible corner.

Law of Mechanical Repair: After your hands become coated with grease, your nose will begin to itch.

Law of the Telephone: When you dial a wrong number, you never get a busy signal.

Law of an Alibi: If you tell your boss you were late for work because you had a flat tire, the very next morning you will have a flat tire.

Law of Variation: If you change lines or traffic lanes, the one you were in will start moving faster than the one you are in now.

Law of Close Encounters: The probability of meeting someone you know increases when you are with someone you don't want to be seen with.

Law of Results: When you try to prove to someone that a machine won't work, it will.

via Golden Spike News, 8/08; via Petrograph, 8/06; from Napa Gems, 6/06

Polynymism is commonly encountered by rockhounds. This is the practice of giving many names to the same thing.

Pseudomorphs by Michele Yamanaka, MWF Junior Activities Chairman

“Pseudomorph” is a big word made of two smaller Greek ones: “pseudes” - which means false; and “morphe” - which means shape or form. So a pseudomorph is something with a false shape. It was first used to describe some kinds of fossils. Then it was used for minerals. For mineral pseudomorphs, what you see is NOT what you get.

A pseudomorph is a mineral possessing the external (outer) form characteristic of another (Webster’s Dictionary). It will look like one thing, but be something else. A famous mineralogist, Mr. James Dana, put pseudomorphs in 5 categories, based on how they became pseudomorphs. Here are the first 4 general ways he listed.

1. Substitution Pseudomorph.

One mineral or other material is completely substituted by another [replacement] or is gradually getting replaced [infiltration]. When this happens, the outside shape of the mineral looks the same, but the color, hardness and chemical composition (its building blocks) change. There is no chemical reaction, just replacement.

Example: Wood* pores can be replaced by quartz or opal to form petrified wood. Even the wood cells appear to be there, but it is no longer wood.

Demonstration: Have each junior dunk a rolled up paper napkin into red soda. What happens to the napkin? The soda travels up the spaces between the paper molecules. Imagine the napkin being the wood and the soda representing the silica. Then imagine this wood soaked with silica under heat and pressure. It produces petrified wood.

2. Alteration Pseudomorph.

One mineral gradually changes into another in the same species because of a chemical reaction. Often, water is added or removed.

Example: Anhydrite changes to gypsum; azurite changes to malachite.

Demonstration: Purchase or borrow a specimen of malachite and one of azurite which show clear crystal shape. Give students a blank outline of an azurite crystal. Have them color it green. This then shows malachite in the shape of azurite. If possible, borrow or buy an example of azurite altered to malachite .

3. Incrustation Pseudomorph.

The original mineral gets coated by another mineral. Then the original mineral dissolves. The coating stays and keeps the shape of the original mineral, even though it is gone. Later, another mineral can fill in the empty shape.

Example: Fluorite gets incrustated by quartz and then dissolves.

Demonstration: Let each junior dip an ice cube into Heath Shell topping. The ice cube represents the original mineral. The shell topping represents the new mineral forming a crust on the old one. After a few minutes, the ice will melt and leave the Heath topping in the ice cube shape. Let them eat the shell. This is an example of an incrustation pseudomorph.

4. Paramorph or allomorph.

The molecules of the mineral change but it has the same chemical composition. The mineral keeps the same shape as the original mineral, but by itself it would have a different crystal shape even though it has the same composition as the original mineral.

Example: Calcite replaces aragonite. Both are CaCO_3 (calcium carbonate), but they form different crystal shapes by themselves.

Demonstration: Show a crystal of calcite and a crystal of aragonite. Let the juniors see the difference in form. Explain that the composition is the same - only the shape is different. Calcite and aragonite are paramorphs of each other .

To describe a pseudomorph, we use special words. We say (replacement) after (original mineral). An example is goethite after pyrite; the goethite replaced the pyrite, but the pyrite cube remains. It may look brown because goethite is brownish-black, but goethite does not have a cubic shape. It is cubic only because it replaced the pyrite which was in a cube shape.

Here are some common pseudomorphs. Many more are possible. Aragonite after calcite; malachite after azurite; goethite after pyrite; limonite after pyrite; hematite after magnetite.

Why is this important to know? Because you may find a mineral that looks like it should be something you know by the shape, but its other characteristics do not seem right. When this happens, suspect a pseudomorph.

* Petrified wood was used as a paramorph example for more than 150 years. However, the modern definition (one mineral replacing another mineral) means that, technically, petrified wood is not a paramorph (Judith Washburn, MWF Geology Chair)

References:

Mineralogy. John Sinkankas, (1964, p. 86); A System of Mineralogy, 4th Edition. James Dana, (1854, 223)

“Pseudomorphs: An Introduction”. Si & Ann Frazier, (Dec. 19, 2004), Published in the Bulletin of the Mineralogical Society of Southern California, Vol. 75, No. 1. Jan. 2005, EASA Mineralogy Homepage. <http://www.eas.slu.edu/People/JPEncarnacion/mineraology/week5.htm>

“Alteration Pseudomorph” Britannica Online Encyclopedia. <http://www.britannica.com/Ebchecked/>

via West Seattle Petroglyphs, 3/09; from MWF News, 12/08

The easiest way to find something lost around the house is to buy a replacement.

from Pegmatite, 3/07

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>) & the *British Columbia Lapidary Society* webpage (<http://www.lapidary.bc.ca>).

- April 18** *Mt Baker Rock club - **Racehorse Creek** - Fossil & Morel mushrooms - Bring diggin, light, & split tools - Meet at 9:00 am at Nugents corner
Brian Hughes - (360) 671-7330, abhughes@comcast.net*
- April 18 & 19** *All Rockhounds Pow-Wow - **Mattawa, WA** - Petrified & Picture Wood, Limb sections, & Diatom Opal - Camping is a free, dry camp site. We furnish outhouses. Saturday evening is potluck dinner, then a small meeting & door prizes. (We encourage everyone to donate things they have made, or rocks & slabs they have.) Sunday morning is pancake & sausage breakfast by the Club.
Membership is required for field trips. \$7.50 per person or \$15.00 per family, includes up to 17 yrs.
Pauline Miller 360-658-8091 paulinem280@aol.com
Rocky Mc Call 360-629-2515 rm711@tgi.net*
- April 19** *BC Wagonmasters - **Harrison Lake, British Columbia** - Clam & Belemnite Fossils - Approximately 30 kilometers up the west side of Harrison Lake, so this will take most of the day to go in and back out again, so please pack a lunch or some snacks - Meet at the Sasquatch Inn parking lot in Harrison Mills on highway #7 at 9:00AM ***DO NOT GO TO THE TOWN OF HARRISON LAKE*** This restaurant is at the turn-off for the Hemlock Valley Ski area. If you are not familiar with this area, please refer to a map. The optimum way to get to the meeting place, would be Highway #7 from Mission - Make sure that you have ample fuel for your vehicle. Tools for this can be nothing but some gloves to pick up samples, or rock hammer, chisel, and larger hammers for those who wish to break up larger pieces. Bring your kids, and the camera, as there are some great views of Harisson lake along the way!*

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 marquis), 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.



Shows

April 4 & 5: Saturday 10 am - 6 pm; Sunday 10 am - 5 pm
Southeast Idaho Gem & Mineral Society, 52nd Annual Show
 Bannock Co., Fairgrounds Commercial Building
 Pocatello, Idaho

April 11 & 12: Saturday 10 am - 6 pm; Sunday 10 am - 5 pm
Mt. Baker Rock and Gem Club, 48th Annual Rock and Gem Show
 Bloedel-Donovan Park Community Center
 2214 Electric Ave.
 Bellingham, WA

April 18 & 19: Saturday 10 am - 5 pm; Sunday 10 am - 4 pm
Lakeside Gem & Mineral Club, Annual Show
 Benton-Franklin Fairgrounds, Building #1
 10th & Chemical Dr.
 Kennewick, WA

April 25 & 26: 10 am - 5 pm
Grays Harbor Geology & Gem Society, 41st Annual Earth Treasures
 Grays Harbor fairgrounds
 43 Elma/McCleary Rd.
 Elma, WA



Internet Addresses

Pseudomorphs
<http://pseudomorphs.com/>

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<http://glendonite.com/>

The Mineral & Gemstone Kingdom
<http://www.minerals.net/>

Claus Hedegaard
<http://www.hedegaard.com/home.html>

LR Ream Publishing
<http://www.lrream.com/>

Je Gem
<http://www.jegem.com/1/>

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

<http://www.crystals.co.za/>

Glendale Community College Earth Science Image Archive
<http://www.gc.maricopa.edu/earthsci/imagearchive/interest.htm>

Rockhound forum
<http://www.rockhounds.com/rocknet/index.shtml#67509>

